PANDEMIC BRIEFING

Best Estimate Assumptions, Capital Margins, Target Surplus and ICAAP

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1. Purpose

The purpose of this document is to provide a list of considerations on the issues related to:

- Setting best estimate assumptions.
- Considerations around capital margins and other PCA considerations.
- Target Surplus policy and ICAAP.

At the time of writing, the results from the COVID-19 risk margins survey were still in the process of being reviewed and any findings have not been explicitly included in this note. The insights from the COVID-19 risk margins survey should also be considered alongside the considerations raised in this note.

2. Best Estimate Assumptions

2.1. Principles

The following section summarises considerations for life insurers, and reinsurers, in respect to setting best estimate assumptions in respect of COVID-19. Whilst other life insurance sub-groups discuss assumption setting in more detail, a brief overview is included here.

The review of best estimate assumptions should continue to be in respect of the principles:

- Materiality of the benefits being considered.
- The effect of particular assumptions on the determined result.

- Reasonable available statistics and other information.
- Any options on asymmetrical distribution of liability outcomes.

The detailed principles and relevant regulations are outlined in LPS 340 (Valuation of Policy Liabilities), AASB 1038 (Life Insurance contracts) and the Actuaries Institute professional standards.

Most companies typically perform annual experience investigations, with experience being monitored more frequently (monthly / quarterly). Whilst this note is not suggesting that best estimate assumptions are revised more frequently, in the current climate, companies should consider whether their existing frameworks to review experience are appropriate under COVID-19. Whilst data, research and experience continues to develop (e.g. data driven morbidity insights of COVID-19 are still limited), any changes in best estimate assumptions will require judgement by Appointed Actuary and should be made in respect of the principles above.

Actuaries should also consider distinguishing between a 'best estimate' assumption and a risk margin (as applicable under the regulatory capital standards).

2.2. Thematic considerations of COVID-19

Below summarises some of the key risk considerations of COVID-19:

Mortality

- In Australia, whilst the overall direct impact of COVID-19 on insured life mortality rates is not expected to be material, insurers should review any correlated deaths impacts (both positive and negative) e.g. increased suicides from a spike in mental illness onset, lower road accidents.
- This should be carefully monitored by insurers for any resurgence of COVID-19 infections (e.g. regularly monitoring transmission rates) as the restrictions are reduced and the economy re-opens.

Morbidity

- There is a substantial economic impact of the enforced society lockdowns (e.g. rising unemployment / underemployment, business closures). Whilst the exact impact to insured lives is difficult to determine, particularly when considered net of the government stimulus packages, companies should aim to review their in-force portfolio (e.g. by occupation) to determine any exposure to sectors with financial distress (e.g. retail, airlines, tourism).

- Linked to the above, the economic impact is expected to result in an increase in income protection incidence rates (e.g. mental health impacts of the economic lockdown) and lower termination rates for policyholders already on claim (e.g. claimants have less financial incentive to return to work if job opportunities are scarce and they can receive a higher income on claim). The income replacement ratio (IRR) is, on average, also expected to increase across the portfolio particularly in the distressed sectors noted above.

- The best estimate assumptions on morbidity also need to consider the time to recovery and the duration of unemployment. Historically, the longer someone is unemployed, the less likely the member returns to work. The time to recovery is also expected to differ significantly by different industry sectors. As above, this will be correlated to the economic recovery (e.g. immediate economic recovery, alongside any further economic shock when the government stimulus packages unwind).

- In respect to the indirect impacts of COVID-19, companies should also consider the likelihood of a re-emergence of COVID-19 as the economic reopens. As infection rates subside (no second wave), economic recovery will be faster and sustained. However in the event of a potential second wave and a delayed vaccine deployment, economic recovery may be slower and the economic downturn lasting for a number of years.

- Government and media have already reported a spike in mental illness cases in the general populate. Any changes in best estimate assumptions for morbidity should specifically consider implications to a rise in the incidence of mental illness claims throughout the pandemic and lower terminations for those currently on claim.

