IFRS 17 & Solvency II Workshop

Measurement of Direct Participation Contracts

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Agenda

Monday, 15 July	Tuesday, 16 July	Wednesday 17 July
• Recap of IFRS 17 Background • General Measurement Model • Reinsurance Held and Contracts Acquired • Considerations for the Implementation of IFRS 17	• **Measurement of direct participation contracts** • Illustrative examples of the Premium Allocation Approach • Presentation of IFRS 17 Results • Data management and calculation engines • Background and Scope of Solvency II • Quantitative Aspects of Solvency II	• Quantitative Aspects of Solvency II (cont'd) • Governance under Solvency II • The Risk Management & Reporting Processes

What are direct participation contracts?

- Insurance contracts that include features that share returns on underlying items with the policyholders
- Significant investment-related services are included in the contract (e.g., *Unit-Linked*, hybrid products, etc.)
- An insurance contract is considered to be a direct participating contract when
  - the policyholder participates in a share of a pool of underlying items
  - the entity expects a substantial portion of any change in the amounts to be paid to the policyholder to vary with the change in the fair value of the underlying items
- If the above conditions are not met, then the contract is either
  - indirect participation
  - non-participating contract

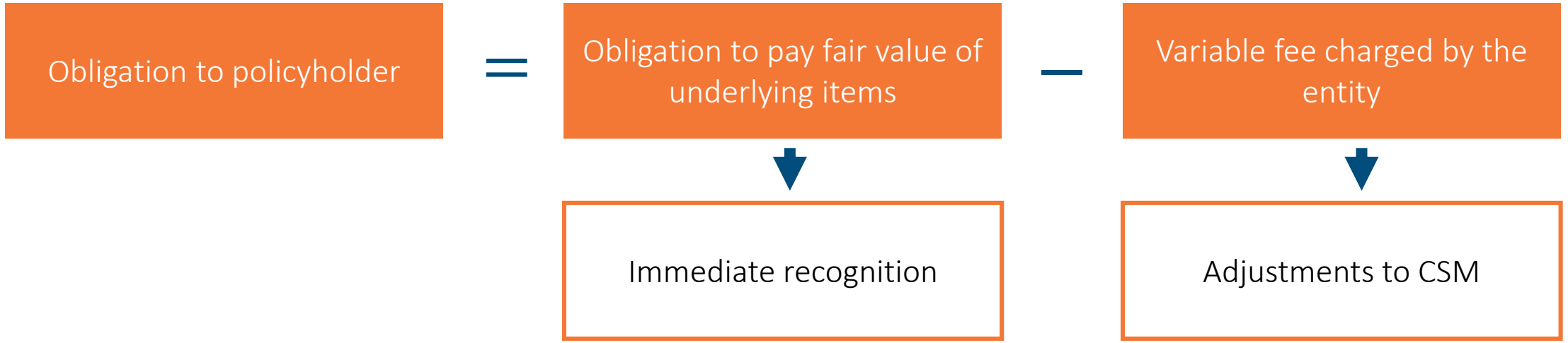
Differences in measurement

	Contract group type and measurement method		
	Non-participating	Indirect participation	Direct participation
Measurement model	General measurement		Variable fee approach
Changes in fulfilment cash flows due to financial risks and time-value of money	Immediate recognition in the profit or loss statement		Considered part of the variation in fees, recognized in the CSM
Interest accreted to the CSM	Interest rate fixed at initial recognition		Non-explicit interest accretion, given that the CSM is recalculated when financial risks change

Contract classification must be done at contract inception. Subsequent reclassifications are not allowed.

