

Bulletin

Outcomes of our first Life Insurance Industry Stress Test.

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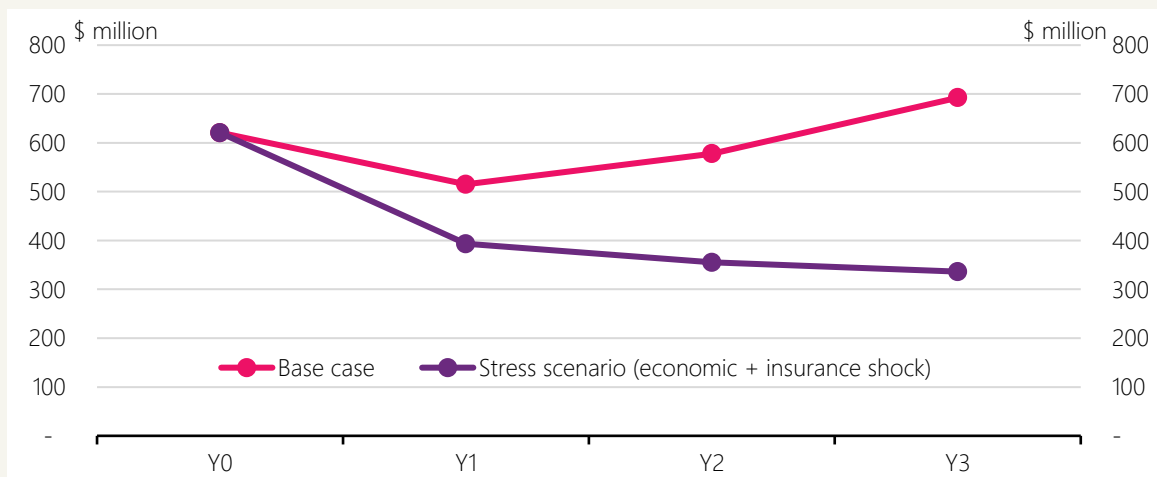
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Executive Summary

- Our industry stress test programme now covers the three main financial sectors we regulate – Banking, General Insurance and now Life Insurance. We have established a regular pattern of stress testing as noted on our website with bank stress tests carried out annually and General Insurance and Life insurance alternating every second year.
- The 2022/23 Life Insurance Stress Test was our inaugural stress test focussed on the Life Insurance sector. It was designed to assess the resilience of life insurers to severe but plausible shocks, develop a platform for future stress tests of the life sector, and improve stress test capability of insurers. It was not a pass or fail exercise.
- We would like to acknowledge the contributions and efforts of the five life insurers - AIA, Asteron Life, Cigna, Fidelity Life and Partners Life - that participated in the 2022/23 stress test.
- The stress test scenario comprised an economic shock and insurance shock. The economic shock consisted of worsening economic conditions with high inflation and rising interest rates. The insurance shock combined long COVID, a new pandemic and higher mortality and morbidity rates. Both shocks included ratings downgrades to reinsurers to the New Zealand market. The scenario covered three years from 2023 to 2025. It is hypothetical and does not represent the Reserve Bank's most likely case.
- Insurers used their own models to estimate the effect of the scenario on their financial conditions. They submitted detailed results for profit, balance sheet and solvency before and after mitigating actions. The Solvency Margin (SM) was used to measure the resilience of insurers to these shocks. The stress results were benchmarked against a base case submission which was absent the prescribed shocks.
- The results showed that all insurers could maintain their SM above zero under the stress scenario and still pay out elevated claims costs to their policy holders. The aggregate SM remained well above the regulatory minimum of zero in all years but was over 50 percent lower in Year 3 (Y3) than the base case (excluding shocks) as shown in figure 1. Insurers were well positioned to withstand the economic shock, despite unrealised losses on long-term bonds. However, the insurance shock had a much greater impact due to higher claims expenses than the base case.
- The effects of the scenario caused the SM of some insurers to fall outside their own risk appetite and triggered mitigating actions. These actions included, cost reductions, premium increases, reductions in advisor commissions, changes to reinsurance arrangements and dividend cuts.
- Lessons learned here will be used to improve the design of the 2024 stress test.

Figure 1: Aggregate Solvency Margin for base case and stress scenario



Background¹

Stress tests serve an important purpose for regulators and financial entities by providing a forward-looking lens on assessing the resilience of an entity's balance sheet to severe but plausible scenarios and on whether the risks pose systemic concerns.

Following on from our first General Insurance Industry Stress Test in 2021/22, we expanded our regulatory stress test programme to include life insurers for the first time. This 2022/23 Life Insurance Industry Stress Test (LIIST) involved the five largest New Zealand incorporated life insurers who make up over 75 percent of the market as measured by gross premium revenue for financial years ending in 2021.

