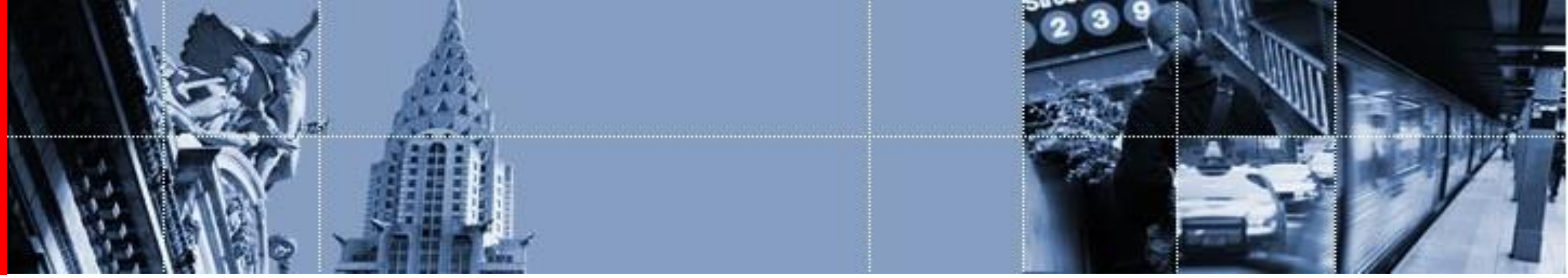


Highlights of IFRS 17

2021 Fall Meeting

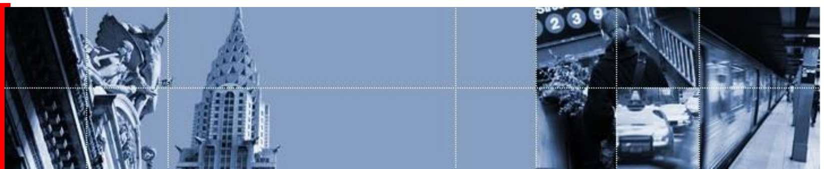
Jing Fritz

Russ Osborn, Transamerica

Nov 17th, 2021

About Presenters

- Jing Fritz, FSA, CFA, FRM, CERA, MAAA, was initially trained as an accountant and financial analyst and ended up working as an actuary and later financial risk manager for insurers before becoming a consultant. Her main focus areas are ALM & Hedging, IFRS 17 and 9, LDTI, market consistent valuation, and Financial Risk Management
- Russ Osborn, FSA, CFA, CERA, MAAA, is a risk management actuary, who has spent most of his career building new modeling and reporting frameworks and transitioning them into production – including pricing, embedded value, internal management frameworks, Solvency II, and now IFRS 17. He currently leads the development of IFRS 17 accounting policies for Transamerica



Agenda

- Overview of IFRS 17
- IFRS 17 Measurement
- Deep Dive into Income Statement
- Transition Impacts
- Q&A

Overview of IFRS 17

Timeline for IFRS 17

2017
- 18 May IFRS 17 issued

2018
- IFRS 9 effective date 1 Jan 2018 (deferral option available for insurers)

2019

2020
- March 2020 IASB deferral of effective date of IFRS 17 (and IFRS 9 for some insurers) to 1/1/2023
- July 2020 IASB final amendments to IFRS 17

2021

2022
- 1/1/2022-IFRS 17 start of comparative period (transition date)

2023
- **IFRS 17 effective date**
- **IFRS 9 effective date (if deferral elected) 1 Jan 2023***

*Deferral of IFRS 17 and IFRS 9 included in IASB Exposure Draft issued in June 2019 and again amended in March 2020

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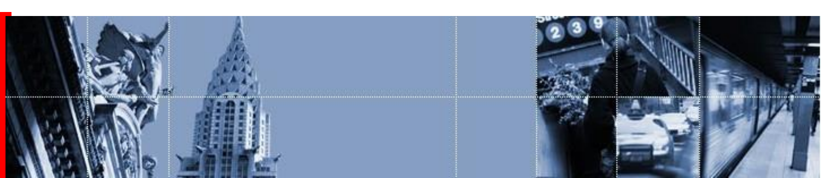

Balance Sheet Principle

- Valuation foundation of IFRS 17: No arbitrage (a.k.a. market consistent valuation)
  – Traditional actuarial approach is based on the law of large numbers
- Example

	Time 0		Time 1	
Trade-able asset	1	q	1.1	Up
		$1-q$	0.9	Down
Insurance	V?	q	1	Up
		$1-q$	0	Down

market implied probabilities

$$1 \times e^{0.02} = 1.1 \times q + 0.9 \times (1-q)$$

$$q = 0.6010$$

$$V \times e^{0.02} = 1 \times q$$

$$V = 1 \times q \times e^{-0.02} = 0.5891$$

- In practice
  - Insurance underwriting assumptions: traditional actuarial approach but with explicit margins
  - Financial markets / variables: market consistent to the extent that they are observable from the market

