3rd Capacity Building Seminar on IFRS 17
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Methodology deep-dive: measurement approach for participating products

Institute of Actuaries of India

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Introduction

Two key questions:

- Whether GMM or VFA applies – or both?
- Whether the financial statements envisaged under IFRS 17 are fit for use in par business, taking into account current laws and regulations.

How does measurement stack up?

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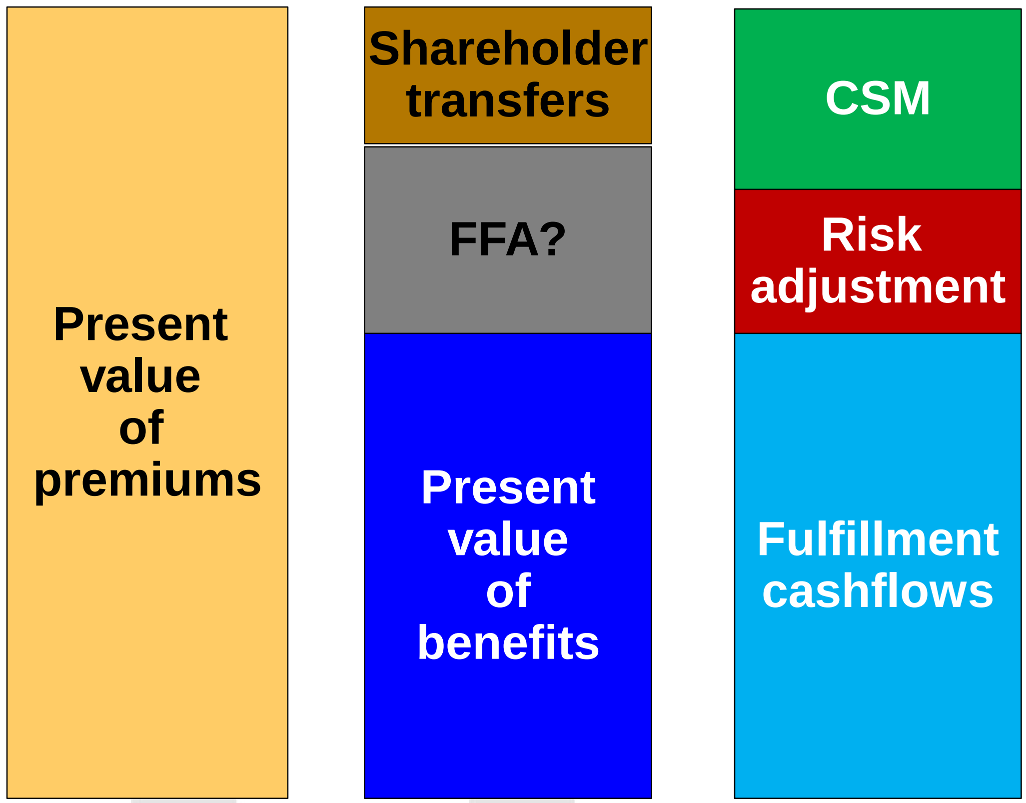

How do we investigate whether par contracts have DPF?

