



2019 HEALTH
MEETING

JUNE 24-26 | PHOENIX, AZ



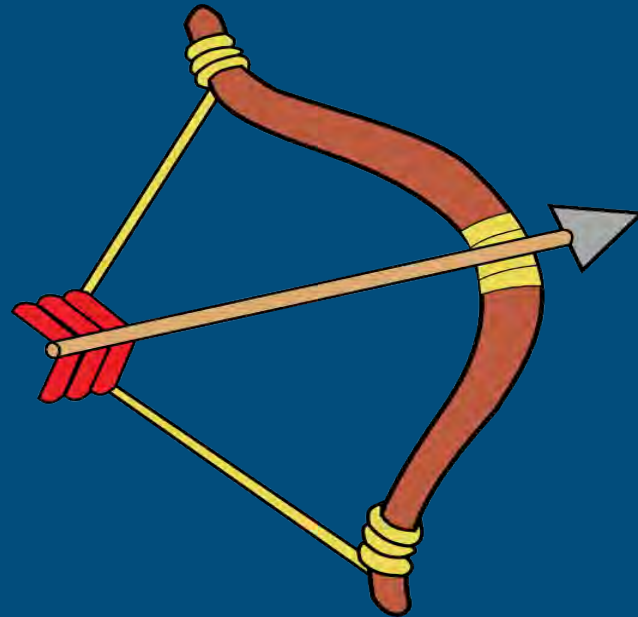
Session 78, GAAP Long Duration Targeted Improvements for Disability Insurance

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GAAP Long Duration Targeted Improvements for Disability Insurance

SOA Health Meeting
Phoenix, Arizona
June 25, 2019



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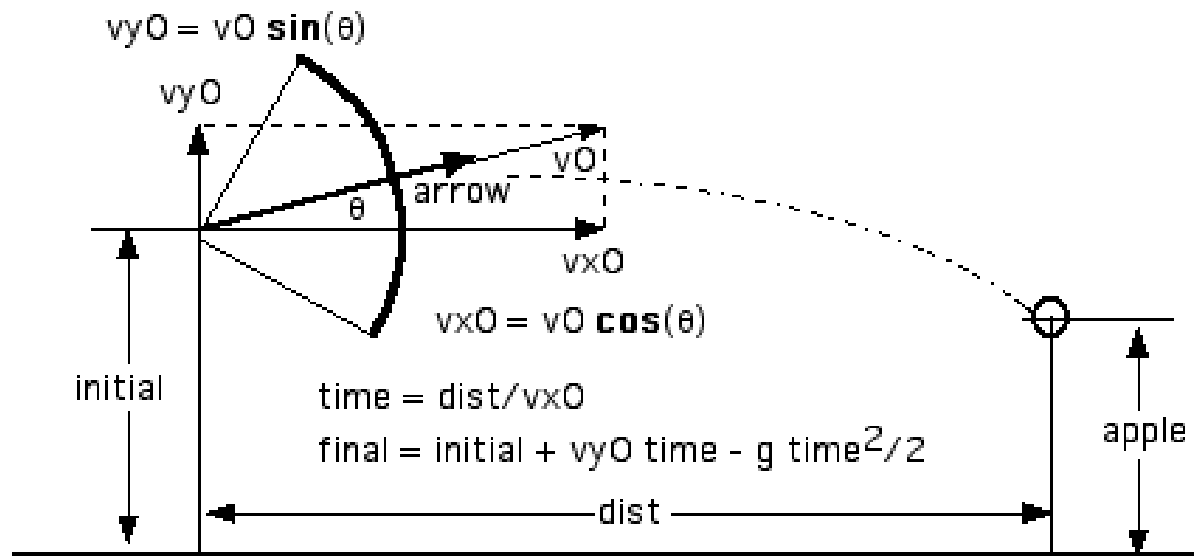
Targeted Improvements

Stage 1: Fear



Targeted Improvements

Stage 2: Acceptance



Statutory Reserving for Individual Disability

Accounting Standard

- SSAP 54: Individual and Group Accident & Health Contracts.
- Appendix A-010: Minimum Reserve Standards for Individual and Group Health Insurance.

