Actuaries of the Southwest Conference

June 7, 2018

US GAAP Long Duration Project Update

pwc

Agenda

1. Technical Overview

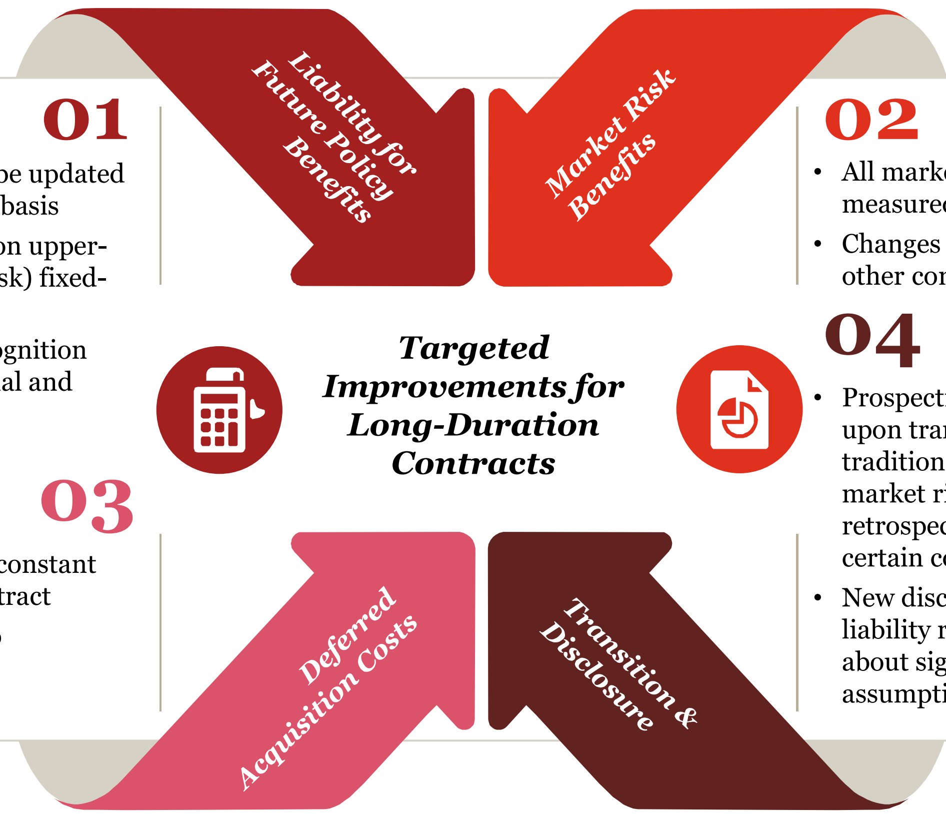
- Overview of proposal and expected timeline
- Non-par traditional and limited-pay contracts
- DAC
- Market Risk Benefits
- Transition rules
- Presentation and Disclosures

2. Simplified Example

- Term life

US GAAP Long-Duration – Overview

The proposed FASB standard update is a set of focused changes to improve, simplify and enhance certain aspects of accounting for long duration contracts. The final standard is expected to be **released in the second half of 2018** and the final standard is expected to be **adopted with effective date of 1/1/2022.**



01

- Cash flow assumptions will be updated annually, on a retrospective basis
- Discount rate will be based on upper-medium grade (low credit risk) fixed-income instruments
- Eliminate PAD and loss recognition testing for non-par traditional and limited pay contracts

02

- All market risk benefits will be measured at fair-value
- Changes in credit risk recognized in other comprehensive income

03

- DAC will be amortized on a constant basis over the life of the contract
- No interest accretion and no impairment test

04

- Prospective application of new guidance upon transition required for non-par traditional contracts, but retrospective for market risk benefits. Option to elect retrospective application under certain conditions
- New disclosure requirements including liability roll forwards and information about significant inputs, judgements & assumptions

FASB Targeted improvements – Long duration contracts expected timeline

February 2014
FASB decided to drop its comprehensive insurance project and focus on targeted improvements

1st half 2016
Re-deliberations completed in March 2016; FASB votes to draft a revised document for exposure

March 2017
Public roundtable

2H 2018*
Issuance of final standard

August 2014
FASB begins re-deliberations on long duration targeted improvements based on scope agreed upon in April 2014

