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**Introduction**

IFRS 17 introduces the CSM to prevent credit being taken at initial contract recognition for the present value of future expected profits. Instead the profits are released (through amortizing the CSM) as the insurance service is fulfilled over the entire insurance period. The determination of the portion of CSM to be released into profit in the current reporting period is to be based on “coverage units.”

**Coverage units**

Paragraph B119 of the standard describes how the CSM is amortized into profit to reflect the services provided in each period:

- The number of coverage units should be determined so as to reflect the quantity of the benefits and expected coverage duration of the product.
- At the end of the period, the CSM should be allocated between the current period and future periods in proportion to the actual coverage provided and the expected future coverage units to be provided.
- The portion of the CSM allocated to the current period should be recognized in profit or loss.

Coverage units determine how the CSM is released into profit in each reporting period. However, IFRS 17 is principle-based and provides little guidance about the definition of such an important factor. Insurers need to choose the unit which best represents each product’s characteristics. In the sections below, we identify considerations for insurers as they define coverage units.

**Definition of units**

The CSM is an amount representing the unearned profit held as part of insurance reserve at the end of each reporting period. It should be amortized in a systematic way into profit. Coverage units are used to “unitize” the CSM so as to recognize the portion belonging to the current period. The “unitization” idea is not uncommon in the modeling of products with fixed benefits. For example, a term insurance contract is modeled by setting an initial unit amount of coverage (which is often a face amount retrieved from the administration system) and then the unit amount is projected by reflecting expected future mortality and lapse rates. Premiums, benefits, and expenses in each reporting period are derived by multiplying this unit amount by certain rates. From this modeling philosophy, it would be quite natural to consider this unit amount as a basis for the coverage units to be used within IFRS 17.

For many fixed benefit insurance products, this unit amount would usually be based on a contractual benefit amount. It could be the death benefit for traditional term, endowment, and whole life business. For deferred annuities, it could be an annuity fund at maturity, guaranteed annuity amount, etc. For increasing or decreasing term life business, the unit amount can be set to the variable death benefit (increasing or decreasing over time).

While IFRS 17 is principle-based, paragraph 279 of the Basis for Conclusions states that coverage units should reflect the provision of insurance coverage and that the risk exposure is not an appropriate measure because this is already taken into account through the measurement of the fulfillment cash flows. Therefore, insured benefits could be a plausible basis for determining coverage units. These are different from expected future cash flows because they do not consider the probability or the uncertainty of the insured event. For example, with a simple term insurance, this means that the coverage units should not be determined by multiplying the face amount by the expected mortality rates (which increase as the insured ages).

The ability to sum coverage units (“additivity”) should be considered where products with different coverage units are put together in the same group of insurance contracts. Amortizing the CSM at an aggregate level for a group in which different types of coverage units are used might have undesirable effects.
Furthermore, even if additivity is preserved by using the same type of coverage units for all products in a group, it should be examined whether it is reasonable to amortize on an aggregated level. For example, if two different product types are put together in a single group and policy count is used as coverage unit, the profit per unit might be very different between these two product types. Careful consideration is necessary in these situations.

As a consequence, insurers might need to distinguish between the coverage units used in defining the groups of contracts within IFRS 17.

**Similarity to existing GAAP practice**

The concept of amortizing an unearned profit reserve (e.g., the CSM) over a certain coverage unit is not a brand new concept. For example, U.S. GAAP stipulates the approach for the deferred profit liability (DPL) for the so-called FAS97 limited pay (F97LP) business under U.S. GAAP. For those insurers that currently report based on U.S. GAAP (or IFRS 4 but taking a similar approach), the current approach under existing GAAP accounting could be familiar and a good starting point. As F97LP is applied to traditional fixed insurance with a limited premium payment period, it is quite common to use the present value of future insurance in force as a driver to amortize the DPL. Insurers may want to apply the same practice to IFRS 17 coverage units.

**Investment services**

Investment contracts with discretionary participation features issued by an entity that also issues insurance contracts are in the scope of IFRS 17, even if these contracts do not transfer significant insurance risk. The CSM of such contracts consists of a net financial margin after deduction of expected contract expenses. For these contracts, paragraph 71 of the standard clarifies that the transfer of investment services should instead be used as the basis for defining coverage units. Again, the standard does not provide further information, which gives entities substantial freedom to define the corresponding coverage units. One option would be to consider investment services as being independent of the underlying assets under management, resulting in a fixed annual release of CSM over the duration of the contract; however, one could argue whether this approach appropriately reflects the transfer of investment services. On the other hand, entities could decide to consider the margin for investment services as a proportion of the underlying managed assets, which would lead to a coverage unit that evolves as a fixed proportion of the assets under management.

