Observations From the Covid-19 Pandemic

Aiza Yasmin Benyamin[1],
Chin Xiao Wei[2],
Daniel Nee,
Kelvin Hii, Logenthiran Kanisan, Yu Yen Hong (Nelson)
Actuarial Society of Malaysia

Malaysia had a difficult two years over 2020 and 2021. We, along with the rest of the world, faced a pandemic that caused loss of lives, placed enormous strain on healthcare and experienced heavy economic losses from loss of jobs, with certain industries like tourism and travel affected badly. In December 2021, unprecedented flash floods brought property damage and loss of lives to neighbourhoods and villages, and submerged towns. Considered in Internal Capital Adequacy Assessment Process or ICAAP terms, these are likely categorized as “one in one hundred years” events or events with a 1% likelihood of occurrence. This underlines two important considerations for actuaries - climate change[1] and pandemic[2]. Unfortunately, it remains likely there will be future occurrence of similar events even in the short term. This paper focuses on the outcome of the COVID-19 pandemic.

Actuaries also have to consider the wider impact on demography and the economy following these adverse events. The objective of this paper is to document events from the perspective of insurers, and to document observations from fellow actuaries in the working group on the COVID-19 impact.

We consider these from two perspectives. Firstly, documenting events of the pandemic will help provide flavour to the stress scenarios exercise when designing tests for future pandemic scenarios. As actuaries, it is important we perform our professional role to ensure insurers remain well capitalized to face future pandemics. Secondly, we consider a longer-term perspective of how the pandemic may influence our assumption-setting considerations for both valuation and for pricing of new business. We stop short of questioning how our industry should change in light of these learnings. Pertinent examples are, is it time for the introduction of pay as you go motor insurance policies; the introduction of advanced digitalization for new business sales (digital insurance); and simplifying the claims process?

Motor Insurance

Motor insurance remains a large part of Malaysia’s general insurance net premium. At the height of the pandemic in Q2 of 2020, the industry saw declining business due to deferral of insurance renewal and negligible sales of new vehicles. Movement control restrictions, however, meant lower claims

[1]Corresponding Author: secretary@actuaries.org.my

[1]https://www.actuaries.org.uk/practice-areas/sustainability/research-working-parties/climate-change-working-party

[2]https://covidactuaries.org/

ratio from fewer accidents with less vehicles on the road. In addition, the number of suspected fraudulent claims was also seen to increase as the economy went through a tough time.

It is worth mentioning that the different Motor segments exhibited different trends during the lockdowns. For example, while Personal Motor vehicles experienced lower usage due to lockdowns and remote work arrangements, specific segments of Commercial Motor vehicles experienced similar, if not higher, usages during the lockdowns, with the new norm of intensified delivery businesses.

As we came out of the first movement control restrictions with tax incentives encouraging car sales, motor insurers were vying for insurance premiums after a lacklustre performance during the first movement control. As the limitations of movement resulted in claim savings, insurers were then able to channel some of these savings to the consumers through premium discounts and sales incentives.

Mobility also had a strong correlation to the number of COVID-19 infected cases. There were several rounds of strict movement control which were implemented throughout 2020 to 2021 and the impact that they had on the mobility of the nation can be seen below.

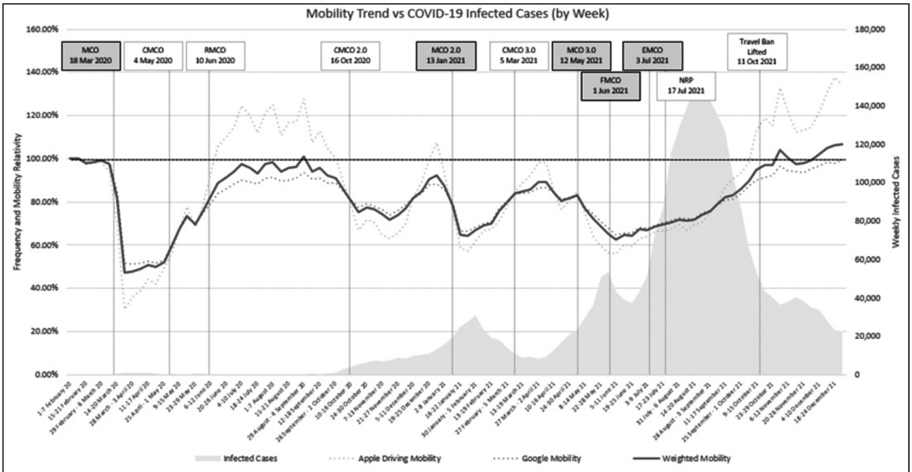
Phase 1 – Movement Control Order (MCO) 1.0 from 18 March 2020 to 3 May 2020

