



Discussion Paper

Review of capital standards for general insurers and life insurers

13 May 2010

Disclaimer and copyright

While APRA endeavours to ensure the quality of this Publication, APRA does not accept any responsibility for the accuracy, completeness or currency of the material included in this Publication, and will not be liable for any loss or damage arising out of any use of, or reliance on, this Publication.

© Commonwealth of Australia

This work is copyright. You may download, display, print and reproduce this material in unaltered form only (retaining this notice) for your personal, non-commercial use or use within your organisation. All other rights are reserved.

Requests and inquiries concerning reproduction and rights should be addressed to:

Commonwealth Copyright Administration
Copyright Law Branch
Attorney-General's Department
Robert Garran Offices
National Circuit
Barton ACT 2600
Fax: (02) 6250 5989

or submitted via the copyright request form on the website <http://www.ag.gov.au/cca>

Preamble

APRA is reviewing its capital standards for general insurers and life insurers.

For general insurers, APRA introduced its current capital standards in 2002. Some minor modifications were made in 2006 and 2008.

The Life Insurance Actuarial Standards Board (LIASB) first introduced solvency and capital adequacy standards for life insurers in 1995. These standards were a requirement of the *Life Insurance Act 1995* (Life Act). The standards were extended to cover friendly societies in 1999. The Life Act was amended in 2007, transferring to APRA the responsibility for setting and administering prudential standards relating to solvency and capital adequacy.

This discussion paper outlines APRA's proposals to update the capital standards for both general insurers and life insurers.

APRA is inviting comment on the proposals discussed in this paper. Written submissions should be sent to InsuranceCapital@apra.gov.au by 12 August 2010 and addressed to:

Mrs Helen Rowell
General Manager, Policy Development
Australian Prudential Regulation Authority
GPO Box 9836
SYDNEY NSW 2001

Important

Submissions will be treated as public unless clearly marked as confidential and the confidential information contained in the submission is identified.

Submissions may be the subject of a request for access made under the *Freedom of Information Act 1982* (FOIA). APRA will determine such requests, if any, in accordance with the provisions of the FOIA.

Contents

Glossary	7
Executive summary	9
Proposed structure	9
Capital base	9
Required capital	10
Prescribed capital amount for general insurers	10
Prescribed capital amount for life insurers	11
Supervisory adjustment	11
Chapter 1 – Introduction	12
Review of capital standards	12
Approach to the review	13
Scope and application	14
Structure of this paper	15
Chapter 2 – The existing capital standards	16
Existing capital standards for general insurers	16
Existing capital standards for life insurers	17
Existing capital management requirements	18
Chapter 3 – Capital concepts	19
Capital adequacy concepts	19
Proposed structure	20
Purpose and level of sufficiency of capital	21
Chapter 4 – Capital base	22
Life insurance capital base	22
Quality of capital	23
Inadmissible assets	24
Chapter 5 – Required capital	26
Components of required capital	26
Prescribed capital amount	26
Implications for general insurers	27
Implications for life insurers	27

Chapter 6 – Components of the prescribed capital amount for general insurers	28
Asset risk capital charge	28
Asset concentration risk capital charge	29
Insurance risk capital charge	32
Insurance concentration risk capital charge	36
Risk margins	36
Other components of required capital for general insurers	38
Chapter 7 – Components of prescribed capital amount for life insurers	39
Asset risk capital charge	39
Asset concentration risk capital charge	41
Insurance risk capital charge	42
Expense reserve	44
New business reserve	44
Participating life insurance business	44
Internal models	46
Other components of required capital for life insurers	46
Chapter 8 – Aspects of prescribed capital amount applying to both general insurers and life insurers	47
Discount rates	47
Operational risk	49
Aggregation benefit	50
Liquidity risk	51
Tax	51
Chapter 9 – Supervisory review and assessment	52
A three pillar approach	52
Principles underlying the Pillar 2 supervisory review process	52
APRA’s approach to determining the Pillar 2 or supervisory adjustment to prescribed capital	53
Insurers’ capital adequacy assessment process	54

Chapter 10 – Disclosure	56
Chapter 11 – Group supervision	57
Chapter 12 – Timetable and process	58
Chapter 13 – Cost-benefit analysis information	59
Attachment A – Summary of proposals	60
1. Summary of proposals – general insurers	60
2. Summary of proposals – life insurers	62
Attachment B – Existing Level 1 capital standards	65
Attachment C – Further details on the asset risk capital charge	66

Glossary

ADI	An authorised deposit-taking institution under the <i>Banking Act 1959</i>
APRA	Australian Prudential Regulation Authority
Appointed Actuary	The actuary appointed under either the <i>Insurance Act 1973</i> or the <i>Life Insurance Act 1995</i>
BCBS	Basel Committee on Banking Supervision
Friendly society	A friendly society as defined in the <i>Life Insurance Act 1995</i> ¹
General fund	The management fund for a friendly society or the shareholders' fund for other life companies
General insurer	A general insurer authorised under the <i>Insurance Act 1973</i>
IAA	International Actuarial Association
IAAust	Institute of Actuaries of Australia
IAIS	International Association of Insurance Supervisors
ICAAP	Internal Capital Adequacy Assessment Process
Insurance Act	<i>Insurance Act 1973</i>
Level 1	Supervision that applies to individual operating companies authorised to undertake activities within a single APRA-regulated industry (ADIs, general insurers, life insurers and RSE licensees)
Level 2	Consolidated group supervision that applies to all single APRA-regulated industry groups headed by an ADI, general insurer or authorised non-operating holding company
Level 3	Consolidated group supervision for conglomerate groups with material operations across more than one APRA-regulated industry and/or in prudentially unregulated entities
LIASB	Life Insurance Actuarial Standards Board
Life insurer	A life company registered under the <i>Life Insurance Act 1995</i> (includes friendly societies)
Life Act	<i>Life Insurance Act 1995</i>
MCR	Minimum Capital Requirement for general insurers as defined in <i>Prudential Standard GPS 110 Capital Adequacy</i>

¹ In this paper the terminology relating to friendly societies follows, in general, the conventions of the *Life Insurance Act 1995* and APRA's existing standards. For example references to statutory funds should be read as references to benefit funds, unless otherwise stated.

MER	Maximum event retention as defined in <i>Prudential Standard GPS 116 Capital Adequacy: Concentration Risk Capital Charge</i>
PAIRS	APRA's Probability and Impact Rating System
Policyholder	Includes policy owner as referred to in the <i>Life Insurance Act 1995</i>
PCR	Prudential Capital Requirement
QIS	Quantitative Impact Study
SOARS	APRA's Supervisory Oversight and Response System
Solvency II	European Commission initiative to reform its insurance regulatory requirements
Tier 1 capital	Comprises the highest quality capital components and is defined in <i>Prudential Standard GPS 112 Capital Adequacy: Measurement of Capital</i>
Tier 2 capital	As defined in GPS 112, includes other components of capital which, to varying degrees, fall short of the quality of Tier 1 capital but nonetheless contribute to the overall strength of an institution as a going concern
VASF	Value of the assets of a life insurance statutory fund

Executive summary

This discussion paper describes APRA's proposals to update its capital standards for general insurers and life insurers. APRA's intention is to make its capital requirements more risk-sensitive and to improve the alignment of its capital standards across the industries it regulates.

APRA is publishing this discussion paper as the first major outcome of its review process. APRA will release three supplementary technical papers (capital base and insurance risk capital charge for life insurers, insurance concentration risk capital charge for general insurers and the asset risk capital charge for both general insurers and life insurers) in June 2010.

This discussion paper focuses on the capital standards for individual (Level 1) insurers. Proposals for Level 2 general insurance groups will follow at a later date.

Insurers may be concerned that these capital proposals will result in higher capital requirements. This is not APRA's aim. It is to be expected, however, that a more risk-sensitive capital framework will result in some insurers having a higher capital requirement and others having a lower requirement.

APRA intends to evaluate its capital proposals by assessing the results of a quantitative impact study (QIS) in which all insurers will be invited to participate. The QIS is expected to be issued in July and insurers will be given three months to complete it.

APRA expects to release draft capital standards by the end of 2010 and final capital standards in mid-2011, to take effect in 2012.

The following is a summary of the key proposals.

Proposed structure

APRA proposes to introduce a common framework for required capital and eligible capital across general insurers and life insurers.

For general insurers, the proposed required capital broadly corresponds to the existing Minimum Capital Requirement (MCR), including any additional capital that APRA may determine is necessary in particular cases.

For life insurers, the two existing requirements for solvency and capital adequacy would be replaced with a single measure of required capital. This measure would be compared with the capital base, in contrast to the current solvency and capital adequacy requirements that are compared with total assets.

The proposed structure is conceptually simple but allows for industry-specific differences to be recognised in the assessment of the components of required capital. The proposed structure also provides a clearer view of the financial position of a life insurer than the current structure, through a direct comparison of the amount of eligible capital with required capital. This simplification will be of benefit to the boards and management of life insurers as well as to external analysts and other industry observers.

The level of required capital for both general and life insurers under the proposals is intended to correspond to a 99.5 per cent probability of sufficiency over a one-year period: an insurer needs to have sufficient capital to absorb unexpected shocks that may arise over the one-year period and continue to be able to meet its obligations to policyholders at the end of that period.

Capital base

In introducing the concept of a capital base for life insurers, APRA would be aligning the capital structure for life insurers with that for general insurers and authorised deposit-taking institutions (ADIs). The capital base for life insurance statutory funds would include shareholders' net assets and approved subordinated debt (and seed capital in the case of friendly societies). Deductions would be made for inadmissible assets and there would be adjustments to policy and other liabilities for the purpose of measuring the capital base.

For general insurers, APRA proposes to adjust the existing method for determining the capital base to avoid any double-counting of regulatory capital held in a general insurer's investments in subsidiaries, associates and joint ventures.

APRA also intends that the definition and measurement of the capital base would be consistent across ADIs, general insurers and life insurers. APRA will finalise its position on this issue when the changes being considered internationally for banks are closer to finalisation and will consult with industry on proposed changes at that time.

Required capital

APRA proposes that required capital, for both general insurers and life insurers, consist of a *prescribed capital amount* and a *supervisory adjustment*.

The prescribed capital amount for an insurer would be determined by quantitative rules set out in the respective capital standards. It would comprise capital charges to cover asset risk, asset concentration risk, insurance risk, insurance concentration risk and operational risk.

The inclusion of an explicit operational risk capital charge is new for both general and life insurers. APRA also proposes to introduce an aggregation benefit that would reduce the prescribed capital amount, reflecting an allowance for diversification between insurance risks and asset risks.

Another common feature of required capital for both industries is the proposal to adopt the same definition for the risk-free discount rates to be used for valuing liabilities in determining the prescribed capital amount.

The other major differences between the existing capital standards and APRA's proposals for the prescribed capital amount are outlined below.

Prescribed capital amount for general insurers

The proposals specific to general insurers include the following:

- the asset risk capital charge would be calculated in a more risk-sensitive manner by subjecting the balance sheet to a series of stress tests according to parameters specified by APRA. This is in contrast to the existing method where the investment risk capital charge is determined using a factor-based method. The proposed stress tests would include tests for mismatches between assets and liabilities by duration for both interest rates and inflation;
- asset concentration risks would be limited through tighter limits on large investment exposures to single counterparties. These limits would broadly align with those in place for ADIs and would better address the risks arising from large exposures to individual investments. Concentration risk limits for reinsurance assets would remain unchanged;
- minor adjustments would be made to the classification of insurance classes for the purposes of assessing the insurance risk capital charge. The changes proposed are intended to reflect better the relative variability in estimates of insurance liabilities for different classes of insurance; and
- the insurance concentration risk capital charge would be reviewed to clarify its application for non-property insurers. APRA will also consider whether or not the insurance concentration risk capital charge needs to be modified to better address the occurrence of multiple large losses in any one year.

Prescribed capital amount for life insurers

The proposals specific to life insurers include the following:

- the method used for recognising diversification between different types of asset risks would be improved and stress tests for inflation and volatility would be added to the asset risk charge. All assets would be included in the calculation of the asset risk charge, not just those required to meet the liabilities of the statutory fund and its prescribed capital amount;
- the asset concentration limits that apply to the retrocessions of specialist reinsurers to their overseas parents would be reduced and specialist reinsurers would be redefined to be the statutory funds of registered life companies whose policy liabilities consist exclusively of inwards reinsurance from third parties;
- an allowance for losses from extreme events such as a pandemic would be included in the insurance risk charge and assumptions about the future repricing of contracts in response to adverse insurance risk experience would be limited. Also, participating policyholders' retained profits would not be available to support the required capital for non-participating business; and
- new business or expense reserves would not be included in the prescribed capital amount.

Supervisory adjustment

Capital adequacy depends not only on an insurer's capital position but also on the way it monitors and manages its capital and risks. APRA is proposing the introduction of a three pillar supervisory approach for general insurers and life insurers similar to that in place for ADIs. The three pillars would comprise:

- Pillar 1 – quantitative requirements in relation to required capital, eligible capital and liability valuation;

- Pillar 2 – the supervisory review process, which includes the supervision of the practices of insurers' risk management and capital management and may include a supervisory adjustment to capital; and
- Pillar 3 – disclosure requirements designed to encourage market discipline.

If APRA is of the view that an insurer's Pillar 1 or prescribed capital amount does not adequately account for all its risks, APRA would apply a Pillar 2 supervisory adjustment. Such an adjustment could be made, for example, to address strategic or reputational risks faced by a particular insurer. In order to apply any such adjustment consistently across insurers, APRA would draw upon all the relevant information sources and analytical tools at its disposal, including its risk assessment and supervisory response models (PAIRS and SOARS).

The minimum level of capital an insurer would be required to hold at all times would be the total required capital amount determined as the Pillar 1 or prescribed capital amount plus any Pillar 2 or supervisory adjustment. This total required capital amount would be referred to as the prudential capital requirement (PCR).

APRA proposes that each insurer be required to disclose annually the individual components and total amount of its capital base and prescribed capital amount. If APRA determines that a PCR is to include a Pillar 2 or supervisory adjustment, the insurer would not be permitted to disclose this adjustment.

Chapter 1 – Introduction

Review of capital standards

APRA is proposing to update its capital standards for general insurers and life insurers. APRA began its review of the capital standards in late 2008 and announced the broad scope of the review in May 2009. The motivation for this review, in the case of general insurance, is to complete the refinements commenced in 2008 and, in the case of life insurance, to undertake a full reassessment in the light of underlying changes occurring during the last 15 years.

The prudential framework for *general insurance* was substantially overhauled in two stages, in 2002 and 2005. These reforms warrant reassessment in the light of some years of subsequent experience. Although further refinements to general insurance capital standards were introduced in 2008, some types of risks, including asset/liability mismatch and asset concentration risks, are not explicitly or adequately catered for within the existing capital standards and in APRA's view they should be.

For *life insurance*, the original versions of the current capital standards were introduced by the Life Insurance Actuarial Standards Board (LIASB) soon after the enactment of the *Life Insurance Act 1995* (Life Act). The LIASB revised its standards a number of times, most recently in 2006. Legislative change transferred the power to make capital standards for life insurers from the LIASB to APRA at the beginning of 2008.¹ At that time the LIASB was in the process of reviewing some parts of the capital standards. Further, the global financial crisis and associated stress testing have brought to light some additional aspects of the existing standards that warrant review.

More fundamentally, the structure of the capital standards for life insurers, particularly the dual reporting requirements for solvency and capital adequacy, is out of line with both the banking and general insurance

industries in Australia. Hence, there is a case for exploring both simplification and harmonisation.

APRA is publishing this discussion paper as the first major outcome of the review process. The next important steps are:

- the release, scheduled for June 2010, of three supplementary technical papers on the following subjects: the capital base and the insurance risk capital charge for life insurers; the asset risk capital charge for general insurers and life insurers; and the insurance concentration risk capital charge for general insurers;
- a request to insurers to participate in a quantitative impact study (QIS), to be issued in July 2010 with responses by September 2010; and
- a response paper and draft prudential standards, scheduled to be issued in late 2010 following assessment of the submissions received on this discussion paper, the technical papers and the QIS.

APRA envisages issuing final prudential standards in 2011 and implementing the revised capital standards in 2012.

For general insurers, the benefits of this review will include more risk-sensitive capital standards, particularly for asset/liability mismatch and for asset and insurance concentration risks. As a result, general insurers with assets well matched to their liabilities and/or with well-constructed reinsurance protection would benefit from lower capital requirements than would apply to insurers where this is not the case.

For life insurers, the capital regime would be simpler and more risk-sensitive than the current arrangements and easier for all stakeholders to understand and work with, in both substance and presentation. The simplifications would be most evident to the boards, management, auditors and actuaries of life companies as they discharge their responsibilities but will also be helpful to external analysts and other industry observers.

¹ *Financial Sector Legislation Amendment (Simplifying Regulation and Review) Act 2007*

More generally, there would be greater harmonisation of capital arrangements across ADIs, general insurers and life insurers. This would improve the ability of all interested parties to understand APRA's capital requirements. It would also facilitate conglomerate group supervision which, for a group that includes a life company, would be more difficult under the current capital standards.

Insurers will be understandably concerned at the possibility that the capital standards that will ultimately emerge from this review will require increased capital for insurers. APRA wishes to reaffirm that:

- in commencing this review, APRA's starting position was not that current capital requirements for the general and life insurance industries were, overall, either too low or too high and APRA has not set out to achieve any material change in overall industry capital levels; and
- APRA will not finalise its proposals without assessing carefully their likely effect on capital at an individual insurer level and in aggregate, drawing on the QIS results.

It is inevitable that the implementation of more risk-sensitive capital requirements will lead to most if not all insurers having different capital requirements. At this stage it is difficult to foresee the impact on individual insurers. However, the overall result should be capital requirements that more appropriately reflect the risks undertaken both at an individual insurer level and by the general and life insurance industries as a whole.