Claim Reserves

- Specified minimum standards based on year of disability

Policy Reserves

- Specified minimum standards based on year of issue
- Two-Year Full Preliminary Term method, no deferral of acquisition costs

Reserve Adequacy

- Measured in aggregate for combined claim and policy reserves
- Gross premium reserve is used to measure adequacy
- Asset adequacy testing required to support actuarial opinion

GAAP Reserving for Individual Disability

Current Rules

Accounting Standard

- ASC 944 (f/k/a FAS 60)

Claim Reserves

- Treated as a short-duration liability
- Assumptions are on a best-estimate basis and are not locked in

Policy Reserves

- Treated as a long-duration liability
- Assumptions include provision for adverse deviations and are locked in
- Net level method
- Separate calculation for deferred acquisition costs

Reserve Adequacy

- Measured separately for claim and policy reserves

GAAP Reserving for Individual Disability

Preview of Long Duration Targeted Improvements

Policy Reserves

- Assumptions no longer locked in by issue year
- Assumptions no longer include PAD
- Net premium ratio and reserves recomputed to reflect actual past experience
- Prospective changes to assumptions are recognized immediately
- Discount rates updated regularly based on market rates

DAC

- No interest accrual
- Straight line amortization

Claim Reserves

- Generally unaffected
- May be second-order impacts

Milliman Survey on LDTI for Individual Disability

Do you anticipate modifications to your IDI claim system for LDTI?

| | |
|------------|---|
| Yes | 0 |
| No | 6 |
| Don't Know | 5 |

What is the expected complexity of these changes?

| | |
|------------|----|
| High | 0 |
| Medium | 0 |
| Low | 0 |
| Don't Know | 11 |

Milliman Survey on LDTI for Individual Disability

Do you anticipate modifications to your valuation data extract for LDTI?

| | |
|------------|---|
| Yes | 3 |
| No | 3 |
| Don't Know | 5 |

What is the expected complexity of these changes?

| | |
|------------|---|
| High | 1 |
| Medium | 2 |
| Low | 0 |
| Don't Know | 8 |

Milliman Survey on LDTI for Individual Disability

Do you anticipate modifications to your valuation systems for LDTI?

| | |
|------------|---|
| Yes | 9 |
| No | 0 |
| Don't Know | 2 |

What is the expected complexity of these changes?

| | |
|------------|---|
| High | 5 |
| Medium | 1 |
| Low | 0 |
| Don't Know | 5 |

Special Considerations for Disability Insurers

- Mapping coverages to issue years
- Availability of granular policy and claim data
- Consistency of claim and policy reserves
 - Morbidity assumptions
 - Discount rates
- Measurement of actual experience when updating policy reserves

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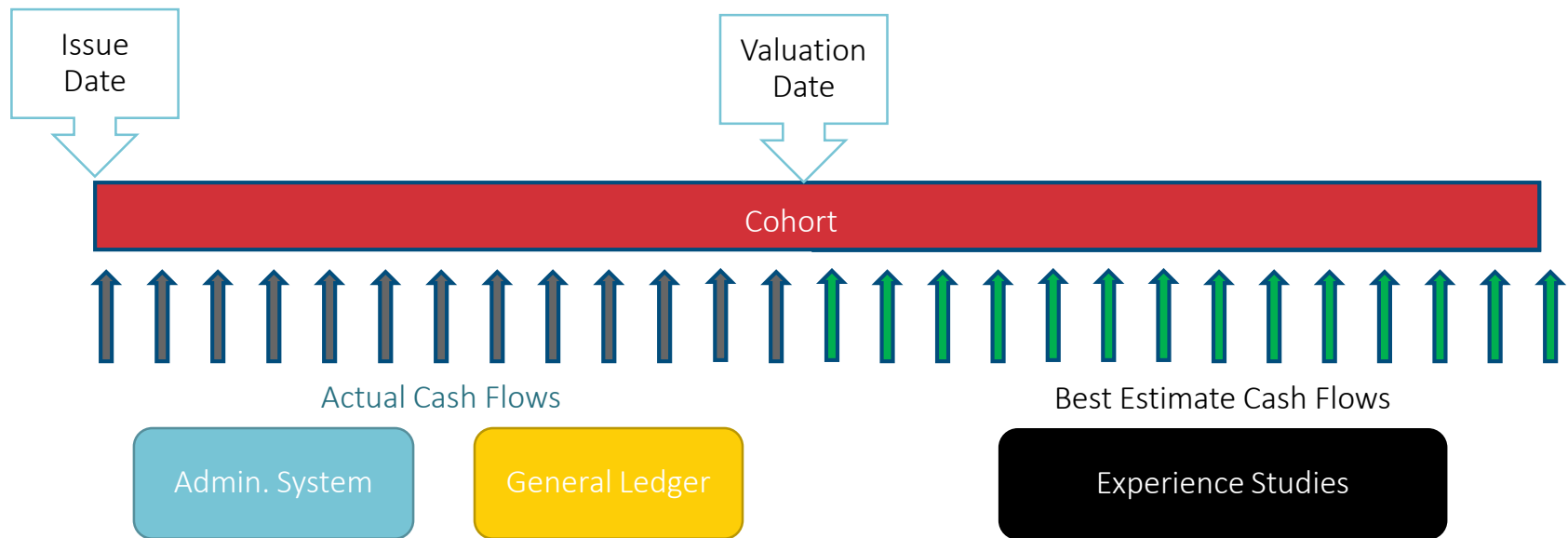
LDTI Overview