Phase 2 - Conditional MCO (CMCO) from 4 May 2020 to 9 June 2020

Phase 3 - Recovery MCO from 10 June to 31 December 2020

Phase 4 – CMCO in areas with high COVID-19 cases from 14 December 2020 to 31 December 2020

Phase 5 – Recovery MCO from 1 January 2021 to 31 March 2021



Source: *Google COVID-19 Community Mobility Reports - https://www.google.com/covid19/mobility/*
Apple Mobility Trends Reports - https://covid19.apple.com/mobility
Our World in Data - Coronavirus Pandemic Country Profile - https://ourworldindata.org/coronavirus/country/malaysia

Phase 6 – MCO 2.0 from 13 January 2021 to 4 March 2021

Phase 7 – MCO 3.0 from 1 June 2021 to 28 June 2021

Current measures are ongoing for targeted localities.

Mobility (driving) was severely impacted during the first MCO and subsequent MCOs in 2021, and rebounded during the relaxation of the lockdowns. Whilst the relaxation of the lockdowns was beneficial for the economy, it was also observed that any form of increase in mobility would see a subsequent increase in COVID-19 cases a few weeks later.

The various imposed lockdowns resulted in the courts not operating at full capacity; hence, the COVID-19 Act 2020 allowed the deferment of the closure of claims files which are time-barred, within the initial lockdown periods. For Motor insurance, this was applicable to third party bodily injury claims and resulted in a temporary shift in payment/ settlement patterns compared to historical payment trends.

We also observed that cost of repairs also increased significantly compared to pre-pandemic levels from poorer exchange rates and the global increase in the cost of fuel and materials.

Looking forward, as a larger percentage of the population gets vaccinated, the economy is slowly recovering. Some offices are accepting working from home (which happened for the most part of 2020 and 2021) as the new norm – if not fully, but partly. Does this mean less time on the road and would this influence future claims experience? Hence, should insurers allow for this new norm in their product design and pricing?

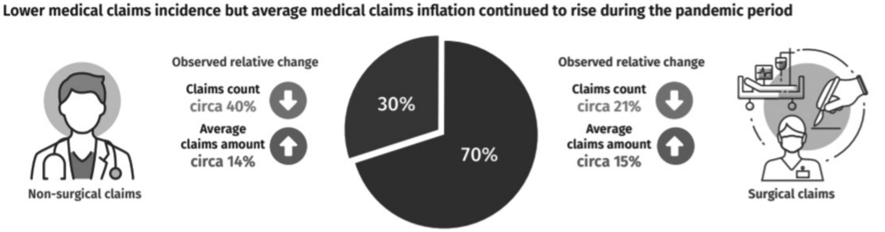
Reserving and pricing actuaries will find their work more challenging when using past data (i.e. either from pre-COVID or during lockdown) to estimate the level of claims under a 'new normal' environment. Further, reserving and pricing actuaries would also need to take into account the potential impacts of (1) significant changes in minimum/blind reserves and (2) Civil Law (Amendment) Act to the long-tailed Motor segment i.e. Motor Act/ Third Party Bodily Injury coverage and (3) changing trends due to the new normal adopted. With the impact of the pandemic having a significant impact to the data, the isolation of underlying trend for analysis has been more challenging, requiring actuaries to think outside the box.

Property Insurance – Business Interruption

In more developed countries, the extension of Property insurance in covering infectious/ contagious disease tends to be written in a 'looser' way, opening up a potentially wide interpretation of what is covered. However, in Malaysia, Property underwriters tend to be more conservative and the default Property insurance (Fire) cover does not include cover for Infectious Disease unless specifically opted for. In addition, even if the Infectious Disease cover was opted for, there are a few criteria to be fulfilled before any claim payments are eligible. Hence the exposure of COVID-19 claims to Property insurers was limited.

There remain concerns whether the precedents set by the UK Supreme Court could impact the judgements of local courts in the interpretation of whether the business interruption arising from the various COVID-19 lockdowns are covered under current coverage extension/wordings.