- Morbidity claims (Trauma, TPD) are also expected to increase to the extent policyholders have delayed treatment (e.g. due to the government's temporary ban on elective surgery or general reduction in hospital visits in a pandemic environment). Companies should also consider any co-morbidities with other illness from COVID-19.

Lapse

Whilst implications for lapses are uncertain in a pandemic (e.g. general population may be averse to cancelling any existing life insurance cover whilst COVID-19 persists), the economic shock particularly any impacts on affordability may see some policyholders cancelling their cover. In the second scenario there will also a higher risk of selective lapsation.

Claims Management

General government and community expectations also may impact the duration of existing claims, which includes but is not limited to:

- Pressure from government bodies (e.g. ASIC letter to insurers date 28 April 2020) has the potential to affect subjective claims management outcomes.

- Difficulty in implementing effective rehabilitation plans in the COVID-19 environment

- Maintaining frequency of visits with treating doctors / treating doctors providing ongoing supporting evidence may prove more difficult in the current situation.

The detailed thematic considerations of each of the above items is considered in more detail as part of other sub-streams and working groups.

2.3. Implementation

Duration of COVID-19 impacts

Whilst the duration and severity of COVID-19 is uncertain, a key consideration for companies will be how they reflect the impacts of COVID-19 in respect of the above.

- One of the key considerations for Appointed Actuaries around COVID-19 will be the duration over which they expect the pandemic will impact the portfolio. This will include, but not be limited to, considerations around mortality (e.g. any re-emergence once the economy re-opens) and morbidity (e.g. 'V' shared recovery versus a more prolonged down turn). Where a company adopts the view the impact is expected to be short term, it is noted that changes to assumptions may spread the impact of short term increases in claims through future profit margins. All approaches will require early engaged with auditors on the appropriateness of the accounting approach.

- A company may determine, and agree with its auditor, that there is insufficient information to adjust best estimate assumptions in the short term. In this case any short term impacts would emergence directly as experience. Where this is the case, companies will still need to ensure that underlying reserves are sufficient to meet obligations.

- Where companies are changing their forward looking best estimate assumptions to reflect the pandemic scenario, they should ensure there is no duplication with the capital held against the event stress under LPS 115.

- Companies will need to consider each of the above in turn in their business planning and capital forecasts. This is discussed in more detail in the capital sections below.

Claims Reserves (IBNR, RBNA, DLR)

Companies should review the appropriateness of their claims reserves, specifically:

- For IBNR, consider any expected changes in notification patterns.

- For DLR (open claims), consider any expected change in terminations rates (whilst the economic impacts of COVID-19 persist). This will be a separate consideration for inforce policies (i.e. whether a termination adjustment should be applied in the event of claim).

- Implications of any changes to claims management processes, including adequacy of resourcing of claim functions.

- Economic impacts (interest rates, CPI, illiquidity premium, credit spread adjustments) applied in the calculation of reserves.

Communication

- Companies will need to communicate impacts arising from changes in best estimate views to relevant stakeholders (including external investors, market participants), particularly where a company has made changes to longer term profit margins.

- Any changes in Best Estimate Liabilities (BEL) and views of Present Value of Future Profit Margins (PVFP) are also disclosed to APRA as part of regular APRA forms.

Other Considerations

Some items that should be considered:

- Expected changes in new business volumes and profile.
- Expected changes in expense management and appropriateness of maintenance / acquisition expense allocations.
- Expected change in indexation rates (applied to claims and expenses).
- Any tax implications (e.g. revaluation of the DAC for lower interest rates).
- Appropriateness of available data and statistics on the insured lives portfolio (infection rates, mortality rates, occupation mix of the portfolio, age mix, claims data and ability to differentiate COVID-19 related claims).
- Considerations and allowance for lower investment income on underlying assets.
- Pricing implications and rate guarantees for Group business (e.g. allowing for the short-term adverse claims experience in longer term pricing assumptions, implications of lower interest rates on level premium business, indexation take up rates).

In all the above considerations, there are flow-on consequences to capital calculations. These are discussed below.