Which Long-Duration products are impacted?

| Products | Insurance Products | | | | Annuity Products | | | |
|--|--------------------------|-------------|-------|-----|------------------|-----|-----|----|
| Item | Life, LTC, IDI (Non-Par) | Trad (Par*) | UL/VL | IUL | SPIA/SS | FDA | FIA | VA |
| Liability for Future Policyholder Benefits | x | | | | x | | | |
| Deferred Profit Liability ("DPL") | x | | | | x | | | |
| Claim Liability ("disabled life reserve", "DLR") | | | | | | | | |
| Additional Liability (e.g. SOP 03-1) | x | | | | x | | | |
| Terminal Dividend Liability ("TDL") | | x | | | | | | |
| Deferred Acquisition Costs | x | x | x | x | x | x | x | x |
| Loss Recognition Testing ("LRT") | x | x | x | x | x | x | x | x |
| Market Risk Benefits ("MRBs") | | | | | | | x | x |
| Disclosures | x | x | x | x | x | x | x | x |

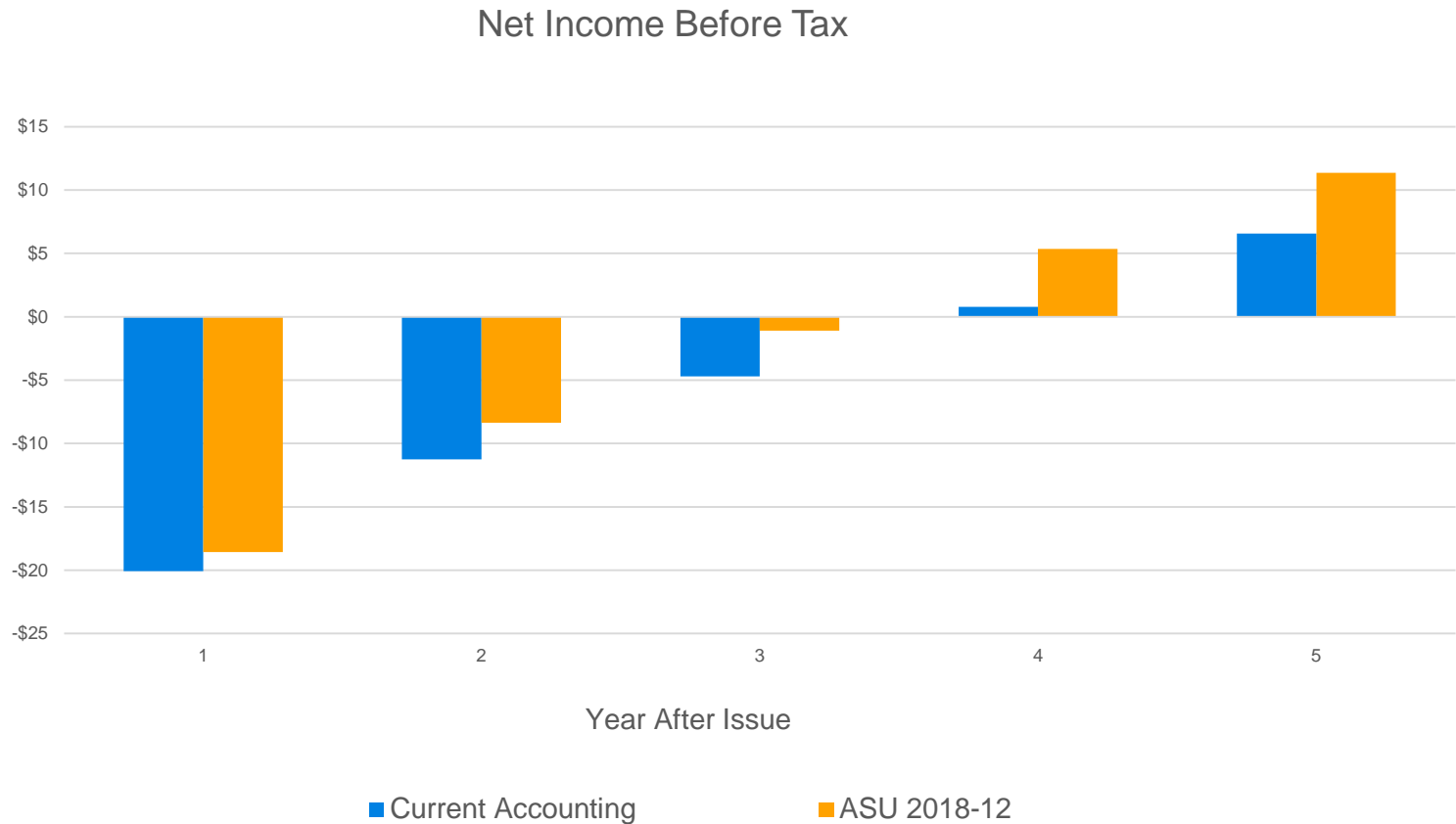
(* For contracts that follow the dividend contribution principle)

