

# Measurement

## Variable Fee Approach (VFA)





VFA

### Insurance with Direct Participation Features

- Policyholder participates in a share of a clearly identified pool of underlying items;
- Policyholder gets a substantial share of the fair value returns on the underlying items;
- Change in the amounts to be paid to the policyholder vary with the change in fair value of the underlying items.

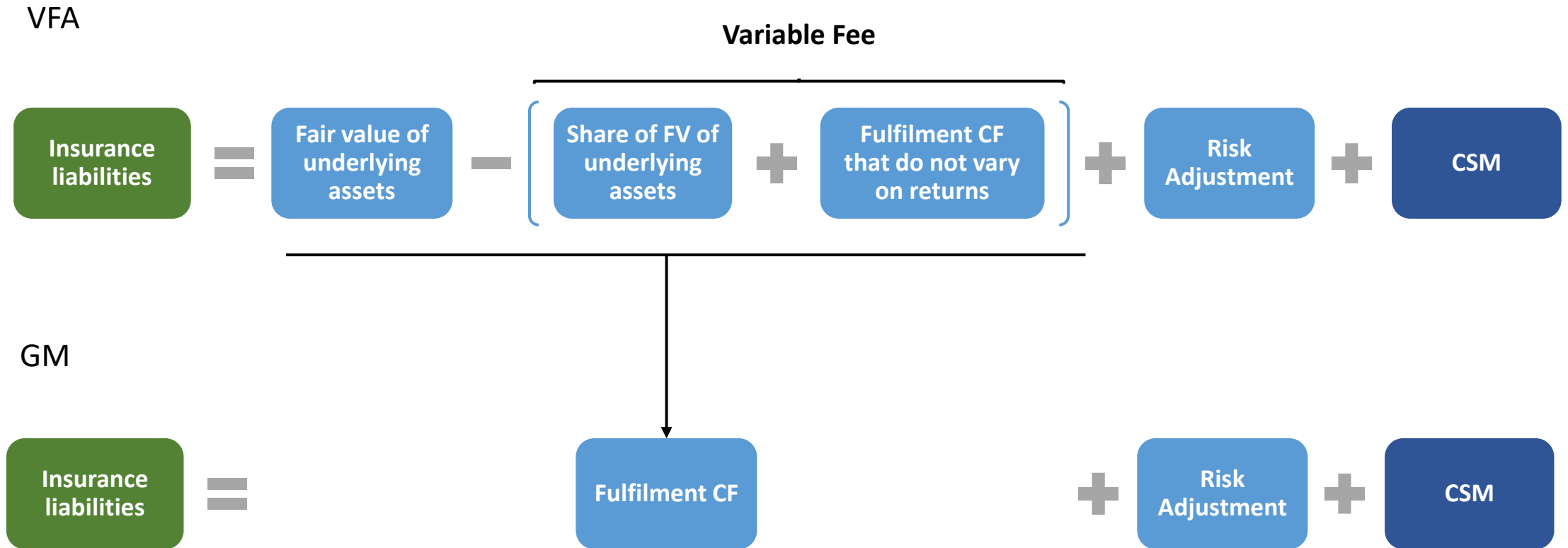
*What does it mean when the policyholder gets a substantial share of the fair value returns?*

Year	1	2	3	4	5	6	7	8	9	10	Total
Opening balance	15,000	15,503	16,156	16,836	17,545	18,284	19,055	19,857	20,694	21,566	
Returns on underlying items (6%)	900	775	808	842	877	914	953	993	1,035	1,078	<b>9,175</b>
Annual management charge (2.5%)	-398	-122	-127	-133	-138	-144	-150	-156	-163	-170	<b>-1,701</b>
Closing balance	15,503	16,156	16,836	17,545	18,284	19,055	19,857	20,694	21,566	22,474	

