

Flashcards

for

ILA Life Financial Management - US

John Aprill, FSA, MAAA

Copyright © 2024, ACTEX Learning,
a division of ArchiMedia Advantage Inc.

No portion may be reproduced or
transmitted in any part or by any means
without the permission of the publisher.

Printed in the United States of America.

Section 1

US GAAP Financial Reporting and Valuation

Surplus Notes

Statutory Accounting

- Surplus notes are treated as surplus and not a liability of the company
- Proceeds from surplus notes must be in cash or have sufficient liquidity to satisfy the commissioner
- Interest is not recorded as an expense or liability until approved by the commissioner

Surplus Notes

Statutory Accounting

- Notes are considered a liability of the issuer; equity or net worth is a measure of assets available to shareholders after all obligations (including surplus notes) have been considered
- PB 15 states
 - Surplus notes are accounted for as debt instruments and presented as liabilities in financial statements of the insurer
 - Interest is accrued over the life of the surplus note and recognized as an expense, regardless whether any interest or principal is paid

GAAP text Ch. 1

Formula for
GAAP Gross Premium Statutory Valuation Reserve

$$GPV_t = NGL_t - PVFBP_t$$

Where:

NGL = Net GAAP liability (GAAP reserve less DAC)

$$PVFBP_t = \sum_{s=t+1}^n v^{s-t} \times [(NGL_{s-1}) \times (1+i) + CF_s - NGL_s]$$

CF_t = cash flows, excluding investment income

GAAP text Ch. 3

Market Risk Benefits At Fair Value

- Accounting is changed for contracts with market risk features

- Fair value measurement is required for all contracts with other-than-nominal capital market risk
- Except for fair value representing instrument specific credit risk which is recognized in other comprehensive income
- Guidance applies to guaranteed minimum benefits (GMxBs) in fixed and variable annuity contracts including guaranteed minimum death and annuity benefits which are currently treated under the insurance model

GAAP text Ch. 3

When Bifurcation is Required

- Economic characteristics of the embedded derivative are not clearly and closely related to the host contract
- The hybrid contract is not measured at fair value
- A separate contract on the same terms as the embedded derivative would be classified as a derivative

Net Premium Ratio

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

GAAP text Ch. 3

Updating Assumptions

- Previous guidance required assumptions to be locked in; revised guidance requires all assumptions other than expenses (mortality, morbidity, lapse) used in the net premium calculation are reviewed and updated on an annual basis or more frequently if evidence suggests revising assumptions
- A revised net premium ratio is calculated using historical experience and new assumptions for the future; it is calculated at contract inception using the discount rate at inception
- An insurer can update assumptions more frequently than annually

GAAP text Ch. 3

Updating the Liability Discount Rate

- When calculating the revised net premium ratio, updated cash flows are discounted at the contract issue date discount rate
- The revised net premium ratio measures benefit expense based on premium recognized in the period
- The difference between the current discount rate and the prior locked in rate at the start of the period is presented in accumulated other comprehensive income (AOCI); the change in the current period goes through OCI
- The liability remeasurement for future policy benefits using the current discount rate is required even if the net premium ratio is not updated
- Interest is accreted to the statement of operations using the original discount rate on the contract issue date

Level of Aggregation

- The individual contract is the unit of account; a seriatim calculation is technically required
- In practice, the liability for future benefits is calculated on a homogenous group; a separate group issued for each product and each year of issue, provided the same assumptions are used

Discount Rate Assumptions for the Liability for Future Policy Benefits

- The estimate for future policy benefits for traditional and limited pay contracts are discounted using future investment yields, but there is substantial diversity in determining yields
- Under new guidance, the discount rate is upper-medium grade (low credit risk) fixed income investment yield (single A rating) that reflects the duration characteristics of the liability; the same yield is used for liabilities with similar cash flows
- An entity should not substitute its own estimates for observable market data unless transactions are not orderly
- Estimates can be used if points are not on the yield curve or limited market data
- Discounting may affect the emergence of earnings from current GAAP; investment income is now earned over the life of the product rather than as product profit

GAAP text Ch. 3

DAC Amortization and Recoverability

- DAC related to all long duration contracts is amortized on a straight line basis over the expected life of the contract, independent of revenue or profitability
- Not tested for impairment
- Acquisition costs are only capitalized and amortized as incurred
- Assumption changes are prospectively amortized
- Experience adjustments are recorded immediately through the statement of operations