Approach to the review

In undertaking this review, APRA is seeking to:

- improve the risk sensitivity and appropriateness of the capital standards, in general and life insurance; and
- where appropriate, improve the alignment of the capital standards across industries.

APRA is taking into account industry and other developments, including international regulatory developments, since the existing standards were set. This approach aligns with APRA's stated supervisory approach, which is to be 'forward-looking, primarily risk-based, consultative, consistent and in line with international best practice'.²

Risk sensitivity

In order to be confident that an insurer has sufficient capital resources, APRA requires that risks be appropriately recognised and valued and that capital held is commensurate with the risks to which the insurer is exposed.

APRA aims to improve the risk sensitivity of capital standards so that:

- an insurer's regulatory capital requirement better reflects its risk profile;
- a minimum level of protection is provided to policyholders regardless of the type of policy held and of the business model or structure of the insurer; and
- the capital to be held by each insurer changes in line with changes to the levels of risk to which it is exposed. There should not be opportunities for reducing capital without a corresponding reduction in risk.

Further, improvement in risk sensitivity facilitates:

- a levelling of the regulatory playing field between individual insurers and across industries by better aligning required capital with risk;
- better alignment with internal models for risk-based capital;
- the availability of better information on risks that insurers undertake; and
- an increased level of understanding of risk by boards and management of insurers and by APRA.

APRA also recognises the need to balance the benefits of greater risk sensitivity of its capital standards with the desirability of maintaining simplicity and clarity.

² See www.apra.gov.au/aboutApra/.

Alignment between industries

APRA proposes to improve the alignment of its capital standards for general insurers and life insurers. Where appropriate, APRA also proposes to align its capital standards for insurers with those for ADIs.

As the financial system has developed over time, groups with entities operating in more than one industry have become more common. It is important that equivalent risks are treated in a similar way, regardless of the nature of the entity undertaking the risk.

Although APRA sees alignment as a useful goal, it also recognises that different industries offer different products with different business models and different risks. These risks may require specific capital treatments because each industry has its own unique features in terms of structure, regulation (by APRA and other agencies) and the risks to which it is exposed. The different industries are also subject to their own accounting standards.

There are, however, benefits in aligning the capital standards where possible. These benefits include not only a levelling of the regulatory playing field between industries, as already noted, but also:

- easier comparison and understanding of regulated entities operating in different industries for stakeholders and observers (including boards, policyholders, analysts and investors);
- simplified risk management for groups whose activities extend across two or more APRA-regulated industries; and
- more effective supervision by APRA of companies or groups whose activities extend across two or more APRA-regulated industries.

International regulatory developments

APRA will continue to monitor international developments throughout its review of capital standards, with a view to maintaining broad consistency with the direction of these developments. APRA will incorporate, to the extent appropriate, any aspects of these developments that it regards as desirable.

Improved harmonisation and comparability with regulatory regimes in other jurisdictions has benefits for companies that operate overseas, companies that are subsidiaries or branches of foreign companies and for local insurers competing with foreign-owned insurers. Accordingly, APRA has been reviewing the standards and guidance developed by the International Association of Insurance Supervisors (IAIS), the development of Solvency II in Europe and the Basel II Framework (where relevant for insurance).

Scope and application

The proposals described in this paper apply to all APRA-authorized:

- general insurers, including branches but excluding Lloyds underwriters;³
- life insurers (including friendly societies, unless otherwise stated) except in respect of life insurance business written in a statutory fund that includes only business written overseas in one or more Approved Countries;⁴ and
- eligible foreign life insurance companies (EFLICs), in respect of life insurance business carried on within Australia.

This discussion paper focuses on the capital standards for individual (Level 1) insurers. Most of the proposals and concepts outlined are also likely to flow through to the capital standards for Level 2 general insurance groups.

³ There are special provisions set down in Part VII of the *Insurance Act 1973* relating to regulation of Lloyds underwriters.

⁴ *Prudential Standard LPS 7.02 General Standard* defines the Approved Countries to be the UK, the USA, and Canada.

Structure of this paper

Together with this chapter, the next two chapters of this paper establish a foundation for the rest of the paper. Chapter 2 provides an overview of APRA's existing capital standards for general insurers and life insurers while Chapter 3 defines some capital concepts that underpin APRA's proposals and describes the proposed future structure of the capital requirements.

Chapter 4 describes APRA's proposals relating to the capital base and Chapter 5 outlines APRA's proposals for required capital in terms of its major components. These proposals are new for life insurers; for general insurers, the proposals build on the existing capital standards.

Chapters 6 to 8 describe APRA's proposals for the prescribed capital amount that an insurer will be required to hold. Chapter 6 contains proposals for general insurers and Chapter 7 contains proposals for life insurers. Chapter 8 addresses aspects of required capital that relate to both general insurers and life insurers.

Chapter 9 discusses APRA's proposals relating to supervisory review and assessment.

Chapter 10 proposes requirements for disclosure of required capital and Chapter 11 refers to the implications of the proposals for insurance groups and financial conglomerates.

Chapter 12 sets out an expected timetable for the consultation process and Chapter 13 requests insurers to provide cost-benefit information.

Chapter 2 – The existing capital standards

As background to APRA's proposals, this chapter provides an overview of the structure of the existing capital standards in general and life insurance.

Existing capital standards for general insurers

The existing general insurance capital standards set out a prescribed method for calculating an insurer's Minimum Capital Requirement (MCR). The MCR includes explicit capital charges for insurance risk, insurance concentration risk, investment risk and investment concentration risk, where:

- *insurance risk* relates to the risk that insurance liabilities, which are the sum of outstanding claims liabilities and premiums liabilities as reported to APRA, will ultimately prove to be understated;
- *insurance concentration risk* relates to the risk associated with an accumulation of insurance exposures to extreme events, adjusted for reinsurance;

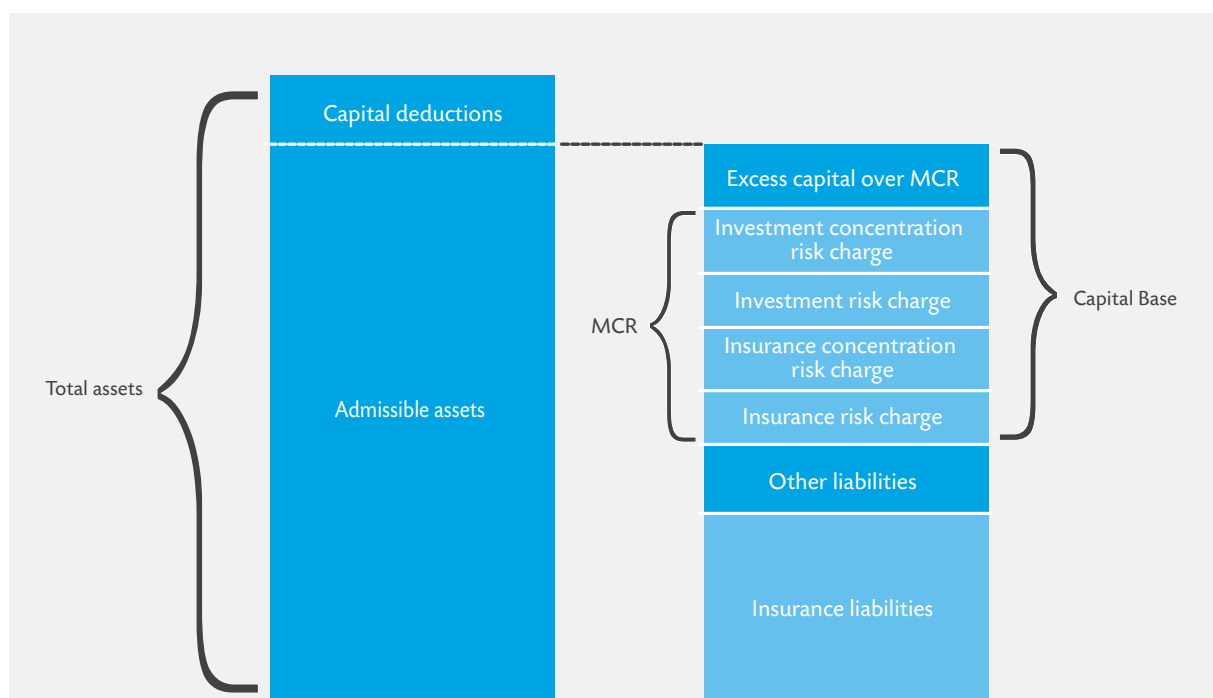
- *investment risk* relates to the risk of adverse movements in the value of an insurer's assets or off-balance sheet exposures, or both; and
- *investment concentration risk* relates to the risk associated with excessive exposures to a particular asset or counterparty.

The MCR is intended to provide a probability of sufficiency of 99.5 per cent over a one-year period. This is discussed further in Chapter 3 in the section on 'Purpose and sufficiency of capital'. As an alternative to calculating the MCR using the prescribed method, an insurer may apply to APRA to use an internal model-based method.

In the existing capital standards, a general insurer's capital base is the capital that is eligible to meet its MCR. An insurer must maintain a capital base in excess of its MCR at all times.

The existing capital structure for general insurers is illustrated in Figure 1. It shows the complete insurance balance sheet, not just the MCR and the capital base. This facilitates a direct comparison with the approach currently adopted in life insurance.

Figure 1 – Existing capital structure for general insurers



Existing capital standards for life insurers

APRA has two forms of capital requirement in life insurance, a solvency standard and a capital adequacy standard.

The *solvency standard* considers the various risks undertaken in a statutory fund in the context of a fund closed to new business. It is intended to provide a probability of sufficiency of capital of 99.5 per cent over a one-year period. The *capital adequacy standard* considers a statutory fund that is open to new business and is intended to provide a probability of sufficiency of capital of 99.75 per cent over a one-year period. This is discussed further in Chapter 3 in the section on ‘Purpose and sufficiency of capital’.

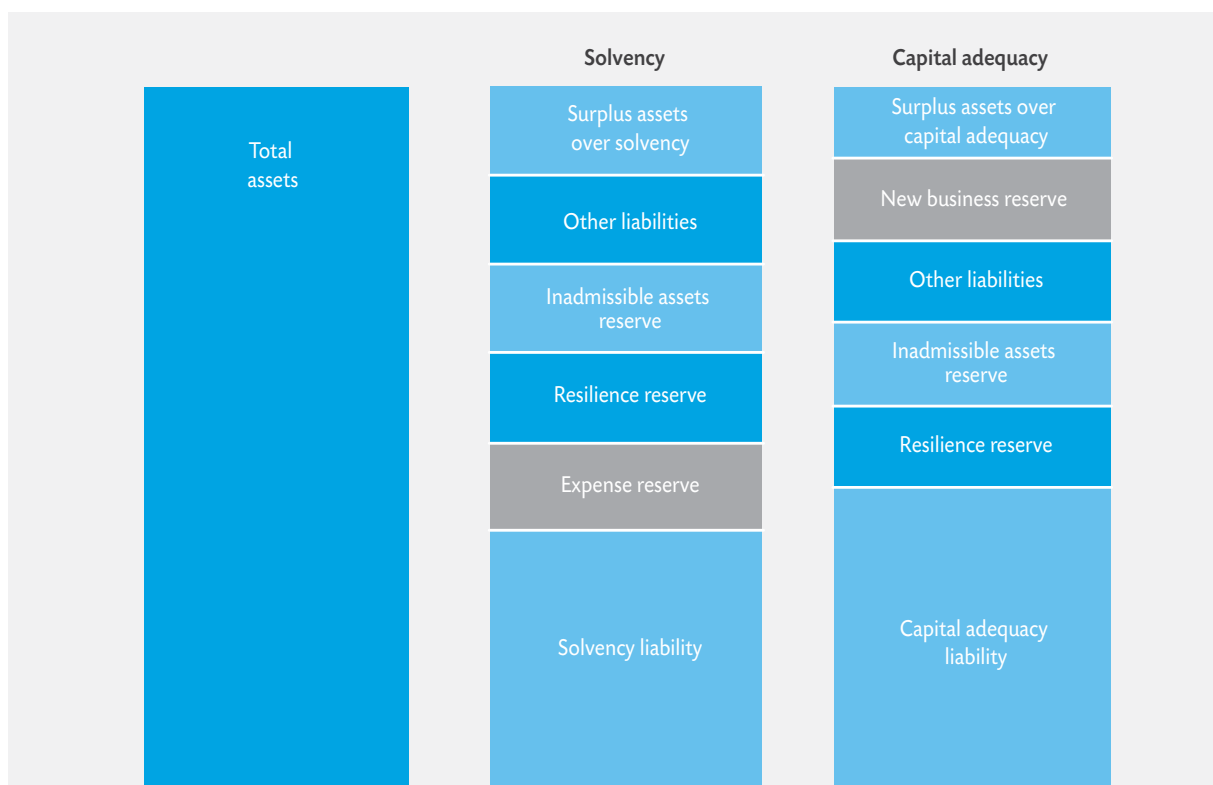
The two standards, which are illustrated in Figure 2, compare total assets to a stressed value for the liabilities together with other reserves. This approach is applied at a statutory fund level. The general fund of the life insurer is subject to a single management capital requirement.

Figure 2 illustrates that, in order to meet the solvency requirement, the ‘surplus assets over solvency’ must be greater than zero. Similarly, to meet the capital adequacy requirement, the ‘surplus assets over capital adequacy’ (as labelled in the diagram) must be greater than zero.

The solvency requirement and capital adequacy requirement are built up from the building blocks illustrated in the diagram but various minima apply at certain stages of the calculations. For example, the solvency liability cannot be less than the minimum termination value (at the related product group level).

The current approach to capital requirements for life insurers has no direct parallel to the ‘minimum capital requirement’ and the ‘capital base’ in general insurance.

Figure 2 – Existing capital structure for life insurers



Existing capital management requirements

As already noted, a general insurer must maintain a capital base in excess of its MCR at all times.

In order to limit the likelihood of a breach of the MCR, APRA expects each general insurer to hold a buffer of surplus capital above the MCR and to manage its capital so as to maintain this buffer at all times. As explained in *Prudential Practice Guide GPG 110 Capital Adequacy: Capital Management*, for most categories of insurer this buffer is expected to be at least 20 per cent of its MCR. APRA maintains the discretion to require a different buffer in individual cases.

In life insurance, the primary APRA capital requirement is based simply on the imperative that life insurers do not breach various provisions of the capital standards. Life insurers are expected to have mechanisms in place for monitoring and ensuring continual compliance with all prudential requirements. They include capital management plans, within which APRA expects to see a level of target surplus that would alert management to, and avert, potential breaches of regulatory capital requirements. While a comparison between actual surplus capital and target surplus capital is APRA's primary supervisory measure for assessing a life insurer's capital position, the current life insurance capital standards do not include any specific requirements for target surplus.

Chapter 3 – Capital concepts

This chapter introduces some capital concepts and describes the proposed structure of capital requirements for general and life insurance. In keeping with the objective of improving the alignment of the capital standards across industries, the proposed structure is essentially the same for both general insurers and life insurers.

Capital adequacy concepts

APRA's principal objective in its regulation of general insurers and life insurers is to protect policyholders. Capital is the foundation of financial strength and is a core element of APRA's regulatory framework. An insurer needs sufficient capital resources to be able to absorb unexpected losses and to manage other adverse shocks so that it can meet its commitments to policyholders.

The primary concepts that APRA uses to assess capital adequacy are:

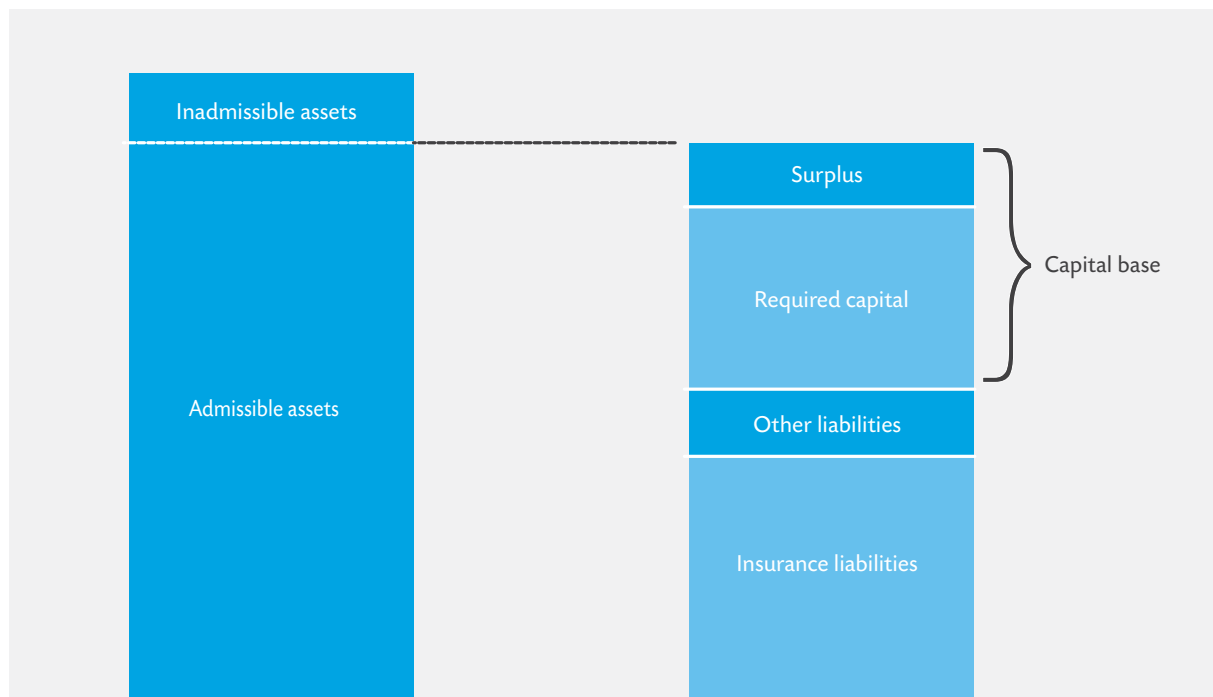
- *required capital*, which is the minimum capital that APRA requires a regulated entity or group to hold;
- *eligible capital*, which is the capital actually held by a regulated entity or group that APRA recognises as eligible for capital adequacy purposes;
- *surplus capital*, which is the excess of eligible capital held by the regulated entity or group over required capital, net of any adjustments; and
- *target surplus*, which is the targeted amount of surplus capital as determined by the board of the regulated entity or group.