Diagram 2.2: Claims Experience Over the Pandemic Period by Claims Type



Note: The annualised relative change in claims count and average claims amount is based on a comparison between 2019 experience to that over the pandemic period (2020 up to 1H 2021). The annualised relative change experienced by each individual life insurer and family takaful operator may differ from the above aggregate statistics

Source: Bank Negara Malaysia estimates using data from life insurers and family takaful operators with significant medical business

However, Property insurance observed a hike in claims ratio over the pandemic-stricken years as there was increased frequency of large losses. As the movement control lockdowns were implemented, business activities were restricted and fewer resources were available to ensure proper risk control and management of the facilities. Potential fraudulent claims are also expected to increase as business starts to fail.

Travel Insurance

At the start of the pandemic, insurers experienced a significant spike in claims due to payments arising from travel cancellation and curtailments.

Since then, the Travel insurance business plummeted significantly as countries closed their borders and imposed various lockdowns. With the re-opening of borders and travel (to some extent), there remains the need for Travel insurance to offer COVID-19 related protection, of which insurers and reinsurers alike are somewhat reluctant to provide due to the significant uncertainty involved.

Medical Loss Ratios

Historically, medical claims have been subject to ever-increasing claims inflation year on year with loss ratios for most insurers increasing steadily before hitting a price adjustment phase. A pandemic scenario would typically have actuaries increasing the medical loss ratios assumed. However, during the pandemic, it was observed that loss ratios did not increase significantly. They in fact largely stabilized or even reduced to a certain extent for specific coverages. To understand this, we need to appreciate that in Malaysia, the cost of healthcare for COVID-19 patients during the pandemic was borne directly by the government in government-run medical facilities. Hence, the exorbitant cost of prolonged stays in ICU, oxygen respirators and related healthcare was not felt by insurers.

The other observations relate to public sentiment or behaviour. Elective surgeries were largely postponed by the insured, for fear of contracting the virus in medical facilities. Hence, there were fewer claims (reduced frequency). However, those that needed medical care were more serious cases and hence saw larger claims size (higher severity). This observation was documented in Bank Negara's financial stability review report[3] (extracted above).

Going forward, as public sentiment reverses, the industry expects the suppressed latent claims to re-emerge. Further, the lower incidences of hospitalization from common non-surgical treatments such as stomach flu and dengue fever observed during the pandemic are expected to return to past trends. From an actuarial perspective, the claims liabilities are probably lower than observed in the past. However, the premium liability in 2022 (from future events) are likely to go back to normal levels or increase from the latent claims.

One further thing to note is as COVID-19 moves from being classified as a pandemic to endemic, the government is expected to reduce support on COVID-19 medical treatments, which means individuals would need to cover the cost of treatment going forward. Whether this would be covered by insurance will depend on the clauses within individual medical policy contracts, which is a developing area. However, as the community is now largely vaccinated, the severity of COVID-19 hospital admissions may not be as costly as we observed a lower ICU utilization rate by COVID-19 cases. There are also lower COVID -19 hospital admission rates as observed by fewer cases categorized as Categories 3-5[4].

All of the above observations would create challenges in setting the appropriate loss ratio assumption for both pricing and valuation actuaries. Further question marks are also likely to arise. For example, on IBNR assumptions, some insurers observed a longer time between policyholders incurring the claims and claims being reported to the insurer. However, this could be restricted to the pandemic period and may not be expected to continue. A second question mark is the challenge in pricing for long COVID related claims as data on this is still sparse.

---

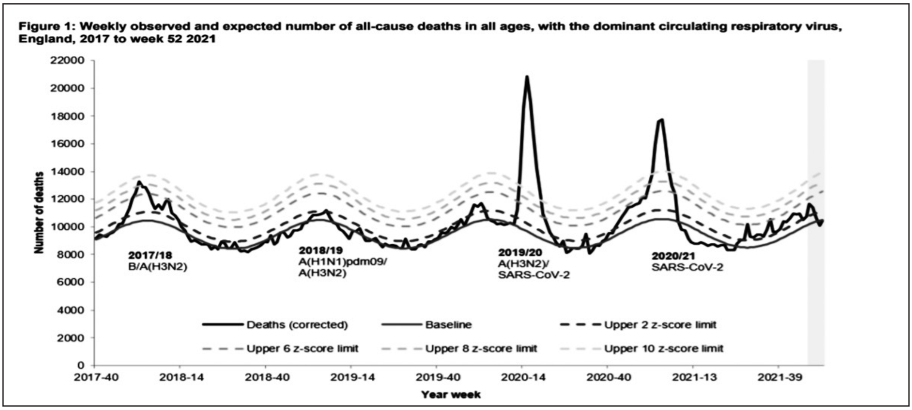
[3]https://www.bnm.gov.my/documents/20124/4782528/fsr2021h1_en_ch2_fi.pdf (page 71)

