# Actuarial & Finance

# Preparing for Changes: LTC Actuary Views on Financial Reporting

Moderated by Rachel Brewster, PwC

Presentations by:

- Rui Zhang, John Hancock / Manulife
- Xianmei Tang, Prudential
- Warren Jones, PwC

March 19, 2017

18th Annual Intercompany Long Term Care Insurance Conference

**I**LTC

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# **IFRS 17**

Presented by

# Rui Zhang

John Hancock, Manulife

LTC Actuary Views on Financial Reporting



## Agenda

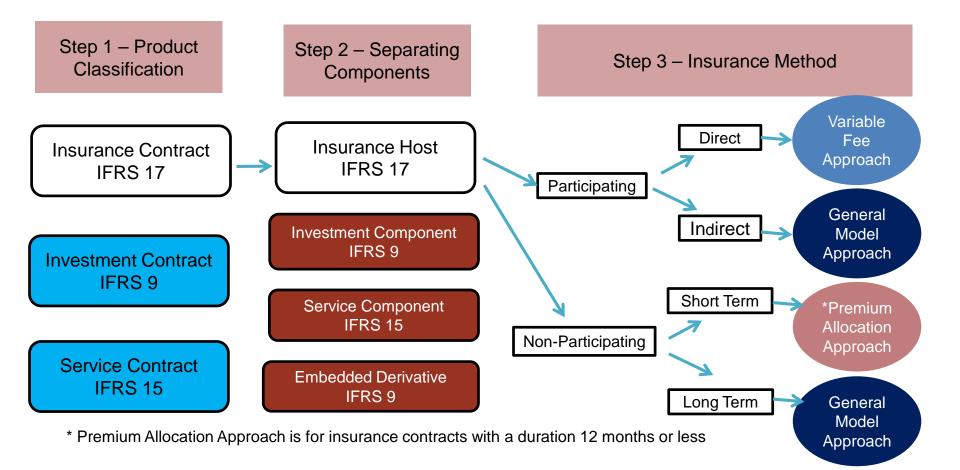


- IFRS 17 Work Stream Updates
  - Contract Classification
  - Future Cash Flows
  - Contractual Service Margin
  - Discount Rate
- What to expect next?



# **IFRS 17 Contract Classification Diagram**



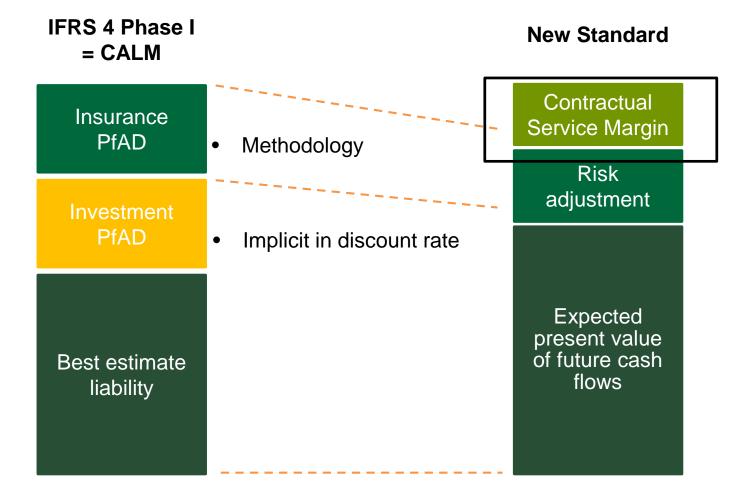


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Building Block Approach to Insurance Contract Liabilities



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## **Introduction to Future Cash Flows**



#### **Future Cash Flows - Inflows**

✓ Premium

#### × Exclude Reinsurance CF

#### **Less Future Cash Flows - Outflows**

- Directly Attributable Expenses (Acq. and Maint.)
- ✓ Death/Lapse Benefit Payment

