IFRS Transition Resource Group for IFRS 17 *Insurance Contracts* (TRG)

Determining quantity of benefits for identifying coverage units

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Introduction

1. At its February 2018 meeting, the Transition Resource Group for IFRS 17 *Insurance Contracts* (TRG) considered agenda paper 05 on coverage units for insurance contracts without investment components. It was observed that:

    - the likelihood of insured events occurring affects coverage units:
        - only to the extent that they affect the expected **duration** of contracts in the group; and
        - do not to the extent that they affect the **amount** expected to be claimed in the period;
    - the expected duration should reflect expected lapses and cancellations; and
    - in principle, different levels of cover across periods should be reflected, but it was noted there were a number practical challenges in doing this.

2. Based on discussions with TRG members, it was agreed to reconsider the determination of quantity of benefits for identifying coverage units on insurance contracts without investment components business at the same time contracts with investment components are considered at its May 2018 meeting. To this end, it was requested TRG members provide examples of the practical determination of quantity of benefits used in determining coverage units.

Scope of the paper

3. This paper has been prepared with input from a number of companies in the Australian insurance market and discussed at the AASB TRG on 13 March 2018. The paper is intended to highlight the practical considerations involved in determining coverage units for different types of general and life insurance products. It is not intended to provide definitive patterns of coverage units that would be used in practice as the impact of selecting certain patterns has not been widely modelled across the various industry groups at this stage. In particular, further understanding of the most relevant coverage patterns will arise from consideration of coverage units from the perspective of the individual contract, group and portfolio, both at inception and evolving over time. This firther work is needed before companies will be in a position to implement an appropriate approach. The scope of the paper includes:

   (a) an outline of relevant IFRS 17 requirements;

   (b) discussion of a practical approach to determining the quantity of benefits and related duration of benefits;

   (c) analysis of IFRS 17 requirements in the context of illustrative examples; and

   (d) appendices of illustrative examples using homogenised data based on actual products and product experience.

4. The examples relate to:

   - lender's mortgage insurance (LMI) cover
   - risks attaching
   - transactional liability cover
   - worker's compensation risk
   - warranty cover
   - extended warranty cover
   - construction risk cover
   - adverse development cover/loss portfolio transfer (reinsurance)
   - income protection cover
   - conventional participating insurance (endowment policy)
   - hybrid insurance contract – retail superannuation contract with both investment and insurance services

Outline of IFRS 17 requirements

5. The directly relevant requirements are set out in IFRS 17.44(e) and B119 (emphasis added):

> 44 For insurance contracts without direct participation features, the carrying amount of the contractual service margin of a group of contracts at the end of the reporting period equals the carrying amount at the start of the reporting period adjusted for: …
>
> (e) the amount recognised as insurance revenue because of the transfer of services in the period, determined by the allocation of the contractual service margin remaining at the end of the reporting period (before any allocation) over the current and remaining coverage period applying paragraph B119.
>
> B119 An amount of the contractual service margin for a group of insurance contracts is recognised in profit or loss in each period to **reflect the services provided** under the group of insurance contracts **in that period** (see paragraphs 44(e), 45(e) and 66(e)). The amount is determined by:
>
> (a) identifying the coverage units in the group. The number of **coverage units** in a group is 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**.
>
> (b) allocating the contractual service margin at the end of the period (before recognising any amounts in profit or loss to reflect the services provided in the period) equally to each coverage unit provided in the current period and expected to be provided in the future.
>
> (c) recognising in profit or loss the amount allocated to coverage units provided in the period.

6. IFRS 17.BC279(a) notes (emphasis added):

> BC279 … **Insurance coverage is the defining service provided by insurance contracts**. The Board noted that an entity provides this service over the whole of the coverage period, and not just when it incurs a claim. Consequently, IFRS 17 requires the **contractual service margin to be recognised over the coverage period in a pattern that reflects the provision of coverage as required by the contract**. To achieve this, the contractual service margin for a group of insurance contracts remaining (before any allocation) at the end of the reporting period is allocated over the coverage provided in the current period and expected remaining future coverage, on the basis of coverage units, reflecting the expected duration and quantity of benefits provided by contracts in the group. The Board considered whether:
>
> (a) the contractual service margin should be allocated based on the pattern of expected cash flows or on the change in the risk adjustment for non-financial risk caused by the release of risk. However, the Board decided **the pattern of expected cash flows and the release of the risk adjustment** for non-financial risk **are not relevant factors in determining the satisfaction of the performance obligation of the entity**. They are already included in the measurement of the fulfilment cash flows and do not need to be considered in the allocation of the contractual service margin. Hence, the Board concluded that coverage units better reflect the provision of insurance coverage. …

7. The second sentence of IFRS 17.BC279(a) focuses on the pattern of expected cash flows and release of risk adjustment. The third sentence says that since 'they' (that is, the pattern and the release) are already reflected in fulfilment cash flows, they don't need to be considered in respect of coverage units. Accordingly:

   (a) the emphasis of IFRS 17.BC279(a) is on explaining that the patterns of fulfilment cash flows and service (benefit) allocations are independent; however,

(b) the IFRS 17.BC279(a) explanation does not preclude the underlying causes of expected fulfilment cash flow patterns from being used to identifying benefits that are the basis of coverage units.

8. IFRS 17.BC280 notes (emphasis added):

> BC280 The Board considered whether the allocation of the contractual service margin based on coverage units would result in profit being recognised too early for insurance contracts with **fees determined based on the returns on underlying items**. For such contracts, IFRS 17 requires the contractual service margin to be determined based on the total expected fee over the duration of the contracts, including expectations of an increase in the fee because of an increase in underlying items arising from investment returns and additional policyholder contributions over time. The Board rejected the view that the allocation based on coverage units results in premature profit recognition. The Board noted that the investment component of such contracts is accounted for as part of the insurance contract only when the cash flows from the investment component and from insurance and other services are highly interrelated and hence cannot be accounted for as distinct components. In such circumstances, the entity provides multiple services in return for an expected fee based on the expected duration of contracts, and **the Board concluded the entity should recognise that fee over the coverage period as the insurance services are provided, not when the returns on the underlying items occur**.

9. The implication of IFRS 17.BC280 for the investment component of a hybrid contract would be that coverage is related to the extent of asset management services provided in a period, not the amount of the fees charged. The two may or may not be correlated. Significantly, IFRS 17.BC280 makes it clear that if the pattern of services is back-ended or front-ended in a multi-year contract, the coverage units should reflect that pattern; because, if they didn't, allocating the contractual service margin using coverage units would result in profit being recognised too early or too late.

10. Coverage for hybrid insurance contracts can therefore, be defined in the same way as for pure risk insurance contracts albeit with the quantity of benefits reflecting insurance services both insurance risk and investment services. Only for investment contracts with discretionary participation benefits is coverage defined in terms of the transfer of investment services (see IFRS 17. 71(c)). Hence coverage for hybrid insurance contracts, should be based on quantity of benefits provided and expected duration under the contract as a whole, as for all insurance contracts.

Practical approach to determination of coverage units

11. Coverage units take into account both the 'quantity of the benefits provided' and 'expected coverage duration' [IFRS 17.B119(a)]. Consistent with the notion of 'benefits for policyholders' [IFRS 17.20], as a practical approach to determining the 'quantity of benefits provided', under insurance service, it is first necessary for the insured to be able

to benefit from insurance coverage. In order to benefit, a policyholder must have an insurable interest and therefore be in a position to make valid claims.

12. IFRS 17.B8 highlights the significance of 'insurable interest; in distinguishing between insurance contracts and contracts that involve only financial risk (emphasis added).

> B8 … Financial risk excludes risk from non-financial variables that are specific to a party to the contract, such as the occurrence or non-occurrence of a fire that damages or destroys an asset of that party. Furthermore, the risk of changes in the fair value of a non-financial asset is not a financial risk if the fair value reflects changes in the market prices for such assets (ie a financial variable) and the condition of a specific non-financial asset held by a party to a contract (ie a non-financial variable). For example, **if a guarantee of the residual value of a specific car in which the policyholder has an insurable interest exposes the guarantor to the risk of changes in the car's physical condition, that risk is insurance risk, not financial risk**.

13. IFRS 17.BC73, BC74 and BC75 provide background on the Board's deliberations on insurable interest (emphasis added).

> BC73 … **The notion that the uncertain event must have an adverse effect on the policyholder is known as 'insurable interest'**.
>
> BC74 The Board considered whether it should eliminate the notion of insurable interest and replace it with the notion that insurance involves assembling risks into a pool in which they can be managed together. …
>
> BC75 However, **the Board decided to retain the notion of insurable interest because without the reference to 'adverse effect', the definition might have captured any prepaid contract to provide services with uncertain costs**. **Such a definition would have extended the meaning of the term 'insurance contract' beyond its traditional meaning, which the Board did not want to do**. The notion of insurable interest is also needed to avoid including gambling in the definition of insurance. Furthermore, it is a principle-based distinction, particularly between insurance contracts and contracts used for hedging.

14. A policyholder must have an insurable interest in order to benefit from insurance cover and make valid claims. The definitions in IFRS 17 Appendix A of both components of insurance liabilities include the notion of 'valid claims' (emphasis added).

liability for incurred claims	An entity's obligation to investigate and pay **valid claims** for insured events that have already occurred, including events that have occurred but for which claims have not been reported, and other incurred insurance expenses.
liability for remaining coverage	An entity's obligation to investigate and pay **valid claims** under existing insurance contracts for insured events that have not yet occurred (ie the obligation that relates to the unexpired portion of the coverage period).

15. Some contracts specify maximum levels of cover, which might be a guide to the quantity of benefits related to coverage units. The stated maximum might be the same across a multi-year coverage period or it might vary from period to period. However, in some cases, the stated maximum level of cover would not reflect the policyholder's ability to enjoy a benefit because it doesn't reflect its insurable interest and, therefore, its ability to make a valid claim up to that level. That is, the magnitude of the maximum level of cover stated in a contract may not be representative of a policyholder's insurable interest (or the

commercial impact of the policy).[1] Furthermore, if the stated maximum level of cover in a contract were regarded as determining the quantity of benefits related to coverage units, it would allow opportunistic structuring of contracts. It would also be a difficult metric to determine in many current insurance systems.

Determining coverage units where a diverse range of insurance risk covers are present in an insurance contract

16. Where a contract has a diverse range of insurance covers, these can take the form of:

    (a) a lump sum amount or equivalents payable upon the insured event occurring; or
    (b) regular amounts or provision of services upon the insured event occurring until the insured recovers from the insured event.

17. Where a range of lump sum covers are involved, the quantity of benefits would be the "valid claim" amount payable if all events insured under the covers occurred, allowing appropriately for any mutually exclusive events and any linking of coverages. For example, a lump sum life insurance contract may have the following covers:

    (a) for death;

    (b) for becoming totally and permanently disabled, and unlikely to ever work again (TPD); and

    (c) for a range of trauma events, e.g. heart attack, loss of limbs, stroke.

18. The sum insured may be the same or differ under each cover and may be linked, either due to:

    (i) product design, e.g. payment of TPD cover reduces amount payable upon subsequent death by the amount paid under TPD;

    (ii) nature of the insured event, e.g. death precludes a subsequent claim on Trauma and TPD covers.

    Consistent with the concept of valid claims, the coverage unit is the sum of the amount payable under the covers allowing for any linkages, e.g. if TPD reduces amount payable upon subsequent death, then quantity of benefits provided is the greater of the death and TPD cover, but if it does not then it is the sum of the covers.

1 IFRS 17.2 says (emphasis added): "… Contractual terms include all terms in a contract, explicit or implied, but an entity shall **disregard terms that have no commercial substance** (i.e. no discernible effect on the economics of the contract). …"

19. Where a coverage provides regular benefit payments, e.g. monthly until recovery from the insured event, the following approaches are considered:

    (a) use the monthly benefit amount as the proxy for coverage units; or

    (b) use the sum of the monthly benefits over the maximum benefit period; or

    (c) use the sum of the monthly benefits expected to be provide over the recovery period.

20. The first has the practical advantage of simplicity, however, it will only be representative of the quantity of benefits expected to be provided under each contract if the recovery during which benefits are payable is similar for all contracts in the portfolio. Also, as it does not give a direct measure of the quantity of benefits, it may not be capable of representing all the covers present.

    For example, if a contract has a monthly benefit of $1,000 payable for ten years upon disablement and a sum insured of $100,000 payable upon trauma event, simply adding the $1,000 to the $100,000 trauma benefit, would give $101,000 of coverage. Whereas if the insured was disabled due to a severe trauma event, $120,000 would ultimately be paid under the disability cover ($1,000 p.m. for 120 months), plus $100, 000 for trauma cover, giving a total of $220,000.

