

IFRS 17 & Solvency II Workshop

Presentation of IFRS 17 Results

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Agenda

Monday, 15 July

- Recap of IFRS 17 Background
- General Measurement Model
- Reinsurance Held and Contracts Acquired
- Considerations for the Implementation of IFRS 17

Tuesday, 16 July

- 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

Wednesday 17 July

- Quantitative Aspects of Solvency II (cont'd)
- Governance under Solvency II
- The Risk Management & Reporting Processes

Statement of profit or loss



Sample Income Statement

Notes:

1. Statement does not comply with IFRS 17
2. Written premiums include deposits
3. Written premiums and expenses correspond to each reporting year, but claims correspond to current and past reporting years
4. Reserve adjustments include the present value of future premiums
5. Insurance and investment earnings from insurance contracts are not separated

USD m	2018	2017
Revenue		
Gross written premiums	52,689	52,006
Premiums ceded to reinsurance	-8,255	-7,977
Net written premiums	44,434	44,029
Change in unearned premium reserve	-224	-79
Net earned premiums	44,210	43,950
Investment returns	1,914	18,913
Other income	1,056	1,099
Total Revenue	47,180	63,962
Claims and expenses		
Gross claims	33,483	34,894
Claims ceded to reinsurance	-5,837	-6,252
Claims net of reinsurance	27,646	28,642
Policyholder dividends	-2,736	12,984
Net acquisition expenses	8,565	9,039
Administrative expenses	7,761	7,212
Financial expenses	402	411
Interest accreted to policyholders	433	546
Total Claims and Expenses	42,071	58,834
Pre-tax income	5,109	5,128
Taxes	-1,132	-1,819
Net Income	3,977	3,309

IFRS 4 vs. IFRS 17

- IFRS 4 responds mostly to local accounting rules and it is not a global standard
- For comparison purposes, consider the following product:
 - Three-year endowment contract sold to 100 policyholders
 - Single premium of **150** per contract
 - The entity invests premium proceeds in fixed income instruments and allocates investment returns to policyholder individual accounts
 - In case of death, beneficiaries receive **170** or the individual account balance, whichever is largest
 - If the policyholder survives until the end of the coverage period, the account balance is paid
 - It is assumed that one policyholder will die in each of the three contract years

IFRS 4 vs. IFRS 17

IFRS 4	year 1	year 2	year 3	Total
Premiums	15,000	-	-	15,000
Claims and expenses	-170	-171	-18,080	-18,421
Change in reserves	-16,048	-744	16,792	-
Investment income	1,500	1,281	1,677	4,458
Profit / (loss)	282	366	389	1,037

IFRS 17	year 1	year 2	year 3	Total
Insurance revenue	320	339	386	1,045
Claims and expenses	-8	-	-	-8
Insurance result	312	339	386	1,037
Investment income	1,500	1,281	1,677	4,458
Insurance finance expenses	-1,500	-1,281	-1,677	-4,458
Insurance finance expenses	-	-	-	-
Profit / (loss)	312	339	386	1,037

Statement of profit or loss

- Group of non-onerous contract (without attribution to the loss component)

item	year 1	year 2	year 3	year 4	year 5
Closing balance of the insurance contract liability	-823.38	-620.92	-425.55	-217.19	-
Opening balance of the insurance contract liability	-	823.38	620.92	425.55	217.19
Insurance finance expenses	46.25	38.17	29.05	20.03	10.36
Inflows	1,000.00	-	-	-	-
Investment component	-70.00	-70.00	-70.00	-70.00	-70.00
Insurance revenue for the remaining coverage	152.87	170.63	154.41	158.38	157.55
Insurance service expenses	-80.00	-70.00	-60.00	-60.00	-60.00
Insurance service result	72.87	100.63	94.41	98.38	97.55
Insurance finance expenses	-46.25	-38.17	-29.05	-20.03	-10.36
Profit / (loss)	26.62	62.46	65.37	78.36	87.19

