

# Coverage units for long-term contracts with complex structure of risks

## 1. Introduction

Purpose of the paper is to provide the guidance for setting the IFRS17 coverage units for the long-term contracts which combine multiple risks insured within one insurance contract (i.e. within one group of insurance contracts) in combination with the saving or investment component (further referred as hybrid products).

Such contracts dominate the individual life insurance market in the Czech Republic and Slovakia in the recent years, while there are no similar products issues in the other countries. As consequence of the regional nature of the issue, there is lack of guidance for IFRS17 implementation for such contracts.

## 2. Coverage Units in IFRS17

IFRS17 defines the coverage unit (par. B119 (a)) as *“the quantity of coverage provided by the contracts in the group, determined by considering for each contract the quantity of the benefits provided under a contract and its expected coverage duration”*.

According to IASB staff analysis presented in the *TRG Agenda Paper - Determining the quantity of benefits for identifying coverage units*:

- *coverage units reflect the likelihood of insured events occurring only to the extent that they affect the expected duration of contracts in the group; and*
- *(b) coverage units do not reflect the likelihood of insurance events occurring to the extent that they affect the amount expected to be claimed in the period.”*

The same paper confirms following methods for determining the quantity of benefits

- *the maximum contractual cover in each period; and*
- *the amount the entity expects the policyholder to be able to validly claim in each period if an insured event occurs;*

while explicitly rejecting methods based on

- *Premiums,*
- *expected cash flows or*
- *number of policies,*

*unless they can be demonstrated to be reasonable proxies for the services provided by the entity in each period.*

Consequently, the stance has been softened further after acknowledging the practical challenges stemming from various combinations of the services provided within the same group of insurance contract. Finally, the Transition Resource Group for IFRS 17 Insurance Contracts meeting held on 2 May 2018 concluded that:

- *Different probabilities of different types of insured events occurring might affect the benefit provided by the entity standing ready to meet valid claims for the different types of insured events<sup>1</sup>;*

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<sup>1</sup> Par 35 (f) and (h) (iv) of TRG conclusions (<https://www.ifrs.org/content/dam/ifrs/meetings/2018/may/trg-for-ifrs-17/trg-for-ifrs17-meeting-summary.pdf>)

- *Methods based on premiums might achieve the objective (of measuring service provided). However, premiums will not be reasonable proxies when comparing serviced across periods if they are receivable in different periods to those in which insurance services are provided, or reflect different probabilities of claims for the same type of insured event in different periods rather than different levels of service of standing ready to meet claims. Additionally, premiums will not be reasonable proxies when comparing contracts in a group if the premiums reflect different levels of profitability in contracts. The level of profitability in a contract does not affect the services provided by the contract.*

### 3. Examples of the issues coming from the standard approach

The standard methods recommended by the IASB staff do not truthfully reflect the nature of service provided due to the fact that the different risks have diametrically different maximum possible covers in comparison to their importance for the client (which, ultimately, shall be the measure of the service provided).

For example, the *permanent disability in case of serious accident with progressive benefits* has extremely high maximum possible benefit, while having limited economic importance for client compared to the standard *death benefit* or even *the daily allowance in case of sickness* (which has limited maximum pay-out).

Coverage units derived by simple summing the maximum pay-outs for the above-mentioned risks would be dominated by the permanent disability, while the service provided by the daily allowance would be basically ignored, despite the significantly higher premium and importance of the cover for the clients.

Second example is the comparison of the *permanent disability in case of serious accident* with different minimum threshold. The low threshold versions provide significant additional service (claim benefits paid in case of less serious disability<sup>2</sup>), while the difference is totally ignored by the maximum possible pay-out.

### 4. Proposed approach

As consequence of the need for simple and reasonable method<sup>3</sup> for hybrid products, we suggest to define coverage units and the ***weighted sum of the sums at risk***<sup>4</sup> for the different types of risks insured within one group of insurance contracts.

For the measurement of saving and investment service, the basis shall correspond to client's balance at any moment, e.g. to the assets under management in case of investments or statutory provisions in case of traditional products with guarantees.

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<sup>2</sup> Due to much higher claim frequency, the total claims pay-out for less serious disabilities tend to be significantly higher than the pay-out for (almost) complete disability.

<sup>3</sup> The expected future coverage units need to be calculated each time the company prepares IFRS17 reports and needs to be consistent with the assessment of the coverage provided in the current period. Therefore, the relatively simple method is need in order to allow for automated processing of the financial closing.

<sup>4</sup> We assume that for each individual type of cover, the maximum pay-out can be calculated (or reliably estimated) from the sum-at-risk. The types of cover will be probably significantly more granular than is the usual "risk" category.

The same weights shall be then applied on all contracts, regardless of the product, seniority of the contract, age of the client, likelihood of the event, type of premium paid or any similar contract-specific information<sup>5</sup>.

There is no reliable way of direct measurement of the relative importance of the cover for the client. Therefore, the assessment must be based on the likelihood of insured events or on the premium, contrary to the general IFRS17 requirements stated above. However, the breach of the requirements must be limited to necessary minimum.