September 2016
FASB exposure draft issued with comment period ending 12/15/16

November 2017
Tentative decisions reached

2022+*
Potential adoption dates – assuming at least 2- 3 years is allowed for conversion efforts

* Timing is estimated based on current understanding of the project's progress and not based on official timeline provided by the FASB

FASB targeted improvements – Long duration contracts

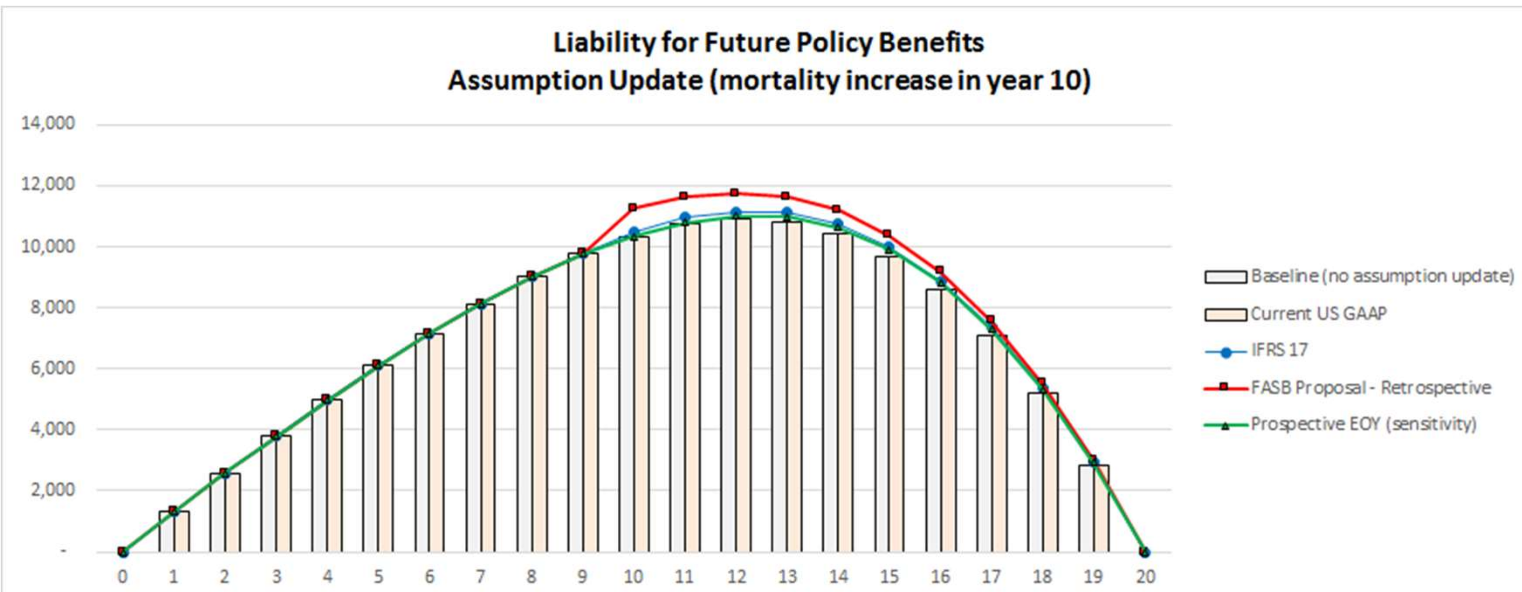
Updating cash flow assumptions

Issue	FASB Tentative decisions	Contracts impacted
Updating of cash flow assumptions	• Annually (same time each year) or more frequently if evidence suggests that earlier cash flow assumptions should be revised (election to not update the expense assumption) • Retrospective unlocking: - Revised net premium ratio as of contract inception would be computed using actual historical experience and updated cash flow assumptions - Contracts from different issue years should not be grouped but contracts issued within a single issue year may be grouped - At-inception discount rate used for interest accretion expense and the revised net premium ratio - The effect of the retrospective unlocking should be calculated and recorded on a catch-up basis in net income • No provision for adverse deviation • Net premium ratio capped at 100%, replacing premium deficiency test • Net premium ratio not updated for changes in discount rates • Liability cannot be less than zero	• Non-par traditional long-duration • Limited-pay