For general insurers, required capital is the Minimum Capital Requirement (MCR) under APRA's prudential standards, including any additional capital that APRA may determine is necessary in particular cases. Eligible capital or *capital base* is defined as the actual capital or net assets determined according to APRA's prudential standards. It includes ordinary equity (proceeds from ordinary shares), reserves, retained earnings, residual capital and hybrid capital.

For life insurers, the existing capital standards do not explicitly define required capital or eligible capital. However, APRA is proposing to apply consistent concepts and the same terminology to general insurers and life insurers. Hence APRA proposes to refer to eligible capital as the 'capital base' for both life insurers and general insurers.

Target surplus represents a component of each insurer's capital management plan and is concerned, among other things, with ensuring that eligible capital does not fall below required capital. Insurers are expected to set appropriate target surplus levels and falling below such levels could be a trigger for supervisory attention.

Figure 3 – Proposed structure



Proposed structure

The proposed structure of the capital requirements for general insurers and life insurers is illustrated in Figure 3 above.

Figure 3 shows that an insurer needs to hold admissible assets that exceed the sum of its liabilities and its required capital. The excess is shown as 'surplus'; by definition, the total of surplus and required capital is capital base.

This structure corresponds to the existing structure of capital requirements for general insurers, described in Chapter 2.

For life insurers, this structure differs from current arrangements in three major ways:

- there is only one capital requirement rather than two standards as at present (solvency and capital adequacy). Life insurers are currently expected to meet the higher of these two standards at all times and APRA, in practice, supervises to the higher amount. The calculation and monitoring of two separate requirements creates an extra burden for both life insurers and APRA;
- eligible capital and required capital are explicitly defined, rather than the existing approach that compares total assets to two measures of total liabilities plus reserves; and
- inadmissible assets are on the asset side of the balance sheet, in place of the existing requirement to hold an 'inadmissible assets reserve' on the liability side. Large exposures would not be treated as inadmissible but a capital charge would apply, as in the existing capital standards.

APRA proposes that this structure apply at the statutory fund level and that a similar approach also apply to the general fund.

The proposed structure is conceptually simple but allows for industry-specific differences to be recognised in the assessment of the components of required capital. The proposed structure also provides a clearer view of the financial position of a life insurer through a direct comparison of the amount of eligible capital with required capital.

The benefits of aligning the structure of capital requirements across general insurers and life insurers include:

- simplified risk management for insurers or groups whose activities extend across two or more APRA-regulated industries;
- more effective capital management as the same documentation and structures for a capital issue can be used across industries;
- more effective supervision by APRA of insurers or groups whose activities extend across two or more APRA-regulated industries (i.e. more effective supervision at Level 3); and
- a simpler basis for industry observers (e.g. analysts, investors and policyholders) to compare entities operating in different industries.

At the same time, the details for determining the components of capital would differ between the general and life insurance industries because of differences in the nature of the risks to which the two industries are exposed.

Legislative changes for life insurers

One of the consequences of moving to a single assessment of required capital for life insurers is that legislation and regulations that refer specifically to solvency or capital adequacy would need to be reviewed. APRA will raise with the Government any legislative amendments to the *Life Insurance Act* which may be required.

Purpose and level of sufficiency of capital

The existing capital standard *Prudential Standard LPS 2.04 Solvency* (LPS2.04) assumes explicitly that the standard is to protect policyholders if a life insurer were put into run-off. The existing *Prudential Standard LPS 3.04 Capital Adequacy* (LPS3.04) assumes that the life insurer is a going concern. The new proposed structure would remove this distinction.

Consistent with the current approach for general insurers, APRA proposes to require each regulated life insurer to have sufficient capital to absorb unexpected losses and continue to meet its commitments to policyholders.

The level of required capital for both general and life insurers under APRA's proposals is designed around a 99.5 per cent probability that each insurer will have sufficient capital to absorb unexpected shocks or losses that may arise over a one-year period and continue to be able to meet its obligations to policyholders at the end of that period. This probability of sufficiency acts as a guide for APRA in establishing both relative levels of required capital for different risks and absolute levels of overall capital. All risk assessments at this level are very approximate, however, and in some cases subjective, such that the ultimate details of the capital calculations are a matter of judgement for APRA.

For general insurers, this 99.5 per cent probability of sufficiency is the same basis as APRA used in setting the current MCR.

For life insurers, the existing basis is nominally 99.5 per cent for solvency on closure to new business and 99.75 per cent for capital adequacy on a going concern basis. For a range of technical and historical reasons, neither basis is directly comparable with the current 99.5 per cent proposal but APRA is nevertheless confident that the new proposals will broadly achieve the same probability of sufficiency as the existing capital requirements.

Chapter 4 – Capital base

This chapter describes the determination of an insurer's capital base. This is the amount of capital held by the insurer that is recognised by APRA as being eligible for capital adequacy purposes.

APRA's proposals relating to the capital base for life insurers are new. Proposals on quality of capital and inadmissible assets affect both general insurers and life insurers, but these are the only changes to the determination of the capital base for general insurers.

Life insurance capital base

APRA is introducing the concept of eligible capital or capital base for life insurers as a key component of the proposed structure of capital requirements for the industry. This structure provides a clearer view of the financial position of a life insurer through a direct comparison of the amount of eligible capital with required capital. This change is also part of the alignment of the life insurance capital structure with the capital structure for ADIs and general insurers.

APRA's starting point for defining the capital base for life insurers is shareholders' net assets (capital and retained earnings). As discussed below, APRA is proposing that policy liabilities and other liabilities be adjusted for the purpose of measuring the capital base.

The eligibility of subordinated debt (and seed capital for friendly societies) for inclusion in the capital base is also discussed below, as is the treatment of inadmissible assets.

Adjustments to policy and other liabilities

Policy liabilities would be adjusted to be the best estimate value of the liabilities to policyholders (BEL), with a minimum being the amount payable on voluntary termination of policies or current termination value (CTV). The minimum would be applied for groups of policies, not for each individual policy.

APRA regards the greater of CTV and BEL as the appropriate liability for the purpose of determining the capital base. It would not be appropriate to include any excess of CTV over BEL in the capital base because its existence usually depends on the voluntary continuation of premium payments by policyholders: should a life insurer encounter difficulties, this excess would have questionable value.

Further adjustments would be required for participating business and non-participating business where there is a discretionary entitlement to share in investment experience. The aim of these adjustments would be to ensure that policyholders' entitlements to future discretionary additions are not treated as part of the capital base. APRA requires that the capital base be freely available to absorb losses and rank behind the claims of policyholders and other creditors in the event of winding up. Funds that can only be distributed to particular groups of policyholders do not satisfy these requirements.

As in the existing solvency and capital adequacy standards, there may also be some adjustment required to the 'other liabilities' if these are not at fair value. An example is defined benefit superannuation fund deficits in certain circumstances.

APRA's proposals for the calculation of the capital base will be detailed in a technical paper dealing with the capital base and insurance risk capital charge for life insurers. This paper is expected to be released in June 2010.

Risk margins

Determination of the capital base depends on suitable measures of both assets and liabilities. APRA requires adjustments to be made to the assets and liabilities in the statutory accounts in order to ensure that the capital base is not overstated. Assets should not be overstated and liabilities should not be understated.

In order to determine an appropriate capital base for general insurers, APRA requires that general insurance liabilities include risk margins that relate to the uncertainties in estimating the liabilities. The liabilities are required to be assessed as central estimates plus risk margins that bring the insurance liabilities to a 75 per cent probability of sufficiency (or higher in some cases).

APRA believes that the proposed adjustments to life insurance policy liabilities described above are appropriate for the purposes of measuring the capital base and that there is no need to include any additional risk margins. Life insurance policies are multi-year contracts and for many types of business there is an expectation that future premiums would be received and/or future fees deducted. Future premiums and fees reduce the best estimate of the present value of future cash flows. As a result, the best estimate liability in these cases is normally lower than the current termination value (including cases where the CTV is nil and the BEL is negative). Hence, for many types of life insurance business, the termination value minimum brings the level of the liabilities to a higher level than best estimate, thereby incorporating an implicit risk margin.

Quality of capital

A key aspect of APRA's existing capital standards for general insurers is the quality of eligible capital. Factors considered in determining the quality of a capital instrument include whether the instrument:

- provides a permanent and unrestricted commitment of funds;
- is freely available to absorb losses;
- does not impose any unavoidable servicing charges against earnings; and
- ranks behind the claims of policyholders and creditors in the event of the winding up of the insurer.

Not all capital instruments meet these criteria equally. Hence, APRA imposes restrictions on the composition of an insurer's capital that is eligible to be included in its capital base.⁵

APRA's current requirements for the composition of eligible capital are the same for general insurers and ADIs. The components of eligible capital or capital base are subdivided into Tier 1 capital, which comprises the highest quality components of capital, and Tier 2 capital. The latter includes other components of capital such as subordinated debt that, to varying degrees, fall short of the quality of Tier 1 capital but nonetheless contribute to the overall strength of an entity as a going concern. In introducing the concept of the capital base for life insurers, APRA proposes also to introduce the same Tier 1 and Tier 2 requirements, where appropriate, as for general insurers and ADIs.

The global financial crisis has prompted regulators to review the eligibility criteria for, as well as the quantum of, certain capital components to be included as eligible capital. In the case of banking institutions, these requirements are currently being reassessed as part of a more general review of capital standards being undertaken by the Basel Committee for Banking Supervision (BCBS). The final outcome of the BCBS review may well be a reduction in the quantum of Tier 2 capital permitted to be included as eligible capital, and possibly an increase in the required quality of that capital.

APRA's practice has been to closely follow the BCBS approach as it applies to ADIs, and to maintain consistency of capital definitions for ADIs and general insurers. APRA expects to continue this practice and, as noted above, to extend this approach to life insurers. However, APRA does not intend to finalise its position on the classification of capital instruments until international developments are clearer. APRA will consult fully with industry before finalising its position.

⁵ Refer to Prudential Standard GPS 110 Capital Adequacy

Inadmissible assets

Value of subsidiaries, associates and joint ventures (life and general insurers)

In considering the extent to which the values of subsidiaries, associates and joint ventures should be treated as admissible in an insurer's balance sheet, APRA needs to be satisfied that there is no double counting of capital among regulated entities, and that the insurer can realise the value of any investments in such entities if required. In some cases, the investments in these entities may not be readily available to meet the insurer's obligations due to, for example:

- a need for the entity to meet its own prudential capital requirements in the jurisdiction in which it operates;
- the value of the entity being dependent on its relationship with the insurer;
- the entity's board not approving a capital transfer; or
- legal restrictions (e.g. dividend paying capacity of retained earnings).

The existing capital standards for general insurers and life insurers differ in their treatment of subsidiaries, associates and joint ventures. In particular, the existing Level 1 general insurance standards allow a general insurer to include the regulatory capital of any such entities in the determination of its capital base. However, given that this amount is required to be held in the regulated subsidiary, it would not be accessible by the parent insurer to meet its policyholder obligations.

(In practice, where a general insurer has significant investments in subsidiaries, APRA generally adjusts the insurer's capital requirements to reflect the inability of the insurer to access some of the capital within the subsidiary.)

The existing life insurance standards specify that the regulatory capital of any subsidiary or associate that is a financial services entity must be treated as inadmissible by a life insurer.

The existing standards for general insurers and life insurers are also not consistent in their treatment of any excess above net tangible assets of the subsidiary, associate or joint venture held in the accounts of the parent. This excess should be treated as inadmissible as these assets (such as goodwill and other intangibles) may not be readily realisable. Whilst the existing standards for general insurers and ADIs currently treat this excess as inadmissible, this is not the case for life insurers in respect of subsidiaries and associates that are not financial services entities, and in respect of joint ventures.

To ensure a consistent and prudent approach, APRA proposes that the following assets be treated as inadmissible for both general insurers and life insurers:

- any excess of the value of the investment in a subsidiary, associate or joint venture in the accounts of the insurer over the net tangible assets of that subsidiary, associate or joint venture; and
- any amount of the remaining value of the investment in the subsidiary, associate or joint venture (i.e. the value of the investment less any intangible component) that is required to meet any regulatory capital requirements of such an entity. This includes any amounts invested in equity or any other capital instrument of that entity.

Exceptions for life insurers would be made where policy benefits are dependent on the performance of the assets. This would be similar to the wording in paragraph 10.3.2 of the existing solvency standard, LPS 2.04, but with the existing requirements extended to cover holdings in joint ventures and non-financial services entities.⁶

Any amounts that are deducted from the capital base would not be subject to the asset risk capital charges and asset concentration risk capital charges described in Chapters 6 and 7.

Presentation of inadmissible assets for life insurers

Under the existing capital standards for life insurers, a reserve for inadmissible assets must be held as part of both the solvency and capital adequacy requirements. Under the proposed capital standard, inadmissible assets would instead be deducted from the capital base. These changes are presentational only and align the treatment of inadmissible assets for life insurers and general insurers.

Currently, life insurance inadmissible assets include the value of any assets in excess of the stated asset concentration limits. In the proposed standard, this excess would no longer form part of inadmissible assets but would instead form the 'asset concentration risk' capital charge.

Inadmissible assets (other than for asset concentration) would be defined in a similar way to the existing solvency standard. The existing solvency and capital adequacy standards have different definitions of inadmissible assets, reflecting the differing purposes of the two standards.

⁶ Paragraph 10.3.2 of LPS 2.04 says:

To the extent the benefits under the policy are contractually linked to the performance of the assets held, these assets include holdings in associated and subsidiary entities, and if

- a) those holdings take the form of equities as part of an index, or typical balanced, investment portfolio; and
 - b) the extent of the exposure to those holdings is consistent with the stated investment objective of the fund; and
 - c) those holdings comply with Section 43 of the Life Insurance Act; and
 - d) the Actuary is satisfied that there has been appropriate disclosure to policy owners of the risks to which they are exposed;
- no reserve is required under paragraph 10.3.1.

Chapter 5 – Required capital

This chapter describes APRA’s proposals for the major components of required capital. Chapters 6 to 9 elaborate on these proposals.

Components of required capital

Required capital is the minimum amount of capital that APRA requires an insurer to hold. APRA proposes that required capital for both general insurers and life insurers consist of:

- a *prescribed capital amount*, i.e. the required capital determined in accordance with quantitative rules as set out in the capital standards; plus
- any additional capital in the nature of a *supervisory adjustment* required by APRA. This supervisory adjustment is discussed in Chapter 9.

The proposed structure of required capital is illustrated in Figure 4 below.

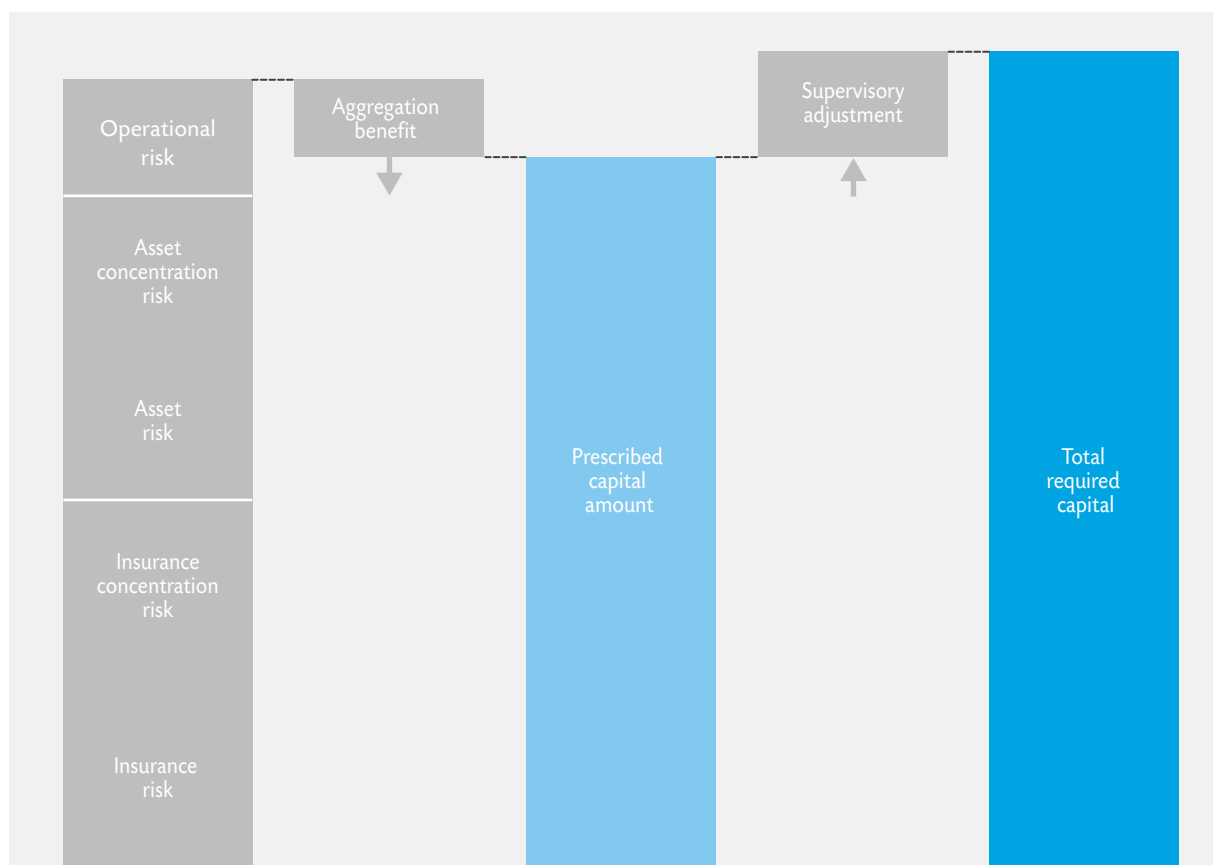
Prescribed capital amount

The prescribed capital amount would comprise capital charges to cover the following risks for both general and life insurers:

- insurance risk;
- insurance concentration risk;
- asset risk;
- asset concentration risk; and
- operational risk.