Presentation in Financial Statements

- Effect of updating cash flow assumptions for the liability for future policy benefits on a retrospective catch-up approach should be presented separately in the statement of operations
- Market risk benefits should be presented separately in the statement of financial position
- Changes in the fair value of MRBs should be presented separately in the statement of operations, except for changes to instrument specific credit risk which is presented in OCI

Expense Recognition under US GAAP

- Expenses are generally recognized when they are consumed in revenue-earning activities
- Expenses are also recognized if future economic benefits of assets have been reduced or liabilities have been created without associated economic benefits

GAAP text Ch. 4

SFAC 6 – Expenses

- Expenses are defined as the using up of assets or incurrences of liabilities from delivering goods or services or occur from ongoing major operations
- Expense types are specifically categorized
- A cost does not become an expense until it is recognized in the financial statement

GAAP text Ch. 4

Categorization of Acquisition Expenses

- Costs that do not vary with or are not related to acquisition are charged as incurred
- Acquisition costs are
 - Deferrable –if primarily relate and vary with new business (commissions, sales expenses, marketing, policy issue, underwriting); recognized over premium-paying period based on assumptions at issue
 - Nondeferrable – if they do not relate or vary with new business
- Other expenses that have substantial future utility and are recoverable from future revenue may be considered for separate deferral

GAAP text Ch. 4, Ch. 5

Expenses Other than Acquisition

- Maintenance expense: costs associated with maintaining activities on insurance contracts
- Investment expense: chargeable against investment income
- Future utility expense: substantial future utility exists
- Overhead expense: anything not included in any other category

GAAP text Ch. 4

Distinct Expense Provisions

- Percentage of premium expenses must be distinguished between deferrable acquisition and direct maintenance
- Acquisition expenses that are level or recurring are not deferrable
- Assumptions may be unlocked after issue

GAAP text Ch. 4

Studies Needed for GAAP Expense Categorization

- Line of business allocation first

- Categorize each expense into one of 6 categories
 - Premium taxes allocated directly to the policies that generated them as a percentage of premium
 - Salary allocations based on functions performed
 - Judgment often used to allocate between overhead and direct maintenance – important for determining future benefit liability
 - Investment expense allocations follow the allocation of the underlying assets
 - Some expenses are unitized per policy, per face amount, per unit issued, per premium

GAAP text Ch. 4

Recoverability

- Process of establishing that capitalized amount can be supported by future revenues
- If expense cannot be recovered from future revenue, it is not deferrable
- Requires determination if present value of gross premiums exceeds present value of benefits and direct expenses
- Tests performed on groups of insurance contracts issued in a given year, subject to actuary's discretion
- Interest on surplus is not included
- If business is reinsured, test performed on net retained basis
-

GAAP text Ch. 4, 7, 11

Loss Recognition Tests

- Used to determine loss profitability on an entire line of business
- Uses current best estimate assumptions
- Uses gross premium statutory valuation to assess unamortized cost balance
- Aggregation must be consistent with the enterprise's normal method of measuring profitability

GAAP text Ch. 4, 11

Actions Taken as a Result of Recoverability and Loss Recognition Testing

- Test assuming margins for deviation (if any) are removed
- If loss, reduce DAC and reclassify to nondeferrable
- If still loss, additional reserve is established

Variations Between GAAP and Pricing Expense Assumptions

- Different category classifications (e.g. underwriting expenses)
- Allocation between base policy and supplemental benefits may differ
- Variation by duration

GAAP text Ch. 4

GAAP Rules for Discontinued Operations

- Discontinued businesses must be reported separately
- Future losses must be reflected at the measurement date
- Expense assumptions probably will need to be changed if the business is walled off
- Direct expenses from the discontinuance must be allocated to the discontinued line
- Provisions for expense allocation due to business run-off must be made at the statement date

GAAP text Ch. 4

Sales Inducements Addressed by GAAP Rules

Examples

Examples

- Initial bonus interest
- Day-one bonuses
- Dollar cost averaging bonuses
- Persistency bonuses

GAAP text Ch. 4, 7, 11