Moody's Analytics

Better Faster Decisions

Unpacking LRC and LIC calculations for P&C insurers

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Our speakers

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High Level set of requirements from P&C Insurers

Data processing

- Ingest data in different patterns – linear (passage of time) or non-linear patterns
- Cashflow generation using ultimate losses, payment patterns, incurred pattern for LRC, LIC
- Capability to allocate patterns from accident year to underwriting or UoA basis

Grouping and Disaggregation

- Develop complete list of all data items needed for grouping, measurement and disclosures.
- Provide option to aggregate contract level data or leverage pre-grouped data for insurance groups.
- Disaggregation feature to allocate inputs from higher level to UoA

Measurement/Rollforward of LRC and LIC

- Calculation and roll forward of LRC and LIC.
- Support ability to take in non-linear patterns for acquisition cost, revenue, claims.
- Discounting and risk adjustment for LRC and LIC.
- Treatment of Premium Timing/Variance
- Calculation of Reinsurance Held under PAA/GMM

Scenario Testing and GMM Comparison

- Ability to run GMM and PAA models for eligibility testing, alternately take in GMM PvCF as input.
- Model and track onerous contracts, track losses and loss reversals.
- Option to not discount cashflows if using PAA
- Allocate Written Premiums by Earned vs. Unearned

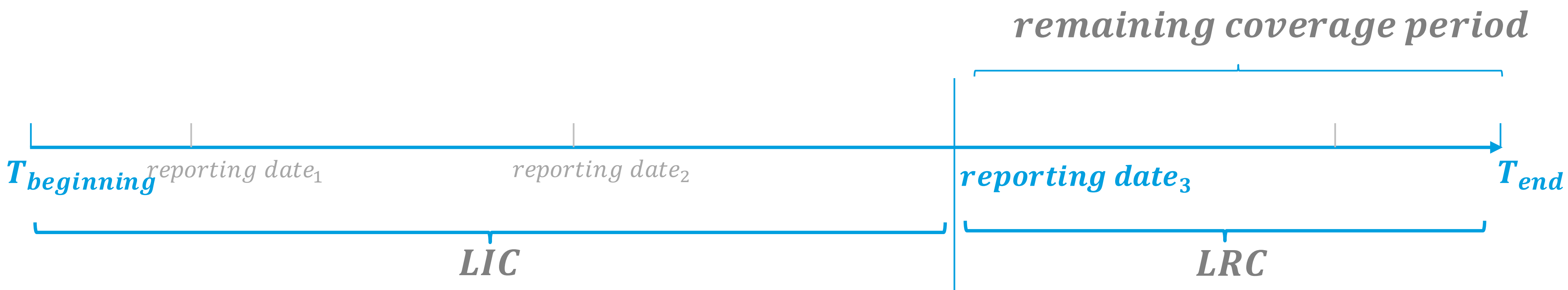
Accounting Treatments

- P&L vs OCI disaggregation of IFE, Insurance Contract Asset/Liability Treatments on LRC+LIC
- Ability to disaggregate IFE on the LIC between OCI & PNL using rates at time of claim.
- Robust sub-ledger capabilities, CoA, journal creation, soft and hard postings, trial balance.

Disclosures, Reporting and Analysis

- Generate all required financial statements and disclosures, movements, B/S, roll forward.
- Ability to disaggregate IFRS 17 results to reserving segments or other levels for internal reporting.
- Profitability testing on the basis of GMM vs PAA

IFRS 17 Measurement Model



LIC relates (in particular) to claims reported (Paid + Case) and Claims not reported (IBNER, IBNR)

LRC relates (in particular) to claims not yet incurred

– Methodology to apply (GMM, VFA, PAA) on the LRC side depends on the modelled product