#### **Total Future CF**

#### x Exclude non-attributable expenses

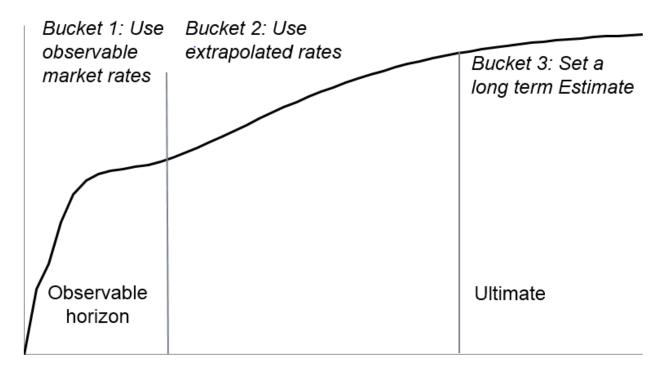
x Exclude Reinsurance CF

#### What's changing

- Reinsurance is tracked separately so CFs now split between gross and ceded.
- Excludes Non-Directly Attributable expenses (some overhead & some product development,..)
- Probability weighted CF, should reflect cost of Guarantees







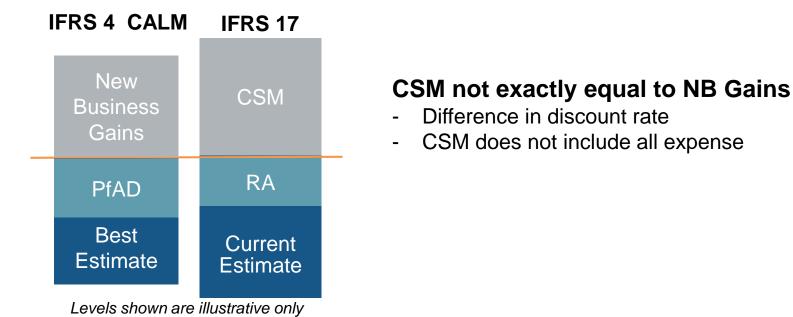
#### What's changing

- IFRS 4 CALM reflect characteristics of assets and reinvestment strategy
- IFRS 17 reflects only the characteristics of the liabilities and includes the concept of an Insurance illiquidity premium.



#### Introduction to Contractual Service Margin (CSM) CSM at contract inception

- CSM represents the "unearned" profit of the contract
- At initial recognition the CSM is established such that the total insurance lability at issue is equal to zero



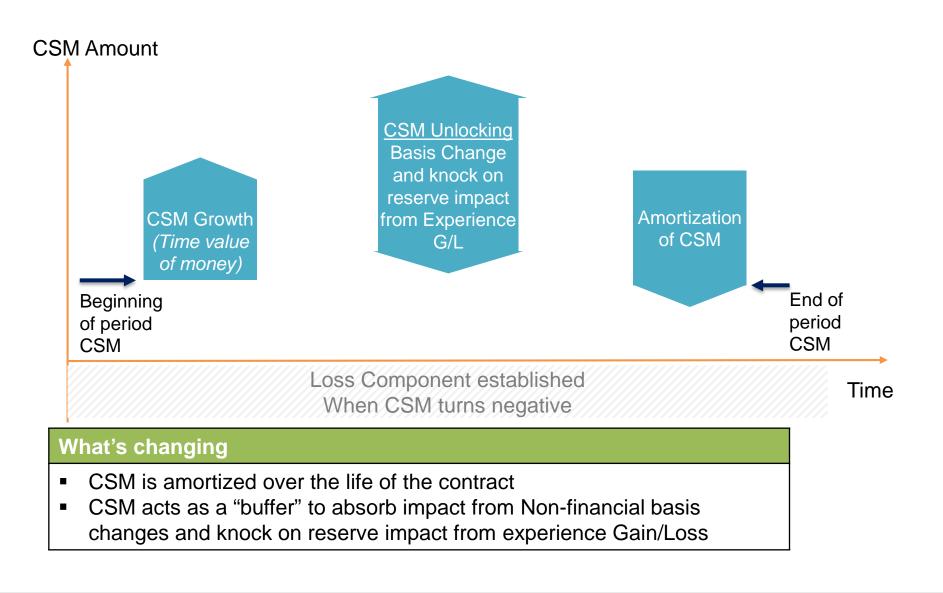
#### What's changing

- CSM replaces New Business gain at issue.
- IFRS 17 "Non-Attributable expenses" likely to lead to more strain at issue.