[4]The treatment plans for COVID-19 patients in Malaysia are based on 5 levels of severity or clinical category of patients:

- **Category 1: No symptom**
- **Category 2: Symptomatic without lung infection**
- **Category 3: Symptomatic with lung infection**
- **Category 4: Symptomatic with lung infection and need oxygen supplementation**
- **Category 5: Critical patients with multiple organs complication**

Figure 1

Weekly Observed and Expected Number of All-cause Deaths in All Ages, with the Dominant Circulating Respiratory Virus, England 2017 to Week 52 2021



Reference: https://www.gov.uk/government/statistics/excess-mortality-in-england-weekly-reports

Mortality Rates

For life insurers, a pandemic is typically met by an increased mortality rate assumption. This "excess mortality"[5] is to be applied additionally on best estimate and provision of adverse deviations (PRAD) during the assumed pandemic period. One of the more detailed studies on mortality was conducted by a long-running government operation within the UK[6]. What they observed during the beginning of the pandemic was that the excess mortality was still within predicted margins; however, in certain periods these have gone dramatically bust. Figure 1 shows the results of the study in England.

Here in Malaysia, the Life Association of Malaysia recently commissioned a mortality study for the period 1996 – 2020. Results of the study should be available within the year.

In Malaysia, we were spared the full brunt of the pandemic due to decisive government actions. The R0[7] in Malaysia for 2021 hovered at about 1.

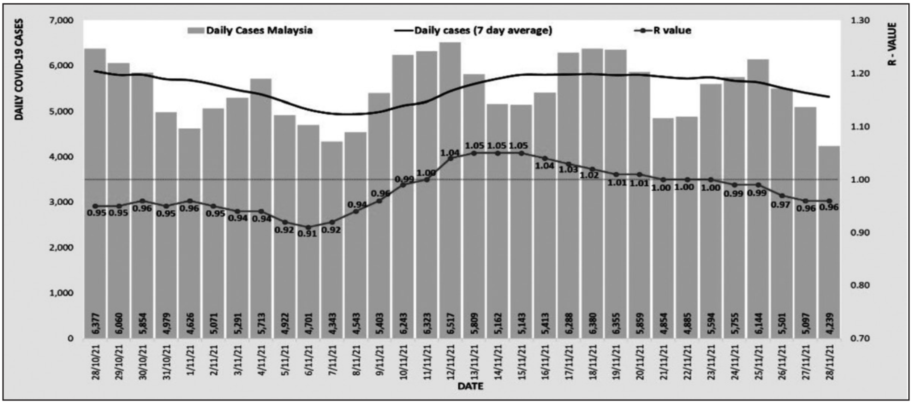
The movement control order ("MCO") which heavily restricted movements from 18 March to 3 May 2020 was painful to the economy but prevented the pandemic spreading to (at the time) an unvaccinated population. Subsequently, various levels of MCO were initiated depending on the case numbers and death counts.

---

[5]https: Excess mortality is a term used in epidemiology and public health that refers to the number of deaths from all causes during a crisis above and beyond what we would have expected to see under 'normal' conditions https://ourworldindata.org/excess-mortality-covid

[6]https://www.gov.uk/government/statistics/excess-mortality-in-england-weekly-reports

[7]R-naught (R0) is a value that can be calculated for communicable diseases. It represents, on average, the number of people that a single infected person can be expected to transmit that disease to.

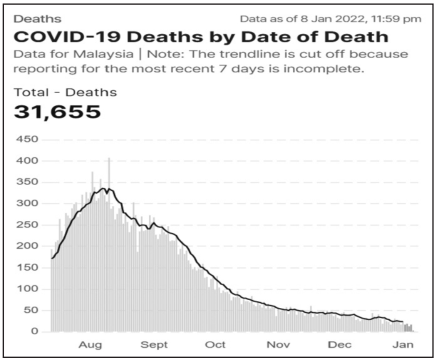


Reference: https://covid-19.moh.gov.my/kajian-dan-penyelidikan/nilai-r-malaysia/1121/r-naught-malaysia-hari-ini-28112021

The chart tracking deaths by date shows that the number of deaths dropped from the height of the pandemic, largely as at January 2022, 78.5%[8] of the Malaysian population was fully vaccinated.