Retrospective vs. prospective assumption update

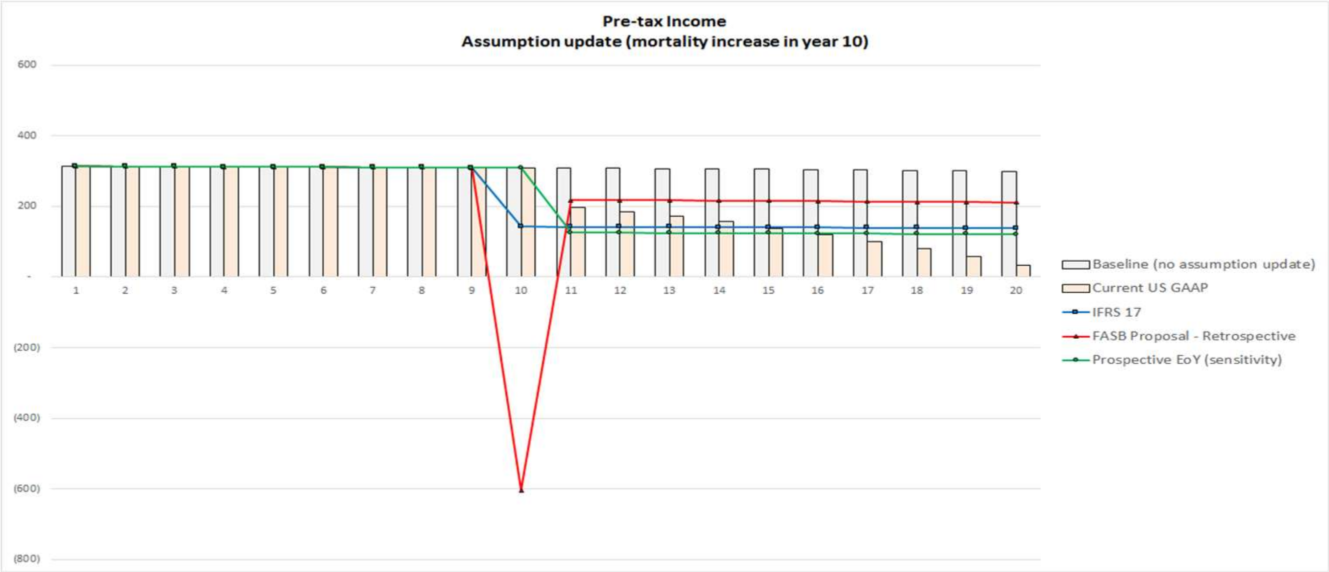
Simplified example

- Single 20 year term-life contract
- No expenses or acquisition cost
- No decrements from lapses
- No provision for adverse deviation or Risk Adjustment
- No time value of money (i.e., 0% discount rate)
- Mortality assumption updated (increased in year 10 and future years)



Retrospective vs. prospective assumption update

Simplified example (cont'd)



Observations:

- **Baseline** - profit emergence is level over the life of the contract (no change in mortality)
- **Current US GAAP** - reduction in profit emergence as reserve does not anticipate higher claims in future years
- **IFRS 17** - profit emergence driven by CSM amortization. CSM reduction in year 10 for increase in PV of cashflows
- **FASB Proposal (Retrospective)**
  - Large impact observed in year 10 due to the cumulative catch up of retrospective unlocking. Net-premium ratio recalculated as of contract inception. Higher profits in future years due to release of additional reserve
- **Prospective (Sensitivity)** - No impact observed in year 10 as net premium ratio is re-calibrated to end of year reserve balance

Discount rate

Issue	FASB Tentative decisions	Contracts impacted
Discount rates	• The use of a current upper-medium grade (low credit risk) fixed-income instrument yield would: - Replace “expected investment yield” contract rates for discounting purposes - Maximize the use of relevant observable inputs and minimize the use of unobservable inputs - Reflect the duration characteristics of the liability	• Non-par traditional long-duration • Limited-pay
Updating of discount rate	• Update at each reporting period (e.g. quarterly) • Change in liability due to discount rate changes would be excluded from income and recognized immediately in Other Comprehensive Income (OCI) • The upper-medium grade (low credit risk) fixed-income instrument yield at the reporting date would be used to discount the present value of future benefits and future net premiums to derive the balance sheet policy benefit liability	• Non-par traditional long-duration • Limited-pay

