



Prudential Standard LPS 110

Capital Adequacy

Objective and key requirements of this Prudential Standard

This Prudential Standard aims to ensure that life companies maintain adequate capital against the risks associated with their activities. This Prudential Standard outlines the overall framework adopted by APRA for assessing the capital adequacy of a life company.

This Prudential Standard forms part of a comprehensive set of prudential standards that deal with the measurement of the capital adequacy of a life company.

The key requirements of this Prudential Standard are that a life company must:

- have an Internal Capital Adequacy Assessment Process;
- maintain required levels of capital within each of its funds and for the company as a whole;
- determine each fund's prescribed capital amount having regard to a range of risk factors that may adversely impact a life company's ability to meet its obligations. These factors include insurance risk, asset risk, asset concentration risk and operational risk;
- comply with any supervisory adjustment to capital imposed by APRA;
- make certain public disclosures about the capital adequacy position of each fund and the company as a whole;
- seek APRA's consent for certain planned capital reductions of the life company; and
- inform APRA of any significant adverse changes in a fund or life company's capital position.

Authority

1. This Prudential Standard is made under paragraph 230A(1)(a) of the *Life Insurance Act 1995* (**the Act**).

Application

2. This Prudential Standard applies to all life companies including **friendly societies** (together referred to as **life companies**) registered under the Act¹, except where expressly noted otherwise.
3. A life company must apply this Prudential Standard separately to:
 - (a) for a life company other than a friendly society, each statutory fund and its shareholders fund; and
 - (b) for a friendly society, each benefit fund and its management fund.
4. This Prudential Standard only applies to the business of an Eligible Foreign Life Insurance Company (**EFLIC**) which is carried on through its Australian statutory funds but not otherwise.²
5. Subject to any specific transition rules, this Prudential Standard applies to life companies from 1 January 2013 (effective date).

Interpretation

6. Unless otherwise defined in this Prudential Standard, expressions in bold are defined in *Prudential Standard LPS 001 Definitions*.
7. Unless otherwise indicated:
 - (a) the term **statutory fund** will be used to refer to a statutory fund of a life company other than a friendly society, or a benefit fund of a friendly society, as relevant;
 - (b) the term **general fund** will be used to refer to the shareholders' fund of a life company other than a friendly society, or the management fund of a friendly society, as relevant; and
 - (c) the term **fund** will be used to refer to a statutory fund or a general fund, as relevant.

Objective

8. The **prescribed capital amount** of a fund is intended to be sufficient, such that if a fund was to start the year with a **capital base** equal to the prescribed capital amount, and losses occurred at the 99.5 per cent confidence level then the assets remaining would be at least sufficient to provide for the **adjusted policy**

¹ Refer to subsection 21(1) of the Act.

² Refer to section 16ZD of the Act.

liabilities and **other liabilities** of the fund at the end of the year. The other liabilities to be provided for exclude those liabilities that satisfy the criteria for inclusion in the capital base.

Responsibility for capital management

9. Capital is the cornerstone of a life company's financial strength. It supports a life company's operations by providing a buffer to absorb unanticipated losses from its activities and, in the event of such losses, enables the life company to continue to meet its insurance obligations.
10. As a consequence of the key role played by capital in the financial health of a life company, the Board of directors (**Board**) of a life company must ensure that:
 - (a) the life company as a whole; and
 - (b) each fund

has capital that is adequate for the scale, nature and complexity of its business and its risk profile, such that it is able to meet its obligations under a wide range of circumstances.

