Finance, Management, & Operations



Accounting: Rewrite of rules of the Road (IFRS/FASB)

Insurance Contract Accounting for LTC Products





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Agenda



Overview of the standard

Income statement and disclosure changes

ILTC Example

Key items to consider



- Background:
 - Existing U.S. generally accepted accounting principles (GAAP) has evolved resulting in multiple accounting models.
 - International Financial Reporting Standards (IFRS) has a temporary accounting principle.



Background:

- In 2008, the Financial Accounting Standards Board (FASB) and International Accounting Standards Board (IASB) began work on a joint project to improve and converge guidance for insurance contracts.
- In June 2013, the FASB and IASB each released proposed standards in the form of Exposure Drafts.



- Background:
 - Neither Exposure Draft includes a proposed effective date, likely to be 2018 or later.
 - Would require full retrospective application at adoption.
 - Retrospective application will require two years of restated financial statements upon adoption.
 - Earliest period to restate would be 2016, assuming a 2018 effective date.



- Comment letter summary
 - General concerns highlighted were:
 - Convergence vs. targeted changes
 - Discount rates
 - Complex and unfamiliar measurement of revenue
 - Locked single margin
 - Onerous contracts
 - Transition
 - Implementation efforts and costs
 - Disclosures

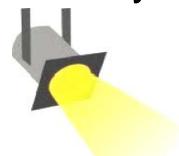


- What Does it mean?
 - The standard will significantly affect...





Demystifies the black box



No lock-in concept

Reserve
assumptions
and discount
rates are
updated each
period



A/E differences

Reserve roll forward by line of business

Changes in assumptions are broken out





Key financial measures are lost.





- Key differences between proposed FASB model and existing GAAP:
 - An explicit margin presented in the financial statements vs. an implicit margin.
 - Revenue recognition earned premium vs. premiums due.



Key terms:

- Contract Boundary
 - Point at which an entity no longer has a substantive obligation to provide the policyholder with coverage at fixed terms.

- Discount Rate

- Current rate that is updated at each reporting period and reflects the characteristics of the liabilities.
- Changes in the liability due to changes in the discount rate are reported in other comprehensive income (OCI).



Key terms:

- Single Margin
 - The excess of the expected present value of the cash inflows over the expected present value of the cash outflows, including acquisition costs.
 - Recognized as revenue as the insurer is released from risk.
- Insurance Contract Revenue
 - Single margin and expected claim payments and certain expenses to be recognized each period (formerly known as - earned premium).



Key terms:

- Portfolio
 - Unit of measure for aggregation of similar insurance contracts.
 - Contracts subject to similar risks and priced similarly relative to risk taken on.
 - Contracts having similar duration and similar expected patterns of release from risk.
 - Level at which the single margin is established and subsequently released.
 - Subset of a line-of-business.
 - Level at which the onerous contract test is performed.



Key terms:

- Onerous Contracts/unlocking the margin
 - Situation in which the fulfillment cash inflows less expected qualifying acquisition costs are less than the fulfillment cash outflows within a portfolio.
 - Required to be measured at portfolio inception and throughout the life of the portfolio.



FASB Building Block Model (BBA)

Total premium received is equal to the Probability weighted discounted expected cash flows plus the single margin

Single margin

Amortized prospectively to P&L and decreased only if onerous contract

Probability weighted discounted expected cash flows

Reported at current value each balance sheet date with changes split between P&L and OCI.

Cash Flow and Experience = P&L

Discount at liability rate

Balance Sheet/OCI = current rate
Income = locked-in rate



Profit emergence under the BBA

Recognition of single margin

- Recognized in income as insurer is "released from risk" over the expected premium and claim paying period.
- Expected pattern of release is updated prospectively as risk estimates change.
- Changes pattern of earnings and more earnings volatility

Difference between actual and expected results (current period)

- Differences between expected and actual cash flows from benefits and expenses in the reporting period are recognized immediately.
- Consistent with existing GAAP.

Changes in assumptions and estimates (forward looking)

- Impact of changes in assumptions is recognized immediately in income.
- Impact of discount rate changes is recognized in OCI.
- More earnings volatility.

Net investment margin

- Earnings on investments less interest accretion on the liabilities.
- Will likely require closer coordination of pricing and changing market conditions.

Financial Statements and Disclosures



Income statement comparison:

| Statement of Comprehensive Income | |
|---|------------|
| Current US GAAP Presentation | 12/31/20xx |
| Premium Income | XX |
| Net Investment Income | XX |
| Net Realized Investment Gains (Loss) | XX |
| Other Income | XX |
| Total Revenues | XX |
| | |
| Benefits and Change in Reserves for Future Benefits | XX |
| Commissions | XX |
| Deferral of Acquisition Costs | XX |
| Amortization of Deferred Acquisition Costs | XX |
| Interest and Debt Expense | XX |
| Compensation Expense | XX |
| Other Expenses | XX |
| Total Benefits and Expenses | XX |
| Income (Loss) Before Provision for Income Tax | XX |

| Statement of Comprehensive Income | |
|--|------------|
| Proposed US GAAP Presentation | 12/31/20xx |
| Insurance contract revenue (premiums earned) (BBA) | XX |
| Insurance contract revenue (premiums earned) (PAA) | XX |
| Ceded reinsurance consideration (BBA) | (xx) |
| Ceded reinsurance consideration (PAA) | (xx) |
| Claims/benefits incurred (BBA) | (xx) |
| Claims/benefits incurred (PAA) | (xx) |
| Reinsurance recoverable for claims/benefits incurred (PAA) | XX |
| Reinsurance recoverable for claims/benefits incurred (BBA) | XX |
| Adjustment for changes in estimates of future benefits/claim | (xx) |
| Amortization of acquisition costs | (xx) |
| Underwriting Margin | XX |
| Investment Income | XX |
| Interest expense (including unwind of the discount) | (xx) |
| Net realized investment gains (loss) | XX |
| Other income | XX |
| Other expenses | (xx) |
| Income (Loss) Before Provision for Income Tax | ХХ |

- Revenue will no longer be reported under the "premiums due" revenue recognition policy. It will be replaced by the insurance contract revenue (i.e. earned premiums) recognition principle and will include interest accretion.
- Reinsurance premium will be reported separately. This will also increase disclosure in the footnotes.
- Existing expense classifications will not be broken out separately. As a result of these changes, typical measures
 of loss or expense ratios will no longer be easily determinable from the face of the financial statements. This will
 increase disclosures within the footnotes.