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#### Introduction to Contractual Service Margin (CSM) CSM at subsequent measurement







#### Five year term insurance contract

#### Assumptions:

Liability CF is not sensitive to interest rate

IFRS 4 unpadded VIR = IFRS 17 discount rate

IFRS 4	4	IFRS 4	IFRS 17	
• T(	(0) Padded Reserve	= (5 MM)		
• T(	(0) Unpadded Reserve	= (7 MM)		
• N	ew business gain	= 5 MM	New Business Gain	CSM 6 MM
<u>IFRS 17</u>		5 MM	Risk Adj.	
• T(	(0) Current Estimate	= (7 MM)		
	T(0) Risk Adjustment T(0) CSM	= 1 MM = 6 MM	Padded Reserve (5 MM)	Current Estimate (7MM)
			PfADs	



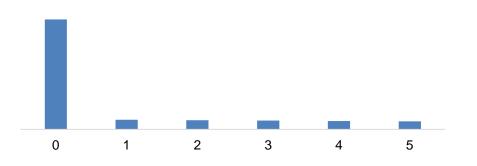




#### IFRS 4

- Earning Emergence:
  - New Business Gain = 5MM
  - Release of PfAD ~ 2MM

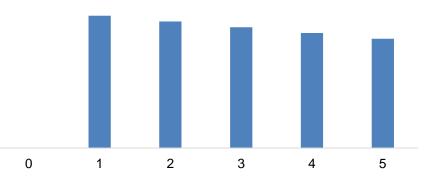
**IFRS 4 Earnings Emergence** 



#### IFRS 17

- Earning Emergence:
  - Release of CSM ~ 6MM
  - Release of Risk Adjustment ~1MM

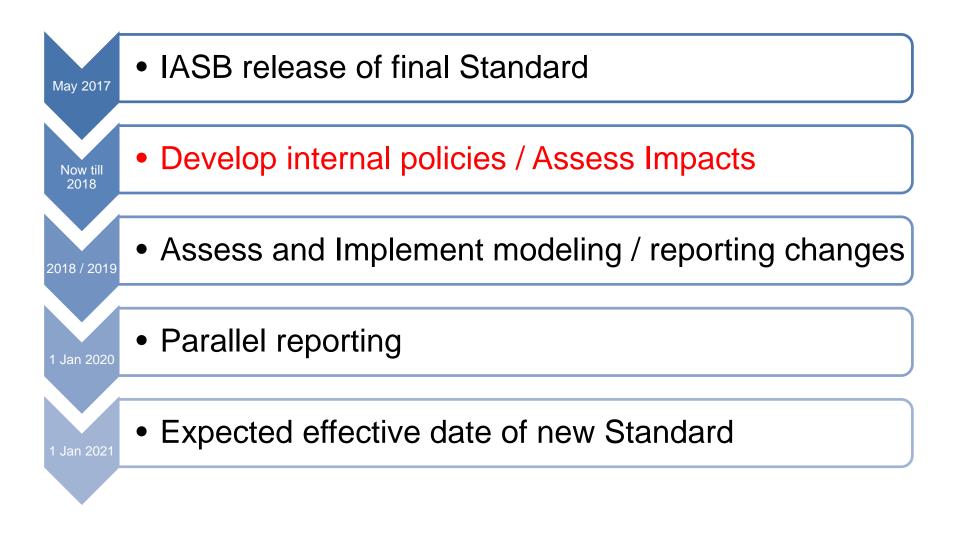
**IFRS17 Earnings Emergence** 





## Timeline for the new Insurance Contracts Standard









# FASB Targeted Improvements

Presented by

Xianmei Tang

Prudential

LTC Actuary Views on Financial Reporting



# Agenda



## 1. Understanding the Proposed Update

- 1.1 Source of Information
- 1.2 The Main Provisions
- 1.3 Transition Requirements

## 2. Company / Product Decisions and Analysis

- 2.1 General Considerations
- 2.2 Long-Term Care Product Concerns
- 2.3 Financial Impacts

## 3. Implementation Challenges

- 3.1 Resources
- 3.2 Timeline



Note: FASB has not finalized the Update yet. This presentation is for discussion only.