The aim of the 2022/23 LIIST was to deliver on its main purpose of:

- assessing the resilience, in particular the solvency, of the large Life Insurers to a severe but plausible stress scenario combining economic and insurance shocks;
- improving stress test capability, both in the industry and at the Reserve Bank; and
- establishing a framework for future Reserve Bank life insurance industry stress testing.

The choice of scenario was influenced by the recent COVID pandemic and a worsening economic outlook with 40-year high rates of inflation and rising interest rates. We were interested in exploring these risks in our first LIIST scenario. In addition, we wanted to test the impact of a reinsurance shock which had a large impact in our 2021/22 General Insurance stress test - we did this for the LIIST by way of rating downgrades to reinsurers providing reinsurance to the New Zealand market.

The LIIST consisted of one single overarching scenario that was modelled by insurers in two incremental stages to allow us to identify the effect of the shocks separately. Stage 1 is the economic shock which included a reinsurance downgrade. Stage 2 adds an insurance shock with additional reinsurance downgrades. We deemed the scenario as severe but plausible. However, it is hypothetical and does not represent the Reserve Bank's view of the most likely future outcomes.

Economic shock

The economic shock is based on the scenario used in the 2022 Bank Industry stress test.

We used this scenario to test how the value of insurers' assets and liabilities may change over a 3-year period due to a combination of:

- Slower economic growth with the unemployment rate increasing to 9.3 percent;
- An inflation rate which, whilst falling, remains well above the Reserve Bank's target band precipitating an increase in the Official Cash Rate;
- A 200 basis point increase in bond yields with most of the increase occurring in Y1 and credit spreads on 5-year BBB-rated corporate bonds peaking at 400 basis points in Y1;
- A cumulative fall in house prices of 40 percent, returning the national house price index close to the level of June 2016, and equities 30 percent lower.

¹ We would like to acknowledge the contribution of Roshane Samarasekera to this article, a former adviser at the Reserve Bank.

Reinsurance downgrades: Due to similar economic conditions globally, reinsurers providing reinsurance cover in the New Zealand market experience a 2-notch downgrade at the end of Y2. Insurers are assumed to not have sufficient time to make changes to their existing reinsurance programmes in light of the downgrades.

The variable paths provided to insurers can be found in Appendix A. A more detailed narrative can be found in the 2022 Bank Industry Stress Test results found on our website.

Additional insurance shock

Stage 2 of the scenario envisages the period of economic stress described above coinciding with a time when COVID-19 has become endemic in New Zealand and the effects of long COVID are starting to emerge. This is followed by a new pandemic in Y3.

In Y1, levels of mortality and morbidity claims are elevated, driven by continued waves of COVID-19. These impacts are exacerbated by higher non-COVID claims as a result of large delays in elective treatment and routine scanning over the previous two years, and the pressures on the health system in terms of staffing resources. The deteriorating economic environment and mental health issues driven by previous lockdowns and periods of uncertainty also lead to increased disability income insurance claims and a decline in disability income insurance claim termination rates as policyholders stay on claim for longer. Initial impacts of long COVID also start trickling through making survivors more vulnerable to other diseases and increasing their mortality and morbidity risks. New business levels decline, and lapses increase as the New Zealand public respond to the higher unemployment, increased cost of living and higher interest rates.²

In Y2, the mortality impacts tail off. However, the morbidity impacts that occurred in Y1 are expected to continue in Y2, with the long COVID related impacts set to worsen further resulting in increased disability income, trauma and total permanent disability incidence rates. New business levels remain low, but the impact on lapse rates is lower than it was in Y1, as a majority of the policyholders expected to have lapsed their policies are assumed to have done so in the first year.

In Y3, a new pandemic occurs at the beginning of the year increasing the mortality rate across the population. Lapse rates improve as people begin to value the importance of retaining their policies in light of the new pandemic. However, new business levels continue to remain affected as advisors and members of the public shun face-to-face transactions during the new pandemic.

Reinsurance downgrades: The onset of the new pandemic triggers a further downgrade in reinsurer strength ratings at the end of Y3. There is a 2-notch downgrade in the strength rating of the reinsurer that accounts for the largest proportion of the insurer's reinsurance recovery risk capital charge and a 1-notch downgrade in the strength rating of all other reinsurers.

The insurance assumptions have undergone a robust review process with input from subject matter experts within the Reserve Bank and one of New Zealand's leading infectious disease experts. Our process allowed participating entities an opportunity to have input in the design of the scenario. The shocks were benchmarked against historical episodes where available, other regulatory stress tests, notably the 2021 EIOPA stress test, and the prescribed solvency assumptions set out in the Reserve Bank's Life Insurance Solvency Standard. The final scenario received sign-off from our Financial Stability Committee. The variable paths and benchmarking are provided in Appendix B.