Net Premium Reserve methodology under ASU 2018-12



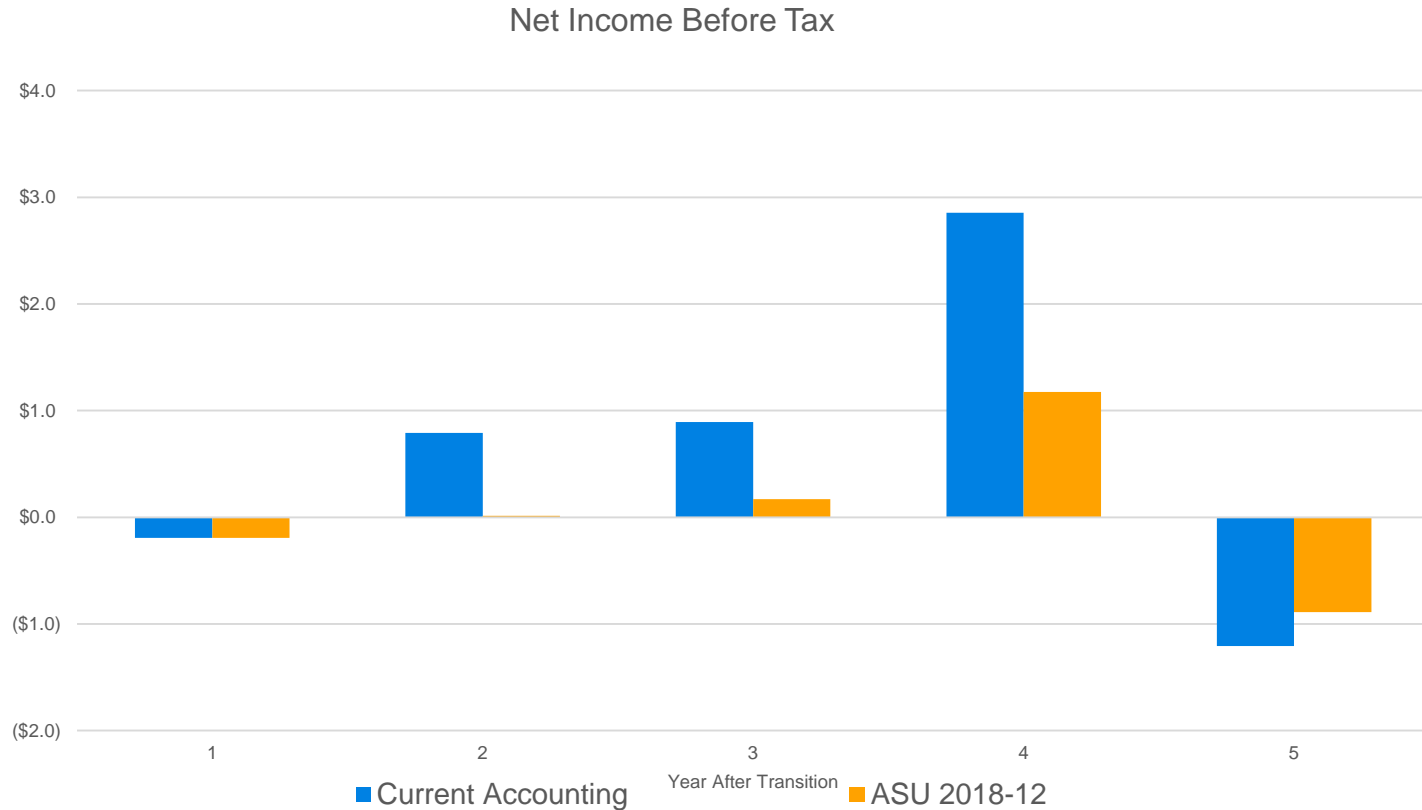
- Net Premium Ratio capped at 100% and reserve floored at zero.
- LRT effectively performed at a cohort level.