## **1.1 Source of Information**

- Authentic FASB documents: exposure draft and responses, memos, meeting proceedings, etc.
- Research by the industry: whitepapers, newsletters, webinars, meetings
- Company's own function teams: Actuarial; Accounting Policies; Controllers; Compliance; etc.
- Your own auditors: Opinions and insights; Early communication and collaboration will make later work much smoother





### **1.2 Main Provisions**

Area of Focus (Scope)	"Target"	Improvements	Issues
Liability for future policy benefit: Assumptions (Traditional Non-par Products)	<ul> <li>Best estimates with PAD and locked in at issue</li> <li>Subject to loss recognition testing</li> </ul>	<ul> <li>Retrospective unlocking (pivot at 2-year prior to effective date?)</li> <li>Periodically updated (annually) without PAD</li> <li>Adjustment for actual experience with exceptions for expense</li> <li>No LRT, but net premium is capped by gross premium to avoid premium deficiency</li> </ul>	<ul><li>Implementation</li><li>Earning volatility</li></ul>
Liability for future policy benefit: Discount Rates (Traditional Non-par Products)	<ul> <li>Company's own expected return, mostly based on own portfolio yields</li> <li>Locked-in</li> </ul>	<ul> <li>For net income, use upper-medium grade low credit risk fixed income yield depending on product liability duration, and locked-in</li> <li>Quarterly subsequent update in other comprehensive income (OCI)</li> </ul>	<ul> <li>Day 1 large adjustment</li> <li>Balance sheet volatility</li> </ul>





### **1.2 Main Provisions**

Area of Focus (Scope)	"Target"	Improvements	Issues
Market risk benefits (Variable Products; GMDB, GMIB)	<ul> <li>Different models for common risks (fair value &amp; insurance accrual model)</li> <li>Difficulties in embedded derivative accounting</li> </ul>	<ul> <li>Fair value for all market risk benefits</li> <li>Instrument-specific credit risk impacts through OCI</li> </ul>	<ul><li>Implementation</li><li>Earning volatility</li></ul>
Amortization of DAC (All Products)	<ul> <li>Complex and linked to liability and investment</li> <li>By gross premium</li> <li>By EGP</li> </ul>	<ul> <li>By inforce (more likely by fixed amortization rates)</li> <li>No interest</li> <li>No recoverability testing</li> </ul>	<ul><li>Measures of inforce</li><li>Impact to earning</li></ul>
Disclosures (All Products)	Limited / minimal	<ul> <li>Detailed disaggregated rollforwards</li> <li>Qualitative &amp; quantitative</li> <li>Assumptions &amp; changes, and other inputs and judgements</li> </ul>	Implementation





## **1.3 Transition Requirements**

- Retrospective Application to Issue Dates (Optional)
  - ✓ Apply actual or estimated historical experiences and new assumptions with net premium capped at gross premium
  - ✓ Note that the new interest rate should be as of the issue date (i.e. interest accretion rate) and locked in for income
  - Record a cumulative catch-up adjustment for the difference between the new balance and the carrying amount
  - ✓ Note that the carrying balance should be net of accumulated other comprehensive income (AOCI), e.g. shadow GAAP adjustments
  - ✓ Quantify the impact of the current new interest rate vs. the interest accretion rate for AOCI





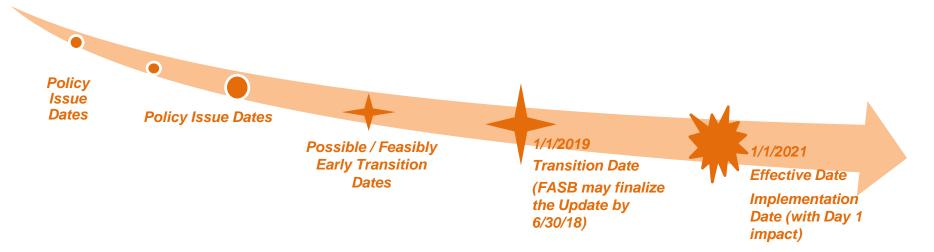
## **1.3 Transition Requirements**

- Retrospective Updating to A Pivot Transition Date (Default)
  - $\checkmark$  Determine a feasible pivot date after issue as the transition date.
  - ✓ The transition date is treated as a "revised issue date" with a carryover reserve balance in the amount of existing reserves after releasing all AOCI.
  - ✓ An interest rate as of the transition date should be determined and locked down (for earning).
  - ✓ Note that the Update is likely to be effective for implementation at the beginning of 2021, and a pivot date two-years prior to the effective day (i.e. 1/1/2019) is likely to be the default. Earlier transition dates are allowed too.



