AAC SINGAPORE 2019

Leveraging Insights

Michael Eves

Appointed Actuary Reinsurance Asia, Managing Director

Swiss Re Asia Pte. Ltd. , Singapore

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Agenda

- The ever complex and demanding world
- Our existing skills
- Success factors for the future

The world is fast changing and becoming more interconnected

IFRS 17

Accounting regimes IFRS17, US GAAP long duration contracts

Regulatory Solvency II, SST, C-ROSS, RBC2, RBC3…

Data/IT availability, analytics possibilities, aggregators

Demanding local/group management

Governance/Professional Standards – more controls & expectations

Need for speed and higher demands from our stakeholders

So what does all this mean for the future role of the reserving actuary?

How do I communicate effectively and show that I add value?

Do I have the right data?

Are my assumptions as good as they could be?

Am I modelling correctly?

What do I know about future trends?

Everybody is looking over my shoulder: managers/auditors/regulators…

What about others taking part/all of my job? data scientists, accountants…

It is best to go back to the basics

The strengths of the reserving actuary

Understanding of the business

- knowledge of products
- understanding profit and loss accounts/ balance sheets
- trends in experience
- risk drivers
- ability to consider the future

BUT

How do we make use of these skills if other parts of the organisation (and even regulators) are pushing us into a little box in the corner

Reserving actuaries must show their true value by more strongly leveraging the insights that they have to the relevant stakeholders

<u>Communication</u>!

This can only work if our communication skills are strong

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Our key skills

- Setting the liabilities across different bases
- Assumption setting
- Understanding financial accounts
- Being forward looking
- Data analytics
- Professionalism, integrity, and continuing to be highly regarded

Global (re)insurers need to deal with multiple valuation bases and multiple views of the company

Accounting

IFRS17

Forthcoming changes for long duration contracts (US GAAP)

Economic

MCEV

Company own methods

Statutory

Principles based and rules based

Capital

Solvency II, SSI, C-ROSS, RBC, RBC2, RBC3, IAIS…

Tax

Always local with local rules

In general the new valuations are becoming more complex thereby giving actuaries more opportunity to be more involved

BUT
we should avoid being seen as a sophisticated calculator
(only for others to communicate the story)

Best estimated future cashflows

Key to business

Key to nearly all valuation bases

key to critical business decisions

Whilst they are an estimate, getting them wrong (either way) can be damaging to the whole business

These clearly are/should be the key responsibility of the reserving actuaries

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So it's relatively simple

Take the best estimate cash flows

Add some prudence (risk margin, confidence interval, PAD…)

Discount (risk free, transfer pricing of funds…)

Apply other risk measures (cost of capital, illiquidity premium, contract service margins…)

and you have all the valuation bases that are required!!

Delta base accounting

Baseline Delta Approach (BDA): an innovative approach to Multi-GAAP accounting

The frozen yoghurt analogy

Baseline Delta explained

- The most suitable Baseline for (re-)insurance businesses is a set of valuation neutral contractual cash flows.
- These cash flows comprise all undiscounted current and future contractual cash flows and reflect best estimates, both of which are considered unbiased.
- The Baseline definition can be applied to all asset and liabilities
- The Deltas are established based on the rules of the specific valuation in question (e.g. US GAAP) and the differences to the Baseline

As the approach is based on a granular and integrated data model, it can also support a seamless production of current and future financial statements – including a cash flow statement – as well as a variance analysis, which is needed for IFRS 17

