

Financial accounting module 24: Reconciliation exhibits

(The attached PDF file has better formatting.)

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(The final exam problems for module 24 of the financial accounting VEE on-line course are based on the six illustrations in this discussion forum posting. You are not responsible for the end-notes, which cite the text of IFRS 17.)

We show the fulfilment cash flows, contractual service margin, insurance finance expense, insurance service expense, and insurance revenue for a series of six scenarios. For each scenario, we show the reconciliations

of the insurance contract liabilities. The six scenarios are simple; other illustrations in this textbook are more complex, but they use the same principles.

The first three scenarios have a one-year coverage period, but they use the general measurement model, not the premium allocation approach. The one-year coverage period is a heuristic simplification to ensure that the concepts are clear. Tracking the loss component of the liability for remaining coverage, determining insurance revenue, and allocating the amortized acquisition expenses are difficult for multi-year insurance contracts with incurred claims each year and revisions of the estimates. We show one year insurance contracts, two-year insurance contracts with one claim, three-year insurance contracts with multiple claims and revisions of the estimates, and five-year insurance contracts with multiple claims, revisions of the estimates, and declining coverage units as deaths occur.

The three scenarios show three relations of premiums to claims and other expenses:

- The premium equals the nominal value of claims and other expenses, so the insurance service result plus the insurance finance expense is zero. The insurer's profit is the investment yield on the financial assets bought with the premium.
- The premium is more than the nominal value of the claims and other expenses, so the insurance service result plus the insurance finance expense is positive. The estimated claim is lower than in the previous scenario, so all the accounting entries change, but the procedures are the same.
- The estimated claim is large enough that the insurance contracts are onerous at initial recognition. The insurer must estimate and track the loss component of the liability for remaining coverage, but the tracking is easy for the one-year coverage period.

The next three scenarios have two-year coverage periods. The reconciliation of the insurance contract liability, the determination and analysis of the insurance revenue, and the tracking of the loss component of the liability for remaining coverage fully explained, since the same procedures are used for the more complex scenarios in other chapters of this textbook.

IFRS 17 requires insurers to disclose the reconciliations of the insurance contract liability, the determination and analysis of insurance revenue, and the loss component of the liability for remaining coverage for the aggregate business of the insurer (sub-divided by insurance contracts issued vs reinsurance contracts held and by contracts in an asset position vs contracts in a liability position). But the reconciliations and the other disclosures use parameters specific to the group of insurance contracts, so they are formed separately for each group and summed for presentation in the financial statements.

SCENARIO #1: CLAIM OF 80, ONE-YEAR COVERAGE PERIOD

An insurer issues a one-year contract on January 1, 20X1, which it measures by the general measurement model (not by the premium allocation approach).

- On January 1, 20X1, premium of 100 is received and acquisition cash flows of 20 are paid.
- A claim is expected to occur and be paid for 80 on December 31, 20X1.
- The discount rate is 6% *per annum*.
- The risk adjustment for non-financial risk is 2.00, and it does not accrete interest.

The present value of future cash flows at initial recognition is $-100 + 20 + 80 / 1.06^1 = -4.53$.

The fulfilment cash flows at initial recognition (including the risk adjustment for non-financial risk) are $-100 + 20 + 80 / 1.06^1 + 2.00 = -2.53$.

The contractual service margin at initial recognition is the negative of the fulfilment cash flows at initial recognition but not less than zero, or 2.53.

The insurance contract liability at initial recognition is $-2.53 + 2.53 = 0.00$. For non-onerous contracts, the insurance contract liability at initial recognition is zero.

The present value of future cash flows after the premium is received and the acquisition cash flows are paid is $80 / 1.06^1 = 75.47$. The risk adjustment for non-financial risk is 2.00, so the fulfilment cash flows after the premium is received and the acquisition cash flows are paid is $75.47 + 2.00 = 77.47$.

The text of IFRS 17 does not specify how to amortize the acquisition cash flows over the coverage period. We follow here illustrations 1 and 2 in the IFRS 17 *Effects Analysis* pages 117-120, which assume the allocated acquisition expenses are amortized at the IFRS 17 discount rate to the end of each accounting period.¹ The coverage period here is one year, so the allocated acquisition expenses for the year are $20 \times 1.06 = 21.20$.

Progression of the insurance contract liabilities

We show the reconciliation of the insurance contract liability required by paragraph 100, which is called the “Progression of the insurance contract liabilities for remaining coverage and for incurred claims” in the IFRS 17 *Effects Analysis*.

We show the completed exhibit and then explain the entries. IFRS 17 paragraph 103 lists the required entries, though the format of the exhibit is not prescribed. Lines with all zero entries (except for the opening and closing balances) need not be shown, though they are included in the exhibits here.²

Progression of the insurance contract liabilities for remaining coverage and for incurred claims

	<i>Liabilities for Remaining Coverage</i>		<i>Liabilities for Incurred Claims</i>	<i>Total</i>
	<i>Excluding Loss Component</i>	<i>Loss Component</i>		
Insurance contract liabilities 20X0	0.00	0.00	0.00	0.00
Insurance revenue	(105.88)			(105.88)
Insurance service expenses	21.20	0.00	80.00	101.20
Incurred claims and other expenses		0.00	80.00	80.00
Acquisition expenses	21.20			21.20
Related to future service (onerous contracts)		0.00		0.00
Related to past service (incurred claims)			0.00	0.00
Investment components	0.00		0.00	0.00
Insurance service result	(84.68)	0.00	80.00	(4.68)
Insurance finance expenses	4.68	0.00	0.00	4.68
Change in comprehensive income	(80.00)	0.00	80.00	0.00
Cash flows				
Premiums received	100.00			100.00
Claims and other expenses paid			(80.00)	(80.00)
Acquisition cash flows paid	(20.00)			(20.00)
Total cash flows	80.00	0.00	(80.00)	0.00
Insurance contract liabilities 20X1	0.00	0.00	0.00	0.00

The opening balances in the reconciliation exhibits are the closing balances from the preceding year. For this illustration, the insurer issues its first contract on January 1, 20X1, so the opening balances (the insurance contract liabilities on December 31, 20X0) are zero for all columns.

Insurance service expenses

The amortized acquisition expenses of 21.20 are shown as a line item under insurance service expenses on the reconciliation of the insurance contract liability required by paragraph 100. They are also included in the insurance revenue, though they are not shown as a separate line item there.

The incurred claim at the end of the year of 80 is shown as a line item under insurance service expenses on the reconciliation of the insurance contract liability required by paragraph 100. It is also included in the insurance revenue, though it is not shown as a separate line item there.

The insurance revenue for the insurance services provided is the value of the claim when it occurs, not the present value of the claim when the premium is received.

- Under U.S. GAAP, the revenue for long duration insurance contracts is the premium, and it is recognized when the premium is due.
- Under IFRS 17, revenue is recognized when the insurance services are provided, so the revenue is the accumulated value of the premium at the date the claim occurs.

Insurance finance expenses

The insurance finance expense on the present value of future cash flows is $80 \times (1.06^0 - 1.06^{-1}) = 4.53$. Since the discount rate does not change during the year, we can compute this as $75.47 \times 6\% = 4.53$ as well.

The insurance finance expense on the contractual service margin is $2.53 \times 6\% = 0.15$.

The computation of the insurance finance expense differs for the present value of future cash flows vs the contractual service margin.

- *Present value of future cash flows*: the insurance finance expense is the difference in the present value from the beginning to the end of the year using the current discount rate at each date. We show the effect of a change in the discount rate in the multi-year illustrations.
- *Contractual service margin*: the insurance finance expense is the accretion of interest at the discount rate determined at initial recognition. A change in the discount rate from the beginning to the end of the year does not affect the insurance finance expense on the contractual service margin.

The total insurance finance expense is $4.53 + 0.15 = 4.68$.

Insurance revenue

The insurance revenue is determined as³

- the change in the insurance contract liability for remaining coverage excluding the loss component
- the amortized and allocated acquisition expenses for the year
- the insurance finance expense
- the investment component (zero in these illustrations)
- the net premium cash flows (gross premium minus acquisition cash flows)

For this illustration of a one-year insurance contract, the insurance contract liability is zero for both the opening balances (at the beginning of the year) and the closing balances (at the end of the year). This illustration has no investment component: that is, no payments are made to policyholders if no insured event occurs. Many long duration insurance contracts with policyholder account balances have investment components that are paid to policyholders even if no insured event (no death) occurs and are not included in insurance service expenses or insurance revenue.

For the liability for remaining coverage excluding the loss component, the insurance revenue equals

- (0 – 0) (change in the liability for remaining coverage excluding the loss component)
- 21.20 (amortized and allocated acquisition expenses)
- 4.68 (insurance finance expense)
- (100 – 20) (gross premium minus acquisition cash flows)
- = (0 – 0) – 21.20 – 4.68 – (100 – 20) = -105.88

We explain the rationale for each part of the expression for insurance revenue:

Insurance revenue relates only to the liability for remaining coverage excluding the loss component. Changes in the loss component of the liability for remaining coverage and the liability for incurred claims are recognized immediately in profit or loss and do not affect insurance revenue. The total insurance contract liability is

- the liability for remaining coverage excluding the loss component
- + the loss component of the liability for remaining coverage
- + the liability for incurred claims

The insurance revenue reported under the total insurance contract liability equals the insurance revenue reported under the liability for remaining coverage excluding the loss component. If the contracts are onerous, the insurance service *expenses* for the total insurance contract liability include changes reported under the loss component of the liability for remaining coverage, but these changes are deducted from the insurance revenue.⁴

Net premium cash flows (gross premium minus acquisition cash flows) raise the insurance contract liability but are not insurance revenue, so they are subtracted from the expression for the insurance revenue.

- If policyholders pay 100 more premium (with no change in expected claims), the insurance contract liability increases 100 but the insurance revenue does not change.
 - The 100 extra premium is recognized as insurance revenue over the coverage period as the allocation of the contractual service margin to profit or loss. The insurance contract liability decreases because the insurer recognizes insurance revenue, not because the insurer receives a cash inflow.
- If the insurer pays 100 more acquisition cash flows, the insurance contract liability decreases 100, but if the allocated acquisition expenses do not change, the insurance revenue does not change.
 - For example, if the insurer pays 100 more acquisition cash flows in 20X1 but $100 \times (1 + \text{the risk-free rate})$ less acquisition cash flows in 20X2, the allocated acquisition expenses for 20X1 and 20X2 do not change so the insurance revenue in each year does not change, even though the acquisition cash flows in 20X1 and 20X2 change.

Insurance revenue includes the allocated acquisition expenses, not the acquisition cash flows. Expenses are positive entries here and revenue is a negative entry, so we subtract the allocated acquisition expenses to derive the insurance revenue. The allocated acquisition expenses are also reported as insurance service expenses, so they do not affect the insurance contract liability, even though they affect insurance revenue.

Insurance finance expenses increase the insurance contract liability but are not part of insurance revenue (or of insurance service expenses), so we subtract the insurance finance expenses to derive insurance revenue.

Illustration: Premium of $100 / 1.06 = 94.34$ is received on January 1, 20X1, a claim for 100 occurs and is paid on December 31, 20X1, the discount rate is 6% *per annum*, acquisition cash flows are zero, and the risk adjustment for non-financial risk is zero. The insurance contract liability is zero on December 31, 20X0, before the contract is issued, and on December 31, 20X1, after the contract expires and the claim is paid. The insurance finance expense in 20X1 is $100 \times (1.06^0 - 1.06^{-1}) = 5.66$. The insurance revenue is the change in the insurance contract liability minus the premium cash flow minus the insurance finance expenses =

$$(0 - 0) - 94.34 - 5.66 = -100.00 \text{ (a negative entry means revenue),}$$

which is the premium accumulated for the time value of money until the claim occurs. If the discount rate is 8% and the premium is $100 / 1.08 = 92.59$, the insurance finance expense is $100 \times (1.08^0 - 1.08^{-1}) = 7.41$, and the insurance revenue is $(0 - 0) - 92.59 - 7.41 = -100.00$.

Insurance revenue is the consideration to which the entity expects to be entitled for insurance services. The consideration is the premium accumulated for the time value of money from the time it is received until the time the insurance services are provided.⁵ The consideration covers insurance service expenses, the risk adjustment for non-financial risk, the contractual service margin, and the allocated acquisition cash flows.⁶

Insurance revenue pieces

Insurance revenue is analyzed as the sum of four parts (see also the exhibit below called analysis of insurance revenue):

- incurred claims and other expenses, such as claim adjusting expenses, for which the insurer expects to receive consideration (excluding amounts in the loss component of the liability for remaining coverage)
- amortized acquisition expenses allocated to the period
- release of the risk adjustment for non-financial risk
- allocation of the contractual service margin to profit or loss

Insurance revenue includes the portion of the incurred claim for which the insurer expects to receive consideration, or the part covered by the premium accumulated to the date the claim occurs, not the part in the loss component of the liability for remaining coverage. In this illustration, the insurance contract is not onerous, so the entire incurred claim is covered by the premium.

The accretion of interest on the contractual service margin is $2.53 \times 6\% = 0.15$, and the contractual service margin at the end of the year is $2.53 + 0.15 = 2.68 = 2.53 \times 1.06$.) The allocation of the contractual service margin to the year is 2.68, as the coverage period is only one year.

The release of the risk adjustment for non-financial risk is 2.00, since it did not accrete interest.

The insurance revenue for the year =

$$\begin{aligned} & -80 \text{ (incurred claims)} \\ + & -21.20 \text{ (amortized acquisition expenses)} \\ + & -2.00 \text{ (release of the risk adjustment for non-financial risk)} \\ + & -2.68 \text{ (allocation of the contractual service margin to profit or loss)} \\ = & -80 + -21.20 + -2.00 + -2.68 = -105.88. \end{aligned}$$

Insurance revenue is earned only on the liability for remaining coverage excluding the loss component. Any changes for the loss component of the liability for remaining coverage and in the liability for incurred claims are insurance service expenses (for increases in the liability) or insurance service contra-expenses (for decreases in the liability), and are recognized immediately in the statement of profit or loss.

Revenues are negative entries, so insurance revenue is -105.88, under the liability for remaining coverage excluding the loss component.

The insurance revenue is the accumulated premium when the claims are paid. Of the premium received, the risk adjustment for non-financial risk of 2.00 does not accrete interest and the remaining premium of 98.00 accretes interest, so the accumulated premium is $98.00 \times 1.06 + 2.00 = 105.88$. The acquisition cash flows accrete interest to derive the amortized acquisition expenses. The acquisition cash flows are paid when the premium is received on January 1, so they do not earn investment income and they do not cause insurance finance expenses; their accretion of interest is for the amortization of allocated acquisition expenses only.⁷

Insurance service result

The insurance service expenses are reported as

- Incurred claims: 80 under liability for incurred claims
- Acquisition expenses: 21.20 under liability for remaining coverage excluding the loss component

Both entries are positive, indicating expenses, and both entries offset insurance revenue entries of the same size. If the insurance contracts are onerous, the insurance service expense for incurred claims would exceed the insurance revenue (the premium the insurer expects to receive in consideration for the claims).

The insurance service result shows

- liability for remaining coverage excluding the loss component: $-105.88 + 21.20 = -84.68$
- liability for incurred claims: 80.00

The total insurance service result is $-84.68 + 80.00 = -4.68$, which is

- the revenue for the release of the risk adjustment for non-financial risk: -2.00
- + the allocation of the accumulated contractual service margin: -2.68

The insurance finance expense is 4.68, so the profit or loss is $-4.68 + 4.68 = 0.00$ in this illustration, because the net premium (the premium received minus the acquisition cash flows paid) at the beginning of the year equals the claim incurred and paid at the end of the year. If the net premium does not equal the claim incurred and paid at the end of the year, the profit or loss from the insurance contracts is not zero. The other scenarios for this illustration, with claims of 70 and 90, show the effects when the net premium is more than or less than the claim.

- The insurance service result is the unearned profit at the beginning of the year (2.53) plus the risk adjustment for non-financial risk (2.00) accumulated to the end of the year [$2.53 \times 1.06 + 2.00 = 4.68$].
- The total insurance finance expense is $80 \times (1 - 1.06^{-1}) + 2.53 \times 6\% = 4.68$, which offsets the insurance service result in this scenario.

The insurer's profit in this scenario is the investment income on the cash received (the net premium) at the beginning of the year.

Net financial result

The profit or loss in the computation above does *not* include the investment income on the underwriting cash flows. The insurer reports a net financial result on the statement of comprehensive income, which is the investment income on the underwriting cash flows minus the insurance finance income or expense on the IFRS 17 exhibits.⁸

- If the investment yield on the financial assets bought with the underwriting cash flows is 6% *per annum*, the investment income is $6\% \times (100 - 20) = 4.80$, the net financial result is $-4.80 + 4.68 = -0.12$ (the negative entry is a net revenue), and the profit or loss is $-4.68 + -0.12 = -4.80$, which is the investment income on the net premium.
- If the investment yield on the financial assets bought with the underwriting cash flows is 8% *per annum*, the investment income is $8\% \times (100 - 20) = 6.40$, the net financial result is $-6.40 + 4.68 = -1.72$ (the negative entry is a net revenue), and the profit or loss is $-4.68 + -1.72 = -6.40$.

The net financial result and the total profit or loss and total comprehensive income are illustrated in the IFRS 17 *Effects Analysis*, not in the IFRS 17 *Illustrative Examples*.

Movements in insurance contract liabilities analyzed by components

We show the reconciliation of the insurance contract liability required by paragraph 101, which is called the *movements in insurance contract liabilities analyzed by components* in the IFRS 17 *Effects Analysis*. The components are

- The present value of future cash flows, whether the insurance contracts are onerous or non-onerous and whether the claims have occurred or have occurred but not yet been paid.
- The risk adjustment for non-financial risk, whether the insurance contracts are onerous or non-onerous and whether the claims have occurred or have occurred but not yet been paid.

- The contractual service margin, which applies only to non-onerous contracts before the claims occur.

The reconciliation of the insurance contract liability required by paragraph 101 uses the columns in the matrix below; the reconciliation of the insurance contract liability required by paragraph 100 uses the rows. The contractual service margin applies only to the liability for remaining coverage excluding the loss component, so the two cells of the matrix marked by an “X” do not have entries.

	present value of future cash flows	risk adjustment for non-financial risk	contractual service margin
liability for remaining coverage excluding the loss component	✓	✓	✓
loss component of the liability for remaining coverage	✓	✓	X
liability for incurred claims	✓	✓	X

- The cells under the column titled “present value of future cash flows” show insurance finance expense and insurance service expense.
- The cells under the column titled “risk adjustment for non-financial risk” show insurance service expense and may or may not show insurance finance expense (at the option of the insurer).
- The cells under the column titled “contractual service margin” show insurance finance expense but not insurance service expense.
- Insurance revenue, premium cash flows, and acquisition cash flows apply only to the liability for remaining coverage excluding the loss component.
- Claim cash flows apply only to the liability for incurred claims.

We show the reconciliation of the insurance contract liability required by paragraph 101 and then explain the entries. The format of the exhibit is not prescribed by IFRS 17, though the required entries are listed in IFRS 17 paragraph 104.⁹

Movements in insurance contract liabilities analyzed by components

	present value of future cash flows	risk adjustment	contractual service margin	total
Insurance contract liabilities 20X0	0.00	0.00	0.00	0.00
Changes that relate to current service	0.00	(2.00)	(2.68)	(4.68)
CSM recognized for service provided			(2.68)	(2.68)
Risk adjustment recognized for the risk		(2.00)		(2.00)
Experience adjustments	0.00			0.00
Changes that relate to future service	(4.53)	2.00	2.53	0.00
Contracts initially recognized in the period	(4.53)	2.00	2.53	0.00
Changes in estimates reflected in the CSM	0.00	0.00	0.00	0.00
Changes in estimates: onerous contract	0.00	0.00		0.00
Changes that relate to past service	0.00	0.00	0.00	0.00
Adjustments to liabilities for incurred claims	0.00	0.00		0.00
Insurance service result	(4.53)	0.00	(0.15)	(4.68)
Insurance finance expenses	4.53		0.15	4.68
Total changes in comprehensive income	0.00	0.00	0.00	0.00
Cash flows	0.00			0.00
Insurance contract liabilities 20X1	0.00	0.00	0.00	0.00

The insurer issues one contract on January 1, whose coverage period is one year and whose claim payments occur on December 31. The entries on January 1 relate to future service; the entries on December 31 relate to current service. The contract is initially recognized with

- a present value of future cash flows of $-100 + 80 / 1.06^1 + 20 = -4.53$
- a risk adjustment for non-financial risk of 2.00
- a contractual service margin of $-(-4.53 + 2.00) = 2.53$
- an insurance contract liability of $-4.53 + 2.00 + 2.53 = 0.00$

The contract is not onerous, so the insurance contract liability is zero.

