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Global pandemics and insurance

What are the potential impacts of coverage when an infectious disease has been declared a pandemic?

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Introduction

The COVID-19 pandemic has undoubtedly been the most consequential global insurance event since the collapse of the Twin Towers on September 11, 2001.

Lloyds have estimated underwriting losses of approximately \$107 billion arising from the event with further losses of \$96 billion from investment losses arising from the general economic downturn.¹

Potential Impacts to Coverage

As I conceive it, there are three potential impacts to coverage arising from the pandemic:

- a. From a claims perspective, insurers may deny coverage for claims that are made which are related to the pandemic. For many insureds, who did not anticipate the possibility of a global pandemic (recent pandemics such as Ebola or SARS have been well contained and have had little economic impact), it's indeed possible that their traditional ISR policy will not respond.

We are already seeing this controversy playing out in the Australian context with insurer wording already come under challenge by insureds². Whatever the outcome of any litigation, which will undoubtedly be a lengthy and expensive process (even if the insurers succeed in establishing that their view of the policy's intention is correct), the insurers will sustain reputational damage arising from the denials.

Beyond the reputational damage, there will be political pressure brought to bear on underwriters to provide a broader and more generous reading of the policy. Already, in the United States, lawmakers have written to industry associations urging to them "work with their members" to recognise losses³.

¹ CNBC report 14 May 2020 "Coronavirus will be the largest loss on record for insurers, Lloyd's of London says"

² Australian Financial Review May 13, 2020 "IAG based pandemic exclusions on outdated law"

³ S&P Market Intelligence report 26 March 2020 "Insurers face impossible dilemma on virus related BI claims"

Insurers may well be capable in successfully denying claims and buffeting long term reputational damage. However, that may not be the end of the conversation. In recent years, governments have taken a more interventionist approach to regulating and investigating alleged financial impropriety through the Royal Commission. This is certainly a very popular move politically with financial institutions having a poor reputation in the community as a result perceived power imbalance between individuals and institutions⁴.

The other alternative is for the government to regulate a policy response and this is not a remote possibility. Following the 2011 Queensland floods and the fallout from the ambiguous wording regarding flood and storm⁵, the Federal Government introduced a standard definition of flood to provide greater certainty regarding the coverage available to policyholders.⁶ Whilst this may not provide immediate comfort to those who have made claims during the pandemic, a policy response dictated by governments will certainly favour small policyholders over underwriters going forward.

- b. Insurers will simply issue blanket exclusions on pandemic coverage for years ahead leaving institutions without coverage or chasing coverage in the market with limited success. Though this creates opportunities for insurers who have prepared for hard markets, such as local government schemes⁷ who almost act as “last resort” for certain exposures, many will be left without coverage for pandemic.

As I observed above, whilst government may take steps to formalise definitions of pandemic coverage, or put political pressure on insurers to take a broader view on coverage, it is unlikely that, given the significant costs that coronavirus will have on the economy, the government will create a “insurer of last resort” to offer coverage going forward.

My assessment that government would not be likely to intervene is based on the Federal Government’s response to an inquiry that it commissioned Treasury to investigate in 2015⁸. The enquiry focused on making cyclone coverage more affordable as cyclones became more frequent and more intense in severity in northern Australia. Various ideas were canvassed including creating a government run mutuals or cyclone reinsurance pools.

The government’s response was focused entirely on regulatory instruments such as:

- *Ensuring consumers are treated fairly through the General Insurance Code of Practice; and*

⁴ AFR report 28 October 2018 “Royal Commission erodes trust in banks”

⁵ ABC report 10 April 2011 “Insurer denies dodging flood victims”