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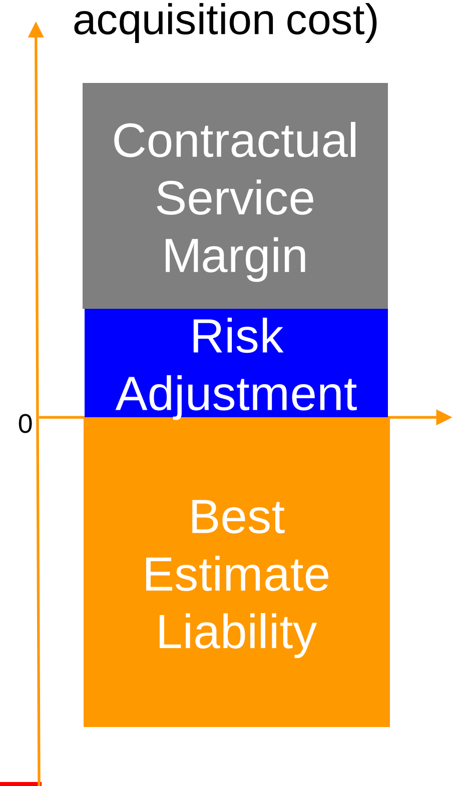
Total Liability = BEL + RA + CSM

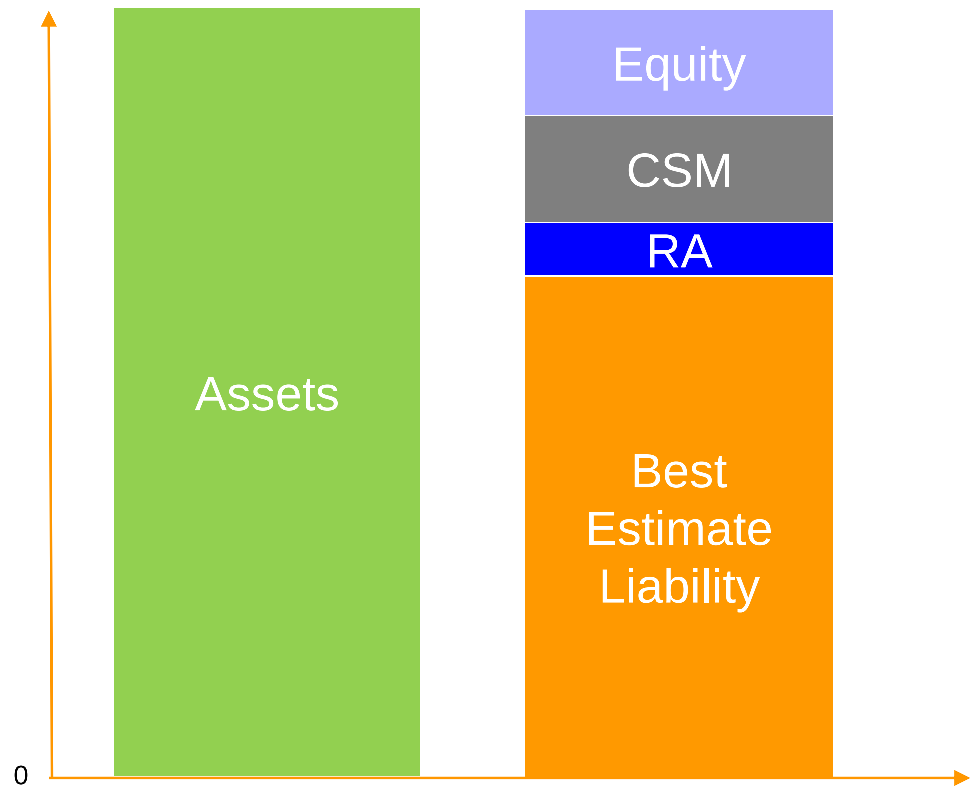
An example

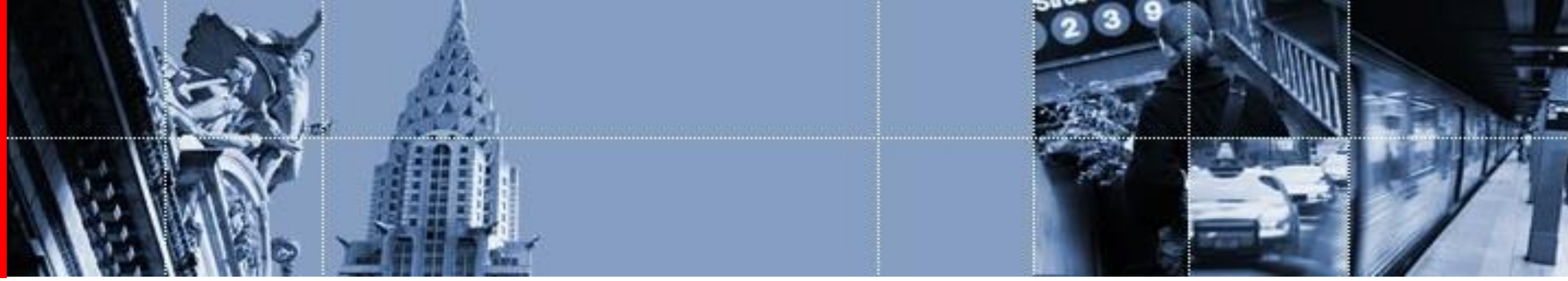
At inception

Total liability=0 (unless there is pre-recognition acquisition cost)