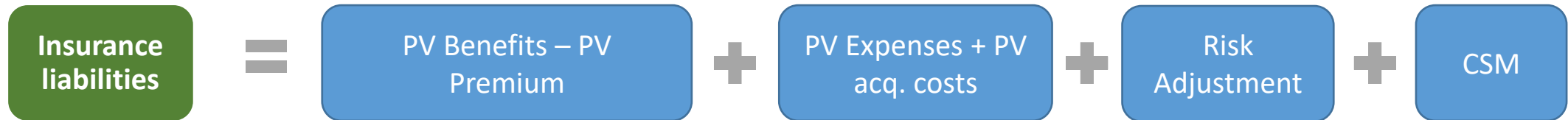
*Fair value returns in total = 9,175*

*Paid to policyholder = 7,474 (22,474-15,000)*

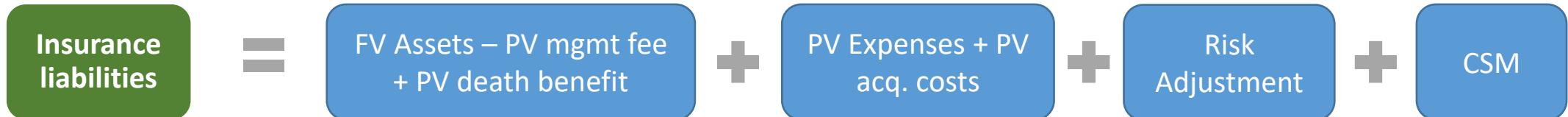
*Policyholder gets 81% share of the fair value returns, 19% remains in the insurance company as management charge.*



VFA



GM



Ref	Roll-forward step	GM	VFA
44(a), 45(a)	Effect of any new contracts added to the group	Yes	Yes
44(b)	Interest accreted on the CSM during the reporting period, measured at the discount rate locked-in at inception	Yes	No
45(b)	Entity's share of the change in the fair value of the underlying items	No	Yes
44(c), 45(c)	Changes in fulfilment cash flows relating to future service	Yes	Yes
44(d), 45(d)	Effect of any currency exchange differences on the CSM	Yes	Yes
44(e), 45(e)	Amount recognised as insurance revenue because of the transfer of services in the period	Yes	Yes