² The lower new business volumes assumption was a feature of stage 2 rather than stage 1 which focussed more on a disruption in financial markets along with higher interest rates, declines in asset prices, and high inflation.

Insurer modelling of the stress scenario

The start date of the economic shock was calibrated to 1 July 2022. Y0 was the 12 months to end-June 2022. The base case and the stress scenario covered a 3-year period. Insurers either used an end-June or end-September balance date to align to their reporting periods.

Insurers used their own models and developed additional lower-level assumptions consistent with the prescribed scenario narrative and variables, to estimate the effect of the scenario on their financial conditions. This was done by applying the prescribed economic and insurance shocks to an underlying base case (free of shocks). The base case was aligned to the insurer's most recent business plan that has been approved by the Board and covers the period of the stress test. Any existing allowances made for COVID-19 related impacts within the assumptions used in the business plan were retained for the stress test exercise.

Insurers submitted detailed results for profit, balance sheet and solvency margin firstly for the effect of the economic shock impacts and then the effect of the combined economic and insurance shock. This allowed us to identify the impact from the insurance shock as the difference between the results of the overall scenario from the economic shock, whilst recognising there may be some interaction between the two shocks.

The results were provided before and after mitigating actions. Mitigants are significant recovery actions that would not automatically flow from the scenario.

The stress test was conducted under the existing accounting and solvency standards, i.e. IFRS4 and the Solvency Standard for Life Insurance Business 2014 (incorporating amendments to November 2018).³

Results before mitigating actions

Profit results

Base case

The aggregate net annual profit after tax (NPAT) improves from a loss in Y0 in the base case to \$400 million by the end of Y3 of the scenario as shown in figure 2. The recovery is mainly due to a turnaround in investment revenue from \$226 million of net unrealised losses recorded in Y0, due to rising interest rates, which is not the case for Y1 to Y3.

Economic shock

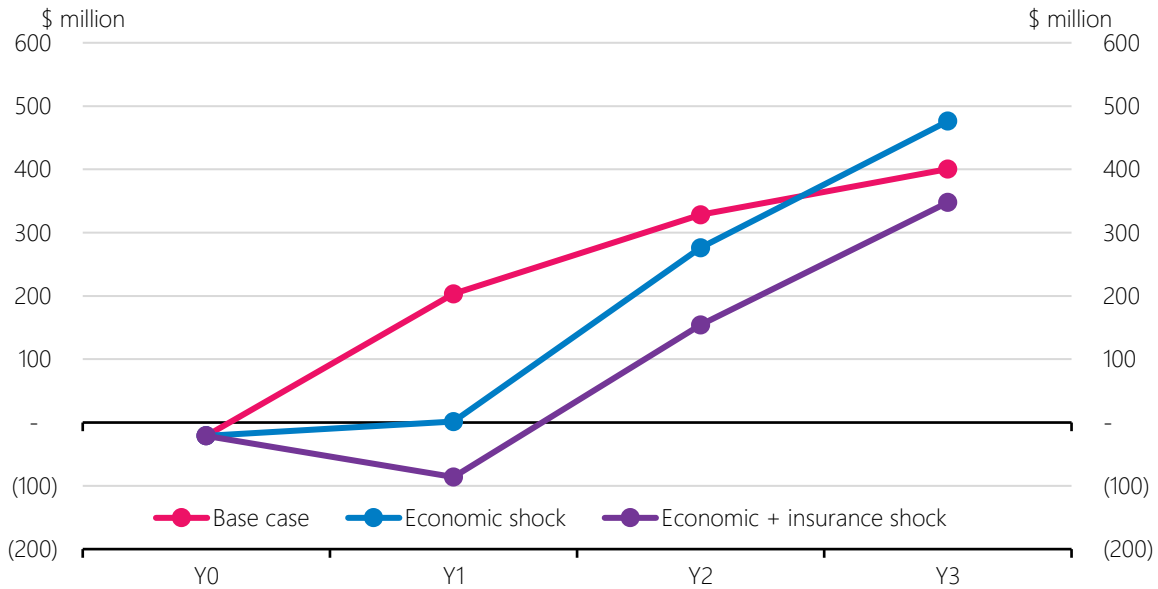
The economic shock caused further unrealised losses in Y1 (\$200m) as interest rates continue to rise (more than base case) and this offsets other profit drivers. The rise in bond yields (approximately 200 basis points in Y1) reduces the market value of bonds and the fall in the market value is recorded as an unrealised loss in annual profit. Note that these losses would reverse if interest rates fell, and if the bonds are sold the losses would be crystallised. As interest rates begin to level off in Y2 with a small fall in interest in Y3, unrealised gains are no longer a drag on profit. By Y3 there are small unrealised gains (\$11 million) and together with higher interest income from cash holdings, profit in the economic shock rises above the base case.