The insurer has no other contracts and it does not change any estimates during the year, so the changes in estimates related to future service are zero. The entries above appear also as the sub-total for changes that relate to future service.

The sign convention in the IFRS 17 *Illustrative Examples* and the IFRS 17 *Effects Analysis* (and used here):

- An estimate of future cash inflows is a negative entry, since it decreases the insurance contract liability. The cash inflow itself is a positive entry, since it increases the insurance contract liability.
- An estimate of future cash outflows is a positive entry, since it increases the insurance contract liability. The cash outflow itself is a negative entry, since it decreases the insurance contract liability.

On December 31, 20X1, three entries relate to current service:

- The claim is occurs for its expected value, so the experience adjustment is zero.
- The risk adjustment for non-financial risk is released, so a profit of -2.00 (negative entries are profits).
- The contractual service margin accumulates to $2.53 \times 1.06 = 2.68$, which is allocated to 20X1 (the only year in the coverage period) as profit of -2.68.

The change in the insurance contract liability is $-2.00 + -2.68 = -4.68$ (a decrease of 4.68).

The insurer has no claims from past contracts, so the changes that relate to past service are zero.

Future cash flows, risk adjustment, and contractual service margin

The insurance service result is the sum of the changes for current, future, and past service (shown in this order for the sums):

- Present value of future cash flows: $0 + -4.53 + 0 = -4.53$.
 - The negative entry means the insurance services based on the present value of the cash flows show a profit.
- Risk adjustment for non-financial risk: $-2.00 + 2.00 + 0 = 0.00$.
 - Over the life of the contract, if the risk adjustment for non-financial risk does not accrete interest (as in this illustration), the release of the risk adjustment equals the amount initially recognized plus or minus any revisions, and the insurance service result for the risk adjustment is zero. In any calendar year, the insurance service result on the risk adjustment may be positive or negative.
 - For the one-year coverage period here, if the risk adjustment for non-financial risk accretes interest, the insurance service result on the risk adjustment is the negative of the insurance finance expense on the risk adjustment.¹⁰ In any calendar year (for multi-year contracts), the insurance service result on the risk adjustment will differ from the insurance finance expense.
- Contractual service margin: $-2.68 + 2.53 + 0 = -0.15$.
 - The contractual service margin at initial recognition is 2.53, it accretes interest at 6% *per annum* of $6\% \times 2.53 = 0.15$, and the total of $2.53 + 0.15 = 2.68$ is allocated to profit or loss (and is included in insurance revenue) when the claim occurs.
 - The insurance service result is the accretion of interest on the contractual service margin and is offset by the insurance finance expense on the contractual service margin. In any calendar year, the insurance service result on the contractual service margin may be positive or negative.

In this illustration, the nominal value of the claim (80) plus the nominal value of the acquisition cash flows (20) equal the nominal value of the premium received (100), so the net cash flow is zero and the insurance service result on the present value of future cash flows is the negative of the insurance finance expense on the present value of the future cash flows. The other illustrations show scenarios with higher or lower claim values.

The reconciliation exhibit above shows a change in comprehensive income of zero, since it does not include the investment income on the underwriting cash flows, which is not governed by IFRS 17. The *net financial result* on the statement of comprehensive income, which includes investment income, has a non-zero change.

Accretion of interest on the risk adjustment for non-financial risk

The illustration above does not disaggregate the change in the risk adjustment for non-financial risk between the insurance service result and insurance finance income or expenses. If the insurer accretes interest on the risk adjustment for non-financial risk at 6% *per annum*, and the risk adjustment is 2.00 when the claim occurs and is paid at the end of the year, the accounting entries are revised as follows:

- The risk adjustment for non-financial risk at initial recognition is $2.00 / 1.06^1 = 1.89$.
- The fulfilment cash flows at initial recognition are $-100 + 20 + 80 / 1.06^1 + 2.00 / 1.06^1 = -2.64$.

- The contractual service margin at initial recognition is 2.64.
- The accretion of interest during the year on the contractual service margin is $2.64 \times 6\% = 0.16$.
- The accumulated contractual service margin allocated to profit or loss in the year is $2.64 + 0.16 = 2.80$.
- The insurance finance expense on the risk adjustment for non-financial risk is $2.00 - 1.89 = 0.11$.

For the reconciliation of the insurance contract liability:

- The insurance revenue and the insurance service result changes by $-2.80 - -2.68 = -0.12$.
- The insurance finance expense changes by 0.11.
- Total profit or loss does not change (the 0.01 difference stems from rounding to two decimal places).

Analysis of contracts initially recognised in the period

The reconciliation of the insurance contract liability required by paragraph 101 ("source of changes in the fulfilment cash flows" or "movements in insurance contract liabilities analyzed by components") shows for contracts initially recognized in the period:

- the present value of future cash flows: a negative entry is a future cash inflow (such as premium), and a positive entry is a future cash outflow (such as claims, acquisition cash flows, and other benefits)
- the risk adjustment for non-financial risk
- the contractual service margin
- the insurance contract liability (the sum of the three items above)

The insurer must further sub-divide these figures (in a separate disclosure) two ways:¹¹

- the present value of future cash flows is divided between cash inflows and cash outflows, and the cash outflows are shown separately for acquisition cash flows and for claims and other expenses.
- all figures are also shown for two components of the insurance contracts issued (in addition to the total):
 - insurance contracts acquired in a transfer or a business combination
 - groups of onerous contracts (that is, the full figures for these groups, not just the loss component of the liability for remaining coverage)

The format of the reconciliation exhibits is not prescribed by IFRS 17, though certain required disclosures are listed. The reconciliations of the insurance contract liability required by paragraph 101 here are similar to those in the IFRS 17 *Effects Analysis*, which show a single row for net cash flows. Other reconciliations of the insurance contract liability required by paragraph 101 in this textbook are based on the IFRS 17 *Illustrative Examples*, which show separate rows for cash inflows and cash outflows.

Analysis of contracts initially recognised in the period

Contracts initially recognized in the year		of which contracts acquired	of which contracts onerous
Estimates of the present value of future cash inflows	(100.00)	0.00	0.00
Estimates of the present value of future cash outflows			
Insurance acquisition cash flows	20.00	0.00	0.00
Claims payable and other expenses	75.47	0.00	0.00
Risk adjustment	2.00	0.00	0.00
Contractual service margin	2.53	0.00	—
Total	0.00	0.00	0.00

The contracts here are issued by the insurer to policyholders (not acquired in a business combination) and they are not onerous, so the right-most two columns of the exhibit are zeros. The first numeric column shows

- Present value of future cash inflows (negative entry) = premium receivables on January 1 = -100
- Present value of acquisition cash outflows (positive entry), paid on January 1 = 20
- Present value of future claims outflows (positive entry), paid on December 31 = $80 / 1.06 = 75.47$
- Risk adjustment for non-financial risk = 2.00
- Contractual service margin = $- (-100 + 20 + 75.47 + 2.00) = 2.53$
- The total insurance contract liability is zero, since the contract is not onerous.

The reconciliation exhibits in the financial statements (shown in the notes, not on the face of the financial statements) are for the aggregate business of the insurer, so the supplementary exhibit shown here separates the entries for onerous contracts and for contracts acquired in a business combination.

Analysis of insurance revenue

Insurance revenue is analyzed as the sum of four parts:¹²

- incurred claims and other expenses, such as claim adjusting expenses, for which the insurer expects to receive consideration (excluding amounts in the loss component of the liability for remaining coverage)
- amortized acquisition expenses allocated to the period
- release of the risk adjustment for non-financial risk
- allocation of the contractual service margin to profit or loss

analysis of insurance revenue for 20X1

amounts related to liabilities for remaining coverage	84.68
expected incurred claims and other expenses	80.00
contractual service margin for the service provided	2.68
risk adjustment for the risk expired	2.00
recovery of acquisition cash flows	21.20
insurance revenue	105.88

The line labels for the exhibit here are those in the IFRS 17 *Effects Analysis* Table 5.

- The expected incurred claims and other expenses are the incurred values for which the insurer expects to receive consideration (premium).
 - The incurred value is the present value of future payments (if the claim is not paid immediately).
 - The onerous portion of the claim (the loss component of the liability for remaining coverage) for which the insurer does not expect to receive consideration is not included in insurance revenue.
- The contractual service margin for the service provided is the allocation of (the contractual service margin at initial recognition plus the accretion of interest) to profit or loss for the year.
- The risk adjustment for the risk expired is the release of the risk adjustment when the claim occurs.
- The recovery of acquisition cash flows is the amortized acquisition expenses allocated to the year.

The sum of the first three bullet points above is the amounts related to liabilities for remaining coverage. The recovery of acquisition cash flows is an allocation of acquisition cash flows already paid, so it is not part of the liability for remaining coverage. Insurance revenue is the sum of all four bullet points.

SCENARIO 2: CLAIM OF 70, ONE-YEAR COVERAGE PERIOD

An insurer issues a one-year contract on January 1, 20X1, which it measures by the general measurement model (not by the premium allocation approach).

- On January 1, 20X1, premium of 100 is received and acquisition cash flows of 20 are paid.
- A claim is expected to occur and be paid for 70 on December 31, 20X1.
- The discount rate is 6% *per annum*.
- The risk adjustment for non-financial risk is 2.00, and it does not accrete interest.

The present value of future cash flows at initial recognition is $-100 + 20 + 70 / 1.06^1 = -13.96$.

The fulfilment cash flows at initial recognition (including the risk adjustment for non-financial risk) are $-100 + 20 + 70 / 1.06^1 + 2.00 = -11.96$, so the contractual service margin at initial recognition is 11.96.

The insurance contract liability at initial recognition is $-11.96 + 11.96 = 0.00$. For non-onerous contracts, the insurance contract liability at initial recognition is zero.

The present value of future cash flows after the premium is received and the acquisition cash flows are paid is $70 / 1.06^1 = 66.04$. The risk adjustment for non-financial risk is 2.00, so the fulfilment cash flows after the premium is received and the acquisition cash flows are paid is $66.04 + 2.00 = 68.04$.

The allocated acquisition expenses are amortized to the end of each accounting period. The coverage period here is one year, so the allocated acquisition expenses for the year are $20 \times 1.06 = 21.20$.

Progression of the insurance contract liabilities

We show the reconciliation of the insurance contract liability required by paragraph 100 (the “progression of the insurance contract liabilities for remaining coverage and for incurred claims”).

Progression of the insurance contract liabilities for remaining coverage and for incurred claims

	Liabilities for Remaining Coverage		Liabilities for Incurred Claims	Total
	Excluding Loss Component	Loss Component		
Insurance contract liabilities 20X0	0.00	0.00	0.00	0.00
Insurance revenue	(105.88)			(105.88)
Insurance service expenses	21.20	0.00	70.00	91.20
Incurred claims and other expenses		0.00	70.00	70.00
Acquisition expenses	21.20			21.20
Related to future service (onerous contracts)		0.00		0.00
Related to past service (incurred claims)			0.00	0.00
Investment components	0.00		0.00	0.00
Insurance service result	(84.68)	0.00	70.00	(14.68)
Insurance finance expenses	4.68	0.00	0.00	4.68
Change in comprehensive income	(80.00)	0.00	70.00	(10.00)
Cash flows				
Premiums received	100.00			100.00
Claims and other expenses paid			(70.00)	(70.00)
Acquisition cash flows paid	(20.00)			(20.00)
Total cash flows	80.00	0.00	(70.00)	10.00
Insurance contract liabilities 20X1	0.00	0.00	0.00	0.00

The opening balances in the reconciliation exhibits are the closing balances from the preceding year. For this illustration, the insurer issues its first contract on January 1, 20X1, so the opening balances (the insurance contract liabilities on December 31, 20X0) are zero for all columns.

Insurance service expenses

The allocated acquisition expenses of 21.20 are shown as a line item under insurance service expenses on the reconciliation of the insurance contract liability required by paragraph 100. They are also included in the insurance revenue, though they are not shown as a separate line item there.

The incurred claim at the end of the year of 70 is shown as a line item under insurance service expenses on the reconciliation of the insurance contract liability required by paragraph 100. It is also included in the insurance revenue, though it is not shown as a separate line item there.

Insurance finance expenses

The insurance finance expense on the present value of future cash flows is $70 \times (1.06^0 - 1.06^{-1}) = 3.96$. Since the discount rate does not change during the year, we can compute this as $66.04 \times 6\% = 3.96$ as well.

The insurance finance expense on the contractual service margin is $11.96 \times 6\% = 0.72$.

The total insurance finance expense is $3.96 + 0.72 = 4.68$, which is the same as the total insurance finance expense when the incurred claim is 80, since the insurance contracts are not onerous and the coverage period is a single year.

- The pieces of the insurance finance expense for the present value of future cash flows (3.96) and the contractual service margin (0.72) depend on the estimated present value of the future claims.
- The total insurance finance expense depends on the portion of the premium received that accretes interest, or $100 - 20 - 2 = 78$ in this illustration: $78 \times 6\% = 4.68$.

For onerous contracts, the insurance finance expense is on both the premium received that accretes interest and the onerous contract loss.

Insurance revenue

The insurance revenue is determined as

- the change in the insurance contract liability for remaining coverage excluding the loss component
- the amortized and allocated acquisition expenses
- the insurance finance expense
- the investment component (zero in these illustrations)
- the net premium cash flows (gross premium minus acquisition cash flows)

For this illustration of a one-year insurance contract, the insurance contract liability is zero for both the opening balances (at the beginning of the year) and the closing balances (at the end of the year).

For the liability for remaining coverage excluding the loss component, the insurance revenue equals

- (0 – 0) (change in the liability for remaining coverage excluding the loss component)
- 21.20 (amortized and allocated acquisition expenses)
- 4.68 (insurance finance expense)
- (100 – 20) (gross premium minus acquisition cash flows)
- = (0 – 0) – 21.20 – 4.68 – (100 – 20) = -105.88

Insurance revenue is analyzed as the sum of four parts (see also the exhibit below called analysis of insurance revenue):

- incurred claims and other expenses, such as claim adjusting expenses, for which the insurer expects to receive consideration (excluding amounts in the loss component of the liability for remaining coverage)
- amortized acquisition expenses allocated to the period
- release of the risk adjustment for non-financial risk
- allocation of the contractual service margin to profit or loss

The insurance services provided are the incurred claim plus the amortized acquisition expenses.

Insurance revenue includes the portion of the incurred claim for which the insurer expects to receive consideration, or the part covered by the premium accumulated to the date the claim occurs, not the part in the loss component of the liability for remaining coverage. In this illustration, the insurance contract is not onerous, so the entire incurred claim is covered by the premium.

The accretion of interest on the contractual service margin is $11.96 \times 6\% = 0.72$, and the contractual service margin at the end of the year is $11.96 + 0.72 = 12.68 = 11.96 \times 1.06$. The allocation of the contractual service margin to the year is 12.68, as the coverage period is only one year.

The release of the risk adjustment for non-financial risk is 2.00, since it did not accrete interest.

The insurance revenue for the year =

$$\begin{aligned} & -70 \text{ (incurred claims)} \\ + & -21.20 \text{ (amortized acquisition expenses)} \\ + & -2.00 \text{ (release of the risk adjustment for non-financial risk)} \\ + & -12.68 \text{ (allocation of the contractual service margin to profit or loss)} \\ = & -70 + -21.20 + -2.00 + -12.68 = -105.88. \end{aligned}$$

Revenues are negative entries, so insurance revenue is -105.88, under the liability for remaining coverage excluding the loss component.

The insurance revenue is the accumulated premium (for which the insurer expects to receive consideration) when the claims occur. Whether the incurred claim is for 70 or 80, the insurance contract is not onerous, so the insurance revenue is the same.

Insurance service result

The insurance service expenses are reported as

- Incurred claims: 70 under liability for incurred claims
- Acquisition expenses: 21.20 under liability for remaining coverage excluding the loss component

Both entries are positive, indicating expenses.

The insurance service result shows

- liability for remaining coverage excluding the loss component: $-105.88 + 21.20 = -84.68$
- liability for incurred claims: 70.00

The total insurance service result is $-84.68 + 70.00 = -14.68$ which is

- the revenue for the release of the risk adjustment for non-financial risk: -2.00
- + the allocation of the accumulated contractual service margin: -12.68

The insurance finance expense is 4.68, so the profit or loss is $-14.68 + 4.68 = -10.00$. In this illustration, the net premium (the premium received minus the acquisition cash flows paid) at the beginning of the year minus the claims incurred and paid at the end of the year is $100 - 20 - 70 = 10$.

- The insurance service result is the unearned profit at the beginning of the year (11.96) plus the risk adjustment for non-financial risk (2.00) accumulated to the end of the year $[11.96 \times 1.06 + 2.00 = 14.68]$.
- The total insurance finance expense is $70 \times (1 - 1.06^{-1}) + 11.96 \times 6\% = 4.68$.

The insurer's profit in this scenario is the investment income on the cash received (the net premium) at the beginning of the year + the profit of 10.00 from the insurance service result.

Movements in insurance contract liabilities analyzed by components

We show the reconciliation of the insurance contract liability required by paragraph 101 (the "movements in insurance contract liabilities analyzed by components").

Movements in insurance contract liabilities analyzed by components

	present value of future cash flows	risk adjustment	contractual service margin	total
Insurance contract liabilities 20X0	0.00	0.00	0.00	0.00
Changes that relate to current service	0.00	(2.00)	(12.68)	(14.68)
CSM recognized for service provided			(12.68)	(12.68)
Risk adjustment recognized for the risk		(2.00)		(2.00)
Experience adjustments	0.00			0.00
Changes that relate to future service	(13.96)	2.00	11.96	0.00
Contracts initially recognized in the period	(13.96)	2.00	11.96	0.00
Changes in estimates reflected in the CSM	0.00	0.00	0.00	0.00
Changes in estimates: onerous contract	0.00	0.00		0.00
Changes that relate to past service	0.00	0.00	0.00	0.00
Adjustments to liabilities for incurred claims	0.00	0.00		0.00
Insurance service result	(13.96)	0.00	(0.72)	(14.68)
Insurance finance expenses	3.96		0.72	4.68
Total changes in comprehensive income	(10.00)	0.00	0.00	(10.00)
Cash flows	10.00			10.00
Insurance contract liabilities 20X1	0.00	0.00	0.00	0.00

The insurer issues one contract on January 1, whose coverage period is one year and whose claim payments occur on December 31. The entries on January 1 relate to future service; the entries on December 31 relate to current service. The contract is initially recognized with

- a present value of future cash flows of $-100 + 70 / 1.06^1 + 20 = -13.96$
- a risk adjustment for non-financial risk of 2.00
- a contractual service margin of $-(-13.96 + 2.00) = 11.96$
- an insurance contract liability of $-13.96 + 2.00 + 11.96 = 0.00$

The contract is not onerous, so the insurance contract liability is zero.

The insurer has no other contracts and it does not change any estimates during the year, so the changes in estimates related to future service are zero. The entries above appear also as the sub-total for changes that relate to future service.

On December 31, 20X1, three entries relate to current service:

- The claim is paid for its expected value, so the experience adjustment is zero.
- The risk adjustment for non-financial risk is released, so a profit of -2.00 (negative entries are profits)
- The contractual service margin accumulates to $11.96 \times 1.06 = 12.68$, which is allocated to 20X1 (the only year in the coverage period) as profit of -12.68.

