Financial reporting developments
A comprehensive guide

Accounting for certain life insurance and annuity products

Revised January 2018
To our clients and other friends in the insurance industry

The accounting and financial reporting guidance for certain long-duration insurance and annuity contracts is codified in Accounting Standards Codification (ASC) 944, Financial Services – Insurance. Our publication will help you understand the accounting and financial reporting requirements for certain long-duration insurance and annuity contracts. Our observations are based on EY's long and close involvement in the varied experiences of our many clients in the life insurance industry and our extensive experience in addressing insurance accounting, actuarial, tax and reporting issues.

The Financial Accounting Standards Board (FASB) issued a proposal in September 2016 that would change how insurers account for and make disclosures about long-duration contracts to provide users of the financial statements with more meaningful information about the amount, timing and uncertainty of cash flows related to these contracts. The proposal would change how insurers recognize and measure insurance liabilities and deferred acquisition costs. It also would require them to make new disclosures. See our Technical Line, A closer look at proposed changes in insurers’ accounting and disclosures for long-duration contracts (SCORE No. 03631-161US), for a detailed discussion. At the time of the issuance of this publication, the FASB was redeliberating aspects of the proposal in response to additional research and industry outreach.

While we believe this publication will help address the relevant considerations and accounting for these long-duration contracts, the application of the guidance for a particular company requires careful evaluation of its facts and circumstances. Your EY insurance executive will be pleased to answer any questions you may have on this topic.

Ernst & Young LLP

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Notice to readers:

This publication includes excerpts from and references to the FASB Accounting Standards Codification (the Codification or ASC). The Codification uses a hierarchy that includes Topics, Subtopics, Sections and Paragraphs. Each Topic includes an Overall Subtopic that generally includes pervasive guidance for the topic and additional Subtopics, as needed, with incremental or unique guidance. Each Subtopic includes Sections that in turn include numbered Paragraphs. Thus, a Codification reference includes the Topic (XXX), Subtopic (YY), Section (ZZ) and Paragraph (PP).

Throughout this publication references to guidance in the codification are shown using these reference numbers. References are also made to certain pre-Codification standards (and specific sections or paragraphs of pre-Codification standards) in situations in which the content being discussed is excluded from the Codification.

This publication has been carefully prepared but it necessarily contains information in summary form and is therefore intended for general guidance only; it is not intended to be a substitute for detailed research or the exercise of professional judgment. The information presented in this publication should not be construed as legal, tax, accounting, or any other professional advice or service. Ernst & Young LLP can accept no responsibility for loss occasioned to any person acting or refraining from action as a result of any material in this publication. You should consult with Ernst & Young LLP or other professional advisors familiar with your particular factual situation for advice concerning specific audit, tax or other matters before making any decisions.
1 Overview

1.1 Historical overview of insurance accounting guidance

Today’s accounting guidance for life insurance and annuity products originated from various standards that were codified in ASC 944, Financial Services – Insurance. These standards included the FASB’s Statement of Financial Accounting Standards (FAS) 60, Accounting and Reporting by Insurance Enterprises, which summarized the insurance industry practice and accounting guides as developed by the American Institute of Certified Public Accountants (AICPA). FAS 60 included guidance on short-duration and long-duration contracts (i.e., policies). The standards also include FAS 97, Accounting and Reporting by Insurance Enterprises for Certain Long-Duration Contracts and for Realized Gains and Losses from the Sale of Investments, and the Statement of Position (SOP) 03-1, Accounting and Reporting by Insurance Enterprises for Certain Nontraditional Long-Duration Insurance Contracts and for Separate Accounts, which was issued by the AICPA and approved by the FASB.

1.2 Overview of publication

This publication applies to entities within the scope of ASC 944 and addresses accounting and reporting issues stemming from the application of the guidance for certain long-duration contracts. This publication does not address the accounting guidance in ASC 944 related to participating insurance contracts, whole life contracts and term-life contracts, contract modifications and reinsurance.

As life insurance and annuity products continue to evolve and new product features are developed, entities need to carefully evaluate how to classify and account for them. For many years, annuity and life insurance contracts were either (1) fixed contracts offered through an insurer’s general account that provided a fixed interest rate over a specified period or (2) variable contracts offered through an insurer’s separate account that passed all investment risks associated with that separate account’s assets to the contract holder, with no guarantees of minimum interest rates, minimum death benefits or return of principal.

Today, many life insurance and annuity products have a combination of fixed and variable features. As a result of the evolution of product designs, interpretive guidance was issued in the following areas:

- Classifying and accounting for certain product types, including:
  - Universal life-type policies
  - Investment contracts
  - Limited-payment policies
- Accounting for certain costs and inducements, including:
  - Capitalization of deferred acquisition costs (DAC) that meet certain criteria and amortization of such amounts over the life of the contract with the model dependent on the underlying product classification
  - Accounting for sales inducements that meet certain criteria and amortization of such capitalized amounts over the life of the contracts using the same methodology employed for amortizing DAC
• Establishment of an additional liability for guaranteed minimum death benefits (and other similar mortality and morbidity benefits) and annuitization benefits

• Separate account presentation and valuation, including accounting for an insurer’s interest in a separate account and transfers with the general account

This interpretative guidance is discussed in detail throughout this publication.
2 Determining the appropriate product accounting model

ASC 944 provides guidance on how to classify long-duration life insurance and annuity products for purposes of determining the appropriate product accounting model. Long-duration products require the performance of various functions and services, including insurance protection, for an extended period. Most life insurance and annuity products are considered to be long-duration products. ASC 944 classifies long-duration contracts that include significant insurance risks into five categories: (1) universal life-type policies, (2) limited-payment policies, (3) certain participating life insurance policies, (4) whole life policies and (5) term life policies. The guidance refers to long-duration contracts that do not include significant insurance risk as investment contracts. Such contracts do not subject the insurer to risks arising from policyholder mortality or morbidity.

This section focuses on the characteristics that insurers should consider when determining whether a product is classified as a universal life-type policy, investment contract or limited-payment life insurance. Section 2.5 of this publication discusses other types of long-duration contracts.

Determining the appropriate product classification requires judgment, including an evaluation of product features and the overall substance of the product. Product classification decisions should not hinge on a policy feature that is insignificant to the overall economics of the product.

2.1 Product classification

The following table shows the typical classifications for a variety of universal life-type contracts, investment contracts and limited-payment contracts. Regardless of what the product is called, it is the substance of the benefits and features in the contract that determines its appropriate classification.

<table>
<thead>
<tr>
<th>Product classifications¹</th>
<th>Investment contracts</th>
<th>Limited-payment policies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Universal life-type policies</td>
<td>Guaranteed investment contracts</td>
<td>Single-premium whole life⁴</td>
</tr>
<tr>
<td>Universal life</td>
<td>Immediate annuities without life contingencies</td>
<td>Immediate annuities with life contingencies</td>
</tr>
<tr>
<td>Equity indexed universal life</td>
<td>Single-premium or flexible-premium deferred annuities²</td>
<td>10-pay or 20-pay whole life</td>
</tr>
<tr>
<td>Variable life</td>
<td>Variable annuities³</td>
<td>Life-paid-up-at-age-65</td>
</tr>
<tr>
<td>Variable universal life</td>
<td>Fixed indexed annuity²</td>
<td></td>
</tr>
<tr>
<td>Interest-sensitive whole life</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variable annuities²</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed indexed annuity²</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¹ Other types of long-duration policies, including traditional long-duration (e.g., level-premium whole life, annual renewable term life) and participating insurance contracts (e.g., participating whole life), have been excluded from this table but are discussed in section 2.5. In addition, certain long-duration contracts may provide for additional benefit features that require separate recognition and measurement, and those features have been excluded from this table.

² Assumes product is in the accumulation phase and has significant mortality or morbidity risk.

³ Assumes product is in the accumulation phase and has no significant mortality or morbidity risk.

⁴ May be classified as universal life if it includes excess interest credits.
Determining the accounting model to apply to the product will depend on whether the entity that is issuing the product is in the scope of ASC 944 and on the product’s benefits and features, which are assessed under ASC 944.

The following diagram illustrates the process for determining the accounting model for products in the scope of ASC 944. It presumes that product characteristics can be determined on a yes-or-no basis. Due to the wide variety of designs, some product characteristics may fall into the “gray areas” not covered by this diagram. Classification in those circumstances will require an evaluation of the substance of the products.

* These policies are accounted for as short-duration contracts, which are not covered in this publication.
** These policies are accounted for as traditional long-duration contracts, which may include accident and health policies.

Certain nontraditional long-duration contracts also may be offered with additional benefit features (e.g., guaranteed minimum death benefits) that may affect product classification. The effect of these benefit features on the assessment of whether the contract is classified as an insurance contract or investment contract is discussed in section 7.
2.2 Universal life-type policies

Universal life-type policies are long-duration contracts that do not have fixed and guaranteed terms. ASC 944-20-15-26 defines universal life-type policies as life insurance and annuity products that involve significant mortality or morbidity risk to the insurer and that have one or more of the following features:

- One or more policy charges are not fixed by the policy and can include mortality charges that may be changed by the insurance company subject to guaranteed maximums or minimums.
- The policy's account balance (or cash value) or the rate at which interest is credited to the account balance is not fixed and guaranteed by the policy.
- The policyholder can vary the amount of premiums to be paid.

For example, a fixed-premium universal life policy could be classified as a universal life-type policy if it has one of these features, even though it may specify that level premiums are to be paid for the life of the policy.

A single-premium whole life insurance policy may be classified as a universal life-type product if the policy credits interest greater than the minimum and the interest crediting varies. However, if the policy has fixed and guaranteed interest credits, and all other policy provisions are fixed and guaranteed as well, it is classified as a limited-payment policy.

Refer to section 4 for a discussion of the accounting for universal life-type contracts.

2.2.1 Features of universal life insurance

Life insurers have developed life insurance and annuity products that allow changes in current interest or investment yield rates to be passed on to the policyholder. Many of these policies also allow the policyholder to change benefit levels or premium payments. This type of product is commonly referred to as universal life insurance.

A distinguishing feature of universal life insurance is that it gives the policyholder more transparency on the contract's insurance, expense and investment elements. Premiums received from the policyholder are credited to the account balance or contract value. A “mortality charge” is assessed each period against the account balance to cover the death protection cost for that period and is based on the net amount at risk (i.e., the difference between the insurance benefit and the account value), the insured’s attained age and other factors. Typically, mortality charge rates may be changed by the insurer subject to a schedule of guaranteed maximum rates.

The insurer also may deduct administrative fees or expense charges periodically from the account balance or from premium payments. Some policies charge a small percentage of each premium or a monthly fee to cover expenses, and others deduct higher charges in the early years of the policy (i.e., front-end loads). Many universal life insurance policies assess surrender charges (i.e., back-end loads) when the policyholder withdraws funds from the account balance or terminates the policy. The surrender charges often phase out after a number of years.

A universal life policy often guarantees a minimum interest rate that is credited to the account balance after the various charges have been deducted. Additional interest above the minimum rate (i.e., excess interest) also may be credited, and the rates of such excess interest credits are determined periodically by the insurer. When these rates are combined with the minimum rate, they generally are competitive with interest rates on other financial instruments available to the policyholder. In some products, the interest rate is indexed to a specifically defined market rate, such as the current rate on Treasury bills.
Unlike traditional life insurance, flexible-premium universal life insurance does not have standard predetermined insurance features. The policyholder may select premium amounts, death benefit levels and premium-payment periods, and he or she may change those features as his or her specific needs change.

Universal life insurance policies usually require the payment of a minimum initial premium. The policyholder then can pay additional amounts into the policy or can skip premium payments, and the account balance will reflect the premium payments received. The policy typically will remain in force as long as the cash surrender value exceeds the amount needed to cover the cost of insurance and expense charges for the next period of coverage. Although premium contributions are discretionary, the insurer usually sends the policyholder a reminder each period to pay a suggested premium amount.

A universal life policy with a secondary guarantee (ULSG) includes provisions that the policy remain in force even if the cash surrender value has been reduced to zero, as long as specified requirements described in the policy have been satisfied.

Variable universal life insurance products also may allow for flexibility in determining policy values or benefits. In such products, invested funds underlying the policies are segregated from other investments of the insurance company in a separate account, and the investment return of the separate account flows directly to the policyholders' account balance.

Certain variable life insurance policies, which are offered through an insurer's separate account, may have neither an account balance nor explicit policy charges but resemble universal life-type policies. These policies are designed like traditional whole life policies since they have fixed and level premiums and a guaranteed amount of death benefits equal to the initial face amount of the policy. However, additional amounts of death benefits, based on a formula specified in the policy, are provided by the return on investments in the separate account in excess of a stated rate of return. As a result, the death benefit (and the cash surrender value) can vary each year based on the actual investment results of the separate account. Thus, the “amounts that accrue to the benefit of the policyholder” are not fixed and guaranteed by the policy. Therefore, this type of a variable life insurance policy also would be considered to be a universal life-type policy, and the liability for the death benefit is recorded in the general account.

2.2.2 Policy account balances

An explicit account balance is not a distinguishing feature of universal life-type policies. As noted in ASC 944-20-15-26, distinguishing features include “amounts that accrue to the benefit of the policyholder,” which is either a policy's account balance or the cash surrender value if the policy has no account balance. As a practical matter, an explicit account balance and explicit policy charges or credits are present in almost all universal life-type policies. The account balance mechanism facilitates the flexible premium feature and variable charges or fees.

2.2.3 Participating insurance and non-guaranteed-premium policies

Participating and non-guaranteed-premium policies do not fall under the universal life-type classification, unless the terms of the policy suggest that it is, in substance, a universal life-type policy.

As noted in ASC 944-20-15-29, a participating life insurance policy or a participating annuity policy with life contingencies should be considered a universal life-type policy if it includes any of the following features:

- The policy has a stated account balance that is credited with policyholder premiums and interest and against which assessments are made for policy administration, mortality coverage, initiation or surrender, and any of the amounts assessed or credited are not fixed and guaranteed.

- The policyholder can vary the amount of premiums to be paid.
The insurer expects that changes in any policy element will be based primarily on changes in interest rates or other market conditions, rather than on the experience of a group of similar policies or the enterprise as a whole.

The first two features for participating insurance contracts are essentially the basic features for universal life-type policies described in ASC 944-20-15-26, except that the first feature also requires the policy to have a stated account balance. The third feature for participating insurance contracts requires a subjective determination about the insurer’s intentions in setting policyholder dividends.