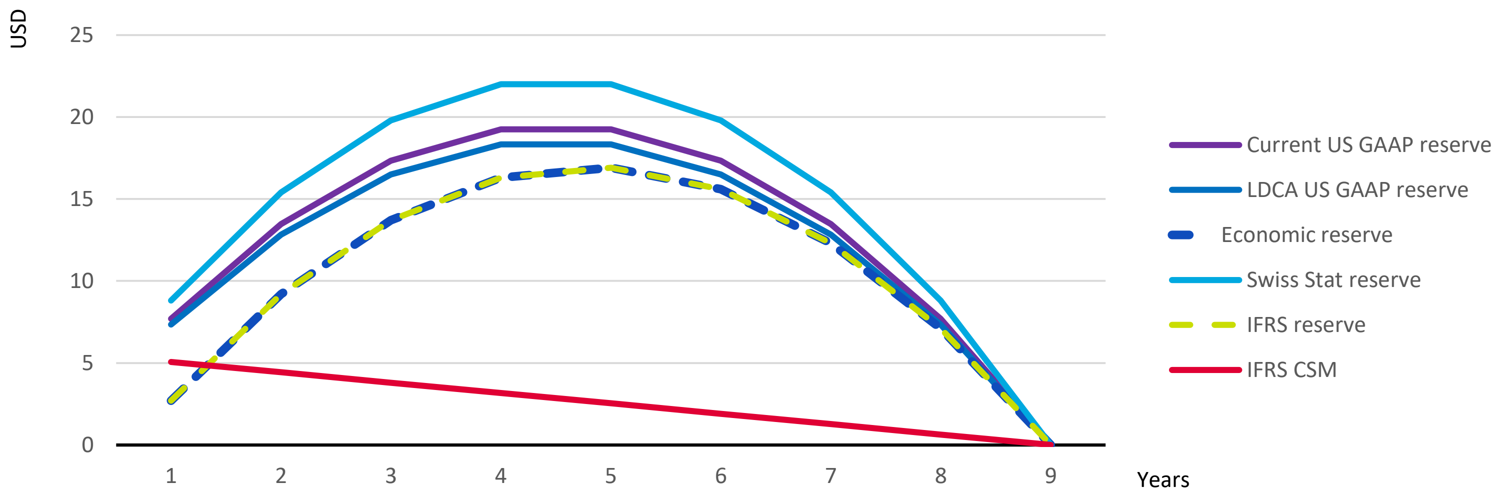
Comparison of various accounting standards

	EVM	IFRS *	LDCA US GAAP	Current US GAAP	Swiss Stat
Use	Economic performance/ steering	Statutory Financial Reporting for many jurisdictions	Group Financial Reporting	Group Financial Reporting	Statutory Financial Reporting for Swiss entities
Actuarial assumptions	Best estimate	Best estimate	Best estimate	Locked-in at inception with margins	Best estimate with prudent margins
Discounting	Risk free	Risk free + illiquidity premium	AA corporate	Book yield, locked-in at inception	Generally risk free plus spread
Experience variance	Fully recognised in period	Fully recognised in period	Smoothed through retrospective unlocking	Fully recognised in period	Fully recognised in period
Assumption changes	Fully recognised in period	Buffered against Contractual Service Margin (CSM)	Smoothed through retrospective unlocking	Not possible, locked-in at inception	Fully recognised in period
Allowance for risk	Capital costs	Risk adjustment (similar to capital costs)	None	Prudent margins at inception	Prudent margins
Profit emergence	At inception, immediately	Over contract lifetime	Over contract lifetime	Over contract lifetime	Over contract lifetime
Loss-making contracts	Immediate recognition of expected losses	Cohort** level losses recognised immediately	Cohort** level losses recognised immediately	No immediate recognition of expected losses, reserves tested at BU level	Immediate recognition of expected losses

* IFRS here refers to the new IFRS 17 standards effective 1.1.22
** Cohort is grouping of similar contracts, with as a minimum different issue years in separate groups

Illustrative comparison of reserve profiles (at inception)

Projected reserves at inception for illustrative case for long duration Life &Health



- **Economic** reserves are based on the present value of benefits and capital costs less gross premiums. **IFRS** liabilities in this example equate to economic reserves assuming the risk adjustment in IFRS is equal to the economic capital costs.
- **IFRS** uses a mechanism called Contractual Service Margin (CSM) to defer profits. In this example a straight line amortisation is assumed.
- **US GAAP** reserves are based on the present value of benefits less net premiums. The reserve includes a PAD (5% in this illustration), whereas under **LDCA US GAAP** the reserve does not include a PAD.
- **Swiss Stat** reserves include a PAD (20% in this illustration)