The change in the insurance contract liability is $-2.00 + -12.68 = -14.68$ (a decrease of 14.68).

The insurer has no claims from past contracts, so the changes that relate to past service are zero.

- Present value of future cash flows: $0 + -13.96 + 0 = -13.96$
 - The negative entry means the insurance services based on the present value of the cash flows show a profit.
- Risk adjustment for non-financial risk: $-2.00 + 2.00 + 0 = 0.00$.
 - Over the life of the contract, if the risk adjustment for non-financial risk does not accrete interest (as in this illustration), the release of the risk adjustment equals the amount initially recognized plus or minus any revisions, and the insurance service result for the risk adjustment is zero. In any calendar year, the insurance service result on the risk adjustment may be positive or negative.
 - For the one-year coverage period here, if the risk adjustment for non-financial risk accretes interest, the insurance service result on the risk adjustment is the negative of the insurance finance expense on the risk adjustment.
- Contractual service margin: $-12.68 + 11.96 + 0 = -0.72$
 - The contractual service margin at initial recognition is 11.96, it accretes interest of $11.96 \times 6\% = 0.72$, and the total of $11.96 + 0.72 = 12.68$ is allocated to profit or loss (and included in insurance revenue) when the claim occurs.
 - The insurance service result is the accretion of interest on the contractual service margin and is offset by the insurance finance expense on the contractual service margin. In any calendar year, the insurance service result on the contractual service margin may be positive or negative.

Analysis of contracts initially recognised in the period

analysis of contracts initially recognised in the period

Contracts initially recognized in the year		of which contracts acquired	of which contracts onerous
Estimates of the present value of future cash inflows	(100.00)	0.00	0.00
Estimates of the present value of future cash outflows			
Insurance acquisition cash flows	20.00	0.00	0.00
Claims payable and other expenses	66.04	0.00	0.00
Risk adjustment	2.00	0.00	0.00
Contractual service margin	11.96	0.00	—
Total	0.00	0.00	0.00

The contracts here are issued by the insurer to policyholders (not acquired in a business combination) and they are not onerous, so the right-most two columns of the exhibit are zeros. The first numeric column shows

- Present value of future cash inflows (negative entry) = premium receivables on January 1 = -100
- Present value of acquisition cash outflows (positive entry), paid on January 1 = 20
- Present value of future claims outflows (positive entry), paid on December 31 = $70 / 1.06 = 66.04$
- Risk adjustment for non-financial risk = 2.00
- Contractual service margin = $- (-100 + 20 + 66.04 + 2.00) = 11.96$
- The total insurance contract liability is zero, since the contract is not onerous.

Analysis of insurance revenue

analysis of insurance revenue for 20X1

amounts related to liabilities for remaining coverage	84.68
expected incurred claims and other expenses	70.00
contractual service margin for the service provided	12.68
risk adjustment for the risk expired	2.00
recovery of acquisition cash flows	21.20
insurance revenue	105.88

- The expected incurred claims and other expenses are the incurred values, not the present values.
- The contractual service margin for the service provided is the allocation of (the contractual service margin at initial recognition plus the accretion of interest) to profit or loss.
- The risk adjustment for the risk expired is the release of the risk adjustment.
- The recovery of acquisition cash flows is the amortized acquisition expenses allocated to the year.

The sum of the first three bullet points above is the amounts related to liabilities for remaining coverage. The recovery of acquisition cash flows is an allocation of acquisition cash flows already paid, so it is not part of the liability for remaining coverage. Insurance revenue is the sum of all four bullet points.

SCENARIO #3: CLAIM OF 90, ONE-YEAR COVERAGE PERIOD

An insurer issues a one-year contract on January 1, 20X1, which it measures by the general measurement model (not by the premium allocation approach).

- On January 1, 20X1, premium of 100 is received and acquisition cash flows of 20 are paid.
- A claim is expected to occur and be paid for 90 on December 31, 20X1.
- The discount rate is 6% *per annum*.
- The risk adjustment for non-financial risk is 2.00, and it does not accrete interest.

The present value of future cash flows at initial recognition is $-100 + 20 + 90 / 1.06^1 = 4.91$.

The fulfilment cash flows at initial recognition (including the risk adjustment for non-financial risk) are

$$-100 + 20 + 90 / 1.06^1 + 2.00 = 6.91.$$

A positive entry is a liability, so the contract is onerous. At initial recognition:

- The contractual service margin is zero.
- The loss component of the liability for remaining coverage is 6.91.
- A loss of 6.91 is recognized in the statement of profit or loss.
- The insurance contract liability is $6.91 + 0 = 6.91$. For onerous contracts, the insurance contract liability at initial recognition is the loss component of the liability for remaining coverage.

The present value of future cash flows after the premium is received and the acquisition cash flows are paid is $90 / 1.06^1 = 84.91$ and the risk adjustment for non-financial risk is 2. The liability for remaining coverage is $90 / 1.06^1 + 2 = 86.91$ and is divided between the two parts of the liability for remaining coverage:

- The liability for remaining coverage excluding the loss component: premium received to cover the claims and other expenses = gross premium – acquisition cash flows = $100 - 20 = 80$.

- The loss component of the liability for remaining coverage: $86.91 - 80 = 6.91$.

The allocated acquisition expenses are amortized to the end of the year, so the allocated acquisition expenses for the year are $20 \times 1.06 = 21.20$.

Progression of the insurance contract liabilities

We show the reconciliation of the insurance contract liability required by paragraph 100 (the “progression of the insurance contract liabilities for remaining coverage and for incurred claims”).

Progression of the insurance contract liabilities for remaining coverage and for incurred claims

	<i>Liabilities for Remaining Coverage</i>		<i>Liabilities for Incurred Claims</i>	<i>Total</i>
	<i>Excluding Loss Component</i>	<i>Loss Component</i>		
Insurance contract liabilities 20X0	0.00	0.00	0.00	0.00
Insurance revenue	-105.88			-105.88
Insurance service expenses	21.20	-0.40	90.00	110.80
Incurred claims and other expenses		-7.31	90.00	82.69
Acquisition expenses	21.20			21.20
Related to future service (onerous contracts)		6.91		6.91
Related to past service (incurred claims)			0.00	0.00
Investment components	0.00		0.00	0.00
Insurance service result	-84.68	-0.40	90.00	4.92
Insurance finance expenses	4.68	0.40	0.00	5.08
Change in comprehensive income	-80.00	0.00	90.00	10.00
Cash flows				
Premiums received	100.00			100.00
Claims and other expenses paid			-90.00	-90.00
Acquisition cash flows paid	-20.00			-20.00
Total cash flows	80.00	0.00	-90.00	-10.00
Insurance contract liabilities 20X1	0.00	0.00	0.00	0.00

The opening balances in the reconciliation exhibits are the closing balances from the preceding year. For this illustration, the insurer issues its first contract on January 1, 20X1, so the opening balances (the insurance contract liabilities on December 31, 20X0) are zero for all columns.

Insurance service expenses

The allocated acquisition expenses of 21.20 are shown as a line item under insurance service expenses on the reconciliation of the insurance contract liability required by paragraph 100. They are also included in the insurance revenue, though they are not shown as a separate line item there.

The incurred claim at the end of the year of 90 is shown as a line item under insurance service expenses on the reconciliation of the insurance contract liability required by paragraph 100. The amount of the claim for which the insurer expects to receive consideration, or $(100 - 20 - 2) \times 1.06 + 2 = 84.68$, is also included in the insurance revenue, though it is not shown as a separate line item there. (The net premium is $100 - 20 = 80$: the risk adjustment for non-financial risk of 2 does not accrete interest and the rest accretes interest. The accumulated value is $78 \times 1.06 + 2 = 84.68$.)

Insurance finance expenses

The insurance finance expense on the present value of future cash flows is $90 \times (1.06^0 - 1.06^{-1}) = 5.09$. The discount rate does not change during the year, so we can compute this as $84.91 \times 6\% = 5.09$ as well.

We determine the proportions of the two parts of the liability for remaining coverage:

- liability for remaining coverage excluding the loss component: $80 / (80 + 6.91) = 92.05\%$
- loss component of the liability for remaining coverage: $6.91 / (80 + 6.91) = 7.95\%$

We allocate the insurance finance expense by these proportions:

- liability for remaining coverage excluding the loss component: $5.09 \times 92.05\% = 4.69$
- loss component of the liability for remaining coverage: $5.09 \times 7.95\% = 0.40$

The contractual service margin is zero, so the insurance finance expense on the contractual service margin is also zero, and no contractual service margin is recognized in profit or loss for the year.

Insurance revenue

At the end of the year, the accumulated value of the liability for remaining coverage is

- liability for remaining coverage excluding the loss component: $80 + 4.69 = 84.69$
- loss component of the liability for remaining coverage: $6.91 + 0.40 = 7.31$

The sum of the two parts of the liability for remaining coverage is $84.69 + 7.31 = 92.00$, which is the claim payment plus the risk adjustment for non-financial risk.

At initial recognition, the premium received as consideration for the claim payment is $100 - 20 - 2 = 78$. When the claim occurs, the accumulated value of this portion of the premium is $78 \times 1.06 = 82.68$, which is reported as insurance revenue. The release of the risk adjustment for non-financial risk of 2.00 is also insurance revenue when the claim occurs.

The insurance revenue for the year =

$$\begin{aligned}
 & -82.68 \text{ (incurred claims)} \\
 + & -21.20 \text{ (amortized acquisition expenses)} \\
 + & -2.00 \text{ (release of the risk adjustment for non-financial risk)} \\
 + & 0 \text{ (allocation of the contractual service margin to profit or loss)} \\
 = & -82.68 + -21.20 + -2.00 + 0 = -105.88
 \end{aligned}$$

Revenues are negative entries, so insurance revenue is -105.88, under the liability for remaining coverage excluding the loss component. Regardless of the amount of the claim, the insurance revenue is the premium received accumulated for the time value of money.¹³ We examine three parts of the premium.

- The risk adjustment for non-financial risk of 2.00 does not accrete interest.

- The acquisition cash flows of 20 are amortized at the discount rate determined at initial recognition to the end of the year: $20 \times 1.06 = 21.20$.
- The remaining premium of $100 - 2 - 20 = 78$ accumulates to the date the claim occurs: $78 \times 1.06 = 82.68$.

The accumulated premium is $2 + 21.20 + 82.68 = 105.88$.

Insurance service result

The insurance service expenses are reported as

- Incurred claims: 90 under liability for incurred claims.
- Acquisition expenses: 21.20 under liability for remaining coverage excluding the loss component.
- The loss component recognized at initial recognition: 6.91
- Reversal of the loss component of the liability for remaining coverage when the claim occurs: -7.31
- Net loss component of the liability for remaining coverage: $6.91 - 7.31 = -0.40$.

The -0.40 insurance service expenses offsets the insurance finance expense on the loss component of the liability for remaining coverage, so that the closing balance is zero.

The total insurance service result, shown in the column for the total insurance contract liability, is

- liability for remaining coverage excluding the loss component: $-105.88 + 21.20 = -84.68$
- liability for incurred claims: 90.00
- the loss component recognized as a loss in the statement of profit or loss at initial recognition: 6.91
- reversal of the loss component of the liability for remaining coverage when the claim occurs: -7.31

$$= -105.88 + 21.20 + 90 + 6.91 - 7.31 = 4.92.$$

The total comprehensive income from the insurance contracts, which is recognized in profit or loss (since the discount rate does not change) is

$$\begin{aligned} & \text{the revenue for the release of the risk adjustment for non-financial risk: } -2.00 \\ + & \text{ the loss component recognized as a loss in the statement of profit or loss at initial recognition: } 6.91 \\ - & \text{ reversal of the loss component of the liability for remaining coverage: } -7.31 \\ + & \text{ the accretion of interest on the loss component: } 0.40 \\ + & \text{ the accretion of interest on the liability for remaining coverage excluding the loss component: } 4.69 \\ = & -2.00 + 6.91 + 0.40 + 4.69 = 10.00 \end{aligned}$$

Intuition: The claim payment of 90 is 10 more than the net premium of $100 - 20 = 80$. The insurer loses 10 from its insurance contract cash flows, which is partly offset by investment income on the net premium. This investment income is not included in the IFRS 17 reconciliation exhibits, though it is shown on the statement of financial performance.

Movements in insurance contract liabilities analyzed by components

We show the reconciliation of the insurance contract liability required by paragraph 101 (the “movements in insurance contract liabilities analyzed by components”).

Movements in insurance contract liabilities analyzed by components

	present value of future cash flows	risk adjustment	contractual service margin	total
Insurance contract liabilities 20X0	0.00	0.00	0.00	0.00
Changes that relate to current service	0.00	(2.00)	0.00	(2.00)
CSM recognized for service provided			0.00	0.00
Risk adjustment recognized for the risk		(2.00)		(2.00)
Experience adjustments	0.00			0.00
Changes that relate to future service	4.91	2.00	0.00	6.91
Contracts initially recognized in the period	4.91	2.00	0.00	6.91
Changes in estimates reflected in the CSM	0.00	0.00	0.00	0.00
Changes in estimates: onerous contract	0.00	0.00		0.00
Changes that relate to past service	0.00	0.00	0.00	0.00
Adjustments to liabilities for incurred claims	0.00	0.00		0.00
Insurance service result	4.91	0.00	0.00	4.91
Insurance finance expenses	5.09		0.00	5.09
Total changes in comprehensive income	10.00	0.00	0.00	10.00
Cash flows	(10.00)			(10.00)
Insurance contract liabilities 20X1	0.00	0.00	0.00	0.00

The insurer issues one contract on January 1, whose coverage period is one year and whose claim payments occur on December 31. The entries on January 1 relate to future service; the entries on December 31 relate to current service. The contract is initially recognized with

- a present value of future cash flows of $-100 + 90 / 1.06^1 + 20 = 4.91$
- a risk adjustment for non-financial risk of 2.00
- a contractual service margin of $\max(-(4.91 + 2.00), 0) = 0$
- an insurance contract liability of $4.91 + 2.00 + 0 = 6.91$

The contract is onerous, so the insurance contract liability is the present value of future cash flows plus the risk adjustment for non-financial risk.

The insurer has no other contracts and it does not change any estimates during the year, so the changes in estimates related to future service are zero, and the entries above appear also as the sub-total for changes that relate to future service.

On December 31, 20X1, three entries relate to current service:

- The claim is paid for its expected value, so the experience adjustment is zero.
- The risk adjustment for non-financial risk is released for a profit of -2.00 (negative entries are profits)
- The contractual service margin accumulates to $0 \times 1.06 = 0.00$, which is allocated to 20X1 (the only year in the coverage period) as profit of zero.

The change in the insurance contract liability is $-2.00 + 0 = -2.00$ (a decrease of 2.00).

The insurer has no claims from past contracts, so the changes that relate to past service are zero.

The insurance service result is the sum of the changes for future, current, and past service:

- Present value of future cash flows: $0 + 4.91 + 0 = 4.91$
 - The positive entry means the insurance services based on the present value of the cash flows show a loss (the contract is onerous)
- Risk adjustment for non-financial risk: $-2.00 + 2.00 = 0.00$.
 - Over the life of the contract, if the risk adjustment for non-financial risk does not accrete interest (as in this illustration), the release of the risk adjustment equals the amount initially recognized \pm any upward or downward revisions, and the insurance service result for the risk adjustment is zero. In any calendar year, the insurance service result on the risk adjustment may be positive or negative.
 - If the risk adjustment for non-financial risk accretes interest (see below), the insurance service result on the risk adjustment is the negative of the insurance finance expense on the risk adjustment.
- Contractual service margin: zero

Analysis of contracts initially recognised in the period

<i>analysis of contracts initially recognised in the period</i>			
Contracts initially recognized in the year		of which contracts acquired	of which contracts onerous
Estimates of the present value of future cash inflows	(100.00)	0.00	(100.00)
Estimates of the present value of future cash outflows			
Insurance acquisition cash flows	20.00	0.00	20.00
Claims payable and other expenses	84.91	0.00	84.91
Risk adjustment	2.00	0.00	2.00
Contractual service margin	0.00	0.00	—
Total	6.91	0.00	6.91

The contracts are issued by the insurer to policyholders (not acquired in a business combination) and they are onerous, so the middle numeric column of the exhibit has zeros. The first and third numeric columns show

- Present value of future cash inflows (negative entry) = premium receivables on January 1 = -100
- Present value of acquisition cash outflows (positive entry), paid on January 1 = 20
- Present value of future claims outflows (positive entry), paid on December 31 = $90 / 1.06 = 84.91$
- Risk adjustment for non-financial risk = 2.00
- Contractual service margin for the onerous contract = $\max(-(-100 + 20 + 84.91 + 2.00), 0) = 0$
- The total insurance contract liability is the loss component of the liability for remaining coverage = $-100 + 20 + 84.91 + 2.00 = 6.91$.

Analysis of insurance revenue

analysis of insurance revenue for 20X1

amounts related to liabilities for remaining coverage	84.68
expected incurred claims and other expenses	82.68
contractual service margin for the service provided	0.00
risk adjustment for the risk expired	2.00
recovery of acquisition cash flows	21.20
insurance revenue	105.88

- The expected incurred claims and other expenses are the incurred values (not the present values) for which the insurer expects to receive consideration. The premium received for the incurred claim is $100 - 20 - 2 = 78$, which accumulates to $78 \times 1.06 = 82.68$ when the claim occurs.
- The contractual service margin for the service provided is the allocation of (the contractual service margin at initial recognition plus the accretion of interest) to profit or loss. The contract is onerous, so the contractual service margin is zero.
- The risk adjustment for the risk expired is the release of the risk adjustment.
- The recovery of acquisition cash flows is the amortized acquisition expenses allocated to the year.

The sum of the first three bullet points above is the liability for remaining coverage excluding the loss component. The recovery of acquisition cash flows is an allocation of acquisition cash flows already paid, so it is not part of the liability for remaining coverage. Insurance revenue is the sum of all four bullet points.

SCENARIO #4: CLAIM OF 80, TWO-YEAR COVERAGE PERIOD

An insurer issues a two-year contract on January 1, 20X1.

- On January 1, 20X1, premium of 100 is received and acquisition cash flows of 20 are paid.
- A claim is expected to occur and be paid for 80 on December 31, 20X2.
- The discount rate is 6% *per annum*.
- The risk adjustment for non-financial risk is 2.00, and it does not accrete interest.

For each scenario, we show the reconciliation of the insurance contract liability required by paragraph 100 and the reconciliation of the insurance contract liability required by paragraph 101.

The present value of future cash flows at initial recognition is $-100 + 20 + 80 / 1.06^2 = -8.80$.

The fulfilment cash flows at initial recognition (including the risk adjustment for non-financial risk) are $-100 + 20 + 80 / 1.06^2 + 2.00 = -6.80$, so the contractual service margin at initial recognition is 6.80.

The insurance contract liability at initial recognition is $-6.80 + 6.80 = 0.00$. For non-onerous contracts, the insurance contract liability at initial recognition is zero.

The present value of future cash flows after the premium is received and the acquisition cash flows are paid is $80 / 1.06^2 = 71.20$. The risk adjustment for non-financial risk is 2.00, so the fulfilment cash flows after the premium is received and the acquisition cash flows are paid is $71.20 + 2.00 = 73.20$.

Allocation and amortization of acquisition cash flows

Acquisition cash flows are included in fulfilment cash flows when they occur, but they are allocated over the coverage period on the basis of the passage of time for insurance revenue and insurance service expense.¹⁴

IFRS 17 itself does not specify the allocation procedure. The IFRS 17 *Illustrative Examples* show an example with one acquisition cash flow (at initial recognition), a zero discount rate, and the same coverage units in each year. The IFRS 17 *Effects Analysis* shows a more complete illustration, which is followed here.¹⁵

The acquisition cash flows are 20 on January 1, 20X1, the discount rate is 6% *per annum*, and the coverage units are the same in 20X1 and 20X2. We allocate the present values of the acquisition expense equally to 20X1 and 20X2: that is, we derive the nominal values in 20X1 and 20X2 whose present values are equal and whose sum is 20. These nominal values depend on the assumed cash flow dates for the allocated acquisition expenses in 20X1 and 20X2. The IFRS 17 *Effects Analysis* assumes that the allocated acquisition expenses occur at the end of the year.