} Difference between the GM and VFA

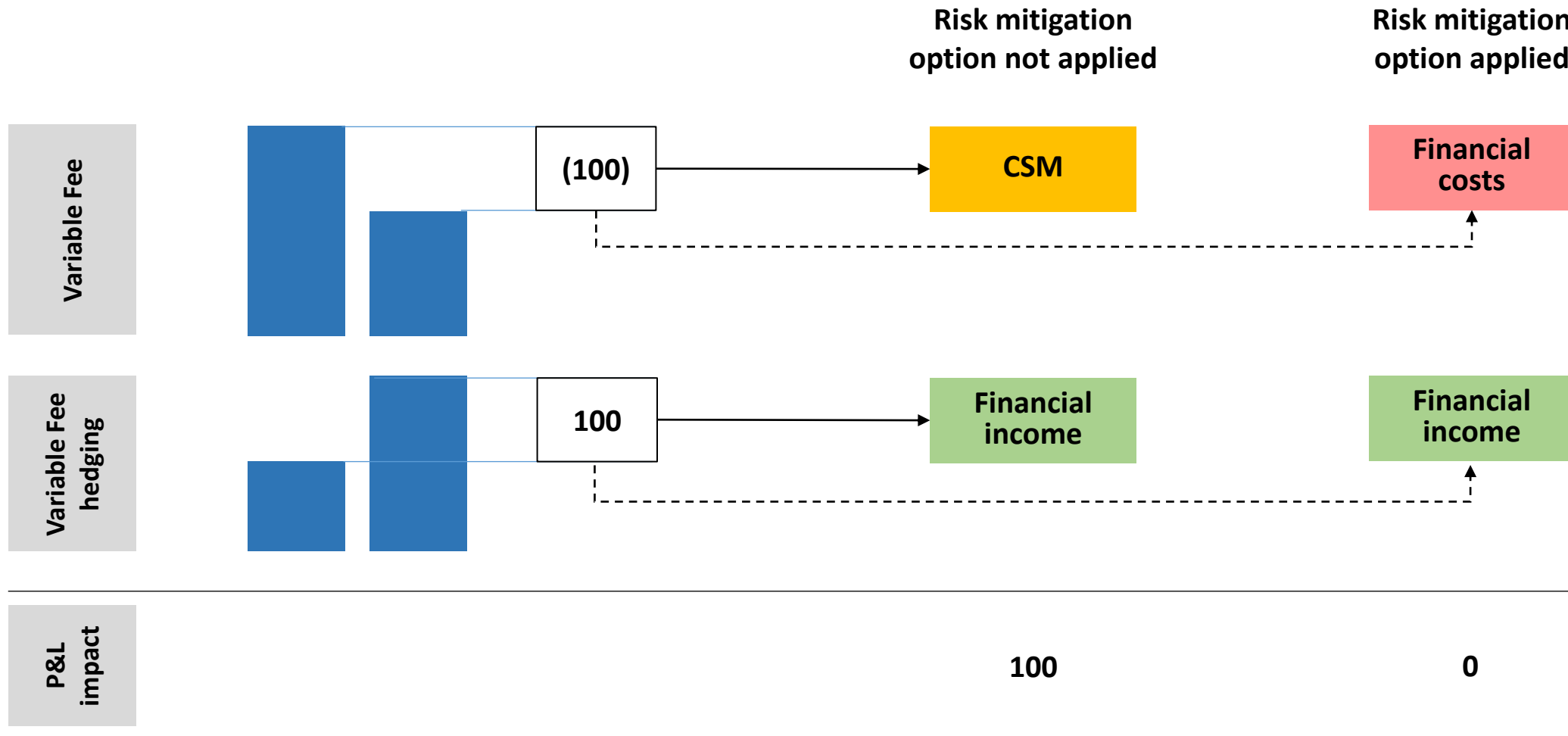
# Introduction to IFRS 17

## VFA - Differences compared to the GM

Area	General Model	Variable Fee Approach
Fulfilment cash flows	PV of Cash Flows + Risk Adjustment	Account value + Variable Fee + Risk Adjustment
Accreting interest on the CSM	Interest accreted, the related financial cost recognised in the income statement	No interest accretion on the CSM
Time value of money, variances in estimates of financial variables	Financial cost/income recognised in the income statement	<ol style="list-style-type: none"><li>1) Related to the policyholders' account (B104a) : financial cost/income recognized in the income statement</li><li>2) Not related to the policyholders' account (B104b) : allocated to the CSM except it is subject to a qualified hedging</li></ol>
Variances in estimates of non-financial variables	Measured at locked-in discount rates and accounted to the CSM	Measured at current discount rates and accounted to the CSM
Coverage period i.e. the period over with the CSM is amortised	Insurance services	Insurance and investment services

# Introduction to IFRS 17

## VFA – Risk Mitigation



### Product description

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- Single premium UL with a death benefit
- Policy term: 3 years
- Maturity benefit: fund value
- Surrender value: fund value
- Death benefit: 1.5% of the fund value
- Asset Management Charge (AMC): 5%

Single premium	1,000
Policy term	3 years
AMC	5%
Death benefit	150%
Maturity benefit	100%
Surrender value	100%

### Assumptions

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- Risk Adjustment assumed to be zero
- No estimate or experience variances
- Contract is not onerous
- AMC and expenses at the beginning of the year, all other cash flows at the end of the year
- Credit (liabilities and incomes) shown with minus
- Debits (assets and expenses) shown with plus
- No hedging qualifying as a risk mitigation under VFA
- One coverage unit delivered each year
- Future coverage units calculated on discounted basis

Expenses	10
Rete of return on assets	10%
Risk free discount rate	3%
Probability of death	1%
Lapses	20%



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## VFA - Example [2]