An aggregation benefit would then reduce this amount to produce the prescribed capital amount. The aggregation benefit would be calculated according to an algorithm, specified by APRA, that would recognise some diversification between insurance risk and asset risk (excluding concentration risk). The aggregation benefit is described further in Chapter 8.

Figure 4 – Proposed structure of required capital



These components are similar to the components of the existing capital standards, with the exception of an operational risk capital charge and the aggregation benefit. The determination of the components, however, is not the same in all respects as the existing capital standards, as explained in Chapters 6, 7 and 8.

Implications for general insurers

For general insurers, the proposed structure of the capital standards is similar to the existing structure. The main changes are:

- the addition of an explicit operational risk capital charge;
- the inclusion of an explicit aggregation benefit to reflect the fact that insurance risks and asset risks are usually largely independent of each other;
- replacement of the current investment risk capital charge with a more risk-sensitive calculation – refer to Chapter 6; and
- the addition of an explicit supervisory adjustment (which may be zero).

Implications for life insurers

For life insurers, the proposed structure is materially different from the current structure. In particular, APRA proposes to:

- replace the current solvency and capital adequacy requirements for statutory funds with a single new measure of capital;
- translate the current approach that compares total assets to a total capital adequacy or solvency requirement into an approach that compares a statutory fund's capital base with its required capital;
- oblige each statutory fund and the general fund to maintain a capital base that exceeds required capital at all times; and
- as for general insurers, add an explicit operational risk capital charge, deduct an explicit aggregation benefit to arrive at the prescribed capital amount, and also add a supervisory adjustment (which may be zero).

Chapter 6 – Components of the prescribed capital amount for general insurers

This chapter describes APRA's proposed changes to the components of the prescribed capital amount for general insurers. It discusses the capital that is required to protect against:

- asset risk;
- asset concentration risk;
- insurance risk; and
- insurance concentration risk.

APRA will provide further details on some of its proposals in two technical papers that are due for release in June 2010. The subjects of the technical papers are:

- the asset risk capital charge (for both general insurers and life insurers); and
- the insurance concentration risk capital charge for general insurers.

Asset risk capital charge

Capital is required to protect insurers against asset risk – i.e. risk arising from investments and from reinsurance assets and other recoverables. The capital charge for asset risks should reflect the potential for losses arising from such risks and encourage insurers to adopt an investment policy that has regard to the term and nature of their liabilities and the creditworthiness of investment and reinsurance counterparties.

In the existing capital standards for general insurers, the investment risk capital charge requires insurers to hold capital against asset risk (see *Prudential Standard GPS 114 Capital Adequacy: Investment Risk Capital Charge* (GPS 114)).

The main shortcomings of this charge are that:

- there is no allowance for mismatch between the duration of the assets and liabilities;
- inflation and currency mismatch risks are not considered;
- the allowance for credit risk does not consider the outstanding term of the assets;

- there is no explicit allowance for the diversification benefits of holding a mixture of assets from different asset classes.⁷ For example, the existing equities charge of 16 per cent for listed equities might be reasonable for a general insurer invested in a diversified portfolio of assets but might be considered low for an insurer whose assets consisted entirely of equities. A higher charge for equities together with an explicit allowance for diversification would generally be more appropriate; and
- the current investment capital factors are fixed. An alternative would be to have factors that increase as asset values increase and vice-versa. This would be a counter-cyclical response to changes in market values, requiring proportionately more capital as market values increase and less as they decrease.

To address these shortcomings, APRA is proposing to replace the existing investment risk capital charge, which is 'factor-based', with a more risk-sensitive charge that APRA proposes to call the asset risk capital charge. The charge would be determined by subjecting the balance sheet to a series of stress tests according to parameters specified by APRA. Because some of these stresses would affect both the assets and the liabilities, the charge is likely to need to be calculated by the Appointed Actuary.

The proposed approach is similar to the resilience reserve approach currently specified by APRA for determining the asset risk capital charge for life insurers.

The primary stress tests applying to all insurers would be based on variations in:

- future risk-free interest rates net of inflation (referred to as 'real interest rates'); and
- future inflation rates.

⁷ Concentration within an asset class is dealt with later in the section on the asset concentration risk capital charge.

Risk-free interest rates are used to discount the values of liabilities. They are also used in determining the values of interest-bearing assets (with the addition of a credit spread to the risk-free rate for assets subject to credit risk). Risk-free interest rates used for this purpose can be regarded as having two components, an inflation rate and a real interest rate. APRA proposes to stress these two components separately because some assets and some liabilities are affected differently by interest rates and inflation rates.

APRA acknowledges that a component of the inflation risk that relates to the liabilities may already be allowed for in the insurance liability risk margins. APRA is therefore proposing that an adjustment be made to address the potential for double-counting in relation to inflation risk. Further details in relation to this adjustment will be provided in the technical paper on asset risk capital charge for general insurers and life insurers.

The other stress tests, which would only apply to insurers where relevant, would be:

- equity and property assets. The prescribed stresses would be applied to dividend and rental yields rather than directly to asset values;
- exchange rates (for insurers with assets or liabilities not denominated in Australian dollars);
- volatility (for insurers with exposure to derivatives);
- credit spreads (for insurers with interest-bearing assets other than government securities); and
- default risk (for insurers with non-interest-bearing assets, including reinsurance and non-reinsurance recoverables, that are subject to the risk of counterparty default).

The results of these stress tests would be combined in a way that recognises that, for insurers with risky assets, there are diversification benefits in holding a mixture of assets from different asset classes.

The stress tests for both equity and property assets would be in the form of a specified or fixed addition to rental yields and dividend yields, rather than a percentage fall in asset values. The higher the yields, the lower is the percentage change to yields and asset values, and vice versa. As a result, this form of stress test lessens the pro-cyclical nature of the asset risk capital charge.

More details on how the asset risk capital charge would work are included in Attachment C. Full details along with examples will be provided in the technical paper referred to above.

Asset concentration risk capital charge

The asset risk capital charge assumes that general insurers maintain a well-diversified investment portfolio. It does not allow for additional risks incurred where investments are concentrated in individual assets or where there are large exposures to individual counterparties (or groups of related counterparties), including reinsurers.

In the existing capital standards, the investment concentration charge requires general insurers to hold capital against asset concentration risk (see paragraphs 29 to 36, *Prudential Standard GPS 114 Capital Adequacy: Investment Risk Capital Charge* (GPS 114)).

APRA proposes to modify these charges by revising the concentration limits and conditions to more appropriately address the risks arising from large exposures to individual assets. APRA also proposes to rename this charge the asset concentration risk capital charge.

Under the existing capital standards, additional capital charges are imposed when a general insurer's exposure to a single counterparty or group of related counterparties exceeds given thresholds. These thresholds apply to both reinsurance and non-reinsurance exposures but are currently only imposed on exposures to counterparties with rating grades of 4 and 5.

APRA believes that the existing asset concentration thresholds do not adequately address the asset concentration risks of a general insurer. Undue concentration of exposure, even to highly rated counterparties, involves more risk than exposure to a range of such counterparties. However, the current thresholds do not apply limits on exposures to grade 1, 2 or 3 counterparties. This is inappropriate in APRA's view.

For non-reinsurance exposures, which are mainly investment exposures, APRA is proposing revised limits on large exposures to a single counterparty or group of related counterparties.

For reinsurance exposures, APRA is proposing that limits for large reinsurance exposures remain unchanged. As outlined later, other mechanisms are in place to address reinsurance concentration risk.

As with the existing capital standards, a 100 per cent capital charge would apply to the excess of assets over the proposed thresholds. General insurers would continue to be required to report to APRA all large exposures that exceed 10 per cent of their capital base.

Non-reinsurance exposures

Table 1 shows the proposed limits for large non-reinsurance exposures to a single counterparty (or group of related counterparties):

Table 1 – Asset concentration limits for non-reinsurance exposures

Asset exposure (counterparty ratings as defined in GPS114)	Current Limit	Proposed Limit
Exposures to governments with a counterparty grade 1 or 2	No limit	No limit
Exposures to unrelated insurers and ADIs (parents and their subsidiaries), provided that they are regulated by APRA	No limit except if counterparty is grade 4 (50 per cent of capital base) or grade 5 (25 per cent of capital base)	Aggregate exposure to all APRA regulated components of a group subject to a limit of the greater of: (i) 50 per cent of capital base; and (ii) \$20 million
All other exposures to unrelated external parties (parents and their subsidiaries)	No limit except if counterparty is grade 4 (50 per cent of capital base) or grade 5 (25 per cent of capital base)	Aggregate exposure to non APRA-regulated components of a group subject to a limit of 25 per cent of capital base
Exposures to related insurers and ADIs (parents and their subsidiaries), provided that they are regulated by APRA	No limit except if counterparty is grade 4 (50 per cent of capital base) or grade 5 (25 per cent of capital base)	Aggregate exposure to all APRA-regulated related entities of a group subject to a limit of the greater of: (i) 100 per cent of capital base; and (ii) \$20 million
All other exposures to other related entities	No limit except if counterparty is grade 4 (50 per cent of capital base) or grade 5 (25 per cent of capital base)	Aggregate exposure to all non APRA regulated related entities of a group subject to a limit of 25 per cent of capital base

The proposed limits for non-reinsurance exposures are based on APRA's large exposure limits for ADIs. These limits are similar in form to the existing general insurance limits, in that they express large exposures in terms of a percentage of capital base.

The approach to asset concentration for general insurers and ADIs differs from that adopted for life insurance. The life insurance standards express asset concentration limits as a percentage of the value of assets in each statutory fund. This difference is appropriate because, for general insurers and ADIs, any losses from default flow directly to shareholder capital, whereas for a large proportion of life insurance statutory fund assets, policyholders bear most or all of the investment risk.

In order not to discourage prudent investment, no limits would apply to exposures with governments with a grade 1 or grade 2 counterparty rating.

An overall limit of 25 per cent of capital base would apply for exposures to a single counterparty or group of related counterparties. Higher limits of 50 per cent of capital base would apply for exposures to APRA-regulated ADIs and insurers.

Higher limits of 100 per cent of capital base would apply for aggregate exposures to related parties that are APRA-regulated (i.e. the aggregate of all exposures to related ADIs and insurers which are APRA-regulated).

The proposed limits for related parties are a simplification of the ADI large exposure limits for asset concentration, in that they consider aggregate exposure to related parties rather than applying separate limits per entity and in aggregate. In this case, APRA believes that the desire for simplicity outweighs the prudential benefits from separately limiting entity specific exposures.

Dollar minimum thresholds are being proposed for exposures to APRA-regulated insurers and ADIs. These would provide higher thresholds for smaller insurers than if the percentage-based thresholds were to be applied. This proposal recognises the benefits that can accrue to a smaller insurer from a strategic partnership with another strong counterparty (such as a well-rated bank). A similar approach is used for smaller life insurance statutory funds.

Dollar minimum thresholds are not proposed for exposures to non APRA-regulated entities. It is APRA's view that large exposures to these counterparties should be limited to a fixed percentage of the capital base.

Reinsurance exposures

As with any other asset, reinsurance recoveries are subject to the risk of default. Good risk management dictates that reinsurance coverage (and hence reinsurance recovery exposures) generally be spread over a range of suitably sound counterparties.

With that in mind, APRA considered introducing limits for reinsurance recovery assets similar to those proposed above for non-reinsurance assets. It was difficult, however, to design limits that would recognise reinsurance diversification but not lead to unintended consequences or practical implementation issues. This is due to the wide variation in, and potential complexity of, reinsurance arrangements as well as the variability in the levels of reinsurance recovery assets.

For this reason, APRA intends to maintain the existing asset concentration thresholds for reinsurance recovery assets. That is, the limits in Table 2 below would continue to apply for large reinsurance exposures to a single counterparty (or group of related counterparties):

Table 2 – Asset concentration limits for reinsurance exposures

Asset exposure (counterparty ratings as defined in GPS114)	Current limit (% of capital base)	Proposed limit (% of capital base)
Exposures to reinsurers with a counterparty grade 1, 2 or 3	No limit	No limit
Exposures to reinsurers with a counterparty grade 4	50	50
Exposures to reinsurers with a counterparty grade 5	25	25

APRA would continue to monitor reinsurance program diversification through its review of general insurers' Reinsurance Management Strategies (ReMS). If it is not satisfied with a general insurer's approach to reinsurance management (including diversification) as outlined in the ReMS, APRA may consider increasing required capital through a supervisory adjustment for this purpose.

Insurance risk capital charge

Insurance risk is the risk that insurance liabilities as reported to APRA in accordance with *Prudential Standard GPS 310 Audit and Actuarial Reporting and Valuation* (GPS 310) will prove to be understated. For general insurers, this risk relates to the uncertain future outcomes of claims that have already occurred (the 'outstanding claims risk') and the uncertain cost of claims yet to occur for which the general insurer is on risk (the 'premiums liability risk').

Prudential Standard GPS 115 Insurance Risk Capital Charge (GPS 115) describes the method used to determine the insurance risk capital charge. The insurance risk capital charge is the sum of charges for the outstanding claims risk and the premiums liability risk.

The capital charge in respect of the outstanding claims risk for each class of business is calculated by multiplying the net outstanding claims liabilities for that class (in accordance with GPS 310) by the relevant outstanding claims risk capital factor.

Similarly, the capital charge in respect of premiums liability risk for each class of business is calculated by multiplying the net premiums liabilities for that class (in accordance with GPS 310) by the relevant premiums liability risk capital factor.

APRA has considered whether the current structure of the insurance risk capital charge should be changed. APRA is satisfied with the current structure and has confined its attention to reviewing the schedule of factors applied to the components of insurance liabilities.

A comparative analysis of insurers' risk margins has been performed to identify classes where the current risk capital factors might be changed to better reflect the uncertainty of those classes.

Direct insurance business

The current factors for direct insurance business are set out in Table 3 below.

Table 3 – Current insurance risk capital factors for direct insurance business

Class	Outstanding claims risk capital factor (%)	Premiums liability risk capital factor (%)
Householders		
Commercial motor	9.0	13.5
Domestic motor		
Travel		
Fire and ISR		
Marine and aviation		
Consumer credit	11.0	16.5
Mortgage		
Other accident		
Other		
CTP		
Public and product liability	15.0	22.5
Professional indemnity		
Employers' liability		

APRA is proposing no changes to the risk capital factors for direct insurance business but is proposing three changes of classification in the application of the factors:

- moving the travel class from the first grouping of classes to the second grouping;
- moving the mortgage class from the second grouping to the third grouping;
- deleting reference to 'other' classes from the second grouping and requiring that the Appointed Actuary select from the three available groupings the most appropriate grouping for the 'other' class, based on the underlying risk characteristics of the business being written in the 'other' category.

The proposed insurance risk capital factors for direct insurance business are set out in Table 4 below.

Table 4 – Proposed insurance risk capital factors for direct insurance business

Class	Outstanding claims risk capital factor (%)	Premiums liability risk capital factor (%)
Householders Commercial motor Domestic motor	9.0	13.5
Travel Fire and ISR Marine and aviation Consumer credit Other accident	11.0	16.5
Mortgage CTP Public and product liability Professional indemnity Employers' liability	15.0	22.5
Other ⁸	Appointed Actuary is required to select from one of the above three groupings, depending on risk profile of business written	Appointed Actuary is required to select from one of the above three groupings, depending on risk profile of business written

⁸ As defined in the instructions to reporting form GRF 210.0: Outstanding Claims provision – Insurance Risk Charge (GRF 210.0) and reporting form GRF 210.1: Premiums liabilities – Insurance Risk Charge (GRF 210.1).

The selection of the appropriate risk grouping for 'other' lines of business would be notified and explained to APRA and the rationale set out in the Financial Condition Report (FCR). If a general insurer has multiple risks that fit in the 'other' category but are distinctly different in risk profile, its Appointed Actuary may choose to subdivide 'other' into more than one category for the purposes of determining the insurance risk capital charges.

Inwards reinsurance business

The current factors for inwards reinsurance business are set out in Table 5 below.

These reinsurance risk capital charge groupings were designed originally to reflect the way in which reinsurance is typically underwritten. They do not, however, cover all inwards reinsurance classes of business and no guidance is currently given as to where business such as motor vehicle, construction, accident and sickness or mortgage insurance should sit. Further, the existing segregation is considerably more complex than applies for direct insurance. In addition, consideration of the relative uncertainty of insurance liability estimates for facultative versus treaty business would suggest that the existing segregation is not warranted.

