

Financial accounting module 21: Acquisition cash flows

(The attached PDF file has better formatting.)

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The final exam problems ask you to allocate and amortize the acquisition cash flows to derive the allocated acquisition expenses that are part of insurance revenue and insurance service expenses. (Insurance revenue and expenses are covered in Module 24. You are not responsible for the end-notes in this posting (which cite the text of IFRS 17).

INSURANCE EXPENSE TYPES

Insurance expenses are of three types:

- claims, claim adjustment expenses, and other benefits (such as maturity values, annuity payments, and withdrawals from the policyholder account balance)
- acquisition cash flows that are directly attributable to the portfolio of insurance contracts
- expenses that are not related to insurance services and not directly attributable to the portfolio of insurance contracts.

IFRS 17 defines insurance acquisition cash flows as “Cash flows arising from the costs of selling, underwriting and starting a group of insurance contracts that are directly attributable to the portfolio of insurance contracts to which the group belongs. Such cash flows include cash flows that are not directly attributable to individual contracts or groups of insurance contracts within the portfolio.”¹

Some acquisition cash flows, such as agents’ commissions and underwriting salaries, are directly attributable to specific insurance contracts. Other acquisition cash flows, such as rent and utilities for underwriting offices, are attributable to the portfolio of insurance contracts but not to individual insurance contracts. Both types of cash flows are acquisition cash flows.² Some administrative and maintenance expenses that are not related to insurance contracts are not treated as acquisition cash flows.

Illustration: An insurer writes a portfolio of whole life insurance contracts, which it groups into non-onerous contracts covering higher income policyholders and onerous contracts covering lower income policyholders. Underwriting and acquisition costs are directly attributable to each contract; actuarial pricing costs are directly attributable to the group of contracts; marketing costs are directly attributable to the portfolio of contracts. All three costs are included in directly attributable acquisition cash flows.

IFRS 17 distinguishes acquisition cash flows from acquisition expenses:

- Acquisition cash flows is the cash paid for acquisition costs and affects fulfilment cash flows.
- Acquisition expenses are the amortized amounts that are allocated to insurance revenue and insurance service expense each year.

Fulfilment cash flows include future claim cash flows and acquisition cash flows. The fulfilment cash flows *at initial recognition* are before the premium, acquisition, or claim cash flows are received or paid. Acquisition expenses are the allocation and amortization of acquisition cash flows over the coverage period.

The insurance service expense and insurance revenue differ for claims vs acquisition cash flows:

- *Claims*: insurance service expense is recognized when claims occur, and insurance revenue the premium covering the claims is recognized at the same time.
- *Acquisition cash flows*: insurance service expense and insurance revenue are allocated by a three step procedure:³
 - evaluate the present value at initial recognition of the acquisition cash flows using the discount rate
 - allocate this present value to the years of the coverage period based on the coverage units
 - amortize the allocated amounts based on the passage of time using the discount rate.⁴

Once the acquisition cash flows occur, they are no longer included in the fulfilment cash flows, even if the allocated acquisition expenses are not yet reported as insurance revenue or insurance service expense.

GAAP DEFERRED POLICY ACQUISITION COSTS VS IFRS 17 ACQUISITION EXPENSES

Accounting systems can report insurance acquisition costs three ways:

- U.S. statutory accounting for short duration insurance contracts charges acquisition costs to expense when they occur. The IFRS 17 premium allocation approach allows insurers an accounting policy choice to charge acquisition costs to expense when they occur.
- U.S. GAAP capitalizes the acquisition costs as a deferred policy acquisition cost that is amortized over the coverage period as the premium is earned for both life insurance and general insurance contracts.
- IFRS 17 does not capitalize an asset but allocates the present value of the acquisition expense over the coverage period and accumulates the present values to the valuation date of each year.