³ Solvency Standard for Life Insurance Business 2014 (incorporating amendments to November 2018)

Insurance shock

The insurance shock caused a reduction in profits in all years compared to the economic shock and the base case. The main impact is from the higher claims expense – claims paid plus provisions for future claims - due to higher mortality and morbidity rates than the base case. The claims ratio net of re-insurance increased from an average of 49 percent in the base case to 57 percent under the insurance shock over the 3 years.

Figure 2: Aggregate NPAT for base case, economic shock and economic + insurance shock.



Solvency Margin results

Insurers are required to maintain a minimum amount of solvency capital (minimum solvency capital) as determined by applying the Reserve Bank solvency standards. The difference between Actual Solvency Capital (ASC) that insurers hold and the minimum solvency capital (MSC) they are required to hold is the SM which must remain positive.⁴ The economic and insurance shocks affect both the ASC and MSC. We use the SM to assess the resilience of insurers in this stress test.⁵ However, this is not a pass or fail exercise. The analysis focuses on Y3 as it is the low point for the stressed SM. The discussion is at an aggregate level and some points may not apply to every insurer due to differences in business mix and modelling.

Overview

The base case SM falls in Y1 due to the MSC growing more quickly than the ASC which is constrained by relatively high dividend payments. The base case SM improves in outer years as dividends return to more normal levels and the ASC grows faster than the MSC. The combined economic and insurance stress reduced the SM significantly in all years. The low point of the aggregate SM under stress occurred in Y3 by which time it had fallen 51 percent below the base case shown in figure 3. The aggregate SM fell to a minimum of \$336 million in Y3 compared to \$692 million for the base case.

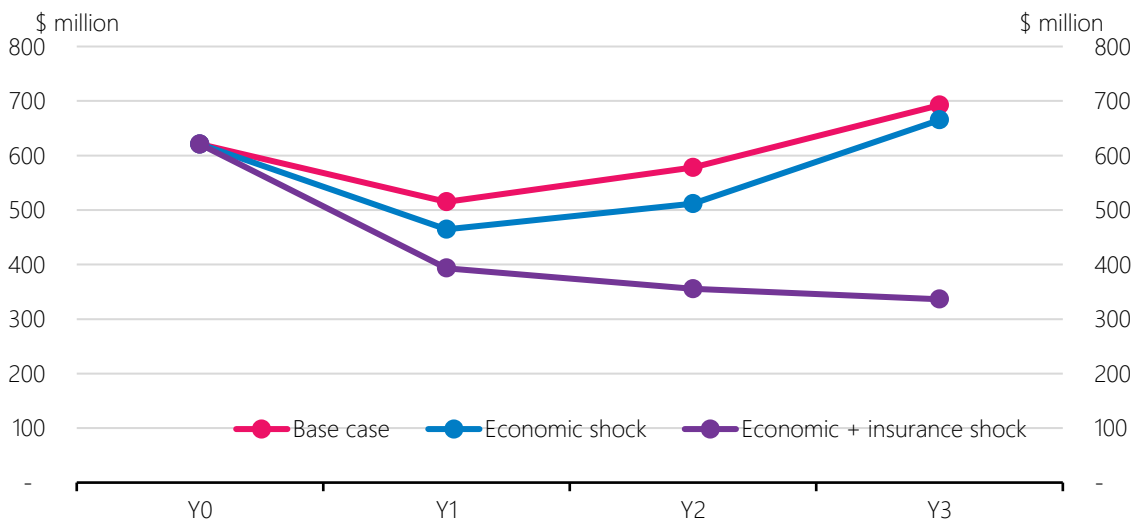
⁴ Licenced insurers must notify the Reserve Bank if it has reasonable grounds to believe it will fail to maintain a SM within the next three years.

⁵ Whilst the standards require Insurers to maintain a positive SM for statutory funds we have only assessed results at a Group level.

Of the \$356 million reduction in SM compared to the base case:

- \$273 million related to the Insurance shock excluding the effect of reinsurance downgrades;
- \$78 million related to the reinsurer downgrades (\$20 million from the economic shock and \$58 million from the additional downgrades in the insurance shock);
- \$47 million related to the Economic shock excluding the effect from reinsurance downgrades and dividend actions; whilst.
- Dividend reductions improved the SM by \$43 million.

Figure 3: Aggregate SM for base case, economic shock and economic + insurance shock.