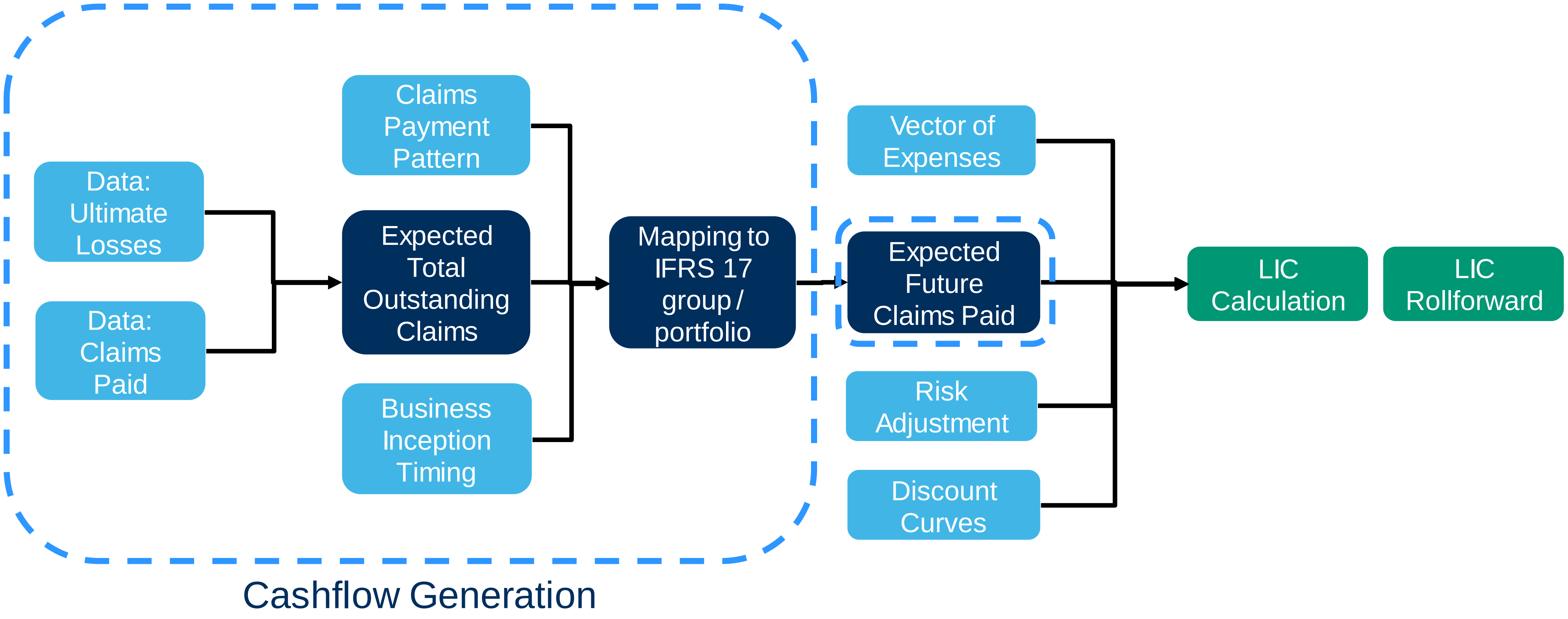
– LIC methodology is identical across products and independent of the LRC methodology applied

IFRS 17	LRC	LIC
Life	GMM/VFA	LIC (BEL + RA)
Non-Life/P&C	PAA or GMM	LIC (BEL + RA)

Sources of complexity:

- LIC analysis of movement, granularity and discounting
- Deferred acquisition expenses
- Premium variance

LIC Calculation – Data Inputs



LIC Calculation – Granularity of Analysis

Rollforward on a best estimate basis

LIC computation process

Inputs	Calculated by IFRS 17 Engine		Derived using Locked in Rate		Release of payments + release of Risk Adjustment		Derived from claims and expense patterns (NFA, exp)		Derived from claims and expense patterns (new claims)		Derived from closing market discount rates		Calculated by IFRS 17 Engine
Actuarial roll-forward	Opening LIC	+	Interest accretion	-	Release of Expected Cash flows	+	Change in estimates	+	New Claims Incurred	+	Change in financial assumptions	=	Closing LIC
IFRS 17 reporting	Opening liabilities		Net finance expense from insurance contracts		Offset to claims & other service expenses paid – past service		Adjustments to liabilities for incurred claims – past service		Incurred claims & other service expenses – current service		Net finance expense from insurance contracts		Closing liabilities