Table 5 – Current insurance risk capital factors for inwards reinsurance business

Class	Outstanding Claims Risk Capital Factor (%)	Premiums Liability Risk Capital Factor (%)
Property		
– Facultative proportional	9.0	13.5
– Treaty proportional	10.0	15.0
– Facultative excess of loss	11.0	16.5
– Treaty excess of loss	12.0	18.0
Marine and aviation		
– Facultative proportional	11.0	16.5
– Treaty proportional	12.0	18.0
– Facultative excess of loss	13.0	19.5
– Treaty excess of loss	14.0	21.0
Casualty		
– Facultative proportional	15.0	22.5
– Treaty proportional	16.0	24.0
– Facultative excess of loss	17.0	25.5
– Treaty excess of loss	18.0	27.0

As a result, APRA is proposing two changes to the risk capital factors for inwards reinsurance business:

- aligning the three levels of class groupings to match the direct class groupings (including the changes to direct charges being proposed as part of this review); and
- removing the distinction between facultative and treaty arrangements.

The proposed insurance risk capital factors for inwards reinsurance business are set out in Table 6 below.

For inwards reinsurance business spanning more than one grouping, an insurer would allocate insurance liabilities between the relevant groupings specified above. An approximate method may be used to perform this allocation.

APRA would not expect figures for inwards reinsurance to be reported separately for each class within each of the above groupings. For the purposes of the APRA returns, figures would only be required in total for each group and separately for proportional and non-proportional business, but not separately for each insurance class within each grouping.

Table 6 – Proposed insurance risk capital factors for inwards reinsurance business

Class of inwards reinsurance business		Outstanding claims risk capital factor (%)	Premiums liability risk capital factor (%)
Householders Commercial Motor Domestic Motor	Proportional	10.0	15.0
	Non-proportional	12.0	18.0
Travel Fire and ISR Marine and Aviation Consumer Credit Other Accident	Proportional	12.0	18.0
	Non-proportional	14.0	21.0
Mortgage CTP Public and Product Liability Professional Indemnity Employers' Liability	Proportional	16.0	24.0
	Non-proportional	18.0	27.0

Insurance concentration risk capital charge

The insurance risk capital charges referred to above are intended generally to ensure adequate capital for well diversified portfolios of insurance risks. They are not designed, however, to respond to concentrations of insurance risk.

At present, APRA uses the Maximum Event Retention (MER) as a general measure of concentration of risk. The MER is defined as the 'largest loss to which an insurer will be exposed (taking into account the probability of that loss) due to a concentration of risk exposures, after netting out any potential reinsurance assets'. Allowance must be made for the cost of one reinstatement of catastrophe reinsurance arrangements. A return period of 1 in 250 years is to be assumed.

This measure was originally intended to ensure that insurers continue to maintain adequate capital even after the occurrence of large losses arising from a single source. Interpretation of this definition was easier for property insurers, with accumulated exposures to catastrophic events, than for other insurers with non-property exposures.

Over time, this definition and the prudential requirements in GPS116 were modified to deal with concentration of insurance risk for non-property insurers, and LMI insurers in particular. APRA has also responded to several insurer requests for clarification of the interpretation of GPS116 in specific circumstances.

With the benefit of experience with the current MER requirements, APRA has identified several aspects of the relationship between the MER and insurance concentration risk that warrant further consideration:

- The existing standards and guidance could benefit from further clarity on the approach which should be taken for non-property insurers. The approach taken to determine the MER for such insurers varies across the industry, and the current standard is silent on the extent to which the probable maximum loss might be reduced to take account of claims already provided for via the premiums liability provision.

- Under the current standards, an insurer 'must at minimum adopt an MER which relates to an accumulation of exposures to a single event'. The standards also indicate that APRA may require a whole-of-portfolio approach in some circumstances. These requirements have been interpreted differently by different insurers and have influenced some insurers to purchase extra layers of cover to meet their interpretation of the standard. Some clarity on these requirements is desirable.
- The occurrence of multiple large events within one year and the impact that large retained losses can have on profitability have resulted in some insurers purchasing various forms of aggregate or sideways cover that are not taken into account by the current MER approach. APRA is considering whether the insurance concentration risk capital charge should be extended to include the risks associated with the occurrence of multiple large events over a given year.

APRA is therefore considering the intent and design of the insurance concentration risk capital charge in light of the above. The importance and nature of insurance concentration risk is such that, instead of treating the issue in full in this discussion paper, APRA will issue a subsequent technical paper on this topic, scheduled for release in June 2010.

This paper will also consider items outstanding from the 2009 review of the MER for lenders mortgage insurers. These are APRA's proposals for the inclusion of expected claims in the probable maximum loss, the deduction of net premiums liabilities and the removal of claims handling expenses in the MER calculation.⁹

Risk margins

Under GPS 310, insurance liabilities are determined by adding risk margins to the central estimates of the outstanding claims liabilities and premiums liabilities. The risk margin is the component of the insurance liabilities that relates to the uncertainty in the central estimate of the liabilities.

⁹ Refer to APRA's paper Response to submissions – maximum event retention for lenders mortgage insurers available at: www.apra.gov.au/General/upload/ADI_RS_MERLMI_032010_v5-2.pdf

The current standard requires that risk margins be determined, for each class of business and in total, on a basis that reflects the individual circumstances of the general insurer and its portfolios. In any event, the risk margins need to be such that the insurance liabilities, after any diversification benefit, are not less than 'the greater of a value that is:

- (a) determined on a basis that is intended to value the insurance liabilities of the general insurer at a 75 per cent level of sufficiency; and
- (b) the central estimate plus one half of a standard deviation above the mean for the insurance liabilities of the general insurer.'

It has taken several years for APRA's risk margin requirements to be bedded down and for a generally accepted practice to emerge for quantification of risk margins.

The requirements have achieved a broadly consistent industry approach to uncertainties in the estimates of insurance liabilities and have also provided a pragmatic but reasonable basis for the application of insurance risk capital charges.

For this reason APRA is not proposing to change its existing approach to risk margin assessment for general insurers but is proposing some amendments to the current standards to clarify APRA's requirements.

Risk margins on reinsurance and non-reinsurance recoveries

Attachment A to GPS 310 states

'26. The risk margins must be determined having regard to the uncertainty of the gross insurance liabilities and to any uncertainty related to the estimate of reinsurance assets and non-reinsurance recoveries that are deducted from the estimate of gross insurance liabilities.'

Industry interpretation of the treatment of risk margins for reinsurance and non-reinsurance recoveries has been inconsistent. APRA would like to ensure that sufficient consideration is given to understanding uncertainty in the gross liabilities when determining risk margins.

Accordingly, APRA proposes to revise GPS 310 to make it clear that risk margins should be assessed based on uncertainty in the gross liabilities. The gross risk margin should be the amount required to bring the gross insurance liabilities to a 75 per cent probability of sufficiency.

The net claims liabilities should be estimated by application of an insurer's reinsurance program and expected non-reinsurance recoveries to the gross claims liabilities.

The net risk margin should be the amount required to bring the net insurance liabilities (determined by applying an insurer's reinsurance program to the gross claim liabilities) to a 75 per cent probability of sufficiency. The difference between the gross and net insurance liabilities at the 75 per cent probability of sufficiency would represent the reinsurance recovery asset.

For the majority of insurers, this clarification would result in no impact to the net insurance liabilities or the insurance risk capital charge. For insurers that are currently adopting a different approach for determination of gross insurance liabilities, the clarification may lead to higher amounts recoverable on outstanding claims and paid claims. This will in turn affect the asset risk capital charge for reinsurance default risk.

Insurance liability diversification

Most insurers assume some credit for risk diversification within various components of their insurance liabilities. For insurance risk margins, general insurers typically assume some level of diversification benefit between classes of business and many insurers also assume some diversification between outstanding claims liabilities and premiums liabilities.

A higher assumed level of diversification increases a general insurer's capital base by reducing its overall level of risk margins and hence its insurance liabilities.

As the insurance risk capital charge is expressed as a percentage of insurance liabilities, a higher diversification benefit also reduces required capital. APRA needs to ensure that the approach taken to diversification is consistent across the general insurance industry and that the level of diversification benefit taken into account in capital calculations is appropriate.

As part of its proposals, APRA is considering placing some limits on the overall level of diversification benefit assumed in the insurance risk margins. For example, APRA may limit, or perhaps preclude, the recognition of a diversification benefit between outstanding claims liabilities and premiums liabilities, and may also put a percentage limit on the overall level of diversification benefit allowed.

To do so would be consistent with the approach being proposed for diversification within asset risk classes (the asset risk capital charge) and between asset risk and insurance risk (the aggregation benefit), where limits are likely to be imposed through the use of an APRA-specified correlation matrix in each case.

APRA will be seeking information in the QIS on the levels of diversification benefit assumed by general insurers, to assist in its consideration of this issue.

More detailed information will also be required to be reported in future by insurers to APRA on the levels of diversification benefit taken into account in the determination of insurance liabilities.

Other components of required capital for general insurers

The operational risk capital charge and aggregation benefit that APRA is proposing to introduce as part of required capital, for both general insurers and life insurers, are discussed in chapter 8.

APRA's position on the risk-free rate for discounting insurance liabilities for both general insurers and life insurers is also described in chapter 8.

Chapter 7 – Components of prescribed capital amount for life insurers

This chapter describes APRA's proposed changes to the components of the prescribed capital amount for life insurers. It discusses the capital that is required to mitigate against:

- asset risk
- asset concentration risk; and
- insurance risk (including insurance concentration risk).

Further details on APRA's proposals will be provided in the two technical papers that are scheduled for release in June 2010.

Asset risk capital charge

Capital is required to protect insurers against asset risk, i.e. risk arising from investments and from reinsurance assets. The capital charge for asset risks should reflect the potential losses arising from such risks, including asset/liability mismatch, and encourage insurers to adopt an investment policy that has regard to the term and nature of their liabilities.

In APRA's existing life insurance capital standards, asset risks are considered in the calculation of the resilience reserve. APRA proposes to revise aspects of the determination of the resilience reserve and also to rename it the 'asset risk capital charge' to better reflect the risks to which it relates.

Conceptually, the proposed asset risk capital charge is similar to the resilience reserve in the current life insurance capital standards. The key differences are:

- the method of recognising correlations between different asset risks would be improved;
- stresses to the inflation and volatility parameters would be included in addition to the stresses already considered in the resilience reserve;
- all assets would be considered in the asset risk charge, not just those needed to meet the liabilities and capital requirements of the statutory fund; and
- there would be separate quantification of exposures to each type of risk (instead of the current 'bundled' or 'black box' approach).

The changes to the calculation of the resilience reserve are intended to improve the risk sensitivity of the capital requirements and the alignment between the life and general insurance industries.

APRA expects the proposed asset risk capital charge to be easier to understand than the current resilience reserve formula. APRA recognises that the number of calculations required may increase but it believes the benefits of the proposed changes, including their greater transparency, are sufficient to justify the additional calculations involved.

These changes would also address the recommendations of the task force of the Institute of Actuaries of Australia, commissioned by the LIASB in 2006 to investigate the resilience reserve.

The existing resilience reserve

The existing resilience reserve is determined under *Prudential Standard LPS 2.04 Solvency* (LPS 2.04) and *Prudential Standard LPS 3.04 Capital Adequacy* (LPS 3.04).

The resilience reserve is determined as the additional amount that needs to be held before the happening of a prescribed set of variations in the economic environment, such that after the changes the admissible assets are able to meet the policyholder and other liabilities of the statutory fund.

The prescribed set of variations in the economic environment includes adverse changes to interest rates, rental yields, dividend yields and exchange rates. The variations also include an increase in credit spreads and an allowance for default risk. The variations in assumptions and stress tests may affect the values of both assets and liabilities.

The effects of the prescribed variations in interest rates, rental yields and dividend yields are moderated by the application of a diversification factor. The diversification factor is calculated using a formula that depends on the changes to the proportionate holdings of interest-bearing assets, indexed bonds, properties and equities.

For equities and properties, the prescribed variations are in the form of additions to rental and dividend yields, rather than as reductions in asset values. When asset values are high, yields are typically low and the fall in asset values would be higher than in more normal circumstances. The converse applies when asset values are low and yields are high.

The proposed asset risk capital charge

Under APRA's proposals, the asset risk capital charge would be determined by subjecting the balance sheet to a series of separate stress tests according to parameters specified by APRA. The capital required for each risk would be the change in net asset value of the statutory fund for a specified stress. The net asset value would be calculated using unstressed liability assumptions (e.g. best estimate mortality and morbidity assumptions) and with a termination value minimum applied to the liabilities. This approach differs from the existing resilience reserve calculations in which all of the asset risk stresses are applied simultaneously and the liabilities that have to be met after applying the asset stresses are calculated using stressed liability assumptions.

The asset risk capital charge would be the sum of the capital amounts required for each risk, less an aggregation benefit. The aggregation benefit would be calculated using a correlation matrix specified by APRA. The aggregation benefit would depend on the amount of capital required for each asset risk and the correlations assumed between the different asset risks. This is a more appropriate way of recognising diversification between different asset risks than the diversification factor used in the existing resilience reserve calculations. The shortcomings of the existing diversification factor include that it considers asset movements but not the associated liability movements and it assumes zero correlations between the stresses to each asset sector.

The proposed stress tests would include:

- future risk-free interest rates net of inflation (referred to as 'real interest rates'); and
- future inflation rates.

Risk-free interest rates are used to discount the values of liabilities. They are also used in determining the values of interest-bearing assets (with the addition of a credit spread to the risk-free rate for assets subject to credit risk). Because risk-free interest rates can be regarded as having two components, an inflation rate and a real interest rate, and because some assets and liabilities are affected differently by real interest rates and inflation rates, APRA proposes to stress these two components separately.

The other stress tests would be:

- equity and property assets, where the stresses are applied to dividend and rental yields;
- exchange rates (for insurers with assets and liabilities not denominated in the same currency);
- volatility (for insurers with exposure to derivatives);
- credit spreads (for insurers with interest-bearing assets other than government securities); and
- default risk (for insurers with non-interest-bearing assets subject to the risk of counterparty default, including reinsurance recoverables)

Hypothecation of particular assets to specific liabilities would be allowed where the value of those liabilities is dependent on the value of the assets (e.g. participating and investment-linked business). Hypothecation can affect the amount by which liabilities and net asset values change in each of the asset risk scenarios. Hypothecation is allowed in LPS 3.04 but is not allowed in LPS 2.04.²⁰

¹⁰ Refer to paragraph 11.3 of LPS 2.04 and paragraphs 11.3 to 11.6 of LPS 3.04.

The asset risk capital charge would consider variations in the value of all admissible assets and so would depend on the total amount of admissible assets and how they are invested. A statutory fund that has its surplus capital invested in risky assets would have a higher asset risk capital charge than an otherwise identical statutory fund that has its surplus capital invested more conservatively.

This is a change from the approach used for the resilience reserve, which only considers changes in the value of the assets required to meet the solvency or capital adequacy requirements. Under the existing standards, no resilience reserve is required for assets in excess of those required to meet the solvency or capital adequacy requirements. To include all assets in the calculation of the asset risk capital charge is simpler to explain and calculate and it fits better with the proposed calculations for required capital. It is also consistent with the approach taken for general insurers and ADIs.

There would be special requirements for participating business, which are described below.

The proposed standard insurance and asset risk capital charges will not adequately cater for the special features of variable annuities. Variable annuities are a type of life insurance product that does not have a simple asset and liability profile. For this product, it is likely that stochastic modelling would be necessary to calculate the required capital. The stochastic modelling would consider both asset and insurance risks simultaneously. Life insurers that issue variable annuities would need to discuss the appropriate methodology with APRA. Variable annuities will be discussed further in the asset risk technical paper.

More details on how the asset risk capital charge might work are included in Attachment C. Full details along with examples will be provided in the technical paper.

Asset concentration risk capital charge

The asset risk capital charge discussed above is based on the assumption that a statutory fund's investments in each asset class are well diversified. Additional capital would be required if there are excessive concentrations of investments in individual assets or in exposures to single counterparties (or groups of related counterparties).

Under LPS 2.04 and LPS 3.04, the reserve for asset concentration risks is part of the inadmissible asset reserve. Under the proposed new capital standards, the asset concentration risk capital charge would be part of required capital. It would not form part of the inadmissible assets.

The asset concentration risk capital charge for statutory funds would be the amount by which the values of individual asset and credit exposures (or groups of related exposures) exceed prescribed limits. APRA proposes to maintain the approach taken in the existing standards but make some changes to the limits that apply to specialist reinsurers, to some mortgage assets and to assets that are secured by a third party or collateralised.

The limits for life insurers are expressed as percentages of the value of the assets of the statutory fund (VASF). This differs from general insurers where the limits are expressed as percentages of the capital base. VASF is used for life insurers because a large proportion of statutory fund assets are often held for insurance products where policyholders bear all or most of the investment risk and where the capital base is therefore small relative to total assets. It would be possible to design a more complicated asset risk capital charge for life insurers, with asset concentration limits depending on whether policyholders or shareholders bear the investment risk. However, APRA does not consider this additional complication is warranted.

The existing capital standards set out higher asset exposure limits for mortgages satisfying specified criteria. APRA proposes to simplify the standards by removing the special treatment of these mortgages. They would be assessed instead against the asset exposure limits that currently apply to non-mortgage investments.

Where an asset is secured by a third party or collateralised, the risk to the life insurer is reduced. APRA is proposing to allow the asset concentration risk capital charge to be reduced to take into account this additional security. This would be subject to the security meeting requirements to be set by APRA.

Specialist reinsurers

Specialist reinsurers currently have no limits placed on their retrocessions to an overseas parent, associated company or subsidiary company where such entity is deemed an appropriate retrocessionaire by APRA. This approach could lead to unacceptably high exposures to single non-APRA-regulated counterparties. APRA now proposes to introduce limits on these exposures. Any such exposures in excess of 50 per cent of VASF would be included in the asset concentration risk capital charge.

The proposal above to allow for security by third parties or collateralisation would also apply to specialist reinsurers.

In some cases, specialist reinsurers are now writing direct life insurance. The existing standards allow those specialist reinsurers to utilise the unlimited exposures to their offshore related companies for that direct life insurance. This is inconsistent with the regulation of companies writing direct business only.