If the insurer pays 100 in acquisition cash flows at initial recognition:

- U.S. GAAP capitalizes a deferred policy acquisition cost (DPAC) of 100 at initial recognition and amortizes it as the premium is earned.
- IFRS 17 has no deferred policy acquisition cost but allocates the insurance acquisition cash flows in proportion to the passage of time.⁵

U.S. GAAP and IFRS 17 differ with respect to income statement matching vs balance sheet market values:

- GAAP capitalizes a deferred policy acquisition cost asset to match acquisition expenses with premium revenue. GAAP matching takes precedence over balance sheet market values.
- The IFRS 17 acquisition cash flows are paid at initial recognition and are compensated by the premium received; no asset exists that represents the deferral of acquisition costs. The value of the assets takes precedence over matching of income and expenses.⁶

IFRS 17 does not capitalize acquisition costs as deferred assets but includes them in the fulfilment cash flows. It recognizes the insurance revenue and expense stemming from acquisition cash flows ratably over the contract period (in proportion to the coverage units and the passage of time), not when the cash flows occur.

- For the fulfilment cash flows, contractual service margin, and insurance contract liability, the acquisition cash flows are treated the same as claim cash flows.
- For insurance revenue and insurance service expense, the acquisition cash flows are allocated over the coverage period.

IFRS 17 recognizes insurance revenue when it recognizes the insurance service expenses that the premium compensates. If acquisition cash flows were recognized as expenses when they occur, the insurance revenue would also be recognized when the acquisition cash flows occur. But most acquisition cash flows occur at (or before) initial recognition of the insurance contracts, and insurance revenue should not be recognized before the insurance services are provided.⁷

Some acquisition cash flows, such as salaries to underwriters, are paid before the insurance coverage begins. The insurer temporarily recognizes a GAAP-type deferred policy acquisition cost asset until the group of insurance contracts is recognized. When the group of insurance contracts is recognized, the asset is de-recognized and the directly attributable acquisition cash flows are included in the fulfilment cash flows.⁸

If acquisition cash flows are paid before initial recognition, the contractual service margin at initial recognition includes the effect of these cash flows (the derecognition of the asset resulting from these cash flows).⁹

Illustration: An insurer issues a contract on January 1, 20X1:

- The premium received on January 1, 20X1, is 900.
- The present value of future cash outflows for claims is 750.
- The insurance acquisition cash flows paid in December 20X0 are 100.

The insurer recognizes an asset for acquisition cash flows in December 20X0 for 100. The asset recognized offsets the decrease in cash, so the change in the insurer's equity for 20X0 is zero.

On January 1, 20X1, the insurer de-recognizes the asset for acquisition cash flows. The asset de-recognized is like a cash outflow, as if the acquisition cash outflow of 100 occurred in 20X1.¹⁰

- The fulfilment cash flows at initial recognition are $-900 + 750 + 100 = -50$.
- The contractual service margin at initial recognition is $900 - 750 - 100 = 50$.

Some acquisition cash flows, such as agents' commissions, relate to insurance contracts that are actually sold to policyholders. Other acquisition cash flows, such as the costs of developing insurance web sites, relate to all insurance contracts available for sale. Insurers pay acquisition cash flows to attract and underwrite policies, not all of which are sold to consumers. Some marketing costs do not lead to policyholder applications for insurance contracts, and some applications are rejected after the insurer's underwriting. U.S. GAAP restricts deferrable acquisition costs to those related to the acquisition of new and renewal insurance contracts (SFAS 60). IFRS 17 relates insurance acquisition cash flows to the portfolio of insurance contracts, not to specific contracts. If some acquisition cash flows were excluded (because no insurance contract was underwritten and sold), the fulfilment cash flows would be lower and the contractual service margin would be higher, overstating the unearned profit. Instead, all acquisition cash flows directly attributable to the portfolio of insurance contracts are included.¹¹ For direct sales marketing systems, such as television advertising, response rates are low: only 2% of television viewers might respond to an advertisement. All the cash flows are included in the acquisition cash flows, whether or not they relate to insurance contracts actually sold to policyholders.

Illustration: Directly attributable acquisition cash flows

An insurer pays a bank 100 on January 1, 20X1, to sell insurance contracts to the bank's customers in 20X1. The coverage period is four years (20X1 through 20X4). We consider the following items:

- A. Whether the payment to the bank qualifies as directly attributable acquisition cash flows.
- B. How the insurer reports the 100 payment to the bank.
- C. When the insurer recognizes the acquisition cash flows as an expense.
- D. How the accounting entries change if the payment to the bank occurs in 20X0, not 20X1.