3. Capital margins and other PCA Considerations

Implications of COVID-19 on capital margins and methodology largely fall into areas where there is discretion of the Appointed Actuary (including management actions). Appointed Actuaries should specifically consider in light of impacts of COVID-19 whether existing stresses are appropriate in ensuring that obligations can still be met after a 1-in-200-year event.

APRA circulated a letter on 4 May 2020 which provided the following guidance:

- The LAGIC reforms which came into effect in 2013 were designed to operate through the cycle.

- Having considered the input received to date in respect of COVID-19, APRA's assessment is that the framework remains fit for purpose and is operating as intended in the current environment.

- APRA continues to expect life insurers to meet their Prudential Capital Requirements (PCR) at all times. Insurers should actively monitor and forecast capital coverage, and if they determine there is any risk of a breach in PCR, they should engage with APRA early.

Below are some specific considerations for each stress:

Insurance Risk:

Future stress margins are set such that there is a 99.5% probability of sufficiency over a 12-month period. As COVID-19 presents heightened uncertainty, the key consideration for the actuary is whether the existing stress margins are still sufficient to cover a 1-in-200-year event. As part of this, some material risks and considerations include:

- Whether potential unemployment and economic impacts from COVID-19 are more onerous than currently assumed in the future stress margins.

- Companies should consider the implications of the reduction in bond yields, CPI, credit spreads, and illiquidity premium on stressed policy liabilities (e.g. stressed DLRs, IBNRs, which will be in part contingent on the duration of the insurer's claims reserves).

Event Stress:

- Insurers currently adopting the minimum event stress within LPS 115 (Insurance Risk charge) should consider the appropriateness of that measure in respect of COVID-19 (e.g. APRA's minimum event stress includes a flat mortality rate across ages whereas COVID-19 experience suggests fatality rates increases by age).

- Companies may wish to consider applying sensitivities on the event stress more tailored to the current COVID-19 impacts, including higher impacts on morbidity risks.

- Insurers should consider that any forward looking risks allowed for in best estimate assumptions to reflect the pandemic are not duplicated under the event stress in the PCA.

Lapse Stress:

- This stress is determined by the Appointed Actuary. Where the view of sufficiency has changed, in light of the additional risks considered above, companies may wish to consider recalibrating lapse stresses.

Asset Risk:

- Depending on a company's asset exposure, there may need to be careful consideration of the impacts on changes in asset values.
- ALM / hedging strategies may need to be reviewed given changes in asset values.
- Companies should actively be monitoring liquidity / cash flow in respect of higher claims, lapses and increase of premium waivers / ex-gratia type payments (including societal pressure to contribute to the broader economic recovery).
- Long-term reductions to bond yields and increases in credit spreads are likely to have longer term impacts to a life insurer's asset risk exposure.

Asset concentration risk charges (ACRC)

Whilst there is no direct impact, companies will need to consider how to manage the ACRC particularly where the income protection (IP) portfolio is materially reinsured. Specifically:

- Any changes in the reinsured DLR (and subsequent increase in exposure to the reinsurer) from higher claims incidence, lower termination rates and reduction in interest rates will need to be monitored.
- Where companies already operate structures to mitigate their reinsurance exposures (e.g. letters of credit, collateral trusts) they should ensure they remain fit for purpose.
- Companies should also ensure there is no change in credit ratings (downgrades) of key counterparties.

Operational Risk

The operational risk charge in the prudential standards is a prescribed calculation based on premiums.

- In the current COVID-19 environment, there are additional factors contributing to operational risk. Insurers may consider alternative operational risk events and their implications as part of target surplus or ICAAP scenarios (see section below).

- One consideration is the mechanical out-workings of the ORC calculation. A decrease in premiums from additional lapses / lower new business in the current environment would lead to a reduction in ORC. Actuaries should consider where this is appropriate and if additional allowance should be made as part of target surplus or ICAAP scenarios.

4. Target surplus and ICAAP considerations

Companies set target capital in reflection of their own risk appetite. It is usually calculated based on ensuring a defined probability of sufficiency over the PCA (e.g. adopting a 1-in-X year probability of breaching PCA). Companies should consider whether this probability of sufficiency remains appropriate in the current environment.