Economic shock

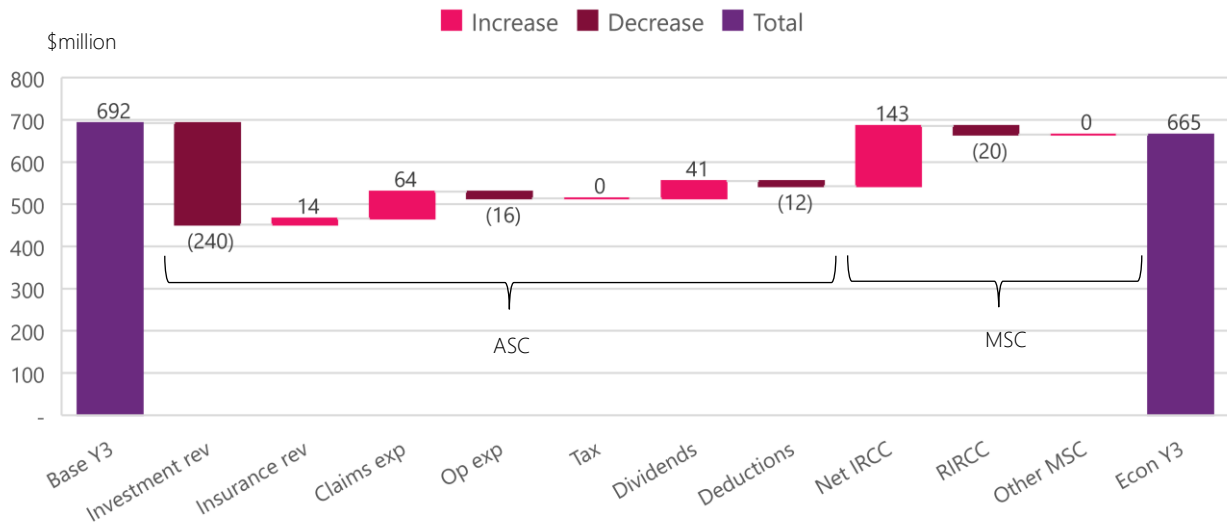
Under the economic shock, the SM declined by only 4 percent (\$27m) from the Y3 base case of \$692 million to \$665 million as shown in Figure 4.

The **ASC** reflects mainly changes in retained earnings (profits less dividends). An increase in the ASC improves an insurers' SM. Insurers modelled a decrease in the ASC of \$149 million compared to the base case for the economic shock. The fall in the ASC is largely due to lower investment revenue over 3 years (\$240 million) compared to the base case as a result of the unrealised losses discussed previously. Some insurers reduced dividends (\$41 million) to improve their ASC.

The **MSC** is the sum of capital charges required of insurers as outlined in the prudential standards less policy and other liabilities. A fall in the MSC means that insurers are required to hold less capital which is an improvement in the SM. Insurers modelled a \$122 million fall in the aggregate MSC compared to the base case. The Insurance Risk Capital Charge net of liabilities (Net IRCC) was lower than the base case improving the SM (\$143m). Insurers are not required to hold as much capital to cover the insurance risk of their policies partly due to a reduction in the likely current value of the future payments which are discounted at a higher interest rate in the scenario.

The ratings downgrades of reinsurers added to the MSC (\$20m) by way of the reinsurance Recovery Capital Charge (RIRCC) reflecting a slight increase in the probability reinsurers would not meet future obligations. For example, the two-notch downgrade in the economic shock would lower a reinsurer with a Standard and Poor's rating of AA- to A and double the capital charge. There are higher charge factors for less credit-worthy reinsurance assets.

Figure 4: Impact on the SM due to the economic shock



Insurance shock

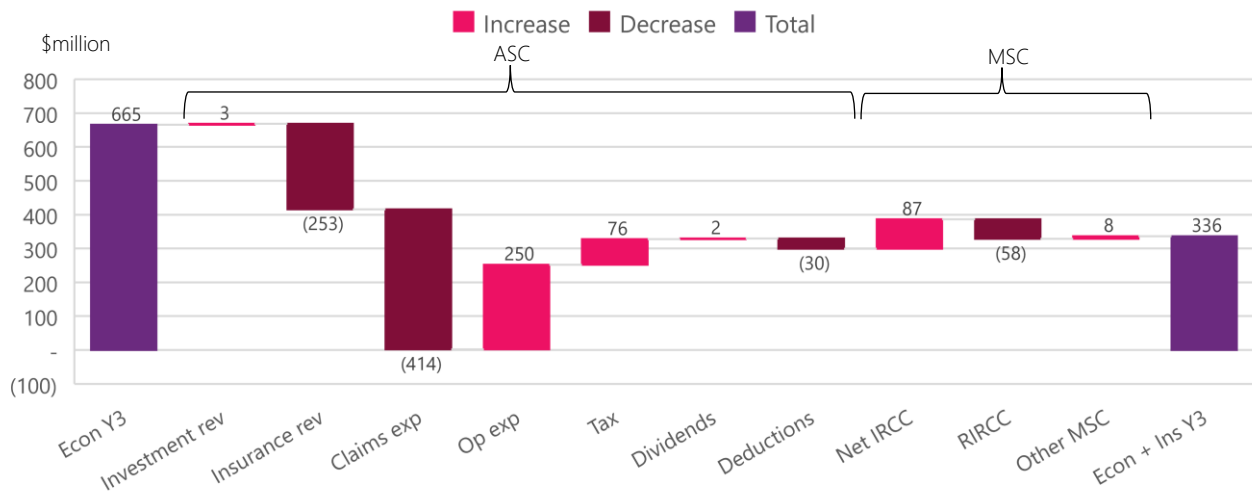
The insurance shock is modelled as an overlay on the economic shock. Figure 5 below shows the impact of the insurance shock on SM by comparing the SM of the combined shocks to the economic shock in Y3. The SM declined by nearly 50 percent from \$665 million to \$336 million.