Under a typical non-guaranteed-premium policy (sometimes referred to as a guaranteed renewable policy), benefit levels are guaranteed for the term of the policy, and the initial gross premium rate is guaranteed for a limited period, such as three to five years of the life insurance policy. After that period, the insurer has the right to change the future gross premium at specific intervals, subject to any maximum gross premium specified in the policy. ASC 944-20-15-30 states that, similar to a participating insurance policy, a non-guaranteed-premium policy should be considered a universal life-type policy if it includes either of the following features:

- The policy has a stated account balance that is credited with policyholder premiums and interest and against which assessments are made for policy administration, mortality coverage, initiation or surrender, and any of the amounts assessed or credited are not fixed and guaranteed.
- The insurer expects that changes in any policy element will be based primarily on changes in interest rates or other market conditions, rather than on the experience of a group of similar contracts or the enterprise as a whole.

Again, the first feature for non-guaranteed premium policy echoes the general criteria in ASC 944-20-15-26 for universal life-type policies, with the added condition that the policy have a stated account balance. Also, as with participating insurance policies, the second feature requires a subjective determination about the insurer’s intentions in setting future gross premium levels.

The objective of ASC 944-20-15-29 and 30 is to exclude conventional forms of participating insurance and non-guaranteed-premium policies, while preventing products from escaping the universal life-type classification merely by taking the form of participating insurance or non-guaranteed-premium policies. As a practical approach, the determination of whether a participating insurance or non-guaranteed-premium policy is a universal life-type policy can be made based on factors other than the dividend or non-guaranteed-premium feature alone. A policy whose features are such that it meets the basic criteria for universal life-type policies should not be excluded solely because it is in the form of a participating or non-guaranteed-premium policy.

### 2.3 Investment contracts

Under the classification guidance in ASC 944-20-15-21 for long-duration contracts with insignificant insurance risks, “the mortality and morbidity risk associated with insurance benefit features offered in a contract is deemed to be nominal.” These types of contracts are accounted for in a manner consistent with interest-bearing or other financial instruments, rather than as insurance products.

The guidance does not list specific types of policies that would be considered investment contracts. Products commonly determined to be investment contracts include immediate annuities without life contingencies and deferred annuities that are in their accumulation phase (i.e., before an annuity settlement option is exercised). If annuity products were to have mortality or morbidity risk (e.g., annuities with life contingencies), they would be classified as either universal life-type policies or limited-payment policies, depending on whether the policy credits an interest rate that varies over time.
Many group and individual deferred annuities guarantee the future purchase price of annuity benefit options. These annuities typically provide for a number of settlement options, and the annuitant can elect to use the accumulated account balance as a single premium to purchase an annuity with a selected benefit payment plan. ASC 944-20-15-17 states that a guaranteed annuity settlement option does not involve mortality risk for accounting purposes until the annuity settlement option is executed. As a result, products that do not involve mortality risk in their fund accumulation phase, such as most deferred annuities without significant death benefit features, are accounted for as investment contracts during the accumulation phase. When an annuity settlement option is executed, the annuity is classified and accounted for as a separate new policy. If the settlement annuity provides for life contingent benefit payments, the settlement annuity typically is classified as an insurance contract (as a limited-payment policy).

To determine whether a product is classified as an investment contract, the insurer should consider policy benefits and features when assessing other-than-nominal mortality and morbidity risk. Under ASC 944-20-15-16, mortality or morbidity risk is present if the policy requires the insurer to make payments or forego required premiums on death or disability (for life insurance) or continued survival (for annuities) of an individual or a group of individuals.

Another policy provision that could be considered, when assessing mortality or morbidity risk, is waiver of surrender charges on death or disability of the policyholder. The level of risk associated with this provision often would be incidental to the overall policy. Insurers will need to carefully assess all policy provisions to determine whether they affect the assessment of mortality or morbidity risk.

Some annuity products are structured as life annuities with a period certain payout. These products guarantee payments of benefits for the annuitant’s lifetime, but if the annuitant dies before a specified number of payments have been made, the payments will continue to be made to a beneficiary until the guaranteed number of payments is reached. Under ASC 944-20-15-18 and 19, such products often should be accounted for as insurance contracts.

For these life annuities with a period certain, if the probability of life contingent payments is remote or if the present value of the expected life contingent payments is insignificant in relation to the present value of all expected payments under the policies, the products are classified as investment contracts. One of these qualifications may be met if the insurer expects to only make the guaranteed number of payments so there are none (or few) expected life contingent payments.

Another product that is commonly determined to be an investment contract is a guaranteed investment contract (GIC). A GIC guarantees the contract holder either a declared interest rate or a market-based interest rate (typically including a contract-value withdrawal guarantee) to be paid on policy funds for a specified period of time. GICS are often issued in conjunction with group annuity or pension products, but they typically do not directly provide for the payment of pension benefits. An additional product that is commonly determined to be an investment contract is a funding agreement, which guarantees a fixed interest rate on a deposit received.

Refer to section 5 for a discussion of the accounting for investment contracts.

2.4 Limited-payment policies

Limited-payment policies are defined as long-duration insurance contracts that have fixed and guaranteed terms but are purchased with premiums paid over a period shorter than the period over which benefits are provided. These contracts subject the insurer to risks arising from policyholder mortality and morbidity over a period that extends beyond the period in which premiums are collected.

ASC 944 describes the “period over which benefits are provided” as including the periods during which the insurer is subject to risk from policyholder mortality and morbidity and is responsible for the administration of the policy. The benefit period does not extend to the period over which the policyholder or beneficiary may elect to have settlement proceeds disbursed.
The definition of limited-payment policies includes products such as single-premium whole life insurance policies, five-pay, 10-pay and 20-pay life insurance policies, life-paid-up-at-age-65 policies and immediate annuities with life contingencies, provided that the policy terms are fixed and guaranteed. It also may include annuitized deferred annuities that provide for life-contingent benefit payments. Other types of policies with a limited number of premiums but with discretionary features (such as single-premium whole life policies with excess interest credits) are treated as universal life-type policies.

Many traditional life insurance plans are designed and marketed to require only a limited number of premium payments, after which cash values are sufficient to permit the policyholder to use policy loans to fund future premiums. Such plans are not classified as limited-payment policies since the premiums continue to be fixed and guaranteed and are just being paid through an alternative mechanism.

Refer to section 6 for a discussion of the accounting for limited-payment contracts.

2.5 Other long-duration contracts

Other long-duration contracts include traditional long-duration and participating insurance contracts.

Traditional long-duration contracts have fixed and guaranteed terms with premiums paid for the life of the contract. Common examples include whole life insurance and term life insurance. Traditional long-duration contracts also include certain guaranteed renewable contracts where premiums are based on historical and projected experience and are not guaranteed. Common examples include long-term care insurance and long-term disability insurance.

Participating insurance contracts (e.g., participating whole life insurance) represent traditional long-duration contracts that also allow a policyholder to participate in the earnings or surplus of the insurer. These distributions are provided to policyholders in the form of dividends.

This publication does not address the accounting and reporting for traditional long-duration contracts and participating insurance contracts.

2.6 Product classification for reinsurance contracts and other similar contracts

Reinsurers that assume a proportionate share of a contract containing insurance benefit features need to perform, at the inception of the reinsurance contract, an assessment of the significance of mortality and morbidity risk within the reinsurance agreement and apply the appropriate guidance. If the inception dates differ between the direct contract and the related reinsurance agreement, the insurer and the reinsurer may reach different conclusions relating to the significance of the mortality and morbidity risk and, therefore, the contract classification. Refer to section 7.1.1 for discussion regarding the effect of insurance benefit features on product classification.

If a reinsurer is assuming only the insurance benefit of a direct contract, and premiums or charges are assessed each period in a manner that is expected to result in current profits and future losses from the insurance benefit feature, the reinsurer will calculate a liability for the portion of premiums collected each period that represents compensation for benefits to be provided in future periods, even though the direct contract may be classified as an investment contract. As is the case with direct contracts, there is a rebuttable presumption that a contract has significant mortality or morbidity risk when the additional insurance benefit varies significantly in response to capital market volatility. Refer to sections 7.1.2 through 7.1.4 for discussion regarding accounting for insurance benefit features.

Additionally, insurers that cede portions of a contract to a reinsurer should include the estimated cost of reinsurance in the estimated gross profits used to amortize DAC on universal life business. See our Financial reporting developments (FRD) publication, Accounting for reinsurance (SCORE No. BB2433), for further discussion.
2.7 Summary of product accounting models

Determining the appropriate product classification is crucial since ASC 944 provides guidance for each product type. The following table shows a summary of the accounting models for universal life-type, investment and limited-payment contracts and focuses on the accounting for insurance assets, liabilities, revenues and expenses.

<table>
<thead>
<tr>
<th>Item</th>
<th>Universal life-type contracts</th>
<th>Investment contracts</th>
<th>Limited-payment policies</th>
</tr>
</thead>
<tbody>
<tr>
<td>DAC capitalization</td>
<td>Certain acquisition costs that are related directly to the successful acquisition of new or renewal insurance contracts are deferred.</td>
<td>DAC is amortized in relation to the present value of estimated gross profits (EGPs) using a retrospective method.5</td>
<td>DAC is amortized in relation to gross premium revenue using assumptions consistent with the liability assumptions.</td>
</tr>
<tr>
<td>Amortization of DAC</td>
<td>DAC is amortized in relation to EGPs5 or the interest method, depending on the type of investment contract.6</td>
<td>DAC is amortized in relation to gross premium revenue using assumptions consistent with the liability assumptions.</td>
<td>DAC is amortized in relation to gross premium revenue using assumptions consistent with the liability assumptions.</td>
</tr>
<tr>
<td>Liability for future policyholder benefits</td>
<td>Liabilities are equal to the sum of policy account balances and deferred policy charge revenues.</td>
<td>Liabilities are accounted for in a manner consistent with interest-bearing obligations, generally equal to the account balance.</td>
<td>Liabilities are measured using the net premium reserve model with locked-in assumptions and a deferred profit liability.</td>
</tr>
<tr>
<td>Annuitzation, death or other insurance benefits</td>
<td>Death or other insurance benefits (such as persistency bonuses) are accounted for under the benefit ratio model or as an embedded derivative.</td>
<td>Annuitzation or death benefits are accounted for under the benefit ratio model or as an embedded derivative.</td>
<td>Not applicable since limited-payment policies generally would not contain these types of features.</td>
</tr>
<tr>
<td>Revenues</td>
<td>Revenues include policy charges and fees assessed.</td>
<td>Premium revenue is recognized over the period of coverage when due from policyholders. Gross premium in excess of the net premium is deferred and recognized over the coverage period.</td>
<td></td>
</tr>
<tr>
<td>Expenses</td>
<td>Expenses include amounts incurred in the period for benefit claims in excess of related account balances, policy maintenance administrative expenses and interest credited to account balances.</td>
<td>Expenses include amounts incurred in the period for benefits and policy maintenance administrative expenses.</td>
<td></td>
</tr>
</tbody>
</table>

Refer to sections 4 through 6 for a description of each accounting model and examples.

Long-duration contracts may also include certain benefit features accounted for under the benefit ratio model or as an embedded derivative. Refer to section 7 for a discussion of the accounting for these benefit features.

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5 If significant negative gross profits are expected in any period, another basis should be used.

6 Refer to section 5.2 for further guidance.
 Deferred acquisition costs and sales inducements

Insurers capitalize certain costs and amortize those amounts over the life of the policy. The guidance on capitalization generally is consistent among different types of long-duration contracts. Section 3.1 addresses the costs eligible to be capitalized as DAC, while section 3.2 addresses the treatment of sales inducements, including amounts capitalized as deferred sales inducement (DSI) assets when a sales inducement liability has been recorded.

3.1 Deferrable acquisition costs

ASC 944 defines acquisition costs as those “related directly to the successful acquisition of new or renewal contracts.” Insurers can capitalize only the following costs related to the acquisition of new and renewal insurance contracts (under ASC 944-30-25):

- Incremental direct costs of a successful contract acquisition
- Portions of employees’ salaries and benefits directly related to time spent performing specified acquisition activities for a contract that has been acquired
- Other costs directly related to the specified acquisition activities that would not have been incurred if the insurer had not entered into that acquisition contract
- Advertising costs that meet the capitalization criteria

Insurers evaluate all costs incurred when issuing new or renewal contracts to determine whether they qualify for capitalization. The guidance stipulates that only acquisition costs resulting from actually acquiring a contract (i.e., successful efforts) can be capitalized as DAC, as discussed in section 3.1.1. The different types of acquisition costs are discussed in sections 3.1.2 to 3.1.4. Any acquisition costs that cannot be capitalized in accordance with ASC 944-30 are expensed as incurred, as discussed in section 3.1.5.

The capitalization guidance was revised to include guidance relating to successful efforts and clarifying the types of costs that may be capitalized. This guidance was developed to provide more consistency in practice for the types of costs that are capitalized.

Universal life-type contracts

ASC 944-30-25-4 contains guidance for universal life-type contracts that indicates that insurers must expense certain acquisition costs when incurred and not defer them. Such acquisition costs include those that (1) vary in a constant relationship to premiums or insurance in force, (2) are recurring in nature or (3) tend to be incurred in a level amount from period to period. The reason why these acquisition costs are charged to expense when incurred is that these expenses are considered period costs. Period costs are charged to expense and are not deferred.

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7 Accounting Standards Update (ASU) 2014-09, Revenue from Contracts with Customers, moved the capitalization criteria for direct-response advertising costs to ASC 944 from ASC 340-20.
8 ASU 2010-26, Accounting for Costs Associated with Acquiring or Renewing Insurance Contracts.
Generally, the first-year commission payment for a long-duration contract is only the first in a series of commission payments. Costs related to the renewal of insurance policies are included in deferrable policy acquisition costs. In practice, DAC generally includes the non-level portion of renewal commissions that are based on a descending commission scale.

For example, agent commission rates on a universal life insurance policy may be 80% of the first year’s premium, 25% of the second year’s premium and 5% of each year’s premiums thereafter. In this circumstance, the non-level portion of the commissions is deferred as an acquisition cost. Therefore, if $100 of premiums was collected each year, $75 of commissions [(100 x 0.80) – (100 x 0.05)] would be deferred in the first year, and $20 of commissions [(100 x 0.25) – (100 x 0.05)] would be deferred in the second year. The remaining $5 of commission costs is a level commission expense incurred every year, including the first two years. The non-level portion of renewal commissions is determined based on the percentage difference in the commission scale (i.e., excluding any effect of different premium amounts).

**Investment contracts**

Insurers are permitted to defer acquisition costs for investment contracts on the same basis outlined for universal life-type contracts.

Flexible-premium deferred annuity products, which typically are investment contracts that do not contain a significant death or morbidity benefit feature, may pay agents’ commissions as a level percentage of each premium received. Because the decision about whether any additional premiums will be paid is at the policyholder’s discretion, the amount of the commissions is not expected to be recurring or level in each period. Therefore, it is appropriate to capitalize those agent commissions as part of DAC.