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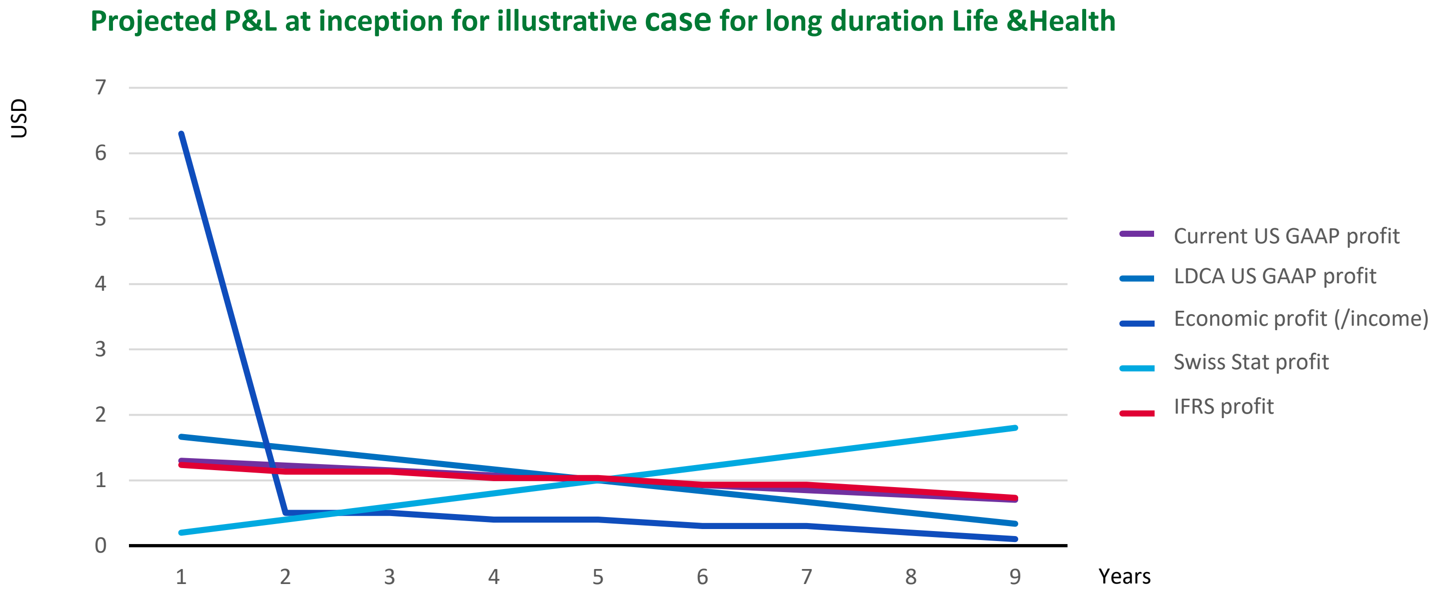
Illustrative comparison of profit signatures (at inception)



The above shows the expected profits at inception, based on reserve profiles shown in the previous slide.