Part A: The payment to the bank is an acquisition cash flow that is directly attributable to the portfolio of contracts sold by the bank, not to any specific contract. The payment is a fixed amount that does not vary with the number of contracts issued or the premium received. GAAP (SFAS 60) views it as a fixed expense, not as a deferrable expense. IFRS 17 classifies directly attributable acquisition cash flows on a portfolio basis, not a contract basis, so the expense qualifies as a directly attributable acquisition cash flow.

Part B: The group of insurance contracts is recognized on January 1, 20X1. They are a single line of business, in a single region, and they are managed together, so they form a portfolio (though they may be combined with contracts issued through other banks if the insurer manages all the contracts together). They are issued the same year, so they form a group. If some contracts are non-onerous and others are onerous, they may form two or more groups.

Part C: U.S. GAAP capitalizes acquisition costs that vary with the acquisition of new and renewal insurance contracts as a deferred policy acquisition cost asset, which is charged to expense as the premium is earned. IFRS 17 recognizes acquisition costs as cash flows of the group of insurance contracts, not as deferred assets. The payment to the bank is directly attributable to the portfolio of insurance contracts and is included in the fulfilment cash flows.

For U.S. GAAP statements, if the payment to the bank does not vary with policies issued or premium received, it is a fixed cost that is charged to expense when it occurs. If the payment varies with the policies issued or the premium received, the insurer capitalizes the payment as pre-paid acquisition expenses (an asset).

IFRS 17 includes directly attributable acquisition cash flows in the fulfilment cash flows (with the cash flows for premiums and claims) but allocates the acquisition cash flows to insurance service expense and insurance revenue in proportion to the passage of time and amortizes the acquisition cash flows to the valuation dates for the acquisition expenses.

Part D: If the directly attributable acquisition cash flows occur before the insurance contract is issued, the insurer capitalizes an asset for these cash flows when they occur. When it issues the insurance contract, it derecognizes the asset for insurance acquisition cash flows and includes them with premium and claim cash flows in the fulfilment cash flows.

Acquisition expenses from cash flows at initial recognition

The insurance service expense from acquisition cash flows is disclosed in 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”).¹² The insurance revenue from acquisition cash flows is disclosed in the analysis of insurance revenue required by paragraph 106.¹³ The insurance revenue and insurance service expense from acquisition cash flows are equal each year, so they do not affect the insurance service result.

Illustration: An insurer writes a three year insurance contract on January 1, 20X1, with

- premium received of 100 at initial recognition
- acquisition cash flows paid of 15 at initial recognition
- one claim for 90 is expected to occur on December 31, 20X3

The discount rate is 6% *per annum*.

The fulfilment cash flows at initial recognition are $-100 + 15 + 90 / 1.06^3 = -9.43$, and the contractual service margin at initial recognition is 9.43.

- The present value of the acquisition cash flows at initial recognition is 15.
 - The coverage units are the same each year, so this present value is allocated equally by year: 5 each to 20X1, 20X2, and 20X3.

- We amortize these present values to the end of each year:
 - $20X1: 5 \times 1.06^1 = 5.30$
 - $20X2: 5 \times 1.06^2 = 5.62$
 - $20X3: 5 \times 1.06^3 = 5.96$
- The insurance revenue and the insurance service expense for acquisition cash flows are 5.30 in 20X1, 5.62 in 20X2, and 5.96 in 20X3.

We show below the claim payments and unearned profit included in the insurance revenue each year:

- The insurance contract is not onerous, so the entire claim is expected to be covered by the premium received. The insurance revenue and the insurance service expense for the claim is 90 in 20X3.
- The insurance revenue from the contractual service margin is
 - $20X1: (9.43 \times 1.06) / 3 = 3.33$.
 - Accretion of interest at 6% is added to the contractual service margin (9.43) at the beginning of the year, giving $9.43 + 6\% \times 9.43 = 10.00$
 - One third is recognized in 20X1 profit or loss = $10.00 / 3 = 3.33$
 - $20X2: (9.43 \times 1.06) \times 2 / 3 \times 1.06 / 2 = 3.53$.
 - The contractual service margin remaining at the beginning of 20X2 is $10.00 - 3.33 = 6.67$
 - Accretion of interest at 6% is added: $6.67 + 6\% \times 6.67 = 7.07$
 - One half is recognized in 20X2 profit or loss: $7.07 / 2 = 3.535$
 - $20X3: (9.43 \times 1.06) \times 2 / 3 \times 1.06 / 2 \times 1.06 = 3.74$.
 - The contractual service margin remaining at the beginning of 20X3 is $7.07 - 3.535 = 3.535$
 - Accretion of interest at 6% is added: $3.535 + 6\% \times 3.535 = 3.747$
 - This accumulated contractual service margin is recognized in 20X3 profit or loss.