21. The second converts the monthly benefit to a lump sum by assuming, that once an insured event occurs, it is payable for the maximum benefit period specified in the insurance contract. This is still relatively simple to apply provided that the contract has a maximum benefit period, but even then, the maximum benefit period may not always be representative of the coverage being provided, for example if the benefit period ceases at age 120.

22. Allowing for expected duration of payments arising from the insured event, the third approach is more complex but is representative of the quantity of benefits being provided for an insured event. Where the recovery period is set in the contract, this can be used. However, if it is not present or only there to act as maximum limit on payments under the contract, then it should be based on the expected duration of benefits, reflecting expected duration to cessation of the claim due to recovery, or other events that extinguish the claim, e.g. death.

23. Note that this is not the same as using the expected cash flows referred to in IFRS 17.BC279(a), as expected cash flows reflect claim incidence. This approach reflects

expected claim amounts once a claim has occurred and is analogous to allowing for expected loan balance reductions in determining coverage units under LMI (see Example 1). Further, if the contract does not specify a maximum limit on the recovery period during which regular payments are made, ignoring expected recovery in determining the quantity of benefits will result in payments being assumed to continue forever, which is not representative of the valid claim arising from an insured event.

24. While the insured is in recovery and the monthly payments are being made, this also affects the expectations for the provision of future coverage under the contract. Thus, it is also appropriate to allow for recoveries in assessing the duration of cover as until the insured recovers, cover for future insured events usually does not commence.

Determining coverage units for hybrid insurance contracts made up of insurance risk and investment services

25. As noted in paragraph 10 above, BC280 implies that for hybrid insurance contracts, when considering the investment component, coverage should be related to the investment services provided.

26. A practical approach for doing this for a hybrid insurance contract is to use the amount of the investment component in the period as the quantity of coverage relating to the investment service, as this reflects the quantity of assets being managed for the policyholder under the hybrid insurance contract. It is also consistent with the definition of coverage unit as the quantity of benefits, being the amount of benefits payable upon surrender or maturity of the contract, as well as usually the amount payable upon the insured event terminating the policy.

Conclusion on determining coverage units in practice

27. This paper concludes that a representation of benefits to policyholders that takes into account policyholders' insurable interests and the capacity of the policyholder to make a valid claim should be used in determining:

    (a) the quantity of benefits and coverage units; and

    (b) expected coverage duration.

28. This concept is practicable for general insurance products and life insurance contracts with a diverse set of insurance risk coverages including both lump sum and regular monthly benefits.

29. For hybrid insurance contracts, the same principles noted in paragraph 26 would apply but the amount of the investment component is also included in the calculation of quantity of benefits. This gives consistency in measurement of coverage based on coverage units across insurance contracts and coverage for investment contracts with discretionary participation features.

30. The coverage duration might be shorter than the stated (contractual) period of a group of contracts.[2] This would be the case if the cover is expected to be fully utilised before the end of the contractual term or if historical information suggests that lapses/utilisation would reduce the number of contracts to an insignificant amount before the end of the contractual term.

31. The following examples illustrate what the approach in paragraphs 27 to 30 might mean in practice.

2 'Coverage duration' might be different from 'the duration of a group of contracts' from the viewpoint of allocating finance income or expenses [IFRS 17.88(b) and B130].

Appendix – illustrative examples

Discounting has been ignored in all the examples below.

Example 1 – Lender's mortgage insurance (LMI) example

IE1.1 A bank (the mortgagee) makes housing loans to customers that are secured against the value of the customers' houses (the customers are the mortgagors).

IE1.2 When the loan to value ratio[3] (LVR) is 80% or more, the bank enters into LMI contracts to cover its risk of loan losses. Accordingly, the insurer's service to the policyholder (bank) is providing cover relating to the potential for the gap between loan balances and house values giving rise to losses. This gap gives rise to the policyholder's insurable interests and capacity to make valid claims.

IE1.3 The insurer's risk exposure and expected claims experience are different from the coverage provided to the policyholder. While they would all be affected by loan balances, accrued interest, house values and house sale costs, the incidence of risk pattern is additionally affected by the timing, expected frequency and severity of claims.

IE1.4 **Assumptions**

- ~ 30-year housing loans averaging CU1,000,000 each – the banks' customers are contracted to make monthly repayments of principal and interest – the loan balance reduces as the principal components of repayments grow larger over the loan term.
- ~ Houses have an average value of approximately CU1,150,000 at loan inception, and the average loan to value ratio (LVR) at inception is approximately 87%.
- ~ House values are expected to increase (on average) by 2% compound each year, based on historical long-term averages.
- ~ For the sake of simplicity, the example has not factored in the impacts of expected interest arrears,[4] expected advance payments of principal[5] or possible loan redraws.[6]

3 Loan as a percentage of house value

4 In practice these are expected to be immaterial relative to loan balances.

5 The most significant of these is advance payments of principal, which were found to have little impact on the outcomes.

6 Loan redraw rules are often complex and are usually available on only some loans in a portfolio. In practice, they are expected to be immaterial relative to loan balances.

IE1.5 **Data from practice**

Lapse/persistency has been determined based on product experience. Contracts lapse for the following reasons:

~ loan default, which can trigger a claim if the loan balance (including arrears) is greater than the net proceeds from selling the house

~ the bank's customer discharges the mortgage early because they refinance or sell their house.

Experience of LMI products and claims has been used as a basis for determining:

~ expected exposure to insurance risk; and

~ expected lapse rates.

IE1.6 The first graph below shows the build-up of the pattern of coverage units, based on the following factors and noting that all examples take into account lapses.

(a) Contractual Loan Balances[7] – the totals of outstanding loan balances over the 30-year contract period assuming borrowers make only contractual repayments.

(b) Contractual Loan Balances taking into account the security provided by the Starting House Value at loan inception over the 30-year contract period and taking into account the loan to value ratio (LVR) and assuming losses given default (LGD) in the table below.[8] LGD has been identified as a useful basis for helping to determine the relative levels of coverage over the contract period. LGD helps reflect the extent of coverage when there are defaults; in contrast with probability of default, which would be reflected in the risk adjustment. LGDs reduce as the gaps between Starting House Values and Contractual Loan Balances reduce (and the LVRs reduce).

Loan to Value Ratio (LVR)	Loss Given Default (LGD)
Greater than 100%	40%
95.01% to 100%	40%
90.01% to 95%	40%
85.01% to 90%	30%
80.01% to 85%	30%

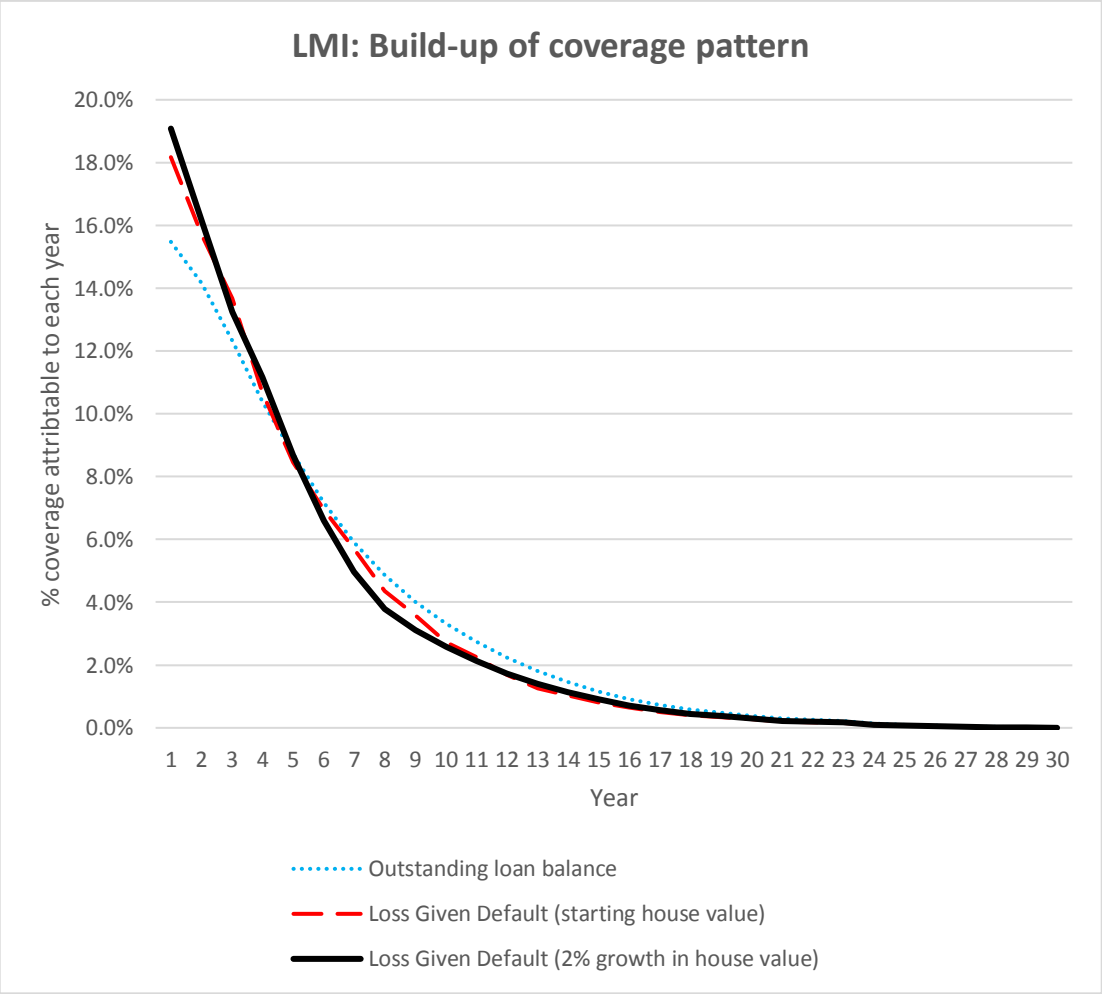
7 As previously noted, this does not include accrued interest, advance payments of principal or redraws.

8 This table shows publicly available information sourced from Australian Prudential Regulation Authority (APRA) Prudential Standards GPS 116 *Capital Adequacy: Insurance Concentration Risk Charge* and is used for illustrative purpose only Company specific LVRs and LDGs are commercially sensitive information. The levels of LGD in the APRA table reflect distress levels appropriate for prudential purposes – the LDGs expected in practice are generally smaller. However, the APRA table is regarded as a reasonable proxy for the actual/expected levels of LGD at various LVRs because the purpose is to determine the relative distribution of coverage over the contract period, not the absolute amounts of cover.

70.01% to 80%	30%
60.01% to 70%	20%
Less than 60.01%	20%

(c) Contractual Loan Balances taking into account the security provided by the Expected House Value, which assumes compound house value increases of 2% each year and taking into account LVRs and the LGDs in the table above. LGDs reduce as the gaps between the Expected House Values and Contractual Loan Balances reduce (and the LVRs reduce).

IE1.7 Because the lapse rate has a significant impact the pattern of the quantity of coverage units using the different methods outlined in patterns (a), (b) and (c) above are similar.



IE1.8 We have considered the factors in paragraphs IE1.6 and IE1.7 above and conclude that there are two most likely potential approaches to determining the quantity of the benefits provided under LMI contracts and their expected coverage duration. These are by:

(i) considering lapses and the relationship between contractual loan balances, expected house values and LGDs. These factors are relevant to determining the policyholder's (bank's) insurable interests, being the potential gaps between outstanding loan balances and house values and, therefore, the extent to which the policyholder has the capacity to make valid claims; or

(ii) considering lapses and only contractual loan balances. This is a simpler approach which takes into account the key drivers of changes in insurable interest without introducing the volatility associated with house price factors.

Whilst approach (i) is considered to be an acceptable representation of the quantity of coverage, it is likely to introduce significant volatility in the profit or loss, making approach (ii) a simpler and more stable alternative.

