

**A NEW STATUTORY SOLVENCY STANDARD FOR  
GENERAL INSURERS**

**September 1999**

**Australian Prudential Regulation Authority**



## **PREAMBLE**

APRA is seeking comments by 17 December 1999 on the following draft policy proposal for the development of a new statutory solvency standard for general insurers. It is proposed that the Solvency Standard will set out the minimum statutory solvency requirements that general insurers will be required to comply with and will be a subordinate instrument to the *Insurance Act 1973*. Further consultation on the issues raised in this paper will occur following receipt of initial comments. This will take place in early 2000.

The development of a new Solvency Standard builds on work previously undertaken by the Insurance and Superannuation Commission. In March 1995, the then Insurance and Superannuation Commissioner, Mr George Pooley, raised publicly the issue of whether a measure of technical or adjusted solvency of general insurers can or should be disclosed. A discussion paper was subsequently issued to the general insurance industry. Consultations arising from the discussion paper raised the question as to whether the existing measures of capital and solvency contained in the Insurance Act were adequate.

As a result, the ISC wrote to the Institute of Actuaries in Australia seeking its assistance in the development of practical minimum solvency standards which meaningfully reflect the variations in risk facing general insurers. In response to this request, the IAA established two working groups. One to examine ways of achieving greater consistency and reliability of companies' outstanding claims provisions and the other to consider how solvency standards could be updated and better reflect the business line risks of insurers. These working groups reported to APRA early this year.

This paper is issued, and should be read, in conjunction with two other papers entitled *Study of the Prudential Supervisory Requirements for General Insurers in Australia* and *A Statutory Liability Valuation Standard for General Insurers*. These two papers consider, respectively, proposals to improve and modernise the prudential supervisory requirements for general insurers and proposals to develop a standard for the valuation of general insurance liabilities.

Comments and any questions about the proposals should be submitted in writing by  
17 December 1999 to:

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## **INTRODUCTION**

For general insurers, the minimum solvency standard represents a test of claims paying ability. Insurers are required to satisfy the test in order to be allowed to continue to write business.

Under the *Insurance Act 1973* (Insurance Act), insurers are required to maintain allowable assets (reported at market value) in excess of reported liabilities by at least the greatest of:

- \$2 million;
- 20% of net premium income; or
- 15% of net outstanding claims.

Certain assets are excluded for this purpose.

In addition, insurers are required to satisfy certain reinsurance requirements. The most significant for solvency purposes is a requirement to hold assets in excess of the statutory minimum (described above) of at least the amount of the maximum event retention.

This solvency structure goes only part way to recognising different risks faced by individual insurers. It is a blunt instrument which:

- does not explicitly recognise the different levels of risk associated with different business lines;
- does not respond to inconsistency in the adequacy of reported liabilities;
- does not explicitly recognise the risks associated with the interaction of assets and liabilities; and
- may not optimally recognise certain other risks, eg asset valuation and concentration risk, risk of reinsurer default, catastrophe risk.

Significantly, as a balance sheet test, it can only be a proxy for any truly prospective, company-specific test of claims paying ability.

In order to support its prudential role APRA requires a statutory solvency regime which:

- is responsive to the individual risk profiles of insurers;
- does not impose undue compliance costs on the industry;
- encourages the development and use of internal risk control and capital management systems; and
- provides for cost effective prudential supervision.

To some extent, these objectives are in conflict. In practice a balance needs to be found between technical sophistication and practicality.

This paper proposes changes to the existing statutory solvency requirement to improve the capacity of the solvency requirement to meet APRA's prudential objectives.

Briefly, it is intended that a solvency standard will be developed that:

- incorporates a 'default' test with a formulaic basis; and
- incorporates scope for an optional test which is based on a scenario survivorship model. The resultant capital requirement would be regarded as the statutory minimum capital requirement, subject to approval by APRA.

Each insurer would apply the default test or the optional test if approved (on a case by case basis) by APRA. Under the default test the statutory minimum solvency margin would be based on the sum of a number of items, each responding explicitly to particular risks, including: liability risk (insurance and concentration risk); asset risk; and asset liability management risk.

Liability valuation risk will also be addressed by a statutory valuation standard.<sup>1</sup> Other non-financial risks will be addressed by controls other than the statutory solvency standard.<sup>2</sup>

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<sup>1</sup> Refer to the paper *A Statutory Liability Valuation Standard for General Insurers* issued by APRA in conjunction with this paper.