Earnings Impact – New Business



Earnings Impact

Impact of updating actual experience

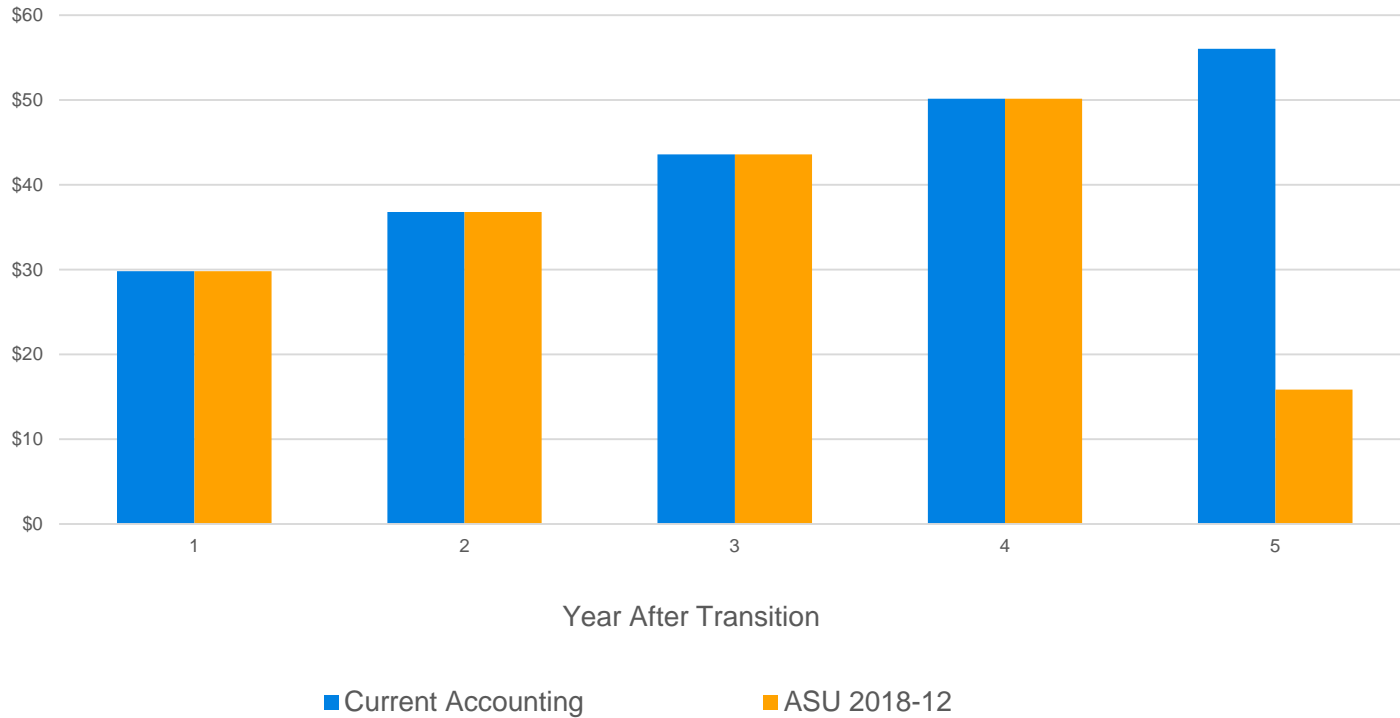


- Impact of current period experience variances is muted under ASU 2018-12, but no cross subsidization between cohorts.

Earnings Impact

Impact of updating future cash flow assumptions

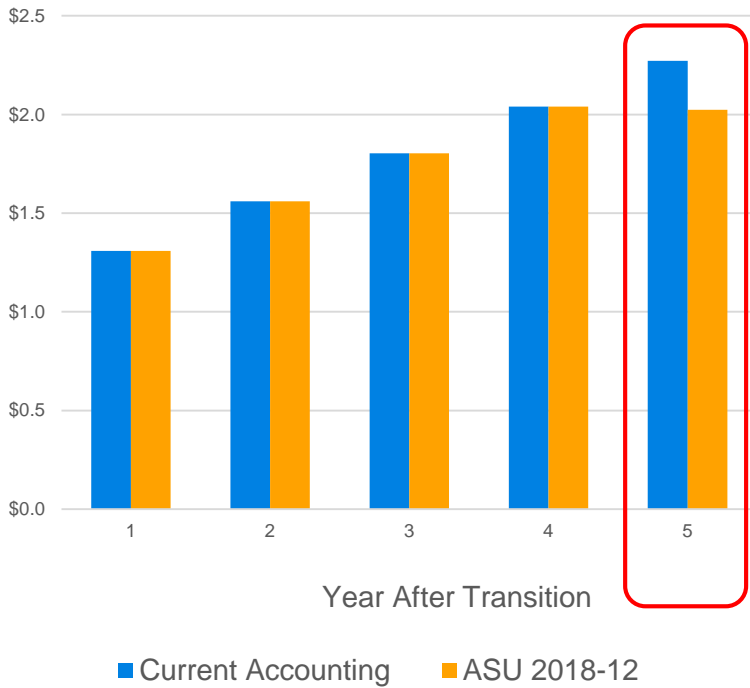
Net Income Before Tax



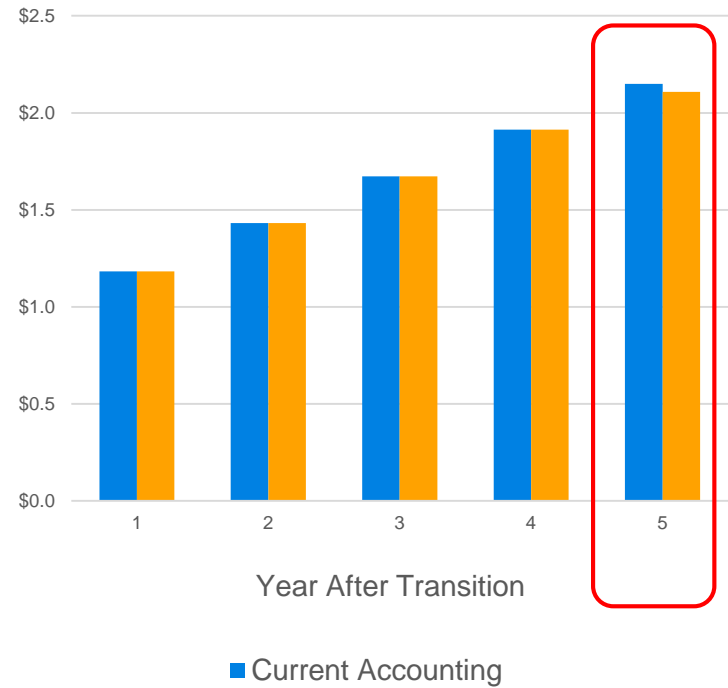
Earnings Impact

DAC Illustration – Variance in amortization revenue

Universal Life NIBT




Individual Disability Income NIBT



Impact of updating discount rates

Policy reserve is reported on the balance sheet:

- Using current discount rates
- With impact of changes reflected in AOCI
- Modeled discount rate movements (parallel shifts):
+30 bps, -30 bps  reserve movements of 5-6%.