The claim that occurs on December 31, 20X3, is insurance revenue for 20X3 under the liability for remaining coverage and insurance service expense for 20X3 under the liability for incurred claims.

Claim payments are insurance revenue and insurance service expenses when they occur; acquisition cash flows are allocated over the contract period on the basis of the passage of time and the coverage units; the unearned profit is allocated to insurance revenue on the same basis but is not insurance service expense.

Changes at later valuation dates in the estimated future cash flows or coverage units change the allocation of the unearned profit and the acquisition cash flows.

Acquisition expenses from cash flows by year

The acquisition cash flows are directly attributable to the portfolio of insurance contracts, not to the individual insurance contracts or the groups of insurance contracts, so they must be allocated to the groups of insurance contracts in the portfolio.¹⁴

Insurance acquisition cash flows are paid up-front, either entirely in the first year of the coverage period or at a higher rate in early years of the coverage period. For a whole life insurance contract, the acquisition cash flows may be 30% of the premium in the first year, 5% in the second year, and smaller amounts in later years.

The insurer allocates these cash flows to derive the insurance service expense and the insurance revenue. Even if the acquisition cash flows are paid in the first year or in the early years of the coverage period, the insurance revenue and insurance service expense are spread over the coverage period based on the passage of time and the coverage units.

Illustration: Groups of permanent life insurance contracts have decreasing numbers in force over time, caused by deaths and lapses. A group may have 1,000 contracts in force in year 1 declining to 10 contracts in force in year 40, as policyholders die or lapse their contracts. For each contract, the allocation of acquisition cash flows is proportional to the passage of time. For the group, the allocation varies with the contracts in force.¹⁵

Illustration: An insurer writes a three year insurance contract on January 1, 20X1, with

- premium received of 100 at initial recognition
- acquisition cash flows paid of
 - 8 on January 1, 20X1
 - 4 on January 1, 20X2
 - 3 on January 1, 20X3
- one claim for 90 is expected to occur on December 31, 20X3

The discount rate is 6% *per annum*. Acquisition cash flows are discounted at current interest rates, just like claim cash flows, for inclusion in the fulfilment cash flows.

The fulfilment cash flows at initial recognition are $-100 + 8 + 4 / 1.06^1 + 3 / 1.06^2 + 90 / 1.06^3 = -9.99$, and the contractual service margin at initial recognition is 9.99.

- The present value of the acquisition cash flows at initial recognition is $8 + 4 / 1.06^1 + 3 / 1.06^2 = 14.44$.
 - The coverage units are the same each year, so this present value is allocated equally by year:
 - $14.44 / 3 = 4.81$ each to 20X1, 20X2, and 20X3.
- We amortize these present values to the end of each year (see below for the amortization procedure):
 - 20X1: $4.81 \times 1.06^1 = 5.10$
 - 20X2: $4.81 \times 1.06^2 = 5.40$
 - 20X3: $4.81 \times 1.06^3 = 5.73$
- The insurance revenue and the insurance service expense for acquisition costs are 5.10 in 20X1, 5.40 in 20X2, and 5.73 in 20X3.