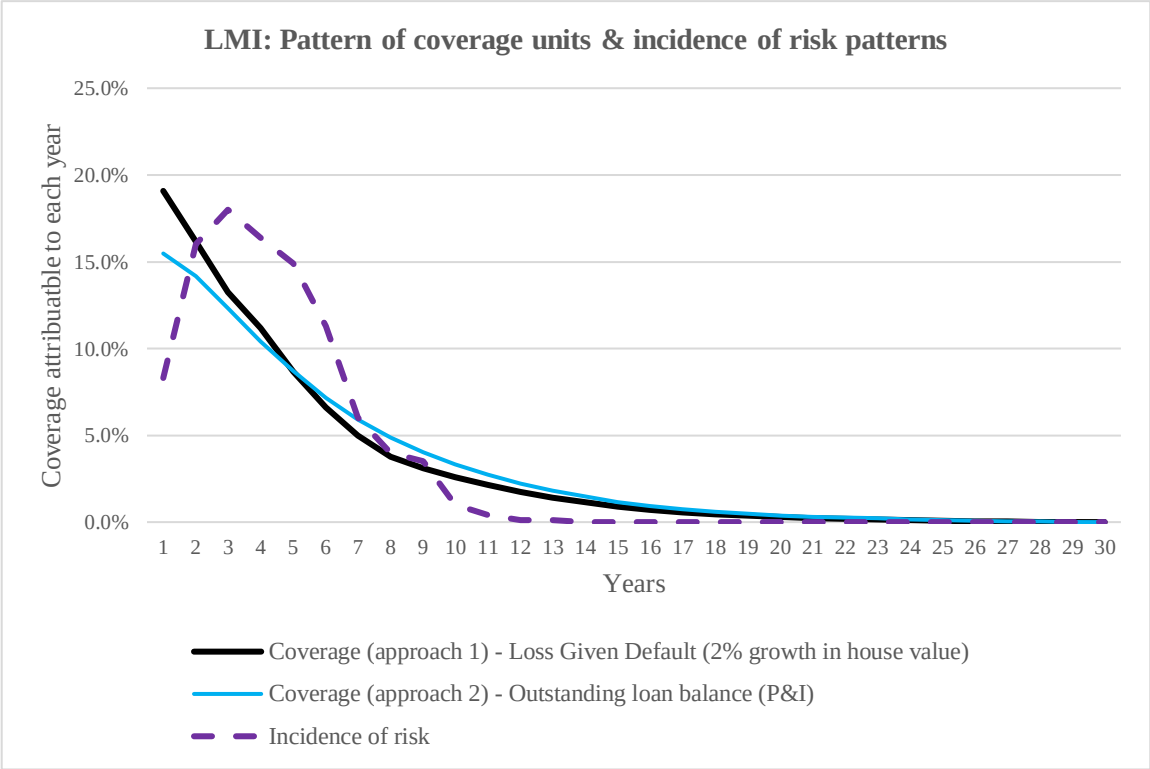
IE1.9 The second graph below shows the two possible patterns of coverage units plotted against a typical LMI incidence of risk pattern. The incidence of risk release tends to be lower in Years 1 and 2 because the insurer benefits from the underwriting[9] the bank performs when it originally grants the loans to customers. The incidence of risk spikes in Years 3 and 4 when some of the bank's customers find that they struggle to meet their obligations due to changes in personal circumstances, including:

~ unemployment or under employment among the bank's customers

~ accident or illness among the bank's customers.

After Year 4, most borrowers have more equity in their homes and are often more established financially. If a sale is required it can be controlled and the net proceeds can often exceed the loan amount outstanding. The high level of lapse is the feature of LMI that results in most coverage and incidence of risk being attributable to the early years of the 30-year contract period.

9 The bank only grants loans to people sufficient income to service the loan repayments, and for variable-rate mortgages, usually factoring in moderate interest rate increases. The bank usually also performs a valuation of the house being mortgaged.



IE1.10 Although loan balances and house values are also relevant to determining the expected incidence of risk, we consider they are also potentially relevant factors in determining coverage units and note the they are applied differently to patterns of coverage and the incidence of risk, as outlined in the following table.

	Coverage	**Risk**
Lapses	The number of contracts and quantity of coverage is affected by the expected level of lapse/persistency, which is based on product experience	Uncertainties about the level of lapse/persistency based on what might affect bank customers' ability and willingness to relocate (and sell their houses) or refinance their loans
Loan balances	Contractual balances, allowing for contractual repayments of principal	Uncertainties about expected loan balances based on what might happen to affect bank customers' abilities to service their loans (for example, due to the impacts of potential economic conditions from 'boom' to 'bust')
House values	Expected house values based on a long-term trend	Uncertainties about expected house values and the extent of the bank's insurable interests, being the gaps between loan balances and house values (for example due to the impacts of potential housing market conditions from price 'boom' to price 'shock')

IE1.11 **Background on LMI**

The Reserve bank of Australia Financial Stability Review in September 2013 reported the following.[10]

> Mortgage insurance is available in many jurisdictions but extensively used in only a small number, including Australia, Canada, Hong Kong, the Netherlands and the United States. The structure of the mortgage insurance industry across these and other countries varies considerably and is affected by the domestic regulatory landscape and the extent of government participation in each jurisdiction

The following table outlines information about the prevalence of LMI in selected jurisdictions.[11] [The table is slightly modified from the original to help fit the page.]

	Australia	**Canada**	**HK**	**NZ**	**Netherlands**	**UK**	**US**
Extensive use of LMI	Yes	Yes	Yes	No	Yes	No	Yes
Government participation in LMI	No	Yes	Yes	Yes[(a)]	Yes[(a)]	No[(b)]	Yes[(a)]
Mortgages fully insured	Yes	Yes	No	Yes	Yes	No	No[(c)]
Mandatory for certain loans	No	Yes	Yes	No	No	No	Yes
Capital relief for insured loans	Yes[(d)]	Yes	Yes	Yes[(d)]	Yes	Yes	Yes

(a) 'Socially targeted' mortgage insurance
(b) The UK Government plans to insure up to 15 per cent of certain mortgages from January 2014
(c) Only the government insurer's policies typically cover the whole mortgage
(d) Smaller lenders have lower capital requirements on insured mortgages
Sources: Joint Forum; RBA; national sources

IE1.12 **Conclusion on LMI example**

This paper concludes that quantity of the benefits provided under LMI contracts and their expected coverage duration can be determined by:

(i) considering lapses and the relationship between contractual loan balances, expected house values and LGDs; or

(ii) considering only lapses and contractual loan balances.

IE1.13 Whilst approach (i) is considered to be a potentially acceptable representation of the quantity of coverage, we therefore, consider approach (ii) to be a simpler and more practicable approach that can be based on robust historical data.

Example 2 – Risks attaching reinsurance

IE2.1 A reinsurance contract is issued covering underlying risks attaching to the policy during the contract period.

10 https://www.rba.gov.au/publications/fsr/2013/sep/box-c.html

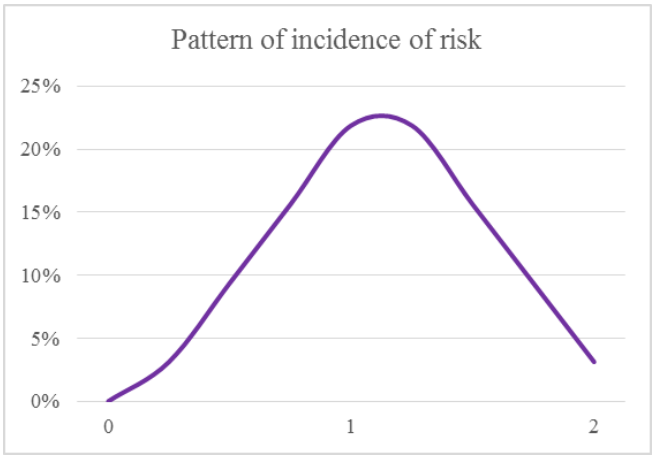
11 https://www.rba.gov.au/publications/fsr/2013/sep/tables.html#table-c1

IE2.2 **Assumptions**

- The reinsurance contract issued provides proportional cover for underlying contracts incepting during the contract period.
- The reinsurance contract issued is for a period of one year.
- Underlying contracts are written uniformly throughout the year and are annual policies that and are reasonably homogenous and provide relatively even cover over their one-year coverage periods.

IE2.3 **Data from practice**

Expected pattern of incidence of risk has been determined based on product experience:



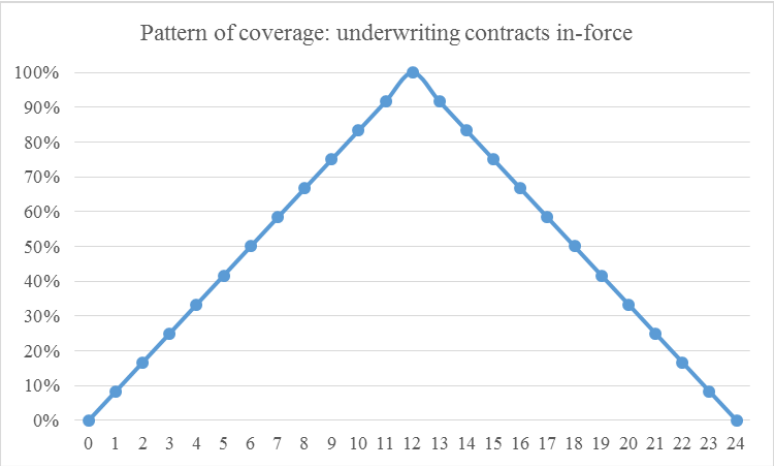
Note: The pattern of incidence of risk may vary depending on both the types of underlying risks and the pattern of inception of underlying contracts.

IE2.4 The insurer has a substantive obligation to provide services under the contract for a period of two years as the risks attaching over a single policy year will cover two-years of exposure to risk[12]. The expected coverage duration of the reinsurance contract issued is therefore, two years (24 months).

IE2.5 The aggregation of the underlying contracts being covered represents the cedant's insurable interest under the reinsurance contract issued. The ability of the cedant to make valid claims is dependent on the extent of inception of the underlying policies. Accordingly, the pattern of coverage should reflect the pattern of underwriting of the underlying contracts because the level of service provided depends on the number of

12 An underlying annual contract written on the last day of the reinsurance contract period has twelve months of insurance cover beyond the last day of the reinsurance contract period.

underlying contracts in-force – the more contracts in force, the higher the level of service. In this example, we have assumed that risks attach uniformly throughout the year. Therefore, the coverage pattern would be as follows:



Example 3 – Transaction Liability

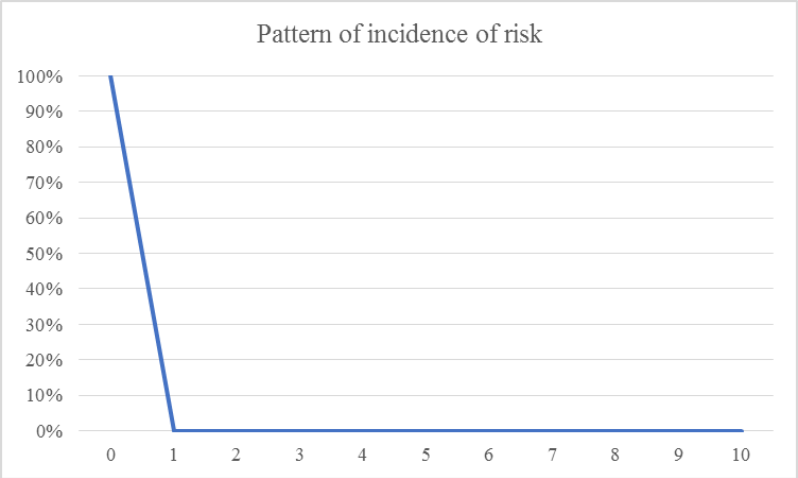
IE3.1 A transaction liability policy will pay claims for financial losses arising as a result of breaches of representations and warranties made in a specified and executed acquisition transaction.

IE3.2 **Assumptions:**

The policy period (contract term) is for 10 years from the policy start date. The insurer will pay claims for financial losses reported during the 10-year policy period up to the maximum sum insured.

