



Reserve Bank
of New Zealand
Te Pūtea Matua

Interim Solvency Standard non- technical summary

3 October 2022



This guide provides a non-technical introduction to what the Interim Solvency Standard does and the terminology it uses. It doesn't try to explain how the Interim Solvency Standard differs from previous standards.¹

The purpose of the solvency standard

The solvency standard sets out how insurers should value the 'Solvency Capital' they hold and calculate the minimum level of capital we require them to hold (their 'Prescribed Capital Requirement') given the risks that their businesses are exposed to.

Insurers are particularly vulnerable to risk events because a large part of their liabilities are 'insurance liabilities'. These liabilities represent the cost of claims and benefits that the insurer is *expected* to have to pay out on the policies it has issued. While insurers work hard to statistically model these expected claims accurately, their ultimate cost will depend on uncertain future events (such as mortality rates or the frequency of earthquakes or storm damage).

The solvency standard is designed to ensure that insurers hold enough capital to be able to pay claims even in the face of quite adverse future events.

Our risk appetite is set out in the standard and outlines that we aim to ensure insurers' capital is adequate for contingencies in 199 years out of 200 for most risks and 999 out of 1000 years for seismic risk (modelled based on prior experience). The 'contingencies' modelled include a wide range of possible risks, including increased claims and broader market movements -see the section on 'stressed balance sheet' below for more on this. The more conservative approach to earthquakes reflects the importance of New Zealand insurers being able to pay out following a major earthquake.

The solvency calculation

The starting point for calculating solvency capital requirements is insurers' financial balance sheets, which set out their assets and liabilities based on accounting rules. The solvency standard uses this balance sheet to work out capital requirements in a two-stage process.

1. A standardised balance sheet – from measuring performance to measuring economic value

Accounting balance sheets are designed more to measure insurers' financial performance than their financial strength.

The first stage in calculating solvency capital is to adjust the accounting balance sheet to a 'standardised balance sheet', designed to measure an insurer's current economic value in a way that is comparable across insurers.

We restrict some judgements about how assets and liabilities are valued. We move from a variety of valuation bases (historic cost, fair value etc.) towards a single criterion of current economic value. We also remove some artificial elements of accounts designed to smooth profit across years for performance measuring purposes and make some deductions from capital.

2. A 'stressed' balance sheet – what might the balance sheet look like under adverse circumstances?

¹ This guide is written to explain the standard to a non-specialist audience. At times it includes simplifications of complex issues. In the case of any ambiguity or uncertainty about how the standard operates, readers should rely on the Interim Solvency Standard itself.

Once we are happy with a 'truer' picture of an insurers' economic value, we then ask how that picture would look under adverse circumstances. We want to ensure that the insurer's assets are sufficient to meet its liabilities even under these conditions.

The solvency standard does this by imposing a range of 'charges' on the balance sheet. These charges represent increases in liabilities or decreases in assets that might appear in stressed circumstances. We then look at the balance sheet under these stresses to determine the minimum capital insurers should hold so that they could survive these types of stress.

Based on our risk appetite, we explore a range of risks. Perhaps the three most important are:

- a risk that adverse events mean more claims, so that insurance liabilities turn out to be higher than the estimates included in the accounts:
- a risk that adverse market movements (such as a fall in share markets, interest rate changes etc.) decrease the value of assets or increase borrowing costs: and
- operational risk – that some kind of operating error creates new liabilities or reduces asset values.

Solvency terminology

'Capital' (for our current purposes) is the excess of assets over liabilities on the balance sheet.

'Solvency Capital' in the Interim Solvency Standard is the amount of capital on the *standardised* balance sheet.

The 'Prescribed Capital Requirement' is the minimum amount of capital insurers need to hold, worked out based on the *stressed* balance sheet (it is the sum of the 'capital charges').

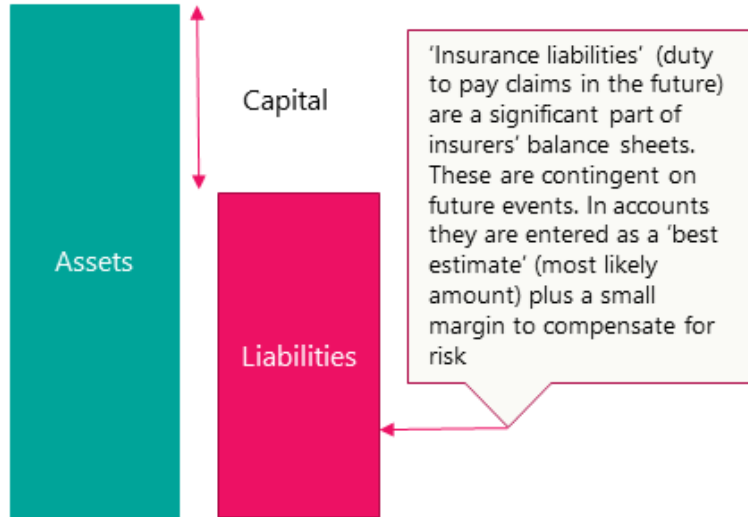
The 'Solvency Margin' is how much additional Solvency Capital an insurer holds, above their Prescribed Capital Requirement

The 'Solvency Ratio' puts the size of solvency margin an insurer holds in the context of the minimum amount of capital they should hold (the Prescribed Capital Requirement). It provides a better way of comparing insurers of different sizes / risk levels than comparing solvency margins would. So:

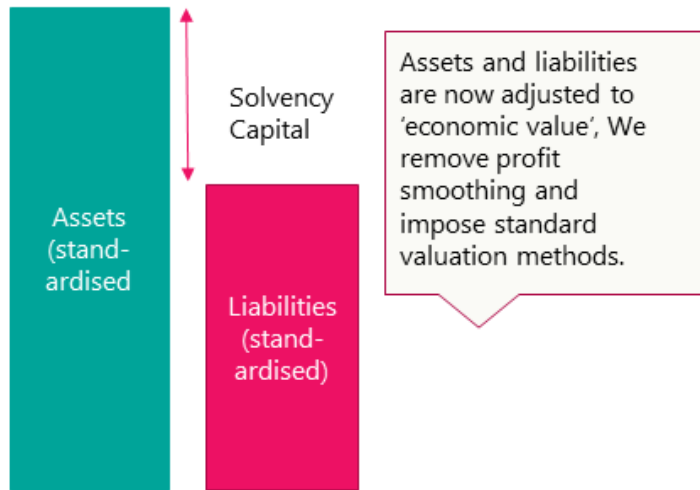
$$\text{Solvency ratio} = \frac{\text{Solvency capital}}{\text{Prescribed capital requirement}}$$

A 'decrease in the solvency margin' means that an insurer is closer to the prescribed capital requirement than before. Depending on their own risk appetite and existing capital levels, they may feel obliged to respond by increasing the capital they hold. In other words, all other things being equal, a decline in measured solvency margin implies an increase in capital requirements.

Accounting balance sheet (NZ IFRS 17):
measures performance



Standardised balance sheet:
measures economic value



Stressed balance sheet:
measures resilience