Statement of financial position



IFRS 4 vs. IFRS 17

IFRS 4

ASSETS

Reinsurance contract assets

Deferred acquisition costs

Value of in-force business

Premiums receivable

Policy loans

LIABILITIES

Insurance contract liabilities

Unearned premiums

Claims payable

IFRS 17

ASSETS

Reinsurance contract assets

Insurance contract assets

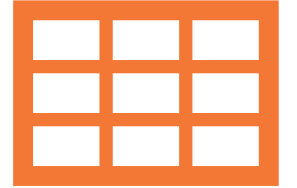
LIABILITIES

Insurance contract liabilities

Reinsurance contract liabilities

Main changes in the liabilities

- Groups of insurance (or reinsurance) contracts that are in an asset position presented separately from groups of insurance (or reinsurance) contracts that are in a liability position
- Included in the measurement of liabilities are
 - Acquisition cost cash flows
 - Premiums receivable
 - Unearned premiums



Presentation of insurance revenue



Elements of the insurance revenue

Insurance revenue Paragraphs 83 and B120—B127	<ul style="list-style-type: none">• Premiums paid to the entity adjusted for<ul style="list-style-type: none">– Adjusted for a financing effect and– Excluding any investment components
Insurance service expenses Paragraphs 84 and 103(b)	<ul style="list-style-type: none">• Insurance service expenses include<ul style="list-style-type: none">– incurred claims (excluding investment components)– expenses related to the incurred claims– amortization of insurance acquisition cash flows– changes that relate to past service, ie changes in fulfilment cash flows related to the liability for incurred claims– changes that relate to future service, ie losses on onerous groups of contracts and reversals of such losses
Investment components Paragraph 85	<ul style="list-style-type: none">• Amounts that an insurance contract requires the entity to repay to a policyholder even if an insured event does not occur• Insurance revenue and insurance expenses shall exclude any investment components

Analysis of the insurance contract liability

$$\begin{array}{|c|} \hline \text{Opening balance} \\ \hline \text{of liabilities} \\ \hline \end{array} - \begin{array}{|c|} \hline \text{Insurance} \\ \hline \text{revenue} \\ \hline \end{array} + \begin{array}{|c|} \hline \text{Insurance} \\ \hline \text{service expenses} \\ \hline \end{array} + \begin{array}{|c|} \hline \text{Investment} \\ \hline \text{components} \\ \hline \end{array} + \begin{array}{|c|} \hline \text{Cash flows} \\ \hline \end{array} = \begin{array}{|c|} \hline \text{Closing balance} \\ \hline \text{of liabilities} \\ \hline \end{array}$$

These components shall be explicitly identified and shall be assigned to the following accounts, as appropriate:

$$\begin{array}{|l} \hline \text{Liabilities for remaining coverage} \\ \hline \bullet \text{ Excluding loss component and} \\ \hline \bullet \text{ Loss component} \\ \hline \end{array} + \begin{array}{|c|} \hline \text{Liabilities for incurred claims} \\ \hline \end{array} = \begin{array}{|c|} \hline \text{Insurance liabilities} \\ \hline \end{array}$$

Notes to the financial statements



Summary of paragraph 100

An entity shall disclose reconciliations from the opening to the closing balance separately for

- a) net liabilities (or assets) for the remaining coverage, excluding any loss component
- b) any loss component
- c) liabilities for incurred claims. For contracts for which the PAA has been applied
 - i. the estimates of the present value of future cash flows
 - ii. the risk adjustment for non-financial risk

Reconciliation of first year

Assumptions:

- The entity does not change assumptions with respect to the future
- There are no new contracts in the group
- Cash flows emerge as expected

item	pv cash flows	risk adjustment	CSM	insurance liabilities
Opening balance	-	-	-	-
Changes related to future service: new contracts	-350.58	75.00	275.58	-
Inflows	1,000.00			1,000.00
Insurance finance expenses	32.47		13.78	46.25
Changes related to current service	-	-15.00	-57.87	-72.87
Outflows	-150.00			-150.00
Closing balance	531.89	60.00	231.49	823.38

Cf. Example 1

Analysis of insurance liabilities of the first year

- Group of non-onerous contract (without attributions to loss components)
- Investment component is assumed to be 70

item	remaining coverage	loss component	incurred claims	insurance liability
Opening balance	-	-	-	-
Inflows	1,000.00	-	-	1,000.00
Insurance revenue	<u>-152.87</u>	-	-	-152.87
Insurance service expenses	-	-	80.00	80.00
Investment components	-70.00	-	70.00	-
Insurance finance expenses	46.25	-		46.25
Outflows	-	-	-150.00	-150.00
Closing balance	823.38	-	-	823.38

Calculation of the insurance revenue for the remaining coverage

- Group of non-onerous contract (without attributions to loss components)
- Investment component is assumed to be 70

item	year 1
Closing balance of liabilities	-823.38
Opening balance of liabilities	-
Insurance finance expenses	46.25
Inflows	1,000.00
Investment components	-70.00
Insurance revenue for the remaining coverage	152.87

Exercise 9

For the group of non-onerous insurance contracts of the previous illustrative example assume:

- outflows at the end of the second year were really 140, and the entity decided to establish outflows at 130 for years 3–5;
- the risk adjustment for non-financial risk becomes 40, 25 and 10 for years 3–5, respectively; and
- the investment component is in the amount of 70

Perform the analysis of the insurance liability for the second year, including disclosure of the insurance revenue for the remaining coverage.