The **ASC** fell by \$366 million compared to the economic shock, reducing the SM. The main driver was the higher claims expense (\$414 million). Lower business growth and higher lapse rates assumptions modelled in the insurance shock caused a large fall in insurance revenue (\$253 million). However, this was mostly offset by lower business-related expenses (\$250 million) such as initial commissions and other acquisition costs.

Gross life insurance claims paid increased by 9 percent compared to the base case as shown in Appendix C. Disability income claims were most impacted by the scenario, with individual claims increasing by 22 percent over the base case, elevated by the assumption of the continued COVID endemic and additional long-COVID related claims. Reinsurance and other recoveries reduced the impact from gross claims expenses by approximately 50 percent, highlighting the importance of reinsurance for Life Insurers.

The **MSC** fell slightly (\$37 million), improving the SM. The lower business volumes reduced the solvency requirement to cover liabilities (\$87m) improving the SM. The additional downgrades of reinsurers added a further capital charge (\$58 million).

Figure 5: Estimated change in SM in Y3 due to the insurance shock



Mitigation actions

Overall, the New Zealand life insurance market appears well capitalised to withstand a scenario combining the current high interest rate environment with higher unemployment rates, lower asset prices and a further insurance shock over three years. However, results varied by insurer. Whilst none of the insurer's SM fell below the regulatory minimum in any years, capital levels fell outside of some insurer risk appetites (i.e. below their own SM targets). This is generally a level of ASC or SM insurers judge fall to a level low enough to warrant remedial actions. These triggers are set out in an insurers' capital management plan. Reductions in dividends was included in the pre-mitigant results where it automatically flowed from an insurers' capital management plans (e.g. if it was linked to a certain level of solvency margin). If dividends cuts were not sufficient further management actions were considered in order to restore the SM above their management target.

The range of mitigating actions applied in the stress test included management expense reductions, capital injections, product repricing, cuts in commission payments, measures to reduce lapses, and changes to reinsurance agreements. Some reinsurance programmes allowed for the potential termination of treaties when the rating of the reinsurer fell below a certain level, and for some policies reinsurers are required to post collateral if ratings fall below threshold levels.

However, it was not clear from some of the contingency planning when these mitigating actions would take place and the order or likelihood of these occurring in this scenario. Some actions also seemed optimistic such as cutting payments to advisers but improving lapse rates.

Unlike the banks' capital framework there is no prudential trigger or capital buffer framework which precipitates regulatory capital actions. Some insurers advised they use stress testing to help set these trigger points. We believe stress testing has a role in informing capital management plans for insurers.

Conclusions

Assessing the resilience of insurers

Life Insurers were well-positioned to withstand the severe but plausible scenario which combines an economic and insurance shock in the 2022/23 LIIST. The economic shock had only a small effect on the aggregate SM, mainly through significantly higher interest rates. The insurance shock combining endemic COVID, long COVID and a new pandemic significantly reduced the aggregate SM through higher claims expenses.

The reinsurance downgrades added additional stress, but this was also manageable. Some insurers had a high reliance on one or two reinsurers which may increase the risk if capacity is limited, or their reinsurer faces a downgrade. The benefits of reinsurance were clear with at least 50 percent of gross claims paid recovered through reinsurance in the base case and the stress scenario.

No insurer breached their regulatory minimum solvency requirements. However, some insurers breached their management target SM and enacted mitigating actions. Insurers generally judged the scenario was of similar severity to their own internal stress testing.

Stress testing capability

We were pleased with the level of co-operation from all participating insurers. This included participation in a workshop, 1-on-1 meetings, presentations and responding to questions. Capability for stress testing appeared to vary across life insurers.