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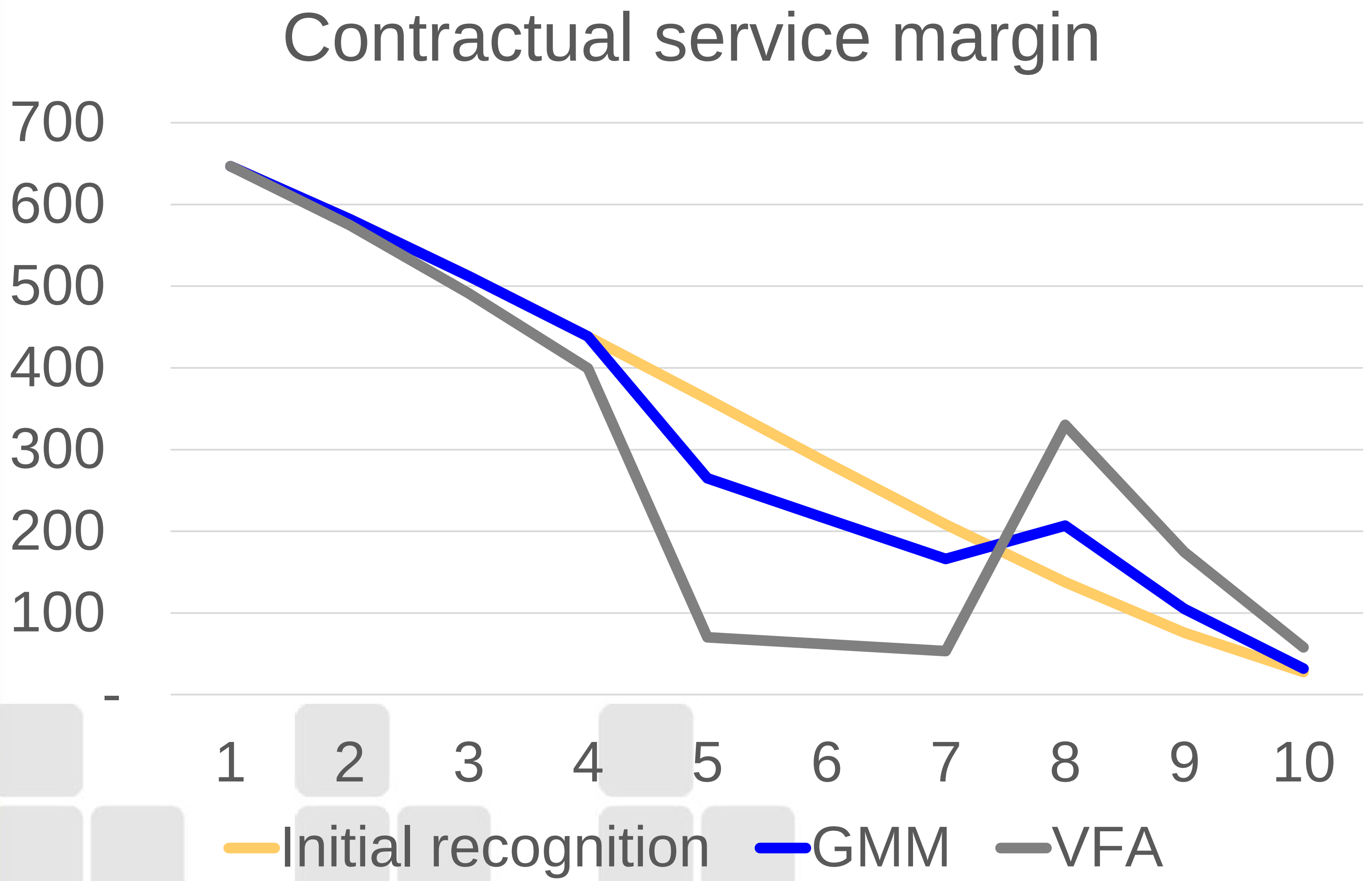
Impact of the model choice