DAC Amortization

Issue	FASB Tentative decisions	Contracts impacted
DAC amortization and recoverability test	• The amortization method may be replaced with a principle in which deferred acquisition costs would be amortized on a constant basis over the expected life of the contract • Renewal commission would not affect amortization before being incurred • No interest accretion • Amortization pattern prospectively updated for assumption changes • DAC is written off for experience variances • No impairment test, by analogy to financial instrument accounting and debt issuance costs	• All long-duration contracts

Amortization of other balances similar to DAC

Issue	FASB Tentative decisions	Contracts impacted
Sales inducement asset and universal life unearned liability	• Follows new simplified DAC guidance	• Universal life • Certain investment contracts
Business combination contract "intangible asset" or "other liability"	• Currently unclear whether the DAC proposal will impact the amortization and impairment test of these balances	• All long-duration contracts
Net cost of reinsurance (asset or liability)	• Currently unclear whether the DAC proposal will impact the amortization of these costs	• All long-duration contracts

Market risk benefits

Issue	FASB Tentative decisions	Contracts impacted
Market risk benefits	• Fair value measurement, with changes in fair value through statement of operations, except that changes to instrument-specific credit risk would be recognized through OCI - The guidance would apply to product guarantees of products held in both general and separate accounts. - Fair value measurement can be a liability or an asset.	• Certain life and annuity contracts with GMDB, GMIB, GMAB, GMWB, or GMWBL riders, as well as those held in general accounts (e.g. fixed indexed annuities)

Transition

Issue	FASB Tentative decisions	Contracts impacted

Transition (at the beginning of the earliest period referred to as the "transition date")	• Apply the proposed amendment to all contracts in force on the basis of their existing carrying amounts at the transition date and updated future assumptions, adjusted for the removal of any related amounts in AOCI
	• There is an option to apply the proposed amendments retrospectively using actual historical experience information as of contract inception
	    ◦ If the retrospective option is elected, the cumulative catch-up adjustment will be booked in opening retained earnings
	    ◦ The option would be elected at the issue-year contract aggregation level and applied to all contract groups for that issue year and all subsequent issue years
	• Market risk benefits – Retrospective application of the fair value requirement at the transition date
	  - An insurance entity would be allowed to use hindsight
	  - Cumulative effect of changes in the instrument-specific credit risk between contract issue date and transition date would be recognized in the opening balance of AOCI
	  - Remaining difference between fair value and carrying value at the transition date, excluding the effect of changes in the instrument-specific credit risk, would be recognized as an adjustment to opening retained earnings
		All long-duration contracts (except for investment contracts that follow financial instrument model/effective yield method)

Presentation & disclosure

Issue	FASB Tentative decisions	Contracts impacted
Presentation & disclosure (for annual and interim reporting periods)	• Disaggregated roll-forwards for the liability for future policy benefits, policyholder account balances, market risk benefits, separate accounts, DAC, and sales inducements • Liability for future policy benefits - Qualitative and quantitative discussion about adverse development. Separate presentation of any "catch-up" adjustments for changes in cash flow assumption. • Policyholder account balances – Weighted-average crediting rates; tabular presentation of account balances by range of guaranteed minimum crediting rates and the related range of the difference between rates being credited to policyholders and the respective guaranteed minimums • Market risk benefits - Separate presentation of the carrying amount of the liability (or asset) and fair value changes in the statements of financial position and operations. Fair value changes attributable to a change in the instrument-specific credit risk would be reported in OCI • Various transition related disclosures, including disclosures for a change in accounting principle, on a disaggregated basis	All long-duration contracts (except for investment contracts that follow financial instrument model/effective yield method)

