

**Solvency Modernization Initiative
Country Comparison Analysis
November 2009**

(Note: Portions excerpted directly from APRA materials.)

Country: Australia

1. Background Description

The prudential (solvency) aspects of general and life insurance are regulated by the Australian Prudential Regulatory Authority (APRA). Matters relating to advice or disclosure of insurance products sold are regulated by the Australian Securities and Investments Commission (ASIC). Thus a twin peaks approach is used in regulation. In certain states, various bodies also have powers in regulating certain types of statutory insurance. The remainder of these notes will focus on solvency regulation and APRA.

The mission of APRA is to establish and enforce prudential standards and practices designed to ensure that, under all reasonable circumstances, financial promises made by institutions that it supervises are met within a stable, efficient, and competitive financial system. It also acts as the national statistical agency for the Australian financial sector and plays a role in preserving the integrity of Australia's retirement income policy.

2. Solvency Regulation Description

As part of its solvency requirements, minimum capital requirements (MCR) exist for nonlife insurance.¹ The MCR is intended to be commensurate with the full range of risks to which an insurer is exposed (including risks relating to insurance claims, investments, counterparty default, asset-liability mismatches, catastrophic events, and operational errors and problems).

As part of its solvency guide, APRA has issued standards relating to corporate governance and risk management. Summaries of these standards appear below.

The ultimate responsibility for the sound and prudent management of insurance companies rests with their Board of Directors. Companies must have a sound governance framework and conduct their affairs with a high degree of integrity. The governance prudential standard sets out minimum foundations for good governance of insurers. It aims to ensure that insurers are managed in a sound and prudent manner by a competent Board of directors, which is capable of making reasonable and impartial business judgements in the best interests of the insurer and which gives due consideration to the impact of its decisions on policyholders.

¹ An anachronistic "funds" system that developed uniquely in Australia applies to life insurers. Due to its idiosyncrasies, specific solvency regulatory requirements for life insurers are not considered further here.

The key requirements of the governance standard include:

1. Specific requirements with respect to Board size and composition must be met.
2. The chairperson of the Board must be an independent director.
3. A Board Audit Committee must be established.
4. Insurers must have a dedicated internal audit function.
5. Certain provisions dealing with independence requirements for auditors must be met.
6. The Board must have a policy on Board renewal and procedures for assessing Board performance.

The Risk Management Standard aims to ensure that a general insurer has systems for identifying, assessing mitigating and monitoring the risks that may affect its ability to meet its obligations to policyholders. These systems, together with the structures, processes, policies and roles supporting them, are referred to as the general insurer's risk management framework.

To meet the key requirements of the Risk Management standard a general insurer must

1. Have in its risk management framework a documented Risk Management Strategy and also include sound risk management policies and procedures and clearly defined managerial responsibilities and controls.
2. Submit its Risk Management Strategy to APRA when any material changes are made.
3. Have a dedicated Risk Management function (or role) responsible for assisting in the development and maintenance of the risk management framework.
4. Submit a three year Business Plan to APRA and re-submit after each annual review and when any material changes are made.
5. Submit a Risk Management Declaration to APRA on an annual basis.
6. Submit a Financial Information Declaration to APRA on an annual basis.

3. Absolute Minimum Capital Standards

Insurers must at all times hold eligible capital (after deductions) in excess of the MCR. For most insurers, the MCR cannot be lower than \$5 million (i.e., absolute minimum).

4. Minimum Capital Requirement (MCR)

One of three approaches may be used to determine minimum levels of capital or minimum capital requirements (MCR):

Internal Model Based (IMB) Method
Prescribed Method
Combination of IMB Method and Prescribed Method

Prescribed Method

A risk-based approach is used to establish capital adequacy in the prescribed method. The capital requirement is the sum of the capital charges for Insurance risk, Investment risk, and Concentration risk. A factor-based approach is used to determine the capital charges for these risks.