We identified a number of areas of good practice and uses of stress testing that could be considered by other participants and insurers more widely across the industry to improve capability:

- Active Board engagement – some insurers engaged their Board/Board Risk Committee in reviewing results especially the mitigating actions. Whilst this was not a requirement, it is better practice to have conversations with the Board over scenarios which are of high risk to the organisation and likely require mitigating actions.
- Do not assume perfect foresight for determining mitigating actions – some insurers ‘war-gamed’ the scenario when determining actions they would take. This involved meetings with experts and only drip feeding the impact of the scenario each year without revealing the rest of the prescribed scenario. This is more akin to a real-world situation where perfect knowledge will not be available and should enhance the capital management plan.
- Broader engagement across the organisation – scenario-based stress tests affect most elements of the balance sheet and there is value in engaging widely across the organisation. Some insurers obtained input from business line staff rather than relying purely on actuarial input. Incorporating the strategy team to comment on mitigating actions would also be worth considering.
- Considering market reaction of mitigating actions – some insurers were mindful of the actions of competitors when assessing how they would react in the scenario.
- Use of stress test results to calibrate capital triggers – some insurers used results to inform their capital buffers over targets. For example, where the solvency margin falls below a target surplus and Boards must commence capital raising plans. We encourage such uses. This is consistent with good practice in the use of stress testing in other sectors.

Insurers were provided with anonymised peer benchmarking of their results and drivers of results. This may assist insurers identify any modelling issues, for example areas where they are outliers to peers.

Framework for future Reserve Bank insurance stress testing

The exercise helped us to develop our own capability and the framework for future life insurance industry stress testing. For future stress tests we will consider;

- Focussing on changes in interest rates as the basis of the economic shock as movement in other macroeconomic variables such as GDP and unemployment did not provide significant stress;
- Designing the severity of the scenario which requires all insurers to enact mitigating actions. We can then test capital management plans.
- Consider a longer-term horizon to test lower new businesses volumes which tended to be less significant over 1 to 2 years, allowing the insurance stresses to be more permanent.
- Provide guidance on what is required for supplementary information to standardise the information we receive.
- Maintain the workshop allowing insurers the opportunity to comment on the design of the scenario and incorporate comments provided by insurers on to improve our processes.

The next life insurance industry stress test is planned to begin in the second half of 2024. This forms part of our 3-year stress test plan available on our website. Life insurers are expected to supplement the industry test with their own stress test scenarios which are testing severe but plausible risks.

Appendix A – Economic Shock

Variable		Y0	Y1	Y2	Y3
Real GDP	ann ch %	1.1	-0.5	-2.3	-0.2
Unemployment rate	end-yr %	3.1	5.8	7.8	9.3
House prices	ann ch %	7	-24	-17	-5
Commercial property price	ann ch %	0	-27	-13	-6
Inflation - CPI	ann ch %	7.3	5.3	4.7	3.8
Official cash rate	end-yr %	2.00	4.25	5.50	5.25
90-day bill rate	end-yr %	2.7	4.6	5.9	5.5
2-year government bond rate	end-yr %	3.5	5.3	5.7	5.3
5-year government bond rate	end-yr %	3.7	5.5	5.7	5.3
10-year government bond rate	end-yr %	3.9	5.6	5.8	5.4
A-rated 5yr corp/gvt bond spread	end-yr bps	191	275	260	190
BBB-rated 5yr corp/gvt bond spread	end-yr bps	265	400	370	250
Equities – S&P / NZX 50	ann ch %	-5	-27	-5	0
USD/NZD \$	end-yr	0.62	0.56	0.57	0.60

Appendix B – Insurance Shock

B1 - Change to insurers' best estimate assumptions for LIIST	Y1	Y2	Y3
Mortality rate	10%	5%	15%
Disability income insurance - claim incidence rate	25%	50%	25%
Disability income insurance - claim termination rate	-25%	-25%	-25%
Trauma/critical illness insurance - claim incidence rate	5%	15%	15%
Total permanent disability insurance - claim incidence rate	5%	10%	10%
Rate of policy lapsation	20%	10%	0%
New business written	-10%	-20%	-10%
Medical and surgical insurance - claim incidence rates	5%	5%	5%
<i>Medical and surgical insurance - claims inflation</i>	5%	5%	5%

Note that the insurance shocks refer to experience variances applied against each year of the base case eg. the mortality rate is 10 percent higher than the base case Y1, rather than changes in long term assumptions. However, insurers have the option of updating their long-term assumptions if they believe that it is appropriate to do so.