### Variable Fee Approach

Assets – Inv. Comp.	1	2	3	
<b>Opening b/ce</b>	<b>1,000.0</b>	<b>836.0</b>	<b>698.9</b>	
AMC	(50.0)	(41.8)	(34.9)	Bank acc.
Investment return	95.0	79.4	66.4	Financial income
Lapses	(209.0)	(174.7)	(146.1)	Liab. - Inv. Comp.
Maturity	-	-	(584.3)	Liab. - Inv. Comp.
<b>Closing b/ce</b>	<b>836.0</b>	<b>698.9</b>	-	

Death benefit	15.7	13.1	11.0
Expenses	10.0	10.0	10.0

Initial Fulfilment CF	1	2	3	Total
AMC (discounted @10%)	50.0	38.0	28.9	<b>116.9</b>
Death benefit (discounted @10%)	(14.3)	(10.8)	(8.2)	<b>(33.3)</b>
Expenses (discounted @3%)	(10.0)	(9.7)	(9.4)	<b>(29.1)</b>
<b>Variable Fee</b>				<b>54.4</b>
<b>Investment component</b>				<b>(1,000.0)</b>
<b>Insurance liability</b>				<b>(945.6)</b>

### General Model

Assets – Inv. Comp.	1	2	3	
<b>Opening b/ce</b>	<b>1,000.0</b>	<b>836.0</b>	<b>698.9</b>	
AMC	(50.0)	(41.8)	(34.9)	Bank account
Investment return	95.0	79.4	66.4	Financial income
Lapses	(209.0)	(174.7)	(146.1)	Fulfilment CF
Maturity	-	-	(584.3)	Fulfilment CF
<b>Closing b/ce</b>	<b>836.0</b>	<b>698.9</b>	-	

Death benefit	15.7	13.1	11.0
Expenses	10.0	10.0	10.0

Initial Fulfilment CF	1	2	3	Total
Death benefit (discounted @10%)	(14.3)	(10.8)	(8.2)	<b>(33.3)</b>
Lapses (discounted @10%)	(190.0)	(144.4)	(109.7)	<b>(444.1)</b>
Maturity (discounted @10%)	-	-	(439.0)	<b>(439.0)</b>
Expenses (discounted @3%)	(10.0)	(9.7)	(9.4)	<b>(29.1)</b>
<b>Insurance liability</b>				<b>(945.6)</b>



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## VFA - Example [3]

### Variable Fee Approach

Liability – Inv. Comp.	1	2	3	
<b>Opening b/ca</b>	<b>(1,000.0)</b>	<b>(836.0)</b>	<b>(698.9)</b>	
AMC	50.0	41.8	34.9	Variable Fee
Financial costs	(95.0)	(79.4)	(66.4)	Financial costs
Lapses	209.0	174.7	146.1	Assets - Inv. Comp.
Maturity	-	-	584.3	Assets - Inv. Comp.
<b>Closing b/ce</b>	<b>(836.0)</b>	<b>(698.9)</b>	-	

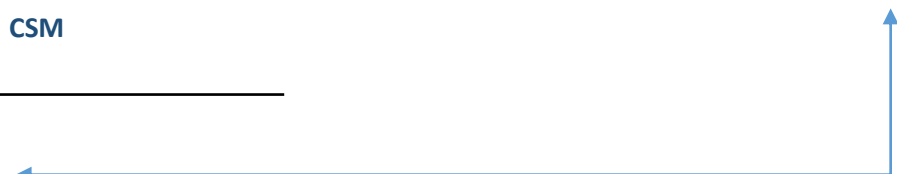
  

Variable Fee	1	2	3	
<b>Opening balance</b>	<b>54.4</b>	<b>32.9</b>	<b>15.0</b>	
AMC	(50.0)	(41.8)	(34.9)	Liab. - Inv. Comp.
Death benefit	15.7	13.1	11.0	Revenue
Expenses	10.0	10.0	10.0	Revenue
Share of FV changes	2.8	0.8	(1.0)	CSM
<b>Closing b/ce</b>	<b>32.9</b>	<b>15.0</b>	-	