The vaccination rate translates to 98% of adults. The vaccination programme for ages 5 to 11 is currently ongoing.

As witnessed globally, the distribution of deaths was highly skewed towards the older ages[9].



[8]https://covidnow.moh.gov.my/deaths/

[9]https://covidnow.moh.gov.my/deaths/

COVIDNOW | Malaysia | Home | Vaccinations | Deaths | Ventilations | ICU | Hospitalisations | Cases | EN

	0 - 4	5 - 11	12 - 17	18 - 29	30 - 39	40 - 49	50 - 59	60 - 69	70 - 79	80+
1 week ago	0.0%	0.0%	0.6%	1.8%	1.8%	8.9%	11.2%	20.7%	32.0%	23.1%
2 weeks ago	0.5%	0.0%	0.0%	1.5%	4.5%	7.5%	10.5%	25.0%	28.5%	22.0%
3 weeks ago	0.4%	0.9%	0.0%	2.6%	2.2%	7.0%	14.0%	23.3%	23.7%	25.9%
4 weeks ago	0.4%	0.0%	0.0%	1.3%	4.2%	3.8%	14.0%	25.0%	26.3%	25.0%
5 weeks ago	0.0%	0.4%	0.0%	1.1%	3.7%	8.4%	15.3%	25.6%	27.4%	18.3%
6 weeks ago	0.0%	0.0%	0.0%	1.6%	3.5%	8.2%	13.9%	23.7%	27.1%	22.1%
7 weeks ago	0.3%	0.0%	0.0%	0.3%	2.3%	5.5%	15.0%	29.3%	27.7%	19.5%
8 weeks ago	0.6%	0.0%	0.3%	0.0%	2.6%	7.8%	13.0%	24.1%	25.5%	26.1%
9 weeks ago	0.9%	0.0%	0.0%	1.4%	1.2%	6.9%	12.9%	23.9%	25.6%	27.3%
10 weeks ago	0.0%	0.0%	0.2%	2.4%	3.1%	6.0%	12.4%	22.9%	27.6%	25.5%
11 weeks ago	0.4%	0.0%	0.2%	1.0%	4.6%	6.6%	11.6%	25.9%	22.4%	27.3%
12 weeks ago	0.2%	0.4%	0.4%	1.1%	3.8%	6.9%	13.4%	24.1%	28.7%	21.1%

[7] https://covidnow.moh.gov.my/deaths/

From the table below, the efficacy of the vaccines to prevent death varied. However, this did not take into account the characteristics of the underlying population taking each vaccine. For example, the Astra Zeneca vaccine which has the lowest death rate in the table, is typically taken by the younger (below age 60) and the healthier population. Other vaccines were delivered first to the elderly and those with co-morbidities. The choice of vaccines was limited as the nation was racing against time. However, it does not detract from the fact that those unvaccinated remain at risk and have a higher likelihood of death on contracting the virus. Based on the above table from MOH, the death rate due to COVID-19 infection of the unvaccinated is 2.87 out of 1000 compared to 0.22 in 1000 of those vaccinated.

What we learnt from the pandemic:

i. The COVID-19 pandemic impact was uneven across ages. Older ages were more susceptible to deaths -75% of deaths were of those above 60.

Vaccine Effectiveness in Malaysia

Status of Vaccination	Death Rate	Effectiveness against Death [2]
Fully Vaccinated [1]	0.022%	92.3%
Pfizer	0.011%	96.1%
Sinovac	0.041%	85.7%
AstraZeneca	0.006%	97.8%
Sinopharm	0.008%	97.1%
Unvaccinated	0.287%	

[1] *Fully vaccinated are defined as individual who has received 2 doses of Covid-19 vaccines for more than 14 days and individual who has receive single dose of Covid-19 vaccines for more than 28 days*

[2] *Effectiveness against Death = 1 – (Death % Each Vaccine Category / Death % for Unvaccinated)*

Source: Ministry of Health Malaysia - https://github.com/CITF-Malaysia/citf-public/blob/main/vaccination/vax_malaysia.csv

