

# PANDEMIC BRIEFING

## Business Interruption - Issues and Ideas for Actuaries

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### Introduction

This note has been produced by the Business Interruption (BI) working group based on their understanding at the time of writing of the issues for BI policy coverage of COVID-19. It is intended to provide ideas around issues for consideration by Actuaries as well as potential sources of information.

At the time of writing this note, it is expected the application of some policy conditions, including exclusions will be challenged. Similar challenges in overseas jurisdictions are resulting in court-based decisions. The implications for Actuaries are discussed in this note.

### Overall Consideration

The impact of COVID-19 is likely to vary across different businesses and locations, due to the various State and Federal requirements and the level of infections.

In setting a central estimate, the Actuary will need to understand:

- a) the policy wording, any exclusions and conditions; and
- b) the benefits payable.

The Actuary will also need to consider if reinsurance may be applicable, considering the specific wording, definitions and exclusions in the reinsurance contract, in addition to any references to time limitations such as period of event. There may be separate considerations if the reinsurance contracts are being renewed during the period of COVID-19, and any changes in terms and how this may impact the Actuarial balances for premium liabilities and outstanding claims.

Running a range of scenarios regarding both the pandemic itself and the duration and type of restrictions as a result of the pandemic will enable the Actuary to identify the range of outcomes based on specific assumptions/decisions. Reserving will then require a decision on an appropriate amount after considering the range of outcomes, the companies' reserving policy and professional and APRA requirements.

The scenarios will also assist in setting risk margins.

## Potential liability

### Policy Wording

Business interruption policies typically cover disruption to a business following physical damage to assets that the business relies upon. Some business interruption policies will have an extension that provides cover where although no physical damage has occurred, there is prevention of access by an authority due to various causes.

In 2005-06 the global insurance industry introduced general exclusions for losses relating to quarantinable or infectious diseases as a result of stress testing on the financial sector for pandemic scenarios following the SARS virus. In Australia, many of these policies are likely to contain exclusions relating to losses caused by a disease notifiable under the Quarantine Act 1908 or its successor, the Biosecurity Act 2015.

A small number of businesses may have specialist cover, specifically written for them. Cover may be provided for disruptions to critical supplies from overseas, or a sudden drop off in trade due to specific border closures.

An example of typical wordings for ISR Mark IV contract are in Appendix 1.

### Exposure

Quantification of potential liability needs only focus on those policies where there is a non-trivial probability that there will be claims exposure due to the infectious disease or prevention of access clauses.

Grouping of the sum insured by contract type, the type of exclusions and any limitations to cover will assist in identifying the potential sources of exposure. It may assist the Actuary to understand the exposure (sum insured) by policy wordings/exclusions. The following table sets out an example of categories to consider.

| Coverage Scenarios  | Coverage Status   | Sum Insured |
|---|---|-------------|
| Total Business Interruption Sum Insured   |   |             |
| Less impacts of any limited BI cover  |   |             |
| Broken into similar policy wording -  |   |             |
| 1. Coverage only for Damage to Property   | No coverage   |             |
| 2. Infectious disease extension resulting in closure by a public authority; No exclusions                                     | Possible coverage (depends on extension wording)                |             |
| 3. Infectious disease extension resulting in closure by a public authority; Exclusion based on Biosecurity                    | No coverage   |             |
| 4. Infectious disease extension resulting in closure by a public authority; Exclusion based on Quarantine Act with Amendments | No coverage expected but potentially subject to legal challenge |             |
| 5. Infectious disease extension resulting in closure by a public authority; Exclusion based on Quarantine Act                 | No coverage expected but potentially subject to legal challenge |             |

In practice, some policy wordings may be complex and require analysis of how the various clauses and extensions would apply under COVID-19 to understand the potential impact, for example how the prevention of access cover is triggered.

## **Exposure to impacted industries**

Some industries have been more significantly impacted than others. The duration of the COVID-19 lockdown, and the timing of the unwinding of restrictions differs by State.

Considering potential exposure at a granular level may assist the Actuary, both understanding where sums insured are significant, and where the COVID-19 impact is large.

Depending on materiality and availability of data, it may be helpful to review exposure by:

- Type of business.
- Size of business.
- Location.

It may assist the Actuary to consider any material exposures, for example by considering the Top 10 largest sum insured covers.

For large corporates, consideration of the individual circumstances of a business will be required.

## **Assumptions Required**

The Actuary will need to make assumptions about the proportion of businesses with a reduction in trade/operations due directly to the COVID-19 restrictions and the amount of that reduction.

### *Potential source of information*

ABS publications 55676.0.55.003 (Business Indicators, Business Impacts of COVID-19) provide a source of information on the impact of COVID-19 on businesses including some information by size of business and by ANZSIC industry division. This information can be used to provide a guide on the extent to which different industries have been impacted by the COVID-19 restrictions.