The basis for setting the weights shall be as general as possible. The working group has suggested following possibilities (ordered from the least specific – i.e. from the most preferable)

- the information for the general population (e.g. general population mortality, sickness and accidental rates etc.);
- the information for the whole insurance market;
- the information for typical policyholder (typical for the whole market);
- the information for the whole portfolio of the company or
- the information for typical policyholder (typical for the particular company at the moment of the assessment).

The working group has concluded that the weights likelihood of insured events shall be used rather than the premium (which prone to fluctuations unrelated to the service provided to the client). However, the primary focus shall be given to the general definition of the data – i.e. the market level of premium shall be preferred over company specific expectation.

The weights shall be stable - the quantitative amounts of the weights shall be changed only in case of substantial change in the conditions on the market.

The weights for new risk types shall be done in comparison to their relative importance to the rest of the portfolio.

## 5. Recommended Weights for CZ market

The quantitative amounts of the weights presented below were developed in cooperation with The Czech Insurance Association.

The input data were the results of the market survey<sup>6</sup>, leading to the total premiums and sums at risk per each risk<sup>7</sup>.

Consequently, the weights have been set to the to represent the ratio between

- the premium rate of a particular risk and
- the premium rate of a standard life cover (risk of death for any reason), i.e.

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<sup>5</sup> The weights shall represent the relative importance of the cover for the client. We assume that the same service is provided by 1 currency unit of sum-at-risk for particular risk (regardless of the composition of the rest of the contract).

<sup>6</sup> The survey has been finalised in Feb/2022, the market share of the insurance companies participating on the survey was approximately 65%.

<sup>7</sup> Before settling with this method, there was attempt to come up with weighting based on public information for the CZ population. However, the attempt was unsuccessful as the available statistical data for the population do not match the insured risks.

$$\frac{Annual\_Premium_{risk}}{Sum\_at\_Risk_{risk}} = w_{risk} \frac{Annual\_Premium_{death}}{Sum\_at\_Risk_{death}}$$

For the measurement of traditional contracts weight has been set equivalent to the risk of death. The basis was the expectation that the same amount of coverage units shall be generated by an Endowment product with given Sum Assured (regardless of the ratio between actual Sum at Risk and the Statutory Provision).

For the investment service (funds where the investment risk is borne by the policyholder), the weights have been based on annual fees charged, i.e.

$$\frac{Annual\_Fees_{investment}}{Assets\_under\_Management_{investment}} = w_{investment} \frac{Premium_{death}}{Sum\_at\_Risk_{death}}$$

The amounts of weights were following

<b>Risk</b>	<b>Weight per unit of exposure</b>	<b>Exposure</b>
<b>Death</b>	<b>1,000</b>	Sum at Risk
<b>Death due to Accident</b>	<b>0,119</b>	Sum at Risk
<b>Permanent Disability due to Accident</b>	<b>0,116</b>	Sum at Risk
<b>Daily Allowance Insurance</b>	<b>1001,931</b>	Daily amount
<b>Dread Disease</b>	<b>0,661</b>	Sum at Risk
<b>Hospitalisation</b>	<b>206,669</b>	Amount per day of hospitalisation
<b>Disability for any reason</b>	<b>0,292</b>	Expected Benefit
<i>of which lump-sum benefit</i>	<b>0,274</b>	Sum at Risk
<i>of which annuity benefit</i>	<b>2,764</b>	Annual amount

  

<b>Type of financial service</b>	<b>Weight</b>	<b>Basis</b>
<b>Traditional Saving with Guarantee</b>	<b>1,000</b>	Statutory Provisions
<b>Investments where the risk is borne by the policholder</b>	<b>1,553</b>	Assets under Management / Unit-Linked Provisions

## 6. Practical Considerations

Before adopting the weights for IFRS17 calculations, the company shall verify reasonability of the resulting coverage units. This means to review the expected development in time as well as the composition of the coverage units. The latter might be done by checking the ration between annual premium and the coverage units.

In some cases, it might not be possible to measure the coverage units by the weighted exposure as described (e.g. the future development exposition is not available for given risk or the weights lead to unreasonable outcomes due to peculiar setting of the insurance). In such cases, we suggest to apply weights on the corresponding premium directly.

<b>Alternative approach</b> <i>only in case that the standard calculation is not possible/reasonable</i>	<b>Weight</b> <i>per unit of premium</i>	<b>Basis</b>
<b>Any risk</b>	<b>204,000</b>	Annual Premium for the particular risk

However, it is necessary to secure that the premium meets the requirements stated in the section 2 Coverage Units in IFRS17 – especially that

- the timing of premium corresponds to timing of the coverage and that
- the premium does not change with the increasing probability of claim events due to aging of insured persons or similar effects.

## 7. Summary

Due to high complexity of insurance products in the Czech Republic the IFRS17 definition of coverage units does not provide reasonable approach for these products.

As consequence we define a general approach for coverage units measurement over the lifetime of groups of insurance contracts which provides reasonable outputs in terms of local specifics of insurance products and at the same time allows the entities to measure coverage units on a consistent basis on the whole market.

Proposed approach as presented in this document is based on market data. Each entity has to decide if this market benchmark is sufficient for its own portfolio or there is a need to adjust it for specifics of the entity's portfolio.

## Appendix A – Weights



Weights\_CZ.xlsx