The Insurance Risk Capital Charge has two components: a charge in respect of outstanding claims risk and a charge in respect of premiums liability risk. The outstanding claims risk capital charge is determined as the sum, over all classes of business of the insurer, of the value of the net outstanding claims liabilities for each class, multiplied by the appropriate outstanding claims capital factor for that class. The premiums liability capital charge is determined as the sum, over all classes of business of the insurer, of the net premiums liabilities for each class, multiplied by the appropriate premium liability capital factor for that class.²

The Investment Risk Capital Charge is determined as the value of each investment multiplied by the relevant investment capital factor for that investment, summed across all assets and certain off-balance sheet exposures. The Investment Risk Capital Charge may be reduced through the reduction in investment risk arising from the availability of risk mitigants (e.g., collateral security or guarantees), subject to APRA criteria. An insurer must hold additional capital, in the form of an Investment Concentration Charge, if its exposure to a particular asset or counterparty exceeds the thresholds set out by APRA.³

The Concentration Risk Capital Charge relates to the risk associated with an accumulation of exposures to a single catastrophic event at a single site. However APRA will require a whole portfolio approach to be implemented by an insurer if APRA assesses that the single event approach is inadequate in evaluating that insurer's reinsurance needs. The Concentration Risk Capital Charge is set equal to the insurer's Maximum Event Retention (MER), plus the cost of one reinstatement of the catastrophe reinsurance cover in cases where the reinstatement reinsurance cover has not been pre-paid by the insurer. In calculating the MER, an insurer may take into account potential reinsurance assets receivable from a reinsurance arrangement in some circumstances.

Internal Model Based (IMB) Method

Use of the IMB Method is conditional on APRA's approval. As of October 2009, no internal models have been approved for insurers, although there are two applications

² The insurer must consult APRA prior to entering into a securitization transaction in order to be able to reduce the Insurance Risk Capital Charge and the Concentration Risk Capital Charge.

³ If an insurer securitizes assets, the insurer must consult APRA prior to entering into the securitization transaction in order to be able to reduce the Investment Risk Capital Charge.

expected. In particular, 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. Internal models may be used by a general insurer or Level 2 insurance group.⁴ The key requirements to obtain and maintain approval for the use of an Internal Model-based Method are

The insurer or Level 2 insurance group must have an advanced approach to risk management and capital management which includes an appropriate Economic Capital Model (ECM)

Governance arrangements for the development and use of the ECM must be suitable.

The ECM must be used by the insurer or Level 2 insurance group for its own purposes or for the purposes of the group and be embedded in management, operations, and decision making processes

The ECM must be technically sufficient to produce a reliable estimate of the capital required by the insurer or Level 2 insurance group.

The insurer's MCR must be an amount of capital sufficient for the insurer's probability of default to be 0.5 percent or less. The Regulatory Capital Model (RCM) is defined as the particular implementation and application of the ECM that is to be used for the purpose of determining the MCR using the IMB Method. The RCM must allow for (a) business written over a one year time horizon; (b) catastrophe risk losses and operational risk losses occurring over the one year time horizon; and (c) run-off of underwriting, reserving, credit and market risks to extinction. APRA does not require any specific form or structure for the RCM, provided it is satisfied that the result is not less conservative than stated above.

An insurer's ECM and RCM must adequately capture all the material risks of the insurer's portfolio and business including the following risk categories: catastrophe risk; underwriting risk; reserving risk; market risk; credit risk; and operational risk. It is not necessary for the ECM and RCM to capture risks outside the above definitions such as strategic or reputation risks. However, material risks that are not captured in the ECM and RCM must continue to be managed under the risk management framework of the insurer.

For each component of risk, the ECM must utilize a distribution with appropriate shape and tail characteristics. In combining components of risk, the model must make appropriate allowance for correlation between risks, particularly correlations in the tail of the distributions. An insurer wishing to incorporate diversification assumptions in respect of operational risk must demonstrate an adequate process for estimating dependencies (particularly for extreme losses) and must apply conservatism in its dependence assumptions commensurate with the uncertainty of the estimates.

⁴ In general, a Level 2 insurance group is either (a) if an insurer is not a controlled entity of an authorized Non-Operating Holding Company (NOHC) and the insurer has controlled entities, the consolidation of the insurer and its controlled entities or (b) if an insurer is a controlled entity of an authorized NOHC, the consolidation of the authorized NOHC and its controlled entities.

APRA's approval to use the IMB Method to determine MCR will be subject to a comprehensive model review process including:

- (a) submission by the insurer of a detailed application for approval, with comprehensive information about the ECM and RCM, its governance and use, and the risk management environment of the insurer; and
- (b) one or more on-site visits by APRA to the insurer to discuss the detail of the ECM and RCM, risk management systems, and surrounding governance and organizational structure and controls.