<sup>2</sup> Refer to the paper *Study of the Prudential Supervisory Requirements for General Insurers in Australia* issued by APRA in conjunction with this paper.

## **SOLVENCY PRINCIPLES**

The proposed statutory solvency test would be based on a limited going-concern perspective. Under this perspective, existing assets should be sufficient to fund existing liabilities, assuming the insurer continues in business. In addition, either future premiums (for a limited time into the future) must be adequate or existing assets must be sufficient to cover any shortfall. Under this perspective, no allowance is needed for transaction costs associated with the sale of assets nor for the diseconomies of scale associated with a wind down of operations.

In effect, the default test would prescribe a statutory minimum solvency margin, defined as the difference between assets and liabilities in the statutory accounts. The formula for the statutory minimum solvency margin should be responsive to the risks being assumed and would contain the following components:

- Liability Risk:
  - the sum of the technical provisions for each class of business multiplied by a factor for each class;<sup>3</sup>
  - an item relating to future business. In practice, this probably needs to be based on historical data and might be given by the sum of the past written premiums for each class multiplied by a factor for each class; and
  - a catastrophe risk component;
- Asset risk:
  - the sum of the values for each class of asset multiplied by a factor for each class; and
  - an item relating to concentration risk;
- Asset liability management risk

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<sup>3</sup> Calculated in accordance with the Liability Valuation Standard (refer to the paper *A Statutory Liability Valuation Standard for General Insurers* issued by APRA in conjunction with this paper).

- an item relating to asset liability mismatch. This might take the form of the value of the liabilities multiplied by the difference between the asset and liability means multiplied by a factor.

## **INTERNAL MODELLING OPTION**

Through refinement of the solvency formula there is scope to increase the risk responsiveness of the standard, without adding unduly to compliance costs. However, any approach which is wholly formulaic cannot be optimally responsive to risk. Indeed, a balance sheet test can only be a proxy for a truly prospective approach.

Of the four regimes currently supervised by APRA (life insurance, authorised deposit taking institutions (ADIs), superannuation and general insurance) the general insurance prudential framework places least responsibility on 'internal experts'. Life and superannuation have statutory roles for actuaries while ADI prudential regulation requires a series of statements involving a 'group risk manager'.

The life insurance regime contains a requirement for a Financial Condition Report to be prepared by a qualified professional (actuary) operating under a professional standard. Such a report is more detailed and meaningful than financial statements. The ADI regime incorporates the concept of regulator approval of internal company models whose purpose is to establish minimum capital requirements. It is clear that, in theory, such an approach can have much closer regard to a company's individual risk profile than is possible under a prescribed formulaic model.

For this purpose, there is clear scope to incorporate a more forward looking element into the general insurance solvency framework.

It is proposed that an optional solvency test based on scenario survivorship be incorporated into the framework. Under guidance, companies would develop their own internal models in this regard, with the resultant capital requirement being allowed for statutory purposes, subject to APRA approval of the model.

## **INTERNATIONAL DEVELOPMENTS**

With increasing globalisation there is a need for consistency with the standards which operate in other jurisdictions. These can be briefly described as:

- European Union – similar structurally to current Australian standard. However, unlike the current Australian standard, the European Union standard does not include a check (the outstanding claims provisions test) on long tail writers. This simple structure has been adopted in the European Union, in part, to enable some harmonisation between member states. It has been under review for some time. It is noteworthy that some member states of the European Union have more risk theoretic systems running in parallel with the common standard.
- USA – a four tier system of risk based capital, specifying a minimum amount based on the company's size and risk profile. The major risk categories are asset risk, underwriting risk, credit risk (reinsurance risk), and other risks.
- Canada – similar structure to Australia, however, that structure is currently under review and is likely to move to a more risk based structure. Mandatory actuarial certification of claims provisions is required. Canada also requires an annual actuarial condition report.

The changes proposed in this paper do not appear out of step with international developments

## **PROCESS AND STRUCTURE**

Empirical testing will be carried out in order to determine factors suitable for the formula for the default test outlined above. This will be undertaken within APRA, but technical guidance may be sought from the Institute of Actuaries in Australia.

The resulting legislative structure would see a Solvency Standard subordinate to the Insurance Act which:

- sets out the absolute minimum capital requirement (currently \$2million);
- sets out the formula and other requirements for the statutory minimum solvency margin under the default test; and
- allows for the (optional) use of certain internal models to establish the statutory minimum capital requirement, subject to approval by APRA.