B2 – Benchmarking LIIST Variables	LIIST Peak Year	EIOPA 2021 stress test	Prescribed solvency assumptions
Life insurance - mortality rate	15%	10%	10%
Disability income insurance - claim incidence rate	50%	15%	50%
Disability income insurance - claim termination rate	-25%	n/a	-25%
Trauma/critical illness insurance - claim incidence rate	15%	n/a	30%
Total permanent disability insurance - claim incidence rate	10%	n/a	20%
Rate of policy lapsation	20%	20%	+/-40%
New business written	-20%	-10%	n/a
Medical and surgical insurance - claim incidence rates	5%	15%	n/a

B3 - LIIST mortality loading	Excess insured deaths per 1000	Excess deaths across LIIST participants	Excess deaths in New Zealand
5%	0.2	~200	~1,700
10%	0.3	~400	~3,500
15%	0.5	~600	~5,200

Appendix C - Gross claims breakdown

Claims - 3 years \$m	Aggregate		
	Base	Stress Scenario (Econ + Ins)	% change
Participating Traditional	164	177	8%
Investment	65	76	18%
Lump Sum Individual	3,122	3,332	7%
Lump Sum Group	147	159	8%
Disability Income Individual	628	767	22%
Disability Income Group	35	39	11%
Other Life Insurance	37	38	2%
Total Life Insurance	4,198	4,589	9%

Appendix D – Glossary

Term	Description
Actual Solvency Capital (ASC)	The licensed insurer's capital (e.g. issued and fully paid-up ordinary shares, retained earnings) less any deductions from that capital (e.g. intangible assets, deferred tax assets) as set out in the Life solvency standard.
Asset Risk Capital Charge	This charge reflects the exposure of the licensed insurer to losses on investment assets and financial risks to the licensed insurer arising from other exposures. It also reflects the risks to the insurer from having large exposures to a single counterparty.
Catastrophe Risk Capital Charge	A charge intended to protect the licensed insurer's solvency position from its potential exposure to extreme events (e.g. earthquakes, floods or storms, that results in unexpected large or extreme losses).
Claims expenses	Policy expense net of reinsurance, increase in policy liability net of reinsurance, increase in policyholder unvested benefit liability, increase in deferred & future tax on policy liabilities.
Deductions	Deductions from capital.
Dividends	Dividend and capital distributions.
Disability Insurance	A type of insurance product that provides income in the event that a policyholder is prevented from working and earning an income due to a disability.
Endemic	Disease regularly occurring within an area or community.
Epidemic	A widespread occurrence of an infectious disease in a community at a particular time.
Insurance revenue	Net policy and premium revenue, outward reinsurance commission, other insurance revenue.
Investment revenue	Interest, dividend, rent, realised gains and losses, unrealised gains and losses.
Insurance Risk Capital Charge (IRCC)	The Insurance Risk Charge relates to the risk that the value of the net insurance liabilities is greater than the value determined by the Appointed Actuary or Group Actuary. Refer to Solvency Standard for Life Insurance Business (2014) for calculation.
Lapse	When premium payments on a life insurance policy are missed and, depending on the type of insurance, the cash value is exhausted, and the policy will no longer pay a death benefit for the insured person.
LIIST	Life Insurance Industry Stress Test.
Minimum Solvency Capital (MSC)	The sum of a number of risk capital charges set out in the Life solvency standard.

Term	Description
Life Solvency Standard	Solvency Standard for Life Insurance Business 2014 (incorporating amendments to November 2018) (available on our website).
Morbidity rate	Rate at which a disease or illness occurs in a defined population.
Mortality rate	Rate of death occurring in a defined population.
Net IRCC	IRCC less policy and other liabilities.
NPAT	Net profit after tax.
Operating expense	Initial commission, other acquisition expense, other commission expense, other insurance expense.
Other MSC	Catastrophe risk capital charge, resilience risk capital charge, asset concentration risk capital charge.
Pandemic	A widespread occurrence of an infectious disease over a whole country or the world at a particular time.
Policy liability	A liability that arises under a life policy and includes any asset or liability that arises under a management services element of an investment account contract or an investment-linked contract.
Premium	The amount of money an individual or business pays for an insurance policy.
Reinsurance	Reinsurance is a form of insurance for insurance companies, where in return for paying a premium the reinsurance company will take on an agreed portion of the insurance companies claims.
Reinsurance Recovery Risk Capital Charge	This charge reflects the exposure of a licensed insurer to losses arising from failure to fully recover on reinsurance contracts, including losses due to reinsurer failure and contract dispute.
Risk Capital Charges	Risk capital charges set out the amounts of capital licensed insurers are required to hold against certain risks they are exposed to. These risks are set out in the Life solvency standard.
Solvency Margin (SM)	The licensed insurer's actual solvency capital less the minimum solvency capital they are required to hold, i.e. their 'excess capital'.
Total Permanent Disability	Insurance coverage for if you become permanently disabled and are unable to work as a result of an accident or illness.