**Tracking deferrable costs**

Insurers need processes and systems to identify direct, incremental and essential costs as defined in the guidance. The processes must determine potential DAC relating to contracts that were actually issued. This could be accomplished by tracking costs at the contract level or using other reasonable methods.

ASC 944 does not specify how deferrable costs are determined, rather it specifies what costs should be deferred. Establishing a reasonable method for determining DAC requires judgment and consideration of the characteristics of the specific contracts and costs. Careful consideration should be given to factors such as the complexity of the underwriting process, the nature of other underwriting costs and other factors distinguishing the relative effort and costs for contracts accepted versus rejected. For contract classes for which the effort and relative costs are generally similar regardless of the outcome, a process based on standard costs or applications processed and issued may be appropriate. For classes of contracts for which the underwriting effort and costs vary significantly from contract to contract, it may be more appropriate to track time and costs at the contract level.

**Costs associated to pending contracts**

An insurer may track costs by identifying them at the contract level or by using a reasonable estimate based on standard costs or applications processed and issued, among other methods. Regardless of the method used to track deferrable costs, an insurer should assess whether contracts pending as of the balance sheet date are deemed unsuccessful before its financial statements are issued.

If the insurer is tracking deferrable costs at the contract level, it can temporarily defer the costs incurred on all contracts in process in a suspense-like account until either the contract is acquired or considered to be an unsuccessful effort. If the insurer uses this approach, it will have to expense any temporarily deferred costs relating to any contracts deemed unsuccessful after the balance sheet date but before the financial statements are issued. This approach is consistent with the guidance for origination costs incurred for loans in process.
The insurer could also estimate a successful efforts ratio and apply it to the costs incurred for contracts in process. This approach works when an insurer defers costs related to a group of contracts using an allocation method. A periodic reevaluation of the successful efforts ratio is necessary to assess whether it accurately estimates costs that eventually are deferred.

### 3.1.1 Successful efforts

Only acquisition costs that result from actually acquiring a contract (i.e., successful efforts) can be capitalized as DAC. The requirement for successful efforts reduces the amount of costs that can be capitalized.

#### Free look provisions

A free look provision is a period of time immediately after an insurance contract is issued, generally between 10 and 30 days, during which the contract holder may legally cancel the contract with a full refund. The length of the free look period depends on the terms of the insurance contract or the laws in a particular state.

Generally, for purposes of determining successful efforts, a contract that is cancelled by the contract holder during the free look period is not considered successfully acquired. Therefore, an insurer should determine whether free look refunds have a material effect on DAC.

#### Successful efforts assessment for acquisition activity-related salaries and benefits

Insurers should consider the following when determining the portion of salaries and benefits related to the time spent performing specified acquisition activities for successful contracts:

- Time spent on specific acquisition activities that would be considered deferrable time
- An appropriate successful efforts factor applied to the costs relating to the deferrable time

Insurers may perform surveys, time studies or other analyses to determine how employee time is spent. Idle time and time spent on activities for which costs cannot be deferred should be identified and excluded from deferrable time. These non-deferrable costs or activities might include costs for holiday, vacation and sick time in a person's salary, as well as training and general administrative time. Insurers should assess the continued appropriateness of how employee time is spent, including making periodic updates to surveys, time studies or other analyses.

Once the pool of costs relating to the deferrable time has been identified, the insurer could apply a ratio of number of successful contracts to total contracts (i.e., successful efforts factor). After establishing the successful efforts factor, a company will need to periodically assess it to determine whether it is still appropriate. We expect the factor to be assessed at least annually or more frequently depending on sales seasonality or changes in products or processes.

There may be meaningful differences in the processes, systems and reporting for different products or at different reporting locations. Insurers may need to determine multiple successful efforts factors. For example, if an insurer has multiple locations, each location may have different processes and spend a different amount of time on each contract. Insurers also may consider different successful efforts factors because the steps that occur earlier in the underwriting process may be assigned a lower successful efforts factor (e.g., the person who processes the initial application likely touches fewer successful contracts than an underwriter who reviews information after the medical inspection).
3.1.2 Incremental direct costs

Incremental direct costs of a successful contract acquisition can be capitalized. These costs result directly from and are essential to the contract and would not have been incurred by the insurer had that contract transaction not occurred.

Examples of incremental direct costs subject to deferral include:

- Employee, agent or broker commissions for successful contract acquisitions
- Renewal commissions and bonuses to agents or brokers
- Third-party medical or inspection fees for successful contract acquisitions
- Premium-related taxes and assessments

An insurer should evaluate all costs it incurs when issuing a new or renewal contract to determine whether they can be capitalized.

Overriding and overwrite commissions

Overriding or overwrite commissions are paid on sales made by a broker, master general agent, general agent or another agent. For example, an insurer may have an agent who charges a 5% commission. This person may have a manager who receives 1% of the sales made by all the people reporting to him or her as compensation. The 1% to the manager is an override.

When considering whether overriding commissions are deferrable, insurers may analogize to the FASB's view on overriding commissions contemplated for loan origination costs in ASC 310-20. Under this view, loan origination costs incurred by the lender in transactions with independent third parties should be deferred. The FASB noted that lenders would not be in a position to determine the portion of time spent on each activity and therefore would be unable to determine the specific amount of cost related to origination activities. Because of that difficulty, as well as the presumption that costs paid to an independent third party represent a reliable measure of the lender's economic sacrifice to acquire a specific loan, the FASB concluded that the costs should be deferred as incremental direct costs of loan origination.

In general, we expect overriding commissions paid to independent third parties to qualify for capitalization since the commissions are incremental direct costs related to successful contract acquisition. However, an insurer should consider whether there are contracts or agreements that state that the purpose of the overriding commission is to cover costs that do not qualify for capitalization (e.g., maintenance, overhead) under ASU 2010-26.9

Sales conference costs

An insurer should use judgment to determine whether sales conference costs meet the definition of incremental direct costs of contract acquisitions. For example, if sales conferences are akin to volume-related bonuses, whereby sales agents who meet certain sales thresholds are rewarded with all-expenses paid trips instead of cash commissions, an insurer may consider the cost to be deferrable. Of course, only the costs associated with the agents being rewarded are eligible for deferral. For example, costs for airfare, meals and entertainment might be eligible for deferral, while other costs, such as speaker fees, may be expensed as training costs. But if the sales conference is not a reward and is for all sales agents and includes non-deferrable activities, we would not believe it meets the requirements to be capitalized.

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9 ASU 2010-26, Accounting for Costs Associated with Acquiring or Renewing Insurance Contracts.
Premium-related taxes and assessments

Premium taxes are payments made by an insurer to a state or municipality that are based on premiums paid by resident contract holders. Premium taxes and certain premium-related assessments qualify for capitalization because they result directly from the acquisition of a contract and would not have been incurred had the contract not been acquired. The FASB’s Emerging Issues Task Force decided during deliberations on the issue of accounting for costs associated with acquiring or renewing insurance contracts that additional clarification about premium taxes was not warranted. It should be noted, however, that ASU 2010-26 did not affect ASC 944-30-25-5, which deals with certain costs related to universal life-type products and provides that costs such as recurring premium taxes and ultimate level commissions, which vary with premium revenue, be charged to expense in the periods incurred.

Bonuses

Volume-related sales bonuses, such as those tied to achieving a certain threshold of contracts or dollar amounts of contracts, meet the definition of incremental direct costs of contract acquisitions. The bonus would not have been incurred had the contracts not been acquired, and the bonus is directly related to the sales of contracts.

3.1.3 Salaries, benefits and other costs directly related to acquisition activities

A portion of employees’ salaries and benefits relating to defined acquisition activities that lead to the successful issuance or renewal of an insurance contract (excluding any compensation already deferred in section 3.1.2) can also be deferred. Acquisition activities are defined as underwriting, contract issuance and processing activities, medical and inspection activities and sales force contract selling.

Benefits include payroll-related fringe benefits, such as payroll taxes, dental and medical insurance, group life insurance, retirement plans, 401(k) plans and stock compensation plans and overtime meal allowances.

A portion of total compensation of any employee who spends time approving successful insurance contracts may be capitalized as DAC if the following criteria are met:

- The employee must have a direct role in acquisition activities.
- The activity must be an essential activity resulting in the contract being issued.

Illustration 3-1: Deferrable underwriting compensation

Life insurer has established an underwriting approval authorization policy based on an underwriter’s experience level and the size of the insurance contract. In this process, Life insurer starts with an underwriter with less experience and includes others if the authorization level is higher than its level.

<table>
<thead>
<tr>
<th>Underwriter</th>
<th>Authorization level</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>up to $50,000 coverage</td>
</tr>
<tr>
<td>B</td>
<td>up to $200,000 coverage</td>
</tr>
<tr>
<td>C</td>
<td>up to $500,000 coverage</td>
</tr>
</tbody>
</table>

Any contract greater than $500,000 but below $1 million requires approval from an underwriting vice president (VP).

Any contract greater than $1 million requires approval from the Contracts Approval Committee.

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10 ASU 2010-26, Accounting for Costs Associated with Acquiring or Renewing Insurance Contracts.
Example 1: A $750,000 contract has been received, Underwriter A and Underwriter C process and approve it, and the VP approves it for issuance.

A portion of whose salary and benefits should be included in the DAC?

Salaries and benefits related to Underwriter A, Underwriter C and the VP should be included in the determination of DAC, because each individual had a direct role in the underwriting process, and it was essential for all levels to be included in the approval process.

Example 2: A $200,000 contract application has been received, and Underwriter B is assigned to review and approve the contract. Underwriter B asks Underwriter C several questions about the applicant’s medical history. Underwriter C assists Underwriter B in determining questions to ask and whether the contract application should be approved. The contract is ultimately approved. In addition, this contract was reviewed as part of the monthly underwriting quality review process after it was issued.

A portion of whose salary and benefits should be included in the DAC?

Only a portion of Underwriter B’s salary and benefits would be included in the DAC. Although Underwriter C assisted in the review of the contract, his or her activities were not essential to the contract’s issuance but were more supervisory in nature. (His/her approval was not required.)

Should a portion of the salary and benefits of the person performing the monthly quality review be included as DAC?

Costs related to the person performing the quality review should be expensed. Quality reviews may be part of the underwriting department’s controls over appropriate contract issuance, but they are not essential to contract acquisition.

Other costs directly related to the specified acquisition activities that would not have been incurred had that contract not been issued also are deferrable. An example would be travel costs for employees who make on-site risk inspections.

The time that supervisors and executives spend on general supervision, oversight or training of employees is considered an indirect role in acquisition activities and should be expensed as incurred.

3.1.4 Direct-response advertising costs

ASC 944-30 indicates that direct-response advertising costs should be capitalized only if they meet two criteria. First, the direct-response advertising must be aimed primarily at eliciting sales from customers that can be shown to have responded to a specific advertisement. Insurers are required to maintain supporting documentation that identifies the customers and the specific advertisements that elicited the responses to justify the cost deferrals. Second, the direct-response advertising must result in probable future benefits. All other advertising expenses are expensed as incurred.

Insurers are required to maintain supporting documentation that identifies the contract holders and the advertisements that elicited the responses to justify the deferral of the costs. They need to determine that the advertising led directly to sales and was not a general solicitation of individuals that required further sales efforts to complete the contract issuance. Examples of documentation that could link a customer response by name to a specific advertisement include a coded order form, coupon, response card or phone log.
Probable future benefits of direct-response advertising activities are probable future revenues generated from a specific advertising campaign. The estimated future revenue attributable to a specific advertisement must exceed the future costs to be incurred to realize those revenues, as well as the advertising costs deferred.

ASC 944-30-25-1P requires that when determining probable future revenues, insurers should only consider revenues from sales to customers receiving and responding to the direct-response advertising.

**Use of historical advertising efforts**

An insurer can consider past advertising efforts to determine whether expenses for current advertising for a new product are eligible for capitalization as direct-response advertising expenses. To demonstrate such a linkage, an insurer must have a reasonable basis, including persuasive evidence, for concluding that the effects of the advertising costs incurred will be similar to those of past direct-response advertising that did result in a future benefit. The insurer must have verifiable information that supports the historical response rate.

The attributes to consider in determining whether the responses to new advertising will be similar to the responses to past advertising include audience demographics, advertising method, product being sold and economic conditions.

The evidence that an insurer develops to support the future benefits of its direct-response advertising costs must be based on its own operating history. Response rates based on industry statistics are not acceptable. An insurer that is marketing a new product can look at the response rate on direct-response advertising for one of its other products, but only if it can demonstrate that response rates for the two products are likely to be highly correlated.

### 3.1.5 Non-deferrable costs

Costs that are considered indirect such as administrative costs, rent, depreciation, occupancy and equipment costs and other general overhead costs are expensed as incurred.

Costs related to a company's administration system or data processing equipment, even if dedicated to underwriting insurance contracts, do not qualify for capitalization but are categorized as equipment costs, since they would have been incurred regardless of whether any contracts were issued.

All other acquisition-related costs, such as costs incurred by the insurer for soliciting potential customers and costs for market research, training, administration, unsuccessful contract acquisition efforts and product development are expensed as incurred.

### 3.1.6 Amortization of DAC

Although the nature of the costs deferred is the same regardless of product type, there are different amortization models depending on product types. Certain models (e.g., estimated gross profits) are complex and require numerous inputs and assumptions. Refer to sections 4 through 6 for a discussion of the amortization methods for universal life-type policies, investment contracts and limited-payment contracts.

For certain long-duration contracts, ASC 944 requires the measurement of DAC amortization to take investment returns into consideration. In these cases, ASC 320 provides guidance for DAC on the treatment of unrealized gains and losses from available-for-sale securities. This is discussed further in our FRD, *Certain investments in debt and equity securities* (SCORE No. BB0961). This adjustment to DAC amortization is commonly referred to in industry as shadow accounting.
Sales inducements

Insurers offer sales inducements to bring in new customers or prevent existing customers from taking their business to a competitor. In exchange, insurers expect customers to keep the contracts in force for several years. The recovery of the costs associated with sales inducements is predicated on a future income stream of items, such as fees charged against the assets or investment spreads, surrender charges, cost of insurance charges or the reduction of other cost components such as the agent’s commission. The most common types of sales inducements include the following:

- The day-one bonus typically involves a credit by the insurance company to increase the account value at the inception of a life insurance or annuity contract.
- The persistency bonus involves the crediting of a bonus at a later date if the contract holder maintains the contract for some stated period, typically several years.
- The enhanced interest rate typically is offered only with universal life insurance or fixed annuity contracts (including the fixed account option or the dollar cost averaging fund of a variable life or annuity contract). For an introductory period (one or two years), the insurer credits interest to the contract at a rate in excess of the one it currently offers for other similar contracts.