Internal Capital Adequacy Assessment Process

11. A life company must have in place an **Internal Capital Adequacy Assessment Process (ICAAP)** that considers each fund of the life company, as well as the life company as a whole. The ICAAP must:
 - (a) be adequately documented, with the documentation made available to APRA on request; and
 - (b) be approved by the Board initially, and when significant changes are made to the process.
12. The ICAAP must include at a minimum:
 - (a) adequate systems and procedures to identify, measure, monitor and manage the risks arising from the life company's activities on a continuous basis to ensure that capital is maintained at a level consistent with the life company's risk profile and the Board's risk appetite;
 - (b) a strategy for ensuring adequate capital is maintained over time, including specific capital targets set in the context of the life company's risk profile and the Board's risk appetite, plans for how the target level of capital is to be met and the means available for sourcing additional capital where required;
 - (c) actions and procedures for monitoring the life company's compliance with its capital requirements and against capital targets, including the setting of triggers to alert management to, and avert, potential breaches of these requirements;

- (d) processes for reporting on the ICAAP and its outcomes to the Board and senior management of the life company; and
 - (e) an **ICAAP summary statement** as defined in paragraph 13;
13. An ICAAP summary statement is a high level document that describes and summarises the capital assessment and management processes of the life company. It must outline at a minimum the aspects of the ICAAP listed in paragraphs 12 (a) to (d) and paragraph 14.
14. A life company must ensure its ICAAP is subject to robust independent review at regular intervals. The frequency and scope of the review must be appropriate to the life company, having regard to the size, business mix and complexity of its operations and the nature and extent of any changes that have occurred or are likely to occur in its business profile or its risk appetite. In any event, the review must not be any less frequent than every three years. The life company's policy for review of its ICAAP must be documented in the ICAAP summary statement, including the responsibility for the review, frequency and scope of the review, and reporting of the review to the Board and senior management.
15. A life company must, on an annual basis, provide a report on the implementation of its ICAAP to APRA (**ICAAP report**). The ICAAP report must be provided to APRA within four months of the end of the financial year³ of the life company. The ICAAP report must include:
- (a) detailed information on current and three-year projected capital levels relative to minimum requirements and target levels for each fund and the life company as a whole;
 - (b) detailed information on the actual outcomes of applying the ICAAP over the period, relative to the planned outcomes in the previous ICAAP report (including analysis of the life company's actual capital position relative to minimum capital requirements and capital targets and actual versus planned capital management actions undertaken);
 - (c) description of any changes to the ICAAP since the previous ICAAP report; and
 - (d) details of any review of the ICAAP since the previous ICAAP report, including any recommendations for change and how those recommendations have been, or are being, addressed.

Capital base

16. In assessing the adequacy of a fund's or a life company's capital base, attention must be paid not only to the risks it is likely to face, but also the quality of the support provided by various forms of capital. In assessing the quality of support provided by a particular form of capital, regard must be had to the extent to which it:

³ As defined in section 77 of the Act.

- (a) provides a permanent and unrestricted commitment of funds;
 - (b) is freely available to absorb losses;
 - (c) does not impose any unavoidable servicing charges against earnings; and
 - (d) ranks behind the claims of policy owners and creditors in the event of the winding-up of the life company.
17. Not all forms of capital meet these criteria equally. Due to the need to ensure that the capital base of a life company provides adequate support for its activities, APRA imposes some restrictions on the composition of the capital base. The forms of capital deemed eligible for inclusion in the capital base, and the conditions as to their inclusion, are specified in *Prudential Standard LPS 112 Capital Adequacy: Measurement of Capital (LPS 112)*. LPS 112 defines the different categories and components of the capital base and the restrictions on the quality of the capital that is used to meet the required level of capital for regulatory purposes.
18. A fund or life company's balance sheet may contain certain assets (such as deferred tax assets, goodwill and other intangibles) that are acceptable from an accounting perspective. However, for supervisory purposes, such assets are either generally not available, or of questionable value, should the fund or life company encounter difficulties. Similarly, the **policy liabilities** on the balance sheet may reflect allowance for future transactions (such as future premium income) that it is not appropriate to recognise for supervisory purposes. A life company is therefore required to make certain adjustments in determining the capital base. Details of these adjustments are provided in LPS 112.