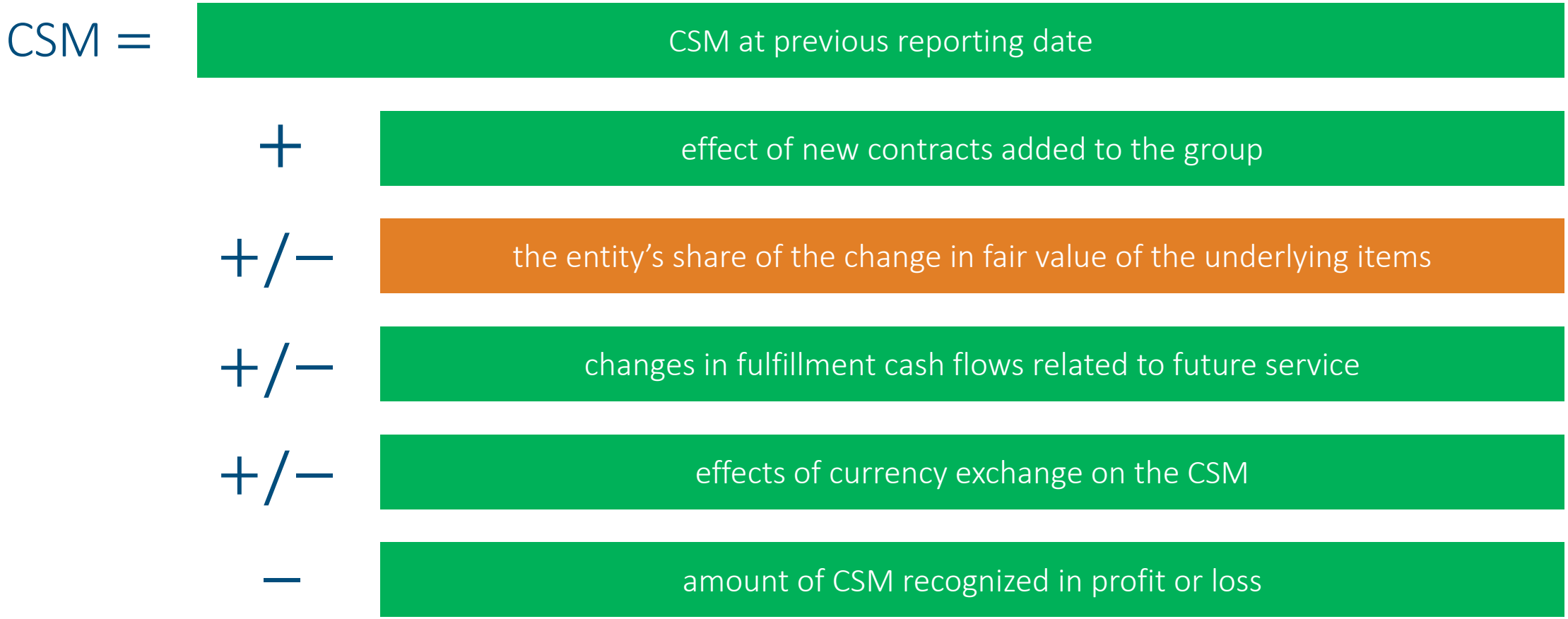
Variable fee approach–subsequent measurement

- At initial recognition, the general model applies to direct participation contracts
- In subsequent measurements, the compensation that the entity receives for financial services rendered is considered



Calculation of the contractual service margin

Under the variable fee approach, the CSM is calculated as follows:



Illustrative example—group of contracts with direct participation

An entity issues 100 policies with the following features:

Contractual terms	
Single premium:	150
Coverage period:	3 years
Death benefit:	the largest of 170 or the individual account balance
Survival benefit:	individual account balance, payable at the end of the coverage period
Contract fee:	2% of the account balance, charged at the end of each year

On initial recognition, the entity assumes:

Assumptions	
Increase in underlying items:	10% per year
Discount rate:	8%
Risk adjustment;	25 (recognition of 12, 8 and 5 at the end of years 1, 2, and 3, respectively)
Deaths assumed:	one policyholder per year

Initial recognition

Insurance (asset) / liability on initial recognition	initial	year 1	year 2	year 3
Estimates of the present value of cash inflows	–15,000	-	-	-
Estimates of the present value of cash outflows	14,180	15,413	16,757	-
Estimates of the present value of cash flows	–820	15,413	16,757	-
				-
Risk adjustment for non-financial risk	25	13	5	-
Fulfilment cash flows	–795	15,426	16,762	-
Contractual service margin	795			

Insurance (asset) / liability on initial recognition	-

← actuarial estimates of cash flows, including the cost of the embedded guarantee

Fair value of the underlying items

As experience emerges, underlying items earn 10%, 8% and 10%, in years 1—3, respectively

Fair value of the underlying items	year 1	year 2	year 3
Opening balance	-	16,008	16,772
Premiums	15,000	-	-
Change in fair value	1,500	1,281	1,677
Contract fee (2%)	–330	–346	–369
Payments for death claims	–162	–171	–18,080
Closing balance	**16,008**	**16,772**	**-**

← amounts assigned to each death, plus the account balances paid at the end of the coverage period

Changes in insurance liability—first year

	PV cash flows	Risk adjustment	CSM	Total liability
Opening balance	820	–25	–795	-
Premiums	–15,000			–15,000
Benefits paid	170			170
Change in underlying items	–1,500			–1,500
Entity's share in underlying items	(A) 30		–30	-
Effect of time value of money and financial risks	(B) 67		–67	-
Recognition in profit or loss		12	(C) 300	312
Closing balance	**–15,413**	**–13**	**–592**	**–16,018**

(A) Contract fee: $1500 \times 0.02 = 30$

(B) The difference between the change in underlying items and the change in fulfilment cash flows is $1500 - 1403 = 97$, of which 30 are allocated to the entity. Thus, the remaining 67 correspond to the effect of time value of money and financial risks.