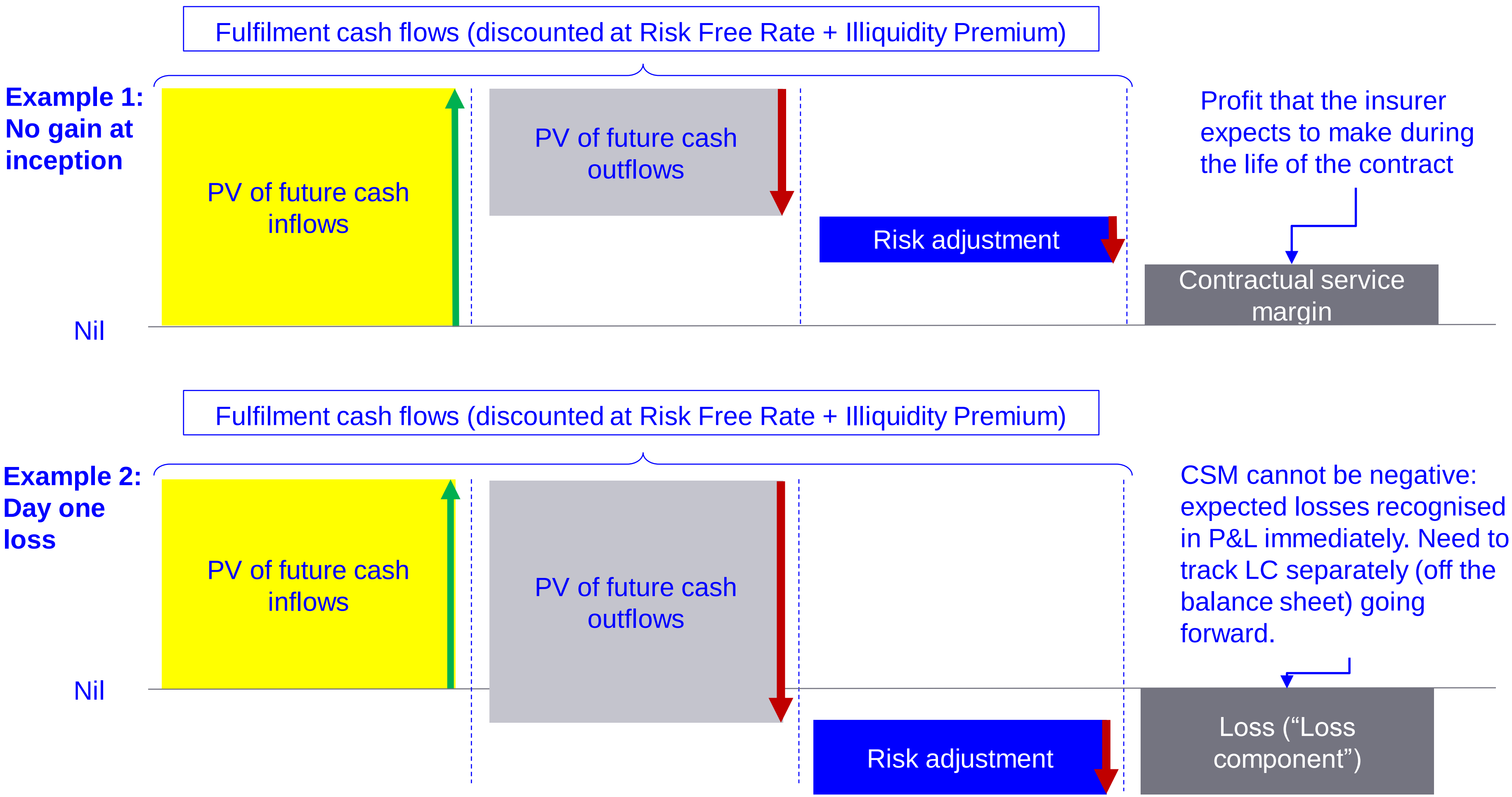
x years since inception



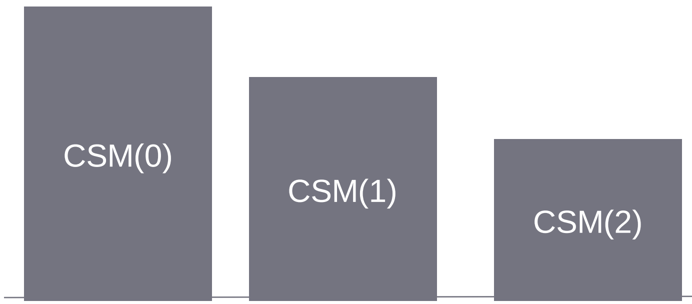


IFRS 17 Measurement

Initial Measurement



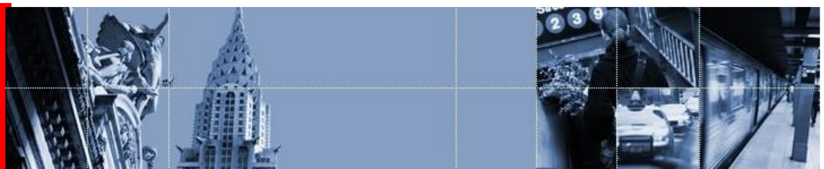
Contractual Service Margin (CSM) is a new item which brings challenges



The challenge is accounting for the CSM through time, and at the level of granularity required by IFRS 17

Challenges that CSM brings:

- No offset allowed between profitable and onerous groups of contracts. It requires specific grouping practice (“unit of account”)
- Selection of appropriate driver (IFRS 17 term “coverage unit”) to amortize CSM
- Treatment when positive assumption changes on onerous contracts requires tracking of loss component
- Determination of transition CSM



Meaning and Purpose of CSM

- Ongoing, historical debate over market value accounting vs book value accounting: trade-offs
- When to recognize value added from new sales?
  - Market value accounting: entire value added booked into equity and P&L at new contract issuance → leaves little P&L for the future
  - Book value accounting: smooth earnings pattern; however, it gives no indication of value added at new contract issuance
- CSM is a practical and transparent way to resolve these challenges:
  - Value added at new contract issuance is booked into CSM, which is included on the balance sheet as a liability, unless negative, in which case it is immediately booked to P&L and equity
  - CSM is then amortized to zero over the service period of the contract, according to the insurance or investment services provided to the customer

US GAAP* Income Statement

Statement of comprehensive income	
Premiums due	X
Claims and expenses incurred	(X)
Movement in deferred acquisition costs	(X)
Investment income	X
Change in insurance liability	(X)
Other income, expenses, taxes	(X)
Profit after tax	**X**
Other comprehensive income	
Investment income	X
Total other comprehensive income	**X**
Total comprehensive income	**X**

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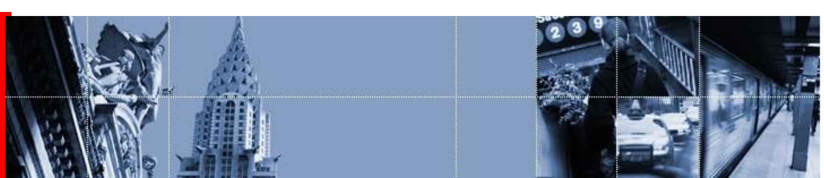

* Current US GAAP reflects IFRS 4

New IFRS Income Statement

Statement of Comprehensive Income	
Insurance contracts revenue	X
Insurance service expenses	(X)
Insurance service result	**X**
Insurance finance income	X
Insurance finance expenses	(X)
Finance result	**X**
Other profit and loss	**X**
Corporate tax	(X)
Profit after tax	**X**
Other comprehensive income	(X)
Total comprehensive income	**X**

Insurance contracts revenue:

- **Release in contractual service margin**
- **Change in risk adjustment**
- Expected claims (in fulfilment cash flows)
- Expected expenses (in fulfilment cash flows)
- Allocating premium relating to the recovery of directly attributable acquisition costs
- **Excluding investment components**

Expected

Insurance service expenses:

- Actual claims incurred
- Actual expenses incurred
- Allocating premium relating to the recovery of directly attributable acquisition costs
- **Onerous contracts**
- **Excluding investment components**

Actual

Insurance finance expenses: Calculated using locked-in rates (if the OCI option is selected)

Other comprehensive income: Effect of discount rate changes on BEL (if the OCI option is selected)

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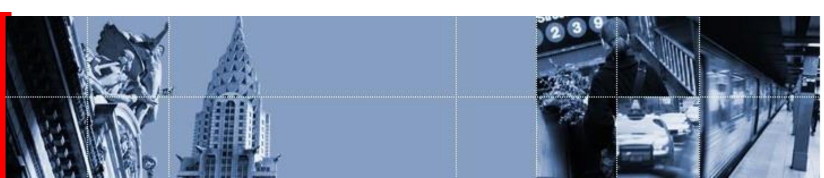


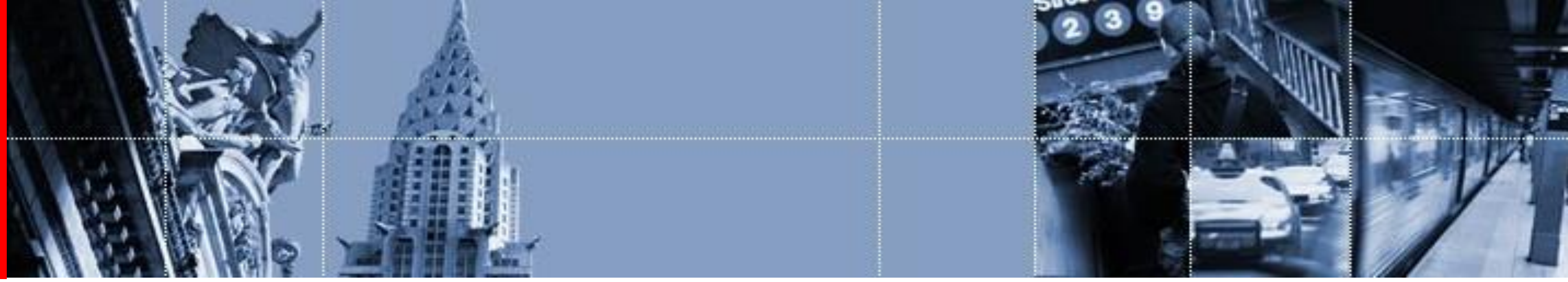
Expected IFRS Profit
(if OCI option elected)

unwind of Risk Adjustment

\+ amortization of Contractual Service Margin (CSM)