Prudential Capital Requirement (PCR)

19. This Prudential Standard establishes a risk-based approach to measuring the capital adequacy of a fund or a life company. This required level of capital for regulatory purposes is referred to as the **Prudential Capital Requirement (PCR)**. The PCR is intended to take account of the full range of risks to which a fund or life company is exposed.
20. A life company must ensure that the life company and each of its funds have a capital base, at all times, in excess of its PCR.
21. The PCR for a fund equals:
- (a) a prescribed capital amount determined either:
 - (i) by applying the **Standard Method** set out in this Prudential Standard; or
 - (ii) by using an internal model developed by the life company to reflect the circumstances of its business – the **Internal Model-based Method (IMB Method)**; or

- (iii) by using a combination of the methods specified in (i) or (ii) above;
plus
 - (b) any **supervisory adjustment** determined by APRA under paragraph 41.
22. The prescribed capital amount for a life company is the sum of the prescribed capital amounts of each of its funds. Regardless of the outcome of the method used for determining the prescribed capital amount, a life company's prescribed capital amount cannot be less than \$10 million.
 23. The prescribed capital amount for a statutory fund with liabilities for variable annuity business must be calculated in accordance with Attachment A.
 24. A life company intending to issue **variable annuities** must, before it issues these policies, obtain approval from APRA of the method to be used for calculating the prescribed capital amount for the statutory fund issuing these variable annuities.
 25. The PCR for a life company is the sum of the PCRs of each of its funds (or such higher amount as determined by APRA under paragraph 41).

Standard Method

26. For life companies using the Standard Method, the prescribed capital amount for a fund is determined as:
 - (a) the **Insurance Risk Charge**; plus
 - (b) the **Asset Risk Charge**; plus
 - (c) the **Asset Concentration Risk Charge**; plus
 - (d) the **Operational Risk Charge**; less
 - (e) an **aggregation benefit**; plus
 - (f) an adjustment for tax benefits and management actions.

Insurance Risk Charge

27. The Insurance Risk Charge relates to the risk of adverse impacts due to movements in future mortality, morbidity, longevity, **servicing expenses**, lapses and other **insurance risks** such as option take-up rates.
28. The Insurance Risk Charge for a fund is determined by assessing the impact on the capital base of the fund of adverse changes in the variables in paragraph 27. The method for determining the Insurance Risk Charge is set out in *Prudential Standard LPS 115 Capital Adequacy: Insurance Risk Charge*.

Asset Risk Charge

29. The Asset Risk Charge relates to the risk of adverse movements in the value of a fund's on-balance sheet and off-balance sheet exposures. Asset risk can be derived from a number of sources, including market risk and credit risk.
30. The method for determining the Asset Risk Charge is set out in *Prudential Standard LPS 114 Capital Adequacy: Asset Risk Charge*.

Asset Concentration Risk Charge

31. The Asset Concentration Risk Charge relates to the risk resulting from investment concentrations in individual assets or large exposures to individual counterparties or groups of related counterparties. The method for determining Asset Concentration Risk Charge is set out in *Prudential Standard LPS 117 Capital Adequacy: Asset Concentration Risk Charge*.

Operational Risk Charge

32. The Operational Risk Charge relates to the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. The method for determining the Operational Risk Charge for a fund is set out in *Prudential Standard LPS 118 Capital Adequacy: Operational Risk Charge*.

Aggregation benefit

33. The aggregation benefit makes an explicit allowance for diversification between asset and insurance risks in the calculation of the prescribed capital amount.
34. The aggregation benefit formula is:

$$\text{Aggregation benefit} = (A + I) - \sqrt{A^2 + I^2 + 2 \times \text{correlation} \times A \times I}$$

where:

- (a) 'A' is the Asset Risk Charge;
 - (b) 'I' is the Insurance Risk Charge; and
 - (c) 'correlation' is 20 per cent.
35. The Asset Concentration Risk Charge and the Operational Risk Charge are not included in the calculation of the aggregation benefit.

Adjustment for tax benefits and management actions

36. Future shareholder tax benefits arising in the stressed scenarios are recognised in determining the Insurance Risk Charge and Asset Risk Charge. A life company must increase the prescribed capital amount by the aggregate amount of any tax benefits that cannot be netted against deferred tax liabilities as specified in LPS 112.