The company recognizes a policy benefit liability for the sales inducement over the period the policy must remain in force for the policyholder to qualify for the inducement. Or, if the sales inducement is credited to the contract holder’s account balance earlier, the liability is recognized at that date. The liability is not adjusted for anticipated surrender charges, persistency or early withdrawal contractual features.

A corresponding sales inducement asset is recognized if all of the following criteria in ASC 944-30-25-6 and 25-7 are met:

- The amounts are incremental to the amounts that the insurer credits on similar contracts without sales inducements.
- The amounts are higher than the contract’s expected ongoing crediting rates for periods after the inducement period. That is, the crediting rate excluding the inducement should be consistent with assumptions used in EGPs, contract illustrations and interest-crediting strategies.
- The sales inducements are recognized as part of the liability.
- The inducement is explicitly identified in the contract at inception.

This sales inducement asset is amortized to benefit expense over the expected life of the contracts using the same methodology and assumptions that are used in amortizing DAC (described by product type in sections 4 to 6). Because ASC 944-30-35-18 requires the annuitization phase to be viewed as a separate contract, the insurer does not combine the annuitization phase with the accumulation phase when determining the amortization of the sales inducement asset.

Under the guidance in ASC 320-10-S99-2, the unamortized sales inducement asset for certain long-duration contracts will attract shadow treatment for unrealized gains and losses on assets accounted for under ASC 320-10, similar to DAC and the unearned revenue liability. This shadow treatment is only applicable to those long-duration contracts that have an amortization basis affected by realized gains and losses.

Given that the sales inducement asset is considered the equivalent of a debt discount and its amortization is an adjustment to benefit expense (that is, investment returns are credited to contract holders), we believe that the effect of amortizing the sales inducement asset should be considered in recoverability of DAC and loss recognition testing, which is inclusive of DAC. ASC 944 does not explicitly address whether...
the sales inducement asset is itself subject to recoverability and loss recognition testing. However, because the sales inducement asset is considered an adjustment to credited investment returns, we do not believe that the sales inducement asset is itself subject to recoverability and loss recognition testing. The shadow accounting is discussed further in our FRD, Certain investments in debt and equity securities.

One criterion for establishing a sales inducement asset is that the amount is incremental to amounts the company credits on similar contracts without sales inducements. Determining whether this criterion is met may require judgment. When products are similar but not identical, we believe that the amount to be deferred as a sales inducement asset, assuming the other asset recognition criteria are met, is limited to the amount in excess of the rates credited on the similar “benchmark” non-sales-inducement product.

We believe that when the criteria to record a sales inducement asset are not met, the expense recognized as a result of recording the sales inducement liability should be included in determining DAC amortization. We believe that when the criteria to record a sales inducement asset are met, consistent with the manner in which unearned revenues are handled, amounts related to sales inducements should not be included in EGPs.

### 3.2.1 Day-one bonus

In day-one bonus sales inducements, insurers may credit an amount, usually defined as a percentage of the deposit, as an immediate addition to the account balance upon receipt of a contribution to the contract. This bonus will be recognized as an immediate addition to the contract liability even if it is forfeitable upon premature liquidation of the contract. If the criteria for recognition of a sales inducement asset are met (and typically they would be), the bonus amount will be capitalized and amortized using the same methodology used for DAC.

For example, assume an annuity contract with no front-end load provides for an immediate bonus credit of 2% of the initial deposit. If the contract holder deposits $100,000, the insurer will report a contract holder liability of $102,000. If the criteria for recognition of a sales inducement asset are met, the insurer will also report a sales inducement asset of $2,000. If the criteria are not met, the insurer will report $2,000 of benefit expense.

### 3.2.2 Persistency bonus

A typical persistency bonus is an additional amount that is credited to the account value of a universal life or annuity contract, provided that the policy remains in force for a specified period of time. The liability for the bonus should be accrued over the period the contract must remain in force to earn the bonus, or recognized at the crediting date, if earlier. If the asset recognition criteria are met (and typically they would be), a corresponding sales inducement asset will be recognized and amortized consistent with the DAC methodology over the life of the contract. This may result in the liability for a persistency bonus being fully accrued on the crediting date, while the related sales inducement asset is only partially amortized.

ASC 944-40-25-15 notes that persistency bonuses, as with any other additional interest, must be “accrued through the balance sheet date at the rate that would accrue to the balance available in cash, or its equivalent, before reduction for future fees and charges, at the earlier of the date that the interest rate credited to the contract is reset (the reset date) or contractual maturity." We believe that one acceptable approach is to equate, at issue, the present value of a constant stream of accruals to the present value of the persistency bonus, assuming no contract terminations. Under this approach, the liability for the sales inducement grows with interest and increases with specified deferral amounts as illustrated below.
Illustration 3-2: Contract with a persistency bonus – measurement of the liability and DSI asset

Assume an annuity contract with no front-end load that provides for a persistency bonus of 4% of the account value at the end of the contract’s fifth year. If the contract terminates before the end of the fifth year, no persistency bonus is credited. Also, assume that the contract starts with an initial deposit of $100,000 and is credited with 5% interest each year.

**Scenario A – Measurement of the liability:** If the company accrues for the liability in equal installments and builds the liability with interest, the liability would build as follows for a persisting contract:

<table>
<thead>
<tr>
<th>Year 5</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>(before crediting bonus)</td>
<td>(after crediting bonus)</td>
</tr>
<tr>
<td>$105,000</td>
<td>$110,250</td>
</tr>
<tr>
<td>$115,763</td>
<td>$121,551</td>
</tr>
<tr>
<td>$127,628</td>
<td>$132,733</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rollforward</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning liability</td>
<td>-</td>
<td>924</td>
<td>1,894</td>
<td>2,913</td>
</tr>
<tr>
<td>Installment component</td>
<td>924</td>
<td>924</td>
<td>924</td>
<td>924</td>
</tr>
<tr>
<td>Interest component</td>
<td>-</td>
<td>46</td>
<td>95</td>
<td>145</td>
</tr>
<tr>
<td>Ending liability</td>
<td>924</td>
<td>1,894</td>
<td>2,913</td>
<td>3,982</td>
</tr>
</tbody>
</table>

The $5,105 additional liability at the end of Year 5 equals the persistency bonus paid at that time (4% of the account value of $127,628). The installment component of $924 is calculated as the level annual amount that accrues to $5,105 over five years, assuming a 5% crediting rate. We believe this approach would be a reasonable way to accrue for the liability over time.

**Scenario B – Measurement of the liability:** An alternative method for a bonus of this type (i.e., one that is expressed as a percentage of the account value) to determine the liability is to accrue a ratable percentage of the account value each reporting period. This would be demonstrated as follows:

<table>
<thead>
<tr>
<th>Year 5</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>(before crediting bonus)</td>
<td>(after crediting bonus)</td>
</tr>
<tr>
<td>$105,000</td>
<td>$110,250</td>
</tr>
<tr>
<td>$115,763</td>
<td>$121,551</td>
</tr>
<tr>
<td>$127,628</td>
<td>$132,733</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rollforward</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning liability</td>
<td>-</td>
<td>840</td>
<td>1,764</td>
<td>2,778</td>
</tr>
<tr>
<td>Installment component</td>
<td>840</td>
<td>882</td>
<td>926</td>
<td>972</td>
</tr>
<tr>
<td>Interest component</td>
<td>-</td>
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<td>139</td>
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<tr>
<td>Ending liability</td>
<td>840</td>
<td>1,764</td>
<td>2,778</td>
<td>3,889</td>
</tr>
</tbody>
</table>

Under this presentation, the installment component in any time period is calculated as the bonus rate (4%) divided by the number of time periods (five years) over which the policyholder must hold the contract to qualify for the bonus (or the time periods to the crediting date, if earlier). This may be one of the simpler methods to apply, and it automatically releases accruals for terminating policies.

**Scenario C – Measurement of the DSI asset:** This scenario illustrates how the corresponding sales inducement asset for the contract in Scenario B is measured, including the related net effect on pretax income. This example assumes (1) the contract satisfies the criteria for asset recognition and (2) the underlying product would amortize DAC using the estimated gross profits method.

The sales inducement asset in any period equals the sales inducement asset from the prior period increased with interest and any additional deferrals and decreased by the current period’s amortization. The DSI asset is amortized to benefit expense over the expected life of the contracts. In this example a 10% lapse rate has been assumed at the beginning of each year beginning in Year 2, and a 100% lapse rate at the end of Year 6 (six-year amortization period). Because of this lapse projection, the account values are projected to decline over time.
Measurement of the DSI asset

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Account value (A)</td>
<td>105,000</td>
<td>99,225</td>
<td>93,768</td>
<td>88,610</td>
<td>83,737</td>
<td>-</td>
</tr>
<tr>
<td>Exp. gross profits (B)</td>
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DSI asset

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<tr>
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<tr>
<td>Ending balance</td>
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<td>549</td>
<td>576</td>
<td>520</td>
<td>422</td>
<td>-</td>
</tr>
</tbody>
</table>

(A) Increased for interest crediting (5%) starting in Year 1, decreased for lapses (10%) starting in Year 2 and increased for the persistency bonus (4%) in Year 6.
(B) Amounts are arbitrary and have been assumed for this illustration.
(C) (A) times the persistency bonus (4%) divided by five years (period to accrue).
(D) Amortization rate (0.441) times the estimated gross profits. (Amortization rate is determined as the present value of the DSI deferrals over the present value of the estimated gross profits).
(E) Prior-year DSI asset balance times crediting rate (5%).

Scenario C demonstrates the mechanics of establishing and amortizing the sales inducement asset, a process that is identical to the amortization of DAC. The sales inducement asset is amortized over the full time period over which profits are earned (six years), while the liability is fully accrued in five years (Scenario B).

Scenario D — Measurement of the DSI asset with unlocking of assumptions: Similar to the process for amortizing capitalized acquisition costs under ASC 944-30, there is an unlocking element to the amortization of the sales inducement asset any time expected gross profits or the estimate of the liability accruals are revised. Scenario D demonstrates this mechanism on the previous illustration that has been revised to include an unanticipated additional lapse of 20% of policyholder account values at the start of Year 4. The additional lapse changes the amortization rate to 0.461 in Year 4.

The Year 4 results show the effects of the unlocking caused by the lapse experience.
Some contracts provide for a bonus credited at contract inception that vests to the contract holder only after the policy has been in force for a number of years. Although the result may be economically identical to a traditionally defined persistency bonus, where the credit is made to the account balance only after the bonus is earned, the up-front bonus has been credited to the contract holder’s account balance at inception and the guidance requires the recognition of the liability at that time. If the criteria for recognizing a sales inducement asset are met, a corresponding sales inducement asset also will be recognized. Therefore, different balance sheet amounts are recognized for contract holder liabilities and sales inducement assets, depending on whether the bonus is credited at the inception of the contract or at the end of the persistency period. However, for economically equivalent bonuses, there should be little difference in the effect on the statement of comprehensive income if the present value of the accrual pattern in the traditionally defined bonus equates to the upfront bonus.

3.2.3 Enhanced interest rate

An Insurer may credit an interest rate for a limited period of time that is in excess of the one it currently offers for other similar contracts. A liability for the bonus amount is accrued over the crediting period. If the asset recognition criteria are met, a corresponding sales inducement asset is established for the portion of the crediting rate that is in excess of the amount credited to similar contracts without bonus interest.

Assume that an annuity contract with no front-end load provides for an extra 2% interest credit during the first two years. If the contract holder deposits $100,000 on 1 January, and the interest credited is 7%, the insurer will report a contract holder liability of $107,000 at the end of the first year. If the criteria for recognition of a sales inducement asset are met, the insurer also will report a sales inducement asset of $2,000 before recognizing amortization and benefit expense of $5,000. If the criteria are not met, the insurer will report $7,000 of benefit expense (interest credited to contract holders’ balances).

Dollar-cost averaging is an option offered under variable annuities. The insurer establishes a short-term fund (typically six months or one year in maturity), generally with an above-market interest rate guarantee, from which systematic transfers are made to variable sub-accounts. Insurers that offer such subsidized dollar-cost averaging accounts that do not offer identical variable product fixed interest rate accounts should consider comparing the subsidy to a reasonably similar product offered by the insurer, even if the duration of the guarantee is not identical.
4  Accounting for universal life-type contracts

A basic principle inherent in ASC 944 is that universal life-type policies are different from traditional life insurance and annuity products because they provide an option to the policyholder to vary the level and frequency of premiums. The amount of the account balance of universal life-type policies represents the accumulated results of various events and transactions since the inception of the policies, including payments of premiums, deductions of policy charges and crediting of interest. Essentially, the account balance for universal life-type policies reflects the cash flows related to these individual events and the transactions realized in each period.

4.1 Accounting for revenues and expenses

Revenues for universal life-type policies consist only of the policy charges assessed against account balances, including mortality charges (or cost of insurance charges), expense charges and surrender charges. Under ASC 944-605-25-5, the portion of the premium that is credited to the account balance (e.g., the initial or subsequent deposits) is not included in revenues.

For most universal life-type policies, policy charges typically are assessed on a monthly or daily basis, so insurers ordinarily do not have to defer policy charges to recognize revenues over the related coverage period. However, if policy charges are assessed at longer intervals (e.g., annually), it may be necessary to defer an estimated portion of the policy charge revenue that relates to the unexpired coverage period.

Under ASC 944-605-25-5 and 6, policy charges that are designed to compensate the insurer for future services are not earned in the period that they are assessed. Rather, those charges must be deferred and recognized in income over the period benefited using the same assumptions and factors used to amortize DAC, as noted in ASC 944-605-35-2. Some universal life-type policies may assess expense charges in the first year or in the early years of the policy that are higher than the expense charges that are assessed in all other renewal periods. ASC 944-605-25-7 specifically states that these excess charges (or front-end fees) should be treated as unearned revenues. The establishment of the unearned revenue liability is discussed in section 4.2.2.

Certain policy charges other than excess front-end fees might also be treated as unearned revenues. Charges that are assessed only in a limited number of periods or that are substantially non-level or disproportionate to related risks may indicate a need for deferral.

For example, actual mortality experience in the early years of the policy typically is expected to reflect lower mortality because of the selection of risks in the underwriting process. Some might view the relatively higher mortality margins in the early policy years as the result of excess revenues relating to future periods when mortality margins are lower. However, the higher mortality margins that may occur in the earlier policy years are properly recognized in income in those years because they result from circumstances that exist in those periods. Thus, current mortality charges ordinarily would be assumed to relate to current mortality costs and would be earned in the period that they are assessed.