Financial Statements and Disclosures



Reserve roll forward in footnotes:

| Rollforward of Insurance Asset (Liability) | Single Margin | Insurance Contract Asset/(Liability) | Net Insurance Asset (Liability) |
|---|------------------|--|---------------------------------------|
| Carrying amount beginning of period | (xx) | xx | xx |
| New contracts recognized in excess of premium Cash flows in period: | (xx) | xx | xx |
| Premiums received | | XX | XX |
| Claims and benefits paid | | XX | XX |
| Operating expenses paid | | XX | XX |
| Direct acquisition costs paid | XX | | XX |
| Other Cash paid | | XX | XX |
| Other Cash received | | XX | XX |
| | | XX | XX |
| Period Results: | | | |
| Release of single margin | XX | | XX |
| Experience adjustments (expected less actual cash flows) | XX | XX | XX |
| Change in estimates of future cash flows | XX | XX | xx |
| Change in discount rates (recorded in OCI) | | XX | xx |
| Interest accretion | XX | XX | XX |
| | XX | XX | XX |
| Carrying amount end of period | (xx) | XX | XX |

- A roll forward of the reserves will be required for each period presented.
 - The "Results" line items will agree to what is reported in the income statement.
 - "Carrying amount end of period" will agree to what is reported in the balance sheet for reserves.

Finance, Management, & Operations



Long Term Care Actuarial Modeling Example

These examples are based on the 2013 ED's for FASB and IASB.



14th Annual Intercompany Long Term Care Insurance Conference

Overview of Example



- The following slides are intended to demonstrate how the 2013 FASB and IASB Insurance Contracts Exposure Drafts could be applied to Long Term Care (LTC). These examples, calculated at product issue, also illustrate the resulting Net Income and Total Comprehensive Income patterns under a range of alternative scenarios.
- Certain simplifying assumptions have been made in various areas, including:
 - Margin run-off patterns
 - Expected cash flows are based on single scenarios assumed to approximate application of a weighted average scenario approach
 - Income Taxes are ignored
 - Determination of IASB Risk Adjustment
 - Interest accretion on the margin is ignored

Example – Long Term Care



- Product Type Long Term Care Insurance
 - Premium \$2,000 annual, level (January 1st issue date)
 - Direct acquisition costs(1st year) \$1,500
 - Indirect acquisition costs (1st year) \$400
 - Maintenance expense per year 12% premium and 6% claims
- Other Assumptions
 - Investment Yield Rate 5.0% per year
 - Mortality 1994 GAM
 - Lapses 5% / 4% / 3%, 2% / 1% ultimate
 - Morbidity—65% lifetime loss ratio
- Margins and Discount Rate
 - FASB Margin Run off according to in present value of benefits over the inforce, no adjustments
 - IASB Risk Adjustment 5% of PV of benefits, discounted at 4%, unlocked each year
 - IASB Contractual Service Margin Run off according to present value of benefits over the inforce, adjusted for changes in estimates
 - FASB/IASB Discount Rate 4.00%
 - Current US GAAP Provision for Adverse Deviation (PAD) 5% on morbidity only

Example – Long Term Care

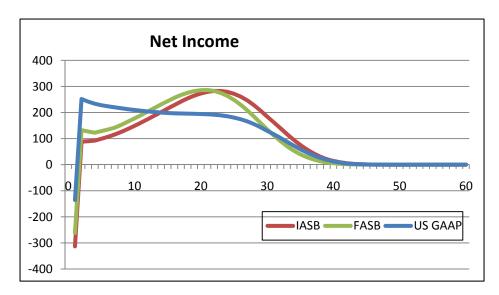


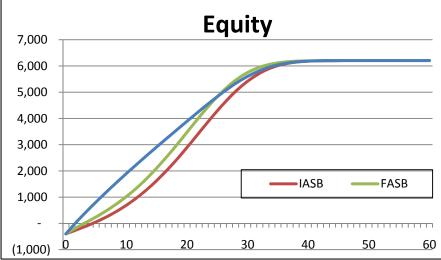
Scenario Descriptions

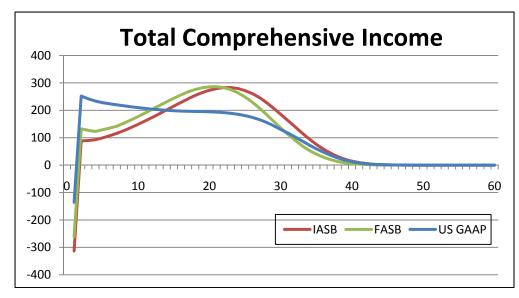
| Scenario | Experience Variances | Change in Estimates | Discount Rate Changes |
|---|--|--|---|
| Base | None | None | None |
| Alternative #1— Spread Compression | Starting in year 2, investment yield decreases by 25 basis points per year from 5% to 4% | None | Starting in year 1, discount rate decreases by 10 basis points per year from 4.0% to 3.5% |
| Alternative #2 (Uses changes from Alternative #1 plus)— Adverse Morbidity & Rate Increase | Morbidity increases to 1.05 times base in year 3 | Estimated morbidity changed in year 4 to 1.025 times base for years 4+; changed again in year 5 to 1.05 times base in years 5+ | None |
| | Premium rate increase of 20% in year 8 | Premium rate increase of 20% in year 8, reflected in year 7 | |