37. In the calculation of the Insurance Risk Charge and Asset Risk Charge, an allowance may be made for any anticipated management actions that would reduce future policy benefits, for example, increasing fees and premium rates, reducing surrender values and reducing **bonuses** and other **discretionary additions** to policy owner benefits. However, there are limits to the extent to which policy benefits can be reduced. A life company must increase the prescribed capital amount if the aggregated management actions would reduce policy benefits below these limits.
38. The method for calculating the adjustment for tax benefits and management actions is specified in Attachment B.

APRA may adjust the Standard Method for calculating the prescribed capital amount

39. If APRA is of the view that the Standard Method for calculating the prescribed capital amount does not produce an appropriate outcome in respect of a particular fund, or a life company has used inappropriate judgement or estimation in calculating the prescribed capital amount, APRA may, in writing, adjust any aspect of the prescribed capital amount calculation for that fund. If such an adjustment is applied to a fund under this paragraph, a life company must comply with the adjusted calculation.

Internal Model-Based Method

40. A life company may use its own capital measurement model to calculate the prescribed capital amount. Use of the IMB Method is conditional on APRA's approval. APRA must be satisfied that the model is well designed, the analysis and assumptions used are sound, and that the results of applying the model are reasonable from a prudential viewpoint. Life companies which do not use an internal model that has been approved by APRA under this paragraph must use the Standard Method described in this Prudential Standard.

Supervisory adjustment to capital

41. APRA recognises that any measure of the adequacy of a fund or a life company's capital involves judgement and estimation, including quantification of risks that may be difficult to quantify. If APRA is of the view that there are prudential reasons for doing so, APRA may, in writing, determine a supervisory adjustment to be included in the PCR of a fund or life company.

Disclosure

42. To improve the understanding of its capital adequacy position by policy owners and other market participants, a life company must publish, at least annually, the following items for the life company as a whole:
 - (a) the amount of **Common equity Tier 1 capital**;
 - (b) the aggregate amount of any regulatory adjustments applied in the calculation of Common equity Tier 1 capital;

- (c) the amount of **Additional Tier 1 capital**;
 - (d) the aggregate amount of any regulatory adjustments applied in the calculation of Additional Tier 1 capital;
 - (e) the amount of **Tier 2 capital**;
 - (f) the aggregate amount of any regulatory adjustments applied in the calculation of Tier 2 capital;
 - (g) the total capital base of the life company derived from the items (a) to (f);
 - (h) the prescribed capital amount; and
 - (i) the capital adequacy multiple (item (g) divided by item (h)).
43. A life company must also publish, at least annually, the following items for each of its funds:
- (a) the amount of the fund's **net assets**, after applying any regulatory adjustments;
 - (b) the aggregate amount of any regulatory adjustments applied to the fund's net assets;
 - (c) the amount of Tier 2 capital held by the fund;
 - (d) the aggregate amount of any regulatory adjustments applied in the calculation of the fund's Tier 2 capital;
 - (e) the total capital base of the fund derived from the items (a) to (d);
 - (f) the fund's prescribed capital amount;
 - (g) the components of the fund's prescribed capital amount specified in paragraph 26⁴; and
 - (h) the capital adequacy multiple of the fund (item (e) divided by item (f)).
44. A life company must publish the information specified in paragraphs 42 and 43 so that it is readily accessible to both policy owners and other market participants.
45. A life company must not disclose any supervisory adjustment included in the PCR of the life company itself or any of its funds.

⁴ A fund containing variable annuity business is not required to separately disclose an Asset Risk Charge, Insurance Risk Charge and aggregation benefit.