## **1.3 Transition Requirements**

- Retrospective Updating to A Pivot Transition Date (Default)
  - ✓ Subsequent valuation will update the assumptions for future cash flows and adjustments for historical experiences.
  - ✓ Note that the net to gross premium ratios must be capped at 100% as a mechanism to prevent deficiency
  - ✓ The reserve and earning will have a catch-up impact. But the impact from interest rate update will go to OCI



#### LTC Actuary Views on Financial Reporting



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## **2.1 General Considerations**

- Confusions with the Update
  - Retrospective unlocking with actual experience adjustments as opposed to prospective unlocking: More likely to increase rather than decrease volatility due to catch-up impact
  - Assigning discount rates based on transition date for inforce business as opposed to inception date: Interest rates tend to be artificially made lower and may cause day 1 losses and even deficiency
  - ✓ Cohort vs. seriatim
  - Exclusion of level expenses from net premium: A potential flaw to substitute net premium cap for loss recognition testing; This will also affect deferred profit liability (DPL) for FAS 97 Limited Pay contracts
  - ✓ Accounting for par contracts: Scoped out except for DAC?





## **2.1 General Considerations**

- Issues that are not necessarily the targets, but are exposed under the Update:
  - Assumption development: Need an overhaul, particularly to consider the combination of experience adjustment and future cash flow projection in retrospective unlocking
  - "Unusual" assumptions for reserves: New types of assumptions and more complex assumption structures, e.g. mortality and morbidity improvements, inflations, rates by calendar year and projection year instead of issue age and policy duration.
  - ✓ Internal replacements and SOP 05-1: Prospective unlocking continues if applicable
  - Profit followed by loss (PFL) reserves: Not required for traditional products
  - ✓ Shadow GAAP: Not required for traditional products





## **2.2 LTC Product Concerns**

#### > ALR vs. DLR:

- ✓ Will the Update apply to claim reserves (unpaid claims and LAE) or disabled life reserve (DLR) too, even if DLR has already been using updated assumptions without PAD?
- ✓ If so, must assumptions be consistent between ALR and DLR, including interest rate and its impact recognition?
- ✓ Shouldn't morbidity experience adjustments in ALR retrospective unlocking include DLR? If so, won't there be a "circular reference" problem between reserve and assumption?
- ✓ Shouldn't DLR interest should be locked in at claim incurrence date for earning?





## **2.2 LTC Product Concerns**

- > Morbidity Assumptions and Their Experience Adjustment:
  - ✓ Assumptions are required to be based on expected incidence and claim cost with considerations for risk of antiselection
  - ✓ Should the measures be based on claim payments or incurred claims? Will this require the first principle approach for the model?
  - Will incurred claims experience adjustment be based on reported amounts or "re-stated" amounts using claim run-out? What about the income statement definition of incurred claim?
  - ✓ Waiver of premium issues, and healthy life vs. total life exposure





## **2.2 LTC Product Concerns**

- > Premium Rating Increases:
  - ✓ Shouldn't assumptions include future premium rating increases?
  - ✓ If so, shouldn't it be used for both net premium pattern and certain benefit amounts that are linked with premium (e.g. waiver) consistently?
  - ✓ If so, shouldn't experience adjustments include gross premium rates too to reflect the actual implemented rating increases?
  - Premium increase approval can happen anytime and can be based on assumptions different from reserves. Will premium increase in effect automatically trigger a prospective unlocking? Shouldn't liability assumptions be updated retrospectively at least? Will the old SEC ruling be revoked?





## 2.2 LTC Product Concerns

- Contract and Product Feature Changes:
  - ✓ SOP 05-1 should continue to apply
  - ✓ Should the "partial lapse" approach for certain benefit reductions be reconsidered? Otherwise how to treat the starting reserve at the transition date and subsequent experience adjustments?
- Guaranteed Purchase Option (GPO) Issues:
  - ✓ Should future purchases be included in ALR assumptions explicitly?
  - ✓ When purchased (without underwriting), should the newly added benefit be treated as a new policy?
  - ✓ Should the GPOs be included in the old cohorts or new cohorts?