\+ investment spread over unwind of liability illiquidity premium

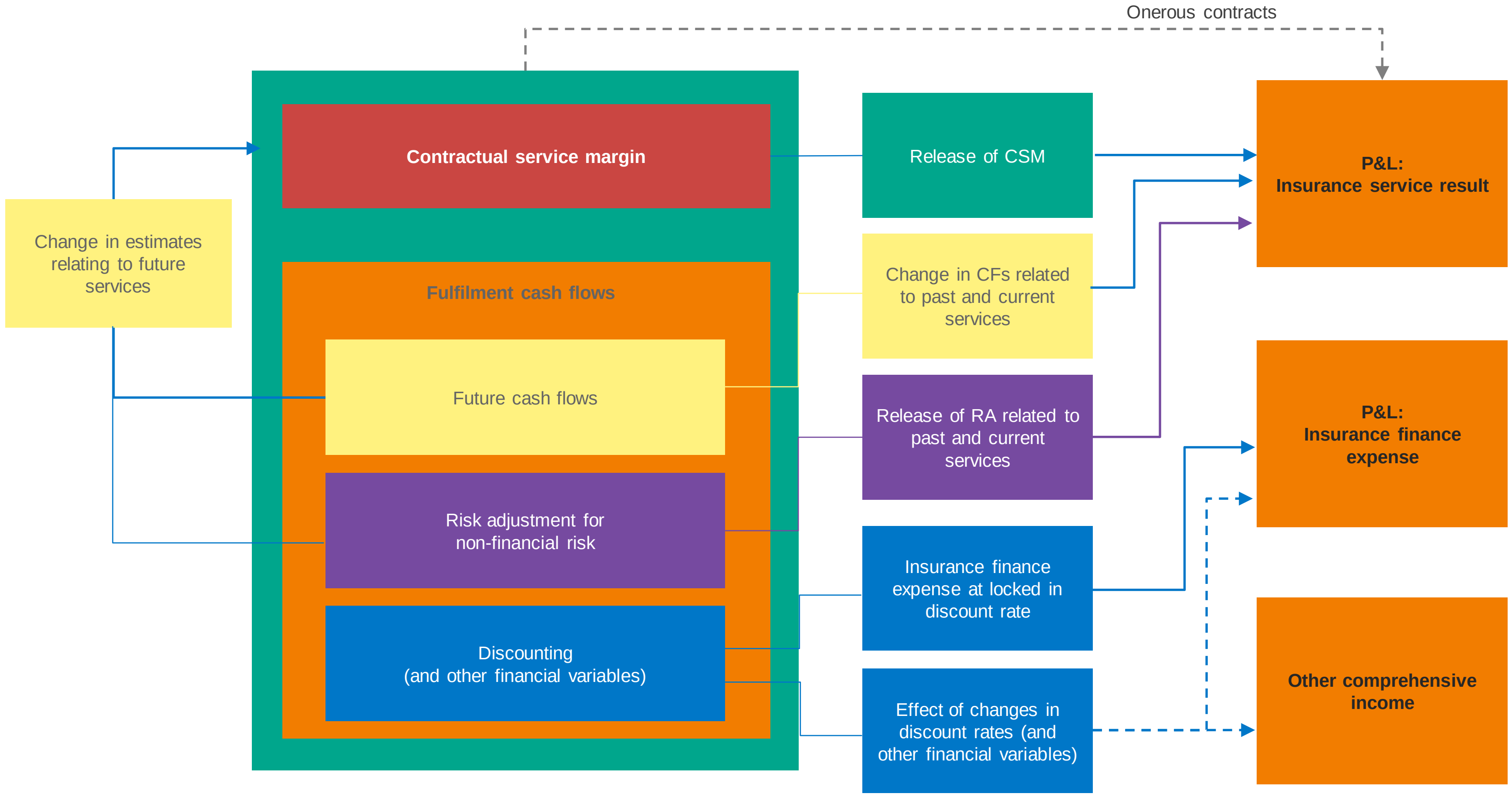
\+ inventory difference between Assets & Liabilities, because Assets are based on statutory reserve requirements



Deep Dive into Income Statement

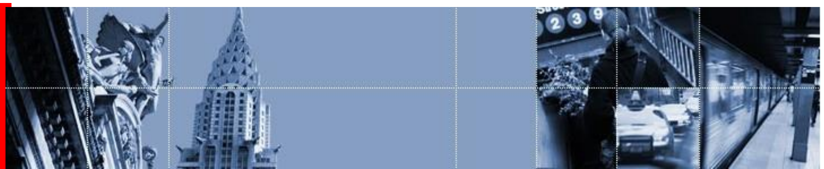
Overview of IFRS 17 Income Impacts

(Insurance liabilities only)