Children below 18, although carriers, were mostly asymptomatic and did not seem to exhibit critical/fatal symptoms.

ii. Infected patients with co-morbidities across age groups were worse-off.

iii. There were higher numbers of ICU utilization and deaths rates of the unvaccinated as against vaccinated

What was, in hindsight, not surprising, is the lower accident-related deaths, particularly during the various MCOs. On employee benefit and mortgage business, insurers have anecdotally noted lower reported death. However, insurers are expecting a possible delay in reporting on bancassurance and group business, given working from home ("WFH") is the new norm and may render some offices less efficient. IBNR provisions typically uncommon for life insurers should now be considered.

The pandemic is also not yet over – new variants continue to emerge. The Omicron strain has prompted travel restrictions amidst the busy Christmas travel period. Closer to our industry, reinsurers are assessing term rates. There have been hikes in term rates offered in countries in the Asia Pacific region like India[10] and Australia and the move is likely to make its way to the reinsurance market here.

The other consideration is the status of lives who have survived COVID-19 infections, whether health complications would render them impaired lives. A recent news article[11] reported that around 98% of new cases are asymptomatic or mild. However, for 2%, the cases can be severe. For some, lasting health effects may include long-term breathing problems, heart complications, chronic kidney impairment, stroke and Guillain-Barre syndrome which is a condition that causes temporary paralysis[12]. Some adults and children experience multisystem inflammatory syndrome after they have had COVID-19.

In short, there is a higher probability of adverse mortality rates across the insured population. The adverse mortality experience is highly skewed towards the older ages, including those above 50. This is compounded by poorer health of the segment of COVID-19 Category 4 and 5 survivors.

With IFRS 17 stripping out insurance service components against investment components, insurers' products are increasingly going back to mainly protection cover, rather than savings. Hence the question for the actuary setting reserving basis and pricing basis: Should mortality rates be increased and for what length of period? The answer may be yes but these are not easy quantifications.

The Economy and Investment Performance

Malaysia's economy took a hit during 2020 and 2021 with several industries such

---

[10]https://www.asiainsurancereview.com/News/View-NewsLetter-Article/id/78932/Type/eDaily/India-Life-insurers-raise-term-life-premium-rates-under-pressure-from-reinsurers

[11]https://www.thestar.com.my/news/nation/2022/01/09/covid-19-almost-99-of-2888-new-cases-on-sunday-jan-9-in-categories-one-and-two-says-health-dg

[12]https://www.mayoclinic.org/diseases-conditions/coronavirus/in-depth/coronavirus-long-term-effects/art-20490351#:~:text=In%20some%20people%2C%20lasting%20health,they%20have%20had%20COVID%2D19%20

[13]Key Statistics of Labour Force in Malaysia https://www.dosm.gov.my/

as travel, F&B and retail suffering worse fates than others. Many Malaysians lost their jobs and livelihood. Malaysia's Department of Statistics announced that the country's unemployment rate for May 2020 was at 5%, or 778,800 people, the highest in almost a decade[13]. More than a year later, in October 2021, the unemployment rate only declined to 4.3%. However, the underlying business for insurance was more focused on the M40 and T20 segments and hence the hardships faced by the B40 and the financially vulnerable segment did not significantly impact the industry. On the back of this scenario, there is now a higher appreciation of life and health insurance coverage as persistency on life insurance has improved. However, new business on traditional distribution channels was impacted by limitations to face-to-face sales. Direct channels generated interest and were seen as a viable alternative for simpler insurance needs for example, online motor aggregators such as Bjak.

Increased interest and take-up of insurance has been observed since the pandemic. Most notably, the Perlindungan Tenang Voucher (PTV) programme by the Government of Malaysia succeeded in enrolling 1.7 million Malaysians[14] from the B40 segment between 30 September 2021 to 31 December 2021 in various Perlindungan Tenang[15] (microinsurance) products offered by insurance and takaful operators. The government has increased the allocation of the PTV programme to RM75 from 1 January 2022.

We saw from the pandemic that our insurance industry is well capitalized to meet unexpected challenges. To manage some of the short- term volatility in the Capital Adequacy Ratios that in normal circumstances would trigger mitigating actions by the insurer and the regulator, Bank Negara introduced some relaxation on the computation of interest rate risk charges[16]. These charges were to essentially capture the mismatch of assets and liability movements on interest rate movements.