Analysis of insurance liabilities of the second year

- Group of non-onerous contract (without attributions to loss components)
- Investment component is assumed to be 70

item	remaining coverage	loss component	incurred claims	insurance liability
Opening balance	823.38	-	-	823.38
Inflows	-	-	-	-
Insurance revenue	-170.63	-	-	-170.63
Insurance service expenses	-	-	70.00	70.00
Investment components	-70.00	-	70.00	-
Insurance finance expenses	38.17	-	-	38.17
Outflows	-	-	-140.00	-140.00
Closing balance	620.92	-	-	620.92

Calculation of the insurance revenue for the remaining coverage

- Group of non-onerous contract (without attributions to loss components)
- Investment component is assumed to be 70

item	year 1	year 2
Closing balance of the insurance liability	-823.38	-620.92
Opening balance of the insurance liability	-	823.38
Insurance finance expenses	46.25	38.17
Inflows	1,000.00	-
Investment components	-70.00	-70.00
Insurance revenue for the remaining coverage	152.87	170.63

Statement of profit or loss

- Group of non-onerous contract (without attributions to loss components)
- Investment component is assumed to be 70

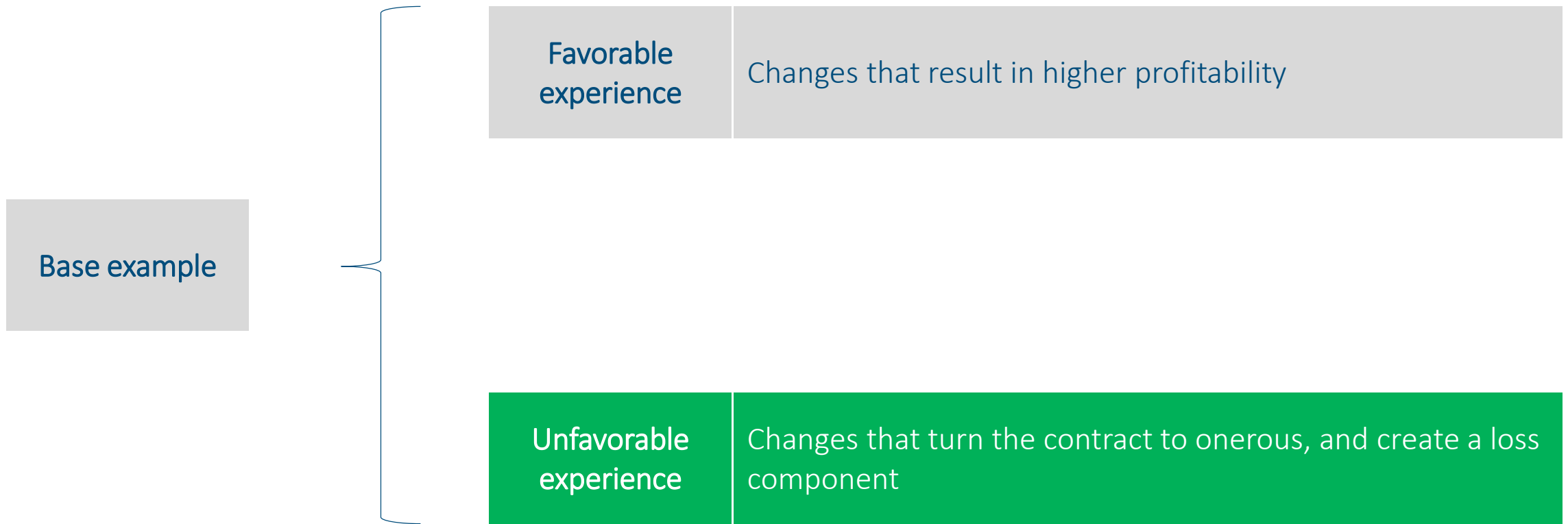
item	year 1	year 2	year 3	year 4	year 5
Closing balance of the insurance liability	-823.38	-620.92	-425.55	-217.19	-
Opening balance of the insurance liability	-	823.38	620.92	425.55	217.19
Insurance finance expenses	46.25	38.17	29.05	20.03	10.36
Inflows	1,000.00	-	-	-	-
Investment components	-70.00	-70.00	-70.00	-70.00	-70.00
Insurance revenue for the remaining coverage	152.87	170.63	154.41	158.38	157.55
Insurance service expenses	-80.00	-70.00	-60.00	-60.00	-60.00
Insurance service result	72.87	100.63	94.41	98.38	97.55
Insurance finance expenses	-46.25	-38.17	-29.05	-20.03	-10.36
Profit / (loss)	26.62	62.46	65.37	78.36	87.19