We show also the allocation of the unearned profit and the claim to insurance revenue and expenses:

- The insurance contract is not onerous, so the entire claim is expected to be covered by the premium received. The insurance revenue and the insurance service expense for the claim is 90 in 20X3.
- The insurance revenue from the contractual service margin is
 - 20X1: $(9.99 \times 1.06) / 3 = 3.53$
 - Accretion of interest at 6% is added to the contractual service margin (9.99) at the beginning of the year, giving $9.99 + 6\% \times 9.99 = 10.59$
 - One third is recognized in 20X1 profit or loss = $10.59 / 3 = 3.53$
 - 20X2: $(9.99 \times 1.06) \times 2 / 3 \times 1.06 / 2 = 3.74$
 - The contractual service margin remaining at the beginning of 20X2 is $10.59 - 3.53 = 7.06$
 - Accretion of interest at 6% is added: $7.06 + 6\% \times 7.06 = 7.48$
 - One half is recognized in 20X2 profit or loss: $7.48 / 2 = 3.74$
 - 20X3: $(9.99 \times 1.06) \times 2 / 3 \times 1.06 / 2 \times 1.06 = 3.97$
 - The contractual service margin remaining at the beginning of 20X3 is $7.48 - 3.74 = 3.74$
 - Accretion of interest at 6% is added: $3.74 + 6\% \times 3.74 = 3.96$
 - This accumulated contractual service margin is recognized in 20X3 profit or loss.

ALLOCATION AND AMORTIZATION OF ACQUISITION CASH FLOWS

Acquisition cash flows are included in the fulfilment cash flows when they occur. For insurance revenue and insurance service expense, they are amortized and allocated over the coverage period.¹⁶

IFRS 17 itself does not specify the amortization and allocation procedures. The IFRS 17 *Illustrative Examples* show an example with one acquisition cash flow at initial recognition, a zero discount rate, and equal coverage units in each year. This example is for simplicity only; it is not meant to imply that acquisition cash flows are not accumulated for the time value of money to derive insurance revenue and insurance service expense or that they are not allocated in proportion to the coverage units. On the contrary: all cash flows are amortized for the time value of money and all allocations to profit or loss depend on the insurance services provided.

The IFRS 17 *Effects Analysis* shows a complete illustration, allocating the present value of the acquisition cash flows by the coverage units in each year and amortizing the acquisition expenses to the valuation dates. The text of IFRS 17 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*.¹⁷

We use two-year and four-year coverage periods to explain the allocation of the acquisition cash flows.

Suppose a group of insurance contracts with a coverage period of two years is issued on January 1, 20X1. Acquisition cash flows are 200 on January 1, 20X1, and 80 on January 1, 20X2.

Scenario #1: The discount rate is zero and the coverage units are the same in 20X1 and 20X2.

The total acquisition cash flows are $200 + 80 = 280$, which are allocated 140 to 20X1 and 140 to 20X2.

Scenario #2: The discount rate is 6% *per annum* and the coverage units are the same in 20X1 and 20X2.

The total present value of the acquisition cash flows is $200 + 80 / 1.06 = 275.47$. We allocate this present value 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 275.47. These nominal values depend on the dates for the acquisition expenses in 20X1 and 20X2. The acquisition cash flows occur on January 1 of each year, but the dates for acquisition expenses may differ. The IFRS 17 *Effects Analysis* assumes that the acquisition expenses occur at the end of the year, like the cash outflows for claims and other expenses.

The present value of the acquisition cash flows is allocated in proportion to the coverage units in each year. The coverage units are the same for the two years in this illustration, so the allocated present values of the acquisition cash flows are $\frac{1}{2} \times (200 + 80 / 1.06) = 137.74$ each year. We accumulate these present values to the acquisition expense dates at the end of each year:

- 20X1: $137.74 \times 1.06^1 = 146.00$
- 20X2: $137.74 \times 1.06^2 = 154.76$

We can also solve for the 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*, $Z_2 = 1.06 \times Z_1$. We solve

$$\begin{aligned} Z_1 / 1.06^1 + Z_2 / 1.06^2 &= 275.47 \Rightarrow \\ Z_1 / 1.06^1 + 1.06 \times Z_1 / 1.06^2 &= 2 \times Z_1 / 1.06^1 = 275.47 \Rightarrow \\ Z_1 &= \frac{1}{2} \times 275.47 \times 1.06^1 = 146.00 \text{ and } Z_2 = 146.00 \times 1.06^1 = 154.76 \end{aligned}$$

We verify that $146.00 / 1.06^1 + 154.76 / 1.06^2 = 275.47$.

Scenario #3: The discount rate is 6% *per annum* and the coverage units are 100 in 20X1 and 90 in 20X2.