An example contract under both measurement models



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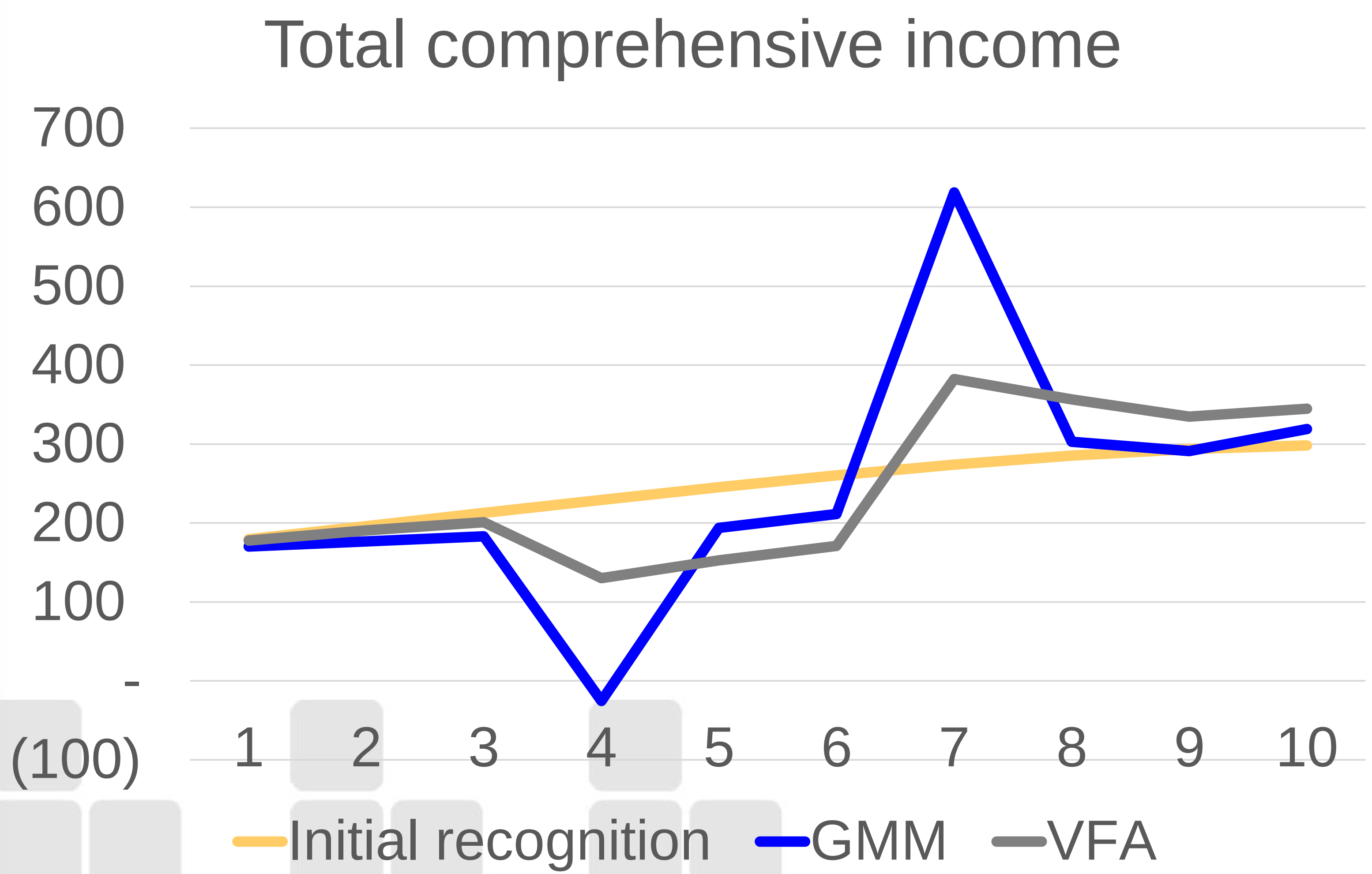

Comparison to existing P&L

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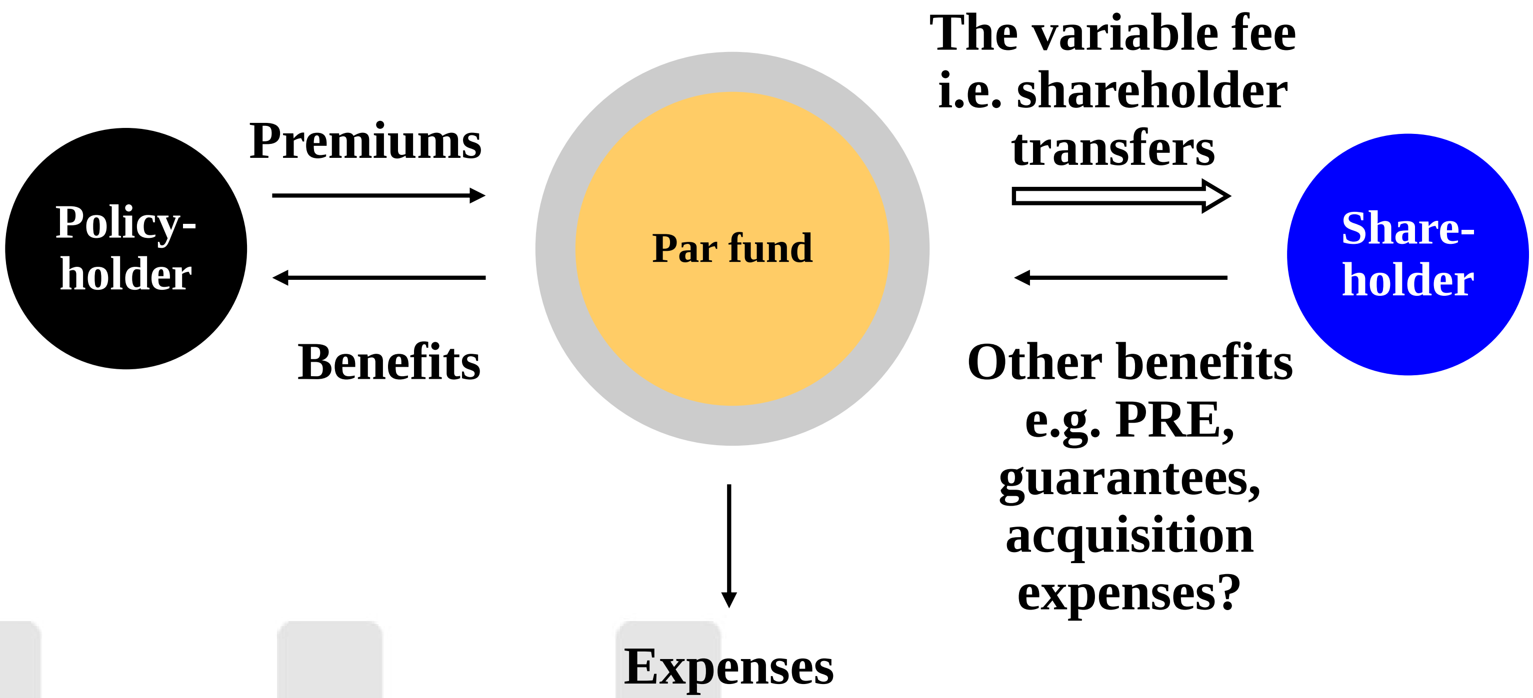
How does par typically operate under our existing regime?