That assumption might be overcome in unusual circumstances, for example, if a policy were to have very high mortality charges in the early years to make up for having no mortality charges in the later years. ASC 944-20-45-2 indicates that expenses recognized for universal life-type policies should not include
the entire increase in the related policyholder balances. Instead, only the increase in the policyholder balance due to interest credited to account balances and the amount of benefit claims incurred in excess of account balances are expensed. The portion of premiums that is credited to the account balance and the return of account balances on termination of the policy do not flow through the income statement. Other expenses recognized for universal life-type policies include policy maintenance expenses and amortization of DAC.

Profit patterns for universal life-type products depend on product design. Profits are recognized each period as the insurer realizes investment results, mortality charges, expense charges and surrender charges in excess of the amounts incurred in that period for related interest credits, mortality benefits and expenses. The profit patterns will vary depending on the level and timing of accumulated funds and fees associated with the product, such as back-end loaded and front-end fees.

While product design will drive differences in profit patterns, the requirement to retrospectively adjust DAC for universal life-type products may produce significant earnings volatility compared to traditional long-duration contracts.

4.2 Liability for future policyholder benefits

Under ASC 944-40-30-16, the insurer's recorded liability for universal life-type policies is the sum of the following items:

- The balance that accrues to the benefit of policyholders at the balance sheet date
- Any amounts that have been assessed to compensate the insurer for services to be performed over future periods (i.e., unearned revenue)
- Any amounts previously assessed against policyholders that are refundable on termination of the policy
- Any probable loss (i.e., premium deficiency)

Most universal life-type policies will have the first component, policy account balance. The other three components may not be present in all cases. Sections 4.2.1 through 4.2.4 discuss each of these components.

In addition to assessing the liabilities prescribed in ASC 944-40-30-16, insurers have to assess any benefit features offered with universal life-type contracts to determine whether there is a profits-followed-by-losses situation requiring an additional liability to be established. Section 7 discusses how to assess and measure this liability.

4.2.1 Policy account balances

The first component of the liability for future policyholder benefits that ASC 944-40-30-16 describes as “the balance that accrues to the benefit of policyholders” is the policy’s gross account balance or policy value before deduction of any surrender charge that may be assessed on withdrawal of funds or termination of the policy. The accumulated account balances ordinarily will be the most significant element of the liability for universal life-type policies.

The account balances are recorded as a liability because, without future action by the policyholder, the account balance will fund the policyholder’s obligation to pay fees until the account balance is reduced to zero or a minimum amount stated in the contract (or returned to the policyholder on termination).

ASC 944 does not refer to the account balance as a “deposit,” but in some ways it treats it as such. Neither the portion of the premium credited to the account balance nor the account balance returned to the policyholder on termination flows through the income statement. Instead, those cash flows are recorded directly on the balance sheet.
Tiered interest policies

For some universal life insurance policies, different portions of the account balance are subject to different interest crediting rates. For example, some policies credit different “new money rates” to portions of the account balance, depending on when premiums were received. Other policies may credit one interest rate for portions of the account balance below a certain level and a higher rate for portions above that level. The accumulated account balance will include the effects of these different interest credit rates, but tiered interest rates may add complexity to the process of estimating gross profits for purposes of amortizing DAC.

Policies without account balances

Policies that do not have explicit account balances may still meet the criteria for classification as universal life-type policies as discussed in section 2.2.2. ASC 944-40-30-18 states that the cash surrender values on these policies should be used as the basis for determining the liability. Cash surrender values on policies with an account value are not equivalent to account balances, which are gross of surrender charges.

4.2.2 Policy charges that relate to future services

Under ASC 944-40-30-16, the second component of the liability for universal life-type policies relates to policy charges that “compensate the insurer for services to be performed over future periods.” These amounts must be included in the liability for future policyholder benefits as an additional liability for unearned revenues and recognized in income “over the period benefited using the same assumptions and factors used to amortize capitalized acquisition costs.” ASC 944-605-25-7 specifically identifies initiation or excess front-end fees as items to be deferred as unearned revenues. Other charges that meet the foregoing definition also would be deferred. The revenue recognition of this deferred liability is discussed in section 4.1.

The determination of whether an unearned revenue liability is required is based on facts and circumstances. However, an unearned revenue liability would be inappropriate if the sole purpose were to level the contract’s gross profit from the mortality benefit over the life of the contract.

4.2.3 Refundable policy charges

The third component of the liability for universal life-type policies relates to policy charges that are refundable upon policy termination, often in the form of a persistency bonus. A persistency bonus typically is contingent on some future event. For example, mortality charges that had been deducted from a policy’s account balance may be credited to the account balance if the policy remains in force for a specified number of years. Other forms of persistency bonuses could include a 2% bonus to the accumulated account value if the policy remains in force for a specified number of years.

Section 3.2 discusses the guidance on the accounting of certain sales inducements that may be refundable and how to accrue the liability for these refundable policy charges.

4.2.4 Loss recognition

The fourth component of the liability for universal life-type policies is any amount accrued as a probable loss on a group of policies as described in ASC 944-60. The liability for any such loss should be determined in accordance with the premium deficiency provisions in ASC 944-60.
4.3 Amortization of DAC

The deferral and amortization of policy acquisition costs can have a major effect on the pattern of profit recognition under any accounting method for life insurance. Refer to section 3.1 for a discussion of the costs that can be capitalized.

The guidance requires that acquisition costs for universal life-type policies be amortized over the policy period in relation to the present value of estimated gross profits. Interest is accrued on the unamortized balance using a rate consistent with the rate credited to policy account balances (that is, either the crediting rate in effect at contract inception or the latest revised rate).

If EGPs are expected to have periods of negative profits, the guidance may require an alternative basis (see section 4.3.4).

Changes in the calculation of DAC amortization lead to income statement volatility, including updating current-period estimates of gross profits for actual experience, the retrospective adjustment for accumulated DAC amortization and changes to estimated future gross profits.

DAC for universal life-type contracts is subject to recoverability testing.

4.3.1 Estimated gross profits

ASC 944-30-35-4 requires that DAC for a group of universal life-type policies be amortized at a constant rate based on the present value of estimated gross profits expected to be realized over the life of the group of policies. For purposes of amortizing DAC, estimated gross profits should consist of the sum of the following items over the life of the book of contracts (ASC 944-30-35-5): (1) the cost of insurance less benefit claims in excess of related policyholder balances; (2) estimated policy expense charges less estimated policy administration expenses, including certain policy-related acquisition costs not included in capitalized acquisition costs, such as ultimate renewal commissions and recurring premium taxes (see ASC 944-30-35-5b); (3) estimated earnings based on the return from investment of policy account balances less estimated interest to be credited to account balances; (4) estimated surrender charges; and (5) other expected assessments and credits.

Estimates of the gross profit are based on assumptions over the life of the book of contracts about premium levels, mortality, investment yields, interest credit rates, expense levels, withdrawals and other experience. Estimates of expected gross profits are based on management’s best estimates and do not include provisions for adverse deviation. ASC 944-30-35-9 requires the estimates of gross profits to also include the recognition of the additional liability for contracts with death or other insurance benefit features.

As discussed in section 4.2.2, the guidance requires certain policy charges to be deferred as unearned revenues and then recognized in income “over the period benefited using the same assumptions and factors used to amortize capitalized acquisition costs.” Since the same gross profit is used to amortize DAC and the unearned revenues, when the unearned revenue fees are recognized they are not included in the gross profits.

The present value of total gross profits consists of actual gross profits realized from inception to date, plus management’s best estimate of gross profits for the remaining life of the policies. Since the EGPs are based on actual experience to date and other information, the estimate of the present value of gross profits can significantly change. The amortization of DAC is recalculated from the inception of the policies using a revised k-factor, and any adjustment of the unamortized DAC balance is recognized in current operations as a cumulative catch-up adjustment. This is discussed further in section 4.3.6.
The amortization process for universal life-type policies using EGPs essentially involves the following steps:

- Identify the deferrable policy acquisition costs, including estimated deferrable renewal acquisition costs, for a group of similar policies.
- Estimate the EGPs to be realized from the group of policies over the expected term of the policies.
- Compute the amortization rate (k-factor) by calculating the present value of the estimated acquisition costs deferred (i.e., the stream of deferrable first-year and renewal policy acquisition costs) and divide it by the present value of the stream of EGPs using the policies' interest crediting rate as the discount rate.
- Accrue in each period interest on the unamortized DAC balance using the policies' interest crediting rate.
- Amortize in each period a portion of the unamortized DAC balance equal to the gross profits for the period, multiplied by the k-factor.
- Regularly reevaluate the estimates of the present value of gross profits and update as necessary.

An illustration of this DAC amortization calculation is presented in ASC 944-30-55-2 through 55-10.

### 4.3.2 Policy administration expenses

Policy administration expenses factored into the gross profits calculation may include costs associated with premium collection and commission processing, costs of policy changes and other direct policy maintenance costs (such as the cost of preparing and distributing policyholder account balance information). Non-policy-related expenses, such as certain overhead costs, and costs that are related to the acquisition of business that are not capitalized, such as certain advertising costs, cannot be included in estimated gross profit.

### 4.3.3 Investment margins

The investment margin component of gross profits is calculated as the expected investment yield on amounts equal to policy account balances, less estimated interest to be credited to account balances. Only general account products include an investment margin since the investment returns in the separate account go to the policyholders. The investment yield rate assumption should be the expected investment yield, which can be considered the same as that used for traditional insurance products, except that ASC 944-30-35-5 prohibits the use of provisions for adverse deviation in the calculation of gross profits. When making the initial estimate of investment yields, pricing assumptions may be a useful starting point.

Assumptions regarding interest crediting rates should be compatible with the investment yield assumptions. Sometimes companies may initially set interest crediting rates higher than current investment return rates to attract new business. In that case, companies should consider whether its other assumptions (e.g., lapse rates) are compatible with the expected reduction in crediting rates in the future. For policies with a tiered interest rate structure, it may be practical to use a blended crediting rate, and the crediting rate assumption might be graded over time to reflect the changing mix of upper- and lower-tier account balances.

While realized investment gains and losses from sale of investments typically are reported separately from investment income, they are viewed as an element of the total investment yield that is a component of gross profits. If the timing and amount of actual to expected realized investment gains and losses change and materially affect the expected total yield and estimated gross profits, the DAC amortization k-factor will need to be updated and a cumulative catch-up adjustment will be reflected in current operations.
In addition, the investment margin component of gross profits should also reflect the assets backing liabilities for other insurance policy benefit features and guarantees, including derivatives for related hedging programs.

4.3.4 Alternative amortization bases

ASC 944-30-35-4 provides that alternative bases for amortizing DAC be used if significant negative gross profits are expected in any future period.

Possible alternative bases for amortization are the present values of estimated gross revenues, gross expenses or the amounts of insurance in force. The objective in providing for alternative bases of amortization is to identify a systematic basis for amortization, but the resulting amortization patterns using these alternative bases can vary widely from those based on estimated gross profits. Because of the significant inconsistencies in profit recognition patterns that may result from the use of different amortization bases, an insurer should carefully evaluate the significance of expected negative gross profits in determining whether the use of an alternative basis of amortization is required.

Actual negative gross profit in a particular period should be included in the EGP amortization model. An isolated and unexpected negative gross profit amount that emerges after the inception of a group of policies and that is not expected to be repeated in the future ordinarily should not cause a change in the basis of amortization. However, when EGPs are re-estimated and the insurer expects a significant negative gross profit amount that will require the retrospective adjustment of DAC amortization, the insurer will need to evaluate whether a change in the basis of amortization is required.

However, because the change in method results from a change in circumstances, it is inseparable from the effect of the change in accounting estimate. ASC 250-10-45-18 states that changes in accounting principles relating to the continuing process of obtaining additional information and revising estimates are considered to be changes in estimates. The new basis of amortization should be applied consistently in the period of change and in future periods.

Negative gross profits most likely will also require careful evaluation of the recoverability of the DAC asset and the possible need for loss recognition. A change in the basis for amortizing DAC that is required because of significant unanticipated negative gross profits involves a change in a method of applying an accounting principle.

4.3.5 Use of interest

Insurers must amortize DAC at a constant rate in relation to the present value of estimated gross profits and accrue interest on the unamortized DAC balance. Under ASC 944-30-35-4 and 35-7, the interest rate used for both of these measurements must be based on the rate at which interest is credited to policy account balances (either the rate in effect at the inception of the contact or the latest revised rate). Once an insurer adopts a method of determining the interest rate, any subsequent change in that method is considered a change in accounting principle.

4.3.6 Retrospective adjustment of amortization

ASC 944-30-35-7 requires that the total amount of amortization recorded to date be adjusted either positively or negatively when “actual experience or other evidence suggests that earlier estimates” of gross profits should be revised, and the adjustments are reported in current income. However, adjustments cannot result in a DAC balance that is greater than the original deferrals plus accrued interest. In effect, periodic revaluation of the unamortized DAC asset is required, with the change in the asset balance representing the amortization (positive or negative) for the period.
The guidance also requires that estimated gross profits be “evaluated regularly.” This evaluation includes updates for actual experience and monitoring of actual and emerging experience.

The extent of the effect on current reported income of retrospective adjustments of DAC is sensitive to changes in estimated gross profits. The retrospective adjustment of DAC as a result of changes in gross profits may affect earnings in three ways.

The first effect on DAC amortization relates to a fluctuation in actual gross profits in relation to the current period’s estimated gross profits (i.e., a true-up of actual to expected variances). Lower-than-expected gross profits in the current period will result in a relatively lower amount of DAC amortization recognized. Higher-than-expected gross profits will result in a relatively higher amount of amortization.

The second effect relates to the catch-up adjustment for DAC amortization of prior periods (i.e., catch-up adjustment for changes in the k-factor). The change in actual gross profits and the effect of those changes on estimates of future gross profits will change the present value of total gross profits and, therefore, cause a change in the DAC amortization rate. This revised amortization rate is applied to the actual gross profits realized in the periods from the inception date of the policies to determine a revised unamortized DAC balance at the date of the revised estimate of gross profits.

The third effect relates to changes in assumptions that affect future periods’ estimated gross profits, often aligned with a company’s unlocking process. These assumption changes are brought into the current period by the retrospective adjustment to the present value of total gross profits and the resulting change in the DAC amortization rate.

The combined impact of these effects on the current period’s income will depend on the following variables:

- **The source of the change in gross profits** – Some changes may affect the current period’s gross profits and have little effect on expected future gross profits. Other changes affect both current and future gross profits. For example, an unexpected increase in surrenders might increase the current period’s gross profits on a back-end loaded product by increasing surrender charge revenues, but it also will decrease future expected gross profits by lowering the amount of insurance in force.