Summary of paragraph 49

An entity shall establish a loss component of the liability for remaining coverage for an onerous group depicting the losses recognized after applying paragraphs 47—48.

The loss component determines the amounts that are presented in profit or loss as reversals of losses of onerous groups and are consequently excluded from the determination of insurance revenue.

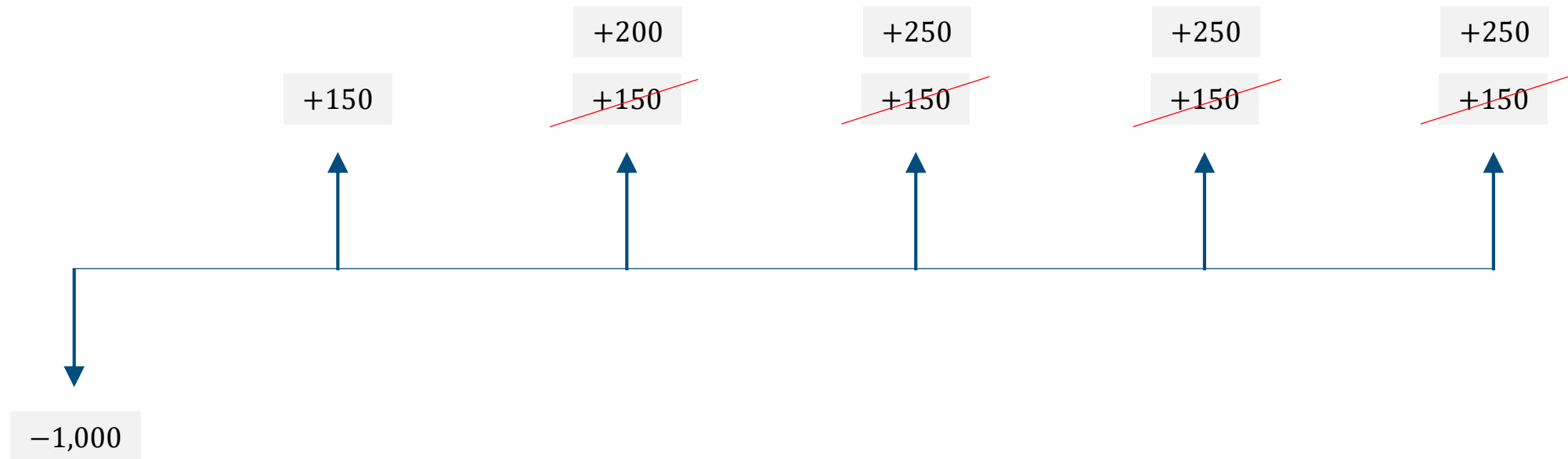
Layout



Subsequent measurement—unfavorable changes to cash flows

Assumptions:

- At the end of the second year, outflows were really 200, and the entity decides to recalculate future outflows at 250 for years 3—5
- The risk adjustment for non-financial risk is set at 50, 35 and 20 for years 3—5, respectively



Reconciliation of the second year

Assumptions:

- At the end of the second year, outflows were really 200, and the entity decides to recalculate future outflows at 250 for years 3—5
- The risk adjustment for non-financial risk is set at 50, 35 and 20 for years 3—5, respectively

item	pv cash flows	risk adjustment	CSM	insurance liability
Opening balance	531.89	60.00	231.49	823.38
Changes related to future service	272.32	5.00	-243.06	34.26
Inflows	-	-	-	-
Insurance finance expenses	26.59	-	11.57	38.17
Changes related to current service	50.00	-15.00	-	35.00
Outflows	-200.00	-	-	-200.00
Closing balance	680.81	50.00	0.00	730.81