# **<u>2.3 Financial Impacts</u>**: Considering an existing LTC block, despite the many questions still to be answered:

On and After the Transition Date But Before Any Subsequent Assumption Update:

<u>Reserve</u>

- $\checkmark$  Starting balance equal to the existing amount (net of AOCI)
- Subsequent reserve increases more likely to slow down due to either switching to current best estimate assumptions or simply removing PAD, equivalent to releasing the existing GAAP reserve margin at the cohort level. The cumulation will result in a catch-up impact.
- Reserve will also rely on interest rate change as of the transition date. The new rate is more likely to be lower than old rate therefore makes reserve higher.





#### **2.3 Financial Impacts:** For an existing LTC block:

On and After the Transition Date But Before Any Subsequent Assumption Update:

<u>DAC</u>

- ✓ Starting balance equals to the existing amount (net of AOCI)
- ✓ Ongoing additions should be lower due to removal of interest
- Ongoing amortization is likely to be lower in early durations and higher in late durations than before





#### **2.3 Financial Impacts:** For an existing LTC block:

On and After Each Post-Transition Valuation Date with Assumption Updates:

<u>Reserve</u>

- ✓ With a cold start of the carryover amount as of the transition date, reserves reflect the cumulated catch-up from both experience adjustments and future assumption changes
- ✓ Under severe adverse situations, the 100% net to gross premium ratio cap will increase reserve to cover future losses

#### <u>DAC</u>

 ✓ No additional impact since transition date except for inforce amount recalculation for amortization





#### **2.3 Financial Impacts:** For an existing LTC block:

On and After Each Post-Transition Valuation Date with Assumption Updates:

#### GAAP Income

- One time gain or loss can be significant due to catch-up impact from assumption updates for future cash flows and adjustments for historical experiences since the transition date
- The retrospective unlocking will also have a "dampening" effect for the assumption and experience updates since net premiums are recalculated (although interest is locked)
- ✓ Updates for more favorable assumptions or simply removing the original PAD will accelerate income
- ✓ Final amount will be offset by the uncertain DAC net impact including new amortization rate and removal of interest





### **2.3 Financial Impacts:** For an existing LTC block:

Post-Transition Date Interest Update:

#### <u>Reserve</u>

- ✓ Subsequent interest update are included in final reserve amount
- ✓ The balance may increase or decrease depending on whether the new rate is lower or higher

#### <u>DAC</u>

✓ No impact (no interest)

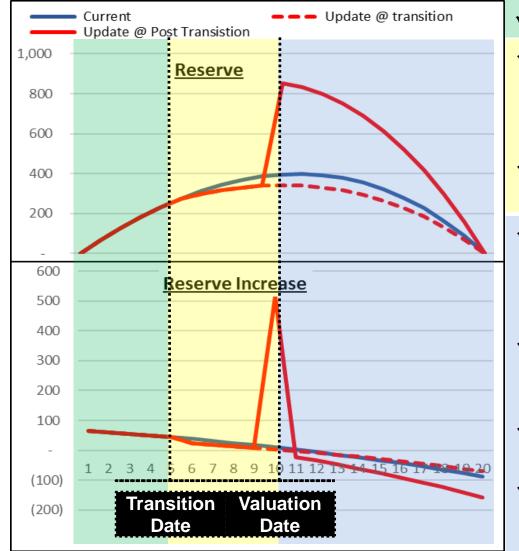
#### GAAP Income

- ✓ No impact. Net premiums are based on interest as of the transition date
- ✓ The impact from periodical interest update is reported as OCI





#### 2.3 Financial Impacts: A hyperthetical illustration with adverse assumptions



#### *Results before transition not changed.*

- ✓ At the transition date (i.e. yr 5), net prem is calculated where existing reserve plus present value of future premiums equal to PV future benefits.
- ✓ The reduction in recalculated reserve is due to removal of PAD.
- At a subsequent val. date (i.e. yr 10), reserve and earning include catch-up impact from experience adjustment and adverse future assumptions.
- Under the current GAAP, such adverse assumptions would have triggered a loss recognition event.
- ✓ Subsequent earning will accelerate due to release of the catch-up.
- Continuous retrospective unlocking in future valuation dates will constantly cause such volatility.