There must be documented, independent review of the RCM (including those aspects of the ECM that are directly relevant to the RCM) which may be undertaken by an internal group (e.g., internal audit) or by an appropriately qualified external party. An insurer with approval to use the IMB Method must provide an Internal Model Report to APRA annually (or more or less frequently as specified by APRA). Also, an insurer that is approved to use an IMB Method must advise APRA in advance of any material changes to the RCM or surrounding controls that are relevant to the RCM. APRA may require the insurer to make a new approval application, including independent review in the same manner as a new model.

Combination of IMB Method and Prescribed Method

An insurer may apply to APRA for approval to use the IMB Method to calculate certain elements of its MCR or the MCR for some business segments, while using the Prescribed Method for the remaining elements or segments.

5. Peer Review

An insurer must have an Appointed Auditor. The Appointed auditor must audit the yearly statutory accounts of the general insurer and must review other aspects of the general insurer's operations on an annual basis. The Appointed Auditor must prepare a certificate and a report on these matters and provide them to the Board of the general insurer. An Appointed Auditor may also be required to undertake other functions, such as a special purpose review.

An insurer must have an Appointed Actuary, except in certain circumstances.⁵ The Appointed Actuary must provide an assessment of the overall financial condition of the general insurer and advice on the valuation of its insurance liabilities on an annual basis. (In particular, the Appointed Actuary must prepare a Financial Condition Report and an

⁵ A small insurer is exempt from the requirement to appoint an actuary when (a) the insurer has provided APRA with documentary evidence that the criteria to be small insurer under GPS 001 have been met; and (b) the insurer has attested to APRA, in writing, that it will meet these same criteria for the next 12 months. The chief executive officer (CEO) of the insurer must provide this attestation.

Insurance Liability Valuation Report and provide these reports to the Board.) An Appointed Actuary may also be required to undertake other functions, such as a special purpose review.

A general insurer must arrange to have the Insurance Liability Valuation Report of its Appointed Actuary peer reviewed by another actuary.

6. Reporting

Annual Statutory Return, reported on the basis of modified IFRS

Quarterly Statutory Returns, reported on the basis of modified IFRS

Certificate relating to the insurer's yearly statutory accounts prepared by the Appointed Auditor. The certificate must provide the Appointed Auditor's opinion in respect of the insurer's yearly statutory accounts.

An Appointed Auditor report that provides the Appointed Auditor's opinion on a range of matters, including

- a. There exist systems, procedures and controls that are kept up to date and address compliance with all prudential requirements.
- b. There exist systems, procedures, and controls relating to actuarial data integrity and financial reporting risks that are adequate and effective.
- c. Details regarding non-compliance with prudential requirements identified during the course of testing the insurer's systems, procedures and controls are provided.
- d. The insurer has complied, in all significant respects, with its Risk Management Strategy and Reinsurance Management Strategy.
- e. The insurer has systems, procedures and controls in place to ensure that reliable statistical and financial data are provided to APRA in the quarterly returns required by reporting standards made under the Collection of Data Act.
- f. The Appointed Auditor must provide details of any matters which have come to the Appointed Auditor's attention that will, or are likely to, adversely affect the interests of policyholders of the insurer.

The Appointed Actuary's annual Financial Condition Report. The Financial Condition Report must provide the Appointed Actuary's objective assessment of the overall financial condition of the insurer. The Appointed Actuary's Financial Condition Report must include, where relevant,

- a. a business overview;
- b. an assessment of the insurer's recent experience and profitability
- c. summary of the key results of the ILVR
- d. assessment of the adequacy of past estimates for insurance liabilities

- e. assessment of asset and liability management, including the insurer's investment strategy
- f. assessment of current and future capital adequacy and a discussion of the insurer's approach to capital management
- g. assessment of pricing, including adequacy of premiums
- h. assessment of the suitability and adequacy of reinsurance arrangements
- i. high-level assessment of the suitability and adequacy of the risk management framework.

Appointed Actuary's Insurance Liability Valuation Report (ILVR)

8. On-Site Examinations

9. Off-site Analysis

APRA has created a risk rating model called Probability and Impact Rating System or PAIRS. This model directs supervisory attention to entities based on their likely failure rate and on the impact should they fail. (That is, size of the institution is reflected in the impact of failure.)

When performing a PAIRS risk assessment, supervisors make an assessment of the following categories: Board; Management; Risk Governance; Strategy and Planning; Liquidity Risk; Operational Risk; Credit Risk; Market and Investment Risk; Insurance Risk; Capital Coverage/Surplus; Earnings; and Access to Additional Capital.