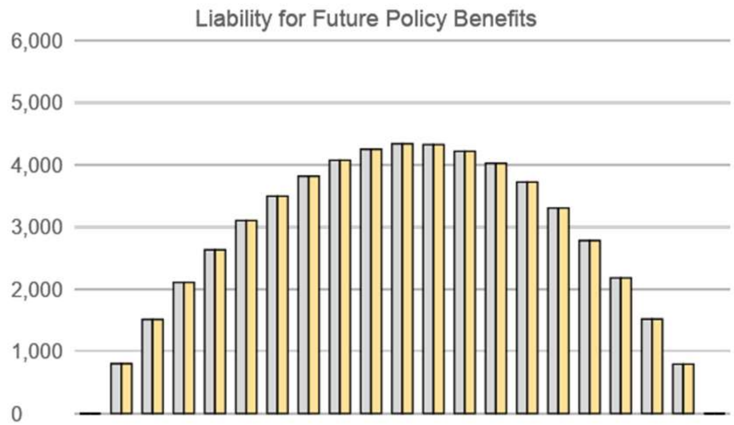
Simplified Example

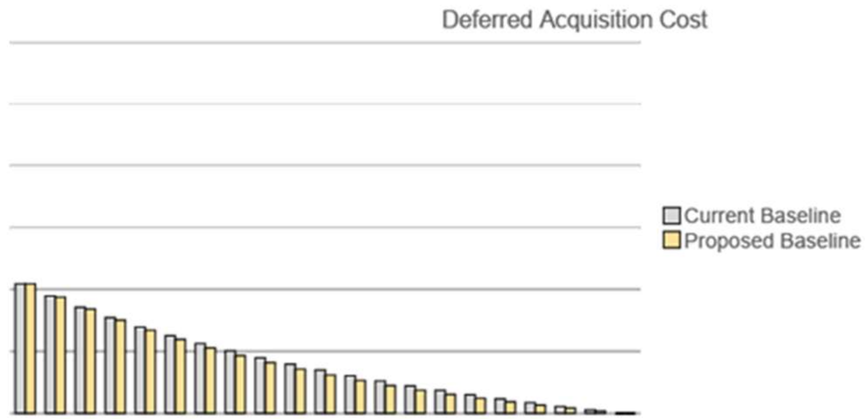
Illustrations – Term life

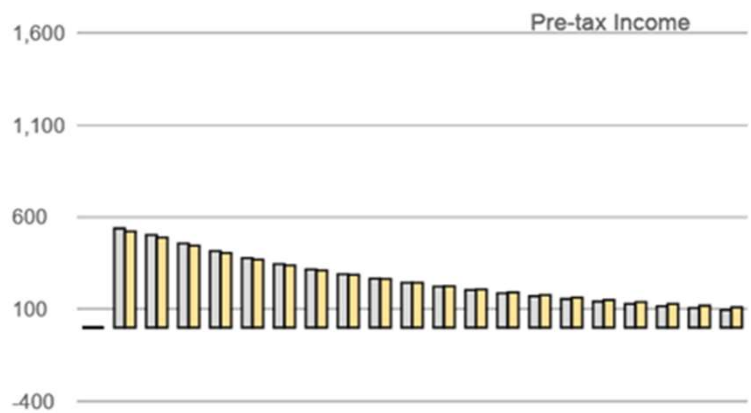
- The following slides provide illustrations of the potential changes for a 20 year term life insurance contract
- Illustrations of the proposed changes on policy benefit liabilities and DAC vs. current US GAAP are provided for the following circumstances:
  - Experience variances (lapses)
  - Actuarial assumption changes (deaths)
  - Discount rate changes (reduction)
- Simplifying assumptions are made to enhance the transparency of results. E.g., current US GAAP assumptions exclude a provisions for adverse deviation (PAD). Also, level discount rates are used, and qualified deferrable acquisition costs are assumed at inception of the contract (i.e., time zero) only
- Liability for future benefits and deferred acquisition cost balances are projected on a cohort basis (i.e., historical cash flows from terminated policies are included in the net-premium ratio retrospective unlocking, and projected inforce amounts are aggregated for DAC amortization purposes)

Term life – Baseline

Current vs. proposed US GAAP







Observations

Baseline scenario uses same set of assumptions for current and proposed approaches (i.e. best estimate assumptions without PAD and 5% level discount rate)

Liability for future policy benefits

- No difference observed.