Example – Long Term Care Base Scenario











Current US GAAP

| Balance Sheet | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|----------------------|-------|---------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| Invested assets | (400) | (139) | 1,547 | 3,184 | 4,783 | 6,353 | 7,901 | 9,419 | 10,898 | 12,330 | 13,709 | 15,025 | 16,261 | 17,403 | 18,436 | 19,347 |
| DAC | - | 1,434 | 1,374 | 1,316 | 1,260 | 1,205 | 1,150 | 1,095 | 1,040 | 985 | 930 | 875 | 820 | 765 | 711 | 658 |
| Benefit reserve | - | 1,350 | 2,645 | 3,907 | 5,142 | 6,357 | 7,555 | 8,727 | 9,865 | 10,963 | 12,015 | 13,009 | 13,931 | 14,766 | 15,501 | 16,122 |
| Maintenance reserve | - | 81 | 159 | 234 | 309 | 381 | 453 | 524 | 592 | 658 | 721 | 781 | 836 | 886 | 930 | 967 |
| Equity | (400) | (136) | 117 | 358 | 592 | 820 | 1,044 | 1,264 | 1,480 | 1,694 | 1,903 | 2,110 | 2,314 | 2,516 | 2,716 | 2,915 |
| Income statement | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| Premium | | 2,000 | 1,887 | 1,797 | 1,727 | 1,676 | 1,640 | 1,603 | 1,565 | 1,526 | 1,486 | 1,445 | 1,403 | 1,359 | 1,313 | 1,265 |
| Investment income | | 67 | 134 | 199 | 263 | 326 | 389 | 451 | 511 | 569 | 626 | 679 | 730 | 777 | 819 | 856 |
| Acquisition expenses | | 1,900 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Maintenance expenses | | 244 | 233 | 224 | 218 | 214 | 213 | 212 | 211 | 210 | 210 | 209 | 210 | 210 | 211 | 212 |
| Claims | | 63 | 102 | 136 | 174 | 218 | 268 | 324 | 386 | 453 | 522 | 599 | 687 | 784 | 888 | 998 |
| Increase in reserves | | 1,430 | 1,374 | 1,337 | 1,310 | 1,287 | 1,269 | 1,243 | 1,207 | 1,164 | 1,115 | 1,054 | 977 | 885 | 779 | 659 |
| Amortization of DAC | | (1,434) | 61 | 58 | 56 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 54 | 53 |
| Net Income | | (136) | 252 | 242 | 234 | 228 | 224 | 220 | 216 | 213 | 210 | 207 | 204 | 202 | 200 | 198 |