- Relatively **smooth emergence of profit** each year, as insurers typically try to maintain a stable level of bonus. **Experience variances are usually spread out** over future bonus declarations
- Short term volatility typically either not recognised (book value valuation) or **absorbed by the FFA or liabilities**
- Can have ‘spikes’ when terminal bonuses are declared

Does VFA for par even make sense?



Definition of direct participation

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IFRS17.B101 Insurance contracts with direct participation features are insurance contracts that are **substantially investment-related** service contracts under which an entity promises an investment return based on underlying items. Hence, they are defined as insurance contracts for which:

a) the **contractual terms** specify that the policyholder participates in a share of a clearly identified pool of **underlying items** …;

b) the entity expects to pay to the policyholder an amount equal to a **substantial share of the fair value returns** on the underlying items ...; and

c) the entity expects a substantial proportion of **any change in the amounts** to be paid to the policyholder to vary with the **change in fair value of the underlying items** ….

B101 a) Identifying the items

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IFRS 17.B101(a) the **contractual terms** specify that the policyholder participates in a share of a clearly identified pool of **underlying items** …;

IFRS 17.2 … Contractual terms include all terms in a contract, **explicit or implied** …… Implied terms in a contract **include those imposed by law or regulation**.

We may be able to identify the underlying items with reference to our regulatory requirement to maintain a ring-fenced par fund, where surpluses are shared in the ratio 90:10

What is the underlying?

IFRS17.B106 The pool of underlying items referred to in paragraph B101(a) can comprise any items, for example a **reference portfolio of assets**, the net assets of the entity, **or a specified subset of the net assets of the entity**, as long as they are clearly identified by the contract. An entity need not hold the identified pool of underlying items.

IFRS17.BC245 ….The Board decided the underlying items **do not need to be a portfolio of financial assets….**

…..seems to be quite an open definition!!

Example of B101(b) assessment

	Policy year			PV(@10% p.a.) at t=0
	1	2	3	
Opening asset share	-	103	215	
Premiums (A)	100	100	100	274
Expenses (B)	5	5	5	14
Risk charge deducted (C)	1	1	1	3
Investment income (10 % p.a.) (D)	9	20	31	48
Shareholder transfer (10% of surplus, E)	0	1	2	3
Closing asset share	103	215	338	
PV of fair value returns (F = D)				48
PV of policyholders share (G =F - B - E)				31
Share of fair value returns to policyholder (G / F)				65%

What is the underlying?

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Two schools of thought:

- Underlying items are simply the assets of the par fund – so that the fair value return on the underlying items is nothing but the investment return on those assets
- Underlying items are all forms of surplus – so that the fair value return on the underlying items includes investment returns, but also profits from mortality, expenses, lapsation etc.

Depending on your view – the assessment of B101 may change

Example of B101(b) assessment

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Share of fair value returns to policyholder (G / F)				90%

Example of B101(c) assessment

Also seem to be two schools of thought

- Under participating contracts, if the underlying fair value changes by an amount A, then the policyholder's return increases by 90% x A. Therefore B101(c) may be satisfied (assuming guarantees have not bitten – see next slide).