A specialist reinsurer is currently defined in *Prudential Standard LPS 7.02 General Standard (LPS 7.02)* as a registered life company under the Act whose predominant business is reinsurance business. This definition requires interpretation to determine whether a life insurer qualifies as a specialist reinsurer. To give proper effect to these matters, APRA proposes that specialist reinsurers would be redefined as the statutory funds of registered life companies whose policy liabilities consist exclusively of inwards reinsurance from third parties.

Insurance risk capital charge

Insurance risk for life insurers includes the risks of adverse changes to mortality, morbidity, voluntary discontinuance and servicing expenses. Servicing expenses include all operating costs and expenses other than acquisition expenses.

The insurance risk capital charge would be the amount of capital required to cover the risks that experience for any of mortality, morbidity, voluntary discontinuance and expenses is worse than best estimate.¹¹

The insurance risk capital charge would be calculated by applying margins to the best estimate assumptions and calculating the resulting increases in liabilities (or decreases in the capital base).

The proposed approach to the determination of the insurance risk capital charge is conceptually similar to the approach in the existing capital standards. The charge would consider the same set of risks as the solvency and capital adequacy liabilities and also apply a termination value minimum.

The following sections give an overview of the proposed insurance risk capital charge. Further details of the calculation methods and the parameters to be applied will be included in the insurance risk technical paper.

¹¹ For friendly societies, the capital required for expense risks is held in the general fund.

Stressed assumptions

The assumptions for mortality, morbidity, voluntary discontinuance and servicing expenses to be used to establish the insurance risk capital charge would be the best estimate assumptions plus margins. Some of these margins would be determined by the Appointed Actuary and others would be specified by APRA. The margins specified by APRA would be those which it considers should be the same for all insurers (e.g. for extreme events such as a pandemic). The margins would allow for:

- random fluctuations in experience;
- extreme events;
- mis-estimation of the mean; and
- adverse trends developing over time.

The margins for random fluctuations and extreme events would be applied for 12 months (mortality and morbidity only). The margins for mis-estimation of the mean and adverse trends would be applied for the term of the liabilities.

The margins would be targeted at a 99.5 per cent probability of sufficiency, after allowing for diversification between the different types of insurance risk. For margins determined by the Appointed Actuary, APRA would expect the Actuary to undertake detailed analysis of the potential variability of experience in order to satisfy this criterion.

Allowance for management discretions

The Appointed Actuary would be allowed to assume that management exercises discretions in response to adverse insurance risk experience, as in LPS 2.04 and LPS 3.04. These discretions include increasing premium rates and fees and reducing the bonus rates for participating business.

APRA proposes to introduce restrictions regarding the assumptions that the Appointed Actuary can make about future repricing of premium rates and fees. APRA believes restrictions are necessary as it is usually not prudent for regulatory capital calculations to assume that short term losses can be fully recovered by future price increases. It is proposed that:

- a minimum period would have to elapse before repricing could take effect, with exceptions to this minimum allowed in some circumstances. A longer elapsed period may be necessary in some circumstances (e.g. where premium rates or fees are guaranteed for a longer period); and
- there would be restrictions on the size of assumed increases to premium rates or fees.

Insurance concentration risk capital charge

In APRA's view, LPS 2.04 and LPS 3.04 do not adequately allow for extreme events (e.g. the impact of pandemics, natural catastrophes and terrorist attacks). The potential impact of extreme events can be thought of as a 'fat tail' to the probability distribution of random fluctuations in experience. A pandemic would be the benchmark for this type of risk as it would have a significant impact on all insurers exposed to mortality and morbidity risks. A pandemic differs from other types of random fluctuations in claims. In particular, there is no reduction in pandemic risk as the number of lives insured increases; and pandemic risk has a different age profile compared with 'normal' fluctuations in mortality and morbidity experience. It is important that these potential changes in claims experience are assessed as part of a life insurer's insurance risk capital.

The Appointed Actuary would also need to consider whether extreme events other than a pandemic, with at least a 1:200 probability of occurrence over a 12-month period, could have a significant impact on the statutory fund. If so, the capital required for extreme event risk may need to be increased. For example, the exposure of large group insurance contracts to localised extreme events such as natural catastrophes and terrorist attacks should be considered.

The allowance for extreme events is similar to the concept of 'insurance concentration risk' for general insurance. APRA does not propose to include a separate insurance concentration risk capital charge for life insurers. Instead, an allowance for losses arising from extreme events would be included within the insurance risk capital charge. Including extreme event risk within the insurance risk capital charge, instead of as a separate charge, would allow the combined effect of all insurance risks on the liabilities to be assessed against the termination value minimum.

Expense reserve

Under the existing solvency standard LPS 2.04, life insurers (other than friendly societies) are required to hold an expense reserve in their statutory funds. This reserve, which aims to provide for the over run of acquisition costs that could occur if the life insurer ceased to acquire new business, is based on one-year's fixed acquisition costs. This is a very approximate allowance for the overrun of acquisition costs that might occur in practice in a run-off situation.

There is no expense reserve in the existing capital adequacy standard LPS 3.04. However, the solvency expense reserve may have the effect of increasing the capital adequacy requirement for statutory funds in circumstances where the minimum of the solvency requirement applies in determining the capital adequacy requirement.

APRA does not include an expense reserve in its capital standards for ADIs or general insurers as it does not regard an allowance for cost overruns in the event of closure to new business as a necessary component of required capital.

APRA proposes to remove the expense reserve for life insurers for the following reasons:

- the proposed standards will not specifically consider the capital requirements of statutory funds in the scenario of closure to new business;

- APRA considers that the combination of the proposed capital charges and the proposals for planning, monitoring and reporting of the capital position (see Chapter 9) will remove the need for a separate expense reserve; and
- removal will better align the capital standards for life insurers with those for ADIs and general insurers.

New business reserve

Under LPS 3.04, statutory funds (other than those of friendly societies) are required to hold a new business reserve. This reserve is determined such that the statutory fund can continue to meet the solvency requirement over the following three years allowing for realistic projections of new business.

APRA does not propose to include a new business reserve in required capital. However, APRA would expect insurers to consider the capital requirements of future new business in their capital management plan. How adequately insurers do so is one of the items APRA would consider in determining any supervisory adjustment. Chapter 9 addresses this in more detail.

Participating life insurance business

APRA's proposals deal with several issues that affect participating life insurance business.

Policyholders' reasonable expectations

LPS 2.04 and LPS 3.04 differ in their treatment of policyholders' reasonable expectations.

APRA proposes that the capital required under the revised prudential standard be sufficient to enable a statutory fund to meet its guaranteed obligations and the reasonable expectations of participating policyholders. This is the same requirement as in the current capital adequacy standard; however the current solvency standard requires only that guaranteed obligations can be met.

Distributions to policyholders when capital requirements are not met

Under the Life Act, distributions can be made to participating policyholders providing the solvency requirement is met; it is not necessary to meet the capital adequacy requirement. With the proposed change to a single measure of required capital, restrictions on distributions to policyholders will be necessary where there is no surplus capital. APRA proposes to allow distributions to policyholders only if it has given its prior approval, and it will recommend to the Government that the Life Act be amended accordingly.

Policyholders' retained profits

LPS 3.04 allows policyholders' retained profits to be regarded as available to support the capital adequacy requirements of non-participating categories of the statutory fund in certain circumstances. APRA proposes to change this treatment of policyholders' retained profits, which would no longer form part of the proposed capital base of life insurers and would not be available to support non-participating business.

Section 62 of the Life Act only allows distributions of Australian policyholders' retained profits (PRP) to participating policyholders. APRA believes it is appropriate to assume that all Australian PRP are held for the benefit of Australian policyholders and must eventually be distributed to them. APRA proposes that Australian PRP would be regarded as a liability to Australian participating policyholders for the purposes of determining capital requirements.

In APRA's view, it is not reasonable to regard part or all of Australian PRP as capital. The use of Australian PRP as capital would, in effect, be similar to a distribution to shareholders. If adverse experience affecting non-participating business resulted in a company being wound up, part of the losses might be borne by participating policyholders when they should more properly be borne by shareholders.

The Life Act allows overseas PRP to be distributed to Australian policies that provide for participating benefits, or transferred to the shareholders' fund if the distribution or transfer has been approved by APRA. For consistency, life insurers would be able to include part of overseas PRP in the capital base, but only if its transfer has been approved by APRA.

APRA does not believe it is appropriate for insurers to assume, for the purpose of calculating their prescribed capital amounts, that part of overseas PRP is an 'orphan estate' with uncertain ownership. In a wind-up situation, a decision on ownership would be needed and APRA would expect consistency of treatment with Australian policyholders. This means that the interests of participating policyholders and shareholders need to be clearly separated and identified for the purpose of calculating capital requirements.

A parallel can be drawn between the proposed treatment of overseas PRP and the application of minimum termination values to overseas business. The APRA minimum termination values do not apply to overseas business for payment purposes. However, in the event of a wind-up, it is not clear that a judicial manager would be able to treat groups of policyholders within a statutory fund differently. A stronger capital requirement applied to Australian policyholders only could, in the circumstances of insolvency, effectively subsidise the benefit position of the overseas policyholders.

Aggregation of capital charges

For participating business, the Appointed Actuary would need to consider the extent to which any management discretions available could be applied (e.g. bonuses cannot be reduced below a certain level, surrender values cannot be reduced below the Minimum Termination Values). It is possible that these limits would not be breached for any of the individual risks but they could be breached if a combination of risks occurs. In testing whether these limits are breached, both the insurance risks and asset risks need to be considered.

There will be further discussion of this issue in the technical papers, which will include a proposed method for determining an adjustment to required capital if management discretions would be exhausted by a combination of stresses.

Internal models

APRA will consider allowing the use of an internal model-based method for life insurers to determine required capital if a number of life insurers indicate a strong desire to use such a method. If APRA proceeds down this path, the key requirements for a life insurer to obtain approval for use of such models would be similar to the existing requirements for general insurers and ADIs.

In particular, life insurers' models would need to meet the comprehensive requirements regarding model governance, model use and technical sufficiency that have been applied for ADIs and general insurers. Use of an internal model could not be approved if it were not embedded in an insurer's management, operations and decision-making processes.

If APRA decides to allow the use of internal models, the development of internal model standards and the potential approval of any such internal models would be pursued separately from and subsequent to this review of capital requirements.

Other components of required capital for life insurers

The operational risk capital charge and aggregation benefit that APRA is proposing to introduce as part of required capital for both general insurers and life insurers, are discussed in Chapter 8.

APRA's position on the risk-free rate for discounting insurance liabilities for both general insurers and life insurers is also described in Chapter 8.

Chapter 8 – Aspects of prescribed capital applying to both general insurers and life insurers

This chapter considers aspects of the prescribed capital amount that are proposed to apply to both general insurers and life insurers. In particular, it considers:

- the risk-free discount rate;
- the proposed operational risk capital charge; and
- the proposed aggregation benefit.

APRA intends to specify initial parameters for both the operational risk capital charge and the aggregation benefit as part of the QIS, which will be released in June 2010.

Discount rates

The general insurance and life insurance prudential standards for the valuation of liabilities and the determination of regulatory capital require the discounting of future cash flows using risk-free discount rates.

APRA's existing standards specify criteria that insurers must use in setting these discount rates. However, the existing criteria for general insurers and life insurers differ. APRA proposes to clarify and align the two sets of criteria. The proposals by and large maintain the status quo for general insurers but have implications for the valuation of policy liabilities and required capital for life insurers.

The existing requirements for general insurers

GPS 310 describes the discount rate as 'a rate that is based on current observable, market-based and objective rates that directly relate to the nature, structure and term of the future obligations'. These terms are similar to those used for the definition of the risk-free discount rate for life insurers in LPS 7.02 (see below).

However, GPS 310 goes further than the life insurance requirements by effectively requiring the use of yields on sovereign risk securities:

'The rates to be used in discounting ... are derived from the gross redemption yields, as at the calculation date, of a portfolio of sovereign risk securities in the currency of, and with a similar payment profile to, the insurance liabilities for that class.'

The existing requirements for life insurers

The existing requirements for discounting of policy liabilities for life insurers are described in *Prudential Standard LPS 1.04 Valuation of Policy Liabilities* (LPS 1.04). These requirements differ depending on whether a life policy is classified by APRA as an insurance contract or an investment contract. Insurance contracts include lifetime annuities, risk business and participating business. Investment contracts include investment-linked business and fixed-term annuities.

The existing requirements for discounting a life insurer's policy liabilities for insurance contracts are set out in LPS 1.04 as follows:

'5.5.1 The gross rate used to discount expected future cash flows must, to the extent the benefits under the policy are contractually linked to the performance of the assets held, reflect the expected investment earnings applicable to the assets backing the benefit being valued. Otherwise, a Risk Free Discount Rate is to be used.'

The Risk-Free Discount Rate is defined in LPS 7.02 as follows:

'Risk Free Discount Rate: The rate (or rates) based on the current observable, objective rates that relate to the nature, structure and term of the future liability cash flows.'

For insurance contract benefits where a risk-free discount rate is not used to discount the future expected cash flows, an adequacy threshold is applied. In determining this adequacy threshold, however, the policy liability is subject to a minimum of the liability determined by discounting the future cash flows (excluding profit margins) at a risk-free rate.

For investment contracts, the policy liabilities are determined in accordance with the fair value through profit and loss provisions of the relevant accounting standards. For contracts where a discount rate is used in determining the value of the liabilities (e.g. for fixed-term annuities), it need not be a risk-free discount rate.

For the existing solvency and capital adequacy standards, the discount rate is the same as for LPS 1.04 but with a maximum of the mid swap rate.

APRA's proposed requirements for risk-free discount rates

The differences in requirements between the two industries, and the associated question of what discount rates should be used, have been highlighted by recent economic circumstances. The question of how to choose risk-free discount rates has been extensively debated by industry practitioners and others, both in Australia and overseas.

APRA is proposing to apply the same definition for risk-free discount rates for general and life insurers. APRA's view is that the risk-free discount rates appropriate for valuing liabilities should reflect the rates that can be earned on assets that:

- have no credit risk;
- are readily realisable or liquid, even in times of stress; and
- match the term and currency of the future liability cash flows.

For Australian-denominated liabilities, APRA regards the zero coupon spot yield curve of Commonwealth Government Securities (CGS) as the best proxy for risk free rates. In forming this view, APRA has considered the views of the Reserve Bank of Australia (RBA) on the appropriateness of CGS yields as a proxy for the risk-free rate. The RBA has indicated that no persuasive evidence exists to suggest that the nominal CGS yield curve exhibits any downwards bias nor that a shallow market exists. It also notes that:

- the Government has been committed to maintaining an adequate supply of government bonds since its review in 2003 (minimum of \$50 billion on issue at any time);
- issues of CGS are likely to grow over coming years;
- the Government's debt management agency, the Australian Office of Financial Management (AOFM), provides a securities lending facility. This facility is intended to enhance the efficiency of the CGS market by increasing the capacity of bond market participants to make two-way prices, particularly for bonds that become 'tight' in the repurchase market;

- the majority of price discovery for CGS now occurs via the futures exchange. A combination of the physical CGS market and the futures market ensures that the government bond market provides a risk-free benchmark curve from which market participants are able to price riskier assets; and
- generally, any distortions that might occur in the CGS market will be short-lived and are typically of lesser magnitude than distortions that occur in other markets.

For foreign denominated liabilities, risk-free rates should be determined with reference to yields from national government bonds in the same currency as the liabilities. The risk free rates may be determined with reference to other instruments if it can be demonstrated that there is insufficient supply of highly rated foreign national government bonds in the relevant currency. If other instruments are used as a reference point, adjustments would need to be made for both credit risk and liquidity. Justification for deviation from use of national government bonds would need to be documented by the Appointed Actuary in the Insurance Liability Valuation Report (for general insurers only) or the Financial Condition Report.

In determining required capital for life insurers, APRA proposes that the risk-free discount rate would be set according to the principles outlined above. For life insurers, changing the definition of the risk-free discount rate for the required capital calculations may necessitate changes to LPS 1.04. APRA will consider this issue at a later date and include any proposed changes to LPS 1.04 in the consultation that will follow the release of the draft prudential standards later in 2010.

In determining required capital for life insurers, the existing maximum of the mid-swap rate would no longer be applied.

‘Liquidity premium’

The existence of a ‘liquidity premium’ in the valuation of assets is generally accepted by market participants. A liquid asset is believed to have a higher market value than an equivalent but illiquid asset with the same expected cash flows and credit risk.

In relation to liabilities, the argument has been made by some market participants and observers that if future cash flows from insurance obligations are illiquid, it may be appropriate to add to the risk-free rates an allowance for a liquidity premium. The argument is that if the future cash flows of an insurance liability are certain, then in theory an insurer could purchase a portfolio of relatively illiquid securities to exactly match the quantum and duration of the liabilities and wait until maturity to realise the value of those assets. As long as this portfolio of assets was free from credit risk and there was no chance that the assets would need to be realised early to meet the liability cash flows, then this portfolio might be considered risk free.

APRA is following the international debate on liquidity premiums and the risk-free discount rate. APRA may consider allowing a liquidity premium adjustment to the risk-free rate for discounting lifetime annuities with no provision for voluntary termination, provided that APRA can arrive at a robust method for quantification of the liquidity premium.

APRA considers that any general insurance or life insurance liabilities (other than annuities with no provision for voluntary termination) are unlikely to meet the certainty criterion required for allowance of a liquidity premium adjustment.

Operational risk

Operational risk is a key risk for insurers and APRA believes that it is appropriate to address this risk in its capital standards. APRA therefore proposes to introduce an explicit capital requirement for operational risk as part of required capital for both general insurers and life insurers.