---

[14]PTV Utilisation Daily Report [2021 - RM50] 19JAN2022

[15]www.mycoverage.my/perlindungan_tenang/

There were also measures imposed on insurers to allow deferral of premium payment without interruption of cover. This was available on application up to December 2021 but was not significantly taken up by policyholders.

ITOs (Insurers and Takaful Operators) also responded responsibly to the pandemic. For example, insurers under Life Insurance Association of Malaysia offered additional relief measures for policyholders in facing the COVID-19 crisis[17]. The Life Insurance Association of Malaysia (LIAM), Persatuan Insurans Am Malaysia (PIAM), and Malaysian Takaful Association (MTA) have set aside a RM 10 million COVID-19 Test Fund, which was set up to support the government's efforts to conduct more tests on Malaysians who are exposed to the COVID-19 virus.

Extract from BNM publication: Coping with COVID-19: Risk Developments in the First Half of 2020

Diagram 4

Regulatory and Supervisory Measures to Facilities Premium/ Contribution Deferment

Enhanced risk capture in line with RBC enhancements

- Adjustments to the stress factor caps of interest/profit rate risk capital charges, from 40% to 30%, effective from 31 March 2020
- Consideration for ITOs to adopt alternative enhanced methodologies for calculating interest/profit rate risk capital charges

Temporary measures to facilitate assistance to affected policyholders/takaful participants*

Capital	• Waive credit risk capital charge for exposures related to deferred premiums/ contributions • Allow drawdown of capital buffers below the Individual Target Capital Level on a case-by-case basis
Investment-linked business	• Flexibility on compliance with sustainability requirements for premiums/ contributions • Simplified disclosure of sustainability outcomes for policy/certificate alterations, subject to appropriate safeguards
Reverse repo	Allow access to the Bank's reverse repo facility to meet liquidity needs

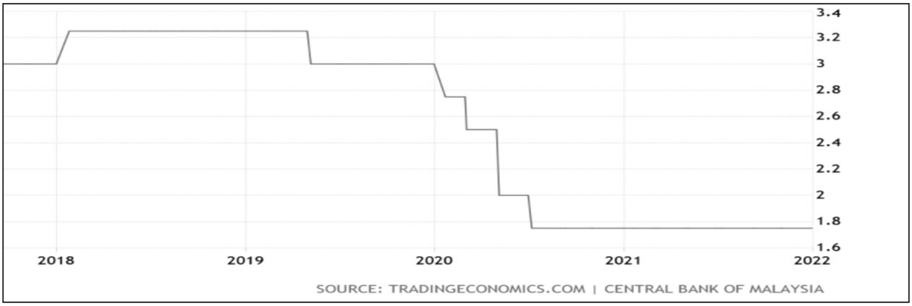
Ease compliance and operational burden

- Extend timelines for regulatory, supervisory and statistical submissions

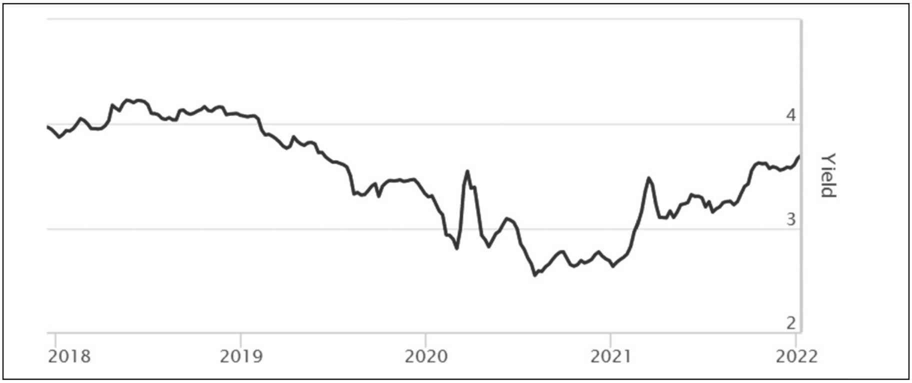
[16]**https://www.bnm.gov.my/documents/20124/1395181/ch1.pdf**

[17]**Life-Insurance-Companies-Offer-Additional-Relief-Measures-for-Policyholders-in-facing-the-COVID-19-crisis_21032020_2a.pdf (liam.org.my)**