The present values at initial recognition of the allocated acquisition expenses reported on December 31, 20X1, and December 31, 20X2, are each $\frac{1}{2} \times 20 = 10$, so the nominal values are

- $10 \times 1.06^1 = 10.60$ on December 31, 20X1
- $10 \times 1.06^2 = 11.24$ on December 31, 20X2

We can also solve for the amortized, allocated acquisition expenses algebraically. Let Z_1 be the acquisition expense on December 31, 20X1, and Z_2 be the acquisition expense on December 31, 20X2. Since the coverage units are the same in the two years and the discount rate is 6% *per annum*, $Z_2 = 1.06 \times Z_1$. For a present value date of January 1, 20X1, we solve

$$\begin{aligned} Z_1 / 1.06^1 + Z_2 / 1.06^2 &= 20 \Rightarrow \\ Z_1 / 1.06^1 + 1.06 \times Z_1 / 1.06^2 &= 2 \times Z_1 / 1.06^1 = 20 \Rightarrow \\ Z_1 = \frac{1}{2} \times 20 \times 1.06^1 &= 10.60 \text{ and } Z_2 = 10.60 \times 1.06^1 = 11.24 \end{aligned}$$

We verify that $10.60 / 1.06^1 + 11.24 / 1.06^2 = 20.00$.

The allocation of the acquisition expenses between 20X1 and 20X2 does not depend on the size of the claim.

Movements in insurance contract liabilities analyzed by components (20X1)

We show the reconciliation of the insurance contract liability required by paragraph 101, which is called the movements in insurance contract liabilities analyzed by components in the IFRS 17 *Effects Analysis*, and then explain the entries.

Movements in insurance contract liabilities analyzed by components, 20X1

	present value of future cash flows	risk adjustment	contractual service margin	total
Insurance contract liabilities 20X0	0.00	0.00	0.00	0.00
Changes that relate to current service	0.00	0.00	(3.60)	(3.60)
CSM recognized for service provided			(3.60)	(3.60)
Risk adjustment recognized for the risk		0.00		0.00
Experience adjustments	0.00			0.00
Changes that relate to future service	(8.80)	2.00	6.80	0.00
Contracts initially recognized in the period	(8.80)	2.00	6.80	0.00
Changes in estimates reflected in the CSM	0.00	0.00	0.00	0.00
Changes in estimates: onerous contract	0.00	0.00		0.00
Changes that relate to past service	0.00	0.00	0.00	0.00
Adjustments to liabilities for incurred claims	0.00	0.00		0.00
Insurance service result	(8.80)	2.00	3.20	(3.60)
Insurance finance expenses	4.27		0.41	4.68
Total changes in comprehensive income	(4.53)	2.00	3.61	1.08
Cash flows	80.00			80.00
Insurance contract liabilities 20X1	75.47	2.00	3.61	81.08

The contract is initially recognized in the period with

- a present value of future cash flows of $-100 + 80 / 1.06^2 + 20 = -8.80$
- a risk adjustment for non-financial risk of 2.00
- a contractual service margin of $-(-8.80 + 2.00) = 6.80$
- an insurance contract liability of $-8.80 + 2.00 + 6.80 = 0.00$

The contract is not onerous, so the insurance contract liability is zero.

The insurer has no other contracts and it does not change any estimates during the year, so the changes in estimates related to future service are zero, and the entries above appear also as the sub-total for changes that relate to future service.

On December 31, 20X1, the entry relating to current service is the allocation of the contractual service margin to profit or loss = $\frac{1}{2} \times 6.80 \times 1.06 = 3.60$, as a negative entry (reduction in the insurance contract liability).

The insurance service result is the sum of the changes for current, future, and past service (shown in this order for the sums):

- Present value of future cash flows: $0 + -8.80 + 0 = -8.80$.
 - The negative entry means the insurance services based on the present value of the cash flows show a profit.
- Risk adjustment for non-financial risk: $0.00 + 2.00 + 0.00 = 2.00$.

- Contractual service margin: $-3.60 + 6.80 + 0 = 3.20$.
 - The contractual service margin at initial recognition is 6.80, it accretes interest of $6\% \times 6.80 = 0.4080$ and half the total, or $\frac{1}{2} \times (6.80 + 0.4080) = 3.60$ is allocated to profit or loss for 20X1 (and is included in insurance revenue).

Cash flows

Underwriting cash inflows from policyholders (premiums received) raise the insurance contract liability, and underwriting cash outflows (acquisition cash flows and claim payments) reduce the insurance contract liability.

In 20X1, premium received is 100 and acquisition cash flows are -20, so the net cash flows are $100 + -20 = 80$ (under the present value of future cash flows).

The insurance contract liability at December 31, 20X1 (the last row in the exhibit) is the sum of

- the present value of future cash flows: $-4.53 + 80 = 75.47$, which is the present value of the claim of 80 to be paid in one year: $80 / 1.06^1 = 75.47$.
- the risk adjustment for non-financial risk: 2.00, which did not change since initial recognition.
- the contractual service margin:
 - accumulated for accretion of interest: $6.80 \times 1.06 = 7.21$
 - allocated to profit or loss: $\frac{1}{2} \times 6.80 \times 1.06 = 3.60$
 - remaining at end of the year: $7.21 - 3.60 = 3.61$

The insurance contract liability is $75.47 + 2.00 + 3.61 = 81.08$.

Progression of the insurance contract liabilities (20X1)

We show the reconciliation of the insurance contract liability required by paragraph 100, which is called the "Progression of the insurance contract liabilities for remaining coverage and for incurred claims" in the IFRS 17 *Effects Analysis*. We show the completed exhibit and then explain the entries. The format of the exhibit is not prescribed by IFRS 17, though the required entries are listed in IFRS 17 paragraph 103.

Progression of the insurance contract liabilities for remaining coverage and for incurred claims (20X1)

	Liabilities for Remaining Coverage		Liabilities for Incurred Claims	Total
	Excluding Loss Component	Loss Component		
Insurance contract liabilities 20X0	0.00	0.00	0.00	0.00
Insurance revenue	(14.20)			(14.20)
Insurance service expenses	10.60	0.00	0.00	10.60
Incurred claims and other expenses		0.00	0.00	0.00
Acquisition expenses	10.60			10.60
Related to future service (onerous contracts)		0.00		0.00
Related to past service (incurred claims)			0.00	0.00
Investment components	0.00		0.00	0.00
Insurance service result	(3.60)	0.00	0.00	(3.60)
Insurance finance expenses	4.68	0.00	0.00	4.68
Change in comprehensive income	1.08	0.00	0.00	1.08
Cash flows				
Premiums received	100.00			100.00
Claims and other expenses paid			0.00	0.00
Acquisition cash flows paid	(20.00)			(20.00)
Total cash flows	80.00	0.00	0.00	80.00
Insurance contract liabilities 20X1	81.08	0.00	0.00	81.08

The opening balances in the reconciliation exhibits are the closing balances from the preceding year. For this illustration, the insurer issues its first contract on January 1, 20X1, so the opening balances (the insurance contract liabilities on December 31, 20X0) are zero for all columns.

The insurance contract liability at December 31, 20X1 (the last row in the exhibit) is the sum of

- the present value of future cash flows: $-4.53 + 80 = 75.47$, which is the present value of the claim of 80 to be paid in one year: $80 / 1.06^1 = 75.47$.
- the risk adjustment for non-financial risk: 2.00, which did not change since initial recognition.
- the contractual service margin:
 - accumulated for accretion of interest: $6.80 \times 1.06 = 7.21$
 - allocated to profit or loss: $\frac{1}{2} \times 6.80 \times 1.06 = 3.60$
 - remaining at end of the year: $7.21 - 3.60 = 3.61$

The insurance contract liability is $75.47 + 2.00 + 3.61 = 81.08$. The components of the insurance contract liability at December 31, 20X1, are shown in the reconciliation of the insurance contract liability required by paragraph 101. The insurance contract is not onerous and the liability for incurred claims is zero, so the liability for remaining coverage excluding the loss component is the same as the total insurance contract liability.

Insurance service expenses

The allocated acquisition expenses of 10.60 are shown as a line item under insurance service expenses on the reconciliation of the insurance contract liability required by paragraph 100. They are also included in the insurance revenue, though they are not shown as a separate line item there.

Insurance finance expenses

The insurance finance expense on the present value of future cash flows is $80 \times (1.06^{-1} - 1.06^{-2}) = 4.27$. Since the discount rate does not change during the year, we can compute this as $71.20 \times 6\% = 4.27$ as well.

The insurance finance expense on the contractual service margin is $6.80 \times 6\% = 0.41$.

The total insurance finance expense is $4.27 + 0.41 = 4.68$, which is the accretion of interest on the premium minus the acquisition cash flows paid at initial recognition and the risk adjustment for non-financial risk (which does not accrued interest in this illustration): $(100 - 20 - 2) \times 6\% = 4.68$. The insurance finance expense for 20X1 is the same whether the claim is paid on December 31, 20X1 (as in a previous illustration), or at a later date (as in this illustration), if the discount rate does not change during the year.

Insurance revenue

Insurance revenue is *determined as*

- the change in the insurance contract liability for remaining coverage excluding the loss component
- cash flows for the net premium (gross premium minus acquisition cash flows)
- amortized and allocated acquisition expenses recognized in the year
- insurance finance income or expenses

Using the values computed above, the insurance revenue for 20X1 is

- (81.08 – 0) change in the insurance contract liability for remaining coverage excluding the loss component
- (100 – 20) premium cash flows minus acquisition cash flows
- 4.68 insurance finance expense
- 10.60 amortized and allocated acquisition expenses
- = (81.08 – 0) – (100 – 20) – 4.68 – 10.60 = -14.20

We analyze insurance revenue in each year as the sum of^{f16}

- The accumulated premium compensating the expected claims, benefits, and other expenses.
- The release of the risk adjustment for non-financial risk.
- The allocated insurance acquisition cash flows.
- The allocation of the contractual service margin to profit or loss.

The accretion of interest on the contractual service margin is $6.80 \times 6\% = 0.41$, and the contractual service margin at the end of the year is $6.80 + 0.41 = 7.21$. (We can compute this as $6.80 \times 1.06 = 7.21$ as well.) The coverage units are the same in 20X1 and 20X2, so the allocation of the contractual service margin to 20X1 is $\frac{1}{2} \times 7.21 = 3.605$. To four decimal places, the contractual service margin is $100 - 20 - 80 / 1.06^2 - 2 = 6.8003$, the accumulated contractual service margin is $6.8003 \times 1.06 = 7.2083$, and $\frac{1}{2} \times 7.2083 = 3.6042$, so we round down to 3.60.

The release of the risk adjustment for non-financial risk pertains to current service: a release of risk when the claim occurs. The claim does not occur in 20X1, so if the risk adjustment for non-financial risk is revised at December 31, 20X1, the change is similar to a change in the estimate of a future claim:

- An increase in the risk adjustment related to future claims causes an increase in the fulfilment cash flows and an offsetting decrease in the contractual service margin (but not to less than zero).
- A decrease in the risk adjustment related to future claims causes a decrease in the fulfilment cash flows and an offsetting increase in the contractual service margin (if the contracts are not onerous).

Neither bullet point affects insurance revenue. (If the contracts are onerous or become onerous, the change in the risk adjustment for non-financial risk affects insurance service expense, not insurance revenue).

In this illustration, the risk adjustment for non-financial risk does not change on December 31, 20X1. In actual practice, the risk adjustment for non-financial risk often decreases as time progresses, especially if the cost of capital method is used, but these decreases are not releases of the risk adjustment for non-financial risk.

The insurance revenue for the year =

$$\begin{aligned}
 & -10.60 \text{ (amortized and allocated acquisition expenses)} \\
 + & -3.60 \text{ (allocation of the contractual service margin to profit or loss)} \\
 = & -10.60 + -3.60 = -14.20
 \end{aligned}$$

Revenues are negative entries, so insurance revenue is -14.20, under the liability for remaining coverage excluding the loss component.

Insurance service result

The insurance service expenses are reported as

- Acquisition expenses: 10.60 under the liability for remaining coverage excluding the loss component.

The positive entry indicates an expense.

The insurance service result shows $-14.20 + 10.60 = -3.60$ under the liability for remaining coverage excluding the loss component, which is the allocation of the contractual service margin to 20X1, since no claims are paid and no risk adjustment for non-financial risk is released in 20X1.

The insurance finance expense is 4.68, so the profit or loss is $-3.60 + 4.68 = 1.08$ (a positive entry is a loss). The loss is an accounting entry; the insurer also earns investment income on the financial assets backing the insurance contract liability, and the investment income generally exceeds the insurance finance expense.

Analysis of contracts initially recognised in the period (20X1)

analysis of contracts initially recognised in the period

Contracts initially recognized in the year		of which contracts acquired	of which contracts onerous
Estimates of the present value of future cash inflows	(100.00)	0.00	0.00
Estimates of the present value of future cash outflows			
Insurance acquisition cash flows	20.00	0.00	0.00
Claims payable and other expenses	71.20	0.00	0.00
Risk adjustment	2.00	0.00	0.00
Contractual service margin	6.80	0.00	–
Total	0.00	0.00	0.00

The contracts here are issued by the insurer to policyholders (not acquired in a business combination) and they are not onerous, so the right-most two columns of the exhibit are zeros. The first numeric column shows

- Present value of future cash inflows (negative entry) = premium receivables on January 1 = -100
- Present value of acquisition cash outflows (positive entry), paid on January 1 = 20
- Present value of future claims outflows (positive entry), paid on December 31 = $80 / 1.06^2 = 71.20$
- Risk adjustment for non-financial risk = 2.00
- Contractual service margin = $- (-100 + 20 + 71.20 + 2.00) = 6.80$
- The total insurance contract liability is zero, since the contract is not onerous.

Analysis of insurance revenue (20X1)

analysis of insurance revenue for 20X1

amounts related to liabilities for remaining coverage	3.60
expected incurred claims and other expenses	0.00
contractual service margin for the service provided	3.60
risk adjustment for the risk expired	0.00
recovery of acquisition cash flows	10.60
insurance revenue	14.20

- The expected incurred claims and other expenses are the incurred values (not the present values) for which the insurer expects to receive consideration (premium).
- The contractual service margin for the service provided is the allocation of (the contractual service margin at initial recognition plus the accretion of interest) to profit or loss.
- The risk adjustment for the risk expired is the release of the risk adjustment.
- The recovery of acquisition cash flows is the amortized acquisition expenses allocated to the year.

The sum of the first three bullet points above is the amounts related to liabilities for remaining coverage. The recovery of acquisition cash flows is an allocation of acquisition cash flows already paid, so it is not part of the liability for remaining coverage. Insurance revenue is the sum of all four bullet points.

Movements in insurance contract liabilities analyzed by components (20X2)

We show the reconciliation of the insurance contract liability required by paragraph 101, which is called the movements in insurance contract liabilities analyzed by components in the IFRS 17 *Effects Analysis*, and then explain the entries.

Movements in insurance contract liabilities analyzed by components, 20X2

	present value of future cash flows	risk adjustment	contractual service margin	total
Insurance contract liabilities 20X1	75.47	2.00	3.61	81.08
Changes that relate to current service	0.00	(2.00)	(3.83)	(5.83)
CSM recognized for service provided			(3.83)	(3.83)
Risk adjustment recognized for the risk		(2.00)		(2.00)
Experience adjustments	0.00			0.00
Changes that relate to future service	0.00	0.00	0.00	0.00
Contracts initially recognized in the period	0.00	0.00	0.00	0.00
Changes in estimates reflected in the CSM	0.00	0.00	0.00	0.00
Changes in estimates: onerous contract	0.00	0.00		0.00
Changes that relate to past service	0.00	0.00	0.00	0.00
Adjustments to liabilities for incurred claims	0.00	0.00		0.00
Insurance service result	0.00	(2.00)	(3.83)	(5.83)
Insurance finance expenses	4.53		0.22	4.75
Total changes in comprehensive income	4.53	(2.00)	(3.61)	(1.08)
Cash flows	(80.00)			(80.00)
Insurance contract liabilities 20X2	0.00	0.00	0.00	0.00

The opening balances for the 20X2 reconciliation exhibits are the closing balances from the 20X1 exhibits.

On December 31, 20X2, the entries relating to current service are

- the allocation of the contractual service margin to profit or loss is -3.83; the negative entry is a reduction in the insurance contract liability.
- the release of the risk adjustment for non-financial risk is -2.00; the negative entry is a reduction in the insurance contract liability.

The insurance service result is the sum of the changes for current, future, and past service. For 20X2, the changes for future service and past service are zero, so the insurance service result is the changes for current service.

- Present value of future cash flows: 0
- Risk adjustment for non-financial risk: -2.00 (release of the risk adjustment for non-financial risk is profit)
- Contractual service margin: -3.83

- The contractual service margin at initial recognition is 6.80, it accretes interest of $6\% \times 6.80 = 0.4080$ and half the total, or $\frac{1}{2} \times (6.80 + 0.4080) = 3.60$ is allocated to profit or loss for 20X1 (and is included in insurance revenue).
- The remaining $6.80 + 0.41 - 3.60 = 3.61$ plus the accretion of interest in 20X2 is $3.61 \times 1.06 = 3.83$.

Cash flows

Underwriting cash inflows from policyholders (premiums received) raise the insurance contract liability, and underwriting cash outflows (acquisition cash flows and claim payments) reduce the insurance contract liability.

In 20X2, the claim of 80 is paid, so the net cash flow is -80 (under the present value of future cash flows). The insurance contract liability at December 31, 20X2 (the last row in the exhibit) is

- present value of future cash flows: $75.47 + 4.53 - 80 = 0.00$; no future cash flows after the claim is paid.
- risk adjustment for non-financial risk: $2.00 + -2.00 = 0.00$ (the risk adjustment is released).
- contractual service margin: $3.61 + -3.83 + 0.22 = 0.00$ (opening balance + insurance service result + insurance finance result)

Progression of the insurance contract liabilities (20X2)

We show the reconciliation of the insurance contract liability required by paragraph 100, also called the "Progression of the insurance contract liabilities for remaining coverage and for incurred claims" in the IFRS 17 *Effects Analysis*, and then explain the entries.

Progression of the insurance contract liabilities for remaining coverage and for incurred claims 20X2

	Liabilities for Remaining Coverage		Liabilities for Incurred Claims	Total
	Excluding Loss Component	Loss Component		
Insurance contract liabilities 20X1	81.08	0.00	0.00	81.08
Insurance revenue	(97.07)			(97.07)
Insurance service expenses	11.24	0.00	80.00	91.24
Incurred claims and other expenses		0.00	80.00	80.00
Acquisition expenses	11.24			11.24
Related to future service (onerous contracts)		0.00		0.00
Related to past service (incurred claims)			0.00	0.00
Investment components	0.00		0.00	0.00
Insurance service result	(85.83)	0.00	80.00	(5.83)
Insurance finance expenses	4.75	0.00	0.00	4.75
Change in comprehensive income	(81.08)	0.00	80.00	(1.08)
Cash flows				
Premiums received	0.00			0.00
Claims and other expenses paid			(80.00)	(80.00)
Acquisition cash flows paid	0.00			0.00
Total cash flows	0.00	0.00	(80.00)	(80.00)
Insurance contract liabilities 20X2	0.00	0.00	0.00	0.00

The opening balances in the reconciliation exhibits are the closing balances from the preceding year. The closing balances are all zero, since the coverage period end in 20X2 and all the claims are paid.

Insurance service expenses

The allocated acquisition expenses of 11.24 are shown as a line item under insurance service expenses on the reconciliation of the insurance contract liability required by paragraph 100. They are also included in the insurance revenue, though they are not shown as a separate line item there.