Implications

- Incentive to classify assets as available for sale (“AFS”)
- Liabilities will be sensitive to A quality investment yields

Transition

- Two transition methods for inforce business
 1. Carryover basis / modified retrospective → Pivot from existing carrying amounts
 2. Full retrospective → Apply the standards retrospectively from contract issue

- Restrictions for full retrospective
 - ❖ Must use actual historical experience
 - ❖ Must not skip issue years
 - ❖ Must be for all LOBs entity wide
 - ❖ Must update LFPB / DAC consistently

Disclosures

- Provide users with information to assess the components of past performance as well as expected performance
- More required disclosures in financial statements including:
 1. Disaggregated roll-forwards of balances (e.g. LFPB, MRB, DAC, GA AV, SA etc.)
 2. Statistical items (e.g. weighted average discount rate, crediting rate, liability duration)
 3. Qualitative and quantitative information (e.g. transition adjustments, adverse developments, etc.)
 4. Sensitivities to significant inputs to valuation
- Judgment needed to determine appropriate level of disaggregation, but should consider how information about the information is presented for other purposes

Disclosures – Sample Reserve Rollforward

LIABILITY ROLLFORWARD FOR FIRST YEAR AFTER TRANSITION

| RESERVE COMPONENT | ALR | DLR | TOTAL |
|--|---------|--------|---------|
| Reserve, beginning of period | \$126.3 | \$23.2 | \$149.5 |
| Reserve, beginning of period (original discount rates) | 122.1 | 23.2 | 145.3 |
| + Impact of updating actual experience | (9.2) | 9.4 | 0.2 |
| + Impact of updating future cash flow assumptions | 0.0 | 0.0 | 0.0 |
| Reserve, beginning of period (adjusted) | 113.0 | 32.6 | 145.5 |
| + Net premiums | 8.3 | 0.0 | 8.3 |
| + Interest credited to reserve | 5.6 | 0.9 | 6.5 |
| - Reserve released for benefits | 1.5 | 6.1 | 7.7 |
| - Reserve released for expenses | 0.4 | 0.0 | 0.4 |
| Reserve, end of period (original discount rates) | 125.0 | 27.3 | 152.3 |
| + Cumulative impact of updating discount rates | (2.4) | 0.0 | (2.4) |
| Reserve, end of period | \$122.6 | \$27.3 | \$149.9 |

Strategic analysis & policy decisions

- Transition method – will produce different reserve / DAC amounts and ROEs going forward
- Cohorts – need to determine appropriate aggregation level
- Discount rates – develop process that maximizes the use of observable inputs
- DAC – select amortization basis
- Disclosures – determine appropriate level of aggregation

Additional Challenges for Products with Long Claim Periods such as LTC and IDI

- Typical approach for ALR under current accounting: $PV \text{ future benefits} = \text{incidence rate} * PV \text{ claims}$
- Under LDTI, this approach leads to historical benefits = PV of benefits for policies that go on claim
- Complications:
 - ❖ How to adjust for actual experience going forward since the DLR is a best estimate?
 - ❖ How to account for PV future benefits given this is already captured in the DLR?
 - ❖ How to account for status changes
 - ❖ How to maintain internal consistency given that the DLR requirements do not change under LDTI

Additional Challenges: Reinsurance Assumed

- Definition of cohort will be important as it defines certain data needs
- Single reinsurance contract vs. issue years within a contract
- Most reinsurance settlement reporting does not provide breakdowns that would support issue year cohorts
- Data provided to reinsurers is often a month or quarter in arrears
- Challenge to assign cash flows to policies in each cohort

Conclusions so far...

- Income patterns will change
 - Reserve increases for traditional products will be slower in early years, decreases smaller in later years
 - DAC no longer follows revenue
- Volatility will decrease for actual versus expected variances
- Volatility will increase for changes in assumptions for future cash flows.
- Data challenges will be paramount for both direct writers and reinsurers
 - Actual cash flows needed by cohort
 - Governance of inputs and outputs
 - Disclosure sensitivities will be key for communication to stakeholders