- Given that the contract becomes onerous, the closing balance of the CSM is zero
- The entity recognizes immediately an insurance liability of 730.81

Analysis of the insurance liability of the second year

- **Onerous** group of contracts, for which a loss component is identified
- The investment component is assumed to be 70

item	remaining coverage	loss component	incurred claims	insurance liability
Opening balance	823.38	-	-	823.38
Inflows	-	-	-	-
Insurance revenue	<u>-95.00</u>	-	-	-95.00
Insurance service expenses	-	34.26	130.00	164.26
Investment components	-70.00	-	70.00	-
Insurance finance expenses	38.17	-	-	38.17
Outflows	-	-	-200.00	-200.00
Closing balance	696.55	34.26	-	730.81

Calculation of the insurance revenue for the remaining coverage

- Onerous group of contracts, for which a loss component is identified
- The investment component is assumed to be 70

item	year 2
Closing balance of the insurance liability	-730.81
Opening balance of the insurance liability	823.38
Insurance service expenses	34.26
Insurance finance expenses	38.17
Inflows	-
Investment components	-70.00
Insurance revenue for the remaining coverage	95.00

Calculation of insurance expenses for the remaining coverage

- **Onerous** group of contracts, for which a loss component is identified
- The investment component is assumed to be 70

Insurance service expenses related to future service	year 2
Present value of cash flows (recalculated)	680.81
Present value of cash flows (original)	-408.49
Risk adjustment for non-financial risk (recalculated)	50.00
Risk adjustment for non-financial risk (original)	-45.00
Contractual service margin	-243.06
Insurance service expenses related to future service	34.26

Analysis of the insurance liability of the third year

- **Onerous** group of contracts, for which a loss component is identified
- The investment component is assumed to be 70

item	remaining coverage	loss component	incurred claims	insurance liability
Opening balance	696.55	34.26	-	730.81
Inflows	-	-	-	-
Insurance revenue	-180.93	-	-	-180.93
Insurance service expenses	-	-14.07	180.00	165.93
Investment components	-70.00	-	70.00	-
Insurance finance expenses	32.44	1.60	-	34.04
Outflows	-	-	-250.00	-250.00
Closing balance	478.06	21.79	-	499.85

Calculation of insurance expenses for the remaining coverage

- **Onerous** group of contracts, for which a loss component is identified
- The investment component is assumed to be 70

item	year 3
Closing balance of the insurance liability	-499.85
Opening balance of the insurance liability	730.81
Insurance service expenses	-14.07
Insurance finance expenses	34.04
Inflows	-
Investment components	-70.00
Insurance revenue for the remaining coverage	180.93

Determination of the insurance service expenses:

Outflows (recalculated), $A = 250.00$

Risk adjustment (recalculated), $B = 50.00$

Loss component, $C = 34.26$

Opening balance of the insurance liability (without loss component), $D = 696.77$

For the third year, insurance service expenses are calculated as $14.07 = (A + B) \frac{C}{C+D}$, because the loss was already recognized in the second year

Exercise 10

Following a similar reasoning, how can the loss component of the insurance finance expenses be calculated?

item	remaining coverage	loss component	incurred claims	insurance liability
Opening balance	696.55	34.26	-	730.81
Inflows	-	-	-	-
Insurance revenue	-180.93	-	-	-180.93
Insurance service expenses	-	-14.07	180.00	165.93
Investment components	-70.00	-	70.00	-
Insurance finance expenses	32.44	1.60	-	34.04
Outflows	-	-	-250.00	-250.00
Closing balance	478.06	21.79	-	499.85

Calculation of insurance finance expenses

Knowing that insurance finance expenses were 34.04, a loss component is calculated using the following proportion:

$$34.04 \cdot \frac{34.26}{(696.55 + 34.26)} = 1.60$$

item	remaining coverage	loss component	incurred claims	insurance liability
Opening balance	696.55	34.26	-	730.81
Inflows	-	-	-	-
Insurance revenue	-180.93	-	-	-180.93
Insurance service expenses	-	-14.07	180.00	165.93
Investment components	-70.00	-	70.00	-
Insurance finance expenses	32.44	1.60	-	34.04
Outflows	-	-	-250.00	-250.00
Closing balance	478.06	21.79	-	499.85



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