- **The age of the group of policies** – A fluctuation in gross profits in the early years of a group of policies may have a relatively larger effect on the present value of total gross profits and the revised DAC amortization rate, but there also will be a lower amount of amortization from prior years to adjust. A comparable fluctuation in a later year will have a relatively smaller effect on the present value of gross profits and the amortization rate, but there will be a higher amount of prior amortization for which to adjust.
5 Accounting for investment contracts

ASC 944-20-15-14 specifies that the guidance for long-duration insurance contracts does not apply to life insurance and annuity products that “do not incorporate significant insurance risk.” ASC 944-825-25-2 states that such investment contracts should be accounted for “in a manner consistent with the accounting for interest-bearing or other financial instruments.”

In section 2 we discussed what to consider when classifying life insurance and annuity products as investment contracts under ASC 944-20-15. Products that typically will be classified as investment contracts include certain settlement annuities, supplementary contracts without life contingencies, individual and group deferred annuity products that do not incorporate significant mortality risk during their accumulation phase, and guaranteed investment contracts.

Many investment contracts sold by insurers are structured and marketed like comparable products that involve mortality or morbidity risk. If investment contracts were to contain mortality or morbidity risk, they typically would be classified as universal life-type policies or as limited-payment policies, depending on the underlying benefit features.

5.1 Accounting requirements

Under ASC 944-825-25-1 and 25-2, payments received by the insurer from an investment contract are accounted for “in a manner consistent with the accounting for interest-bearing obligations.” The guidance states that payments on investment contracts are required to be reported as liabilities rather than revenue. Similar to universal life-type products, the liability for investment contracts represents a contract holder’s account balance. ASC 944 does not specifically address the recognition of fees earned on investment contracts; therefore, insurers generally analogize to the universal life-type fee guidance (see section 4.1).

5.2 Amortization of DAC

Investment contracts’ policy acquisition costs are deferred following the guidance discussed in section 3.1. The type of DAC amortization method that should be used for investment contracts depends on certain contract provisions. For investment contracts that include significant surrender charges or generate significant sources of revenue not based on the contract holder’s funds, ASC 944-30-35-19 requires the use of the universal life-type products method (i.e., retrospective method of amortization using EGPs). ASC 944-30-35-20 requires other investment contracts to use a method consistent with the interest method under ASC 310-20 to amortize the DAC.

Under the interest method, the objective is to arrive at a constant effective yield over the term of the contract. Under the universal life-type method, DAC is amortized as a constant percentage of the present value of estimated gross profits, and interest is accrued to the unamortized DAC balance. Refer to sections 5.2.1 and 5.2.2 for a discussion of how these methods are applied to investment contracts.

Under ASC 944-20-15, products that do not involve mortality or morbidity risk in their fund accumulation phase, such as many deferred annuities, are accounted for as investment contracts during the accumulation phase. ASC 944-20-15 requires the settlement annuity to be accounted for as a separate policy when these products annuitize upon execution of an annuity settlement option. Generally, the DAC associated with the deferred annuities is amortized over the expected accumulation period. When the investment contract annuitizes, the net proceeds are treated as a single premium for the purchase of the settlement annuity. That is, when the contract changes from accumulation to annuitizing it is considered a new contract.
5.2.1 DAC amortization following the universal life-type products method

For investment contracts that include significant non-investment revenues (e.g., surrender charges), insurers follow the DAC amortization method used for universal life-type products. Section 4.3 discusses what to consider when determining the components of gross profits for universal life-type policies. Once an insurer has selected a method for determining gross profits for investment contracts, it should consistently apply the method to its investment contracts in future years.

Interest margins typically are the greatest source of gross profits for investment contracts because these products involve no more than nominal mortality or morbidity risk. Other possible sources include expense margins and surrender charges. Surrender charges that are expected to be significant should be included in gross profits for purposes of determining DAC amortization.

The following illustration shows how the estimated gross profits method would be applied to a flexible-premium deferred annuity. In each period, DAC is equal to the prior year’s balance, additional amounts capitalized, interest accretion and the amortization (k-factor rate times gross profits). Since this is a retrospective calculation, if amounts were revised due to a change in assumptions or experience, a cumulative effect adjustment would be recorded in the current period (which is not illustrated).

**Illustration 5-1: Universal life-type products method (i.e., estimated gross profits) for flexible-premium deferred annuity**

This example illustrates the DAC amortization method for universal life-type products applied to a flexible-premium deferred annuity investment contract with a 15-year maturity. Premium persistency is 90% each year, and acquisition costs qualifying for deferral are 6% of each premium received. The policy has a surrender charge that phases out after seven years. The estimated investment yield rate is 10% and the interest crediting rate is 8.5%. Gross profits are defined as the sum of investment margins, policy expenses and surrender charges.

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<td>-</td>
<td>1</td>
<td>96</td>
<td>58</td>
<td>-</td>
<td>37</td>
</tr>
</tbody>
</table>

Explanation (all amounts are rounded):
- Column A: (A) of prior year * (90%)
- Column B: (A) * (6%)
- Column C: (C) of prior year + (A) – withdrawals + (E) – (F)
- Column D: [C] of prior year + (A) * 10%
- Column E: [(C) of prior year + (A)] * 8.5%
- Column H: (D) – (E) + (F) – (G)
- Column I: (H) * 0.6051. [For purposes of the illustration, we used a DAC amortization rate of 0.6051. Withdrawals are not shown, but they follow a pattern of general increase each year until a full withdrawal of all accumulated account balances in Year 15 upon expiration of the policy term.]
- Column J: [(J) of prior year + (B)] * 1.085 – (I).
5.2.2 DAC amortization using the interest method under ASC 310-20

For investment contracts in which investment margins are the sole significant source of revenues and for which future cash flows and interest crediting rates are relatively certain, insurers use the DAC amortization method that is consistent with the interest method under ASC 310-20-35.

ASC 310-20 contains the accounting guidance for interest-bearing obligations and addresses the accounting for nonrefundable fees and costs associated with originating or acquiring loans. Generally, ASC 310-20 requires lenders and certain lessors to defer origination fees less certain direct origination costs and amortize those amounts over the life of the loan or lease as a yield adjustment using the interest method.

ASC 310-20 applies to originating and purchasing loans, which are recorded as assets, rather than to interest-bearing obligations such as investment contracts, which result in liabilities. The objective of this interest method is to arrive at a constant effective yield on the net investment in the loan (i.e., the sum of unpaid principal and unamortized net fees or costs) over the loan’s term. The required amortization is the difference between the periodic interest specified by the contractual terms of the loan agreement (i.e., the amount computed by applying the stated rate of interest to the outstanding principal balance) and the amount computed by applying the effective yield to the net investment in the loan.

The interest method is applied to investment contract DAC differently than it is applied to nonrefundable fees and costs related to loans in several ways. For loans, both the loan origination costs and the loan origination fees are deferred, and the net amount is amortized. DAC for investment contracts is not reduced by front-end fees. Instead, the front-end fees are deferred (i.e., unearned revenue liability) and amortized on the same basis as DAC. Since the front-end fees and DAC are amortized on the same basis, there is no effect on the financial statements from accounting for them separately or accounting for them if they were netted. Another key difference is the loan is reported in the financial statements net of unamortized deferred fees or costs. DAC and the related benefit liability are reported as separate assets and liabilities.

When a company applies the interest method to an investment contract, the effective interest rate is established at policy issuance at the level that results in the present value of future benefits and expenses being equal to the net cash received. As a result, the company does not recognize profit as a percentage of premiums, and it does not recognize profit at policy issuance, which is the approach used for traditional long-duration contracts. This approach results in a profit only when the interest rate actually earned on investment net proceeds exceeds this calculated “break-even rate.”

Each period, the investment contract DAC amortization is equal to the difference between the interest accretion on the account balance (i.e., crediting rate) and the amount computed by applying the effective interest rate to the account balance.

5.3 Recoverability of DAC

ASC 944-30-35-22 indicates that when the DAC balance is probably not recoverable, the insurer reduces the asset to the level at which it can be recovered. Because of this, DAC for investment contracts is subject to recoverability testing.

ASC 944-60-35-6 specifies that the loss recognition (or premium deficiency) guidance does not apply to investment contract liabilities. This was an intentional decision by the FASB, based on the fact that noninsurance financial institutions are not subject to loss recognition requirements. Therefore, we believe insurers are neither required nor permitted to accrue a liability for estimated losses on investment contracts. However, DAC for investment contracts may be written off as a result of loss recognition (or premium deficiency) testing.
6 Accounting for limited-payment contracts

ASC 944 defines limited-payment policies as long-duration life insurance and annuity products with fixed and guaranteed terms that are purchased with premiums paid over a period shorter than the period over which benefits are provided. Limited-payment policies might include single-premium whole life insurance policies; five-pay, 10-pay and 20-pay life insurance policies; life-paid-up-at-age-65 policies; and immediate annuities with life contingencies, provided that the policy terms are fixed and guaranteed.

Refer to section 2 for further discussion of product classification.

6.1 Accounting requirements

Limited-payment policies are similar to traditional long-duration policies with fixed premium and benefit levels, but their premium payment patterns are different. Traditional long-duration policies have premiums that are paid over the period in which benefits are provided, while limited-payment policies have premiums paid over a shorter period. As a result, the accounting for limited-payment contracts is based on that for traditional long-duration contracts, with a modification for the premium recognition. Traditional long-duration contracts recognize premium when due, while limited-payment contracts may require a portion of the gross premium to be deferred.

Similar to traditional long-duration contracts, the assumptions in the limited-payment model are locked in at inception of a policy. This is applicable to the accounting for all components of a limited-payment contract, including revenue recognition, DAC and the liability for future policyholder benefits.

Revenue recognition

ASC 944-605-25-3 requires that for limited-payment contracts any gross premium in excess of the net premium be deferred (i.e., establish a deferred profit liability). The net premium is defined as the portion of the gross premium required to provide for all benefits and expenses. This deferral of the excess premiums for limited-payment policies prevents the issue of potential “front-ending” of profits on these products and results in profits being recognized over the life of the policy in relation to performance.

In subsequent periods, the deferred profit liability is amortized with profits recognized in income in a constant relationship with insurance in force (for life insurance policies) or in a constant relationship with expected future benefit payments (for annuities) (ASC 944-605-35-1). It will be necessary to estimate the amounts of insurance in force or annuity payments in future years to determine the amortization rate for the deferred profits. Also, as noted in ASC 944-605-35-1A, interest should accrue to the unamortized deferred profit liability balance.

In addition, ASC 944-30-25-8 requires that nondeferrable first-year acquisition costs not be included in calculating net premiums when determining the deferred profit liability for limited-payment policies.

ASC 944-605-25-4A and 35-1 do not indicate how the deferred portion of the profits should be reported in the balance sheet. However, most companies include this amount as an addition to the liability for future policyholder benefits.
DAC
Consistent with other long-duration contracts, certain acquisition costs for limited-payment contracts may be deferred and amortized. Refer to section 3 for a discussion on costs that can be capitalized.

DAC for limited-payment contracts is amortized in relation to premiums recognized using assumptions consistent with the liability assumptions, as required by ASC 944-30-35-3. This DAC amortization method is consistent with that applied for traditional long-duration contracts.

DAC for limited-payment contracts is subject to recoverability testing and loss recognition (or premium deficiency) testing.

Liability for future policyholder benefits
The liability for future policyholder benefits for limited-payment policies is determined by using the net premium model (similar to traditional long-duration policies). This liability is calculated as the present value of estimated future policy benefits to be paid, less the present value of expected future net premiums. Liabilities are established based on “locked-in” assumptions of future experience, including provisions for adverse deviation. In addition, a deferred profit liability is established as discussed above in the “Revenue recognition” section.

ASC 944-60-15-5 states that loss recognition provisions apply to limited-payment policies.
7 Accounting for benefit features

7.1 Overview of accounting for benefit features

Certain long-duration products, such as universal life-type or investment contracts, may be sold with contract features that provide for benefits in addition to the account balance. Depending on their characteristics, some of those features are accounted for as embedded derivatives at fair value under ASC 815 or as insurance liabilities under ASC 944 using a benefit ratio liability model (formerly known as the SOP 03-1 liability). Certain benefit features (e.g., minimum interest rate guarantee) do not require a separate liability at initiation.

To determine the accounting treatment for a benefit feature, an insurer first assesses whether the benefit feature should be accounted for as an embedded derivative under ASC 815. All other benefit features are assessed to determine whether they should be accounted for under the benefit ratio model. If the benefit feature does not meet the criteria for either of these accounting models, no liability is established to recognize the feature, and all cash flows related to the feature are recorded in the period in which they occur.

There are two categories of benefit features that apply the benefit ratio model. Sections 7.1.1 and 7.1.2 discuss the accounting for death or other insurance benefit features. Sections 7.1.3 and 7.1.4 discuss the accounting for annuitization and other guaranteed minimum benefits features.

7.1.1 Effect of death or other insurance benefit features on product classification

To determine the appropriate accounting under ASC 944 for a contract that contains death or other benefit features, the insurer must apply the guidance on benefit features to assess whether the contract is an investment contract or an insurance contract (overall product classification is addressed in section 2). An insurer performs this assessment following the criteria in ASC 944-20-15-20 and 21. The guidance requires an assessment at contract inception to determine whether the contract has mortality or morbidity risk.

If mortality and morbidity risks are nominal (i.e., “of insignificant amount or remote probability”), the contract is classified as an investment contract, and no additional liability is recognized for the insurance benefit feature until there is a triggering event. The triggering event is the occurrence of the insured mortality or morbidity event, not the change in market values or account values. For example, for a guaranteed minimum death benefit, the triggering event is the death of the insured when the death benefit guaranteed by the contract is in excess of the account value.

If the mortality and morbidity risks associated with non-elective insurance benefit features (e.g., death or disability) are other than nominal, the contract is classified as an insurance contract. There is a rebuttable presumption that a contract has significant mortality risk if the additional insurance benefit would vary significantly in response to volatility in the capital markets. The significance of mortality and morbidity risk is measured based on a comparison of the present value of expected excess payments under the insurance benefit provisions (benefit amounts in excess of account balance) plus related additional benefit processing expenses to the present value of all revenue (contract assessments) expected from the contract holder. For general account spread-based products, the expected revenue includes the expected investment margin. These calculations are to be made considering both frequency and severity under a full range of possible scenarios, taking into consideration historical investment returns, the volatility of those returns and expected future returns.

11 Benefit features classified as an embedded derivative are addressed in our FRD, Derivatives and hedging (SCORE No. BB0977).
The cost of the benefits must be compared to total expected assessments to determine the significance of the mortality or morbidity risk. Total expected assessments (as defined in ASC 944-40-30-21) are the aggregate of all charges, including those for administration, mortality and surrender, regardless of how characterized. However, ASC 944-20-15 does not quantify the level at which the estimated cost of excess benefit payments becomes “other than nominal” when compared to the amounts assessed against the contract holder. As a result, insurers have to exercise judgment to reach this conclusion.