^{*}Additional rows may be added to aid in understanding



FASB

| 0 | 1 | 2 | 2 | 4 | | _ | | | | | | | | | |
|----------|--|--|--|---|---|---|---|--|---|--|--|---|--|--|--|
| | | | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| (400) | (139) | 1,547 | 3,184 | 4,783 | 6,353 | 7,901 | 9,419 | 10,898 | 12,330 | 13,709 | 15,025 | 16,261 | 17,403 | 18,436 | 19,347 |
| | | | | | | | | | | | | | | | |
| (1,462) | (1,307) | 268 | 1,788 | 3,264 | 4,706 | 6,119 | 7,495 | 8,825 | 10,101 | 11,319 | 12,466 | 13,526 | 14,486 | 15,332 | 16,050 |
| 1,462 | 1,429 | 1,408 | 1,398 | 1,398 | 1,398 | 1,398 | 1,398 | 1,393 | 1,384 | 1,368 | 1,347 | 1,318 | 1,282 | 1,239 | 1,187 |
| - | 122 | 1,676 | 3,186 | 4,662 | 6,104 | 7,517 | 8,893 | 10,218 | 11,485 | 12,687 | 13,813 | 14,845 | 15,769 | 16,570 | 17,237 |
| (400) | (262) | (129) | (2) | 121 | 249 | 385 | 526 | 679 | 844 | 1,022 | 1,212 | 1,416 | 1,634 | 1,865 | 2,109 |
| entation | | | | | | | | | | | | | | | |
| | 2,000 | 1,887 | 1,797 | 1,727 | 1,676 | 1,640 | 1,603 | 1,565 | 1,526 | 1,486 | 1,445 | 1,403 | 1,359 | 1,313 | 1,265 |
| | 67 | 134 | 199 | 263 | 326 | 389 | 451 | 511 | 569 | 626 | 679 | 730 | 777 | 819 | 856 |
| | 1,900 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 244 | 233 | 224 | 218 | 214 | 213 | 212 | 211 | 210 | 210 | 209 | 210 | 210 | 211 | 212 |
| | 63 | 102 | 136 | 174 | 218 | 268 | 324 | 386 | 453 | 522 | 599 | 687 | 784 | 888 | 998 |
| ities | (1,307) | 1,575 | 1,520 | 1,476 | 1,441 | 1,413 | 1,376 | 1,330 | 1,277 | 1,217 | 1,147 | 1,060 | 960 | 845 | 718 |
| | 1,429 | (21) | (10) | - | - | - | - | (4) | (10) | (15) | (22) | (29) | (36) | (44) | (51) |
| | (262) | 132 | 127 | 123 | 129 | 135 | 142 | 153 | 165 | 177 | 190 | 204 | 218 | 231 | 244 |
| | | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| OCI) | (262) | 132 | 127 | 123 | 129 | 135 | 142 | 153 | 165 | 177 | 190 | 204 | 218 | 231 | 244 |
| i | (1,462) 1,462 - (400) entation | (1,462) (1,307) 1,462 1,429 - 122 (400) (262) tentation 2,000 67 1,900 244 63 tities (1,307) 1,429 (262) - | (1,462) (1,307) 268 1,462 1,429 1,408 - 122 1,676 (400) (262) (129) Tentation 2,000 1,887 67 134 1,900 - 244 233 63 102 (1,307) 1,575 1,429 (21) (262) 132 | (1,462) (1,307) 268 1,788 1,462 1,429 1,408 1,398 - 122 1,676 3,186 (400) (262) (129) (2) Tentation 2,000 1,887 1,797 67 134 199 1,900 244 233 224 63 102 136 ities (1,307) 1,575 1,520 1,429 (21) (10) (262) 132 127 | (1,462) (1,307) 268 1,788 3,264 1,462 1,429 1,408 1,398 1,398 - 122 1,676 3,186 4,662 (400) (262) (129) (2) 121 Tentation 2,000 1,887 1,797 1,727 67 134 199 263 1,900 244 233 224 218 63 102 136 174 ities (1,307) 1,575 1,520 1,476 1,429 (21) (10) - (262) 132 127 123 | (1,462) (1,307) 268 1,788 3,264 4,706 1,462 1,429 1,408 1,398 1,398 1,398 - 122 1,676 3,186 4,662 6,104 (400) (262) (129) (2) 121 249 Tentation 2,000 1,887 1,797 1,727 1,676 67 134 199 263 326 1,900 244 233 224 218 214 63 102 136 174 218 ities (1,307) 1,575 1,520 1,476 1,441 1,429 (21) (10) (262) 132 127 123 129 | (1,462) (1,307) 268 1,788 3,264 4,706 6,119 1,462 1,429 1,408 1,398 1,398 1,398 1,398 - 122 1,676 3,186 4,662 6,104 7,517 (400) (262) (129) (2) 121 249 385 Tentation 2,000 1,887 1,797 1,727 1,676 1,640 67 134 199 263 326 389 1,900 244 233 224 218 214 213 63 102 136 174 218 268 ities (1,307) 1,575 1,520 1,476 1,441 1,413 1,429 (21) (10) (262) 132 127 123 129 135 | (1,462) (1,307) 268 1,788 3,264 4,706 6,119 7,495 1,462 1,429 1,408 1,398 1,398 1,398 1,398 1,398 - 122 1,676 3,186 4,662 6,104 7,517 8,893 (400) (262) (129) (2) 121 249 385 526 Tentation 2,000 1,887 1,797 1,727 1,676 1,640 1,603 67 134 199 263 326 389 451 1,900 244 233 224 218 214 213 212 63 102 136 174 218 268 324 (ities (1,307) 1,575 1,520 1,476 1,441 1,413 1,376 1,429 (21) (10) (262) 132 127 123 129 135 142 | (1,462) (1,307) 268 1,788 3,264 4,706 6,119 7,495 8,825 1,462 1,429 1,408 1,398 1,218 1,366 1,390 1,490 1,603 1,565 1,565 1,560 1,476 1,441 1,413 1,376 1,330 1,429 (21) (10) (4) (262) 132 127 123 129 135 142 153 | (1,462) (1,307) 268 1,788 3,264 4,706 6,119 7,495 8,825 10,101 1,462 1,429 1,408 1,398 1,398 1,398 1,398 1,398 1,398 1,393 1,384 1,400) (262) (129) (2) 121 249 385 526 679 844 1,400) (262) (129) (2) 121 249 385 526 679 844 1,500 | (1,462) (1,307) 268 1,788 3,264 4,706 6,119 7,495 8,825 10,101 11,319 1,462 1,429 1,408 1,398 1,0218 11,485 12,687 1,486 1,000 1,600 | (1,462) (1,307) 268 1,788 3,264 4,706 6,119 7,495 8,825 10,101 11,319 12,466 1,462 1,429 1,408 1,398 1,398 1,398 1,398 1,398 1,398 1,393 1,384 1,368 1,347 122 1,676 3,186 4,662 6,104 7,517 8,893 10,218 11,485 12,687 13,813 1,400) (262) (129) (2) 121 249 385 526 679 844 1,022 1,212 1,212 1,000 1,887 1,797 1,727 1,676 1,640 1,603 1,565 1,526 1,486 1,445 1,900 | (1,462) (1,307) 268 1,788 3,264 4,706 6,119 7,495 8,825 10,101 11,319 12,466 13,526 1,462 1,429 1,408 1,398 1,384 1,368 1,347 1,318 1,460 1,600 (262) (129) (2) 121 249 385 526 679 844 1,022 1,212 1,416 1, | (1,462) (1,307) 268 1,788 3,264 4,706 6,119 7,495 8,825 10,101 11,319 12,466 13,526 14,486 1,462 1,429 1,408 1,398 1,398 1,398 1,398 1,398 1,393 1,384 1,368 1,347 1,318 1,282 - 122 1,676 3,186 4,662 6,104 7,517 8,893 10,218 11,485 12,687 13,813 14,845 15,769 (400) (262) (129) (2) 121 249 385 526 679 844 1,022 1,212 1,416 1,634 (401) (| (1,462) (1,307) 268 1,788 3,264 4,706 6,119 7,495 8,825 10,101 11,319 12,466 13,526 14,486 15,332 1,462 1,429 1,408 1,398 1,398 1,398 1,398 1,398 1,393 1,384 1,368 1,347 1,318 1,282 1,239 - 122 1,676 3,186 4,662 6,104 7,517 8,893 10,218 11,485 12,687 13,813 14,845 15,769 16,570 (400) (262) (129) (2) 121 249 385 526 679 844 1,022 1,212 1,416 1,634 1,865 (400) (262) (129) (2) 121 249 385 526 679 844 1,022 1,212 1,416 1,634 1,865 (400) (262) (129) (2) 121 249 385 526 679 844 1,022 1,212 1,416 1,634 1,865 (400) (40 |

Note: The margin is runoff over declines in PV of future benefits, those amounts increase in years 4-7.