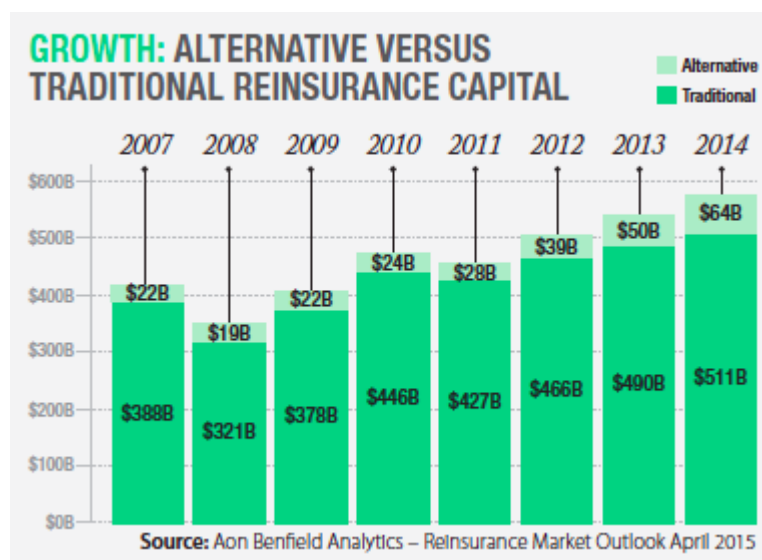
⁶ ABC report 11 April 2017 “Insurers move to clear up flood definition”

⁷ Insurancenews.com.au report 24 July 2020 “Councils return to mutual insurer as market hardens”

⁸ Treasury “Northern Australia Insurance Premiums Taskforce Final Report” dated 4 March 2016

- *Extending the unfair contract term provisions to contracts of insurance with proposals to be released in early 2018. (which were ultimately enacted)*

c. Alternative capital entities may enter the market and provide their own product that provides an insurance solution that makes up any shrinkage in coverage. I see this is a very likely outcome based on the experience of recent years where the amount of inflow of alternative reinvestment capital in the market has been significant.



The reasons why the alternative capital market may become a feature of the pandemic response and coverage generally are as follows:

- There are potentially higher returns on reinsurance premiums than bonds or equities which have performed poorly in the aftermath of the pandemic;
- Long term investment profiles which are suitable for large pension funds such as those in the United States which have invested heavily in reinsurance markets in recent years⁹;
- Risk diversification as property or casualty insurance has “low to zero correlations to other asset classes”¹⁰

This discussion will be the main focus of this paper.

Solution to potential impacts

Parametrics is an evolving method of placing insurance risks. Though it has been around for some twenty years and was initially used by traders to engage in risk transfers¹¹, insurers such as AXA Global Parametrics and Swiss Re have started to develop parametric products. Parametrics offers a flexible insurance solution because it decouples an insurance payout being dependent on physical damage to a client’s property occurring which is a limitation to standard insurance products.

⁹Pension Pulse Report October 28, 2013 “Will Catastrophe Bonds Wipe Out Pensions”

¹⁰ The Business Times Singapore Monday July 8 2019 “Alternative risk transfer taking insurance industry by storm”

¹¹ AXA Global Parametrics briefing note 14 January 2019 ‘Fast Fast Forward: Let’s Talk Climate’

Such a product would be incredibly useful in the case of a pandemic, because a virus doesn't cause actual damage to property but otherwise causes disruption to a client's business. The disruptions may include something as direct as injury or infection to a key person within the business, the disruption of trade as borders close, or an economic downturn that would not be ordinarily covered.

Parametrics works by linking an insurance payout to an index rather than to damage. A novel application of parametric insurance involved the World Health Organization placing coverage in West Africa to indemnify themselves for the costs of responding to the Ebola outbreak. Once it was established that 5,000 people had been infected with Ebola, the insurer settled the claim¹²

Given that:

- a. The insurers are now developing an appetite and, more importantly, the ability to understand and accurately price risks on a parametric basis;
- b. Pandemic risk is presently a significant and generally uninsurable risk under normal ISR or BI policies unless there is a bespoke arrangement in place such as the policy that Wimbledon had¹³;
- c. Australia is also dependent on international tourism which exposes hoteliers and other secondary industries to loss even where there is a limited spread of the pandemic (such as Queensland¹⁴); and

How would it address an uninsured risk such as Pandemic?

As the Ebola example makes clear, the ways a parametric policy could be applied are manifold depending on the ability of the parties to agree to an index that captures the loss events.