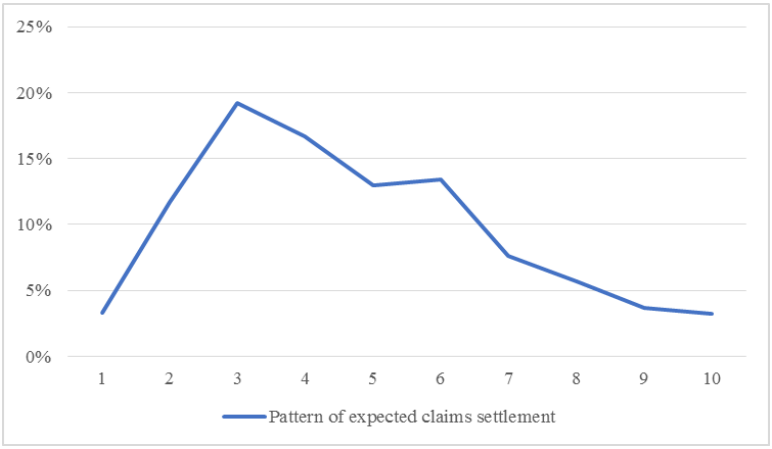
IE3.3 **Data from practice:**

The pattern of incidence of risk has been determined based on product experience. The contract coverage begins on the Closing date of the acquisition transaction and will pay claims for financial losses reported during the policy period (of 10 years from policy start date) in respect of covered representations and warranties made in the executed transaction agreement. The pattern of incidence of risk is based on the event within the scope of the contract giving rise to the financial loss (i.e. losses arising from representations and warranties included in the final executed agreement on the specified Closing date of a transaction). As the insured event occurs on the transaction Closing date, all risk is incurred on that date and a liability for incurred claims will be recognised for financial losses expected to be reported during the 10-year policy period as losses incurred but not reported (IBNR):



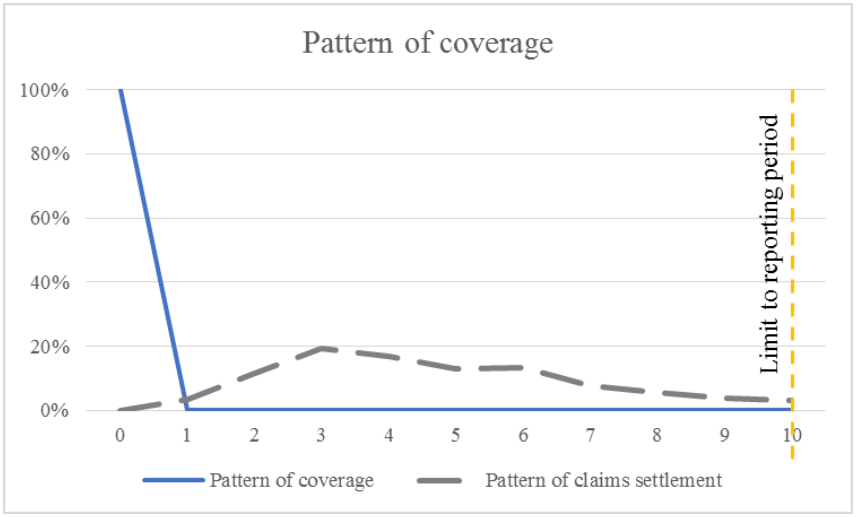
The pattern of claims settlement below reflects the emergence or notification of loss and the transfer of the IBNR to reported losses – both within the liability for incurred claims. Typically, following the execution of an acquisition transaction, there will be

an increasing trend of losses notified over the first three years (up to the maximum sum insured) before beginning to decline until the end of the contract term.



IE3.4 Appendix A of IFRS 17 defines coverage period as "the period during which the entity provides coverage for **insured events**". The insured event is the representations and warranties made in the final executed transaction agreement which is dated the transaction Closing date. Therefore, the coverage period (expected coverage duration) is one day, which is the transaction Closing date. The policy period has been included in the contract to limit the reporting period for claims so it is not an indefinite period. This limits the timescale for loss reporting in the same way that the maximum sum insured limits the quantum of loss. Given the insured event arises from representations and warranties the concept of an "insurable interest" is difficult to apply without needing to assess the expected frequency **and** severity of the loss i.e. incidence of risk. However, a valid claim is only permitted in relation to the executed representations and warranties and therefore limited to a one-day period.

IE3.5 Accordingly, the CSM will be fully allocated to the profit or loss on the Closing date of the transaction:


Pattern of coverage
100%
80%
60%
40%
20%
0%
0
1
2
3
4
5
6
7
8
9
10
Limit to reporting period
Pattern of coverage
Pattern of claims settlement

Example 4 – Workers Compensation

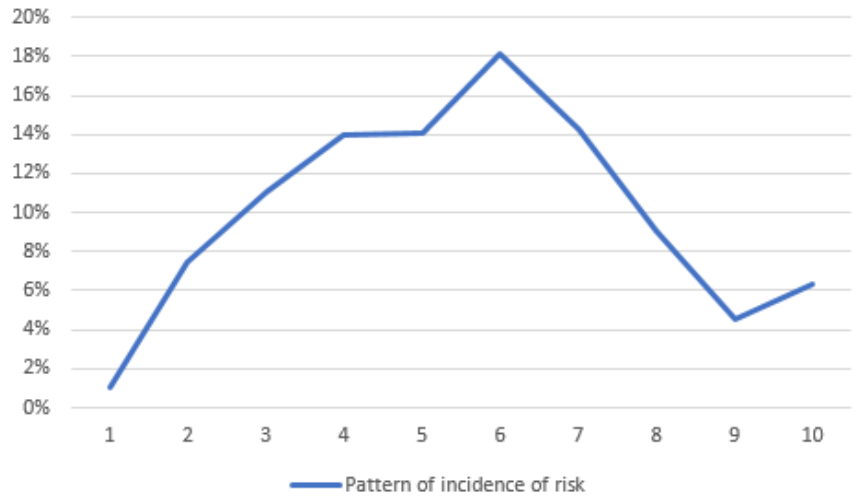
IE4.1 A workers' compensation policy is issued to provide cover for medical care, permanent disability and lost wages for employees who sustain injury during a construction project over the expected 10-year period of the construction contract.

IE4.2 **Assumptions:**

- The contract term is for 10 years.
- The policy incepts at the beginning of Year 1.
- Policyholder submits estimated employees for each year of the policy duration at its inception. All employees are assumed to be covered from the start of each coverage period.
- Average wage per employee in Year 1 is CU10,000 and inflates at 2% in each year of coverage.
- Policy is for unlimited cover.
- Policyholder operates in the construction and engineering industry.
- Contract will not lapse before the end of the coverage period.

IE4.3 **Data from practice:**

The incidence of risk is typically skewed toward the middle of the coverage period as this is when more employees are on site and performing tasks with a higher risk which in turn increases the severity of claims. The graph below shows the pattern of incidence of risk.



IE4.4 The insurer has a substantive obligation to provide services under the contract for the duration of the contract term of 10 years. Therefore, the expected coverage duration is the contract term of 10 years.

IE4.5 The table below illustrates three possible methods for the determination of the pattern of coverage units for the contract:

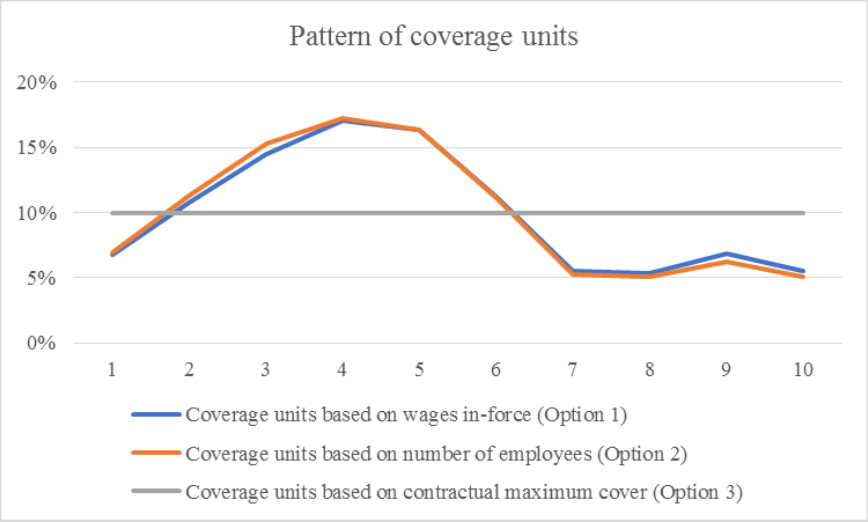
Year	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**Total**
Option 1: Proposed pattern of coverage units based on wages in-force											
Average wage per employee (CU'000)	10.0	10.2	10.4	10.6	10.8	11.0	11.2	11.5	11.7	12.0	109.4
Wages in-force in each period (CU'000)	220	347	468	551	529	363	179	173	222	180	3,232
Coverage Units Calculation	220/ 3232	347/ 3232	468/ 3232	551/ 3232	529/ 3232	363/ 3232	179/ 3232	173/ 3232	222/ 3232	180/ 3232	
Pattern of Coverage Units based on wages in-force	7%	11%	14%	17%	16%	11%	6%	5%	7%	6%	
Option 2: Proposed pattern of coverage units based on number of employees											
Estimated # of Employees covered	22	34	45	52	49	33	16	15	19	15	300
Coverage Units Calculation	22 / 300	34 / 300	45 / 300	52 / 300	49 / 300	33 / 300	16 / 300	15 / 300	19 / 300	15 / 300	
Pattern of Coverage Units based on number of employees	7%	11%	15%	17%	16%	11%	5%	5%	6%	5%	100%
Option 3: Coverage units based on contractual maximum cover											
Pattern of Coverage Units based on contractual maximum cover	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	100%

IE4.6 We consider that policyholder benefits during the coverage period can be appropriately measured based on the amount of wages in-force under the contract in each period (Option 1). We see this as a realistic representation of the level of service being provided as the wages in-force represents the total amount being covered under contract in each period and is the basis on which the policyholder can make valid claims. Applying a pattern of coverage units based on wages in-force would take into

account the inflationary increase in wages year on year and therefore, reflect the increase in the level of service being provided in each period as the amounts being covered increases.

An alternative approach would be to consider the number of employees covered under the contract in each period (Option 2) as the covered employees represent the "insurable interest" under the contract. Where few or no employees are present there would be an absence of an insurable interest and no basis on which the policyholder can make valid claims and therefore no ability for the insurer to deliver service.

IE4.7 The graph below shows the pattern of coverage units under each of the three options set out above.



IE4.8 The pattern of coverage units based on Options 1 and 2 do not consider other factors that would be used to determine the pattern of risk, such as the timing and frequency of claims which might be a function of the industry in which the policyholder operates and activities being performed by employees.

Example 5 – Warranty (based on the example from February 2018 TRG Agenda Paper 5)

IE5.1 A five-year warranty coverage contract provides for replacement of a purchased item if it fails to work properly within five years of the date of purchase. Claims are typically skewed toward the end of the coverage period as the purchased item ages.

IE5.2 The insurer has a substantive obligation to provide services under the contract for the duration of the contract term of 5 years. Therefore, the expected coverage duration is the contract term of 5 years.

IE5.3 The insured asset is the underlying purchased items and therefore would be a relatively constant amount during the warranty period, noting there could be some inflationary costs increases.

IE5.4 Therefore, coverage units would be recognised on a straight-line basis over the coverage period assuming that the cost of purchasing the covered item is constant over the period. However, we would also take into account the impact of inflation on the replacement prices of the insured asset and therefore expect an incremental increase in coverage units over the five-year period. The valid claims that could be made in any period is limited to the cost of supplying a new item, and reflects the policyholders' insurable interests and level of benefits being provided under the contract.

Example 6 – Extended Warranty

IE6.1 Extended warranty policies are designed to cover the policyholder after the manufacturer's original warranty has expired. The policies provide new for old cover in the event of a major defect to the covered asset.

IE6.2 **Assumptions:**

- 100 x 7yr Extended Warranty white goods contracts.
- All policies are written on the first day of Year 1.
- Manufacturer's original warranty is for a period of 2 years.
- The value of the insured asset (cost of supplying a new asset) is expected to inflate at a rate of 5% each year.
- In Year 3, the expected cost of supplying a new asset to a customer located in a metropolitan area is CU300 and CU320 in a non-metropolitan area.
- 80 customers live in metropolitan areas and 20 in non-metropolitan areas when they bought their assets.
- No contracts will lapse before the end of the coverage period.
- The 100 contracts form a group applying paragraphs 20 to 24 of IFRS 17.
- The group of contracts is not onerous.

IE6.3 **Data from practice:**

As the assets near the end of the extended warranty coverage period the likelihood of a major defect increases, which increases the expected severity of claims.

IE6.4 In accordance with paragraph 25 of IFRS 17, the group of contracts is recognised from the beginning of the coverage period which is the first day of Year 1 (assuming that this is before the date first payment becomes due). The end of the contract coverage is 7 years after the expiry of the manufacturer warranty. Therefore, the expected coverage duration is 9 years.