^{*}Additional rows may be added to aid in understanding



FASB - Base

| raso - buse | | | | | | | | | | | | | | | |
|---|-------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| FASB Presentation Per June 2013 ED 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| Insurance Contract Revenue | 373 | 378 | 380 | 392 | 432 | 481 | 536 | 606 | 683 | 763 | 852 | 955 | 1,067 | 1,188 | 1,314 |
| Adj for change in est of future benefits | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Loss at initial recognition | - | | | | | | | | | | | | | | |
| Claims and Benefits Incurred | 307 | 335 | 360 | 392 | 432 | 481 | 536 | 597 | 663 | 732 | 808 | 897 | 994 | 1,099 | 1,210 |
| Amortization of qualifying acq cost | 33 | 22 | 10 | - | - | - | - | 5 | 10 | 16 | 22 | 29 | 37 | 45 | 53 |
| Underwriting margin | 32 | 21 | 10 | - | - | - | - | 4 | 10 | 15 | 22 | 29 | 36 | 44 | 51 |
| Non-qualifying acquisition & other costs | (400) | | | | | | | | | | | | | | |
| Investment Income | 67 | 134 | 199 | 263 | 326 | 389 | 451 | 511 | 569 | 626 | 679 | 730 | 777 | 819 | 856 |
| Interest Expense | 38 | (23) | (83) | (141) | (198) | (254) | (309) | (362) | (414) | (463) | (511) | (555) | (595) | (632) | (664) |
| Net Income | (262) | 132 | 127 | 123 | 129 | 135 | 142 | 153 | 165 | 177 | 190 | 204 | 218 | 231 | 244 |
| осі | - | - | _ | - | - | - | - | - | - | - | - | - | - | - | - |
| Total comprehensive income (NI + OCI) | (262) | 132 | 127 | 123 | 129 | 135 | 142 | 153 | 165 | 177 | 190 | 204 | 218 | 231 | 244 |
| | | | | | | | | | | | | | | | |
| Insurance Contract Revenue Breakdown 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| Expected Claims and Expenses | 307 | 335 | 360 | 392 | 432 | 481 | 536 | 597 | 663 | 732 | 808 | 897 | 994 | 1,099 | 1,210 |
| Change in margin | 32 | 21 | 10 | - | - | - | - | 4 | 10 | 15 | 22 | 29 | 36 | 44 | 51 |
| Acquisition Cost Amortization | 33 | 22 | 10 | - | - | - | - | 5 | 10 | 16 | 22 | 29 | 37 | 45 | 53 |
| Total Insurance Contract Revenue | 373 | 378 | 380 | 392 | 432 | 481 | 536 | 606 | 683 | 763 | 852 | 955 | 1,067 | 1,188 | 1,314 |
| | | | | | | | | | | | | | | | |
| Income statement-summarized margin presentation | on | | | | | | | | | | | | | | |
| Change in margn | 32 | 21 | 10 | - | - | - | - | 4 | 10 | 15 | 22 | 29 | 36 | 44 | 51 |
| Experience adjustments | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Change in estimates | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Non-qualifying acquisition & other costs | (400) | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Investment income | 67 | 134 | 199 | 263 | 326 | 389 | 451 | 511 | 569 | 626 | 679 | 730 | 777 | 819 | 856 |
| Interest on insurance liability | 38 | (23) | (83) | (141) | (198) | (254) | (309) | (362) | (414) | (463) | (511) | (555) | (595) | (632) | (664) |
| Net Income | (262) | 132 | 127 | 123 | 129 | 135 | 142 | 153 | 165 | 177 | 190 | 204 | 218 | 231 | 244 |
| осі | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Total comprehensive income (NI+OCI) | (262) | 132 | 127 | 123 | 129 | 135 | 142 | 153 | 165 | 177 | 190 | 204 | 218 | 231 | 244 |

^{*}Additional rows may be added to aid in understanding

Note: The margin is runoff over declines in PV of future benefits, those amounts increase in years 4-7.

11: Accounting: Rewrite of rules of the Road (IFRS/FASB)