APRA has provided some guidance of Target capital, specifically:

- Target surplus is a reflection of a company's own risk appetite and there may be scenarios where individual companies breach their target capital in the current climate. Part of the purpose of a company's ICAAP and target surplus is to manage severe events (e.g. pandemic events like COVID-19).

- Where capital drops below target levels companies should operate per the trigger points defined in their ICAAP, including reporting to APRA. Companies should have a robust and credible plan to return to the defined target capital within a sensible timeframe.

Some specific considerations include:

- Review of current plans and defined scenarios for appropriateness in the current climate. Some companies have adopted a plausible and severe cases structure for COVID-19. Scenarios should be commensurate of:
    - Immediate impacts of COVID-19 (e.g. infection rates, immediate economic shock)
    - Recovery scenarios (e.g. immediate ‘V’ shaped recovery, any resurgence of the virus as the lockdown are lifted)
- Review of target levels of capital, trigger points, expected/accepted position relative to target surplus ‘hard’/’soft’ floors, management actions (e.g. derisking, repricing, sourcing additional capital) and / or remedial actions to ensure they remain actionable and robust in the current climate (and particularly if the economic impacts persevere over multiple years). For instance, companies should consider their ability to raise equity capital in the current market (particularly with depressed share prices or where a company is owned by an overseas parent the fungibility of the Group being able to inject capital). Companies should also consider the implications to their credit ratings (and credit ratings of key counterparties e.g. reinsurers).
- Insurers could consider additional operational risk impacts, where the view is the operational risk charge (under PCA) and existing scenarios do not adequately capture some of the emerging risks from COVID-19, which include but are not limited to:
    - Reputational risks (e.g. with claims management practices in respect of pandemics, premium waivers, any other consumer expectations around societal support not readily met in current climate).
    - Distribution (e.g. effectiveness of distribution channels during remote working).
    - Efficiency of call centres / support staff while remote working.
    - Claims management capabilities and potentially increased caseloads.
    - Higher manual interventions and ‘work arounds’ required (e.g. requests from premium waivers, higher number of reduction / increases to existing covers).
    - Effectiveness of outsourcing models particularly where an offshoring model is used

- Failure of business continuity plans (BCP).

- Companies should consider the frequency and reliability of monitoring. This may consider if specific additional metrics are required or existing metrics reported more frequently (e.g. cause of claims or frequency of claims reporting).

- Considerations around the approach used in calculating target surplus and whether COVID-19 presents required changes.

  - Whether the calculation of TS allows for pandemics or significant economic shocks

  - Where TS is calculated as a function of PCA, changes to risk margins may also affect the target surplus. In this case, companies should consider whether the calculated target surplus still represents the target level of sufficiency.

- Companies may wish to consider the appropriateness of the business plan for the coming year, and whether this needs revision (e.g. implications for new business growth, expected margins on the inforce portfolio).

- APRA has already provided guidance to companies to limit distribution of capital (e.g. through dividend payments and share buy backs).

- Consideration may be given to allow for countercyclical offsets (within target surplus or via PCA).

Scenarios and stress testing

Whilst there is a separate sub-group covering scenarios and stress testing in greater detail, due to the relevance of this topic in an insurer's ICAAP, this has been briefly discussed below.

- When performing stress and scenario tests, insurers should consider impacts with and without management actions as well as any limitations on management actions due to COVID-19.

- Scenarios may consider differences in the expected duration and impact of the pandemic. It may include varying parameters on the duration of lockdown restrictions, level of peak infections and varying the magnitude of any shocks e.g. claims and lapse shocks.

An example of some trends that could be considered when designing scenarios are as below:

- The duration of economic lockdowns / restriction (both the expected currently and any resurgence) and expected impact to claim experience.
- If insurers are considering providing hardship relief (e.g. through premium holidays or pausing cover), the extent to which this mitigates / defers shock lapses.
- Any potential changes to credit ratings for key counterparties (e.g. reinsurers with significant exposure to severely affected overseas markets).
- The narratives around scenario analysis could also include considerations for when vaccines become available which may represent a further loosening of government restrictions.