For example, the publication for the week commencing 30 March reported that 31% of businesses in the Accommodation and Food Services division were not operating compared with 4% of businesses in the Transport, Postal and Warehousing division. Other useful bits of information in this publication include:

- 70% of the businesses which were not trading reported that this was due to COVID-19.
- 84% of these businesses reported that the pause was due to the introduction of Government restrictions.

The publication also reported that for businesses still operating, 64% reported a reduction in demand for products or services, ranging from 25% of businesses in the electricity, gas, water and waste service division to 90% of businesses in the Accommodation and Food Services division.

The updated Business Indicators survey, May 2020 includes information on the expected impact of government restrictions (separately for trading, social distancing and travel restrictions) on businesses by ANZSIC division.

This type of information can be used by the Actuary to guide assumptions on the number of businesses impacted by restrictions and the extent of the impact at least at the ANZSIC division level. There will of course still be a significant amount of judgement required by the Actuary. The Actuary will need to consider whether an approach applying industry distributions and 'average' assumptions is reasonable for the particular portfolio.

ABS publication 8155 provides information by ANZSIC division and size of business (0-4 employees, 5-19 employees, 20-199 employees, >200 employees) on operating profit and sales and service income.

ABS publication 8165 provides information by two digit ANZSIC subdivision on the number of businesses by employee count (0, 1-19, 20-199 and 200+)

This information could be used by the Actuary to understand exposure by size of business and/or more detailed type of business if their own data is not sufficient to understand this.

ABS publication 5676.0.55.003 Business Indicators provides information on take up of Jobkeeper statistics by industry. These suggestions of information sources are not intended to be exhaustive.

## **Amount of loss**

If policy coverage is triggered, then the amount of loss will depend on the reduction in turnover or profit over the period of interruption, according to the policy terms.

There is not complete certainty on when losses start and end. The date of loss may depend on the interpretation of the policy wordings. It is unclear when contractual conditions cease providing cover, as there may continue to be a decline in business for some time after restrictions ease.

It may assist the Actuary to consider sensitivities on the timing of loss given that there is likely to be dispute about this.

Most businesses purchase 12 months of BI cover although some purchase less or more than this. Many SMEs underinsure and losses may be subject to adjustment. A starting point for the potential monthly loss could be 1/12th of the sum insured.

Assumptions will be required about the impact of different levels of restriction on turnover/profit for different types of businesses (by size and segment). There will clearly be considerable speculation in the assumptions made.

## **Scenarios**

In constructing scenarios, the AA will need to consider how long different restriction levels will last, for example:

- A 'best' case where we move through the different restriction levels at about a month at a time so that there are no/limited restrictions by August/September 2020.
- An increase in numbers of infections so that a level of restrictions are maintained for a longer period.
- A second wave infection scenario where we return to more stringent restrictions for a period.



The Actuary will then need to combine the assumptions about the impact of different restrictions with the scenarios about the duration of restrictions. The following table provides an illustrative example of the types of assumptions required using cafes and restaurants as an example and with the full lockdown assumptions guided by ABS publication 55676.0.55.003.

|                            |            | Full<br>lockdown | 10<br>patrons | 50<br>patrons | 100<br>patrons |
|----------------------------|------------|------------------|---------------|---------------|----------------|
| Duration of restrictions   |            | 6 weeks          | 4 weeks       | 8 weeks       |                |
| Not operating              | % impacted | 25%              | 20%           | 10%           | 0%             |
|                            | % SI loss  | 100%             | 100%          | 100%          | 100%           |
| Reduced operations         | % impacted | 60%              | 50%           | 25%           | 0%             |
|                            | % SI loss  | 50%              | 50%           | 33%           | 0%             |
| SI loss during restriction |            | 55%              | 45%           | 18%           | 0%             |
| TOTAL SI loss              |            | 5%               | 3%            | 2%            | 0%             |

### Reserving Outcomes

The scenario work on the potential liability provides the Actuary with an understanding of the materiality of this exposure and the impact of various assumptions on the outcomes. The materiality of the potential liability will also guide the level of detail required for the valuation, including data analysis of exposure.

For reserving purposes, the Actuary needs to determine a point estimate, intended to be a central estimate of the distribution of outcomes. In addition, the Actuary will need to consider an appropriate risk margin, for example at 75% sufficiency.

While the Actuary has quantified potential liability under a range of scenarios it may be impossible to put a probability on the different scenarios.

Interpretation of certain aspects of some policies, including the application of exclusions, the date of loss or the determination of the loss may be subject to legal challenge. The outcome of these challenges is unlikely to be known for the 30 June reserving process.