IASB with risk adjustment

| IASD WITH HISK dajastinent | | | | | | | | | | | | | | | | |
|---|----------|---------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| Balance Sheet | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| Invested Assets | (400) | (139) | 1,547 | 3,184 | 4,783 | 6,353 | 7,901 | 9,419 | 10,898 | 12,330 | 13,709 | 15,025 | 16,261 | 17,403 | 18,436 | 19,347 |
| Insurance liability | | | | | | | | | | | | | | | | |
| PV future cash flows | (1,462) | (1,307) | 268 | 1,788 | 3,264 | 4,706 | 6,119 | 7,495 | 8,825 | 10,101 | 11,319 | 12,466 | 13,526 | 14,486 | 15,332 | 16,050 |
| Risk adjustment | 879 | 911 | 943 | 973 | 1,004 | 1,033 | 1,061 | 1,087 | 1,111 | 1,133 | 1,152 | 1,168 | 1,181 | 1,189 | 1,192 | 1,190 |
| Contractual Service margin | 582 | 570 | 561 | 557 | 557 | 557 | 557 | 557 | 555 | 551 | 545 | 537 | 525 | 511 | 494 | 473 |
| Total Insurance Liability | - | 174 | 1,772 | 3,319 | 4,825 | 6,296 | 7,737 | 9,139 | 10,491 | 11,786 | 13,016 | 14,171 | 15,233 | 16,186 | 17,017 | 17,713 |
| Equity | (400) | (313) | (225) | (135) | (42) | 57 | 165 | 280 | 406 | 544 | 693 | 854 | 1,029 | 1,217 | 1,418 | 1,634 |
| Income Statement-Traditional presentation | | | | | | | | | | | | | | | | |
| Premiums | | 2,000 | 1,887 | 1,797 | 1,727 | 1,676 | 1,640 | 1,603 | 1,565 | 1,526 | 1,486 | 1,445 | 1,403 | 1,359 | 1,313 | 1,265 |
| Investment income | | 67 | 134 | 199 | 263 | 326 | 389 | 451 | 511 | 569 | 626 | 679 | 730 | 777 | 819 | 856 |
| Acquisition expenses | | 1,900 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Maintenance expenses | | 244 | 233 | 224 | 218 | 214 | 213 | 212 | 211 | 210 | 210 | 209 | 210 | 210 | 211 | 212 |
| Claims | | 63 | 102 | 136 | 174 | 218 | 268 | 324 | 386 | 453 | 522 | 599 | 687 | 784 | 888 | 998 |
| Change in insurance liability | | | | | | | | | | | | | | | | |
| Present value of cash flows | | (1,307) | 1,575 | 1,520 | 1,476 | 1,441 | 1,413 | 1,376 | 1,330 | 1,277 | 1,217 | 1,147 | 1,060 | 960 | 845 | 718 |
| Change in risk adjustment | | 911 | 31 | 31 | 30 | 29 | 28 | 26 | 24 | 22 | 19 | 16 | 12 | 8 | 3 | (2) |
| Change in contractual service margin | | 570 | (8) | (4) | - | - | - | - | (2) | (4) | (6) | (9) | (11) | (14) | (17) | (20) |
| Total change in insurance liability | | 174 | 1,598 | 1,547 | 1,506 | 1,470 | 1,441 | 1,402 | 1,352 | 1,295 | 1,230 | 1,155 | 1,061 | 954 | 831 | 696 |
| Net Income | | (313) | 88 | 90 | 92 | 100 | 107 | 116 | 126 | 137 | 149 | 161 | 175 | 188 | 202 | 215 |
| Components of OCI | <u> </u> | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Total comprehensive income (NI+OCI) | | (313) | 88 | 90 | 92 | 100 | 107 | 116 | 126 | 137 | 149 | 161 | 175 | 188 | 202 | 215 |

^{*}Additional rows may be added to aid in understanding

Note: The margin is runoff over declines in PV of future benefits, those amounts increase in years 4-7.



IASB with risk adjustment

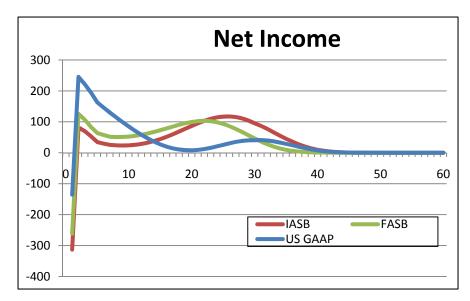
| IASB Presentation Per June 2013 ED | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|--|---------|-------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Insurance Contract Revenue | | 321 | 334 | 343 | 362 | 403 | 453 | 509 | 579 | 655 | 735 | 823 | 925 | 1,037 | 1,158 | 1,285 |
| Adj for change in est of future benefits | | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Loss at initial recognition | | - | | | | | | | | | | | | | | |
| Claims and Benefits Incurred | | 307 | 335 | 360 | 392 | 432 | 481 | 536 | 597 | 663 | 732 | 808 | 897 | 994 | 1,099 | 1,210 |
| Amortization of qualifying acq cost | | 33 | 22 | 10 | - | - | - | - | 5 | 10 | 16 | 22 | 29 | 37 | 45 | 53 |
| Underwriting margin | | (19) | (23) | (27) | (30) | (29) | (28) | (26) | (22) | (18) | (13) | (8) | (1) | 6 | 14 | 23 |
| Non-qualifying acquisition & other costs | | (400) | | | | | | | | | | | | | | |
| Investment Income | | 67 | 134 | 199 | 263 | 326 | 389 | 451 | 511 | 569 | 626 | 679 | 730 | 777 | 819 | 856 |
| Interest Expense | | 38 | (23) | (83) | (141) | (198) | (254) | (309) | (362) | (414) | (463) | (511) | (555) | (595) | (632) | (664) |
| Net Income | | (313) | 88 | 90 | 92 | 100 | 107 | 116 | 126 | 137 | 149 | 161 | 175 | 188 | 202 | 215 |
| OCI | | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Total comprehensive income (NI + OCI) | | (313) | 88 | 90 | 92 | 100 | 107 | 116 | 126 | 137 | 149 | 161 | 175 | 188 | 202 | 215 |
| | | | | | | | | | | | | | | | | |
| Insurance Contract Revenue Breakdown | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| Expected Claims and Expenses | | 307 | 335 | 360 | 392 | 432 | 481 | 536 | 597 | 663 | 732 | 808 | 897 | 994 | 1,099 | 1,210 |
| Change in risk adjustment | | (32) | (31) | (31) | (30) | (29) | (28) | (26) | (24) | (22) | (19) | (16) | (12) | (8) | (3) | 2 |
| Change in margin | | 13 | 8 | 4 | - | - | - | - | 2 | 4 | 6 | 9 | 11 | 14 | 17 | 20 |
| Acquisition Cost Amortization | | 33 | 22 | 10 | - | - | - | - | 5 | 10 | 16 | 22 | 29 | 37 | 45 | 53 |
| Total Insurance Contract Revenue | | 321 | 334 | 343 | 362 | 403 | 453 | 509 | 579 | 655 | 735 | 823 | 925 | 1,037 | 1,158 | 1,285 |
| | | | | | | | | | | | | | | | | |
| Income statement-summarized margin prese | ntation | (22) | (24) | (24) | (20) | (20) | (20) | (26) | (24) | (22) | (10) | (1.0) | (12) | (0) | (2) | |
| Change in risk adjustment | | (32) | (31) | (31) | (30) | (29) | (28) | (26) | (24) | (22) | (19) | (16) | (12) | (8) | (3) | 2 |
| Change in contractual service margin | | 13 | 8 | 4 | - | - | - | - | 2 | 4 | 6 | 9 | 11 | 14 | 17 | 20 |
| Experience adjustments | | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Change in estimates | | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Net gain at inception | | (400) | 40.4 | 400 | 250 | 226 | 200 | | | = 60 | 505 | 670 | 700 | | 040 | 056 |
| Investment income | | 67 | 134 | 199 | 263 | 326 | 389 | 451 | 511 | 569 | 626 | 679 | 730 | 777 | 819 | 856 |
| Interest on insurance liability | | 38 | (23) | (83) | (141) | (198) | (254) | (309) | (362) | (414) | (463) | (511) | (555) | (595) | (632) | (664) |
| Net Income | | (313) | 88 | 90 | 92 | 100 | 107 | 116 | 126 | 137 | 149 | 161 | 175 | 188 | 202 | 215 |
| OCI | | | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Total comprehensive income (NI + OCI) | | (313) | 88 | 90 | 92 | 100 | 107 | 116 | 126 | 137 | 149 | 161 | 175 | 188 | 202 | 21 |