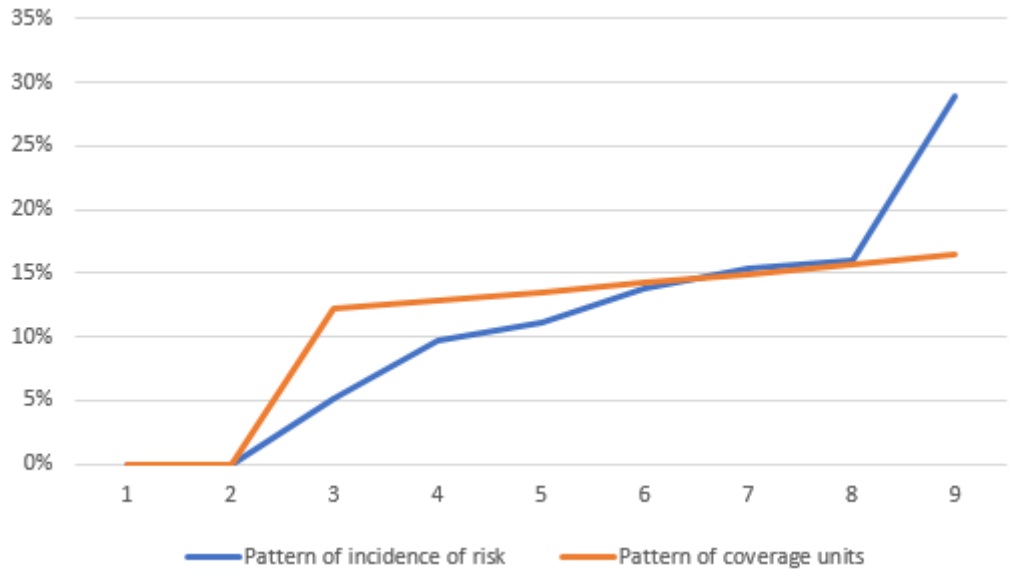
IE6.5 The insurer's obligations to provide cover begins after expiry of the manufacturer's warranty. The valid claim that could be made in any subsequent period is limited to the cost of supplying a new asset. Therefore, the quantity of benefits provided in each period will reflect the increase in the cost of supplying a new asset.

IE6.6 The table below illustrates how the pattern of coverage units that should be determined for the group of contracts:

	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Total
Coverage Units (based on value of insured asset)	# 0	# 0	(80x300) + (20x320) = 3.04m	(80x315) + (20x336) = 3.19m	(80x331) + (20x353) = 3.35m	(80x347) + (20x370) = 3.52m	(80x365) + (20x389) = 3.70m	(80x383) + (20x408) = 3.88m	(80x402) + (20x429) = 4.07m	CU24.75 million
Pattern of Coverage Units	# 0%	# 0%	3.04m ÷ 24.75m = 12.28%	3.19m ÷ 24.75m 12.90%	3.35m ÷ 24.75m 13.54%	3.52m ÷ 24.75m 14.22%	3.70m ÷ 24.75m 14.93%	3.88m ÷ 24.75m 15.68%	4.07m ÷ 24.75m 16.46%	**100.00%**

Policies under manufacturer's warranty

IE6.7 The graph below shows the pattern of coverage units (based on the calculation above) and the pattern of incidence of risk for the group of contracts.



IE6.8 The pattern of coverage units identified above is based on the value of the policyholder's insured asset and does not consider other factors that would be used to determine the pattern of risk, such as the timing and frequency of claims which might be a function of the expected:

- failures or defects as the assets age;
- location of the assets in use – metropolitan vs non-metropolitan; and
- likelihood of mass failures of the asset.

Example 7 – Construction policy example

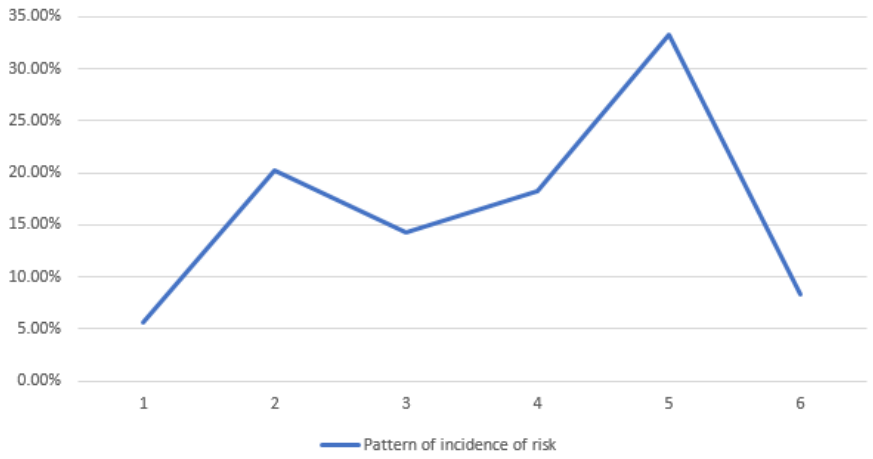
IE7.1 A construction policy is issued to provide broad protection, covering projects, tools, materials, equipment and exposure to the community.

IE7.2 **Assumptions:**

- 1 x 5yr Construction policy made up of two buildings (the insured asset).
- Maximum Coverage Policy limit of CU40m.
- The policy incepts at the beginning of Year 1. The first building is expected to be completed in Year 2 and the second building in Year 5. Work on the second building will not begin until work on the first building has been completed.
- There is no surety cover on this policy.

IE7.3 **Data from practice:**

The pattern of incidence of risk has been determined based on product experience. and varies over the term of the contract. Typically, in a construction phase the value of the insured asset will increase over the term (to the maximum policy limit) until construction is complete. There will then be a period (12 months), which then allows for discovery of defects after the completion of the project. The graph below shows the pattern for the incidence of risk.



IE7.4 We propose to quantify coverage units based on the value of the policyholder's insured asset in each period of coverage as this represents the potential benefit to the policyholder. In this example this is derived based on the underlying asset value (materials, building value, temporary structures, etc.) across each year of the policy.

IE7.5 We consider that the pattern of coverage units based on a contractual maximum cover of the policy is not representative of the policyholder's insurable interest because it

does not reflect the policyholder's ability to make a valid claim. For example, in the early part of the coverage period there is little or no insured asset and therefore no potential for a valid claim or policyholder benefit.

IE7.6 The table below illustrates how the coverage pattern should be determined for the contract:

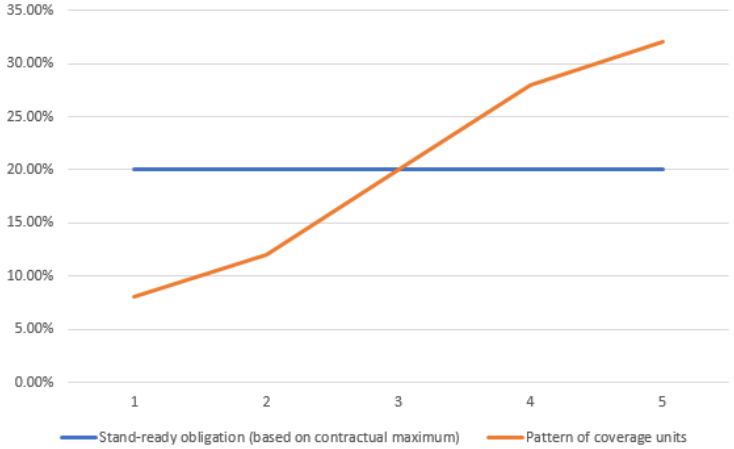
Year	1	2	3	4	5	Total
Insured Asset Value (IAV)	CU10m	CU15m	CU25m	CU35m	CU60m	150
Coverage units based on policyholder IAV	10	15	25	35	40^	125
Pattern of Coverage Units based on Policyholder IAV	10/125 = 8%	15/125 = 12%	25/125 = 20%	35/125 = 28%	40/125 = 32%	100%
Pattern of Coverage Units based on maximum contractual limit	40/200 = 20%	40/200 = 20%	40/200 = 20%	40/200 = 20%	40/200 = 20%	100%

^Cannot exceed maximum policy limit of CU40m

IE7.7 The pattern of coverage units identified above is based on policyholder insured asset value and does not consider other factors that would be used to determine the pattern of risk, such as the timing and frequency of claims which might be a function of the expected:

- timing of detection of defects that need to be rectified;
- transportation and installation of any constructed items;
- number of contracting firms on site; and
- number of times materials might be damaged or stolen.

IE7.8 The graph below shows the preferred pattern of coverage units based on policyholder insured asset value compared with a straight-line pattern based on the maximum contractual limit.



Example 8 – Reinsurance Adverse Development Cover

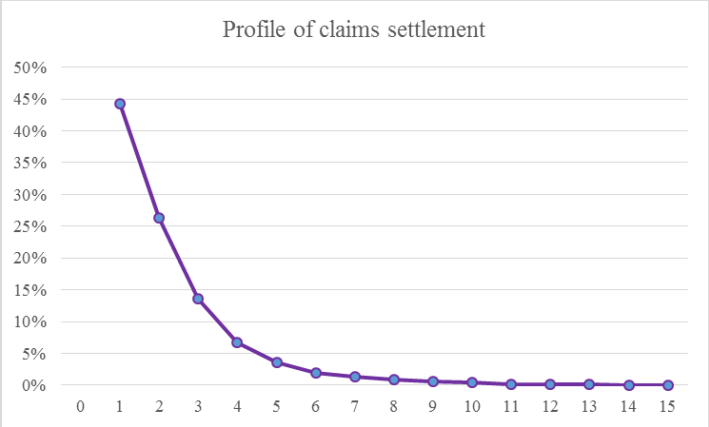
IE8.1 A reinsurance adverse development cover issued (ADC) provides cover for any adverse deterioration in the ultimate cost of the claims for a defined group of underlying contracts where the claim event has already occurred but there is uncertainty as to the final claims settlement amount. In accordance with IFRS 17.B5, the service provided by the issued of the ADC to the policyholder (cedant) is the provision of cover for the adverse development of the underlying incurred claims.

IE8.2 **Assumptions**

- Cover is for 100% of adverse development on defined claims.
- The CSM on initial recognition is CU150.
- The expected claims settlement period is 15 years.

IE8.3 **Data from practice**

Expected claims settlement pattern, representing the incidence of risk, has been determined based on product experience:



Note: The claims settlement profile above is based on an ADC reinsurance contract issued which covers underlying contracts comprising of a mix of general insurance products. The expected claims settlement pattern may vary depending on the type of underlying contracts being covered.

IE8.4 In the case of **an unlimited cover**, the expected **coverage duration** would be the period to when it is expected there will be no other cash payments, i.e. the end of the expected claims settlement period. If the contract has an upper limit that is expected to be reached, the expected **coverage duration** would be the period from inception of the contract to the time at which the limit of cover is expected to be reached. In this example, although the last claim payment is expected to be made in Year 15, over 90%

of claims are expected to be settled by Year 6 and the amounts expected to be settled in each period beyond Year 6 is minimal. As such it would be reasonable to apply an expected coverage duration of 6 years. In paragraphs IE8.6 to IE8.7 below, we have illustrated the impact of applying a coverage period of 15 years.

If there is a **contractual coverage duration** (i.e. defined period in which the settlements on the underlying claims are covered), the expected coverage duration would be the shorter of the contractual coverage duration and the time to the last expected claims settlement. It is assumed that there is no contractual coverage duration in this example.

IE8.5 This paper illustrates three possible views about how the "quantity of benefits provided under a contract" in each period should be determined.

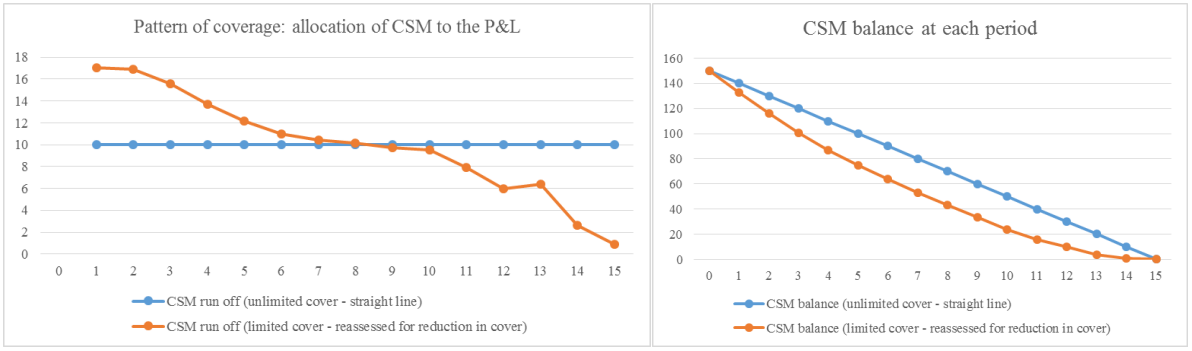
IE8.6 **View A: reflect contractual maximum level of cover in each period of coverage**

The insurer is standing ready to pay claims over the life of the contract. Where the contract is for **unlimited cover**, the contractual maximum amount that could be claimed in any period is constant because it is unlimited. The pattern of quantity of benefits is straight line over the life of the contract which would end at the date of the last expected settlement payment.