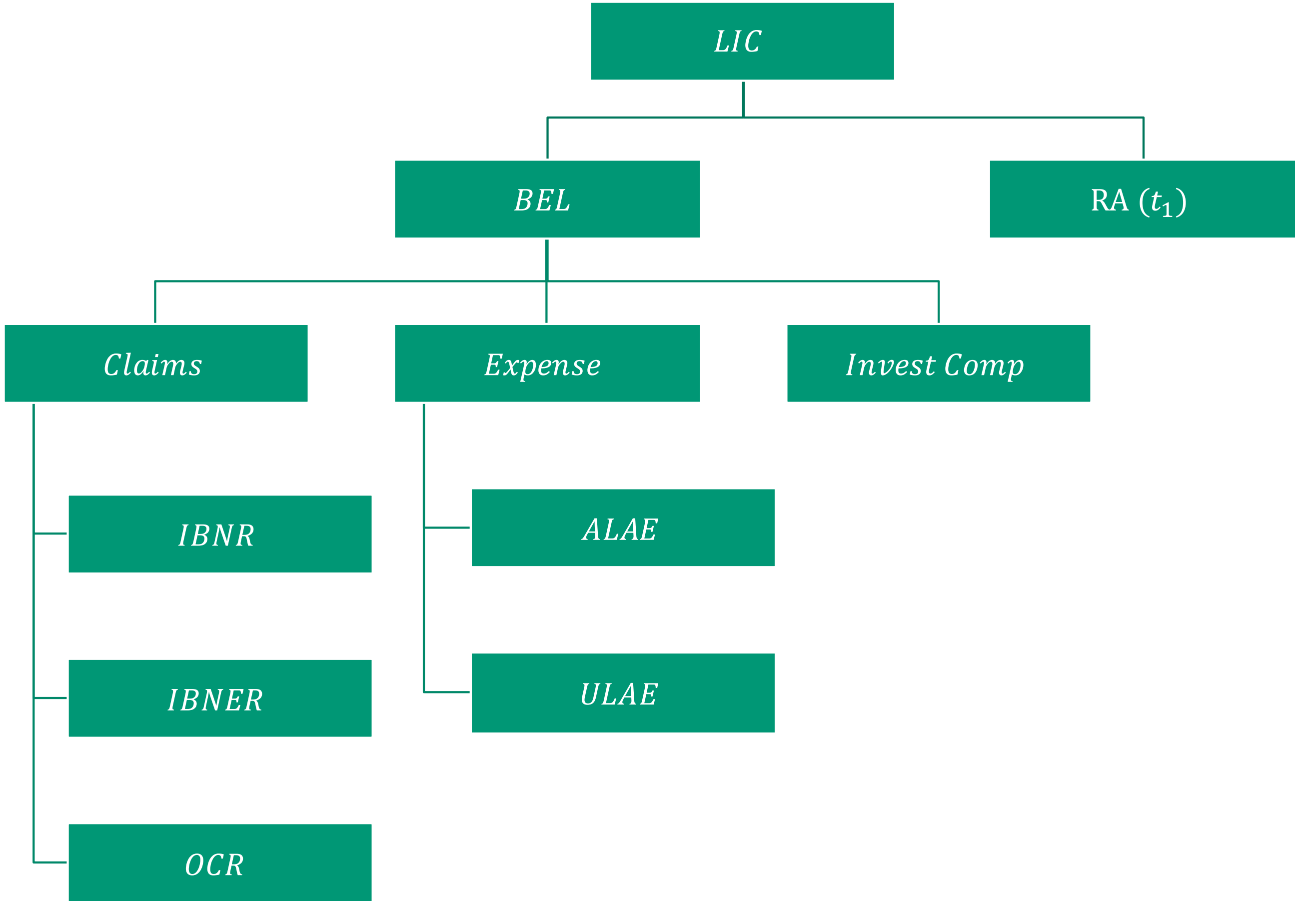
LIC calculation - Granularity of Calculation

