LIFE FINANCIAL REPORTING SUB-COMMITTEE
Discussion Note

Valuation and Resilience Reserves: Geared or Guaranteed Assets

1 BACKGROUND

The Solvency, Capital Adequacy and Management Capital Requirements include a provision for risks associated with the assets supporting the liabilities (i.e. asset / liability mismatch, liquidity and credit risks).

The Standards prescribe a method for calculating reserves associated with market risks. The Standards also specify a basis for allowing for assets where the value of the asset is dependant on continuation of the business (Solvency Standard and Management Capital Standard only), holdings in Associated Financial Entities and Asset Concentration.

Although no formulae are specified for determining a provision for credit and liquidity risk, Section 10.4.2 of the new AS2.03, Section 10.3.2 of the new AS3.03 and Section 9.5 of AS6.02, contain a general requirement to consider these issues and add to the reserve for inadmissible assets an appropriate amount.

Various asset structures and arrangements can make the process of determining an appropriate allowance for asset risks more complicated. For example, the security of an asset may be improved by way of guarantees provided by a third party, conversely situations may arise where the risk profile of an asset is modified through gearing. This Discussion Note highlights some of the issues that should be considered in determining an appropriate allowance for asset risks in these circumstances. However, it should be noted that the issues that these actions or structures raise for the calculation of the diversification factor are not addressed.

As a separate matter this note also considers the issue of the valuation of asset structures, particularly geared asset structures, on other than a "sum of parts" basis.

This discussion note is broken up into three sections that cover the following issues:

- The valuation of asset structures.
- The Resilience Reserve calculations where an asset is geared.

- The Resilience Reserve / reserve for asset risks for an asset where a portion of its value is secured and a portion of its value is unsecured.

2 VALUATION OF ASSET STRUCTURES

Issue: Valuation of asset structures, particularly geared asset structures, on other than a "sum of parts" basis.

Standards:

Market value definition in the Life Insurance Act 1995:—

- The assets of a life company, other than operating assets, must be valued in the financial statements at net market value.

- Where no quoted market value exists in relation to an asset, the asset must be valued in the financial statements at net market value as determined by: (a) suitably qualified valuer; (b) on a basis which they (the Board) consider, on reasonable grounds, to be appropriate. If the directors determine the value, the basis of the valuation must be disclosed in the financial statements.

Market value definition in AASB1038:

- Assets of a life insurer must be valued at net market value as at the reporting date… For assets without active and liquid markets, the methods used to determine their net market value must be disclosed.

- In determining net market values of investments, reference is made to the market that provides the most reliable information, which is likely to be the market in which the investment is normally traded. In addition, whilst investments are often managed …

Valuation Principles

It is widely regarded as a sound valuation principle that in valuing an asset structure comprising two or more identifiable sub-components, that the vale of the whole should be equal to the value of the sum of the parts.

This is reflected in the common market practice of valuing geared assets on the basis of a valuation of the ungeared asset cash-flow of the structure less the value of the gearing debt. Unless there is an observable market value for similar net asset structures, it is generally problematic to directly value the structures net cash-flows. The ready example of $100 borrowed to purchase a $100 equity investment is noted - this has an obvious net market value at inception of $0, yet

there is no discount rate (other than infinity) that would likely produce this result when applied to a DCF valuation of the projected net cash-flows of the structure.

The only exceptions to the above (to produce a higher value) would be:

- Where the asset structure generates net benefits for its owner that would not be readily available to other market participants (e.g. merging two life insurers and extracting various synergy benefits).

- Where one or more of the asset structure components has been entered into on "non-market" (non-commercial) terms.

- Where the asset structure manages to capture some material market arbitrage benefit.

Nonetheless, where these circumstances apply, there would be a heavy onus on the valuer to identify and reliably quantify the effects. In addition, and this applies particularly in the case of the second and third exception above, the valuation should ordinarily still be determined relative to the component of the asset structure effect and not on a net cash-flow basis (i.e. the valuation should still be sum of parts based).

Conclusions:

- There is a requirement to refer to market prices when determining asset values. Where market prices are not readily calculable, an appropriate and reliable basis should be adopted and disclosed.

- In particular, where an asset with a known, or otherwise observable or professionally determinable, market value is geared, and if there is otherwise no reliably identified change in the risk profile of the ungeared asset as a result of the asset structure adopted, then the value adopted for the asset structure should not exceed the known/observable/determinable value of the ungeared asset less the value of the debt.

- Actuaries should be aware of the requirements of paragraph 46 of PS200 that require the Actuary to hold an appropriate reserve should the values of the assets be considered unsuitable in any respect.

3 THE IMPACT OF DEBT ON ASSET RISKS

Issue: Allowing for asset risks on an effective exposure basis, including geared assets under capital and solvency standards.

Standards:

- There is a requirement under paragraph c) of 5.3 in AS2.03, paragraph c) of 5.3.1 in AS3.03 and paragraph c) of 4.3 in AS6.01 to adopt a “look through” approach in respect of investment entities.