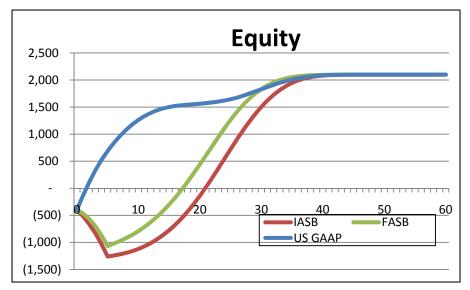
^{*}Additional rows may be added to aid in understanding

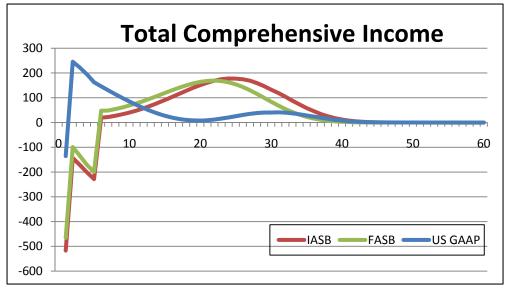
Note: The margin is runoff over declines in PV of future benefits, those amounts increase in years 4-7.

Long Term Care—Alternative #1 Spread Compression





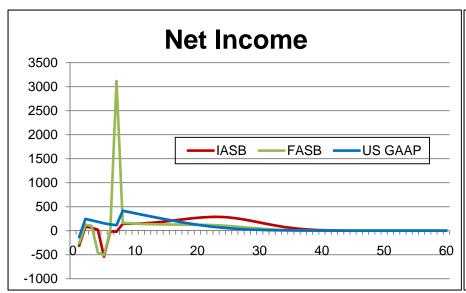


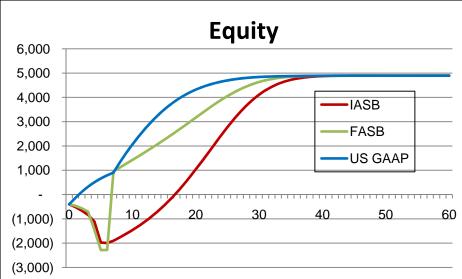


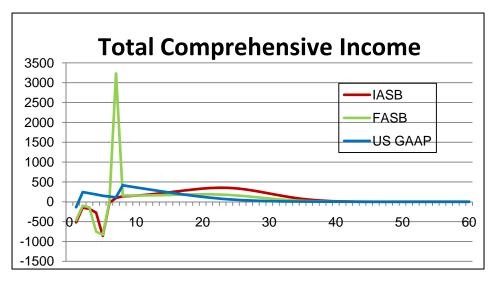
Long Term Care—Alternative #2

Adverse Morbidity & Rate Increase









Level of Measurement



Level of measurement

 An insurer would measure the present value of the fulfillment cash flows excluding the risk adjustment at the portfolio level of aggregation for insurance contracts.

Portfolio

 FASB – contracts that are subject to similar risks and priced similarly relative to the risk taken on and have a similar duration and similar expected patterns of release of the single margin.

Margins

 FASB – unit of account to determine and release the single margin is at portfolio level.

Margin Amortization Patterns



- The method of amortizing the margin is not prescribed but rather is principles based
- The margin should be released at the portfolio level (similar in concept to a DAC cohort)
- Margin is the mechanism by which (potential) profit is released and as such should be released as the entity is released from risk
- Choice of how to release the margin will obviously have impact on the profit profile of the block
- ED indicates that an entity should consider specific facts and circumstances to qualitatively determine whether there is a reduction in the variability of cash flows. Including:
 - The company's relative experience with the types of contracts
 - The company's past experience in estimated expected cash flows
 - Inherent difficulties in estimating expected cash flows
 - The homogeneity of the contracts within the portfolio
 - The fact that past experience may not be representative of future results

Margin Amortization Patterns (continued)



- The ED text and examples differentiate between reduction of risk (1) based on timing and (2) based on frequency/severity.
 - Based on Timing examples appear relatively simplistic straight line reduction based on life expectancy but also indicate other factors to consider including reduction in face, in policy counts, in claims counts and in net amount at risk.
 - Based on Frequency/Severity examples based on standard deviations of cash flows distributions and the change in the standard deviations over time as evidence of reduction in risk.

Discounting



Purpose of discounting

- Adjust future cash flows for the time value of money
- Discount rate consistent with a market rate used in measuring an instrument with cash flows whose characteristics reflect those of the insurance contract liability – timing, currency and liquidity

Subsequent measurement and presentation

- Discount rate updated at each reporting period and effects of changes generally presented in OCI
- Unwind of the locked-in discount rate at inception recognized in profit or loss.