Level of calculations

IFRS 17 Group

Vs

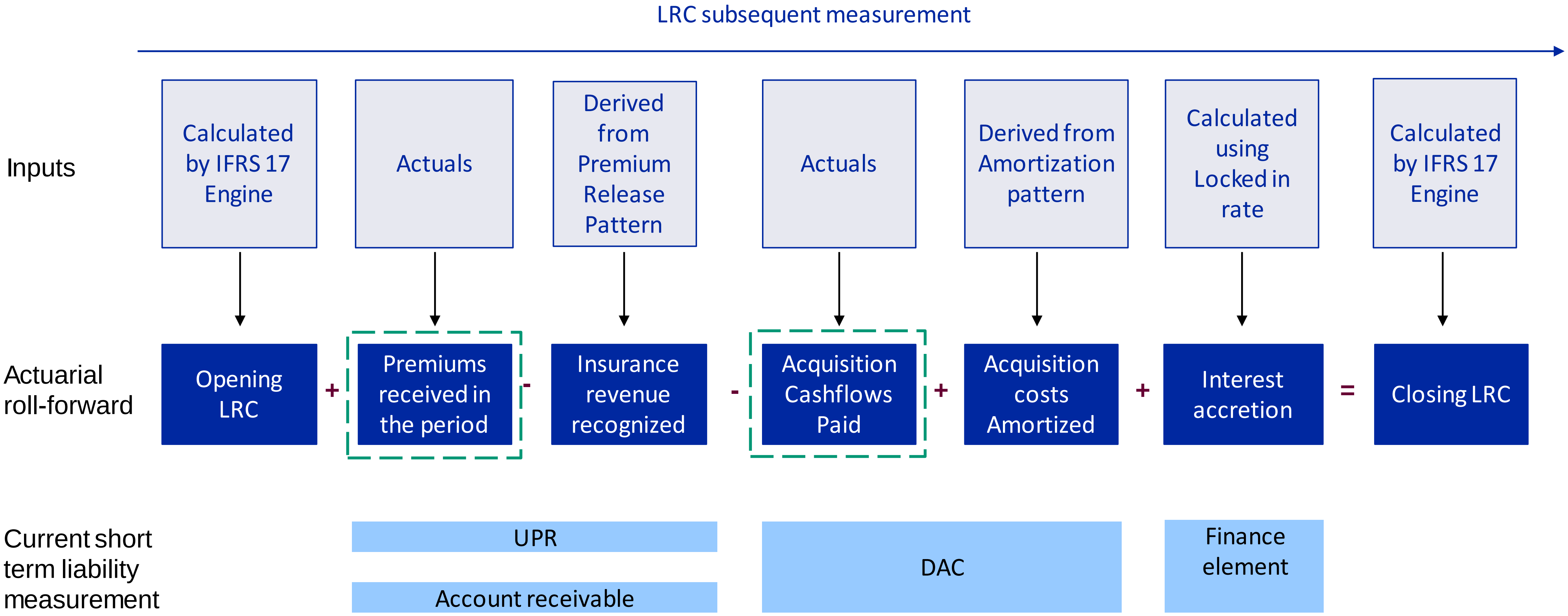
Portfolio



LRC calculations

GMM	PAA
Future cash flows	Simplified approach based on premiums received less acquisition expenses
Discounting	
Risk adjustment	
CSM	

LRC computation Under PAA



Premium component

TRG 2018 interpretation:

- Premiums experience arising related to **current or past service** should be recognised **immediately in the P&L** as part of **insurance revenue**, because total revenue is the total amount of premiums paid to the entity.
- If premiums are paid only after the period when the coverage was provided, the **total reduction in the liability for remaining coverage is 0**. The receipt of premium is booked to LRC, but the same amount representing insurance revenue is removed.

Subsequent year			
Roll-forward by LRC LIC	LRC	LIC	Total
Opening balance	0	0	0
Insurance revenue	-500	0	-500
Insurance service expense	0	0	0
Cash inflows	500	0	500
Cash outflows	0	0	0
Closing balance	0	0	0

Issues remaining

? Deciding whether the premium experience adjustments relate to current, past or future service

? Mixture of adjustment to current and past year, and to future years.

? If the expected future premiums are known from the beginning, should they be included in CSM calculation?

? CSM release pattern and period (for insurance coverage)

? Is there investment service? How does recent amendment affect the TRG example?

Allocation of acquisition expenses

What to look at in the IASB's amendment to treatment of acquisition expenses related to future renewals?