Where the contract includes a **total aggregate limit**, the coverage units would reflect the contractual maximum cover (being the contractual limit) on initial recognition. This would be reassessed at each reporting date to reflect the reduction in the cover available because of claims actually settled during the period. Assume that the contract has an aggregate limit of CU100 and that CU44 of claims have been settled in Year 1. At each reporting date, the insurer will determine the allocation of the CSM to profit or loss over the current and remaining coverage period by applying IFRS 17.B119. At the end of Year 1, the insurer will reflect the reduction in cover available in future periods because of actual claims incurred during the period as follows:

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Coverage units assessed as at the end of Year 1	100	56	56	56	56	56	56	56	56	56	56	56	56	56	56

This is because as at the end of Year 1, the insurer is standing ready to meet the maximum cover of CU56 (limit of CU100 less claims incurred of CU44) over the remaining coverage duration. In each subsequent period, the coverage units will be reassessed to reflect claims settled in the period. Assuming all claims occur as expected in subsequent periods, the pattern of recognition of CSM allocation to profit or loss based on coverage units and the CSM balance at the end of each period will be as follows:

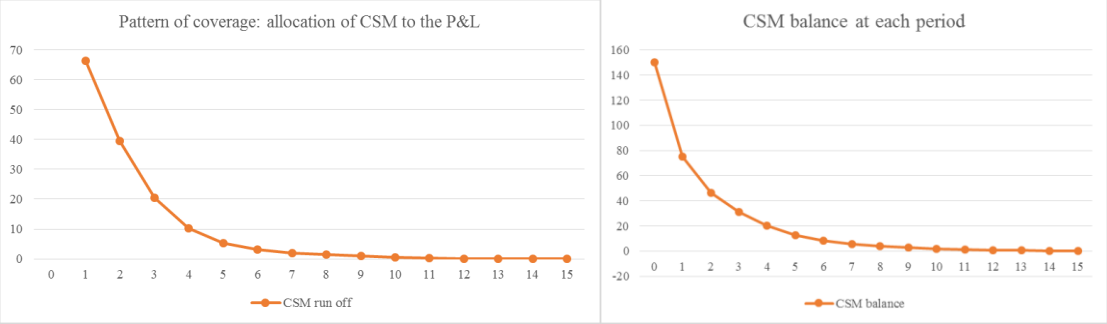


Observation: A stand-ready obligation approach based on the maximum level of cover (View A) does not reflect the benefit received by the policyholder under the contract because it is not representative of the policyholder's insurable interest which is the expected underlying claims being covered (see View B below). Although the reduction in the levels of cover across periods due to the settlement of underlying claims is reflected under View A in the case of a limited cover, this is not reflected where the contract provides unlimited cover as the coverage pattern would always be straight line even though the same pattern of service is being provided under both types of contracts. Applying a straight-line pattern of coverage units (View A) for unlimited cover would result in the release of profit over periods when no (or minimal) service is being provided.

IE8.7 **View B (our recommended approach): reflect the run-off of underlying claims reserves in each period of coverage**

The ADC contract issued is providing coverage over previously incurred underlying claims and is issued to cover the risk associated with the development and settlement of those claims (not the original insured risk which gave rise to the underlying claims). The expected adverse development and final settlement of underlying claims reserves therefore represents the insurable interest under the ADC contract issued. The ability

of the cedant to make valid claims is dependent on the underlying claims being closed and settled and are therefore considered a reasonable representation of the policyholder's insurable interest under the ADC contract. As the underlying claims are closed and settled over time, the quantity of benefits provided under the contract in each period will also decrease. The pattern of coverage should be represented by the run off of the underlying claims reserves to reflect the service being provided as the underlying claims are closed and settled. Applying the same assumptions as in View A above, the pattern of CSM allocation to profit or loss and the CSM balance in each period of coverage will be as follows:



Observation: In contrast to View A above, the pattern of coverage will be the same for both limited and unlimited covers. Although the run off of the underlying claims reserves is an underlying basis of the pattern of expected cash flows[13], it also represents the level of benefits received by the policyholder under the contract which is the basis for the determination of coverage units.

IE8.8 **View C (alternative consideration): reflect the number of underlying claims in each period of coverage**

An alternative approach would be to consider the number of claims being covered by the ADC contract. The level of future benefit provided under the ADC contract could be aligned to coverage units represented by the expected number of remaining claims compared with the number settled to date and this would decrease as claims on the underlying contracts are settled in each period.

Observation: In view C, the pattern of expected cash flows is not a factor in the determination of coverage. In the TRG February 2018 meeting Agenda Paper 5, the

13 In BC279(a) of the Basis for Conclusions on IFRS 17, the Board rejected the use of the pattern of expected cash flows as a factor in the determination of the quantity of benefits.

IASB staff rejected the use of **expected events** in the determination of coverage units and notes that distinguishing between expected number of claims (View C) and expected amount of claims (View B) seems to be a "distinction without substance"[14]. The expected number of claims may be a factor in the determination of the pattern of expected cash flows, but the pattern of expected cash flows is different because it would also take into account the expected severity of claims settlements. Consequently, using a coverage pattern based on the number of underlying claims would not necessarily reflect the pattern of expected cash flows, and is representative of the level of benefits which is the basis for the determination of coverage units. However, in practice, the use of numbers of underlying claims would pose operational challenges as it is a metric which may not be readily available in current insurance systems.

14 AP05 para 15 (extract): "The staff think that the rejection by the Board of the use of the pattern of expected cash flows…indicates that the level of cover reflecting expected events should not be included in the determination of coverage units…This conclusion avoids making what seems a distinction without substance between the expected number of claims and expected amount of claims in the example…above"

Example 9 – Income Protection Policy

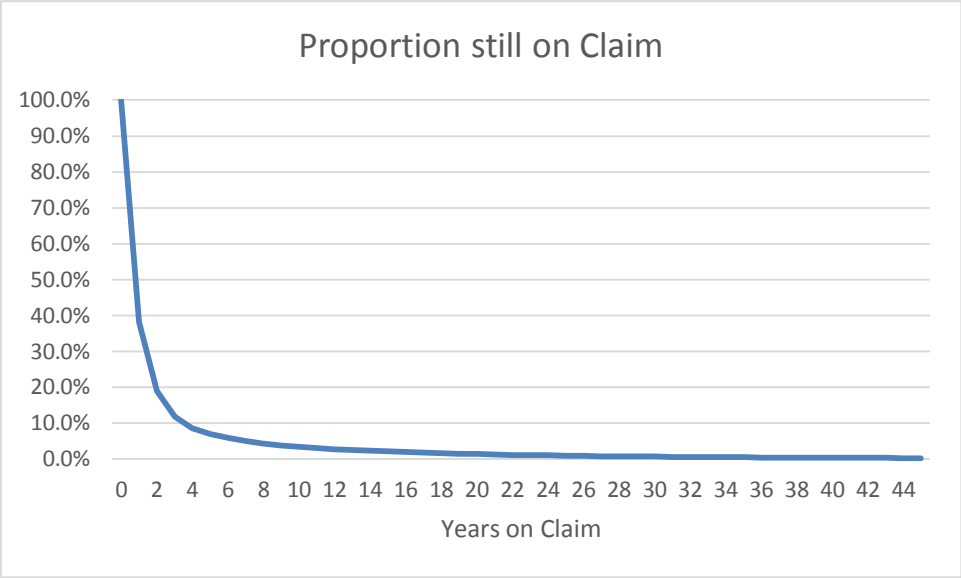
IE9.1 Policies providing insurance against loss of income due to disablement represent about a quarter of insurance covers currently written by life insurers in Australia. We understand this type of product is common in several other countries, e.g. South Africa, United Kingdom and Singapore. This type of cover is written on both individual retail and group basis as a standalone contract or as a rider on a superannuation investment contract.

IE9.2 This example focuses on individual retail risk Income Protection contracts to illustrate the practical considerations involved in determining the coverage unit for providing regular payments during the recovery period following an insured event discussed in paragraphs 19-24 above. The example is representative of this type of product as written in Australia.

IE9.3 Income protection insurance contract – this provides:

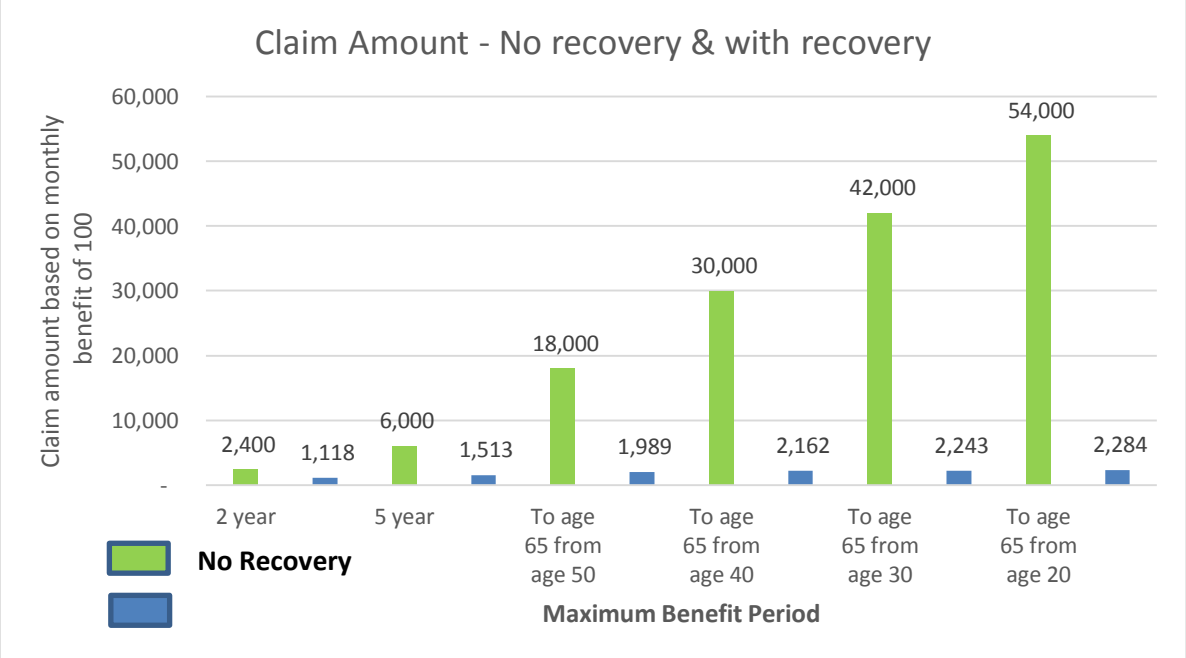
- A monthly insured benefit in the form of a monthly amount to replace regular income (up to maximum of 75% of salary) once disabled and unable to work beyond the waiting period to the end of the benefit period while still disabled and unable to work.
- A waiting period of one month (usual range of waiting periods offered are – one, two, three, six, twelve or twenty-four months). The insured benefit commences from the end of the waiting period; and
- Maximum benefit period – two or five years, up to age sixty, sixty-five or seventy years;
- Indexation of monthly insured benefit:
    - during life of contract up to the insured event (usually CPI);
    - during the benefit period if an additional premium is paid, otherwise not indexed once on claim.

IE9.4 The following graph illustrates the recovery rate from the end of the waiting period as % of those disabled at the end of the one month waiting period:

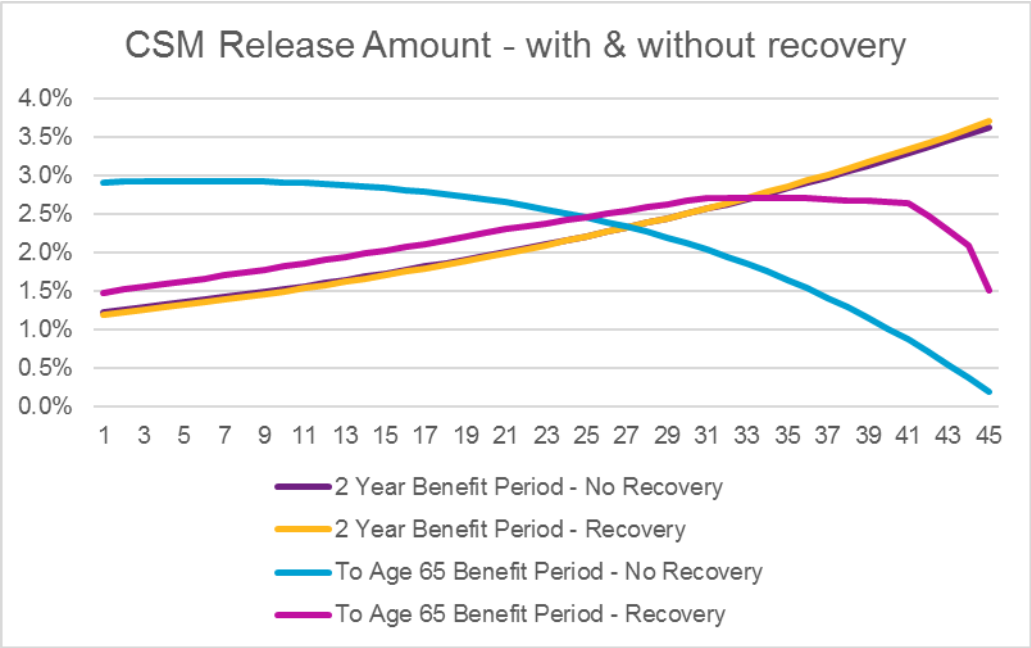


IE9.5 This shows how quickly the insured is expected to recover and the very low likelihood that claim payments will be made out to the maximum benefit period of **age 65 for a 20-year-old.**