Characteristics of discount rate

- Exclude any factors that influence the observed market rates but are not relevant to the insurance contract liability (e.g., credit risk)
- Reflect dependence on asset returns.
 Replicating-portfolio technique might be applied

Methods for determining discount rate

- No specific method prescribed
- However, proposals provide guidance for determining the discount rate (bottom-up and top-down approaches)

Discounting (continued)



Example bottom-up and top-down approach

Financial instrument yield of 5.25% (based on actual assets held or a reference portfolio)

Top-down

approach:

3.75%

Either a top-down or a bottom-up approach may be used to determine an appropriate discount rate.

- In theory, both approaches should result in the same discount rate, however in practice, differences are expected.
- The top-down approach may result in a higher rate, as illustrated.
- Bottom-up approach: 3.50%

Market risk premium expected credit losses (1%)

Market risk premium for unexpected losses (.5%)

Difference between top-down and bottom up approach (.25%)

Liquidity premium (.5%)

Risk-free rate 3%

- · No specific method prescribed.
- Regardless of the approach used, the discount rate should be consistent with the characteristics
 of the insurance contract liability, e.g., timing, currency and liquidity.

Estimating the Contractual Service/Single Margin at Transition



Level of measurement

- Estimate what the margin would have been if the insurer had been able to apply the new standard retrospectively.
- When retrospective application is impracticable, an entity would estimate:
 - The expected cash flows at the date of initial recognition at the amount of the expected cash flows at the beginning of the earliest period presented, adjusted by cash flows that are known to have occurred between the date of initial recognition and the beginning of the earliest period presented; and
 - The risk adjustment at the date of initial recognition at the same amount of the risk adjustment that is measured at the beginning of the earliest period presented. (IASB only)
- If no objective information to retrospectively adopt, estimate margin to zero (FASB only)
- Practical expedient to determine the margin based on an insurer's existing definition of a portfolio on transition (FASB only).

What discount rate would be used?

- The discount rate used is a key determinant of the margin established at transition and amounts would be recognized in OCI and the interest expense recorded in profit or loss.
- Insurers may find it difficult to determine the discount rate in the retrospective period using either the top-down or bottom-up approaches.
- Practical expedient when determining the discount rate would otherwise be impracticable for contracts written prior to transition.

How will the Proposals Affect Your Organization?



Product design and pricing and asset – liability management

People and processes

Operational performance

Data and systems

Possible volatility in equity and profit or loss

Capital management

Changes to Asset Liability Management



Increased volatility possible in profit or loss and equity

- Volatility may increase because current information and assumptions would be used in measuring insurance liabilities.
- Applying the new financial instruments proposals may mitigate or increase volatility.
- The degree of volatility would depend on how insurance liabilities and financial assets are measured under current and proposed requirements.
- Discounting insurance liabilities would be a big change for many property and casualty insurers.





Impacts on asset-liability management and financial instruments accounting

- Effective date of financial instrument proposals may precede effective date of the insurance proposals.
- Interaction with future financial instruments models may impact investment allocations and asset-liability management.
- Entities would have limited ability to re-designate some financial assets on initial application.
- Accounting mismatches may result if:
 - Changes in conditions have offsetting effects on the economic values of assets and liabilities; but
 - Gains and losses are not recognized symmetrically.

Changes to Operating Performance



Measurement and reporting of operational performance

- Proposed measurement model changes how insurance liabilities are presented and consequently operating performance.
- · Presentation and disclosure proposals are expected to change the communication of performance because:
 - Performance metrics would be less familiar:
 - Multi-line business may be more complex to explain;
 - Reporting processes may take longer;
 - Non-GAAP measures may be used to explain financial performance; and
 - IFRS vs. U.S. GAAP differences may need to be considered.



Broad business impacts

- May change decisions on product profile and features, or product pricing.
- Growing businesses may see negative impact on results if earnings patterns become more backended on long duration contracts.
- More volatile products may become less desirable - e.g., long-duration insurance products with guarantees.
- New reporting basis may have tax implications in some jurisdictions.



Capital management and interaction with regulatory capital requirements in some jurisdictions

- Increased volatility in reported equity may impact capital positions.
- Insurers would need to incorporate accounting change into planning for solvency and regulatory reporting.



Analysts, investors, and shareholders may need time to understand the new reporting

Business Impacts People Impacts



Significant impacts on people

- Compensation arrangements and performance targets may be changed.
- Additional resources may be needed to manage transition.
- Actuarial and accounting resources will be in high demand.
- IT resources will be needed to address changing actuarial valuations and systems developments.
- Some resource gaps may be addressed by additional hiring, outsourcing to third parties, internal training, and redeploying existing resources within the organization.



Systems and Processes



Significant impacts on systems and processes

- Upgrading accounting systems to ensure that they can handle new requirements.
- Upgrading actuarial modeling capabilities, and valuation and financial reporting systems.
- Evaluating data collection needs and co-ordinate significant actuarial and finance involvement.
- Identifying processes affected by the proposals and establish processes for:
 - Evaluating contract classification and unbundling requirements;
 - Calculating insurance contract liabilities, including determining the discount rate, risk adjustment and contractual service margin (or single margin); and
 - Disclosures.
- Evaluating changes needed to key internal controls over financial and regulatory reporting.
- Considering the need to outsource processes.
- Considering implementation of revised IT strategy.
- Developing a transition plan for parallel runs and dual reporting.





Significant impacts on business

- Reviewing product profile and possible changes to product design and pricing.
- Revisiting investment allocations and asset-liability management.
- Considering impacts on reinsurance and outsourcing arrangements.
- Assessing impacts on key performance metrics.
- Budgeting for necessary changes to people, processes and systems.
- Assessing impact on general business issues such as contractual terms, treasury practices, and risk management practices.





Questions?