- A further condition may be tested - whether the amount of benefit that is variable is a substantial portion of the overall benefits given to the policyholder. If bonuses are a small component of overall benefits, then B101(c) is not satisfied.

Adjustments to the assessment

There are some implicit assumptions used to establish:

"Policyholders return = Return on assets less some deductions"

Assumption	Relevant part of the standard
Guarantees have not bitten	IFRS17. B107 – Need to assess on a probability weighted basis
We are targeting to deliver asset share (or something similar) to policyholders	IFRS 17.B103/B68 –Need to reflect mutualisation in our assessment

Assess probabilistically

IFRS 17.B107 …An entity shall…assess the variability in the amounts in paragraphs B101(b) and B101(c): … on a **present value probability-weighted** average basis, not a best or worst outcome basis....

Scenario	Share of fair returns passed to policyholders	Probability of scenario
Return on assets exceeds guaranteed benefits	90%	1-p
Return on assets is less than guaranteed benefits	0% - benefits are fully guaranteed	p

Assess probabilistically

Probability guarantee bites (p)	Share of fair returns passed to policyholders	B101 (b) /(c) satisfied?
5% - “low guarantee”	90% x (1-p) + 0% x p = 86%	Yes?
50% - “high guarantee”	90% x (1-p) + 0% x p = 45%	No?