According to AXA Global Parametric, "About seven out of nine economic sectors are actually weather sensitive, already now without even taking climate change into the picture..." "The vast range of different types of climate and weather risks include frost, excess rainfall, drought, flooding"¹⁵

Cost and Benefits

As set out above, the benefits to insureds are manifold depending on their industry:

- a. Hoteliers and other tourism operators can cover their financial exposure to adverse events such as pandemic or even weather which is becoming more prevalent as the effects of climate change intensify¹⁶;
- b. A resources company may be able to protect its revenue streams in a nosediving commodities market¹⁷ by taking out one insurance policy not several positions in the open market;

¹² Munich Re briefing note 29 June 2017 'Insurance Scheme helps fight epidemics and pandemics'

¹³ Insurance Journal report April 13 2020 "Wimbledon Shows How Pandemic Insurance Could Become Vital"

¹⁴ Queensland Health data (30 September 2020) confirming only 1157 total COVID-19 cases

¹⁵ Insurance Business Magazine 4 April 2019 How parametric solutions are transforming the insurance industry"

¹⁶ Smithsonian Magazine May 2, 2019 'Climate Change has made droughts more frequent since 1900'

¹⁷ The Guardian July 30, 2020 'Shell reports \$18bn loss as global oil and gas prices collapse'

- c. Aged care providers, who have been especially hard hit, can insure themselves from loss of revenues or business interruption or even a liability exposure should a virus infect a facility¹⁸.

In the case of a liability exposure, an aged care facility may receive a settlement and then have significant freedom in how it deals with families or their solicitors in settling cases. This would be far more efficient for the insured because they do not need to show that the policy responds. They can also handle the matter in a way that minimises its reputational damage whereas a liability insurer would put the claimant to proof on causation and quantum.

As the liability insurer takes that conventional approach and the matter drags through the Courts, the facility continues to receive adverse press until it resolves. Indeed, even if it does resolve, the insured will receive the blame for the delay in settling 'grieving families' whereas that is simply a function of the insurer taking steps to minimise any financial settlement.

The main challenge in developing a parametric product (and wherein the costs in developing the product would be) is developing a baseline measure of an 'index' to which the policy would respond. For products involving natural catastrophes, developing a measure is not as challenging as there is sufficiently detailed historical data to allow insurers to make an informed view on their exposure.

The examples of an index could be the following:

- a. Actual case numbers in a jurisdiction (such as the Ebola scenario);
- b. The effective reproduction number of the virus in the community;
- c. The number of cases within a facility or workplace (which would be specific to aged care facilities where there is a cohort of vulnerable people or to hospitals);
- d. An index based on when "revenue per available room" drops below a value. This product has been developed by Lloyds only last year and has broader application.¹⁹

A parametric insurance solution has not previously been one that can be easily rolled out or scaled up because the information necessary for the insurer to price a risk and what is available to an insured may not match up. It would often also be the subject of negotiations between insured and insurer particularly in relation to a specific industry risk such as agriculture where individual climatic and soil conditions would drive different outcomes even in the same region.

A parametric solution is possible if a simple measure like "actual case numbers" is used as the benchmark as it was in Ebola. Other indexes based on the effective reproduction rate of the virus in the community can also be developed because we know from epidemiological data that the spread of the virus is generally based on factors such as:

- the strictness of a lockdown in a jurisdiction;
- the ability of a government to undertake an effective contact tracing program;
- the ability of a government to enforce a lockdown through the use of police or army; or

¹⁸ The New Daily August 18 2020 "Victorian aged-care centre faces coronavirus lawsuit"

¹⁹ Insurance Journal March 3 2020 "Parametric Insurance Could Offer Hotels Relief from Coronavirus Cancellations March "

- the availability of treatments to mitigate the effect of infection.

Therefore, actuaries can assess the likelihood of a spread of a virus and price risk to create a parametric product that has the advantages to both insured and insurers alike.

Conclusion

Insurers will be reluctant to cover claims or extend coverage to insureds due to coronavirus now and into the future. However, this creates a unique opportunity for other entities such as pension funds to offer a simple, easy to understand insurance product to a broad range of individual entities that provides them with the protection against pandemic that the market may not be providing now.

For the reasons set out in this paper, I see that parametrics as a solution to the potential for market failure within the pandemic insurance space. It is entirely possible that they may become more than a niche solution for farmers or hoteliers but also for a response for individuals or entities whose business has been affected by coronavirus.