The total present value at initial recognition of the acquisition cash flows is $200 + 80 / 1.06 = 275.47$. We derive the nominal acquisition expense values in 20X1 and 20X2 (assuming the acquisition expenses occur at the end of the year) by two relations:

- their present values have a ratio of 100 to 90
- the sum of the present values is 275.47.

We allocate the present value of the acquisition cash flows by the coverage units in each year.

- 20X1: $(200 + 80 / 1.06) \times 100 / (100 + 90) = 144.99$
- 20X2: $(200 + 80 / 1.06) \times 90 / (100 + 90) = 130.49$

We accumulate these present values to the valuation dates at the end of each year:

- 20X1: $144.99 \times 1.06^1 = 153.69$
- 20X2: $130.49 \times 1.06^2 = 146.62$

We can also solve for the 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. The coverage units in 20X2 are 90% of the coverage units in 20X1 and the discount rate is 6% *per annum*, $Z_2 = 90\% \times 1.06 \times Z_1$. We solve

$$\begin{aligned} Z_1 / 1.06^1 + Z_2 / 1.06^2 &= 275.47 \Rightarrow \\ Z_1 / 1.06^1 + 90\% \times 1.06 \times Z_1 / 1.06^2 &= 1.90 \times Z_1 / 1.06^1 = 275.47 \Rightarrow \\ Z_1 &= 275.47 \times 1.06^1 / 1.90 = 153.68 \text{ and } Z_2 = 153.68 \times 90\% \times 1.06^1 = 146.61 \end{aligned}$$

We verify that $153.68 / 1.06^1 + 146.61 / 1.06^2 = 275.46$. (The 0.01 difference stems from rounding.)

We combine the acquisition cash flows with claims and other expense costs.

Illustration: A four year insurance contract written on December 31, 20X0, has expected cash flows of

- premium cash inflow of 950 on December 31, 20X0
- acquisition cash outflow (directly attributable to the portfolio of contracts) of 100 on December 31, 20X0
- claim cash outflows of 200 each on December 31 of 20X1, 20X2, 20X3, and 20X4
- other cash outflows (not directly attributable to the portfolio of contracts) of 50 on December 31, 20X0

The discount rate is 6% *per annum* for all maturities. For simplicity, we assume the risk adjustment for non-financial risk is zero in this illustration.

The fulfilment cash flows at initial recognition are

$$-950 + 100 + 200 \times (1.06^{-1} + 1.06^{-2} + 1.06^{-3} + 1.06^{-4}) = -156.98.$$

Negative fulfilment cash flows at initial recognition mean the insurance contract is not onerous. The fulfilment cash flows do not include the cash flows that are not directly attributable to the portfolio of insurance contracts (even if they are needed for insurance operations), such as maintenance of a company athletic center that is used for the entire firm. Insurers differ in their cost allocation methods: some attribute most fixed expenses to portfolios of insurance contracts and some write them off as expenses when they occur.

After the premium is received and the insurance acquisition cash flows are paid, the fulfilment cash flows are

$$200 \times (1.06^{-1} + 1.06^{-2} + 1.06^{-3} + 1.06^{-4}) = 693.02$$

The contractual service margin at December 31, 20X0, is 156.98 (unearned profit in the insurance contracts).

The insurance service expense and the insurance revenue for 20X0 are zero:

- The claims are insurance service expense when they occur: 200 each year of 20X1–20X4. The insurance contract is not onerous, so the insurance revenue for these claims is also 200 each year of 20X1–20X4.
- The present value of the insurance acquisition cash flows are allocated to insurance service expense over the coverage period in proportion to the passage of time. The allocated present values are amortized to the valuation dates in each year.

The allocation of the acquisition cash flows depends on the coverage units in each year.

If the coverage units are the same each year, the total acquisition cash flows are allocated $100 / 4 = 25$ to each year. If the valuation dates are the end of the year, the amortized acquisition expenses are

- 20X1: $25 \times 1.06^1 = 26.50$
- 20X2: $25 \times 1.06^2 = 28.09$
- 20X3: $25 \times 1.06^3 = 29.78$
- 20X4: $25 \times 1.06^4 = 31.56$

The amortized acquisition expenses are included in the insurance revenue and insurance service expense for each year.