IFRS 17 Measurement Models

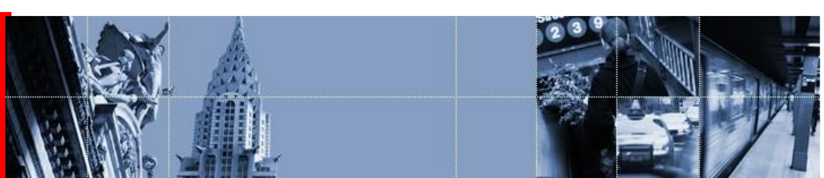
Measurement Model	General Measurement Model (GMM) – "Pure" GMM	General Measurement Model (GMM) – "Indirect" Participating	Variable Fee Approach (VFA)	Premium Allocation Approach (PAA)
Earnings Treatment of Financial Impacts on BEL + RA	P&L or OCI (choice)	Financial impacts are systematically allocated between P&L vs OCI Allocation options: • Effective Yield • Projected Credited Rate	adjusts CSM (by default) Risk Mitigation option: targeted financial impacts flow to P&L (to match hedge income in P&L)	P&L or OCI (choice)
Typical Products	Whole Life Insurance, Term Life Insurance	some Fixed Deferred Annuities, some Indexed Products	Variable Annuities, Variable Universal Life	P&C, Health



Impact of Changes in Financial Variables

Case Study: OCI option is elected for all cases except Case 2

	Decision Level	Case 1	Case 2	Case 3	Case 4	Case 5
Does the policyholder participate in a substantial share of the fair value returns of a clearly identified pool of underlying items?	Product	Yes	Yes	If either answer is “No”		
Does the entity expect a substantial proportion of any change in amounts to be paid to the policyholder to vary with the change in fair value of the underlying items?	Product	Yes	Yes			
Does the entity choose to hedge all or part of the financial risk using FVPL securities?	Portfolio	No	Yes	N/A		
Do changes in financial markets / assumptions have a substantial effect on the amounts paid to the policyholders?	Product	N/A	N/A	Yes		No
Does the entity elect to report impacts of financial market / assumption movements through P&L or OCI?	Portfolio	OCI	P&L	OCI		OCI
MEASUREMENT MODEL		VFA*	VFA with Risk Mitigation	“Indirect Par” (“Modified VFA”)		GMM*
Financial Impacts flow through…		OCI	Hedged part: P&L Unhedged Part: CSM	Systematic Allocation: Effective Yield Method	Systematic Allocation: Projected Credit Rate Method	OCI



*VFA = Variable Fee Approach (Direct Participating)

*GMM = General Measurement Model

Impacts of Financial Changes (Profitable Cohorts)

(if OCI option elected)

- Example: Interest rate down 100bp
  - Assume impact as follows :
  - Shocked BEL – Base BEL = 1000
  - Shocked RA – Base RA = 50
  - (current assumptions BEL & RA for OCI, not locked-in)
  - Assume change to effective yield (or PCR) interest accretion: Decrease 3
  - Assume 10% amortization of CSM and release of RA (same % of coverage units)

	GMM-(pure)	Indirect Par	VFA-no hedge	VFA-100% hedge of BEL only
BEL	0 (locked in rate)	0 (locked in rate)	+ 1000	+ 1000
RA	0 (locked in rate)	0 (locked in rate)	+ 50	+ 50
CSM	0	0	– 1050	– 50
P&L	0	– 3 (interest accretion)	– 100 (ΔRA & CSM amortization)	– 1000 (Risk Mitigation, amortization nets out)
Equity	– 1050 Δ(OCI)	– 1053 Δ(OCI + P&L)	– 100 (no change in OCI)	– 1000 (no change in OCI)
	OCI can be offset by changes in Revaluation Reserve			RM offset by change in hedge P&L

- Financial impact rules
  - GMM (Pure) –
    - locked-in rates in FCF*
    - no change to FCF, CSM, or P&L
    - entire change goes to OCI
  - Indirect Par –
    - locked-in rates in FCF
    - no change to FCF, CSM
    - change to effective yield makes small change in P&L
      (no interest accretion on CSM)
    - majority flows through OCI
  - VFA (no Hedge) –
    - current assumptions in FCF changes
    - FCF is offset by CSM
    - Small change in P&L from change in current RA release & CSM amortization
  - VFA w/ Risk Mitigation (100% of BEL hedged) –
    same as VFA (no Hedge) except the following:
    - BEL impact transferred to P&L, not CSM
    - NOTE: P&L change in liability should be matched by hedge P&L, not shown

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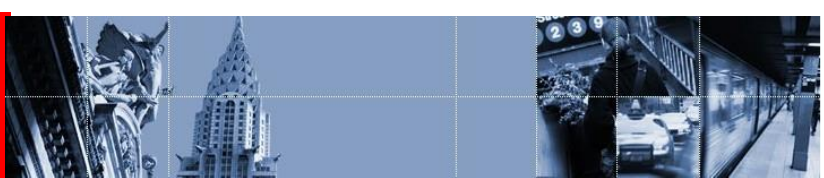


*FCF = Fulfilment Cash Flows

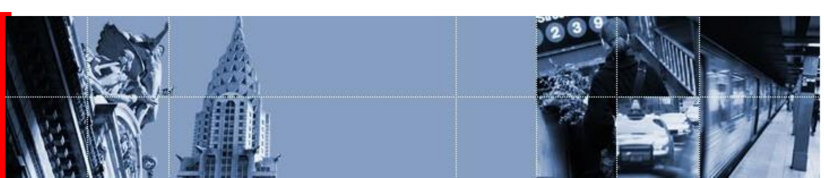
Impacts of Financial Changes (Loss Status Cohorts)

(if OCI option elected)

- Example: Interest rate down 100bp
  - Assume impact as follows :
  - Shocked BEL – Base BEL = 1000
  - Shocked RA – Base RA = 50
  - (current assumptions BEL & RA for OCI, not locked-in)
  - Assume change from effective yield interest accretion of RA: Decrease 0.7
  - Assume 10% release of RA (same % of coverage units)