Interest Rate Movements



Malaysia's 10-year Government Bond Yield



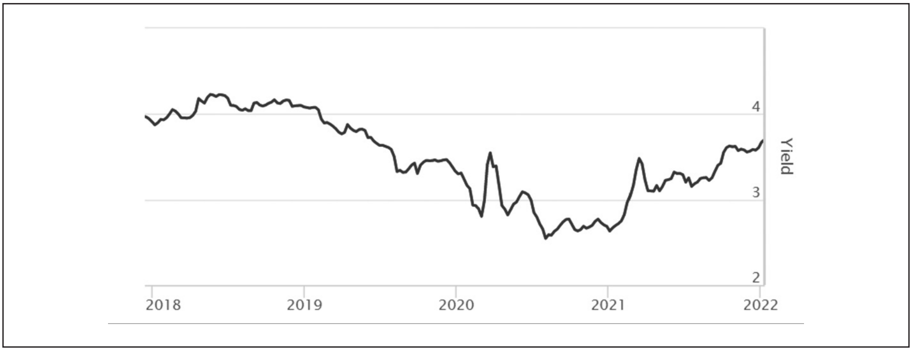
Reference: http://www.worldgovernmentbonds.com/bond-historical-data/malaysia/10-years/

Bank Negara's financial stability report[18] noted that the insurance and takaful sector recorded lower profitability during the first half of 2021 compared to the same period in 2020, the main driver being weaker investment performance. To reiterate, lower performance not from poor underwriting results due to the pandemic but driven by poor investment performance. In subsequent periods, the underwriting experience for life insurance is likely to have worsened.

Life insurers in Malaysia are largely invested in fixed income with some exposure to domestic equities. With the availability of GII and sukuks, shariah-approved equity white list in Malaysia, takaful operators' assets are held similarly. On the fixed income portfolio, Asset Liability Management ("ALM") consideration meant that durations of assets against liabilities are not significantly wide with many ITOs pursuing a more matched position in their choice of assets.

[18]**https://www.bnm.gov.my/documents/20124/4782528/fsr2021h1_en_ch2_fi.pdf**

FTSE Bursa Malaysia KLCI (^KLSE) index movement



Reference: https://finance.yahoo.com/chart/%5EKLSE#

When interest rates and yields dropped during the early part of the pandemic, ITOs actually saw a run on their fixed income assets with values of their portfolio increasing. However, in the same period, the equity market suffered a sharp drop.

The decrease in interest rates put pressure on ITOs with longer liabilities. Typically, asset duration is still comparatively shorter as liability duration on insurance and takaful products can be long (for e.g. on mortgage-related credit protection types and on whole life plans).

The equity market later improved, primarily due to an active retail market, on the back of growth of glove stocks in response to the pandemic. To provide some context, Top Glove was trading at sub RM2 pre-pandemic and reached RM9.39 at its peak in August 2021, an increase seen over a very short period.

Recently, the US Fed's projected multiple rate hike in 2022 driving an increase in interest rate in tandem with a recovering economy resulted in pressure on fixed income asset value in the past few months. The volatility in yield makes it even more so important that insurers keep a duration matching liabilities and remain vigilant of changing circumstances.

The fluctuations in yields and market value were felt more acutely by participating funds with legacy business. Bonus scales need prior Bank Negara approval to be revised and prospective reserve is based on a fund-based yield, rendering the liability reserves bases "fixed" in contrast to a fluctuating market.

Although earnings were undoubtedly impacted, the industry proved resilient in meeting solvency and capital requirements, in part from robustness of applying Internal Capital Adequacy Assessments ("ICAAP").

Conclusion

The COVID -19 pandemic has given insight into a real case adverse scenario and challenged some of the assumptions actuaries have traditionally made in stress testing to assess adequacy of capital (ICAAP).

An equally crucial challenge ahead is to ensure assumptions underlying reserving and pricing are robust enough to allow for expected experience under the new norm. This is by no means an easy feat and the actuarial control cycle, an important part of the actuarial skill set where experience is constantly monitored and assumptions adjusted, should be effectively utilized to this end ■

Reference

The official Malaysia government website for data and insights on COVID-19 : https://covidnow.moh.gov.my/

https://www.soa.org/resources/research-reports/2020/impact-coronavirus/

https://covidactuaries.org/

https://actuaries.asn.au/microsites/pandemics-resource-centre/covid-19-articles