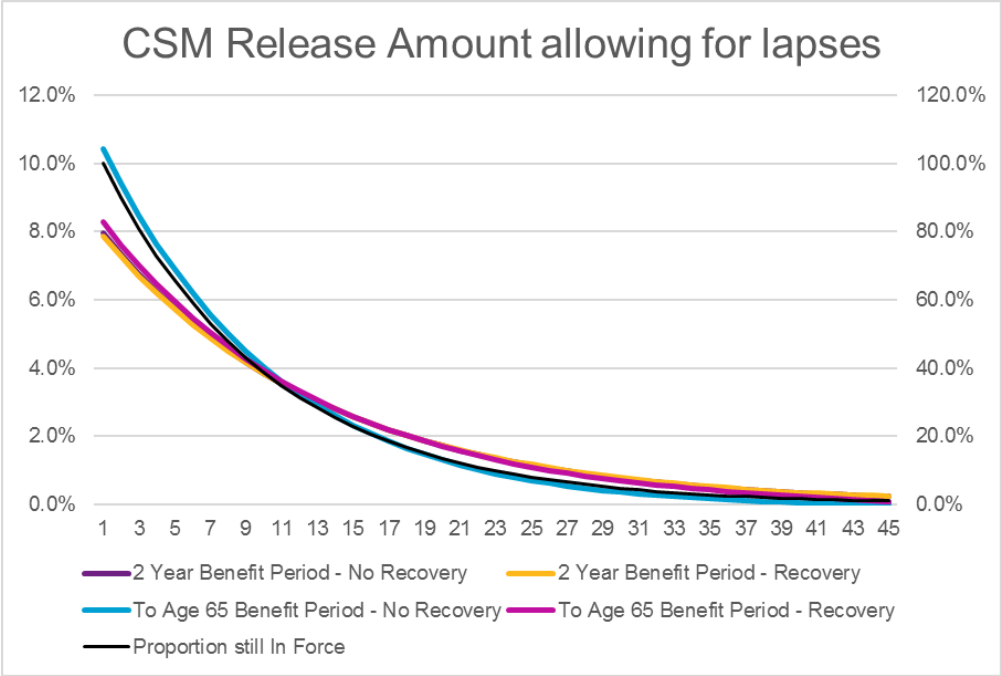
IE9.6 The following chart shows the importance of allowing for recovery where the benefit period acts as a maximum on monthly benefits payable. Under no recovery, the potential claim amount, assumes that, once the insured event has occurred, the monthly benefit to the end of the maximum benefit period under the contract. The impact for the following maximum benefit periods are shown - two years, five years and to age 65.



IE9.7 The following chart illustrates the CSM release amount as a percentage of total CSM release over the life of contract, assuming no lapses. This shows allowing for recovery has no impact where the maximum benefit period is short, but a very significant impact for longer benefit periods.



IE9.8 This is moderated if allowance is made for lapses. The following chart illustrates the CSM release amount as a percentage of total CSM release over the life of contract (left axis), assuming a 10% p.a. lapse rate. It also shows the proportion of contracts still in force (right axis). The release patterns become more similar, although there is still some impact where the maximum benefit period is to age 65.



Example 10 - Conventional participating insurance (endowment policy)

IE10.1 The entity has issued conventional participating insurance with the following features:

(a) The policyholder pays a regular level premium to the insurance company.

(b) In return, the policyholder receives:

- Insurance coverage, payable upon death of the life insured, of a specified sum insured, and
- A share of the investment returns from an underlying pool of assets to which the policy is referrable.

(c) The investment returns are allocated to the policyholder through bonuses that are added to the policy's sum insured.

(d) The insurance company may allocate 'reversionary bonuses' (i.e. an annual incremental addition to the sum insured) or 'terminal bonuses' (i.e. an amount in addition to the sum insured and reversionary bonuses that is payable to the policyholder upon maturity or death).

(e) There are three ways in which the policy can terminate:

(i) The policyholder could die. In this case the sum insured including all reversionary bonuses accumulated at the time of death and the terminal bonus would be payable.

(ii) The policyholder could survive and reach the maturity date of the policy. In this case the maturity value consisting of the sum insured, all reversionary bonuses accumulated at maturity and the terminal bonus would be payable.

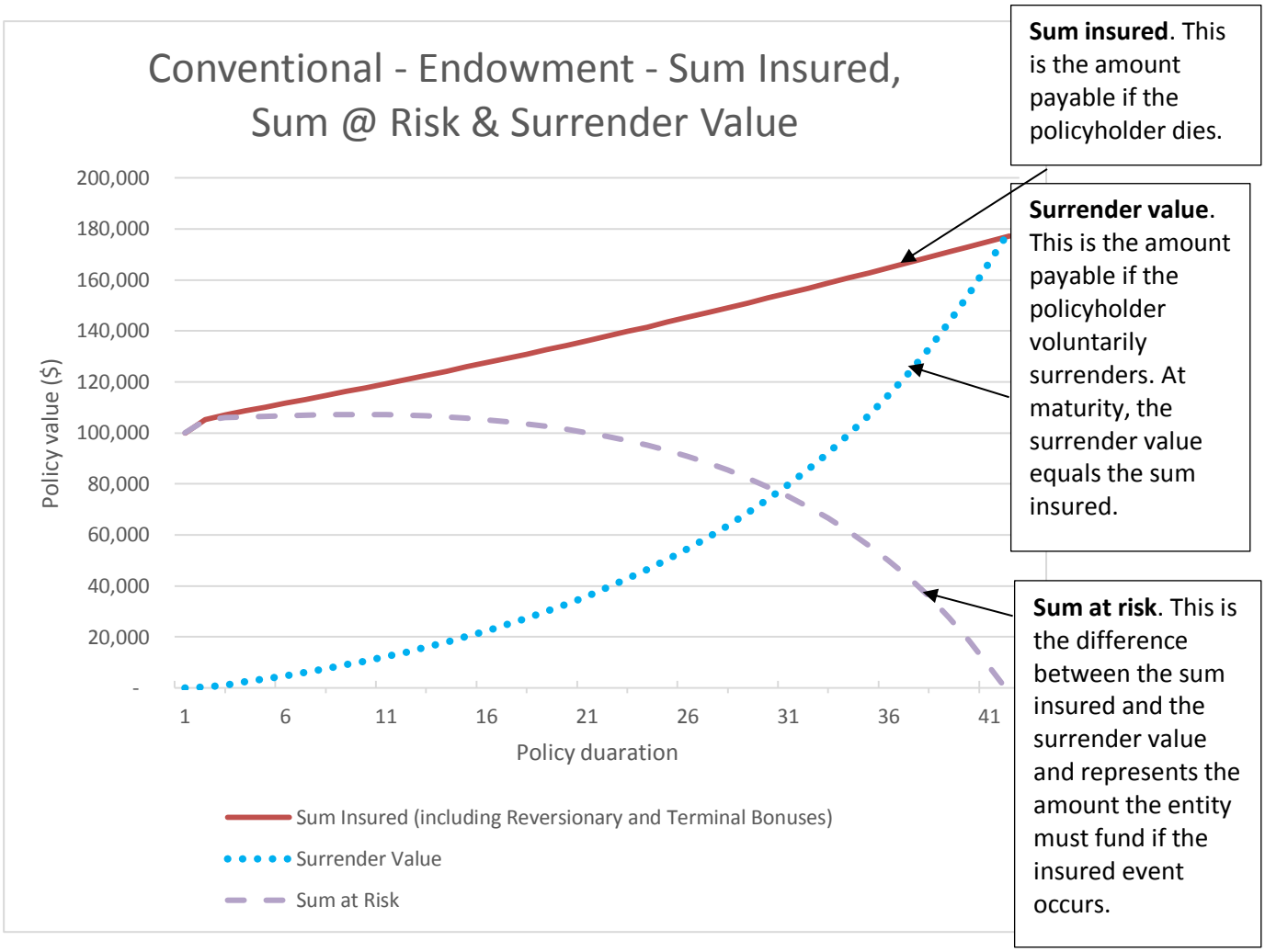
(iii) The policyholder could voluntarily surrender their policy before the maturity date. In this case, a surrender value would be payable to the policyholder. The surrender value is generally based on a set schedule such that the surrender value is low in the early years of the policy and increases with policy duration. At maturity, the surrender value equals the maturity value.

IE10.2 The entity has determined that these contracts meet the criteria for an investment component as defined in defined in IFRS 17 Appendix A:

"The amounts that an insurance contract requires the entity to repay to a policyholder even if an insured event does not occur."

IE10.3 In the event of early surrender or maturity, the surrender value is payable to the policyholder. That is, the surrender value is required to be repaid to the policyholder irrespective of whether the insured event (death of the policyholder) occurs (consistent with IFRS 17.BC34).

IE10.4 The relationship between the sum insured (including reversionary and terminal bonuses) and the surrender value for a single policy is shown in the chart below:



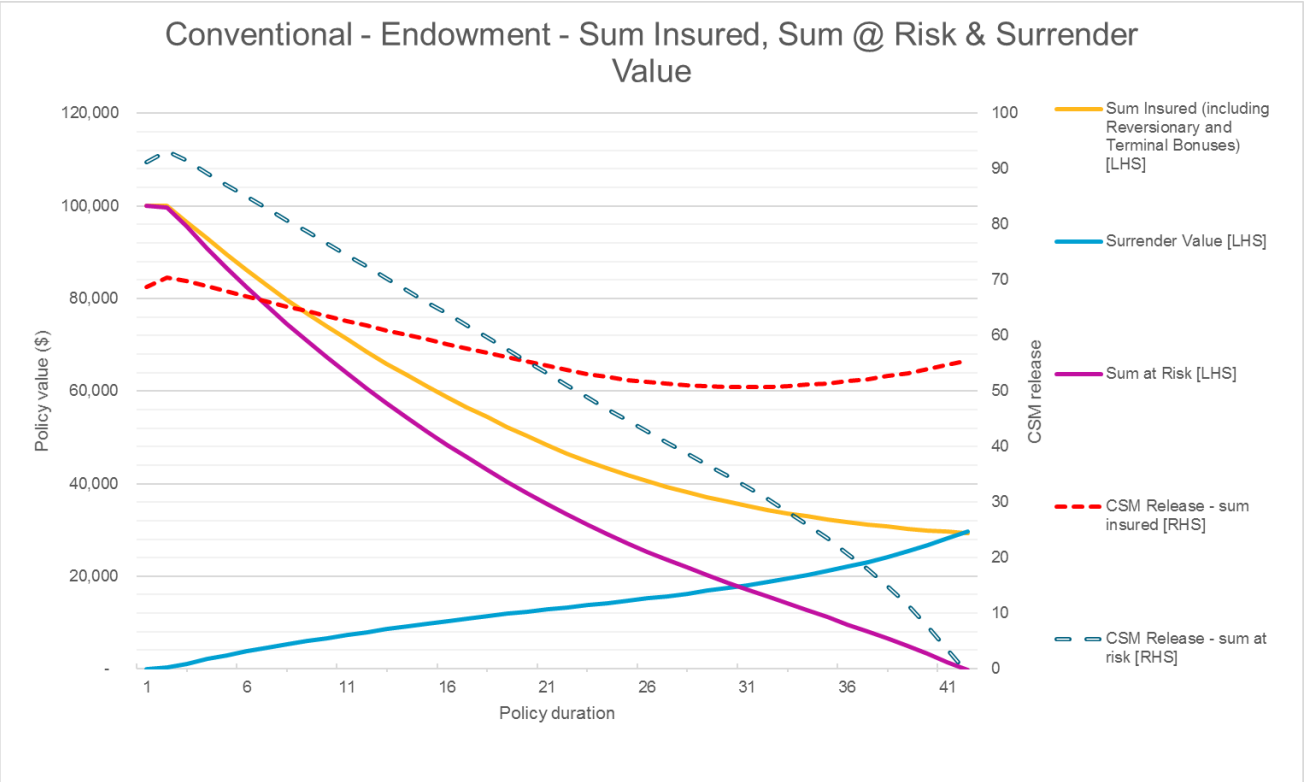
IE10.5 A key point illustrated by the above chart is that **the insurance component of the policy dominates at early durations and the investment component dominates at later durations as the policyholder accumulates investment returns.**

IE10.6 The two alternative coverage units considered for this policy are:

(a) The sum insured, which reflects the quantity of benefits for both insurance and investment services provided by the entity.