- Other sections of the Standards also require that where the essence of the transaction is an equity / property exposure, this should be reflected in the resilience reserve calculation. This is similar to requiring a "look through approach" where assets are assessed on the basis of effective asset exposures. Refer to paragraph a) of Section 5.3 in AS2.03, paragraph a) of Section 5.3.1 in AS3.03 and paragraph a) of Section 4.3 in AS6.02. One of the advantages of a look through approach is the ability to apply the asset concentration test at a lower level.

From AS2.03 Section 5.3 “The Actuary in assessing the asset risks must:

a) take account of the effective exposure of the fund to various asset classes, regardless of the physical asset holdings of the fund; and

b) consider exposure to counterparty risks including, but not limited to, futures and options contracts, swaps, hedges, warrants, forward rate and repurchase agreements...”

Conclusions:

- The basis for the calculation of the parameters in the Standards assumes a well diversified portfolio that does not contain any gearing (at least not in addition to the average level of gearing in the asset class itself). The calculation of the factors recognises that some classes (such as equities) already contain a level of gearing, and the average impact of this is reflected in the level of the prescribed yield changes in the resilience section of the Standards.

- Consistent with the requirement to reflect the effective exposure to various asset classes, the impact of any gearing should be explicitly allowed for in the Solvency Reserve / Capital Adequacy Reserve / Management Capital Requirement calculation by separately applying the resilience tests to the asset value (ignoring any associated debt) and the associated debt. Note that the adverse tests are applied separately to each asset or liability component in the usual way.

- The value of the debt in the post resilience scenarios should be calculated and appropriately allowed for in the resilience reserve calculation.

- One interpretation of this approach is that no life company has the average portfolio holding for an asset class, and therefore each life company should be making an allowance to the extent the gearing level of the material assets in their portfolio is different to the average. However, where a life company has a well diversified portfolio, with no additional external debt, we would expect that no adjustment might be needed.

- To the extent that a portfolio of equities, property or fixed interest has been geared by additional debt applied at a unit trust level or secured externally on those assets themselves, particular care should be made to allow appropriately for the effective exposures of the various asset classes.

- One possibility with property that has been mortgaged to the extent of around 30% of its value, may be to treat it as an equity. This would include assuming the ASX 100 Index yield (i.e. not applying the property yield in calculating the asset fall). However, for any gearing beyond this level the debt should be placed on balance sheet for the resilience calculation, so that the resilience tests are separately applied to the asset value (ignoring any associated debt) and the associated debt.

4 RESILIENCE RESERVE FOR AN ASSET WHERE PART OF THE VALUE IS SECURED AND PART IS UNSECURED

Issue: There are various arrangements that can make the value of an asset more certain. One way of doing this is to obtain a guarantee over all or a part of the cash flows of the asset. For instance a put option can be purchased over equities or a swap arrangement could be entered into over the dividend cash flows. For property, entering into a lease agreement with limited flexibility for re-negotiating rental amounts and breaking early can make the value of the property more certain.

Standards: Not clear.

Conclusions:

When considering the extent to which guarantees are allowed for in calculating the reserve for asset risks, the following should be considered and allowed for:

- The credit worthiness of the party(ies) providing the guarantee

- The term of the arrangement

- Options to re-negotiate the arrangement

- The break terms of the arrangement

- Exposures to costs / losses from failing to satisfy any contractual obligations

- Gaps in insurance cover

In the example of a property lease, the life company may be exposed to losses due to gaps in insurance cover. They may also need to provide compensation to the lessee (in addition to losing rental income) in the event the building is damaged.

Further, the impact of these issues should be reassessed under the resilience scenario being considered.

Guarantees should only be allowed:

- To the extent of their term, and

- To the extent any "guarantee" provided is materially in addition to the guarantees that would typically apply to such an asset and is therefore already reflected in the required reserving factors.

The residual asset value (the asset value over which no guarantees are provided) should be assessed on the basis of the effective asset class exposure.

5 SUGGESTED AREAS FOR FEEDBACK

This is the first version of this Discussion Note and we welcome suggestions on how it might be improved. A further version of the Discussion Note will be issued later in 2003. Although input on any aspect of the Discussion Note is appreciated, set out below is a list of issues that we consider are worthwhile discussing further:

- Should the Discussion Note be formalised as a Guidance Note?

- The Discussion Note has not addressed the issues relating to the calculation of the diversification factor. However, we do note that the diversification factor has a minimum value of 0.5. How should this issue be progressed?

- In the conclusions in Section 3 we have commented on the basis for the calculation of the parameters in the Standards. Is this appropriate?

- Suggestion that property that has been mortgaged to the extent of around 30% of its value may be treated as an equity. Is this appropriate?

- In the conclusions in Section 4 we have listed some of the issues that should be considered in allowing for guarantees. Are these appropriate and are there others that should be included?

- Could the Discussion Note provide more specific guidance in certain areas? Alternatively is the Discussion Note too specific?

If you have any questions or suggestions please contact Michael Dermody (Secretary of the Life Financial Reporting Sub-Committee), phone number (02) 9335 8141 or e-mail mdermody@kpmg.com.au.