In the context of risk assumed by the insurance enterprise, a relevant application of total expected assessments is revenue realized by the insurer, including fees charged directly against the contract holder and collected by the insurer, as well as any revenue from fee-sharing arrangements with investment managers. However, a literal reading of the guidance might lead one to include all investment management fees, even if not collected or retained by the insurer, in the definition. Assuming the investment adviser is not a subsidiary or equity-method investee, we do not believe that this latter interpretation is consistent with the intent of the guidance.

For example, in a product generating revenues of 1.00% of account value per year, a minimum guaranteed death benefit (MGDB), also referred to as guaranteed minimum death benefits (GMDB), with an estimated level benefit cost of 0.10% per annum may be considered significant, while the same MGDB in a product generating revenues of 4.50% of account value per year might be considered nominal. However, the guidance includes a rebuttable presumption that a contract contains significant mortality and morbidity risk when it provides for insurance benefits that vary significantly in response to capital market volatility. The existence of this rebuttable presumption likely results in both of these contracts being considered to contain significant mortality risk.

Further complexity could occur when product revenue is generated by different entities within a single organization. For example, consider an MGDB in an annuity contract written by an insurance company (Company A) that offers variable sub-accounts managed by a related investment company (Company B). Assume both Company A and Company B are owned by Company C. In determining the revenue to be used for contract classification, Company A might consider asset charges collected directly from the policyholder, surrender fees and any fee-sharing revenue collected from Company B. Company C, on the other hand, includes all contract-related revenue recognized by Company A, as well as that portion of the investment management fees retained by Company B. This results in the same MGDB being a less significant percentage of contract revenues for Company C than it is for Company A. Therefore, the same contract classified as an insurance contract for Company A could, upon consolidation, be an investment contract for Company C. However, we believe the rebuttable presumption would, in most instances, lead Company C to conclude that the contract contains sufficient benefit variability in response to capital market volatility for it to be classified as an insurance contract for accounting purposes.

### 7.1.2 Accounting for a universal-life-type contract with death or other insurance benefit features

When a contract is classified as an insurance contract and the amount for an insurance benefit is compared against the benefit assessment in a manner expected to result in profits in earlier years and losses in subsequent years from that insurance benefit (commonly referred to as profits followed by losses), the insurer should recognize an additional liability. This evaluation is applied to each insurance benefit feature individually, at contract issuance. This liability is in addition to the accrued account balance.

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12 For example, a variable annuity might include an explicit charge of 1.00% for mortality and expense charges assessed and received by the insurer and an additional 0.75% for investment management fees paid to an investment adviser, of which 0.25% might be subsequently paid by the investment adviser to the insurer under a revenue-sharing arrangement. It is unclear in the guidance whether the insurer’s revenue (1.25% in this case) or the total contract fees (1.75%) should be the base for determining the significance of mortality or morbidity benefits.
for the portion of such assessments that represents compensation to the insurer for services to be performed in future periods. This type of liability could be required in situations where there is either no specific cost of insurance (COI) charge or the COI charge is not adequate to cover the expected benefit costs in a number of years of the contract. Entities should determine whether an insurance benefit liability calculation is required at contract issuance. This determination holds for the life of the contract.

For universal life products (including variable universal life) containing minimum premium schedules or other no-lapse guarantees, the question arises about whether an additional liability for such guarantees is required. No-lapse guarantees are addressed explicitly in ASC 944-20-05-31, and are treated as separable benefits that must be valued independently (the way an MGDB would be considered under a variable annuity contract). The decision on whether these features result in losses being projected in later years of the contract will determine whether the contract needs to be included within the benefit liability model at contract inception and in future reporting periods. However, given that these guarantees are typically subject to significant capital market variability, the rebuttable presumption is that would be subject to the benefit ratio model.

ASC 944 provides guidance on the accounting for the various types of guaranteed minimum benefits offered under variable annuities, including MGDBs and guaranteed minimum income benefits (GMIBs).

Typical MGDBs include (1) return-of-premium benefits, where the contract holder is assured to receive, at death, no less than the return of all premiums, net of withdrawals, contributed to the contract; (2) maximum anniversary value benefits where the contract holder is guaranteed to receive, at death, no less than the highest account value obtained on any contract anniversary, adjusted for subsequent withdrawals; and (3) roll-up benefits, where the contract holder is guaranteed to receive, at death, no less than the net of deposits and withdrawals accumulated at some rate of interest (e.g., 5%).

The change in the additional liability is reported as a component of benefit expense in the statement of comprehensive income, and the amount of the liability at the balance sheet date, which may not be less than zero, is determined based on (1) the current benefit ratio multiplied by (2) the cumulative assessments recorded from contract inception through the balance sheet date, including any investment margins if applicable, minus (3) the cumulative excess benefit payments and related expenses (including amounts reflected in claims payable liabilities), plus (4) accreted interest. The current benefit ratio is equal to the present value of total expected insurance benefit excess payments and related benefit processing expenses over the life of the contract, divided by the present value of total expected assessments over the life of the contract.

While the benefits payable used to calculate the benefit ratio must reflect actual and expected experience, the calculation is supposed to consider a range of possible results, not just a single best-estimate. In addition, the assumptions (including discount rates) should be consistent with the assumptions underlying the gross profits used to amortize DAC. Though not stated explicitly, this language strongly hints at stochastic methods for determining the benefit ratio. One way to implement a stochastic method and still maintain consistency with the fund return assumption used to amortize DAC would be to randomly generate fund return scenarios using a distribution with a mean value equal to the DAC assumption. The benefit ratio could then be set at the mean value (or some other appropriate statistic) of the benefit ratios coming from the resulting distribution.
The benefit ratio is recalculated at each reporting date, and the resulting change in the liability is recognized in the income statement as benefit expense. This approach requires insurers to have systems in place that can reflect the effects of an unlocking of assumptions at each reporting period, similar to the process required for the amortization of DAC. The reflection of past claim experience in the liability means that historical claim experience (i.e., experience associated with contracts that are no longer active) needs to be maintained to perform the calculation. The history and projection of death benefits and the reserve must also be reflected in the EGPs used to amortize DAC, unearned revenue liabilities and DSI.

When the insurer considers practical issues related to calculating this liability, a key assumption is the level at which the calculation is performed. Typically under US GAAP, actuarial reserve calculations are performed at the policy level, with grouping techniques allowed only if they generate materially the same result that would be achieved by a seriatim (i.e., policy level) valuation. The calculation for this liability is different because it considers benefits paid in the past on groups of contracts. As a result, there is an element of grouping in the method by its very definition.

We believe there are two elements to the question of grouping: definition and calculation. Determining whether a contract is deemed to be an insurance contract or an investment contract, as described in section 7.1.1, should be performed at the policy level. This raises the possibility that, in theory, two identical contracts issued to different people on the same day could be classified differently depending, for example, on the age and sex of the contract holder. However, the rebuttable presumption that a contract contains significant mortality and morbidity risk when it provides for insurance benefits that vary significantly in response to capital market volatility makes it unlikely that a split between insurance and investment contracts exists to any material extent within a particular contract form.

The calculation element comes down to balancing practical issues relating to calculations with the intent of the guidance. Insurers should consider a level of aggregation that is consistent with the level at which they calculate EGPs for DAC amortization purposes. The liability calculation is not a deficiency test, so we believe it is inappropriate to perform the calculation on an entire block of variable annuity business, for example, in aggregate. On the other hand, performing the calculation at a level that is too granular (e.g., for each combination of product type, age at issue, sex and issue year) may be computationally difficult and likely result in disjointed, largely random results that probably would overstate the liability.

While the guidance allows latitude, insurers need to be careful when selecting their grouping methods and documenting the justification for their approaches as they develop new products. When selecting a grouping method, they should consider the risk that the liability is intended to cover and be satisfied that their methods establish liabilities that reflect those risks.

For example, the primary risk associated with MGDBs under variable annuities is the risk that variable funds perform poorly, so groupings should be designed around this risk. Therefore, groupings that distinguish between issue year and type of MGDB may be appropriate because they identify groups of policies where the market risk is expected to be relatively homogenous, and they separate them from other groups where the effect of that same risk is expected to be materially different. Groupings that distinguish between sex and issue age are not suggested, except perhaps at very broad levels, because they are not relevant grouping factors that affect market risk.

On the other hand, age or sex groupings may be appropriate for other types of products covered by this provision of the guidance, such as annuities containing long-term care features or level-COI universal life products, because in these situations, the risk being covered is directly associated with the factor that defines the grouping.
Assume that the company’s DAC model uses a variable account return assumption of 7%. The only sources of revenue (assessments) in the product are an asset-based fee (mortality and expense charge) of 1.50% and surrender charges. The company calculates the reserves for an issue year block of business.

The following pattern of revenues (assessments) is reflected in the company’s EGP stream at issue.

### Table A

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<td>1,502</td>
<td>1,500</td>
<td>1,496</td>
<td>1,332</td>
<td>1,136</td>
<td>1,066</td>
<td>1,023</td>
<td>938</td>
<td>789</td>
<td>730</td>
<td>671</td>
<td>615</td>
<td>559</td>
<td>266</td>
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<tr>
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<td>789</td>
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<td>671</td>
<td>615</td>
<td>559</td>
<td>266</td>
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</table>

Using a stochastic model with a mean variable fund return assumption of 7% (consistent with its DAC model assumption), the company generates a range of possible death benefit payments in excess of the account value expected at issue. It uses this range to establish a benefit ratio (perhaps by selecting the results at the 50th percentile of the distribution), which relates the present value of the projected death benefits to the present value of the assessments, with both benefits and assessments being consistently generated. Assume the benefit ratio is 0.095 at issue.

Table B shows how the MGDB reserve might be expected to develop over time if the company’s 7% return assumption is actually realized. In this example, we also assume that the company’s assumption at issue for death benefits paid is realized. This example is somewhat unrealistic because usually a smooth growth environment, like the one assumed here, results in no MGDBs, although volatility during the year could result in some benefits being paid. However, the example is useful for understanding the mechanics of the MGDB reserve calculation.

### Table B

<table>
<thead>
<tr>
<th>Year</th>
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**Note:**
- “Acc. payments” refers to the benefits paid accumulated with interest (7%).
- “Acc. ben. assmt.” refers to the cumulative value of assessments times the benefit ratio accumulated with interest (7%). The assessments can be found in Table A.
- “Tentative reserve” is the difference between the cumulative assessments for benefits and the cumulative benefits paid. The recorded reserve equals the tentative reserve, with a floor of zero.

In Table B, the benefit ratio established at issue perfectly anticipated the benefits to be paid over the life of the contracts. The company never changed its estimate of either assessments or benefits paid, so the benefit ratio remained the same throughout. There was never any retrospective unlocking of assumptions. The ending reserve of zero demonstrates that the benefit ratio used and the payments made were consistent.

It is unlikely that the benefit ratio would remain constant. In fact, we would expect the benefit ratio to be unlocked and adjusted frequently, as it is with certain DAC k-factors. At a minimum, an insurer would have to evaluate actual and emerging experience at every reporting date to determine whether the benefit ratio continues to be appropriate.
Illustration 7-2: Unlocking mechanism in the development of an MGDB reserve

If we consider a second illustration in which actual benefits paid under MGDBs are considerably lower than reflected in the initial benefit ratio, we can observe the unlocking mechanism in the development of the reserves. For simplicity, we’ll keep everything the same as illustration 7-1, but assume no MGDB benefits are paid in each period. Each period the benefit ratio is re-estimated, since we had expected benefits in each period. This is consistent with an environment in which annual fund returns equal 7% and balances grow smoothly throughout the year.

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<td>452</td>
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</tbody>
</table>

Note:

- The unlocked benefit ratio in each period is given in this illustration.

In Table C, the company reruns its stochastic model each year to redefine the benefit ratio. Because the market has risen smoothly by 7% in each year, and no excess benefits have been paid, the company finds that it is adjusting its estimate downward each time it performs this recalculation. The change in reserve each period, therefore, contains both a current period and a retrospective unlocking component. The current component equals interest on the prior year’s reserve, plus the current year’s benefit ratio times the current year’s assessments, minus the benefits paid in the current year (zero in this example). The unlocking (prior year) component equals the prior years’ assessments, multiplied by the difference between the current year’s benefit ratio and the benefit ratio of the immediately preceding year accumulated at interest to the current year.

Table D

For example, the $70 change in reserve in Year 5 is calculated as follows:

| Interest on beginning reserve | $ 38 |
| Current benefit assessment (.0675 * 1,332) | 90 |
| Benefits paid | 0 |
| Unlocking of benefit ratio | $ -58 |
| Total change in reserve | $ 70 |

The value for the unlocking of the benefit ratio (.0675-0.0750) is calculated as follows:

- Year 1 accumulation: $-.0075 * 1,698 * 1.07^4 = $ -17
- Year 2 accumulation: $-.0075 * 1,650 * 1.07^3 = $ -15
- Year 3 accumulation: $-.0075 * 1,598 * 1.07^2 = $ -14
- Year 4 accumulation: $-.0075 * 1,545 * 1.07^1 = $ -12
- Total unlocking = $ -58
Complexities can arise in the calculations of the liability, which is based on a range of values, while DAC amortization is based on a single best estimate, such as estimated gross profits. The question then becomes which of the assumptions an insurer should use, at issue, to project MGDB reserves and benefit payments in the EGP stream in its DAC model. Two acceptable methods commonly used in industry are: (1) benefits from the company’s stochastic modeling and a benefit ratio consistent with them that is projected to remain constant over time and (2) benefits consistent with the company’s return assumption in the DAC model.

### 7.1.3 Contracts that provide annuitization benefits

ASC 944-40-25-26 and 27 provide a mechanism for establishing a liability during the accumulation phase of contracts that provide annuitization benefit features using the benefit ratio approach. Under this approach, an insurer should establish an additional liability for the contract feature if it expects the present value of the expected annuitization payments to exceed the expected account balance at the expected annuitization date.

These contract features include (among others) annuity purchase guarantees, guaranteed minimum income benefits, and two-tier annuities. The liability presumably would be established regardless of whether the contract is classified as an investment contract or an insurance contract. The additional liability is calculated as the benefit ratio applied against assessments, minus the cumulative excess payments determined at annuitization plus accreted interest, with the result accumulated to the valuation date.

The benefit ratio is calculated as follows:

- The numerator is the difference between the expected present value of annuity payments and related additional claim adjustment expenses, discounted at estimated investment yields expected to be earned during the annuitization phase of the contract, minus the expected accrued account balance at the expected annuitization date.