For groups of life insurance contracts, death claims reduce the policies in force and the coverage units. If this group began with 10 life insurance contracts and each claim reduces the policies in force, the coverage units are 10, 9, 8, and 7 for the four years. The 100 acquisition cash flows at initial recognition are allocated as

- 20X1: $100 \times 10 / (10 + 9 + 8 + 7) = 29.41$
- 20X2: $100 \times 9 / (10 + 9 + 8 + 7) = 26.47$
- 20X3: $100 \times 8 / (10 + 9 + 8 + 7) = 23.53$
- 20X4: $100 \times 7 / (10 + 9 + 8 + 7) = 20.59$

The sum of these four present values is $29.41 + 26.47 + 23.53 + 20.59 = 100.00$.

The present values are accumulated to the valuation date of each year for insurance revenue and insurance service expense:

- 20X1: $29.41 \times 1.06^1 = 31.17$
- 20X2: $26.47 \times 1.06^2 = 29.74$
- 20X3: $23.53 \times 1.06^3 = 28.02$
- 20X4: $20.59 \times 1.06^4 = 25.99$

The expense in the statement of profit or loss in 20X2 is the 50 of other expenses that are recognized in 20X0.

In 20X1, the insurance finance expense on the future cash flows is $693.02 \times 6\% = 41.58$.¹⁸

- If the coverage units are equal each year, the insurance service expense for 20X1 is the claim of 200 plus the allocated acquisition expenses of 26.50, or 226.50 in total.
- If the coverage units are proportional to the policies in force, the insurance service expense for 20X1 is the claim of 200 plus the allocated acquisition expenses of 31.17, or 231.17 in total.

The insurance revenue includes the allocation of the contractual service margin to profit or loss.

The contractual service margin at December 31, 20X1, with accretion of interest is $156.98 \times 1.06 = 166.40$. This accumulated contractual service margin is allocated by year to profit or loss in proportion to the coverage units provided.

- If the coverage units are the same in all years, the allocation to 20X1 is $166.40 / 4 = 41.60$, and the total insurance revenue in 20X1 is $226.50 + 41.60 = 268.10$.
- If the coverage units are proportional to the policies in force of 10, 9, 8, and 7 for the four years, the allocation to 20X1 is $166.40 \times 10 / (10 + 9 + 8 + 7) = 48.94$, and the total insurance revenue in 20X1 is $231.17 + 48.94 = 280.11$.

The insurance acquisition cash flows in the illustration above are not discounted because they are paid at initial recognition. Many life insurance contracts have annual premiums and annual acquisition cash flows.

If the insurance contract in the illustration above had annual premiums of 250 at the beginning of each year and acquisition cash flows of 25 at the beginning of each year, the present values would be

- Premium cash flows: $250 \times (1.06^{-0} + 1.06^{-1} + 1.06^{-2} + 1.06^{-3}) = 918.25$
- Acquisition cash flows: $25 \times (1.06^{-0} + 1.06^{-1} + 1.06^{-2} + 1.06^{-3}) = 91.83$
- Claim cash flows: $200 \times (1.06^{-1} + 1.06^{-2} + 1.06^{-3} + 1.06^{-4}) = 693.02$

The fulfilment cash flows at initial recognition = $-918.25 + 91.83 + 693.02 = -133.40$, and the contractual service margin at initial recognition = 133.40.

End-notes:

¹ See IFRS 17 Appendix A (Defined terms). For ease of reading, the phrase “acquisition cash flows” means insurance acquisition cash flows directly attributable to the portfolio of insurance contracts.

² See IFRS 17 *Basis for Conclusions* paragraph BC182: “The Board noted that (a) including only insurance acquisition cash flows that are incremental at a contract level would mean that entities would recognise different contractual service margins and expenses depending on the way they structure their acquisition activities. For example, there would be different liabilities reported if the entity had an internal sales department rather than outsourcing sales to external agents. ... differences in the structure of insurance acquisition activities would not necessarily reflect economic differences between insurance contracts issued by the entities. (b) an entity typically prices insurance contracts to recover not only incremental costs, but also other direct costs and a proportion of indirect costs incurred in originating insurance contracts – such as costs of underwriting, medical tests and inspection, and issuing the policy. The entity measures and manages these costs for the portfolio, rather than for the individual contract. Accordingly, including insurance acquisition cash flows that are incremental at the portfolio level in the fulfilment cash flows of the insurance contracts would be consistent with identification of other cash flows that are included in the measurement of the contracts.”