The incurred claim at the end of the year of 80 is shown as a line item under insurance service expenses on the reconciliation of the insurance contract liability required by paragraph 100. The insurance contract is not onerous, so the insurer expects to receive consideration for the entire claim, so the claim amount is included in the insurance revenue, though it is not shown as a separate line item there.

Insurance finance expenses

The insurance finance expense on the present value of future cash flows is $80 \times (1.06^0 - 1.06^{-1}) = 4.53$. Since the discount rate does not change during the year, we can compute this as $75.47 \times 6\% = 4.53$ as well.

The insurance finance expense on the contractual service margin is $3.61 \times 6\% = 0.22$.

The total insurance finance expense is $4.53 + 0.22 = 4.75$.

Insurance revenue

Using the values computed above, the insurance revenue for 20X2 is determined as

$$\begin{aligned} & (0 - 81.08) \text{ change in the insurance contract liability for remaining coverage excluding the loss component} \\ - & (0 - 0) \text{ premium cash flows minus acquisition cash flows} \\ - & 4.75 \text{ insurance finance expense} \\ - & 11.24 \text{ amortized and allocated acquisition expenses} \\ = & (0 - 81.08) - (0 - 0) - 4.75 - 11.24 = -97.07 \end{aligned}$$

The claim payment in 20X2 affects the liability for incurred claims, not the liability for remaining coverage.

We analyze insurance revenue in each year as the sum of

- The accumulated premium compensating the expected claims, benefits, and other expenses.
- The release of the risk adjustment for non-financial risk.
- The allocated insurance acquisition cash flows.
- The allocation of the contractual service margin to profit or loss.

The remaining contractual service margin at December 31, 20X1, is $7.21 - 3.60 = 3.61$. The accretion of interest on the contractual service margin in 20X2 is $3.61 \times 6\% = 0.22$, and the contractual service margin at the end of 20X2 is $3.61 + 0.22 = 3.83 = 3.61 \times 1.06$. The coverage period ends at December 31, 20X2, so the allocation of the contractual service margin to 20X2 is 3.83.

The release of the risk adjustment for non-financial risk in 20X2 is -2; the release is shown as a negative entry for a reduction in the liability.

The insurance revenue for the year =

$$\begin{aligned} & -80 \text{ (incurred claims)} \\ + & -11.24 \text{ (amortized acquisition expenses)} \\ + & -2.00 \text{ (release of the risk adjustment for non-financial risk)} \\ + & -3.83 \text{ (allocation of the contractual service margin to profit or loss)} \\ = & -80 + -11.24 + -2.00 + -3.83 = -97.07 \end{aligned}$$

Revenues are negative entries, so insurance revenue is -97.07, under the liability for remaining coverage excluding the loss component.

Insurance service result

The insurance service expenses are reported as

- Incurred claims: 80 under liability for incurred claims
- Acquisition expenses: 11.24 under liability for remaining coverage excluding the loss component

The positive entries indicate expenses. The total insurance service expense is $80 + 11.24 = 91.24$.

The insurance service result under the liability for remaining coverage excluding the loss component is $-97.07 + 91.24 = -5.83$, which is the allocation of the contractual service margin to 20X2 and the release of the risk adjustment for non-financial risk: $-3.83 + -2.00 = -5.83$.

The insurance finance expense is 4.75 (worked out above), so the profit or loss is $-5.83 + 4.75 = -1.08$.

The total profit or loss over the two years of the coverage period (20X1 and 20X2) is $1.08 + -1.08 = 0.00$. The nominal value of the cash outflows, $20 + 80 = 100$, equals the nominal value of the cash inflows. The profit or loss is the investment income on the underwriting cash flows, which is not included in the IFRS 17 exhibits (though it is included in the net financial result shown on the statement of financial performance).

Analysis of contracts initially recognised in the period (20X2)

No contracts are issued in 20X2.

Analysis of insurance revenue (20X2)

analysis of insurance revenue for 20X2

amounts related to liabilities for remaining coverage	85.83
expected incurred claims and other expenses	80.00
contractual service margin for the service provided	3.83
risk adjustment for the risk expired	2.00
recovery of acquisition cash flows	11.24
insurance revenue	97.07

- The expected incurred claims and other expenses are the incurred values for which the insurer expects to receive consideration (premium).
 - The incurred claim is 80 and it is covered by the premium (the contract is not onerous)
- The contractual service margin for the service provided is the allocation of (the contractual service margin at initial recognition plus the accretion of interest) to profit or loss.
 - $6.80 + 0.41 - 3.60 = 3.61$ plus the accretion of interest in 20X2 is $3.61 \times 1.06 = 3.83$ for 20X2
- The risk adjustment for the risk expired is the release of the risk adjustment.
 - 2.00 for 20X2 in this scenario
- The recovery of acquisition cash flows is the amortized acquisition expenses allocated to the year.
 - 11.24 for 20X2 in this scenario

The sum of the first three bullet points above is the amounts related to liabilities for remaining coverage. The recovery of acquisition cash flows is an allocation of acquisition cash flows already paid, so it is not part of the liability for remaining coverage. Insurance revenue is the sum of all four bullet points.

Changes in the current discount rate

Change in the current discount rate affect the fulfilment cash flows, the insurance finance expense, total comprehensive income, and the insurance contract liability. These effects are discussed more fully in other sections of this textbook. We illustrate here how changes in the discount rate would affect the example above.

IFRS 17 assumes insurers keep track of the discount rate at initial recognition and at subsequent valuation dates. The insurance contracts in a group may be issued over the course of a year, and contracts may have different issue dates. IFRS 17 uses a weighted average discount rate for initial recognition based on the discount rates during the coverage period. The discount rate at initial recognition may change if the insurance contracts in the groups are issued in two calendar years.¹⁷

If the group of insurance contracts in the group are issued from June 1, 20X1, through May 31, 20X2, then

- The discount rate at initial recognition for the 20X1 financial statements is a weighted average of current discount rates from June 1, 20X1, through December 31, 20X1.
- The discount rate at initial recognition for the 20X2 financial statements is a weighted average of current discount rates from June 1, 20X1, through May 31, 20X2.

Insurers must disclose the effects of insurance contracts initially recognised in the period on the estimates of future cash outflows, which are affected by changes in the discount rate at initial recognition.¹⁸

Insurance finance expenses are computed for the present value of future cash flows and the contractual service margin in different ways:

- The fulfilment cash flows are valued at the current discount rate, and the insurance finance expenses on the present value of future cash flows use the current discount rates at the beginning and end of the year.¹⁹
- The accretion of interest on the contractual service margin uses the discount rate determined at initial recognition, not the current discount rate.²⁰

If the discount rate changes from 6% at initial recognition to 5% at December 31, 20X1, the insurance finance expense on the present value of future cash flows is

- $80 \times (1.05^{-1} - 1.06^{-2}) = 4.99$ in 20X1
- $80 \times (1.05^0 - 1.05^{-1}) = 3.81$ in 20X2

The total insurance finance expense over the two years is $4.99 + 3.81 = 8.80$, which is the same as when the current discount rate does not change ($4.27 + 4.53 = 8.80$), but more insurance finance expense is reported in 20X1 and less is reported in 20X2.

The insurer has an accounting policy choice whether to dis-aggregate the insurance finance expense between profit or loss and other comprehensive income. It chooses whether²¹

- to recognize the entire insurance finance expense in profit or loss using the current discount rates
- to recognize in profit or loss the insurance finance expense determined using the discount rate at initial recognition and to recognize the remaining portion in other comprehensive income.

If the insurer dis-aggregates the insurance finance expense between profit or loss and other comprehensive income, the amounts in profit or loss and in other comprehensive income are

- 20X1: profit or loss = 4.27; other comprehensive income = $4.99 - 4.27 = 0.72$
- 20X2: profit or loss = 4.53; other comprehensive income = $3.81 - 4.53 = -0.72$

The cumulative insurance finance expense in other comprehensive income is zero when the claims in the group of insurance contracts settle.²²

If the discount rate changes from 6% at initial recognition to 7% at December 31, 20X1, the insurance finance expense on the present value of future cash flows is

- $80 \times (1.07^{-1} - 1.06^{-2}) = 3.57$ in 20X1
- $80 \times (1.07^0 - 1.07^{-1}) = 5.23$ in 20X2

The total insurance finance expense over the two years is $3.57 + 5.23 = 8.80$ which is the same as when the current discount rate does not change ($4.27 + 4.53 = 8.80$), but less insurance finance expense is reported in 20X1 and more is reported in 20X2.

If the insurer dis-aggregates the insurance finance expense between profit or loss and other comprehensive income, the amounts in profit or loss and in other comprehensive income are

- 20X1: profit or loss = 4.27; other comprehensive income = $3.57 - 4.27 = -0.70$
- 20X2: profit or loss = 4.53; other comprehensive income = $5.23 - 4.53 = 0.70$

The accounting policy choice helps insurers avoid accounting mismatches between the investment income on the financial assets bought with the underwriting cash flows and the insurance finance expenses.

- If the investment income on the financial assets is recognized at fair value through profit or loss, the insurer might recognize all insurance finance expense in profit or loss (not dis-aggregate).
- If the investment income on the financial assets is recognized at fair value through other comprehensive income, the insurer might dis-aggregate the insurance finance expense between profit or loss and other comprehensive income.

The accounting policy choice whether to dis-aggregate insurance finance expenses applies to the portfolio of insurance contracts. IFRS 17 assumes that insurers select financial assets for each portfolio of insurance contracts, so the valuation method for the financial assets may differ by portfolio of insurance contracts.²³

The insurance finance expense on the contractual service margin is $6.80 \times 6\% = 0.41$, even if the current discount rate changes to 5% or 7%.

The total insurance finance expense for 20X1 if the current discount rate changes to 5% is $4.99 + 0.41 = 5.40$.

The reconciliation of the insurance contract liability required by paragraph 100 for 20X1 is

Progression of the insurance contract liabilities, with changes (20X1)

Progression of the insurance contract liabilities for remaining coverage and for incurred claims (20X1)

	<i>Liabilities for Remaining Coverage</i>		<i>Liabilities for Incurred Claims</i>	<i>Total</i>
	<i>Excluding Loss Component</i>	<i>Loss Component</i>		
Insurance contract liabilities 20X0	0.00	0.00	0.00	0.00
Insurance revenue	(14.20)			(14.20)
Insurance service expenses	10.60	0.00	0.00	10.60
Incurred claims and other expenses		0.00	0.00	0.00
Acquisition expenses	10.60			10.60
Related to future service (onerous contracts)		0.00		0.00
Related to past service (incurred claims)			0.00	0.00
Investment components	0.00		0.00	0.00
Insurance service result	(3.60)	0.00	0.00	(3.60)
Insurance finance expenses	5.40	0.00	0.00	5.40
Change in comprehensive income	1.80	0.00	0.00	1.80
Cash flows				
Premiums received	100.00			100.00
Claims and other expenses paid			0.00	0.00
Acquisition cash flows paid	(20.00)			(20.00)
Total cash flows	80.00	0.00	0.00	80.00
Insurance contract liabilities 20X1	81.80	0.00	0.00	81.80

The insurance revenue, insurance service expenses, and cash flows do not change. The insurance finance expense and the insurance contract liability at the end of the year change by the same amount. In 20X2, the insurance finance expense is lower by an offsetting amount.

Movements in insurance contract liabilities analyzed by components with changes (20X1)

The reconciliation of the insurance contract liability required by paragraph 101 for 20X1 shows:

Movements in insurance contract liabilities analyzed by components, 20X1

	present value of future cash flows	risk adjustment	contractual service margin	total
Insurance contract liabilities 20X0	0.00	0.00	0.00	0.00
Changes that relate to current service	0.00	0.00	(3.60)	(3.60)
CSM recognized for service provided			(3.60)	(3.60)
Risk adjustment recognized for the risk expired		0.00		0.00
Experience adjustments	0.00			0.00
Changes that relate to future service	(8.80)	2.00	6.80	0.00
Contracts initially recognized in the period	(8.80)	2.00	6.80	0.00
Changes in estimates reflected in the CSM	0.00	0.00	0.00	0.00
Changes in estimates: onerous contract losses	0.00	0.00		0.00
Changes that relate to past service	0.00	0.00	0.00	0.00
Adjustments to liabilities for incurred claims	0.00	0.00		0.00
Insurance service result	(8.80)	2.00	3.20	(3.60)
Insurance finance expenses	4.99		0.41	5.40
Total changes in comprehensive income	(3.81)	2.00	3.61	1.80
Cash flows	80.00			80.00
Insurance contract liabilities 20X1	76.19	2.00	3.61	81.80

If the current discount rate changes by December 31, 20X1, the entries for (i) the insurance finance expense, (ii) the total changes in comprehensive income, and (iii) the closing balance for the insurance contract liability change for the columns titled the present value of future cash flows and the total insurance contract liability.

The IFRS 17 reconciliation exhibits do not distinguish profit or loss from other comprehensive income. The insurer's accounting policy choice whether or not to dis-aggregate insurance finance expense between profit or loss and other comprehensive income affects its statements of financial performance, not the reconciliation exhibits. However, the insurer must explain the relation between its insurance finance income or expense and its investment income and the amount of each recognized in profit or loss vs other comprehensive income.²⁴ If the insurer dis-aggregates insurance finance income or expense between profit or loss and other comprehensive income, it must explain how it determined the amount in profit or loss.²⁵

The change in the discount rate does not affect the analysis of contracts initially recognised in the period and the analysis of insurance revenue.

SCENARIO #5: CLAIM OF 70, TWO-YEAR COVERAGE PERIOD

An insurer issues a two-year contract on January 1, 20X1.

- On January 1, 20X1, premium of 100 is received and acquisition cash flows of 20 are paid.
- A claim is expected to occur and be paid for 70 on December 31, 20X2.

- The discount rate is 6% *per annum*.
- The risk adjustment for non-financial risk is 2.00, and it does not accrete interest.

The present value of future cash flows at initial recognition is $-100 + 20 + 70 / 1.06^2 = -17.70$.

The fulfilment cash flows at initial recognition (including the risk adjustment for non-financial risk) are $-100 + 20 + 70 / 1.06^2 + 2.00 = -15.70$, so the contractual service margin at initial recognition is 15.70.

Compared to the illustration with a claim payment of 80 at the end of two years, this illustration with a payment of 70 has fulfilment cash flows that are $(80 - 70) / 1.06^2 = 8.90$ lower and a contractual service margin that is 8.90 higher.

The insurance contract liability at initial recognition is $-15.70 + 15.70 = 0.00$. For non-onerous contracts, the insurance contract liability at initial recognition is zero.

The present value of future cash flows after the premium is received and the acquisition cash flows are paid is $70 / 1.06^2 = 62.30$. The risk adjustment for non-financial risk is 2.00, so the fulfilment cash flows after the premium is received and the acquisition cash flows are paid is $62.30 + 2.00 = 64.30$.

Allocation and amortization of acquisition cash flows

Acquisition cash flows are included in fulfilment cash flows when they occur, but they are allocated over the coverage period on the basis of the passage of time for insurance revenue and insurance service expense.

The acquisition cash flows are 20 on January 1, 20X1, the discount rate is 6% *per annum*, and the coverage units are the same in 20X1 and 20X2. We allocate the present values of the acquisition expense equally to 20X1 and 20X2: that is, we derive the nominal values in 20X1 and 20X2 whose present values are equal and whose sum is 20. The nominal values are assumed to occur at the end of the year. The present values at initial recognition of the acquisition expenses reported on December 31, 20X1, and December 31, 20X2, are each $\frac{1}{2} \times 20 = 10$, so the nominal values are

- $10 \times 1.06^1 = 10.60$ on December 31, 20X1
- $10 \times 1.06^2 = 11.24$ on December 31, 20X2

We can also solve for the amortized, allocated acquisition expenses algebraically. Let Z_1 be the acquisition expense on December 31, 20X1, and Z_2 be the acquisition expense on December 31, 20X2. Since the coverage units are the same in the two years and the discount rate is 6% *per annum*, $Z_2 = 1.06 \times Z_1$. For a present value date of January 1, 20X1, we solve

$$\begin{aligned} Z_1 / 1.06^1 + Z_2 / 1.06^2 &= 20 \Rightarrow \\ Z_1 / 1.06^1 + 1.06 \times Z_1 / 1.06^2 &= 2 \times Z_1 / 1.06^1 = 20 \Rightarrow \\ Z_1 &= \frac{1}{2} \times 20 \times 1.06^1 = 10.60 \text{ and } Z_2 = 10.60 \times 1.06^1 = 11.24 \end{aligned}$$

We verify that $10.60 / 1.06^1 + 11.24 / 1.06^2 = 20.00$.

Progression of the insurance contract liabilities (20X1)

We show the reconciliation of the insurance contract liability required by paragraph 100, also called the "Progression of the insurance contract liabilities for remaining coverage and for incurred claims" in the IFRS 17 *Effects Analysis*, and then explain the entries.

Progression of the insurance contract liabilities for remaining coverage and for incurred claims 20X1

	<i>Liabilities for Remaining Coverage</i>		<i>Liabilities for Incurred Claims</i>	<i>Total</i>
	<i>Excluding Loss Component</i>	<i>Loss Component</i>		
Insurance contract liabilities 20X0	0.00	0.00	0.00	0.00
Insurance revenue	(18.92)			(18.92)
Insurance service expenses	10.60	0.00	0.00	10.60
Incurred claims and other expenses		0.00	0.00	0.00
Acquisition expenses	10.60			10.60
Related to future service (onerous contracts)		0.00		0.00
Related to past service (incurred claims)			0.00	0.00
Investment components	0.00		0.00	0.00
Insurance service result	(8.32)	0.00	0.00	(8.32)
Insurance finance expenses	4.68	0.00	0.00	4.68
Change in comprehensive income	(3.64)	0.00	0.00	(3.64)
Cash flows				
Premiums received	100.00			100.00
Claims and other expenses paid			0.00	0.00
Acquisition cash flows paid	(20.00)			(20.00)
Total cash flows	80.00	0.00	0.00	80.00
Insurance contract liabilities 20X1	76.36	0.00	0.00	76.36

The opening balances in the reconciliation exhibits are the closing balances from the preceding year. For this illustration, the insurer issues its first contract on January 1, 20X1, so the opening balances (the insurance contract liabilities on December 31, 20X0) are zero for all columns.

Insurance service expenses

The allocated acquisition expenses of 10.60 are shown as a line item under insurance service expenses on the reconciliation of the insurance contract liability required by paragraph 100. They are also included in the insurance revenue, though they are not shown as a separate line item there.

Insurance finance expenses

The insurance finance expense on the present value of future cash flows is $70 \times (1.06^{-1} - 1.06^{-2}) = 3.74$. Since the discount rate does not change during the year, we can compute this as $62.30 \times 6\% = 3.74$ as well.

The insurance finance expense on the contractual service margin is $15.70 \times 6\% = 0.94$.

The total insurance finance expense is $3.74 + 0.94 = 4.68$, which is the accretion of interest on the portion of the net premium that accretes interest: $(100 - 20 - 2) \times 6\% = 4.68$. The insurance finance expense for 20X1

is the same whether the claim is paid on December 31, 20X1, or at a later date, and is the same whether the claim is paid for 70 or 80 (if the contract is not onerous and the discount rate does not change over the year).

Insurance revenue

Insurance revenue is *determined* as

- the change in the insurance contract liability for remaining coverage excluding the loss component
- cash flows for the net premium (gross premium minus acquisition cash flows)
- amortized and allocated acquisition expenses recognized in the year
- insurance finance income or expenses

Using the values computed above, the insurance revenue for 20X1 is

- (76.36 – 0) change in the insurance contract liability for remaining coverage excluding the loss component
- (100 – 20) premium cash flows minus acquisition cash flows
- 4.68 insurance finance expense
- 10.60 amortized and allocated acquisition expenses
- = (76.36 – 0) – (100 – 20) – 4.68 – 10.60 = -18.92.