Overall, the adopted liability should be transparent to management and the Board together with the level of uncertainty demonstrated through quantification of different scenarios regarding the lockdown and policy interpretation. Consideration should be given to whether the risk margin is higher than normal, reflecting the increased uncertainty in the central estimate.

## Appendix 1

### Excerpts from typical ISR Mark IV Modified Wording

*The typical BI wording for what IS covered...*

#### Section 2 – Consequential Loss

##### THE INDEMNITY

In the event of any building or any other property or any part thereof used by the Insured at the Premises for the purpose of the Business being physically lost, destroyed or damaged during the period of insurance by any cause or event not hereinafter excluded (loss, destruction or damage so caused being hereinafter termed "Damage") and the Business carried on by the Insured being in consequence thereof interrupted or interfered with, the Insurer(s) will, subject to the provisions of this Policy including the limitation on the Insurer(s) liability, pay to the Insured the amount of loss resulting from such interruption or interference in accordance with the applicable Basis of Settlement.

*Endorsement to extend BI coverage for prevention of access...the terms "in the vicinity" are sometimes replaced with references to adjacent buildings or a specific radius from the Premises.*

##### PREMISES IN THE VICINITY (PREVENTION OF ACCESS)

Loss as insured by this Policy resulting from interruption of or interference with the Business in consequence of damage to property **in the vicinity** of the Premises caused by a peril, damage as a result of which is insured hereunder, which shall prevent or hinder the use thereof or access thereto, whether the Premises or property of the Insured therein shall be damaged or not, shall be deemed to be loss resulting from Damage to property used by the Insured at the Premises.



Loss as insured by this Policy resulting from interruption of or interference with the Business in consequence of damage to property in the vicinity of and forming part of or contained in the complex of which the Premises forms part caused by a peril, damage as a result of which is insured hereunder, which results in a cessation or diminution of trade due to temporary falling away of potential custom whether the Premises or property of the Insured therein shall be damaged or not shall be deemed to be loss resulting from Damage to property used by the Insured at the Premises.

*Endorsement to extend BI coverage for closure by order of a public authority...note the three common alternatives shown below re: Quarantine Act vs Biosecurity Act. Other versions of this specifically mention as INCLUSIONS closure consequent upon infectious diseases, vermin/pests, food poisoning and murder/suicide before then EXCLUDING diseases under the Quarantine/Biosecurity Act.*

#### **CLOSURE BY ORDER OF A PUBLIC AUTHORITY**

Loss as insured by this policy resulting from interruption of or interference with the Business directly or indirectly arising from closure or evacuation of the whole or part of the Premises or other premises in the vicinity of the Premises by order of a competent public Authority directly or indirectly arising from infectious or contagious human disease occurring at such premises or from a threat or fear of violent damage to such premises and/or injury to persons therein shall be deemed to be loss resulting from damage to property used by the Insured at the Premises. Perils Exclusion XX shall not apply to the cover granted by this endorsement.

Provided that this endorsement will not indemnify loss resulting from interruption of or interference with the business directly or indirectly arising from or in connection with Highly Pathogenic Avian Influenza in Humans, or any other Listed Human Diseases listed under the **Quarantine Act 1908 OR Quarantine Act 1908 and subsequent amendments OR Biosecurity Act 2015 (Cth) and subsequent amendments.**

*Lloyds Market Authority (LMA) communicable disease exclusion drafted POST COVID-19.*

## **COMMUNICABLE DISEASE ENDORSEMENT (LMA5393)**

1. Notwithstanding any other provision of this policy to the contrary, this policy does not insure any loss, damage, claim, cost, expense or other sum, directly or indirectly arising out of, attributable to, or occurring concurrently or in any sequence with a Communicable Disease or the fear or threat (whether actual or perceived) of a Communicable Disease.
2. For the purposes of this endorsement, loss, damage, claim, cost, expense or other sum, includes, but is not limited to, any cost to clean-up, detoxify, remove, monitor or test:
  - 2.1. for a Communicable Disease; or
  - 2.2. any property insured hereunder that is affected by such Communicable Disease.
3. As used herein, a Communicable Disease means any disease which can be transmitted by means of any substance or agent from any organism to another organism where:
  - 3.1. the substance or agent includes, but is not limited to, a virus, bacterium, parasite or other organism or any variation thereof, whether deemed living or not;
  - 3.2. the method of transmission, whether direct or indirect, includes but is not limited to, airborne transmission, bodily fluid transmission, transmission from or to any surface or object, solid, liquid or gas or between organisms; and
  - 3.3. the disease, substance or agent can cause or threaten damage to human health or human welfare or can cause or threaten damage to, deterioration of, loss of value of, marketability of or loss of use of property insured hereunder.
4. This endorsement applies to all coverage extensions, additional coverages, exceptions to any exclusion and other coverage grant(s).

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**DISCLAIMER**

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