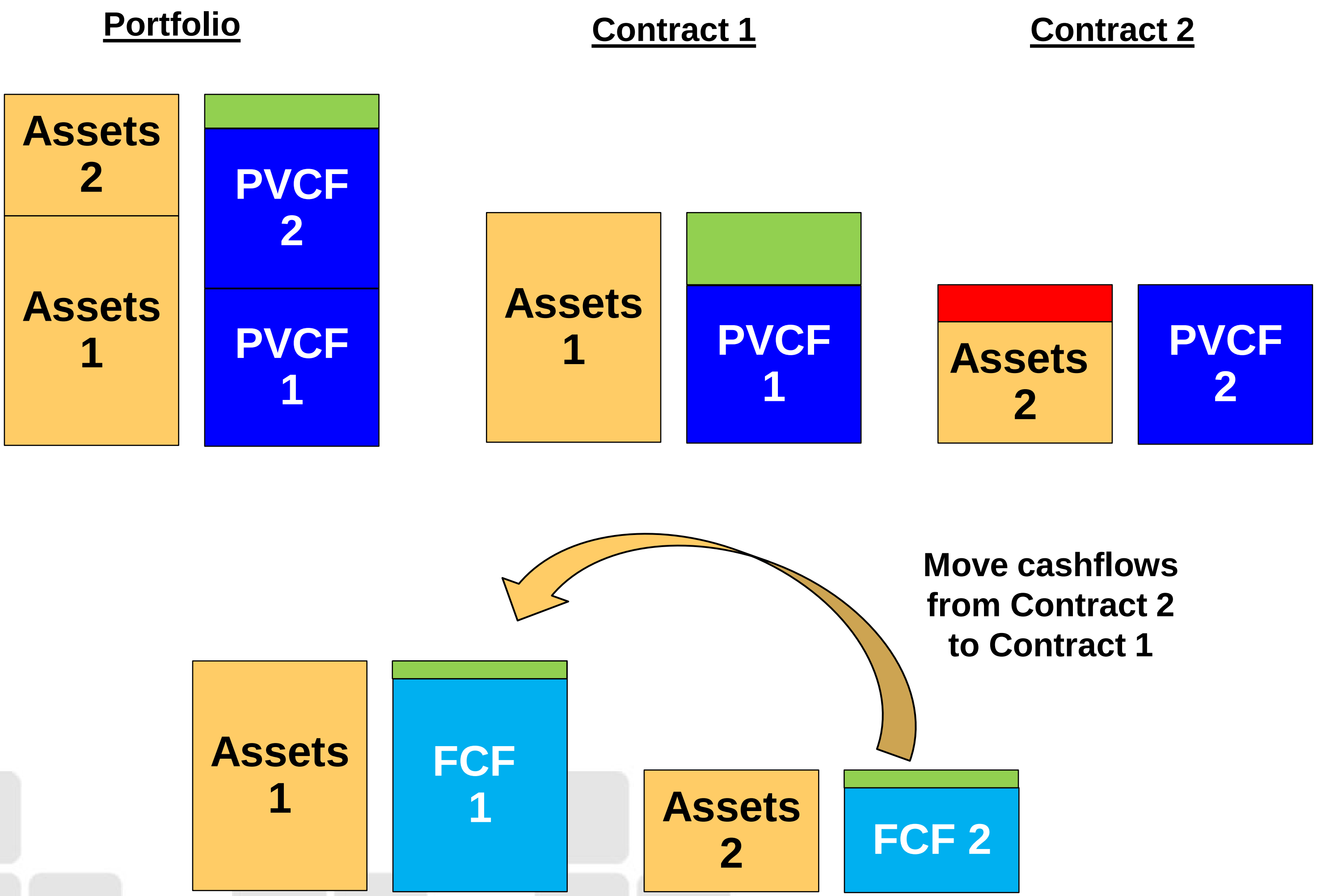
Mutualisation

IFRS17.B68 …. The fulfilment cash flows of each group reflect the extent to which the contracts in the group **cause the entity to be affected by expected cash flows**, whether to policyholders in that group or to policyholders in another group. Hence the fulfilment cash flows for a group:

(a) include payments arising from the terms of existing contracts to policyholders of contracts in other groups, **regardless of whether those payments are expected to be made to current or future policyholders**; and

(b) exclude payments to policyholders in the group that, applying (a), have been included in the fulfilment cash flows of another group.

Mutualisation



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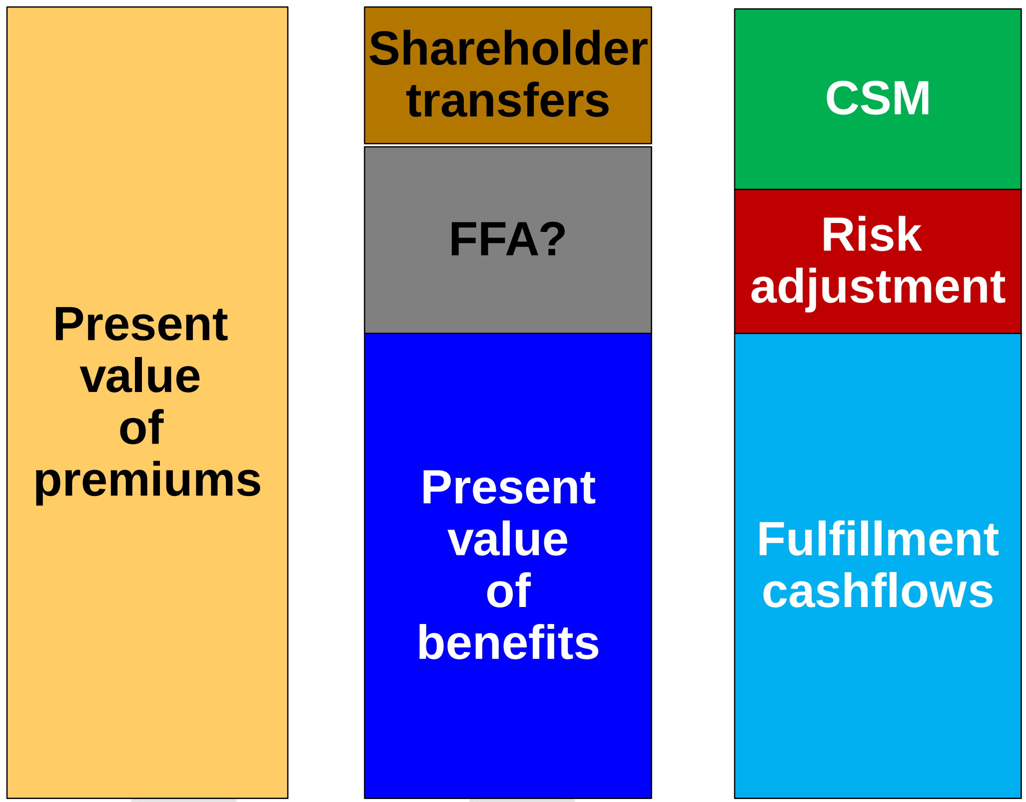
How does measurement stack up?



Conclusions

- B101(a) – Need to be careful about what's included in the underlying items.
- B101(b)/(c) – depend heavily on our bonus mechanism (and the link to asset shares) and our definition of underlying
- It is very possible that par contracts with different features (say high guarantees and low guarantees) would be measured under different models – is this a problem for users of financial statements?
- Need to define 'substantial' share
- Mutualisation of cash flows creates a headache!