We analyze insurance revenue in each year as the sum of

- The accumulated premium compensating the expected claims, benefits, and other expenses.
- The release of the risk adjustment for non-financial risk.
- The allocated insurance acquisition cash flows.
- The allocation of the contractual service margin to profit or loss.

The accretion of interest on the contractual service margin is $15.70 \times 6\% = 0.94$, and the contractual service margin at the end of the year is $15.70 + 0.94 = 16.64 = 15.70 \times 1.06$. The coverage units are the same in 20X1 and 20X2, so the allocation of the contractual service margin to 20X1 is $\frac{1}{2} \times 16.64 = 8.32$.

The risk adjustment for non-financial risk stays 2.00 until the claim is paid, so the release in 20X1 is zero.

The insurance revenue for the year =

- 10.60 (amortized acquisition expenses)
- + -8.32 (allocation of the contractual service margin to profit or loss)
- = -10.60 + -8.32 = -18.92

Revenues are negative entries, so insurance revenue is -18.92, under the liability for remaining coverage excluding the loss component.

Insurance service result

The insurance service expenses are reported as

- Acquisition expenses: 10.60 under the liability for remaining coverage excluding the loss component.

The positive entry indicates an expense.

The insurance service result shows

- liability for remaining coverage excluding the loss component: $-18.92 + 10.60 = -8.32$, which is the allocation of the contractual service margin to 20X1, since no claims are paid and no risk adjustment for non-financial risk is released in 20X1.

The insurance finance expense is 4.68, so the profit or loss is $-8.32 + 4.68 = -3.64$ (a negative entry means a profit).

The present value of future cash flows at December 31, 20X1, is $70 / 1.06^1 = 66.04$. The risk adjustment for non-financial risk is 2.00, so the fulfilment cash flows after the premium is received and the acquisition cash flows are paid is $66.04 + 2.00 = 68.04$.

The remaining contractual service margin (after the allocation to 20X1 profit or loss) is $16.64 - 8.32 = 8.32$, so the insurance contract liability is $68.04 + 8.32 = 76.36$.

Movements in insurance contract liabilities analyzed by components (20X1)

We show the reconciliation of the insurance contract liability required by paragraph 101, which is called the movements in insurance contract liabilities analyzed by components in the IFRS 17 *Effects Analysis*, and then explain the entries.

Movements in insurance contract liabilities analyzed by components, 20X1

	present value of future cash flows	risk adjustment	contractual service margin	total
Insurance contract liabilities 20X0	0.00	0.00	0.00	0.00
Changes that relate to current service	0.00	0.00	(8.32)	(8.32)
CSM recognized for service provided			(8.32)	(8.32)
Risk adjustment recognized for the risk expired		0.00		0.00
Experience adjustments	0.00			0.00
Changes that relate to future service	(17.70)	2.00	15.70	0.00
Contracts initially recognized in the period	(17.70)	2.00	15.70	0.00
Changes in estimates reflected in the CSM	0.00	0.00	0.00	0.00
Changes in estimates: onerous contract losses	0.00	0.00		0.00
Changes that relate to past service	0.00	0.00	0.00	0.00
Adjustments to liabilities for incurred claims	0.00	0.00		0.00
Insurance service result	(17.70)	2.00	7.38	(8.32)
Insurance finance expenses	3.74		0.94	4.68
Total changes in comprehensive income	(13.96)	2.00	8.32	(3.64)
Cash flows	80.00			80.00
Insurance contract liabilities 20X1	66.04	2.00	8.32	76.36

The contract is initially recognized in the period with

- a present value of future cash flows of $-100 + 70 / 1.06^2 + 20 = -17.70$
- a risk adjustment for non-financial risk of 2.00
- a contractual service margin of $-(-17.70 + 2.00) = 15.70$
- an insurance contract liability of $-17.70 + 2.00 + 15.70 = 0.00$

The contract is not onerous, so the insurance contract liability is zero.

The insurer has no other contracts and it does not change any estimates during the year, so the changes in estimates related to future service are zero, and the entries above appear also as the sub-total for changes that relate to future service.

On December 31, 20X1, the entry relating to current service is the allocation of the contractual service margin to profit or loss $= \frac{1}{2} \times 15.70 \times 1.06 = 8.32$, as a negative entry (reduction in the insurance contract liability).

The insurance service result is the sum of the changes for current, future, and past service (shown in this order for the sums):

- Present value of future cash flows: $0 + -17.70 + 0 = -17.70$
 - The negative entry means the insurance services based on the present value of the cash flows show a profit.
- Risk adjustment for non-financial risk: $0.00 + 2.00 + 0.00 = 2.00$.
- Contractual service margin: $-3.60 + 6.80 + 0 = 3.20$.
 - The contractual service margin at initial recognition is 15.70, it accretes interest of $6\% \times 15.70 = 0.94$ and half the total, or $\frac{1}{2} \times (15.70 + 0.94) = 8.32$ is allocated to profit or loss for 20X1 (and is included in insurance revenue).

Cash flows

Underwriting cash inflows from policyholders (premiums received) raise the insurance contract liability, and underwriting cash outflows (acquisition cash flows and claim payments) reduce the insurance contract liability.

In 20X1, premium received is 100 and acquisition cash flows are -20, so the net cash flows are $100 + -20 = 80$ (under the present value of future cash flows). The insurance contract liability at December 31, 20X1 (the last row in the exhibit) is the sum of

- the present value of future cash flows: $-13.96 + 80 = 66.04$ which is the present value of the claim of 70 to be paid in one year: $70 / 1.06^1 = 66.04$.
- the risk adjustment for non-financial risk: 2.00, since it did not change since initial recognition.
- the contractual service margin:
 - accumulated for accretion of interest: $15.70 \times 1.06 = 16.64$
 - allocated to profit or loss: $\frac{1}{2} \times 15.70 \times 1.06 = 8.32$
 - remaining at end of the year: $16.64 - 8.32 = 8.32$

The insurance contract liability is $66.04 + 2.00 + 8.32 = 76.36$.

Analysis of contracts initially recognised in the period (20X1)

analysis of contracts initially recognised in the period

Contracts initially recognized in the year		of which contracts acquired	of which contracts onerous
Estimates of the present value of future cash inflows	(100.00)	0.00	0.00
Estimates of the present value of future cash outflows			
Insurance acquisition cash flows	20.00	0.00	0.00
Claims payable and other expenses	71.20	0.00	0.00
Risk adjustment	2.00	0.00	0.00
Contractual service margin	6.80	0.00	–
Total	0.00	0.00	0.00

The reconciliation of the insurance contract liability required by paragraph 101 (“source of changes in the fulfilment cash flows” or “movements in insurance contract liabilities analyzed by components”) shows for contracts initially recognized in the period:

- the present value of future cash flows: a negative entry is a future cash inflow (such as premium), and a positive entry is a future cash outflow (such as claims, acquisition cash flows, and other benefits)
- the risk adjustment for non-financial risk
- the contractual service margin
- the insurance contract liability (the sum of the three items above)

The insurer must further sub-divide these figures (in a separate disclosure) two ways:

- the present value of future cash flows is divided between cash inflows and cash outflows, and the cash outflows are shown separately for acquisition cash flows and for claims and other expenses.
- all figures are also shown for two components of the insurance contracts issued (in addition to the total):
 - insurance contracts acquired in a transfer or a business combination
 - groups of onerous contracts

The contracts here are issued by the insurer to policyholders (not acquired in a business combination) and they are not onerous, so the right-most two columns of the exhibit are zeros. The first numeric column shows

- Present value of future cash inflows (negative entry) = premium receivables on January 1 = -100
- Present value of acquisition cash outflows (positive entry), paid on January 1 = 20
- Present value of future claims outflows (positive entry), paid on December 31 = $70 / 1.06^2 = 62.30$
- Risk adjustment for non-financial risk = 2.00
- Contractual service margin = $-(-100 + 20 + 62.30 + 2.00) = 15.70$
- The total insurance contract liability is zero, since the contract is not onerous.

Analysis of insurance revenue (20X1)

analysis of insurance revenue for 20X1

amounts related to liabilities for remaining coverage	8.32
expected incurred claims and other expenses	0.00
contractual service margin for the service provided	8.32
risk adjustment for the risk expired	0.00
recovery of acquisition cash flows	10.60
insurance revenue	18.92

- The expected incurred claims and other expenses are the incurred values for which the insurer expects to receive consideration (premium):
 - no claim occurs in 20X1 for this scenario.
- The contractual service margin for the service provided is the allocation of (the contractual service margin at initial recognition plus the accretion of interest) to profit or loss.
 - $\frac{1}{2} \times 15.70 \times 1.06 = 8.32$ for 20X1 in this scenario.
- The risk adjustment for the risk expired is the release of the risk adjustment.
 - The risk adjustment for non-financial risk is not released in 20X1 for this scenario.
- The recovery of acquisition cash flows is the amortized acquisition expenses allocated to the year:
 - 10.60 for 20X1 in this scenario.

The sum of the first three bullet points above is the amounts related to liabilities for remaining coverage. The recovery of acquisition cash flows is an allocation of acquisition cash flows already paid, so it is not part of the liability for remaining coverage. Insurance revenue is the sum of all four bullet points.

Progression of the insurance contract liabilities (20X2)

We show the reconciliation of the insurance contract liability required by paragraph 100, also called the “Progression of the insurance contract liabilities for remaining coverage and for incurred claims” in the IFRS 17 *Effects Analysis*, and then explain the entries.

Progression of the insurance contract liabilities for remaining coverage and for incurred claims 20X2

	<i>Liabilities for Remaining Coverage</i>		<i>Liabilities for Incurred Claims</i>	<i>Total</i>
	<i>Excluding Loss Component</i>	<i>Loss Component</i>		
Insurance contract liabilities 20X1	76.36	0.00	0.00	76.36
Insurance revenue	(92.06)			(92.06)
Insurance service expenses	11.24	0.00	70.00	81.24
Incurred claims and other expenses		0.00	70.00	70.00
Acquisition expenses	11.24			11.24
Related to future service (onerous contracts)		0.00		0.00
Related to past service (incurred claims)			0.00	0.00
Investment components	0.00		0.00	0.00
Insurance service result	(80.82)	0.00	70.00	(10.82)
Insurance finance expenses	4.46	0.00	0.00	4.46
Change in comprehensive income	(76.36)	0.00	70.00	(6.36)
Cash flows				
Premiums received	0.00			0.00
Claims and other expenses paid			(70.00)	(70.00)
Acquisition cash flows paid	0.00			0.00
Total cash flows	0.00	0.00	(70.00)	(70.00)
Insurance contract liabilities 20X2	0.00	0.00	0.00	0.00

The opening balances in the reconciliation exhibits are the closing balances from the preceding year.

Insurance service expenses

The allocated acquisition expenses of 11.24 are shown as a line item under insurance service expenses on the reconciliation of the insurance contract liability required by paragraph 100. They are also included in the insurance revenue, though they are not shown as a separate line item there.

Insurance finance expenses

The insurance finance expense on the present value of future cash flows is $70 \times (1.06^0 - 1.06^{-1}) = 3.96$. Since the discount rate does not change during the year, we can compute this as the present value of cash outflow times the discount rate: $70 / 1.06 \times 6\% = 3.96$.

The insurance finance expense on the contractual service margin is $8.32 \times 6\% = 0.50$.

The total insurance finance expense is $3.96 + 0.50 = 4.46$.

Insurance revenue

Using the values computed above, the insurance revenue for 20X2 is determined as

- (0 – 76.36) change in the insurance contract liability for remaining coverage excluding the loss component
- (0 – 0) premium cash flows minus acquisition cash flows
- 4.46 insurance finance expense
- 11.24 amortized and allocated acquisition expenses
- = (0 – 76.36) – (0 – 0) – 4.46 – 11.24 = -92.06

The claim payment in 20X2 affects the liability for incurred claims, not the liability for remaining coverage.

We analyze insurance revenue in each year as the sum of

- The accumulated premium compensating the expected claims, benefits, and other expenses.
- The release of the risk adjustment for non-financial risk.
- The allocated insurance acquisition cash flows.
- The allocation of the contractual service margin to profit or loss.

The remaining contractual service margin at December 31, 20X1, is $16.64 - 8.32 = 8.32$. The accretion of interest on the contractual service margin in 20X2 is $8.32 \times 6\% = 0.50$, and the contractual service margin at the end of 20X2 is $8.32 + 0.50 = 8.82 = 8.32 \times 1.06$. The coverage period ends at December 31, 20X2, so the allocation of the contractual service margin to 20X2 is 8.82.

The release of the risk adjustment for non-financial risk in 20X2 is -2.00; the release is shown as a negative entry for a reduction in the liability.

The insurance revenue for the year =

- 70 (incurred claims)
- + -11.24 (amortized acquisition expenses)
- + -2.00 (release of the risk adjustment for non-financial risk)
- + -8.82 (allocation of the contractual service margin to profit or loss)
- = $-70 + -11.24 + -2.00 + -8.82 = -92.06$.

Revenues are negative entries, so insurance revenue is -92.06, under the liability for remaining coverage excluding the loss component.

Insurance service result

The insurance service expenses are reported as

- Incurred claims: 70 under liability for incurred claims
- Acquisition expenses: 11.24 under liability for remaining coverage excluding the loss component

The positive entries indicate expenses. The total insurance service expense is $70 + 11.24 = 81.24$.

The insurance service result shows

- liability for remaining coverage excluding the loss component: $-92.06 + 81.24 = -10.82$ which is the allocation of the contractual service margin to 20X2 and the release of the risk adjustment for non-financial risk: $-8.82 + -2.00 = -10.82$.

The insurance finance expense is 4.46 (worked out above), so the profit or loss is $-10.82 + 4.46 = -6.36$.

The total profit or loss over the two years of the coverage period (20X1 and 20X2) is $-3.64 + -6.36 = -10.00$. The nominal value of the cash outflows, $20 + 70 = 90$, is 10 less than the nominal value of the cash inflows, so the profit or loss (excluding the investment income on the underwriting cash flows) is -10.

The total profit or loss is the 10 shown on the IFRS 17 exhibits plus the investment income on the underwriting cash flows, which is not included in the IFRS 17 exhibits (though it is included in the net financial result shown on the statement of financial performance).

Movements in insurance contract liabilities analyzed by components (20X2)

We show the reconciliation of the insurance contract liability required by paragraph 101, which is called the movements in insurance contract liabilities analyzed by components in the IFRS 17 *Effects Analysis*, and then explain the entries.

Movements in insurance contract liabilities analyzed by components, 20X2

	present value of future cash flows	risk adjustment	contractual service margin	total
Insurance contract liabilities 20X1	66.04	2.00	8.32	76.36
Changes that relate to current service	0.00	(2.00)	(8.82)	(10.82)
CSM recognized for service provided			(8.82)	(8.82)
Risk adjustment recognized for the risk expired		(2.00)		(2.00)
Experience adjustments	0.00			0.00
Changes that relate to future service	0.00	0.00	0.00	0.00
Contracts initially recognized in the period	0.00	0.00	0.00	0.00
Changes in estimates reflected in the CSM	0.00	0.00	0.00	0.00
Changes in estimates: onerous contract losses	0.00	0.00		0.00
Changes that relate to past service	0.00	0.00	0.00	0.00
Adjustments to liabilities for incurred claims	0.00	0.00		0.00
Insurance service result	0.00	(2.00)	(8.82)	(10.82)
Insurance finance expenses	3.96		0.50	4.46
Total changes in comprehensive income	3.96	(2.00)	(8.32)	(6.36)
Cash flows	(70.00)			(70.00)
Insurance contract liabilities 20X2	0.00	0.00	0.00	0.00

The opening balances for the 20X2 reconciliation exhibits are the closing balances from the 20X1 exhibits.

On December 31, 20X2, the entries relating to current service are

- the allocation of the contractual service margin to profit or loss = $\frac{1}{2} \times 15.70 \times 1.06 \times 1.06 = 8.82$ as a negative entry (reduction in the insurance contract liability).
- the release of the risk adjustment for non-financial risk of 2.00 as a negative entry (reduction in the insurance contract liability)

The insurance service result is the sum of the changes for current, future, and past service. For 20X2, the changes for future service and past service are zero, so the insurance service result is the changes for current service.

- Present value of future cash flows: 0
- Risk adjustment for non-financial risk: -2.00 (release of the risk adjustment for non-financial risk is profit)
- Contractual service margin: -8.82
 - The contractual service margin at initial recognition is 15.70, it accretes interest of $6\% \times 15.70 = 0.94$ and half the total, or $\frac{1}{2} \times (15.70 + 0.94) = 8.32$ is allocated to profit or loss for 20X1 (and is included in insurance revenue).
 - The remaining $15.70 + 0.94 - 8.32 = 8.32$ plus the accretion of interest in 20X2 is $8.32 \times 1.06 = 8.82$, which is allocated to profit or loss for 20X2.

Cash flows

Underwriting cash inflows from policyholders (premiums received) raise the insurance contract liability, and underwriting cash outflows (acquisition cash flows and claim payments) reduce the insurance contract liability.

In 20X2, the claim of 70 is paid, so the net cash flow is -70 (under the present value of future cash flows). The insurance contract liability at December 31, 20X2 (the last row in the exhibit) is

- present value of future cash flows: $66.04 + 3.96 - 70 = 0.00$ no future cash flows after the claim is paid.
- risk adjustment for non-financial risk: $2.00 + -2.00 = 0.00$ (the risk adjustment is released).
- contractual service margin: $8.32 + -8.82 + 0.50 = 0.00$ (opening balance + insurance service result + insurance finance result)

Analysis of contracts initially recognised in the period (20X2)

No contracts are issued in 20X2.

Analysis of insurance revenue (20X2)

analysis of insurance revenue for 20X2

amounts related to liabilities for remaining coverage	80.82
expected incurred claims and other expenses	70.00
contractual service margin for the service provided	8.82
risk adjustment for the risk expired	2.00
recovery of acquisition cash flows	11.24
insurance revenue	92.06

- The expected incurred claims and other expenses are the incurred values for which the insurer expects to receive consideration (premium).
 - The incurred claim in 20X2 is 70 and is covered by the premium (the contract is not onerous)
- The contractual service margin for the service provided is the allocation of (the contractual service margin at initial recognition plus the accretion of interest) to profit or loss.
 - $15.70 + 0.94 - 8.32 = 8.32$ plus the accretion of interest in 20X2 is $8.32 \times 1.06 = 8.82$ for 20X2
- The risk adjustment for the risk expired is the release of the risk adjustment.
 - 2.00 for 20X2 in this scenario
- The recovery of acquisition cash flows is the amortized acquisition expenses allocated to the year.
 - 11.24 for 20X2 in this scenario

The sum of the first three bullet points above is the amounts related to liabilities for remaining coverage. The recovery of acquisition cash flows is an allocation of acquisition cash flows already paid, so it is not part of the liability for remaining coverage. Insurance revenue is the sum of all four bullet points.

SCENARIO #6: CLAIM FOR 96, TWO-YEAR COVERAGE PERIOD

An insurer issues a two-year contract on January 1, 20X1.

- On January 1, 20X1, premium of 100 is received and acquisition cash flows of 20 are paid.
- A claim is expected to occur and be paid for 96 on December 31, 20X2.
- The discount rate is 6% *per annum*.
- The risk adjustment for non-financial risk is 2.00, and it does not accrete interest.

The present value of future cash flows at initial recognition is $-100 + 20 + 96 / 1.06^2 = 5.44$

The fulfilment cash flows at initial recognition (including the risk adjustment for non-financial risk) are $-100 + 20 + 96 / 1.06^2 + 2.00 = 7.44$.

- The contractual service margin at initial recognition is zero.
- The loss component of the liability for remaining coverage is 7.44.
- The statement of profit or loss shows a loss of 7.44 at initial recognition.

The present value of future cash flows after the premium is received and the acquisition cash flows are paid is $96 / 1.06^2 = 85.44$. The risk adjustment for non-financial risk is 2.00, so the fulfilment cash flows after the premium is received and the acquisition cash flows are paid is $85.44 + 2.00 = 87.44$.