- The denominator is the present value of total expected assessments during the accumulation phase of the contract.

Insurers recalculate the benefit ratio periodically in light of emerging experience and the accumulation of resulting assessments recalculated retrospectively with the corresponding change in the liability recorded in the current period. They do this to prevent the recognition of a loss during the payout phase as a result of the annuitization guarantee (charges for which presumably were assessed during the accumulation phase) and not to blend or smooth profits over the combination of the accumulation and payout phases. Therefore, assumptions in this model should be a "best estimate." In many respects, the mechanism for establishing a liability for annuitization benefits parallels the methodology used for establishing reserves for other insurance benefit features.
Illustration 7-3: Annuity contract that guarantees a minimum lifetime annuity payment

Consider an annuity contract that guarantees a minimum lifetime annuity payment beginning, if elected, at age 65. This benefit will require an additional liability if the projected account value at the annuitization age is less than the present value of the guaranteed benefits at that time, based on assumptions that reflect a range of possible outcomes. The difference between the present value of the projected payments and the projected account value is recognized over the accumulation period. The development of the resulting liability is demonstrated in Table F, which illustrates a situation where the projected account balance is $44,627, and the projected present value of the annuitization guarantee is $59,522. These projections are based on an expected accumulation rate for the contracts and an assumed lapse rate over the 15 years between the issue of the policy and the age-65 annuitization date. In addition, a 15% election rate is assumed, based on the company’s expectations.

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Table F

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Annuitization liability

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Note:

- “Installment” refers to the assessments times the benefit ratio.

The assessments (which reflect surrender charges, asset-based revenue and other fees) are arbitrary and assumed for this example. The annual installment is equal to the benefit ratio times the annual assessment. The benefit ratio (0.0805) is defined as the present value of the expected amount by which the account value is projected to fall short of the present value of annuity payments for those electing to annuitize ($2,234 = 0.15 * (59,522 − 44,627)) divided by the present value of projected assessments. Interest is credited at the discount rate of 6% used in this example. If the insurer’s projected account value, projected value of the guaranteed payments and projected annuitization election rate remain unchanged, the liability for annuitization benefits will increase as shown in the example to $2,234. This is the amount by which the account value falls short of the annuity value at annuitization.

Table F provides an illustration of the additional liability for annuity benefits during the accumulation period.

The calculation of the liability for annuitization benefits is similar to the one used for MGDBs, and considerations related to methodology are similar as well. Insurers should reflect the development of the liability for annuitization benefits in the EGPUs used to amortize DAC, excluding the benefits paid after annuitization. There is also a constant reassessment of assumptions and actual experience that results in an unlocking effect when EGPUs or the expected value of the annuitization guarantee change. This mechanism is demonstrated in Table G. An unexpected 10% drop in the value of variable accounts occurs in Year 5, and the company changes its expected annuitization election rate assumption from 15% to 25% as a result. In all other respects, the assumptions are the same as in the prior example, and experience matches expectation thereafter.
The $781 unlocking in Year 5 reflects the “catch-up” of applying the revised benefit ratio calculated in Year 5 (0.1837) to prior-year assessments. As in the prior example, the liability for annuitization developed at Year 15 ($4,839) equals the present value of the projected annuity payments minus the projected account value at that date, all multiplied by the expected election rate for annuitization.

Insurers establish a reserve when the contract annuitizes in accordance with the limited-payment guidance in ASC 944, which typically results in the use of a best estimate assumption with a provision for adverse deviation (PAD). However, this results in a disconnect at annuitization. The reserve established exceeds the liability for annuitization developed during the accumulation phase of the contract by the present value of the PAD.

We believe this approach is inconsistent with the intent of the guidance (PADs are not included if a loss at issue or a deficiency would be created by the PAD). The development of the liability for annuitization during the accumulation period is the funding of a recognized deficiency that will occur at annuitization. Therefore, we believe that the reserve at annuitization should be established with no PADs. This will result in no gain or loss on annuitization.

### 7.1.4 Contracts that provide other guaranteed minimum benefits

In addition to traditional annuitization benefits, many insurance contracts provide various types of guaranteed minimum benefits:

- A guaranteed minimum accumulation benefit (GMAB) refers to a contract feature that guarantees a specified level of fund performance over a period of time (as defined in the guarantee) and provides that the account value available for withdrawal is increased to meet the minimum guarantee if fund performance falls short.

- Contracts may offer guaranteed minimum withdrawal benefit (GMWB) features that allow for minimum withdrawals each year until withdrawals exceed a specified amount and, in some cases, for withdrawals that continue for the policyholder’s life. Contracts containing GMWBs for life (GMWBL) are either life contingent (i.e., no minimum withdrawal period is provided under the guarantee) or a combination of minimum withdrawals for a specified period and life-contingent withdrawals thereafter.

- GMIBs typically guarantee a payout stream beginning at annuitization and are based on some combination of guaranteed fund performance during the accumulation phase and annuity purchase rates contained in the contract.
We believe it is appropriate to conclude that a GMWBL contract with a minimum withdrawal period is a combination of a derivative and insurance (life-contingent component) that, by analogy to ASC 815-15-55-61 (DIG Implementation Issue B25 Question 4), is accounted for under both ASC 815 and ASC 944. We also believe it is appropriate to analogize solely life-contingent GMWBLs to solely life-contingent variable-payout annuities and account for these GMWBLs under ASC 944.

However, some companies have concluded that for contracts that simultaneously contain a GMDB and a GMWBL (i.e., “mirror” mortality benefits), they should use the “insurance exception” under ASC 815-10-15-13 to account for only one mortality benefit (either premature mortality or longevity) under ASC 944. They should account for the other benefit separately, in its entirety, as an embedded derivative under ASC 815.13 For contracts that fall outside the scope of ASC 815, ASC 944 allows an insurer to establish a liability for annuitization benefits before their election if the insurer expects the benefits to be elected and result in a more valuable payment stream to the contract holder than could be supported by the projected contract liability (the accrued account balance) on the election date.

13 The “insurance exception” and accounting of guarantees under ASC 815 are discussed separately in our FRD, Derivatives and hedging.
8 Separate accounts

8.1 Separate accounts overview

The accounting for separate accounts depends on whether they are classified as qualified separate arrangements. To be a qualified separate account arrangement, the separate account must meet all of the following criteria in ASC 944-80-25-2:

- The assets reside in a legally recognized separate account (i.e., the separate account is established, approved and regulated under special rules such as state insurance laws, federal securities laws or similar foreign laws).
- The separate account assets supporting the contract liabilities are legally insulated from the general account liabilities of the insurance company.
- As a result of contractual, statutory or regulatory requirements, the insurer must invest the contract holder’s funds in contractually designated investment alternatives within the separate account as directed by the contract holder, or for certain group contracts, the insurer must invest in accordance with specified investment objectives and policies that are established by or in consultation with the contract holder.
- All investment performance must be passed through to the contract holder (net of applicable fees) as a result of contractual, statutory or regulatory requirements. Contracts may have a minimum return guarantee, but not a ceiling on the investment return.

The second criterion to be a qualified separate account arrangement requires a legal determination. An insurer should consult legal counsel. Generally it is believed that the legal structure typically applied to unitized separate accounts in the US provide ample insulation to satisfy the second criteria and that state laws related to the status of those separate accounts designated and approved by US insurance regulators as “insulated” will be respected. For separate accounts established in other jurisdictions, however, the insulation criterion may not be met.

There are several different arrangements that do not meet the qualified separate account arrangement definition. For example, certain separate account arrangements have contract holders’ funds that are maintained in a separate account, but not all of the investment performance on these investments is passed on to the contract holders. Other examples include arrangements in which contract holders’ funds are maintained in separate accounts to fund the fixed account option of a variable contract, market value adjusted contract and guaranteed investment contract.
ASC 944-80-25-3 provides the accounting guidance for qualified separate account arrangements, which is summarized in the following chart:

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<td><strong>Minimum guarantees and insurance benefits</strong></td>
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<tr>
<td><strong>Investment performance of the separate account</strong></td>
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<tr>
<td><strong>Contract fees and assessments</strong></td>
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</table>

If a separate account arrangement is not a qualified separate account arrangement, ASC 944-80-25-4 indicates that assets and liabilities under the arrangement should be accounted for, valued and reported as general account assets and liabilities of the insurer. Revenue and expenses related to such arrangements should be recognized in the respective general account revenue and expense line items in the statement of income.

### 8.1.1 Accounting for an insurance enterprise’s interest in a separate account

An insurer’s proportionate interest in the separate account (e.g., seed money or other investment) typically does not meet the criteria for separate account accounting and reporting. If the arrangement is a qualified separate account arrangement and (1) contracts permit contract holders to direct funds into additional units in the separate account or (2) the insurer is issuing contracts that permit contract holder funds to be invested in the separate account, the assets of the separate account underlying the insurer’s proportionate beneficial interest should be accounted for in a manner consistent with similar assets held by the general account that the insurance company would need to assess for impairment.

Under ASC 944-80-25-11, if an insurer’s proportionate interest in the separate account is less than 20% of the separate account and all of the separate account’s underlying investments meet the definition of securities under ASC 320-10 or ASC 944-325-35-1 or are cash and cash equivalents, the insurer may elect to account for its interest as an equity security under ASC 320-10.

### 8.1.2 Transfers to separate accounts

The transfer guidance discussed in this section should be applied to all qualified separate account arrangements when the insurer’s proportionate interest is 20% or more of the separate account or when the underlying investments do not meet the definition of securities under ASC 320-10 or ASC 944-325-35-1 or are cash and cash equivalents. Otherwise the accounting for the insurer’s proportionate interest would follow the guidance described in section 8.1.1.

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14 This paragraph is modified upon the adoption of ASU 2016-01, Recognition and Measurement of Financial Assets and Financial Liabilities, as the accounting for securities would be included in ASC 320-10 and ASC 321-10.
Assets that are transferred (and the related risk and rewards of ownership) from the general account in a qualified separate account arrangement are at fair value to the extent of the contract holders’ proportionate interests in the separate account. Any resulting gain related to the contract holders’ proportionate beneficial interests, determined using the fair value of the asset at the date of the contract holders’ assumption of risks and rewards, should be recognized immediately in the earnings of the general account.

An insurer should recognize an impairment loss on its proportionate interest in a qualified separate account arrangement whenever the current fair value of its proportionate interest in the separate account assets is less than its carrying amount. When the arrangement is not a qualified separate account arrangement, but the contract terms are such that the insurer will be unable to recover the asset’s carrying value, an impairment loss should be recognized when the asset is transferred to the separate account.

Any unrecognized gain related to the insurer’s proportionate beneficial interest in a transferred asset is recognized when the asset is sold by the separate account or when the insurer’s proportionate beneficial interest is decreased by new contract holder investments in the separate account.

If the insurer’s proportionate beneficial interest increases as a result of transactions executed at fair value (for example, at net asset value), the increase is considered a purchase from the contract holder and should be initially recognized at fair value.

If the risks and rewards of ownership have not been transferred to the contract holders (for example, because of a guarantee of asset value, rate of return or repurchase price), no gain is recognized on the transfer. If the separate account arrangement is not a qualified separate account arrangement, a transfer from the general account to the separate account generally would have no effect on financial reporting, except when the contract is essentially a pass-through product and there is an embedded loss in the asset such that the insurer cannot recover its investment in the asset.

8.1.3 Application issues

The following paragraphs address the application issues of separate account guidance for various types of products.

Variable life insurance and annuities – In general, separate accounts that support the unitized sub-accounts of variable life insurance and annuity contracts are qualified separate account arrangements. Investment performance, net of mortality, expense and investment fees, typically is passed through to the contract holder. The value of any minimum performance guarantees associated with the contracts will be reflected in the general account and accounted for using the appropriate US GAAP guidance (e.g., ASC 815 for guaranteed accumulation benefits and ASC 944-40 for guaranteed minimum death benefits). Because minimum guarantees are accounted for separately, when they are offered with a separate account product it will not prevent the contract from meeting the qualified separate account arrangements criteria for a complete pass-through of investment performance.

Separate account modified guaranteed annuities – Some separate account market-value-adjusted annuities provide for a fixed interest crediting rate if the contract is held until a specified date. However, they would require a market value adjustment if the contract holder terminates the contract prior to the expiration of the fixed interest rate guarantee period. This type of fixed investment return alternative also may be an investment option under a variable annuity or life insurance contract. Separate accounts often are used to support these fixed interest investment options. These separate accounts do not meet the criteria for separate account treatment under ASC 944-80-25-2d because they do not directly pass through investment performance.
Separate account GICs – Separate account GICs frequently contain an interest-crediting mechanism that aims to provide the contract holder with returns that, over time, are consistent with the actual performance of a specified underlying portfolio of assets through the crediting of interest rates that reflect a combination of past experience with the expectation of future investment earnings. Although this mechanism can be quite effective, it may not result in the passing through of actual investment return to the contract holder. Because the final interest rate credited on GICs with specified maturity dates and the liquidation payments elected on some continuously renewed GICs cannot be guaranteed to identically match the value of such underlying assets, complete pass-through of investment results (net of fees) is not required by contractual terms and, as such, the criteria for separate account treatment are not met. However, a contract provision or an insurer’s adoption of a legally enforceable policy to require the crediting of any excess earnings of the underlying assets (i.e., earnings not otherwise credited through the interest rate mechanism) to the contract holder on maturity could permit separate account treatment, albeit with an economic cost.

Institutional separate accounts – Insurers often establish single-client separate accounts to manage assets for institutional clients, including pension plans. The existence of an investment policy statement defining the investment parameters for the client’s separate account generally would be expected to satisfy the requirement that the contract holder directs the investment of its own funds. Therefore, if the other criteria are met, these separate accounts would be qualified separate account arrangements.

Separate accounts with limitations on earnings – Some separate accounts contain limitations and guarantees on the investment return. A minimum performance guarantee included in the contract (for example, a zero interest rate floor or a guaranteed return of 95% of the S&P 500) does not violate the direct pass-through criterion, and separate account treatment may still be possible, provided all other criteria are met. However, the guarantee may be an embedded derivative requiring bifurcation under ASC 815. The existence of a performance ceiling (for example, the direct pass-through of the investment experience of assets subject to a cap of 11% per year) violates the direct pass-through of investment experience criterion and precludes separate account treatment. The separate account criterion in ASC 944-80-25-2d requires the contract holder to be entitled to all the rewards of owning the assets, which is not achievable when there is a performance ceiling.

When performance-based fees reduce the amount of additional return credited to the contract holder’s account balance, such fees should be assessed to determine whether the contract holder is still entitled to all the rewards of owning the assets. The facts of each performance-based fee arrangement should be analyzed to determine whether separate account treatment is appropriate.
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