	GMM-(pure)	Indirect Par	VFA-no hedge	VFA-100% hedge of BEL only
BEL	0 (locked in rate)	0 (locked in rate)	+ 1000	+ 1000
RA	0 (locked in rate)	0 (locked in rate)	+ 50	+ 50
CSM	0	0	0	0
P&L	0	– 0.7 (interest accretion)	– 1045 (ΔFCF + RA release)	– 1045 (ΔFCF + RA release)
Equity	– 1050 Δ(OCI + P&L)	– 1050.7 Δ(OCI + P&L)	– 1045 (no change in OCI)	– 1045 (no change in OCI)
	OCI can be offset by changes in Revaluation Reserve			RM offset by change in hedge P&L

- Financial impact rules
  - GMM (Pure) –
    - locked-in rates in FCF*
    - no change to FCF, CSM, or P&L
    - entire change goes to OCI
  - Indirect Par –
    - locked-in rates in FCF:
    - no change to FCF, CSM
    - change to effective yield makes small change in P&L (no interest accretion on CSM)
    - majority flows through OCI
  - VFA (no Hedge) –
    - current assumptions in FCF changes,
    - no offset by CSM
    - small change in P&L from change in current RA release only
  - VFA with Risk Mitigation (100% of BEL hedged) –
    same as VFA (no Hedge) except the following:
    - BEL impact transferred to P&L, not CSM
    - Change in Risk Adj transferred to P&L, because no CSM left
    - NOTE: P&L change in liability should be matched by hedge P&L, not shown

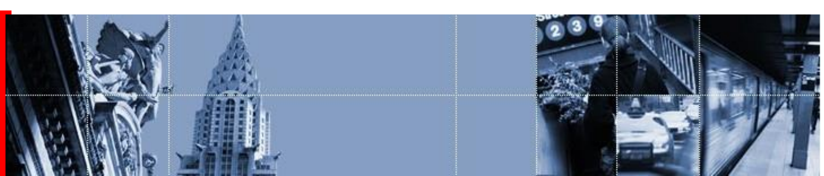


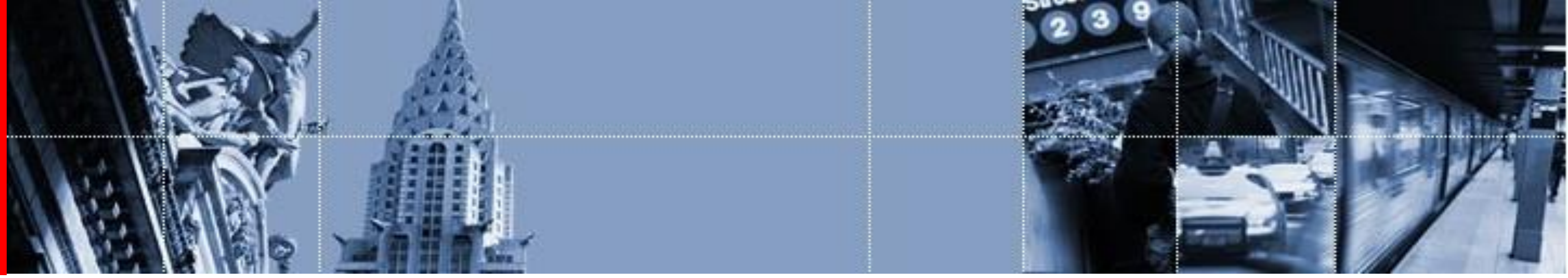
*FCF = Fulfilment Cash Flows

Investor Window into Impact of Changes in Financial Markets / Variables

- Market value vs book value vs CSM
- Some investors may prefer the market value view; others may prefer “book value”
- Depending on the product classification, the business model and the entity’s accounting presentation choices, investors can often obtain whichever view provides the most insight to the case at hand:
  - For example, for General Measurement Model contracts with OCI election, P&L will tell the “book” value story, and OCI will tell the remainder of the “market value” story
- Equity + CSM ⇐⇒ Value of Inforce (VIF)

➔ some investors / analysts may prefer to focus on this metric





Transition Impacts

Transition for Inforce Business

Decide transition method by group of contracts

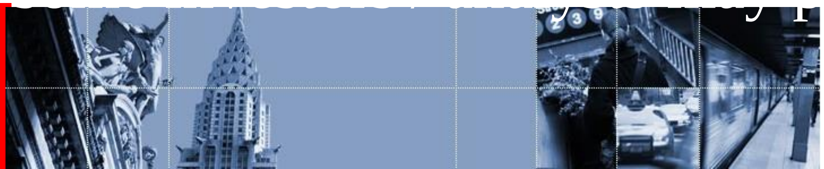
Full retrospective approach (apply IAS 8)

If impracticable

Modified retrospective approach **or** Fair value approach

- Modifications available if necessary given reasonable and supportable information
- Maximise the use of the information needed for full retrospective approach

Insufficient reasonable and supportable information available



Impact on P&L and RoE Post Transition

- Clean slate at transition
  (unless electing Transitional Accumulated OCI (AOCI); see later slides)
- Transition CSM depends on Transition approach (previous slide)
- In general, if initial Equity is lower, and the transitional CSM and Risk Adjustment are high, then P&L and RoE will be higher following transition to IFRS 17

Transitional AOCI* Election**: Background

*AOCI = Accumulated Other Comprehensive Income

IFRS 17.C24:

"*In applying the fair value transition approach, if an entity chooses to disaggregate insurance finance income or expenses between profit or loss and OCI, it is permitted to determine the cumulative amount of insurance finance income or expenses recognized in OCI at the transition date:*

a) retrospectively—but only if it has reasonable and supportable information to do so; or

b) as nil—unless (c) applies; and

c) for insurance contracts with direct participation features to which paragraph B134 (holding underlying items) applies—as equal to the cumulative amount recognized in other comprehensive income from the underlying items."