- The net premium received for the claim and the risk adjustment for non-financial risk is $100 - 20 = 80$, which is the liability for remaining coverage excluding the loss component right after initial recognition.
- The loss component of the liability for remaining coverage is $87.44 - 80 = 7.44$.

Allocation and amortization of acquisition cash flows

Acquisition cash flows are included in fulfilment cash flows when they occur, but they are allocated over the coverage period on the basis of the passage of time for insurance revenue and insurance service expense.

The acquisition cash flows are 20 on January 1, 20X1, the discount rate is 6% *per annum*, and the coverage units are the same in 20X1 and 20X2. We allocate the present values of the acquisition expense equally to 20X1 and 20X2: that is, we derive the nominal values in 20X1 and 20X2 whose present values are equal and whose sum is 20. The nominal values are assumed to occur at the end of the year, like the cash outflows for claims and other expenses.

The present values (at initial recognition) of the acquisition expenses reported on December 31, 20X1, and December 31, 20X2, are each $\frac{1}{2} \times 20 = 10$, so the nominal values are

- $10 \times 1.06^1 = 10.60$ on December 31, 20X1
- $10 \times 1.06^2 = 11.24$ on December 31, 20X2

We can also solve for the amortized, allocated acquisition expenses algebraically. Let Z_1 be the acquisition expense on December 31, 20X1, and Z_2 be the acquisition expense on December 31, 20X2. Since the coverage units are the same in the two years and the discount rate is 6% *per annum*, $Z_2 = 1.06 \times Z_1$. For a present value date of January 1, 20X1, we solve

$$\begin{aligned}
Z_1 / 1.06^1 + Z_2 / 1.06^2 &= 20 \Rightarrow \\
Z_1 / 1.06^1 + 1.06 \times Z_1 / 1.06^2 &= 2 \times Z_1 / 1.06^1 = 20 \Rightarrow \\
Z_1 = \frac{1}{2} \times 20 \times 1.06^1 &= 10.60 \text{ and } Z_2 = 10.60 \times 1.06^1 = 11.24
\end{aligned}$$

We verify that $10.60 / 1.06^1 + 11.24 / 1.06^2 = 20.00$.

Progression of the insurance contract liabilities (20X1)

We show the reconciliation of the insurance contract liability required by paragraph 100, also called the “Progression of the insurance contract liabilities for remaining coverage and for incurred claims” in the IFRS 17 *Effects Analysis*, and then explain the entries.

Progression of the insurance contract liabilities for remaining coverage and for incurred claims 20X1

	<i>Liabilities for Remaining Coverage</i>		<i>Liabilities for Incurred Claims</i>	<i>Total</i>
	<i>Excluding Loss Component</i>	<i>Loss Component</i>		
Insurance contract liabilities 20X0	0.00	0.00	0.00	0.00
Insurance revenue	-10.60			-10.60
Insurance service expenses	10.60	7.44	0.00	18.04
Incurred claims and other expenses		0.00	0.00	0.00
Acquisition expenses	10.60			10.60
Related to future service (onerous contracts)		7.44		7.44
Related to past service (incurred claims)			0.00	0.00
Investment components	0.00		0.00	0.00
Insurance service result	0.00	7.44	0.00	7.44
Insurance finance expenses	4.69	0.44	0.00	5.13
Change in comprehensive income	4.69	7.88	0.00	12.57
Cash flows				
Premiums received	100.00			100.00
Claims and other expenses paid			0.00	0.00
Acquisition cash flows paid	-20.00			-20.00
Total cash flows	80.00	0.00	0.00	80.00
Insurance contract liabilities 20X1	84.69	7.88	0.00	92.57

The opening balances in the reconciliation exhibits are the closing balances from the preceding year. For this illustration, the insurer issues its first contract on January 1, 20X1, so the opening balances (the insurance contract liabilities on December 31, 20X0) are zero for all columns.

Insurance service expenses

The allocated acquisition expenses of 10.60 are shown as a line item under insurance service expenses on the reconciliation of the insurance contract liability required by paragraph 100. They are also included in the insurance revenue, though they are not shown as a separate line item there.

Insurance finance expenses

The insurance finance expense on the present value of future cash flows is $96 \times (1.06^{-1} - 1.06^{-2}) = 5.13$. Since the discount rate does not change during the year, we can compute this as $85.44 \times 6\% = 5.13$ as well.

We determine the proportions of the two parts of the liability for remaining coverage:

- liability for remaining coverage excluding the loss component: $80 / (80 + 7.44) = 91.49\%$
- loss component of the liability for remaining coverage: $7.44 / (80 + 7.44) = 8.51\%$

We allocate the insurance finance expense by these proportions:

- liability for remaining coverage excluding the loss component: $5.13 \times 91.49\% = 4.69$
- loss component of the liability for remaining coverage: $5.13 \times 8.51\% = 0.44$

The insurance finance expense on the contractual service margin is $0 \times 6\% = 0$

The total insurance finance expense is $4.69 + 0.44 + 0.00 = 5.13$

Insurance revenue

Insurance revenue is *determined* as

- the change in the insurance contract liability for remaining coverage excluding the loss component
- cash flows for the net premium (gross premium minus acquisition cash flows)
- amortized and allocated acquisition expenses recognized in the year
- insurance finance income or expenses

The liability for remaining coverage excluding the loss component at December 31, 20X1, is the amount of the claim for which the insurer expects to receive consideration

$$= (100 - 20 - 2 \times 91.49\%) \times 1.06 + 2 \times 91.49\% = 84.69$$

Intuition: The risk adjustment for non-financial risk of 2 is allocated by the proportions:

- liability for remaining coverage excluding the loss component: $2 \times 91.49\% = 1.83$
- loss component of the liability for remaining coverage: $2 \times 8.51\% = 0.17$

Alternatively, we can derive the liability for remaining coverage excluding the loss component at December 31, 20X1, from the proportion allocated to the liability for remaining coverage excluding the loss component times (the risk adjustment for non-financial risk plus the present value of the estimated claim payment)

$$= 91.49\% \times (96 / 1.06^1 + 2) = 84.69$$

If the insurance contract were not onerous, the amount of the claim for which the insurer expects to receive consideration would be $(100 - 20 - 2) \times 1.06 + 2 = 84.68$. Since the insurance contract is onerous, part of the risk adjustment for non-financial risk is allocated to the loss component of the liability for remaining coverage, so the part allocated to the liability for remaining coverage excluding the loss component is smaller, and the portion that is the present value of future cash flows is larger. More of the liability for remaining coverage excluding the loss component accretes interest, so the liability for remaining coverage excluding the loss

component at December 31, 20X1, is larger (84.69 instead of 84.68). The insurance finance expense allocated to the liability for remaining coverage excluding the loss component is larger by the same amount, so the insurance revenue stays -10.60.

Using the values computed above, the insurance revenue for 20X1 is

- (84.69 – 0) change in insurance contract liability for remaining coverage excluding the loss component
- (100 – 20) premium cash flows minus acquisition cash flows
- 4.69 insurance finance expense
- 10.60 amortized and allocated acquisition expenses
- = (84.69 – 0) – (100 – 20) – 4.69 – 10.60 = -10.60

We analyze insurance revenue in each year as the sum of

- The accumulated premium compensating the expected claims, benefits, and other expenses.
- The release of the risk adjustment for non-financial risk.
- The allocated insurance acquisition cash flows.
- The allocation of the contractual service margin to profit or loss.

The contractual service margin is zero, so the accretion of interest on the contractual service margin is zero.

The release of the risk adjustment for non-financial risk pertains to current service: a release of risk when the claim occurs. In this illustration, the claim does not occur in 20X1, so no risk adjustment is released (even if the risk adjustment for non-financial risk changes in 20X1, which it does not here).

The insurance revenue for the year = -10.60 (amortized acquisition expenses)

Revenues are negative entries, so insurance revenue is -10.60, under the liability for remaining coverage excluding the loss component.

Insurance service result

The insurance service expenses are reported as

- Acquisition expenses related to current services: 10.60 under the liability for remaining coverage excluding the loss component.
- Losses on onerous contracts related to future service: 7.44 under the loss component of the liability for remaining coverage

The positive entries indicate expenses.

The insurance service result shows

- liability for remaining coverage excluding the loss component: $-10.60 + 10.60 = 0$, which is the allocation of the contractual service margin to 20X1, since no claims are paid and no risk adjustment for non-financial risk is released in 20X1.
- loss component of the liability for remaining coverage: $0 + 7.44 = 7.44$ (a loss of 7.44)

The insurance finance expense is 5.13, allocated as 4.69 to the liability for remaining coverage excluding the loss component and 0.44 to the loss component of the liability for remaining coverage. The profit or loss for 20X1 in the statement of comprehensive income is

- liability for remaining coverage excluding the loss component: $0 + 4.69 = 4.69$ (a loss)
- loss component of the liability for remaining coverage: $7.44 + 0.44 = 7.88$ (a loss)

The liability for incurred claims has entries of zero, since no claims have occurred.

The total loss in the statement of comprehensive income is $4.69 + 7.88 = 12.57$.

The cash flows are +100 for premium received and -20 for acquisition cash flows, for a net cash flow of +80, under the liability for remaining coverage excluding the loss component.

The insurance contract liability at the end of the year (December 31, 20X1) is $96 \times 1.06^{-1} + 2 = 92.57$:

- liability for remaining coverage excluding the loss component: $80 + 4.69 = 84.69$
- loss component of the liability for remaining coverage: $0 + 0.44 + 7.44 = 7.88$

The total insurance contract liability is $84.69 + 7.88 = 92.57$.

Movements in insurance contract liabilities analyzed by components (20X1)

We show the reconciliation of the insurance contract liability required by paragraph 101, which is called the movements in insurance contract liabilities analyzed by components in the IFRS 17 *Effects Analysis*, and then explain the entries.

movements in insurance contract liabilities analyzed by components, 20X1

	present value of future cash flows	risk adjustment	contractual service margin	total
Insurance contract liabilities 20X0	0.00	0.00	0.00	0.00
Changes that relate to current service	0.00	0.00	0.00	0.00
CSM recognized for service provided			0.00	0.00
Risk adjustment recognized for the risk expired		0.00		0.00
Experience adjustments	0.00			0.00
Changes that relate to future service	5.44	2.00	0.00	7.44
Contracts initially recognized in the period	5.44	2.00	0.00	7.44
Changes in estimates reflected in the CSM	0.00	0.00	0.00	0.00
Changes in estimates: onerous contract losses	0.00	0.00		0.00
Changes that relate to past service	0.00	0.00	0.00	0.00
Adjustments to liabilities for incurred claims	0.00	0.00		0.00
Insurance service result	5.44	2.00	0.00	7.44
Insurance finance expenses	5.13		0.00	5.13
Total changes in comprehensive income	10.57	2.00	0.00	12.57
Cash flows	80.00			80.00
Insurance contract liabilities 20X1	90.57	2.00	0.00	92.57

The contract is initially recognized in the period with

- a present value of future cash flows of $-100 + 96 / 1.06^2 + 20 = 5.44$
- a risk adjustment for non-financial risk of 2.00
- a contractual service margin of $-(5.44 + 2.00)$, but not less than zero = 0
- an insurance contract liability of $5.44 + 2.00 + 0 = 7.44$

The contract is onerous, so the insurance contract liability at initial recognition. equals the loss component of the liability for remaining coverage at initial recognition.

The insurer has no other contracts and it does not change any estimates during the year, so the changes in estimates related to future service are zero, and the entries above appear also as the sub-total for changes that relate to future service.

Cash flows

Underwriting cash inflows from policyholders (premiums received) raise the insurance contract liability, and underwriting cash outflows (acquisition cash flows and claim payments) reduce the insurance contract liability.

In 20X1, premium received is 100 and acquisition cash flows are -20, so the net cash flows are $100 + -20 = 80$ (under the present value of future cash flows).

Closing balance for the insurance contract liability

The insurance contract liability at December 31, 20X1 (the last row in the exhibit) is the sum of

- present value of future cash flows is the present value of 96 paid in one year: $96 / 1.06^1 = 90.57$
- risk adjustment for non-financial risk: 2.00, since it did not change since initial recognition.
- contractual service margin = 0, since the insurance contract is onerous.

The insurance contract liability is $90.57 + 2.00 = 92.57$

Analysis of contracts initially recognised in the period (20X1)

<i>analysis of contracts initially recognised in the period</i>			
Contracts initially recognized in the year		of which contracts acquired	of which contracts onerous
Estimates of the present value of future cash inflows	(100.00)	0.00	(100.00)
Estimates of the present value of future cash outflows			
Insurance acquisition cash flows	20.00	0.00	20.00
Claims payable and other expenses	85.44	0.00	85.44
Risk adjustment	2.00	0.00	2.00
Contractual service margin	0.00	0.00	—
Total	7.44	0.00	7.44

The reconciliation of the insurance contract liability required by paragraph 101 (“source of changes in the fulfilment cash flows” or “movements in insurance contract liabilities analyzed by components”) shows for contracts initially recognized in the period:

- the present value of future cash flows: a negative entry is a future cash inflow (such as premium), and a positive entry is a future cash outflow (such as claims, acquisition cash flows, and other benefits)

- the risk adjustment for non-financial risk
- the contractual service margin
- the insurance contract liability (the sum of the three items above)

The insurer must further sub-divide these figures (in a separate disclosure) two ways:

- the present value of future cash flows is divided between cash inflows and cash outflows, and the cash outflows are shown separately for acquisition cash flows and for claims and other expenses.
- all figures are also shown for two components of the insurance contracts issued (in addition to the total):
 - insurance contracts acquired in a transfer or a business combination
 - groups of onerous contracts

The contracts here are issued by the insurer to policyholders (not acquired in a business combination) and they are onerous. The middle column of the exhibit has zeros, and the first and third numeric columns show

- Present value of future cash inflows (negative entry) = premium receivables on January 1 = -100
- Present value of acquisition cash outflows (positive entry), paid on January 1 = 20
- Present value of future claims outflows (positive entry), paid on December 31, 20X2 = $96 / 1.06^2 = 85.44$
- Risk adjustment for non-financial risk = 2.00
- Contractual service margin is zero, since the contract is onerous.
- The total insurance contract liability $-100 + 20 + 85.44 + 2 = 7.44$, which is the insurance contract liability for the onerous contracts.

Analysis of insurance revenue (20X1)

<i>analysis of insurance revenue for 20X1</i>	
amounts related to liabilities for remaining coverage	0.00
expected incurred claims and other expenses	0.00
contractual service margin for the service provided	0.00
risk adjustment for the risk expired	0.00
recovery of acquisition cash flows	10.60
insurance revenue	10.60

- The expected incurred claims and other expenses are the incurred values for which the insurer expects to receive consideration (premium).
 - No claim occurs in 20X1 for this scenario
- The contractual service margin for the service provided is the allocation of (the contractual service margin at initial recognition plus the accretion of interest) to profit or loss.
 - The contract is onerous, so the contractual service margin is zero.
- The risk adjustment for the risk expired is the release of the risk adjustment.
 - The risk adjustment for non-financial risk is not released until the claim occurs in 20X2.
- The recovery of acquisition cash flows is the amortized acquisition expenses allocated to the year.
 - 10.60 for 20X1 in this scenario.

The sum of the first three bullet points above is the amounts related to liabilities for remaining coverage. The recovery of acquisition cash flows is an allocation of acquisition cash flows already paid, so it is not part of the liability for remaining coverage. Insurance revenue is the sum of all four bullet points.

Movements in insurance contract liabilities analyzed by components (20X2)

We show the reconciliation of the insurance contract liability required by paragraph 101, which is called the movements in insurance contract liabilities analyzed by components in the IFRS 17 *Effects Analysis*, and then explain the entries.

Movements in insurance contract liabilities analyzed by components, 20X2

	present value of future cash flows	risk adjustment	contractual service margin	total
Insurance contract liabilities 20X1	90.57	2.00	0.00	92.57
Changes that relate to current service	0.00	-2.00	0.00	-2.00
CSM recognized for service provided			0.00	0.00
Risk adjustment recognized for the risk expired		-2.00		-2.00
Experience adjustments	0.00			0.00
Changes that relate to future service	0.00	0.00	0.00	0.00
Contracts initially recognized in the period	0.00	0.00	0.00	0.00
Changes in estimates reflected in the CSM	0.00	0.00	0.00	0.00
Changes in estimates: onerous contract losses	0.00	0.00		0.00
Changes that relate to past service	0.00	0.00	0.00	0.00
Adjustments to liabilities for incurred claims	0.00	0.00		0.00
Insurance service result	0.00	-2.00	0.00	-2.00
Insurance finance expenses	5.43		0.00	5.43
Total changes in comprehensive income	5.43	-2.00	0.00	3.43
Cash flows	-96.00			-96.00
Insurance contract liabilities 20X2	0.00	0.00	0.00	0.00

The opening balances for the 20X2 reconciliation exhibits are the closing balances from the 20X1 exhibits.

On December 31, 20X2, the entries relating to current service are

- the release of the risk adjustment for non-financial risk of 2.00 as a negative entry (reduction in the insurance contract liability)

The insurance service result is the sum of the changes for current, future, and past service. For 20X2, the changes for future service and past service are zero, so the insurance service result is the changes for current service.

- Present value of future cash flows: 0
- Risk adjustment for non-financial risk: -2.00 (release of the risk adjustment for non-financial risk is profit)
- Contractual service margin: 0

Cash flows

Underwriting cash inflows from policyholders (premiums received) raise the insurance contract liability, and underwriting cash outflows (acquisition cash flows and claim payments) reduce the insurance contract liability.

The insurance finance expense for 20X2 is $96 \times (1.06^0 - 1.06^{-1}) = 5.43$.

In 20X2, the claim of 96 is paid, so the net cash flow is -96 (under the present value of future cash flows). The insurance contract liability at December 31, 20X2 (the last row in the exhibit) is

- present value of future cash flows: $90.57 + 5.43 - 96 = 0.00$; no future cash flows after the claim is paid.
- risk adjustment for non-financial risk: $2.00 + -2.00 = 0.00$ (the risk adjustment is released).
- contractual service margin is zero for onerous contracts.

Progression of the insurance contract liabilities (20X2)

We show the reconciliation of the insurance contract liability required by paragraph 100, also called the “Progression of the insurance contract liabilities for remaining coverage and for incurred claims” in the IFRS 17 *Effects Analysis*, and then explain the entries.

Progression of the insurance contract liabilities for remaining coverage and for incurred claims 20X2

	<i>Liabilities for Remaining Coverage</i>		<i>Liabilities for Incurred Claims</i>	<i>Total</i>
	<i>Excluding Loss Component</i>	<i>Loss Component</i>		
Insurance contract liabilities 20X1	84.69	7.88	0.00	92.57
Insurance revenue	-100.90			-100.90
Insurance service expenses	11.24	-8.34	96.00	98.90
Incurred claims and other expenses		-8.34	96.00	87.66
Acquisition expenses	11.24			11.24
Related to future service (onerous contracts)		0.00		0.00
Related to past service (incurred claims)			0.00	0.00
Investment components	0.00		0.00	0.00
Insurance service result	-89.66	-8.34	96.00	-2.00
Insurance finance expenses	4.97	0.46	0.00	5.43
Change in comprehensive income	-84.69	-7.88	96.00	3.43
Cash flows				
Premiums received	0.00			0.00
Claims and other expenses paid			-96.00	-96.00
Acquisition cash flows paid	0.00			0.00
Total cash flows	0.00	0.00	-96.00	-96.00
Insurance contract liabilities 20X2	0.00	0.00	0.00	0.00

The opening balances in the reconciliation exhibits are the closing balances from the preceding year.

Insurance service expenses

The allocated acquisition expenses of 11.24 are shown as a line item under insurance service expenses on the reconciliation of the insurance contract liability required by paragraph 100. They are also included in the insurance revenue, though they are not shown as a separate line item there.

The incurred claim at the end of the year of 96 is shown as a line item under insurance service expenses on the reconciliation of the insurance contract liability required by paragraph 100. The portion of the incurred claim for which the insurer expects to receive consideration is $(100 - 20 - 2) \times 1.06^2 = 87.64$ plus the release of the risk adjustment for non-financial risk of 2 are also included in the insurance revenue, though they are not shown as separate line items.