(C) Immediately before recognition in profit or loss, the CSM is $792 + 30 + 67 = 892$. However, in the first year the entity provided 100 units of coverage, and it expects to provide 99 and 98 in the second and third year, respectively. Thus, the portion of coverage provided in the first year is $\frac{100}{100+99+98} = 0.337$. Therefore, $892 \times 0.337 = 300$ are recognized in profit or loss.

Statement of profit or loss

Profit / (loss)		year 1
Insurance liability at year-end		–16,018
Premiums received		15,000
Insurance finance expenses		1,500
Investment component		–162
Insurance service result		**320**
Insurance service expenses		–8
Insurance service result		**312**
Investment income	A	1,500
Insurance finance expenses	B	–1,500
Finance result		**-**
Profit / (loss)		**312**

← This is also equal to the sum of $8 + 12 + 300$, that is:

- expected insurance service expenses of 8
- change in risk adjustment caused by the release from risk of 12
- CSM recognized in profit or loss of 300

A Investment income related to the assets that the entity holds is accounted of by IAS 39 / IFRS 9

B Changes in the obligation to pay the policyholder an amount equal to the fair value of the underlying items do not relate to future service and not adjust the CSM.

Change in policyholder account balances

Changes in policyholder account balances	year 1	year 2	year 3
Opening balance	-	16,008	16,772
Premiums	15,000	-	-
Change in fair value	1,500	1,281	1,677
Contract fee	–330	–346	–369
Payments for death claims	–162	–171	–184
Payments for maturity benefits	-	-	–17,896
Closing balance	**16,008**	**16,772**	**-**

Change in the fulfilment cash flows

Changes in the fulfilment cash flows	year 1	year 2	year 3
Opening balance	-	15,426	16,461
Changes related to future service	–795	-	-
Effect of time value of money and financial risks	1,403	1,214	1,624
Changes related to current service	–12	–8	–5
Cash flows	14,830	–171	–18,080
Closing balance	**15,426**	**16,461**	**-**

← computed from actuarial estimates of cash flows, including the cost of the embedded guarantee

Change in the contractual service margin

Changes in the contractual service margin	year 1	year 2	year 3
Opening balance	-	592	327
Changes related to future service	795		
Change in the fair value of the underlying items	1,500	1,281	1,677
Effect of time value of money and financial risks	–1,403	–1,214	–1,624
Changes related to future service (recognition in profit or loss)	–300	–331	–380
Closing balance	**592**	**327**	**-**

Exercise 8

Consider the set of assumptions of the illustrative example.

Due to the emerging experience, the fulfilment cash flows at the end of year 2 are $16{,}461$

Develop the changes in insurance liability for years 2—3 and construct the corresponding profit or loss statements.

Insurance liability reconciliation—second year

	PV cash flows	Risk adjustment	CSM	Total liability
Opening balance	–15,413	–13	–592	–16,018
Premiums	-			-
Benefits paid	171			171
Change in underlying items	–1,281			–1,281
Entity's share in underlying items	(A) 26		–26	-
Effect of time value of money and financial risks	(B) 41		–41	-
Recognition in profit or loss		8	(C) 331	339
Closing balance	**–16,456**	**–5**	**–327**	**–16,788**

(A) Contract fee: $1281 \times 0.02 = 26$

(B) The difference between the change in underlying items and the change in fulfilment cash flows is $1281 - 1214 = 67$, of which 26 are allocated to the entity. Thus, the remaining 41 correspond to the effect of time value of money and financial risks.

(C) Immediately before recognition in profit or loss, the CSM is $592 + 26 + 41 = 659$. However, in the second year the entity provided 99 units of coverage, and it expects to provide 98 in the third year. Thus, the portion of coverage provided in the second year is $\frac{99}{99+98} = 0.503$. Therefore, $659 \times 0.503 = 331$ are recognized in profit or loss.

Insurance liability reconciliation—third year

	PV cash flows	Risk adjustment	CSM	Total liability
Opening balance	–16,456	–5	–327	–16,788
Premiums	-			-
Benefits paid	18,080			18,080
Change in underlying items	–1,677			–1,677
Entity's share in underlying items	(A) 34		–34	-
Effect of time value of money and financial risks	(B) 19		–19	-
Recognition in profit or loss		5	(C) 380	385
Closing balance	**-**	**-**	**-**	**-**

(A) Contract fee: $1677 \times 0.02 = 34$

(B) The difference between the change in underlying items and the change in fulfilment cash flows is $1677 - 1624 = 53$, of which 34 are allocated to the entity. Thus, the remaining 19 correspond to the effect of time value of money and financial risks.

(C) Immediately before recognition in profit or loss, the CSM is $327 + 34 + 19 = 380$. However, in the third year the entity provided the remaining 98 units of coverage. Since this is the last coverage year, the entire 380 is recognized in profit or loss.

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