³ IFRS 17 does not specify amortization and allocation methods for acquisition cash flows. The procedures here are those used in the IFRS 17 *Effects Analysis* illustrations 1 and 2.

⁴ The IFRS 17 statement itself refers to an allocation on the basis of the passage of time. The procedure in the IFRS 17 *Effects Analysis* allocates both by coverage units and by the passage of time.

⁵ 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.”

⁶ See IFRS 17 *Basis for Conclusions* paragraph BC176: “... accounting models ... with deferral of insurance acquisition cash flows ... treat insurance acquisition cash flows as ... a recognisable asset, which ... does not exist”

⁷ See IFRS 17 *Basis for Conclusions* paragraph BC178: “In many cases, insurance acquisition cash flows occur at the beginning of the coverage period of a group of insurance contracts, before any coverage or other service has been provided. Because insurance revenue is recognised in the same pattern as changes in the liability for remaining coverage, this would mean that some of the insurance revenue would be recognised when the insurance acquisition cash flows are paid, often at the beginning of the coverage period.” See also IFRS 17 *Basis for Conclusions* paragraph BC179: “the premium related to insurance acquisition cash flows is not recognised as revenue when the insurance acquisition cash flows occur, but is separately identified and recognised over the coverage period.... and the insurance acquisition cash flows are recognised as an expense over the same period.”

⁸ See IFRS 17, paragraph 27: “An entity shall recognise an asset or liability for any insurance acquisition cash flows relating to a group of issued insurance contracts that the entity pays or receives before the group is recognised, unless it chooses to recognise them as expenses or income ... An entity shall derecognise the asset or liability resulting from such insurance acquisition cash flows when the group of insurance contracts to which the cash flows are allocated is recognised ...”

⁹ See IFRS 17 paragraph 38: The contractual service margin ... on initial recognition ... results in no income or expenses arising from:

(a) the initial recognition of ... the fulfilment cash flows ...

(b) the derecognition ... of any asset or liability recognised for insurance acquisition cash flows ...”

¹⁰ IFRS 17 does not discuss the accretion of interest on acquisition cash flows paid before the insurance contracts are recognized. The time lag is generally short enough that the accretion of interest is not material.

¹¹ See IFRS 17 *Basis for Conclusions* paragraph BC183: “The Board also considered whether to restrict insurance acquisition cash flows to be included in the measurement of a group of insurance contracts to those cash flows related directly to the successful acquisition of new or renewed insurance contracts. The approach in IFRS 17 to the measurement of a group of insurance contracts is to estimate the profit expected to be generated over the duration of the group. In this context, excluding some insurance acquisition cash flows that relate to issuing a portfolio of contracts would result in an understatement of the fulfilment cash flows and an overstatement of the contractual service margins of groups in the portfolio. In addition, the Board wanted to avoid measuring liabilities and expenses at different amounts depending on how an entity structures its insurance acquisition activities ...”

¹² See IFRS 17 paragraph P103(b)(ii): “An entity shall separately disclose in the reconciliations required in paragraph 100 each of the following amounts related to insurance services ... amortisation of insurance acquisition cash flows ...”

¹³ See IFRS 17 paragraph P106(b): “... an entity shall disclose an analysis of the insurance revenue [including] ... the allocation of the portion of the premiums that relate to the recovery of insurance acquisition cash flows.”

¹⁴ The allocation is a cost accounting matter; the insurer uses an allocation method that is appropriate for these costs. IFRS 17 does not specify the allocation method.

¹⁵ Acquisition cash flows for insurance contracts that are not issued (because the insurer did not issued the contract or because the applicant did not accept the offer) are allocated in proportion to contracts issued.

¹⁶ 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.”

¹⁷ See IFRS 17 paragraph 103(b)(ii), and IFRS 17 *Effects Analysis*, page 75, footnote 72.

¹⁸ The accretion of interest formula is appropriate when the discount rate does not change. If the discount rate changes, the insurance finance expense is the difference in the present values at the beginning and end of the year using the discount rate at each date.