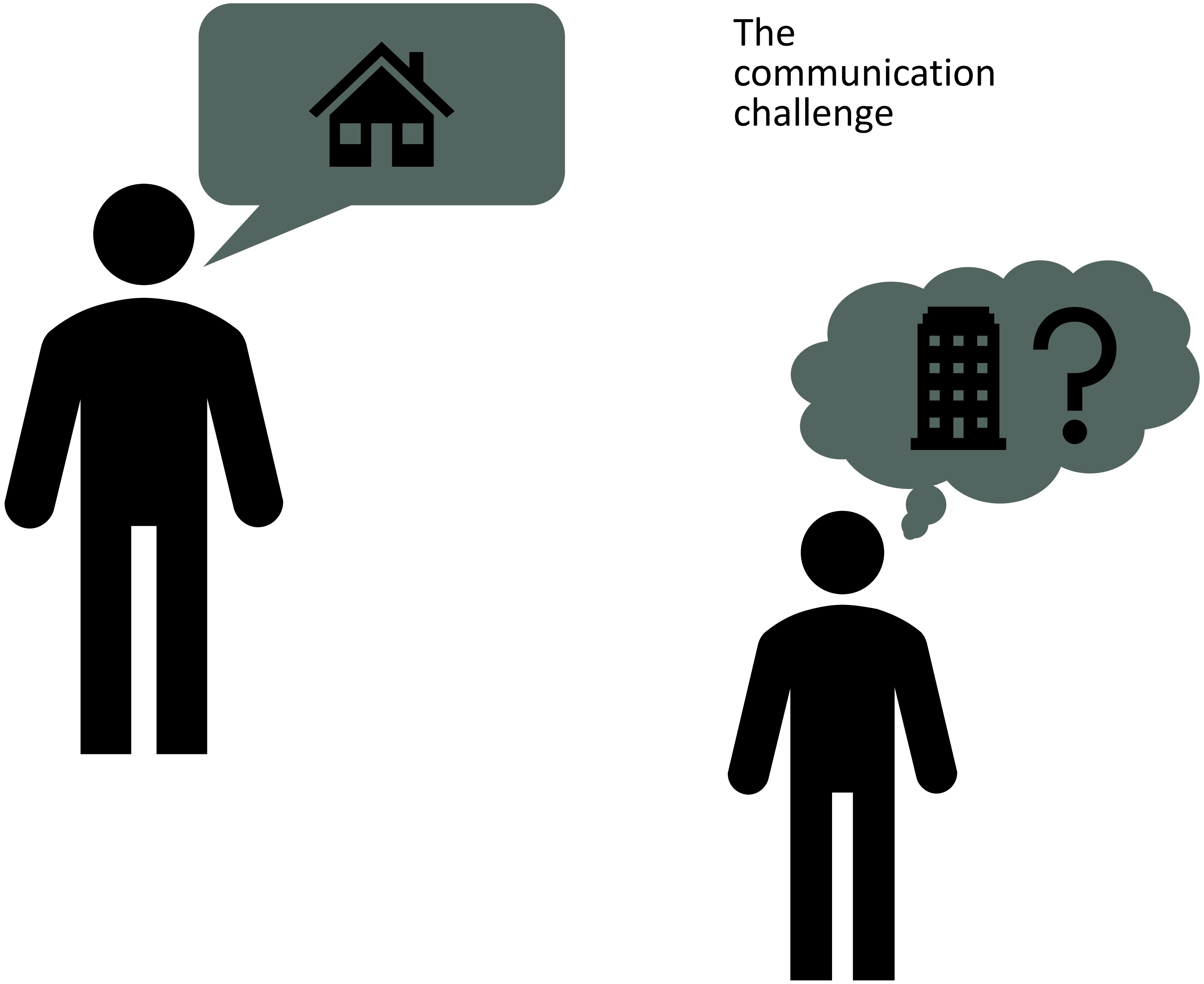
- **Economic** profits emerge at inception, calculated as the present value of gross premiums less benefits and capital costs on best estimate assumptions. In addition, capital costs are released over time into income.
- Under **IFRS** the CSM defers the recognition of profit, and the Risk Adjustment is released over time into profit.
- **US GAAP** profits emerge as a constant proportion of premium, generated by the excess of actual premium over net premium. Profits under **Current US GAAP** are slower to emerge than **LDCA US GAAP** due to the PADs in the reserves.
- **Swiss Stat** profits are deferred because assumptions are prudent.

Stakeholders must have confidence in the best estimates otherwise we lose our credibility

- analysing the past, data analytics
- actuarial models
- assumptions, trends
- dynamic, stochastic techniques
- dealing with the uncertainty
- understanding our biases

Communicating with authority

Knowing and seeing everything is useless unless the key insights are communicated in a way that the target audience can easily understand and can form a strong basis for their decision making



The communication challenge

A need to be bold

If we act hesitantly or submissively then we will be put into the box in the corner of the room

Use our insights to come up with business recommendations will help to get us a place at the management tables

Conclusion

Our vision must be for the reserving actuary making sense of an ever complex and demanding world

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