Reductions in capital base

46. A life company must obtain APRA's written consent prior to making any planned reduction in the capital base of the company. APRA's consent may be subject to conditions.
47. A reduction in a life company's capital base includes, but is not limited to⁵:
- (a) a share buyback;
 - (b) the redemption, repurchase or early repayment of any qualifying Additional Tier 1 and Tier 2 capital instruments issued by the life company;
 - (c) trading in the life company's own shares or capital instruments outside of any arrangement agreed upon with APRA in accordance with LPS 112;
 - (d) payment of dividends on common shares that exceed a life company's after-tax earnings (as reported to APRA in the life company's **statutory accounts**), after including any payments on more senior capital instruments, in the financial year to which they relate; and
 - (e) dividend or interest payments (whether whole or partial) on Additional Tier 1 or Tier 2 capital that exceed a life company's after-tax earnings (as reported to APRA in the life company's statutory accounts), including any payments made on more senior capital instruments, calculated before any such payments are applied in the financial year to which they relate.
48. A life company proposing a capital reduction must provide APRA with an updated ICAAP report incorporating the proposed reduction. The life company must satisfy APRA that its capital base, after the proposed reduction, will remain adequate for its future needs.
49. For these purposes, 'financial year' refers to the last four quarters for which the life company was required to submit quarterly returns⁶ to APRA preceding the date of the proposed payment of interest or dividend.

Materiality

50. A life company may take into account materiality when calculating its capital base and prescribed capital amount. Particular values or components are considered material to the overall result of a calculation if misstating or omitting them would produce results likely to be misleading to the users of the information.

⁵ For an Eligible Foreign Life Insurance Company, the requirements relating to reductions in capital base must be applied at the level of each statutory fund of the Australian operations.

⁶ In accordance with reporting standards made under the *Financial Sector (Collection of Data) Act 2001*.

Notification requirements

51. A life company must inform APRA as soon as practicable of:
- (a) any breach or prospective breach of its PCR or the PCR of any of its funds;
 - (b) any significant departure from its ICAAP; or
 - (c) any significant adverse changes in the capital base or PCR of the company or any of its funds.

The notice must include any remedial actions taken or planned to be taken to address the situation and the timing of these actions.

Adjustments and exclusions

52. APRA may, by notice in writing to a life company, adjust or exclude a specific requirement in this Prudential Standard in relation to that life company.

Transition

53. On application by a life company, APRA may grant transitional relief from the obligation for the life company to comply with any requirement in this Prudential Standard up until 31 December 2014.

Attachment A

Variable annuities

1. The calculation of the prescribed capital amount for a statutory fund containing variable annuity business must be undertaken in accordance with this Attachment.
2. Variable annuities are a type of life insurance product that has special features that are not adequately catered for under the Standard Method. Accordingly, more sophisticated modelling must be performed to determine the prescribed capital amount for a statutory fund with liabilities for this type of product.
3. The required modelling could be undertaken using stochastic techniques or scenario-based techniques, as long as the techniques are adequate for assessing the risks inherent in the relevant variable annuities. The modelling must consider both asset and insurance risks simultaneously.
4. The modelling of asset and insurance risks must be consistent with the principles outlined in paragraph 8.
5. The following issues must be addressed in determining the prescribed capital amount for a statutory fund with liabilities for variable annuities:
 - (a) the uncertainty associated with the company's ability to implement any required hedging strategy in a timely and effective manner;
 - (b) the effectiveness of hedging arrangements;
 - (c) the ability to access suitable hedge instruments in the future;
 - (d) whether a matched asset and liability profile within 12 months can be achieved for this type of product, particularly given the risks that exist for these type of products beyond 12 months e.g. ratchets and path dependencies;
 - (e) allowance for any discretions available; and
 - (f) allowance for management corrective action to achieve a matched asset and liability profile within 12 months.
6. The prescribed capital amount (before addition of the Asset Concentration Risk Charge and the Operational Risk Charge) for a statutory fund with liabilities for variable annuity business must be determined via the following formula:

$$\text{Capital} = E * \text{Capital (including hedging)} + (1-E) * \text{Capital (excluding hedging)}$$

where:

- (a) Capital (including hedging) = the capital requirement for asset and insurance risks calculated assuming that dynamic hedging is included in the model

- (b) Capital (excluding hedging) = the capital requirement for asset and insurance risks assuming there is no dynamic hedging but allowance can be made for hedge positions that exist at the valuation date
- (c) E = an effectiveness factor that reflects the level of sophistication of the dynamic hedging in the model.