Deferred acquisition cost

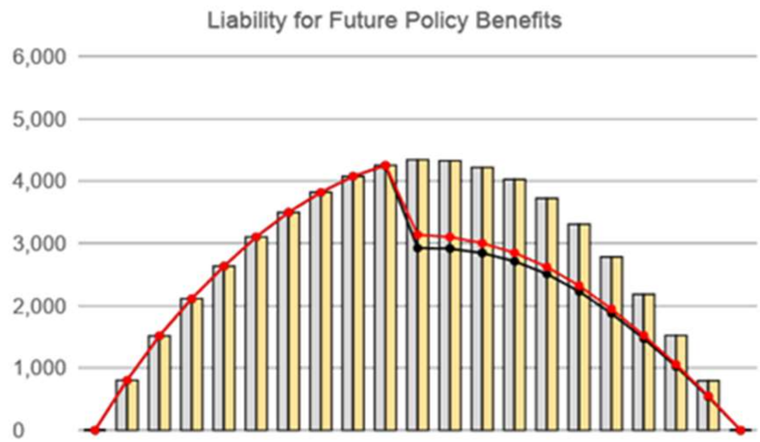
- Current approach – amortization in proportion to premiums.
- Proposed approach – amortization based on projected in-force amounts.
- Proposed approach accelerates DAC amortization since there is no interest accretion.

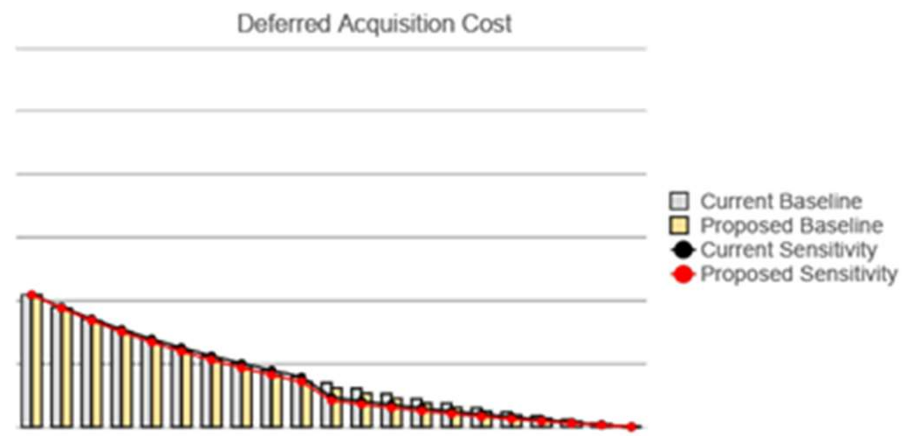
Pre-tax Income

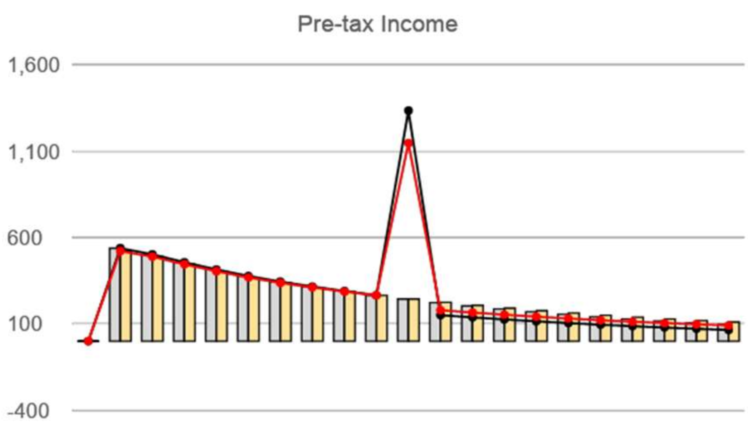
- Under the baseline scenario, profit emergence is slightly delayed under the proposed approach due to the revisions to the DAC model (i.e., no interest accretion).

Term life – Lapse experience deviation

Current vs. proposed US GAAP







Observations
Assumed that 30% of business lapses in year 10. No change to prospective cash flow assumptions.