PAIRS involves an assessment of four key factors:

Inherent Risk – any uncertainty in relation to the business operations of an entity, whether statistically quantifiable or not, that has the potential to affect the financial position of an entity. (Involves supervisory rating of the categories Strategy & Planning, Liquidity Risk; Operational Risk; Credit Risk; Market and Investment Risk; and Insurance Risk)

Management and Control – encapsulates how an entity identifies, measures, monitors, and controls the risks inherent in its business. The capability of an entity to manage and control inherent risks arises from the underlying policies, practices, systems, and controls established. (Involves supervisory rating of the categories Strategy & Planning; Liquidity Risk; Operational Risk; Credit Risk; Market and Investment Risk; and Insurance Risk)

Net risk – residual risk remaining after taking into account the mitigating effect of management and controls. (Involves averaging of Strategy & Planning, Liquidity Risk; Operational Risk; Credit Risk; Market and Investment Risk; and Insurance Risk ratings. Also involves supervisory assessment of the categories Board, Management, and Risk Governance.)

Capital support – buffer available to absorb unexpected losses. Most regulated entities are required to maintain minimum levels of regulatory capital, but APRA expects such entities to target a level of economic capital that is sufficient to support their particular risk exposures and continuing business needs rather than simply meeting minimum regulatory requirements. (Involves supervisory rating of the categories Capital Coverage/ Surplus; Earnings; and Access to Additional Capital.)

Quality assessment scores are applied to each PAIRS category from a continuous scale of 0 to 4, with 0 being the best and 4 the worst. The exception is for Capital support, where significance weights (summing to 100%) are applied.

An assessment of the categories in PAIRS leads to a determination of an entity's overall risk of failure. This is an assessment that is made of an entity's relative riskiness or the likelihood that unexpected losses resulting from its net risk exposure are not able to be absorbed by capital support resources and would therefore cause the entity to fail. The overall risk of failure is a score between 0 and 4. (For more information, see APRA, *Probability and Impact Rating System*, May 2008, APRA website.)

The scores obtained from PAIRS are then mapped into one of four supervisory stances in the Supervisory Oversight and Response System or SOARS. The four supervisory stances are normal, oversight, mandated improvement, restructure. For example, a general insurer with a low risk of failure would be mapped into the Normal category typically.⁶ A large bank with a low probability of failure might be mapped into the Oversight category simply by virtue of its size and importance to the economy.⁷ (For more information, see APRA, *Supervisory Oversight and Response System*, May 2008, APRA website.)

10. Definition of Capital

Tier 1 capital comprises the highest quality components of capital. Tier 1 capital is divided into

Fundamental Tier 1 capital (e.g., paid up ordinary shares, reserves, retained earnings, current year's earnings net of dividends and tax expenses, and excess technical provisions)

⁶ Normal entities generally have the ability to absorb unexpected losses within existing resources, without any significant pressure on their financial health. Some entities may be categorized as Normal because the potential adverse consequences of their failure, or their beneficiaries and the industry more broadly, may be very limited.

⁷ Broadly speaking, there are two sorts of Oversight entities: those that reside naturally in this category, and those that should be in Normal but have some identifiable but non-fatal weakness or weaknesses in their risk position. Entities categorized as Oversight are not expected to fail, but there are aspects of their risk position that may create vulnerabilities in extremely adverse circumstances and that require more extensive examination by APRA.

Residual Tier 1 capital

Non-innovative Residual Tier 1 capital (e.g., perpetual non-cumulative preferred shares that satisfy relevant criteria)

Innovative Tier 1 capital (must satisfy relevant criteria)

Tier 2 capital includes other components of capital that, to varying degrees, fall short of the quality of Tier 1 capital but nonetheless contribute to the overall strength of an insurer as a going concern. Tier 2 capital is divided into

Upper Tier 2 capital (e.g., perpetual cumulative preferred shares, perpetual cumulative mandatory convertible notes, and perpetual cumulative subordinated debt)

Lower Tier 2 capital (e.g., term subordinated debt, limited life redeemable preferred shares)

Total tier 2 capital is limited to a maximum of 100 percent of an insurer's net Tier 1 capital. Total Lower Tier 2 capital is limited to a maximum of 50 percent of an insurer's net Tier 1 capital. Net Tier 1 capital must constitute at least 50 percent of its required capital base.