#### LTC Actuary Views on Financial Reporting

# **Company / Product Decisions and Analysis**

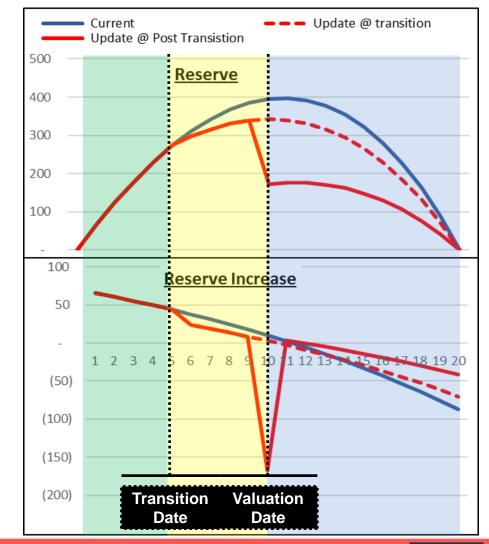


### 2.3 Financial Impacts: Hyperthetical illustration (cont.) --

Similarly, if subsequent new assumptions are favorable:

- ✓ The catch-up effect will decrease reserves and be recognized in earning.
- Earnings in subsequent periods will eventually reverse it accordingly.

To compensate or justify such potential volatility, assumption development has to be more disciplined. As a matter of fact, the Update mandates qualitative and quantitative disclosures on assumptions, their changes and judgements involved.



#### LTC Actuary Views on Financial Reporting

ILTC

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# **Implementation Challenges**

### 3.1 Resources

#### Data and Assumptions:

- ✓ Any new or different census data required?
- ✓ How to recover / retain experience data?
- ✓ Assumption developments ready?

#### Systems Ready?

- ✓ Valuation; Projection; Pricing
- ✓ Vendor systems; Home-grown tools
- ✓ On technical side: Seemingly very convoluted processes
  - New type and/or new structure of assumption
  - To constantly differentiate OCI and GAAP income
  - To retain multiple sets of assumptions, as well as interim results, for quantitative analysis and disclosures
- ✓ Interruption / leverage with existing projects, e.g. system conversions, first principle approach transition





### 3.1 Resources

Again, actuaries are not alone when dealing with accounting / regulatory changes. A company may have the following teams that all can contribute:

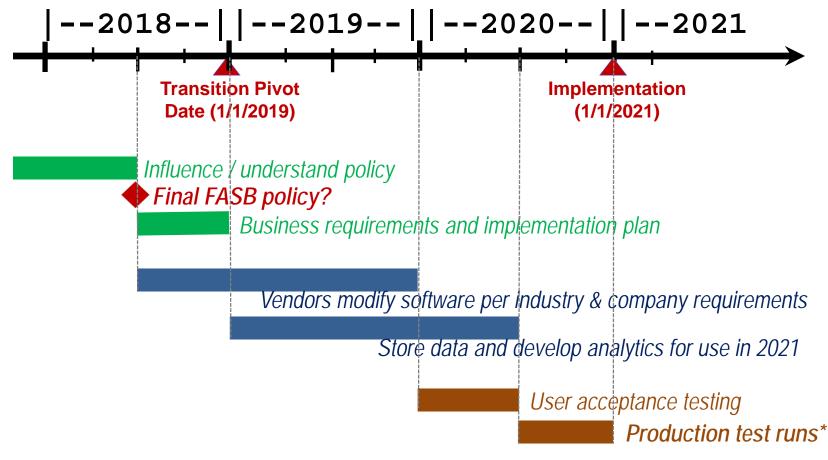
- > <u>Accounting Policies:</u> Influence FASB; Set up internal standards
- Controllers and Finance: Re-design ledger; Analyze impacts
- Investment Relations: External communications
- Corporate Actuarial: Set up corporate level actuarial guidelines; Evaluate different approaches; Coordination and training
- Valuation / Projection: Develop business requirements; Design analytics; Solve product specific issues
- Modeling: Implement requirements to systems; Test
- <u>Risk & Control</u>: Modify control standards; Communicate to risk management bodies and external parties



# **Implementation Challenges**

# 3.2 Timeline

A sample plan targeting at beginning of 2021 implementation:



\* Including calculation and roll-forward from beginning of 2019 for disclosures



# **Tax Reform Updates**

Presented by

Warren Jones

PwC

LTC Actuary Views on Financial Reporting





- Conference committee agreement on December 15
- President signed tax reform legislation on December 22
- Consultants and company tax staff were monitoring the conference committee reconciliation of House and Senate bills