Inv. Comp. + Var. Fee      (803.1)      (683.9)      -

### General Model

Fulfilment CF	1	2	3	
<b>Opening balance</b>	<b>54.4</b>	<b>(803.1)</b>	<b>(683.9)</b>	
Premium	(1,000)	-	-	Assets
Death benefit	15.7	13.1	11.0	Revenue
Expenses	10.0	10.0	10.0	Revenue
Lapses - surrender value	209.0	174.7	146.1	Assets
Maturity benefit	0.0	0.0	584.3	Assets
Discounting unwind	(92.2)	(78.6)	(67.4)	Financial costs
<b>Closing b/ce</b>	<b>(803.1)</b>	<b>(683.9)</b>	-	



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## VFA - Example [4]

### Variable Fee Approach

Coverage Units	1	2	3	
Coverage Units (CU)	1.00	1.00	1.00	
CU - discounted @3%	0.97	0.94	0.92	A
CU - disc. cumulative	2.83	1.86	0.92	B
Release to P&L	0.34	0.51	1.00	A/B

CSM	1	2	3	
Opening balance	(54.4)	(37.6)	(18.9)	
Share of FV change	(2.8)	(0.8)	1.0	Variable Fee
Release to P&L	19.6	19.5	17.9	Revenue
Closing b/ce	(37.6)	(18.9)	-	

### General Model

Coverage Units	1	2	3	
Coverage Units (CU)	1.00	1.00	1.00	
CU - discounted @3%	0.97	0.94	0.92	A
CU - disc. cumulative	2.83	1.86	0.92	B
Release to P&L	0.34	0.51	1.00	A/B

CSM	1	2	3	
Opening balance	(54.4)	(36.8)	(18.7)	
Interest	(1.6)	(1.1)	(0.6)	Financial cost
Release to P&L	19.2	19.2	19.2	Revenue
Closing b/ce	(36.8)	(18.7)	-	

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## VFA - Example [5]



### Variable Fee Approach

Income Statement	1	2	3	
Death benefit	(15.7)	(13.1)	(11.0)	Variable fee
Expenses	(10.0)	(10.0)	(10.0)	Variable fee
CMS amortisation	(19.6)	(19.5)	(17.9)	CSM
<b>Revenue</b>	<b>(45.3)</b>	<b>(42.6)</b>	<b>(38.9)</b>	
Death benefit	15.7	13.1	11.0	Bank acc
Expenses	10.0	10.0	10.0	Bank acc
<b>Insurance service cost</b>	<b>25.7</b>	<b>23.1</b>	<b>21.0</b>	
Financial income	(95.0)	(79.4)	(66.4)	Assets - Inv. Comp.
Financial costs	95.0	79.4	66.4	Liab - Inv. Comp.
Unwind of discount	-	-	-	-
Interest on CSM	-	-	-	-
<b>Financial result</b>	<b>-</b>	<b>-</b>	<b>-</b>	
<b>Gross result</b>	<b>(19.6)</b>	<b>(19.5)</b>	<b>(17.9)</b>	

### General Model

Income Statement	1	2	3	
Death benefit	(15.7)	(13.1)	(11.0)	Fulfilment CF
Expenses	(10.0)	(10.0)	(10.0)	Fulfilment CF
CMS amortisation	(19.2)	(19.2)	(19.2)	CSM
<b>Revenue</b>	<b>(44.9)</b>	<b>(42.3)</b>	<b>(40.2)</b>	
Death benefit	15.7	13.1	11.0	Bank acc
Expenses	10.0	10.0	10.0	Bank acc
<b>Insurance service cost</b>	<b>25.7</b>	<b>23.1</b>	<b>21.0</b>	
Financial income	(95.0)	(79.4)	(66.4)	Assets
Financial costs	-	-	-	
Unwind of discount	92.2	78.6	67.4	Fulfilment CF
Interest on CSM	1.6	1.1	0.6	CSM
<b>Financial result</b>	<b>(1.1)</b>	<b>0.3</b>	<b>1.6</b>	
<b>Gross result</b>	<b>(20.4)</b>	<b>(18.9)</b>	<b>(17.7)</b>	