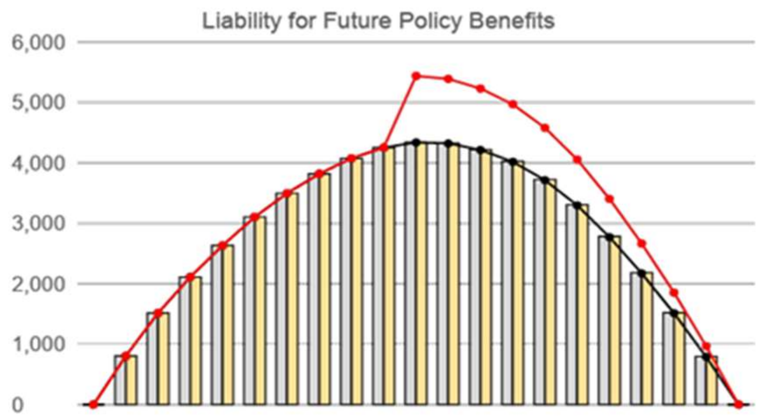
Liability for future policy benefits
For both approaches, the liability reflects additional terminations in year 10. For the proposed approach, the liability reduction is partially offset by the retrospective unlocking (i.e., net premium ratio decreases as less benefit claims were paid due to the additional terminations)

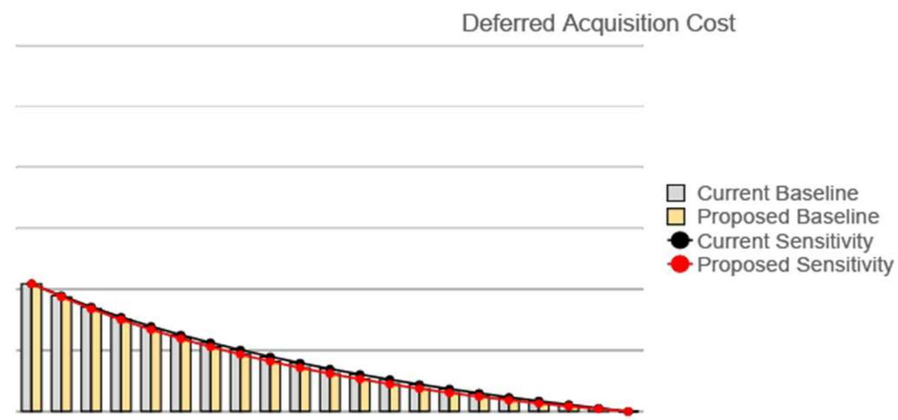
Deferred acquisition cost
For both approaches, the DAC balance reflects additional terminations. However, the amortization pattern remains unchanged as there is no change to prospective cash flow assumptions.

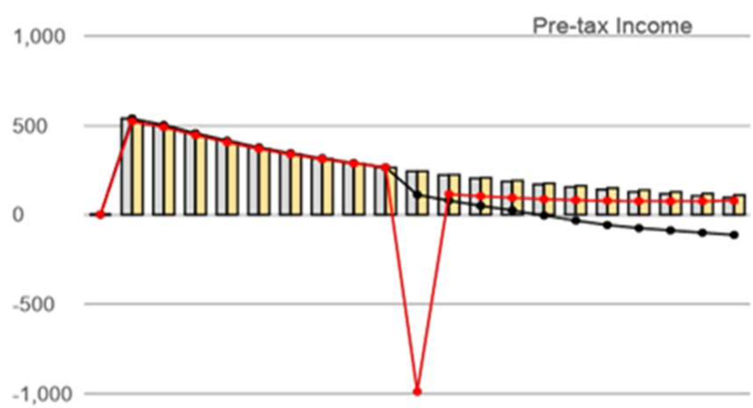
Pre-tax Income
A gain in year 10 is observed due to the release of the net GAAP liability. The proposed standard delays profit emergence due to the retrospective unlocking.

Term Life – Prospective mortality update

Current vs. proposed US GAAP







Observations

Assumed a 20% increase in mortality in year 10 and future years. Experience emerges as expected in prior years (i.e., no current period impacts)

Liability for future policy benefits.

- Assumptions under the current approach are locked-in, small impact is observed due to the reduction in in-force. Proposed approach reflects the assumption update in year 10, but the liability increase is partially offset by the retrospective unlocking (i.e., the net premium ratio increases anticipating the 20% increase in future benefit claims)