(b) The sum at risk, which reflects only the quantity of benefits for only the insurance services provided by the entity.

IE10.7 The chart below shows these amounts for a portfolio of contracts, allowing for expected deaths and surrenders.



IE10.8 In the above chart:

(a) The CSM release based on sum insured (including reversionary and terminal bonuses) provides a good reflection of the services provided under the contract, including investment services.

(b) The CSM release based on sum at risk only reflects the insurance services provided and will release proportionately more CSM in the early years of the policy (when the insurance component dominates) and proportionately less CSM in the later years (when the investment component dominates).

Example 11 Hybrid Insurance contract – a retail superannuation contract with both investment and insurance services

IE11.1 These types of product are common in Australia and we understand in several other countries, e.g. United Kingdom and Asia. The trend in Australia, is to write the investment component through trust which holds a policy with the group's life insurance entity. However, there is still a very significant volume of the older style hybrid insurance business in-force and open to current customers.

IE11.2 The entity issues retail investment linked superannuation contracts with the option (subject to underwriting) of an insured death benefit to self-employed and small employers. This investment component cannot be separated under IFRS 17.11(b) as it is not distinct.

IE11.3 Under Australia's superannuation regime:

(a) employers are expected to contribute around 10% of employee's salary per annum to the member's account balance, whilst the employee is in their employment;

(b) insurance cover can be provided under superannuation arrangements with premiums paid by deduction from members account balance.

IE11.4 There are three ways in which the contract can terminate:

(a) The insured could die. In this case the sum insured and investment linked balance are paid at the time.

(b) The insured could reach retirement age. In this case the investment linked balance would be payable and the contract including any insurance component would cease.

(c) The policyholder could transfer to move to another employer and transfer the investment linked balance another superannuation scheme, which also ceases the insurance cover.

IE11.5 The insured can cease the insurance cover, without the investment component itself also ceasing. As the investment component and insurance component are required to be unbundled for regulatory purposes, statistics are not readily available with on what proportion of these type of hybrid insurance contracts no longer have an insurance

component. One large insurer has estimated that 25% of their superannuation investment linked contracts that had insurance no longer have insurance present. [15]

IE11.6 In this example, the retail superannuation contract comprises:

(a) An investment linked account which:
- Reflects the fair value of the underlying investments, being daily marked to market and is subject to tax at 15% concessional rate on investment earnings;
- Accumulates with contributions of 10% of salary;
- Bears an AUM fee of 1.5% p.a.
- Policy fee of $100 pa indexed at CPI

(b) An insurance rider which insures payment of 5 times salary upon death or account balance if greater

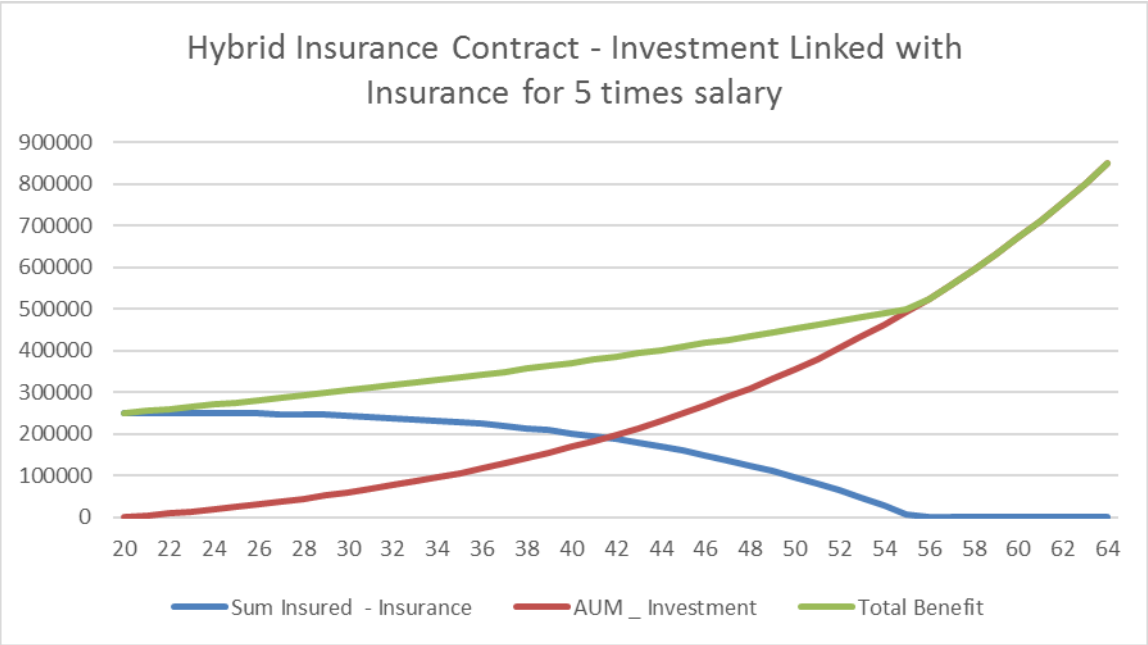
(c) The entity prices for a 10% profit margin in investment services and a 15% return on insurance services.

(d) Other assumptions for this example are:

Entry Age	20			Retirement Age	65
Opening Salary	50,000	p.a.		Wage Inflation	2%
Contribution rate	10%	p.a.		Asset Earning rate	6%
Member Fee		100		AUM Fee	1.50%
Insurance Cover	5	times Salary		Inv Pricing Margin	10%
Insurance Pricing Margin		15.00%			

IE11.7 The relationship between the sum insured, investment linked balance and balance payable upon death for a single policy is shown in the chart below.

15 Hybrid contracts that no longer include insurance risk cover would continue to be regarded as insurance contracts by virtue of IFRS 17.B25.



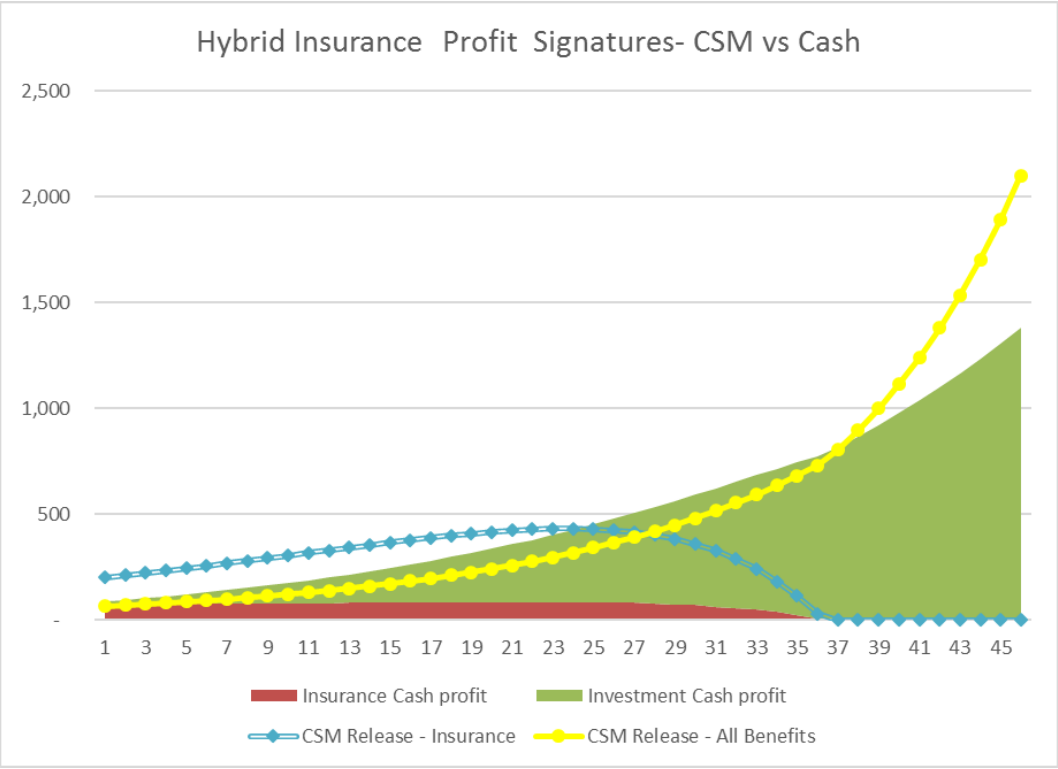
IE11.8 A key point illustrated by the above chart **is that the insurance component dominates at early durations and the investment component dominates at later durations as the policyholder accumulates investment returns.**

IE11.9 The two alternative coverage units considered for this hybrid insurance contract are:

(a) Total Benefit payable on death– investment linked balance plus sum insured, which reflects the quantity of benefits for both insurance and investment services provided by the entity.

(b) The sum at risk, which reflects only the quantity of benefits for only the insurance services provided by the entity.

IE11.10 The chart below shows these amounts compared with the cash profit arising from the pricing margins.

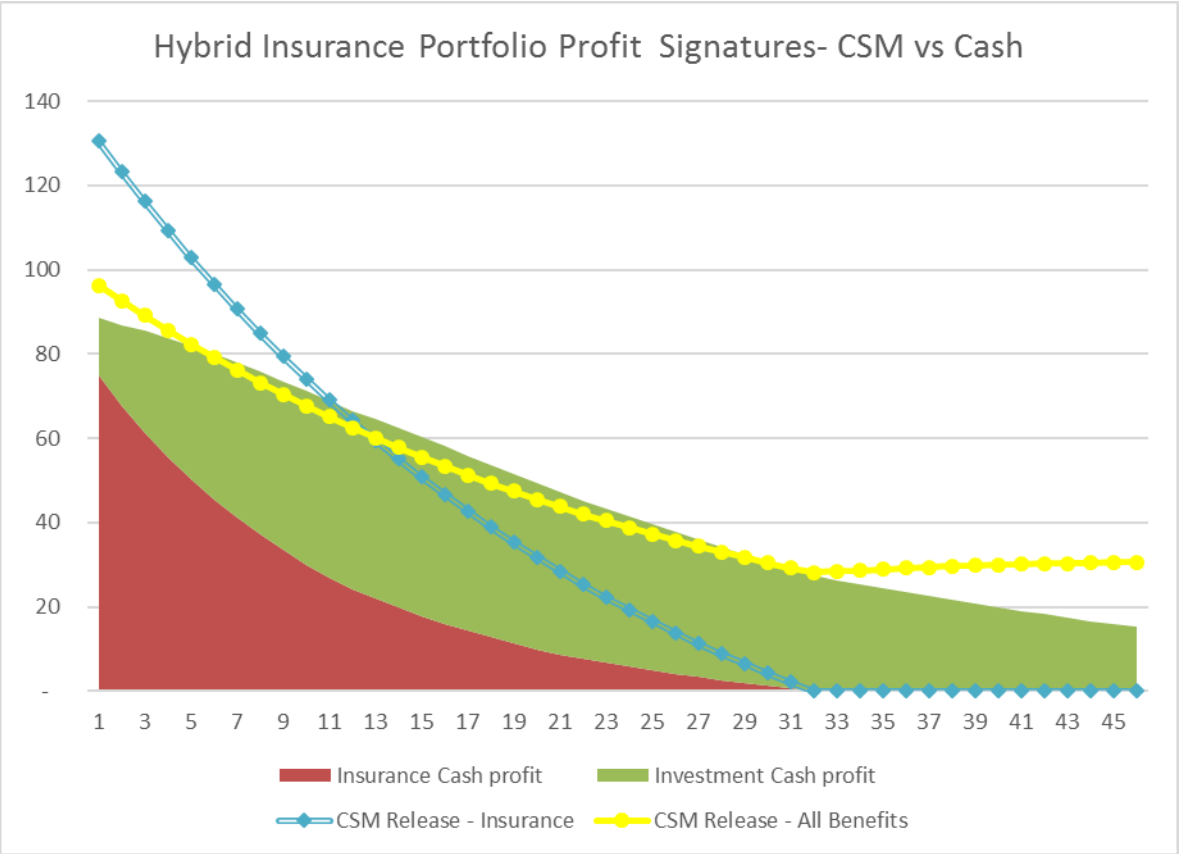


In the above chart:

IE11.11 In the above chart, the CSM release based on the total Benefit payable (on death – investment linked balance plus sum insured) provides a good reflection of the services provided under the contract, including investment services.

IE11.12 The CSM release based on sum insured only reflects the insurance services provided and will release proportionately more CSM in the early years of the policy (when the insurance component dominates) and proportionately less CSM in the middle years (when the investment component starts to dominate) and none in the later years when the investment component exceeds the minimum death benefit.

IE11.13 The chart below shows the same again but based on a portfolio, which allows for lapses at 10% p.a.



IE11.14 The picture is similar to that for single contract.

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