- Permanently lower corporate rate from 35% to 21%
- Change rules for Net Operating Losses (NOL's) for life insurers
  - Unlimited carryforward
  - Limited to 80% of taxable income
  - No carryback
  - Nonlife insurers permitted to carry NOLs back
     2 years and forward 20 years, exempt from
     the limitation to 80 percent of taxable income





- Life reserves 807(d) tax reserve is greater of CSV or 92.81% of reserve using NAIC prescribed method
  - No prescribed tables
  - -No prescribed interest rates
- Variable contracts 92.81% does not apply to separate account reserve
- Statutory cap applies





- 8 year grade-in
- DAC tax
  - Rates increased 20% (9.2% up from 7.7% for LTC)
  - 15 year amortization up from 10 year
     No recomputation for unamortized balances
- Change in Basis 807(f) changed to general rule for changes in accounting method (4 years for positive adjustment, 1 year for negative adjustment)





# • Proration

- Replace the current law computation of the company's share and policyholders' share with fixed percentages of 70% and 30%, respectively.
- Together with the general change of the DRD from 70% to 50%, this change would result in a significant increase in the amount of dividend income that is taxed to a life insurer





- Territoriality and deemed repatriation
  - transition from the current system, which taxes worldwide income of US corporations, to a territorial system, which provides a 100percent DRD for certain qualified foreignsource dividends received by US corporations from foreign subsidiaries
- Base erosion and anti-abuse tax (BEAT)
  - tax on certain 'base erosion payments' paid to foreign affiliated companies





- A reduction in corporate tax rates could cause a significant revaluation of deferred tax assets and liabilities and, in turn, riskbased capital
- BEAT could significantly modify crossborder affiliated reinsurance arrangements and could affect pricing of reinsurance in certain markets





- Territorial system of taxation could alter the choice of domicile, and reinvestment decisions related to offshore profits going forward
- Changes in incentives for both inbound and outbound transactions could in turn result in increased merger and acquisition activity





- Territorial tax regime combined with deemed repatriation of offshore profits would allow US companies to access offshore cash more freely to deploy in such activity
- Changes to proration for both life and nonlife companies could change the decision to invest in state and municipal bonds, and in dividend-paying stocks







• Product pricing will necessarily reflect changes in company taxation





- Implementing and accounting for tax reform will be a challenging exercise
- Accounting guidance requires recognition of the tax effects of tax law changes in the period in which the law is enacted
- Companies will need to determine the potential implications in financial reporting to ensure they account for these changes in the period of enactment





# Statutory Updates: Actuarial Guideline 51

Presented by

Warren Jones

PwC

LTC Actuary Views on Financial Reporting





- LTC AG was discussed at the 2016 Fall NAIC meeting
- Discussed on calls by LTCAWG through spring of 2017
- Adopted by LTCAWG on call May 31
- Adopted by NAIC at Summer NAIC meeting





- Asset adequacy of LTC blocks
- Discount rate assumptions in GPV's used for LTC not reflective of portfolio and new money yields
- Aggregate rate increase assumptions not reflective of effectiveness by state





- Effective December 31, 2017
- Scope is blocks of LTC with more than 10,000 lives, direct and assumed, excludes life and annuity combo products
- Requires stand alone AAT for LTC business
- If CFT is not used for LTC, cannot aggregate LTC results with other business
- If GPV used, discount rate must reflect portfolio yield and new money rates





- AAT may only include anticipated increases based on rate increase plan that is documented
  - Approved by management
  - Highly likely to be undertaken
  - Contains increase filings and timelines by state
  - Should reflect reasonable approval effectiveness and implementation timelines





- Stand alone LTC AAT reported in separate section of AOM
- Assumptions
  - Mortality
  - Lapse
  - Morbidity
    - If external source, support for use and any adjustments



# **Requirements – Rate Increases**



- Rate increases already approved
  - Documentation by state
  - Implementation timelines
- Future increases
  - Documented by policy form or grouping
  - Document how assumption of increases developed
  - Reliance letter that rate increase plan reflects management's plan





- Only affects blocks of over 10,000 lives
- If GPV used for LTC, may not aggregate
- Otherwise, all other requirements are documentation only
  - Stand alone AAT reporting for LTC in AOM
  - Requires detailed rate increase plan by policy form (grouping) and state
- Overall, more detailed AOM



# **Session Survey Instructions**



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