Deferred acquisition cost

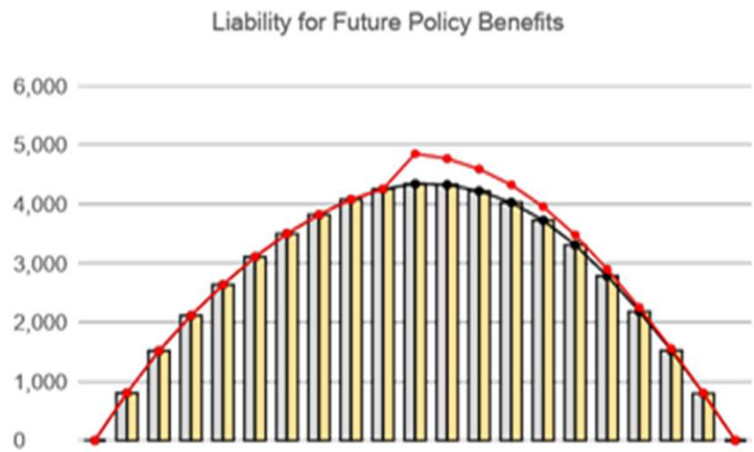
- Both approaches reflect the projected reduction in in-force, but the observed DAC impact is relatively small. The prospective DAC amortization pattern is revised in the proposed approach only due to the assumption update

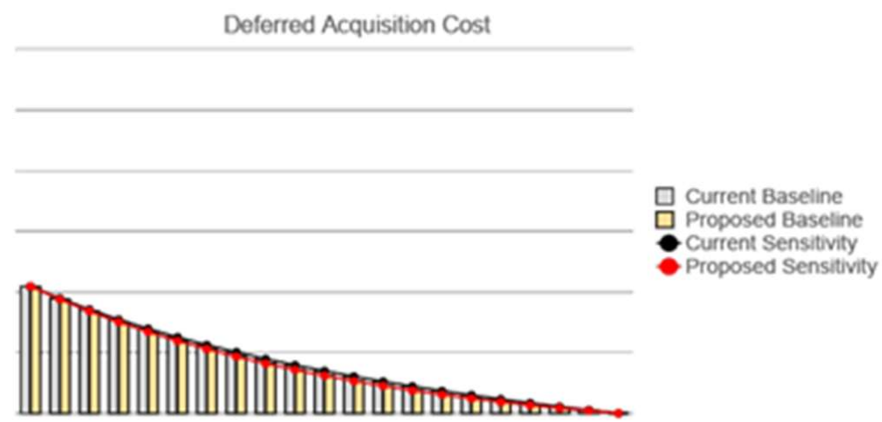
Pre-tax Income

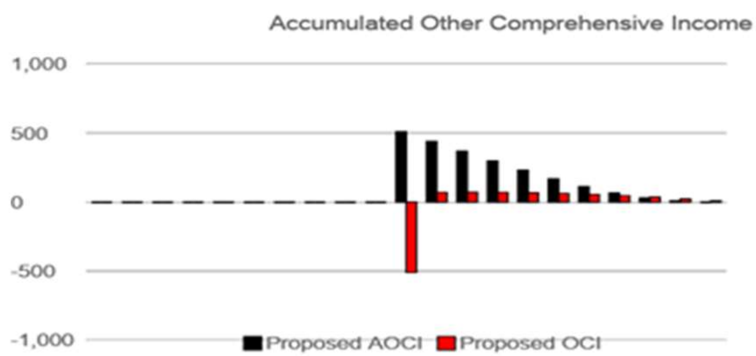
- Under the current approach, projected profits decrease as claim payments increase. The proposed approach produces a loss in year 10 due to the reserve increase, but profit emergence is smoother in future years.

Term Life – Reduction in discount rate

Current vs. proposed US GAAP







Observations

Assumed a 200 bps reduction (5% to 3%) in single level the discount rate in year 10

Liability for future policy benefits

- No changes under current approach since assumptions are locked-in. The proposed approach requires updating discount rates for balance sheet purposes (i.e., the net-premium ratio is not updated for changes in discount rates, but future benefits and net premiums are discounted with the updated valuation interest rate).

Deferred acquisition cost

- No impact to DAC amortization.

Accumulated Other Comprehensive Income (AOCI)

- The AOCI balance is calculated as the difference between the liabilities using the updated and the interest accretion discount rates (i.e., 3% and 5% respectively).
- Under the proposed standard, changes in discount rate are recorded in Other Comprehensive Income (OCI), with no impact on income. The OCI impact is then calculated as the change in the AOCI balance.
- Although the decision of recording discount rate changes in OCI mitigates income volatility, changes in the balance sheet liability may produce equity volatility.

Thank you!