For contracts that meet the definition of an insurance contract that also provide investment services, it may be a challenge for companies to define appropriate coverage units as the pattern of the insurance coverage may differ significantly from the pattern of the provision of investment services.

Consider an insurance contract that provides both insurance and investment services, but the insurance services only cover half of the lifetime of the contract. As noted above, paragraph 279 of the Basis for Conclusions states that coverage units should reflect the provision of insurance coverage. A strict interpretation can be that the entire CSM needs to be released over the shorter insurance coverage period.

Using the insurance coverage as basis for the coverage units results in a CSM release pattern that is not properly aligned with the investment services provided. Careful consideration is necessary to define appropriate coverage units in this situation.

**Need to take present value**

Because the coverage units should reflect coverage duration, it makes sense to define coverage units as the sum of the defined units in future periods. A central question is whether future units should be discounted when taking the sum.

Under IFRS 17’s general model (GM), the CSM represents the present value of unearned future profits and needs to be credited with the interest (accrued) using the discount rates locked in at initial recognition. Let’s take a look at a simple example of a two-year term insurance where the CSM is 80 and the number of coverage units is the same for both years.

<table>
<thead>
<tr>
<th>T</th>
<th>1</th>
<th>2</th>
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</thead>
<tbody>
<tr>
<td>UNITS</td>
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<td>100</td>
</tr>
<tr>
<td>DISCOUNT RATE</td>
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<td>5%</td>
</tr>
<tr>
<td>SUM OF UNITS</td>
<td>200</td>
<td>100</td>
</tr>
<tr>
<td>PV UNITS</td>
<td>95</td>
<td>90</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>CSM1</th>
<th></th>
<th>CSM2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>OPENING CSM</td>
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<td>42.0</td>
<td>80.0</td>
<td>41.0</td>
</tr>
<tr>
<td>ACCRUAL</td>
<td>4.0</td>
<td>2.1</td>
<td>4.0</td>
<td>2.0</td>
</tr>
<tr>
<td>RELEASE</td>
<td>(42.0)</td>
<td>(44.1)</td>
<td>(43.0)</td>
<td>(43.0)</td>
</tr>
<tr>
<td>CLOSING CSM</td>
<td>42.0</td>
<td>-</td>
<td>41.0</td>
<td>-</td>
</tr>
</tbody>
</table>

In the table above, release pattern CSM2 shows the situation when the coverage units are defined as the present value of the units (using the locked-in discount rates), whereas release pattern CSM1 is based on the sum of coverage units without discounting. At the end of period 1, CSM is derived by CSM(t=0)/Coverage Units(t=0) * Coverage Units(t=1). Applying discounting results in an equal release over both years in this simple example.
Release pattern CSM2, which is based on the present value of units, can be considered as more correct as it follows the derivation of the CSM more closely. However, as described in paragraph 282 of the Basis for Conclusions, IFRS17 does not require discounting, and whether to discount or not is a matter of each entity’s judgement.

Extending the abovementioned GM concept to the variable fee approach (VFA) would be logical, but it adds complexity as the CSM is adjusted for financial and non-financial components.

**Assumption unlocking implication**

Paragraph B119(b) of the standard stipulates that the allocation of the CSM between the current period and future periods needs to be made at the end of the period. Paragraph 279(b) of the Basis for Conclusions clarifies that this means that the CSM at the end of the period is after unlocking of the assumption changes over the period. Accordingly, expected future coverage units should also be derived using the current assumptions rather than the assumptions used at the beginning of the period.

As the CSM and coverage units change when new non-economic assumptions are adopted, on top of the changes caused by experience adjustments for what has actually occurred over the current period (i.e., actual versus expected decrement differences), it is a delicate exercise to design the calculation model to release CSM in the way stipulated by the standard.

**Conclusions**

While IFRS 17 provides little guidance about coverage units, insurers may be able to find quick but reasonable choices from the current modeling philosophy or certain existing standards such as U.S. GAAP. Nevertheless, insurers should carefully examine the consequences and reasonableness of those choices in light of the characteristics of their business as coverage units are very important factors for determining the future profit signature under IFRS 17. This topic is currently being discussed in Transition Resource Group (TRG) and further interpretation guidance may be issued in time.

**DISCLAIMER**

This paper is one of many examples where Milliman intends to provide added value to users of IFRS 17 through their actuarial expertise and long track record on following the development of this insurance standard.

This interpretation mentioned in this document is solely the opinion of Milliman consultants and should be properly discussed with them or with the entity’s accountant and/or auditor.

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