"Systematic and rational" allocation

- No further guidance
- Expected recovery is an option

Impairment

- Triggered by facts and circumstances
- Two step approach

Granularity

- Group of contracts, not entity
- This may be complex

Disclosures

- Reconciliation of asset
- Asset derecognition timeline

Presentation

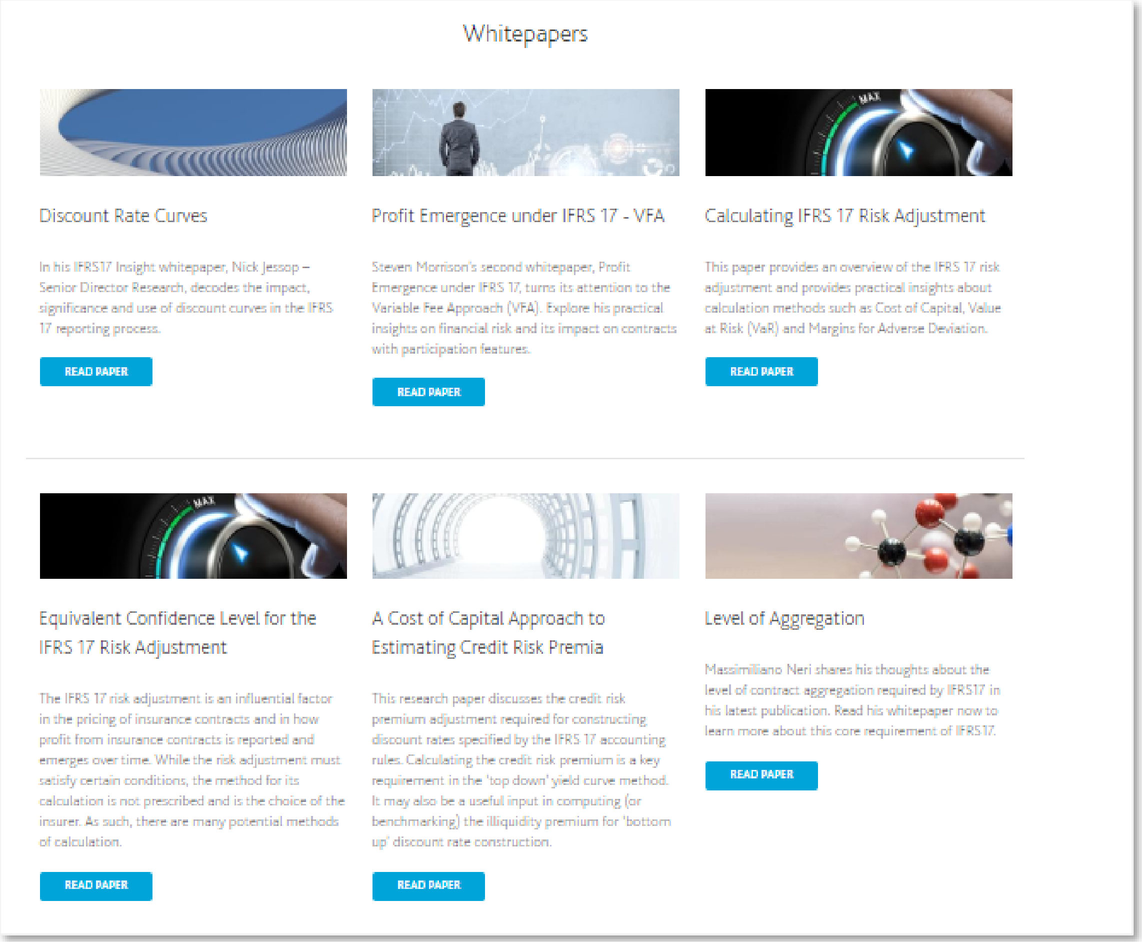
- In the carrying amount of a portfolio

Financial impacts

- Less onerous contracts recognized?

Moody’s Analytics Expertise for IFRS 17

IFRS 17 Thought Leadership



Whitepapers

Discount Rate Curves

In his IFRS17 Insight whitepaper, Nick Jessop – Senior Director Research, decodes the impact, significance and use of discount curves in the IFRS 17 reporting process.

READ PAPER

Profit Emergence under IFRS 17 - VFA

Steven Morrison's second whitepaper, Profit Emergence under IFRS 17, turns its attention to the Variable Fee Approach (VFA). Explore his practical insights on financial risk and its impact on contracts with participation features.

READ PAPER

Calculating IFRS 17 Risk Adjustment

This paper provides an overview of the IFRS 17 risk adjustment and provides practical insights about calculation methods such as Cost of Capital, Value at Risk (VaR) and Margins for Adverse Deviation.

READ PAPER

Equivalent Confidence Level for the IFRS 17 Risk Adjustment

The IFRS 17 risk adjustment is an influential factor in the pricing of insurance contracts and in how profit from insurance contracts is reported and emerges over time. While the risk adjustment must satisfy certain conditions, the method for its calculation is not prescribed and is the choice of the insurer. As such, there are many potential methods of calculation.

READ PAPER

A Cost of Capital Approach to Estimating Credit Risk Premia

This research paper discusses the credit risk premium adjustment required for constructing discount rates specified by the IFRS 17 accounting rules. Calculating the credit risk premium is a key requirement in the 'top down' yield curve method. It may also be a useful input in computing (or benchmarking) the illiquidity premium for 'bottom up' discount rate construction.

READ PAPER

Level of Aggregation

Massimiliano Neri shares his thoughts about the level of contract aggregation required by IFRS17 in his latest publication. Read his whitepaper now to learn more about this core requirement of IFRS17.

READ PAPER

Additional Resources:

- Moody’s Analytics IFRS 17 Thought Leadership Center
- Moody’s Knowledge Portal on COVID-19
- Moody’s Analytics Webinar on IFRS 17 Discount Rates

Thank You!

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