Insurance finance expenses

The insurance finance expense on the present value of future cash flows is $96 \times (1.06^0 - 1.06^{-1}) = 5.43$. Since the discount rate does not change during the year, we can compute this as $90.57 \times 6\% = 5.43$.

We determine the proportions of the two parts of the liability for remaining coverage.

- liability for remaining coverage excluding the loss component: $84.69 / (84.69 + 7.88) = 91.49\%$
- loss component of the liability for remaining coverage: $7.88 / (84.69 + 7.88) = 8.51\%$

The proportions are the same in 20X2 as in 20X1 because no claim estimates changed, and the insurance finance expense added to each liability was allocated in these proportions.

We allocate the insurance finance expense by these proportions:

- liability for remaining coverage excluding the loss component: $5.43 \times 91.49\% = 4.97$
- loss component of the liability for remaining coverage: $5.43 \times 8.51\% = 0.46$

The insurance finance expense on the contractual service margin is zero.

The total insurance finance expense is $4.97 + 0.46 + 0 = 5.43$.

Insurance revenue

Using the values computed above, the insurance revenue for 20X2 is determined as

$$\begin{aligned} & (0 - 84.69) \text{ change in insurance contract liability for remaining coverage excluding the loss component} \\ - & (0 - 0) \text{ premium cash flows minus acquisition cash flows} \\ - & 4.97 \text{ insurance finance expense} \\ - & 11.24 \text{ amortized and allocated acquisition expenses} \\ = & (0 - 84.69) - (0 - 0) - 4.97 - 11.24 = -100.90 \end{aligned}$$

The claim payment in 20X2 affects the liability for incurred claims, not the liability for remaining coverage.

We analyze insurance revenue in each year as the sum of

- The accumulated premium compensating the expected claims, benefits, and other expenses.
- The release of the risk adjustment for non-financial risk.
- The allocated insurance acquisition cash flows.
- The allocation of the contractual service margin to profit or loss.

The allocated acquisition expenses for 20X2 are 11.24, which are both insurance revenue and insurance service expenses under the liability for remaining coverage excluding the loss component.

The release of the risk adjustment for non-financial risk in 20X2 is -2, shown as insurance revenue under the liability for remaining coverage excluding the loss component. The release of the risk adjustment for non-financial risk is allocated between the two parts of the liability for remaining coverage and reported as insurance revenue (for the liability for remaining coverage excluding the loss component) and as a contra-expense for the loss component of the liability for remaining coverage.

- liability for remaining coverage excluding the loss component: $-2.00 \times 91.49\% = -1.83$
- loss component of the liability for remaining coverage: $-2.00 \times 8.51\% = -0.17$

The incurred claim for which the insurer expects to receive consideration is $(100 - 20 - 91.49\% \times 2) \times 1.06^2 = 87.83$, which is the net premium received (excluding acquisition cash flows and the risk adjustment for non-financial risk in the liability for remaining coverage excluding the loss component) plus the accretion of interest for two years at the discount rate. This is also computed as the claim payment times the percentage allocated to the liability for remaining coverage excluding the loss component: $96 \times 91.49\% = 87.83$.

The remaining part of the incurred claim is a contra-expense under the loss component of the liability for remaining coverage is $96 - 87.83 = 8.17$. The change in the risk adjustment for non-financial risk from 0.1702 to zero (the part allocated to the loss component of the liability for remaining coverage is also a contra-expense, so the insurance service expense under the loss component of the liability for remaining coverage is $-8.17 + -0.17 = -8.34$.

The insurance revenue for 20X2 under the liability for remaining coverage excluding the loss component =

$$\begin{aligned}
 & -87.83 \text{ (incurred claims)} \\
 + & -11.24 \text{ (amortized acquisition expenses)} \\
 + & -2.00 \times 91.49\% = -1.83 \text{ (release of the risk adjustment for non-financial risk)} \\
 = & -87.83 + -11.24 + -2.00 \times 91.49\% = -100.90
 \end{aligned}$$

Revenues are negative entries, so insurance revenue is -100.90, under the liability for remaining coverage excluding the loss component.

Insurance service result

The insurance service expenses are reported as

- Incurred claims: 96 under liability for incurred claims
- Reversal of loss on onerous contracts: -8.34
- Acquisition expenses: 11.24 under liability for remaining coverage excluding the loss component

The positive entries are expenses. The total insurance service expense is $96 + -8.34 + 11.24 = 98.90$

The insurance service result shows

- liability for remaining coverage excluding the loss component: $-100.90 + 11.24 = -89.66$
- loss component of the liability for remaining coverage: -8.34 (a contra-expense)

We add the insurance finance expenses for each part of the liability for remaining coverage (worked out above as 4.97 and 0.46) to derive the comprehensive income, all of which is profit or loss, since the discount rate does not change during the year:

- liability for remaining coverage excluding the loss component: $-89.66 + 4.97 = -84.69$
- loss component of the liability for remaining coverage: $-8.34 + 0.46 = -7.88$

Analysis of contracts initially recognised in the period (20X2)

No contracts are issued in 20X2.

Analysis of insurance revenue (20X2)

analysis of insurance revenue for 20X2

amounts related to liabilities for remaining coverage	89.66
expected incurred claims and other expenses	87.66
contractual service margin for the service provided	0.00
risk adjustment for the risk expired	2.00
recovery of acquisition cash flows	11.24
insurance revenue	100.90

- The expected incurred claims and other expenses are the accumulated amount (not the present values) for which the insurer expects to receive consideration = the incurred claim + the reversal of the loss component of the liability for remaining coverage = $96 + -8.34 = 87.66$
- The contractual service margin for the service provided is the allocation of (the contractual service margin at initial recognition plus the accretion of interest) to profit or loss, which is zero for onerous contracts.
- The risk adjustment for the risk expired is the release of the risk adjustment, or 2.00.
- The amounts related to liabilities for remaining coverage can also be computed as (the gross premium minus acquisition cash flows minus the risk adjustment for non-financial risk included in the liability for remaining coverage excluding the loss component) accumulated for two years at the discount rate plus the risk adjustment for non-financial risk included in the liability for remaining coverage excluding the loss component = $(100 - 20 - 2 \times 91.49\%) \times 1.06^2 + 2 \times 91.49\% = 89.66$.
- The recovery of acquisition cash flows is the amortized acquisition expenses allocated to the year.

The sum of the first three bullet points above is the amounts related to liabilities for remaining coverage. The recovery of acquisition cash flows is an allocation of acquisition cash flows already paid, so it is not part of the liability for remaining coverage. Insurance revenue is the sum of all four bullet points.

End-notes:

¹ The illustration in the IFRS 17 *Illustrative Examples* showing acquisition cash flows assumes a discount rate of zero, so the accretion of interest in that illustration is zero.

² See IFRS 17 paragraph 103: “P103 An entity shall separately disclose in the reconciliations required in paragraph 100 each of the following amounts related to insurance services, if applicable:

- (a) insurance revenue
- (b) insurance service expenses, showing separately:
 - (i) incurred claims (excluding investment components) and other incurred insurance service expenses;
 - (ii) amortisation of insurance acquisition cash flows;
 - (iii) changes that relate to past service, ie changes in fulfilment cash flows relating to the liability for incurred claims; and
 - (iv) changes that relate to future service, ie losses on onerous groups of contracts and reversals of such losses.
- (c) investment components excluded from insurance revenue and insurance service expenses.”

³ See IFRS 17 paragraph B123: “when an entity provides services in a period, it reduces the liability for remaining coverage for the services provided and recognises insurance revenue. The reduction in the liability for remaining coverage that gives rise to insurance revenue excludes changes in the liability that do not relate to services expected to be covered by the consideration received by the entity. Those changes are:

(a) changes that do not relate to services provided in the period, for example:

- (i) changes resulting from cash inflows from premiums received ...
- (iv) insurance finance income or expenses;
- (v) insurance acquisition cash flows (see paragraph B125) ...

(b) changes that relate to services, but for which the entity does not expect consideration, ie increases and decreases in the loss component of the liability for remaining coverage ...” We have omitted from this citation items not relevant to this illustration (namely, investment components, premium taxes, and derecognition of the insurance contract liability upon transfer to another party). Paragraph B123(a)(i) subtracts the net premium cash flows (gross premium received minus acquisition cash flows paid), B123(a)(iv) subtracts the insurance finance expenses, and B123(a)(v) subtracts the acquisition cash flows. IFRS 17 paragraph B125 includes the allocated acquisition expenses in the insurance revenue: “An entity shall determine insurance revenue related to insurance acquisition cash flows by allocating the portion of the premiums that relate to recovering those cash flows to each reporting period in a systematic way on the basis of the passage of time. An entity shall recognise the same amount as insurance service expenses.” The IFRS 17 instructions use the phrases “excluding changes” or “adjusted for changes.” The sign conventions are not prescribed by IFRS 17, so the IFRS statement does not specify whether to add or subtract. We explain in the text whether each item is added or subtracted and the rationale for these signs.

⁴ See IFRS 17 paragraph B123(b). The incurred claims (and the changes in the incurred claims), the claim cash flows, and insurance finance expenses on incurred claims affect the total insurance contract liability but they offset each other and do not affect the insurance revenue.

⁵ See IFRS 17 paragraph B120: “The total insurance revenue for a group of insurance contracts is the consideration for the contracts, ie the amount of premiums paid to the entity: (a) adjusted for a financing effect; and (b) excluding any investment components.” The phrase *adjusted for a financing effect* means adding the accretion of interest.

⁶ See IFRS 17 paragraph B121: “insurance revenue ... depicts the transfer of promised services at an amount that reflects the consideration to which the entity expects to be entitled in exchange for those services. The total consideration ... covers ...

- (a) amounts related to the provision of services, comprising:
 - (i) insurance service expenses, excluding any amounts allocated to the loss component of the liability for remaining coverage;
 - (ii) the risk adjustment for non-financial risk, excluding any amounts allocated to the loss component of the liability for remaining coverage; and
 - (iii) the contractual service margin.
- (b) amounts related to insurance acquisition cash flows.”

⁷ IFRS 17 does not explicitly say that the allocated acquisition expenses accrete interest; the procedure here is inferred from the illustrations in the IFRS 17 *Effects Analysis* and from references to amortized acquisition expenses in IFRS 17, the IFRS 17 *Effects Analysis*, and the IFRS 17 *Basis for Conclusions*. If the insurer does not accrete interest on the allocated acquisition expenses, the accumulated premium is $(100 - 20 - 2) \times 1.06 + 20 + 2 = 104.68$. The difference of $105.88 - 104.68 = 1.20$ is the accretion of interest on the allocated acquisition expenses.

- The insurance revenue would be $-80 + -20 + -2.00 + -2.68 = -104.68$ (instead of -105.88).
- The acquisition expenses would be 20 (instead of 21.20).

⁸ The reporting requirements for the net financial result are vague. The text of IFRS 17 does not require disclosure of the net financial result or show its computation, since the investment income part of the net financial result is governed by IFRS 9, not by IFRS 17. The presentation requirements for the financial statements are governed by IAS 1, which was issued long before IFRS 17. The computation of the net financial result is illustrated in the IFRS 17 *Effects Analysis*; see the section of this textbook on multi-year insurance contracts with annual premiums for alternative methods of computing the net financial result.

⁹ See IFRS 17 paragraph 104: “An entity shall separately disclose in the reconciliations required in paragraph 101 each of the following amounts related to insurance services, if applicable:

- (a) changes that relate to future service ... showing separately:
 - (i) changes in estimates that adjust the contractual service margin;
 - (ii) changes in estimates that do not adjust the contractual service margin, ie losses on groups of onerous contracts and reversals of such losses; and
 - (iii) the effects of contracts initially recognised in the period.
- (b) changes that relate to current service, ie:
 - (i) the amount of the contractual service margin recognised in profit or loss to reflect the transfer of services;
 - (ii) the change in the risk adjustment for non-financial risk that does not relate to future service or past service; and
 - (iii) experience adjustments ...
- (c) changes that relate to past service, ie changes in fulfilment cash flows relating to incurred claims ...”

¹⁰ See the chapter of this textbook on the risk adjustment for non-financial risk for discussion of the accretion of interest on the risk adjustment.

¹¹ See IFRS 17 paragraph 107: “an entity shall disclose the effect on the statement of financial position separately for insurance contracts issued and reinsurance contracts held that are initially recognised in the period, showing their effect at initial recognition on:

- (a) the estimates of the present value of future cash outflows, showing separately the amount of the insurance

- acquisition cash flows;
- (b) the estimates of the present value of future cash inflows;
- (c) the risk adjustment for non-financial risk; and
- (d) the contractual service margin.

See also IFRS 17 paragraph 108: “an entity shall separately disclose amounts resulting from:

- (a) contracts acquired from other entities in transfers of insurance contracts or business combinations; and
- (b) groups of contracts that are onerous.

¹² See IFRS 17 paragraph 106: “... an entity shall disclose an analysis of the insurance revenue recognised in the period comprising:

- (a) the amounts relating to the changes in the liability for remaining coverage ... separately disclosing:
 - (i) the insurance service expenses incurred during the period ...
 - (ii) the change in the risk adjustment for non-financial risk ...
 - (iii) the amount of the contractual service margin recognised in profit or loss because of the transfer of services in the period ...
- (b) the allocation of the portion of the premiums that relate to the recovery of insurance acquisition cash flows.

¹³ IFRS 17 paragraph B120 says: “The total insurance revenue for a group of insurance contracts is the consideration for the contracts, ie the amount of premiums paid to the entity, (a) adjusted for a financing effect; and (b) excluding any investment components.” The phrase *adjusted for a financing effect* means adding the accretion of interest.

¹⁴ See IFRS 17 paragraph B125: “An entity shall determine insurance revenue related to insurance acquisition cash flows by allocating the portion of the premiums that relate to recovering those cash flows to each reporting period in a systematic way on the basis of the passage of time. An entity shall recognise the same amount as insurance service expenses.”

¹⁵ IFRS 17 paragraph 103(b)(ii) refers to the amortization of insurance acquisition cash flows, indicating that the allocated amounts are adjusted for the time value of money, as shown in the IFRS 17 *Effects Analysis* (see especially page 75, footnote 72).

¹⁶ See IFRS 17 paragraph B124.

¹⁷ See IFRS 17 paragraph B73: “To determine the discount rates at the date of initial recognition ... an entity may use weighted-average discount rates over the period that contracts in the group are issued, which ... cannot exceed one year.” The weights for the weighted average may be the volume of business issued at each date or the coverage units issued at each date.

¹⁸ See IFRS 17 paragraph 107: “... an entity shall disclose the effect on the statement of financial position separately for insurance contracts issued and reinsurance contracts held that are initially recognised in the period, showing their effect at initial recognition on:

- (a) the estimates of the present value of future cash outflows, showing separately the amount of the insurance acquisition cash flows;
- (b) the estimates of the present value of future cash inflows;
- (c) the risk adjustment for non-financial risk; and
- (d) the contractual service margin.”

See also IFRS 17 paragraph 104 (iii): “An entity shall separately disclose in the reconciliations ... the effects of contracts initially recognised in the period.”

¹⁹ See IFRS 17 paragraph B72(a): “An entity shall use the following discount rates ... (a) to measure the fulfilment cash flows—current discount rates.”

²⁰ See IFRS 17 paragraph B72(b): “An entity shall use the following discount rates ... (b) to determine the interest to accrete on the contractual service margin ... discount rates determined at the date of initial recognition.” See also IFRS 17 *Basis for Conclusions* paragraph BC273: “Because the contractual service margin is measured at initial recognition of the group of insurance contracts, the ... interest rate used to accrete interest on the contractual service margin for insurance contracts without direct participation features should be locked in at initial recognition and not adjusted subsequently. ... Locking in the rate is consistent with the determination of the contractual service margin on initial recognition and making no adjustments for changes in assumptions relating to financial risk.”

²¹ See IFRS 17 paragraph 88: “an entity shall make an accounting policy choice between: (a) including insurance finance income or expenses for the period in profit or loss; or (b) disaggregating insurance finance income or expenses for the period to include in profit or loss an amount determined by a systematic allocation of the expected total insurance finance income or expenses over the duration of the group of contracts.” The systematic allocation depends on the characteristics of the insurance contracts (see IFRS 17 paragraph B130). IFRS 17 paragraph B131 specifies that if “changes in assumptions that relate to financial risk do not have a substantial effect on the amounts paid to the policyholder, the systematic allocation is determined using the discount rates specified in paragraph B72(e)(i)” (that is, “discount rates determined at the date of initial recognition”). See also IFRS 17 *Basis for Conclusions* paragraph BC42: “IFRS 17 requires entities to make an accounting policy choice for each portfolio on how to present insurance finance income or expenses. Such income or expenses for a portfolio of insurance contracts is either all included in profit or loss or is disaggregated between profit or loss and other comprehensive income. If disaggregated, the amount in profit or loss is based on a systematic allocation of the expected total finance income or expenses over the duration of the groups of insurance contracts in the portfolio. The systematic allocation is based on the characteristics of the insurance contracts ...,” and IFRS 17 *Basis for Conclusions* paragraph BC43: “The Board decided to allow entities to choose an accounting policy for the presentation of insurance finance income or expenses to balance the sometimes competing demands of understandability and comparability.”

²² See IFRS 17 *Basis for Conclusions* paragraph BC49: “If an entity fulfils its obligations under the contracts in the group, the systematic allocation required by IFRS 17 means that the cumulative amount recognised in other comprehensive income over the duration of the group equals zero,” and IFRS 17 *Basis for Conclusions* paragraph B130(b): “a systematic allocation is an allocation of the total expected finance income or expenses of a group of insurance contracts over the duration of the group that ... results in the amounts recognised in other comprehensive income over the duration of the group of contracts totalling zero. The cumulative amount recognised in other comprehensive income at any date is the difference between the carrying amount of the group of contracts and the amount that the group would be measured at when applying the systematic allocation.”

²³ See IFRS 17 paragraph B129: “An entity shall apply its choice of accounting policy to portfolios of insurance contracts. In assessing the appropriate accounting policy for a portfolio of insurance contracts ... the entity shall consider for each portfolio the assets that the entity holds and how it accounts for those assets.” See also IFRS 17 *Basis for Conclusions* paragraph BC44: “The Board noted that, in selecting an accounting policy, entities would need to apply judgement regarding the policy’s relative benefits and costs. The Board decided to require entities to make the accounting policy choice for each portfolio because a key factor in making the choice will be what assets the entity regards as backing the insurance contracts. The Board received feedback that many entities regard the choice of strategies for assets backing insurance contracts to be driven by the differences between portfolios of insurance contracts. Hence, an entity might hold financial assets measured at fair value through other comprehensive income for one portfolio, and for another portfolio, hold financial assets measured at fair value through profit or loss. Accordingly, an option applied to portfolios of insurance contracts would allow entities to reduce accounting mismatches.”

²⁴ See IFRS 17 paragraph 110: “An entity shall disclose and explain the total amount of insurance finance income or expenses in the reporting period. In particular, an entity shall explain the relationship between insurance finance income or expenses and the investment return on its assets, to enable users of its financial statements to evaluate the sources of finance income or expenses recognised in profit or loss and other comprehensive income.”

²⁵ See IFRS 17 paragraph 118: “If ... an entity chooses to disaggregate insurance finance income or expenses into amounts presented in profit or loss and amounts presented in other comprehensive income, the entity shall disclose an explanation of the methods used to determine the insurance finance income or expenses recognised in profit or loss.” See also IFRS 17 *Basis for Conclusions* paragraph BC364: “IFRS 17 allows an entity to choose how to present insurance finance income or expenses; therefore, the Board concluded it is important for an entity to disclose or explain: (a) the total amount of its insurance finance income or expenses in each period; (b) the basis for any disaggregation of the total between amounts recognised in profit or loss and other comprehensive income; and (c) the relationship between insurance finance income or expenses and investment income on the related assets the entity holds.”