APRA defines operational risk as ‘the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events’.¹³ Examples of operational risk include losses due to:

- fraud, either by staff or from external sources;
- failures in computer systems and administrative processes, whether from in-house or outsourced delivery;
- legal risk (excluding strategic risk and reputation risk);
- mis-selling of products;
- lack of effective management of distributors and other third parties, where they are integral to the insurer;
- manipulation or concealment of financial information;
- poor performance by the management team;
- unit pricing and other administrative errors;
- failure to provide customers with sufficient product information; and
- external events causing damage to the insurer’s premises, equipment or people – e.g. terrorism, vandalism, earthquakes, fires and floods.

Recent international and Australian experience has shown the potential for operational risk exposures to result in severe and unexpected losses. There is also evidence that operational risk is continuing to increase in its size and complexity due to factors such as the increasing reliance on advanced technology, legacy and IT system issues, outsourcing and agency distribution channels and mergers and acquisitions activity.

Hence, APRA is of the view that inclusion of an explicit capital charge for operational risk is appropriate.

¹² Defined for life insurers in *Prudential Practice Guide LPG 230 Operational Risk*.

The development of operational risk capital modelling is in its early stages, particularly in the insurance industry. APRA is therefore proposing a method for determining the operational risk component of required capital that is relatively simple to apply whilst still reflecting the exposure of an insurer to operational risk. The proposed operational risk charge would have two components. One would be a 'base component', related to the scale of the insurer's operations. The second component would be based on risk attributes that are specific to the insurer. The base component would be formulated according to indicators that reflect an insurer's exposure to operational risk; e.g., premium income, insurance liabilities and assets under management. The requirement would be set at a level that is appropriate for a well-managed insurer.

To the extent that an insurer has a higher operational risk profile or an inadequate approach to operational risk management, APRA would increase the insurer's operational risk capital requirement by making a supervisory adjustment. This proposal is intended to provide incentives for insurers to improve their operational risk management.

For life insurers, the current solvency and capital adequacy margins that reflect the additional risks (mainly operational risks) that may be borne by the insurer in conducting investment-linked life insurance business would be removed. For friendly societies, the operational risk capital charge in respect of the benefit funds would be held in the relevant benefit fund or the management fund.

Aggregation benefit

The concept of diversification is a fundamental principle of insurance and is a key feature of the current capital standards for general and life insurers. Under the proposed capital standards, APRA would make aspects of the recognition of diversification within and between risk types more explicit and is also considering limits on the level of diversification benefit that APRA would recognise for individual insurers.

As noted in Chapter 6, most general insurers make an allowance for insurance risk diversification when determining their insurance liabilities. APRA is also proposing to allow explicitly for insurance risk diversification in the determination of the insurance risk charge for life insurers, as outlined in Chapter 7. The proposed asset risk charge for both general and life insurers (discussed in Chapters 6 and 7) would also recognise the diversification benefits of exposure to different asset classes as well as the level of matching of assets and liabilities, subject to limits to be set by APRA.

Under the existing prudential standards, the components of required capital for asset and insurance risk are added together with no allowance for diversification between these risks, i.e. with no recognition of the level of independence between asset risks and liability risks. There is, however, some implicit recognition of diversification in the calibration of the components of the capital charges. This implicit approach to the recognition of diversification between risks leads to required capital that is either too high for insurers with significant exposures to both asset and insurance risks, or too low for insurers with a significant exposure to only one of these types of risk.

APRA proposes to address this issue by making an explicit allowance for diversification between asset and insurance risks, so that required capital better reflects the level of independence between asset risks and insurance risks. Each of the asset risk and insurance risk capital charges would be calibrated separately to a target of 99.5 per cent probability of sufficiency. To maintain this level of sufficiency in aggregate while recognising their relative independence, the two capital charges would be combined using a suitable formula that yields a total capital charge that is less than the sum of the asset and insurance risk charges.

The formula that APRA proposes to use is:

$$\begin{aligned} \text{Combined capital charge} \\ = \sqrt{(A^2 + I^2 + 2 \times \text{corr} \times A \times I)} \end{aligned}$$

Where A = the insurer's asset risk capital charge

I = the insurer's insurance risk capital charge

corr = the specified correlation factor

The sum of the asset and insurance risk charges is $(A + I)$ and therefore the aggregation benefit is the difference between the combined capital charge given by the above formula and $(A+I)$. In other words:

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

The correlation factor in this formula needs to be set to reflect the extent to which asset and liability risks are not independent. In principle, it represents the likelihood of insurance and asset risk events occurring simultaneously. Although asset and insurance risks are largely independent, the correlation factor would not be zero because some situations, such as for example natural catastrophes or a pandemic, can have an adverse impact simultaneously on both claims experience (and hence insurance liabilities) and investment markets (and hence asset values).

The value of the correlation factor, which will be a number between 0 and 1 and is likely to be in the range 0.2 to 0.5, is a matter for further investigation. APRA will nominate its value and the value is likely to be the same for all insurers. As part of the QIS and the consultation process, APRA will consider two particular questions on the aggregation benefit. They are:

- does the extra risk sensitivity of the combined capital charge warrant the extra complexity of introducing the aggregation benefit?
- if yes, what is the right value for the correlation factor?

The operational risk capital charge would not be included within the calculation of the aggregation benefit and would be added on (unadjusted) as part of required capital. This is because operational risk is linked to both asset risk and insurance risk and these correlations become stronger in times of extreme stress.

The capital charges for asset concentration risk and insurance concentration risk are designed to address concentration of assets and liabilities and can be regarded as independent of the other risks. APRA intends that these capital charges would also not form part of the aggregation benefit and would be added on (unadjusted) in determining required capital.

For life insurers, the calculation of the aggregation benefit would be undertaken separately for each statutory fund.

APRA will be assessing the proposed treatment of diversification within and between risks as part of the QIS and may revise aspects of these proposals following analysis of their impact on capital at an individual insurer level and in aggregate.

Liquidity risk

APRA is not proposing to make any changes to the capital standards in respect of the liquidity needs of insurers. APRA expects an insurer's risk management framework to adequately consider its liquidity needs.

Liquidity is one of the risk factors APRA may take into account in determining whether a supervisory adjustment is appropriate for an insurer as part of its assessment of the adequacy of an insurer's risk management.

Tax

There are a number of areas in the capital standards where tax can affect the treatment of components of the calculation of required capital and the capital base. Examples include treatment of deferred tax assets, and tax consolidation for groups and between statutory funds. APRA is proposing to review these tax-related matters, including their consistency, as part of this capital review.

Proposals for some of these tax matters will be detailed in the separate technical papers. Any proposals for change that are not included in these technical papers will be included in the consultation on the draft prudential standards later in 2010.

Chapter 9 – Supervisory review and assessment

The bulk of this paper, and in particular Chapters 5 to 8, concentrates on APRA's proposals for an insurer's prescribed capital amount and the associated assessment of its capital base.

Capital adequacy, however, also depends heavily on the way an insurer monitors and manages its capital position and its risks. APRA therefore considers its supervisory processes in regard to an insurer's capital management and risk management to be of utmost importance. This chapter explains APRA's proposals on these supervisory processes for general and life insurers.

A three pillar approach

APRA's capital adequacy framework for ADIs is based on a three pillar approach and APRA is proposing to adopt this approach for general and life insurers. The approach is also consistent with the three pillar approach adopted under Basel II and proposed for Solvency II.

The three pillars, intended to be mutually reinforcing, are as follows:

- Pillar 1 – quantitative requirements in relation to required capital, eligible capital and liability valuations;
- Pillar 2 – the supervisory review process which includes supervision of the risk management and capital management practices of regulated entities and may include a supervisory adjustment to capital; and
- Pillar 3 – disclosure requirements designed to encourage market discipline.

From a purely capital perspective:

- the Pillar 1 required capital of an insurer is the prescribed capital amount determined as the sum of the various components of prescribed capital as proposed in preceding chapters;
- as part of the Pillar 2 supervisory process, APRA may require an insurer to hold capital in addition to the prescribed capital amount, that is APRA may apply a supervisory or Pillar 2 adjustment; and

- Pillar 3 relates to disclosure rather than assessment of capital.

This chapter introduces the principles underlying APRA's approach to supervisory review of capital adequacy and describes two specific proposals. The first relates to the determination of a supervisory or Pillar 2 adjustment to the Pillar 1 or prescribed capital amount. The second proposal is that an insurer have an internal capital adequacy assessment process (ICAAP).

The proposals build on APRA's existing supervisory processes. In most cases the proposals are a refinement of existing practice and not a significant departure from it; they formalise and provide a clearer description of APRA's supervisory approach.

This chapter also introduces the term 'Prudential Capital Requirement' (PCR), which is the total of the Pillar 1 or prescribed capital amount and any Pillar 2 or supervisory adjustment.

Principles underlying the Pillar 2 supervisory review process

APRA is proposing to adopt four principles for its Pillar 2 supervisory review of capital adequacy:

1. Each insurer to have a process for assessing its overall capital adequacy and a strategy for maintaining its capital levels.
2. APRA to review and evaluate each insurer's internal capital adequacy assessment and strategy, as well as its ability to monitor and comply with regulatory capital requirements. APRA to take supervisory action if it is not satisfied with the result of this process.
3. Each insurer to operate above its required capital amount and APRA to have the ability to adjust the amount where there are prudential reasons to do so.
4. APRA to intervene at an early stage if an insurer's capital shows any signs of falling below the required capital amount and to require remedial action if capital is not maintained or restored.

Under these proposals, if APRA considers that an insurer's prescribed capital amount or its capital base is inadequate in quantity or quality, APRA would make a Pillar 2 supervisory adjustment, requiring the insurer to hold additional capital and/or a greater proportion of higher quality capital.

The application of supervisory adjustments to the prescribed capital amount is just one of the tools available to APRA in supervising an insurer's capital adequacy. Other tools include the ability to require improvements in governance, risk management and control practices and to reduce the level of exposure to risk.

APRA's approach to determining the Pillar 2 or supervisory adjustment to prescribed capital

APRA's existing standards for adjusting capital requirements

APRA's existing approach to adjusting capital requirements differs for general insurers and life insurers.

General insurers

Paragraph 17 of *Prudential Standard GPS 110 Capital Adequacy* (GPS 110) allows APRA to adjust the MCR for a general insurer. APRA has adjusted the MCR of a small number of general insurers under this provision.

Life insurers

The existing life insurance capital standards make no specific provision for APRA to adjust the solvency or capital adequacy requirements of an individual life insurer. However, APRA can issue a prudential standard for an individual life insurer under S230A of the Life Act that would enable APRA to amend these requirements should it believe that was necessary for prudential reasons.

The proposed Pillar 2 or supervisory adjustment

As explained previously in this paper, APRA is proposing to set out in prudential standards the determination of a Pillar 1 or prescribed capital amount for each insurer at a level commensurate with the insurer's overall risk profile.

If APRA is of the view that this prescribed capital amount does not adequately account for all of an insurer's risks, APRA is proposing to apply a Pillar 2 or supervisory adjustment. Such an adjustment may increase the total required capital amount and/or strengthen the composition of the insurer's capital base (i.e. the insurer may have to hold an increased proportion of higher quality capital).

Pillar 1 addresses a variety of risks such as asset, insurance and operational risks. The Pillar 2 or supervisory adjustment would address risks to which an insurer may be exposed that are not addressed adequately through Pillar 1. For example, Pillar 2 may be used to address strategic or reputation risks or it may be used for qualitative assessments related to poor corporate governance or risk management systems. APRA would also, as noted in Chapter 8, consider applying a supervisory adjustment if an insurer exhibits high levels of operational risk.

The prudential capital requirement

APRA is proposing that the minimum level of capital that an insurer needs to hold at all times is the prescribed capital amount together with any supervisory adjustment that APRA makes to that amount. This total required capital will be referred to as the prudential capital requirement (PCR). An insurer that breaches its PCR would be subject to intense APRA intervention.

In order to ensure that Pillar 2 supervisory adjustments are applied consistently across insurers, APRA would draw upon all relevant information sources and analytical tools at its disposal. These include:

- APRA's PAIRS assessment derived from APRA's risk assessment model;¹³
- APRA's SOARS assessment based on APRA's structured approach to determining appropriate supervisory response;¹⁴
- the length of time the insurer has been operating;
- whether the insurer is in, or appears likely to be in, financial or operational difficulty;
- whether the insurer is deemed by APRA to have a disproportionate exposure to a particular type of risk;
- whether particular risks faced by an insurer are adequately dealt with by the capital standards;
- how the insurer has addressed risks in its own capital management plan; and
- the adequacy of an insurer's own capital assessment and management processes.

Insurers' capital adequacy assessment process

Existing capital management requirements

The capital management requirements set out in the current capital standards for general insurers and life insurers are not the same.

General insurers

GPS 110 requires a general insurer to have in place a capital management plan. *Prudential Standard GPS 220 Risk Management* (GPS 220) requires a general insurer's business plan to include a description of the insurer's approach to capital management and to include financial projections for three years. *Prudential Practice Guide GPG 110 Capital Adequacy: Capital Management* (GPG 110) sets out further details of what would typically be included in a general insurer's business plan.

Life insurers

Prudential Standard LPS 220 Risk Management (LPS 220) requires a life insurer's Risk Management Strategy (RMS) to identify the policies and procedures for the management of capital by the insurer. *Prudential Practice Guide LPG 200 Risk Management* (LPG 200) sets out further details of what a life insurer's capital management plan would ordinarily include.

Proposed capital adequacy assessment process

APRA proposes to strengthen the capital management practices of general and life insurers as part of the Pillar 2 supervisory process. To a large extent, the proposals build on and more explicitly articulate the existing capital management requirements. They are intended to enhance the consistency of approach to capital management and monitoring by insurers, with particular emphasis on the insurer's own assessment of the capital needed to support its business.

The proposals, as set out below, broadly align with the requirements currently in place for ADIs.¹⁵

The proposals require an insurer to develop and maintain a rigorous and well-documented capital adequacy assessment process (ICAAP). The ICAAP should be appropriate to the nature, scope and complexity of the insurer's activities and be consistent with prudential requirements.

¹³ www.apra.gov.au/PAIRS/upload/PAIRS_Final_May_2008_External_Version.pdf

¹⁴ www.apra.gov.au/PAIRS/upload/SOARS_Final_May_2008_External_Version.pdf

¹⁵ Refer to *Prudential Standard APS 110 Capital Adequacy and Implementation of the Basel II Capital Framework – Supervisory Review Process* (21 December 2007).

APRA does not propose to mandate any particular format for insurer ICAAPs. However, in line with sound business practice, APRA's proposals would require an insurer:

- to maintain at all times a level and quality of capital commensurate with the level and extent of risks to which the insurer is exposed from its activities;
- to have adequate systems and procedures for identifying, measuring, monitoring and managing the risks arising from its activities on a continuous basis, and for assessing the capital needed in relation to those risks;
- to document how it determines its target capital level for supporting the degree of risks associated with its current activities and its overall business plans;
- to document its strategy for maintaining appropriate capital resources over time, including how the required level of capital is to be met, the means available for sourcing additional capital where needed and the procedures for monitoring compliance with APRA's minimum capital requirements; and
- to ensure that its ICAAP is subject to effective and comprehensive review. The frequency and scope of the review would need to be appropriate to the insurer having regard to the size, business mix and complexity of the insurer's operations and the nature and extent of any change to its business profile and risk appetite.

APRA proposes that each insurer submit to APRA on an annual basis an ICAAP report that addresses the points outlined above and includes capital projections for at least a three-year period. This proposal would replace the existing reporting requirements for capital management as part of the business plan for general insurers. For life insurers, the ICAAP report would replace the requirement referred to above.

Chapter 10 – Disclosure

APRA's proposed requirements for disclosure of relevant capital items represent no change for general insurers and align the disclosure requirements for life insurers with the proposed new structure for capital requirements proposed in this paper.

Pillar 3 of APRA's supervisory approach aims to ensure disclosures by insurers that would assist market observers to assess the capital adequacy of insurers. Market disclosure can reinforce prudential supervision by highlighting those institutions that more effectively assess and manage risk. Hence APRA is proposing that insurers give market observers ready access to some basic information on their capital adequacy on a regular basis.

The proposed disclosure requirements for the Pillar 1 or prescribed capital amount and capital base would be essentially the same as the current disclosure requirements for general insurers. In summary, insurers would be required to disclose annually:

- the individual components of the insurer's Pillar 1 or prescribed capital amount;
- the insurer's total Pillar 1 or prescribed capital amount; and
- the individual components of the insurer's capital base.

Insurers utilising the internal model-based method for determining the Pillar 1 or prescribed capital amount would be required to make further disclosures consistent with the current disclosures for a general insurer using the internal model-based method.¹⁶

If APRA determines that an insurer's PCR is to include a Pillar 2 or supervisory adjustment, the insurer would not be permitted to disclose this adjustment.

¹⁶The provisions for utilising the internal model based method for general insurers are described in *Prudential Standard GPS 113 Capital Adequacy: Internal Model-based Methods*.

Chapter 11 – Group supervision

Some general insurers are part of a Level 2 general insurance group that is subject to APRA's Level 2 group supervision framework.¹⁷ This framework includes capital requirements for Level 2 general insurance groups.

Recent amendments to the Life Act enable the registration of life insurance non-operating holding companies (NOHCs). However, APRA does not currently apply Level 2 capital requirements to life insurance groups.

In addition to its Level 2 group supervision framework, APRA is proposing a Level 3 supervision framework for conglomerate groups that have material operations in more than one industry.¹⁸ Once finalised, this framework will apply to general and life insurers that are part of such conglomerate groups.

This discussion paper focuses on the capital standards for individual (Level 1) insurers but most of its proposals are also likely to flow through to Level 2 general insurance groups. Further details for these groups will be set out in the discussion paper that accompanies the draft standards and will be subject to consultation at that stage. APRA is yet to consider capital requirements for Level 2 life insurance groups.