A dynamic hedging strategy is a hedging strategy that requires frequent rebalancing of the asset portfolio. The Capital (including hedging) and Capital (excluding hedging) may allow for diversification between asset and insurance risks but must not attribute any value to tax benefits that cannot be netted against deferred tax liabilities.

7. In determining E, the following points must be taken into account:
- (a) E cannot be greater than 0.70 because most models would include at least some approximations or idealistic assumptions;
 - (b) if certain economic risks are not hedged, yet the model does not generate scenarios that sufficiently capture those risks, E must be in the lower end of the range of 0.0 to 0.7;
 - (c) a life company that does not have 12 months of experience to date must set E to a value no greater than 0.30⁷; and
 - (d) the ultimate effect of the current hedging strategy (including currently held hedge positions) needs to recognise all:
 - (i) risks;
 - (ii) associated costs;
 - (iii) imperfections in the hedges; and
 - (iv) hedging mismatch tolerances associated with the hedging strategy.
8. The risks referred to in subparagraph 7(d)(i) above include, but are not limited to:
- (a) basis;
 - (b) gap;
 - (c) price;
 - (d) parameter estimation; and
 - (e) variation in any assumptions (mortality, lapses, annuitisation, etc.).

⁷ Such a company must take into account the factors in paragraph 7 to determine E within the range of 0.0 to 0.3.

9. The costs referred to in paragraph 7(d)(ii) above include, but are not limited to:
 - (a) transaction, margin (opportunity costs associated with margin requirements); and
 - (b) administration.
10. APRA may require a life company to adopt a value for E specified by APRA in writing if APRA is satisfied that the value of E adopted by the company is not appropriate.
11. The Asset Concentration Risk Charge and the Operational Risk Charge apply to statutory funds with liabilities for variable annuities in addition to the capital requirement calculated under this Attachment.

Attachment B**Adjustment for tax benefits and management actions**

1. The adjustment for tax benefits and management actions must be calculated from a single scenario in which all of the asset risk and insurance risk stresses are applied. The stresses may be modified by multiplying them by diversification factors.
2. The adjustment for tax benefits and management actions must be calculated as:
 - (a) the capital charge for the single scenario;
 - (b) less the Insurance Risk Charge;
 - (c) less the Asset Risk Charge;
 - (d) plus the aggregation benefit.

The adjustment for tax benefits and management actions cannot be less than zero.

3. The capital charge for the single scenario is the reduction in the capital base in this scenario.
4. The stressed policy liabilities for the single scenario are defined in the same way as for the Insurance Risk Charge.
5. The insurance risk stresses for the single scenario must be the adjusted stress margins⁸ used in determining the Insurance Risk Charge, multiplied by the **aggregation diversification factor** between insurance risks and asset risks.
6. The aggregation diversification factor must be calculated as the sum of:
 - (a) the Insurance Risk Charge;
 - (b) the Asset Risk Charge;
 - (c) less the aggregation benefit;

divided by the sum of the Insurance Risk Charge and the Asset Risk Charge.

7. The asset risk stresses for the single scenario must be the stresses used in determining the Asset Risk Charge, multiplied by both the aggregation diversification factor and an **asset risk diversification factor**. The asset risk diversification factor is calculated as the Asset Risk Charge divided by the sum of the capital charges for the seven asset risk stresses. For the stresses that apply in two directions, the capital charge for the direction that determines the overall amount of the Asset Risk Charge must be used.

⁸ As defined in LPS 115.

8. For the purpose of deducting deferred tax assets net of deferred tax liabilities from the capital base, these amounts may be adjusted to include any additional tax assets or liabilities accruing over the 12 months following the reporting date.
9. The taking of discretionary management actions in the single scenario can only be assumed to the extent that they are appropriate, justifiable and equitable in the adverse conditions assumed.
10. For a statutory fund that has liabilities for life policies that provide participating benefits or discretionary additions to benefits, the life company must use a single scenario where the direction of the asset risk stresses for real interest rates and expected inflation are both down, if this scenario would result in a higher capital charge.