- Sub-paragraph (c) is only relevant to assets in the separate account on VFA products that elect OCI option
- Given that transition options are selected at a lower level of granularity than the product portfolio level, this election may made at that lower level (i.e., at a lower level than P&L vs OCI option)
- At transition, the election of holding an AOCI balance on the liabilities does not impact the Balance Sheet; it is a movement within Equity between Retained Earnings and AOCI
- In the Income Statement, the election of Transition AOCI effects a transfer from OCI to P&L of the differential interest accretion between locking in historical rates vs locking in rates at the transition date

*There is also a set of rules for computing AOCI under Modified Retrospective Approach to transition. However, this presentation focuses on the Fair Value approach)

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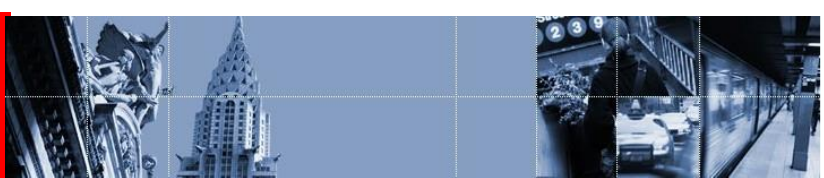
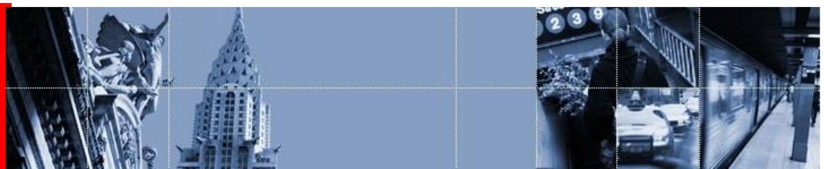
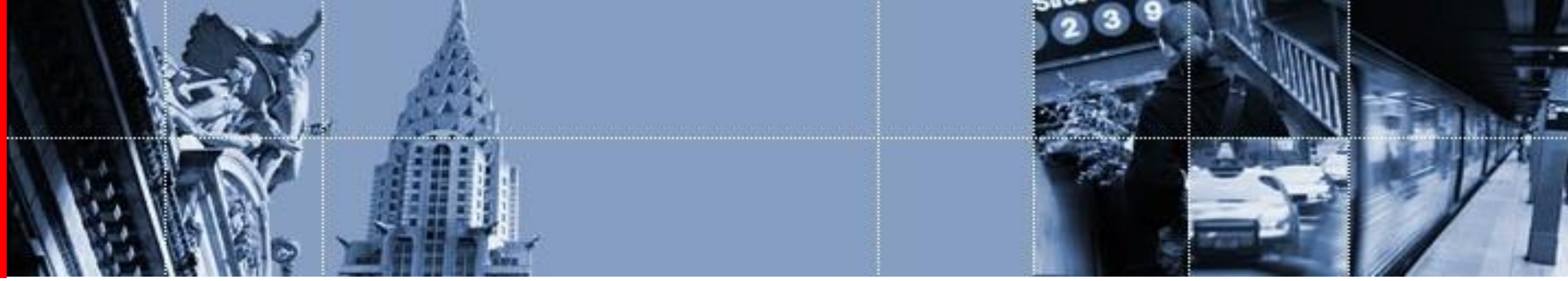


Transitional AOCI* Election : Considerations

*AOCI = Accumulated Other Comprehensive Income

- Possible alignment with AOCI on asset side (if well hedged)
- Computing transitional AOCI requires (estimates of) historical discount rate curves, apportioning the block according to inception year, and performing model runs by inception year (like Full or Modified Retrospective Approaches). Depending how far back the business was sold, this could require significant effort
- AOCI election would effectively nullify the philosophy behind the Fair Value transition approach, which aims to restate the value based on what a third party would pay for it on the transition date, and then to “start fresh” on reporting earnings from that point forward
- Electing AOCI on Fair Value blocks could put at risk impracticability arguments around Full Retrospective Approach
- Under IFRS 17, transitional AOCI is an election at the product group level, which would impact the liability AOCI only, moving the impact from Retained Earnings to AOCI (Revaluation Reserve)
- Without a transitional AOCI election, the liability offset to the Revaluation Reserve (liability AOCI) would re-start at zero
- On the asset side, given that asset AOCI is determined by the IFRS 9 asset categorization, the AOCI is unimpacted by any such election (assuming no asset rebalancing)
- In either case, any future impact due to financial market movements would flow to AOCI post-transition





Questions?