APRA also anticipates that the proposals in this paper will have a bearing on the implementation of the Level 3 capital framework. Further details will be provided as part of the development of the Level 3 requirements and will be subject to APRA's usual consultation process.

¹⁷ Prudential Standard GPS 111 Capital Adequacy: Level 2 Insurance Groups

¹⁸ Refer to APRA's discussion paper *Supervision of Conglomerate Groups*, released 18 March 2010

Chapter 12 – Timetable and process

APRA is seeking submissions on the proposals in this discussion paper by 12 August 2010.

APRA expects to release three technical papers for comment in June 2010. These technical papers will cover:

- the capital base and insurance risk capital charge for life insurers;
- the asset risk capital charge for life insurers and general insurers; and
- the insurance concentration risk capital charge for general insurers.

These technical papers will set out further details of APRA's proposals on these topics.

As noted in Chapter 1, APRA proposes to conduct a QIS in mid-2010 to assist it in assessing the impact of its proposals on individual insurers and on the general and life insurance industries. The QIS will invite insurers to provide details to APRA of the impact of the various proposed changes to their required capital and capital base. Participation by insurers in the QIS will be voluntary. It is important however, that as many insurers as possible participate to enable APRA to assess fully the impact of the proposals. The QIS results will be an essential input into finalising APRA's proposals, including the details and parameters of the revised capital standards.

Following its review of submissions and analysis of the QIS results, APRA expects to release a response paper and draft prudential standards for comment towards the end of 2010. Final prudential standards are targeted for release in mid 2011, with the implementation date likely to be early in 2012.

APRA expects to release draft reporting standards and draft reporting forms for comment in the second half of 2011, and final reporting standards and forms in early 2012.

Chapter 13 – Cost-benefit analysis information

To improve the quality of regulation, the Australian Government requires all proposals to undergo a Preliminary Assessment to establish whether it is likely that there will be business compliance costs associated with the proposals. In order to perform a cost-benefit analysis, APRA welcomes information from interested parties.

As part of the consultation process, APRA requests respondents to provide an assessment of the impact of the proposed changes and, specifically, any marginal compliance costs that APRA-regulated entities are likely to face. APRA will also be undertaking an impact study of its proposals.

Given that APRA's proposed requirements may impose some compliance costs, respondents may also indicate whether there are any other relevant regulations relating to the general insurance and life insurance capital standards that should be improved or removed to reduce compliance costs. In doing so, please explain what they are and why they need to be improved or removed.

Respondents are requested to use the Business Cost Calculator (BCC) to estimate costs to ensure that the data supplied to APRA can be aggregated and used in an industry-wide assessment. APRA would appreciate being provided with the input parameters to the BCC as well as the final result. The BCC can be accessed at: www.finance.gov.au/obpr/bcc/index.html.

Attachment A – Summary of proposals

1. Summary of proposals – general insurers

The following table summarises the proposals that affect general insurers.

General insurers	Proposals
Capital base	<ul style="list-style-type: none"> For insurers with investments in other APRA-regulated entities, the value of this investment would be reduced by the regulatory capital requirements of the subsidiary, associate or joint venture for the purposes of inclusion in the insurer's capital base. There may be changes to the requirements for Tier 2 capital.
Prescribed capital amount	<ul style="list-style-type: none"> The existing Minimum Capital Requirement (MCR) would be replaced by the Prudential Capital Requirement (PCR). The part of the PCR that is calculated by insurers and must be publicly disclosed will be called the prescribed capital amount.
Supervisory adjustment	<ul style="list-style-type: none"> APRA could increase an insurer's total required capital if it believed the prescribed capital amount did not adequately account for all of an insurer's risks. This adjustment would not be permitted to be publicly disclosed.
Prudential capital requirement (PCR)	<ul style="list-style-type: none"> The PCR would be the total of the prescribed capital amount and any supervisory adjustment. An insurer would be required to have a capital base that exceeds the PCR at all times.
Components of the prescribed capital amount	<ul style="list-style-type: none"> The prescribed capital amount would comprise separate charges for insurance risk, insurance concentration risk, asset risk, asset concentration risk and operational risk.
Insurance liabilities	<ul style="list-style-type: none"> APRA's requirements for the valuation of insurance liabilities are described in GPS 310. The insurance liabilities comprise outstanding claims liabilities and premiums liabilities. The current methodology for risk margins would be retained. APRA proposes to: <ul style="list-style-type: none"> clarify that risk margins must be held on both reinsurance and non-reinsurance recoveries; and consider constraining the level of diversification that can be assumed.
Insurance risk capital charge	<ul style="list-style-type: none"> The insurance risk capital charge is described in GPS 115. It would continue to be calculated by applying APRA-specified factors to the outstanding claims provisions and premiums liability provisions. Minor changes would be made to the outstanding claims liability and premiums liability risk capital factors. The classes affected are travel, mortgage insurance and 'other'. Changes are proposed to the insurance risk capital charge groupings for inwards reinsurance business. The separate charges for facultative versus treaty business will be removed, and the groupings by class will be aligned with groupings for the direct classes.

General insurers	Proposals
Insurance concentration risk capital charge	<ul style="list-style-type: none"> • The insurance concentration risk capital charge is described in GPS 116. It is the Maximum Event Retention (MER) plus the cost of one reinstatement of the relevant reinsurance cover. • The insurance concentration risk charge requirements in GPS 116 will be clarified in a technical paper due for release in June 2010.
Asset risk capital charge	<ul style="list-style-type: none"> • The investment risk capital charge (which would be renamed the asset risk capital charge) is described in GPS 114. • APRA proposes to improve the risk sensitivity of the asset risk capital charge by requiring the insurer to apply a series of stress tests to the balance sheet. • The stress tests would include changes to a range of factors affecting the assets and, in some cases, the liabilities.
Asset concentration risk capital charge	<ul style="list-style-type: none"> • The investment concentration risk capital charge (which would be renamed the asset concentration risk capital charge) is described in GPS 114. • The asset concentration thresholds would be strengthened. • Special treatment would be allowable for exposures to: <ul style="list-style-type: none"> – highly rated governments; – reinsurance recoveries; – APRA-authorized entities; and – related parties.
Operational risk capital charge	<ul style="list-style-type: none"> • There would be an explicit charge for operational risk. • Operational risk profile and management would be a consideration in determining any supervisory adjustment.
Aggregation benefit	<ul style="list-style-type: none"> • The aggregation of the insurance risk capital charge and the asset risk capital charge would include explicit allowance for diversification between risks. • The operational risk capital charge, asset concentration risk capital charge and insurance concentration risk capital charge would be added unadjusted to the other charges.
ICAAP	<ul style="list-style-type: none"> • Insurers would be required to develop and maintain an internal capital adequacy assessment process (ICAAP). • The five main features of an ICAAP would be: <ul style="list-style-type: none"> – board and management oversight; – sound capital assessment; – comprehensive assessment of risks; – monitoring and reporting; and – internal control review.

2. Summary of proposals – life insurers

The following table summarises the proposals that affect life insurers.

Life insurers	Proposals
Replacement of solvency and capital adequacy requirements	<ul style="list-style-type: none"> The solvency and capital adequacy requirements for statutory funds would be replaced by a single measure called the Prudential Capital Requirement (PCR). The PCR would be compared with the capital base of each statutory fund.
Capital base	<ul style="list-style-type: none"> The capital base would include shareholders' net assets and approved subordinated debt (and seed capital in the case of friendly societies). Deductions would be made for inadmissible assets. Adjustments would be made to policy and other liabilities for the purpose of determining the capital base. There may be changes to the requirements for subordinated debt.
Inadmissible assets	<ul style="list-style-type: none"> Inadmissible assets are assets that would not qualify for inclusion in the capital base. The capital charge for asset concentration risks would be included in the PCR and not in the inadmissible assets. For subsidiaries, associates and joint ventures the regulatory capital requirements and any excess of the value of the entity over net tangible assets would be inadmissible. Other inadmissible assets would be defined by APRA similarly to the existing solvency standard.
Prescribed capital amount	<ul style="list-style-type: none"> The prescribed capital amount would be calculated by the Appointed Actuary and would be required to be publicly disclosed.
Supervisory adjustment	<ul style="list-style-type: none"> APRA could increase an insurer's total required capital if it believed the prescribed capital amount did not adequately account for all of an insurer's risks. This adjustment would not be permitted to be publicly disclosed.
Prudential capital requirement (PCR)	<ul style="list-style-type: none"> The PCR would be the total of the prescribed capital amount and any supervisory adjustment. An insurer would be required to have a capital base that exceeds the PCR at all times.
Components of the prescribed capital amount	<ul style="list-style-type: none"> The prescribed capital amount would comprise separate charges for insurance risk, asset risk, asset concentration risk and operational risk. An aggregation benefit would be deducted.

Life insurers	Proposals
Insurance risk capital charge	<ul style="list-style-type: none"> The insurance risk capital charge would be the amount of capital required to cover the risks that mortality, morbidity, voluntary discontinuance and servicing expenses are worse than best estimate. Some margins would be determined by the Appointed Actuary and others would be specified by APRA. The Appointed Actuary would be allowed to assume exercise of discretions to mitigate the effects of insurance risks as in LPS 2.04 and LPS 3.04. However, APRA would specify limits to the discretions that can be assumed for future repricing. The insurance risks considered would include extreme events (e.g. a pandemic).
Asset risk capital charge	<ul style="list-style-type: none"> The range of asset risks considered in the asset risk capital charge would include those in LPS 2.04 and LPS 3.04 as well as inflation and market volatility (affecting the value of derivative-type investments and any financial options and guarantees embedded in the liabilities). Each risk would be evaluated separately. The asset risk capital charge would be the sum of the capital amounts required for each risk, less an aggregation benefit. Hypothecation of specific assets to specific liabilities would be allowed. The asset risk capital charge would depend on the total amount of admissible assets and how they are invested.
Asset concentration risk capital charge	<ul style="list-style-type: none"> The asset concentration risk capital charge would be calculated in a similar way to the asset concentration risk reserve required under LPS 2.04 and LPS 3.04. The special treatment of mortgages would be removed. Collateralisation and other forms of security would be able to be allowed for. Exposures of a specialist reinsurer to its overseas parent would no longer be unlimited; rather they would be subject to a limit of 50 per cent of VASF. The relief provided to specialist reinsurers with regard to exposures to offshore parents would not be available to statutory funds that include directly written business.
Operational risk capital charge	<ul style="list-style-type: none"> There would be an explicit charge for operational risk, to apply to all types of life insurance business. The existing investment-linked margins in LPS 2.04 and LPS 3.04 would be removed. Operational risk profile and management would be a consideration in determining any supervisory adjustment.

Life insurers	Proposals
Aggregation benefit	<ul style="list-style-type: none"> • The aggregation of the insurance risk capital charge and the asset risk capital charge would include explicit allowance for diversification between risks. • The operational risk capital charge and asset concentration risk capital charge would be added unadjusted to the other charges.
New business reserve	<ul style="list-style-type: none"> • The new business reserve (required under LPS 3.04) would be removed. However, APRA would expect insurers to consider the capital requirements of future new business in their ICAAP.
Expense reserve	<ul style="list-style-type: none"> • The expense reserve (required under LPS 2.04) would be removed.
Risk-free discount rates	<ul style="list-style-type: none"> • Principles would be set for determining risk-free discount rates used for determining the prescribed capital amount. • The risk-free rates used for valuing Australian liabilities would be the yields on commonwealth government securities. • For foreign liabilities government bond yields may be adjusted in some circumstances. • A liquidity premium may be allowed for some annuity contracts.
ICAAP	<ul style="list-style-type: none"> • Insurers would be required to develop and maintain an Internal Capital Adequacy Assessment Process (ICAAP). • The five main features of an ICAAP would be: <ul style="list-style-type: none"> – board and management oversight; – sound capital assessment; – comprehensive assessment of risks; – monitoring and reporting; and – internal control review.

Attachment B – Existing Level 1 Capital Standards

GPS 001	<i>Prudential Standard GPS 001 Definitions</i>
GPS 110	<i>Prudential Standard GPS 110 Capital Adequacy</i>
GPS 112	<i>Prudential Standard GPS 112 Capital Adequacy: Measurement of Capital</i>
GPS 113	<i>Prudential Standard GPS 113 Capital Adequacy: Internal Model-based Method</i>
GPS 114	<i>Prudential Standard GPS 114 Capital Adequacy: Investment Risk Capital Charge</i>
GPS 115	<i>Prudential Standard GPS 115 Capital Adequacy: Insurance Risk Capital Charge</i>
GPS 116	<i>Prudential Standard GPS 116 Capital Adequacy: Concentration Risk Capital Charge</i>
GPS 220	<i>Prudential Standard GPS 220 Risk Management</i>
GPS 310	<i>Prudential Standard GPS 310 Audit and Actuarial Reporting and Valuation</i>
LPS 1.04	<i>Prudential Standard LPS 1.04 Valuation of Policy Liabilities – an ex-LIASB standard (AS 1.04) remade by APRA with effect from 1 January 2008</i>
LPS 2.04	<i>Prudential Standard LPS 2.04 Solvency Standard – an ex-LIASB standard (AS 2.04) remade by APRA with effect from 1 January 2008</i>
LPS 3.04	<i>Prudential Standard LPS 3.04 Capital Adequacy Standard – an ex-LIASB standard (AS 3.04) remade by APRA with effect from 1 January 2008</i>
LPS 4.02	<i>Prudential Standard LPS 4.02 Minimum Surrender Values and Paid-up Values – an ex-LIASB standard (AS 4.02) remade by APRA with effect from 1 January 2008</i>
LPS 5.02	<i>Prudential Standard LPS 5.02 Cost of Investment Performance Guarantees – an ex-LIASB standard (AS 5.02) remade by APRA with effect from 1 January 2008</i>
LPS 6.03	<i>Prudential Standard LPS 6.03 Management Capital Standard – an ex-LIASB standard (AS 6.03) remade by APRA with effect from 1 January 2008</i>
LPS 7.02	<i>Prudential Standard LPS 7.02 General Standard – an ex-LIASB standard (AS 7.02) remade by APRA with effect from 1 January 2008</i>
PS3	<i>Prudential Standards No 3 – Prudential Capital Requirements (applies to all life companies)</i>

Attachment C – Further details on the asset risk capital charge

An insurer would be required to determine the change in net assets from specified adverse movements in a range of eight asset risks, represented by eight asset risk modules (see below). The net assets would exclude inadmissible assets and assets in excess of the asset concentration limits.

For some modules (e.g. real interest rates), both an increase and a decrease in valuation parameters would need to be considered. The capital required for each scenario would be the fall (if any) in net assets in that scenario.

An explicit approach to diversification between asset modules would be adopted by combining the capital required for each scenario using a correlation matrix prescribed by APRA. The correlations adopted between each pair of risk modules would be set at conservative levels by APRA and would allow for the relative likelihood of the two scenarios occurring at the same time. The scenarios would each be intended to have a 1:200 probability of occurring over a 12 month period.

Depending on the risk profile of the insurer, it may not be necessary to consider all of the above scenarios.

For example, for a general insurer with all assets and liabilities denominated in Australian dollars only and with no investments in derivatives, property or equities, the asset risk module would only require examination of real interest rates, expected inflation, credit spreads and default risk.

For general insurers, the real interest rates, expected inflation and currency modules would consider changes to the values of both assets and liabilities. For the other modules only asset values would normally be affected. For life insurers, the liabilities may be affected in all modules.

For the real interest rate module, APRA would specify an increase and a decrease that must be applied to the prevailing real (in excess of expected CPI inflation) risk free yield curves. All other asset and liability valuation parameters, including expected CPI inflation and credit spreads, would be unchanged.

For the expected inflation module, APRA would specify an increase and a decrease that must be applied to the expected CPI inflation rates. Real interest rates, credit spreads and all other valuation parameters would remain unchanged. The specifications for this module would recognise that there may already be an allowance for inflation risk in the insurance liability risk margins of general insurers.

Risk Module	Directions	Stresses are applied to:
Real interest rates	up, down	Real yields
Expected inflation	up, down	CPI inflation expectations
Currency	up, down	Exchange rate
Volatility	up, down	Volatility assumptions
Equity	up	Dividend yields
Property	up	Rental yields
Credit spreads	up	Credit spreads
Default risk	down	Value

For the currency module, APRA would specify an adverse exchange rate movement that would apply to all assets and liabilities not denominated in Australian dollars. Both an increase and a decrease in exchange rates would be considered.

The volatility scenario would affect the values of options and some other derivatives and the values of any financial options and guarantees that are included in life insurance liabilities. Volatility is a key valuation parameter for options and some other types of derivatives and can change significantly over fairly short periods. APRA would specify a rise or fall in forward-looking volatilities for interest rates, equities and exchange rates.

For the equity module, APRA would specify an increase in the prevailing dividend yield on the ASX 200 Index. Insurers would be required to convert this increase in dividend yield into an equivalent fall in equity prices. The same proportionate fall in prices would be applied to both Australian and foreign equities. This method would result in a higher capital charge being applied when the prevailing dividend yield is low (i.e. equity prices are high).

For the property module, APRA would specify an increase in actual rental yields on properties held (based on most recent leases in force and determined net of expenses). Insurers would be required to recalculate property values using the stressed yield (assuming no change in actual rents).

For the credit spreads module, APRA would specify an increase in credit spreads that must be applied in recalculating the value of interest bearing assets. The increase in credit spreads would vary by counterparty grade, being higher for riskier assets.

For the default risk module APRA would specify default risk factors that must be applied to over-the-counter derivatives, reinsurance recoveries, unpaid premiums, unclosed general insurance business and any other non-interest-bearing assets subject to credit risk. The default factors would vary by counterparty grade.



Telephone
1300 13 10 60

Email
contactapra@apra.gov.au

Website
www.apra.gov.au

Mail
GPO Box 9836
in all capital cities
(except Hobart and Darwin)