Australian Prudential Regulation Authority

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To all CEOs (or equivalent) and Appointed Actuaries of life insurers

Illiquidity premium

As you know, APRA is reviewing and updating its capital standards for general insurers and life insurers. The aims of the review include improving the risk sensitivity of the standards and achieving better alignment across APRA-regulated industries. APRA has been consulting with industry on these proposals since May 2010.

During 2011, in response to the quantitative impact study results and submissions, APRA released two response papers that refined and provided clarity on the capital proposals. The December 2011 response paper was accompanied by draft prudential standards. Submissions on the December 2011 package closed on 24 February 2012. APRA is currently considering the issues raised by industry in this latest round of consultation.

The December 2011 response paper noted APRA's intention to continue consultation with industry in 2012 on its proposals in the areas of composition of the capital base and, for life insurers, the illiquidity premium. This letter details APRA's proposals for the illiquidity premium. The proposed methodology, its rationale, and the proposed changes to the draft prudential standards that were released in December 2011 are set out in the Attachment.

APRA welcomes feedback from industry in relation to the proposals in this letter by 1 June 2012. Submissions should be sent to InsuranceCapital@apra.gov.au. APRA expects to finalise the proposals relating to illiquidity premium by September 2012.

Yours sincerely

Important Disclosure Notice - Publication of Submissions

All information in submissions will be made available to the public on the APRA website unless a respondent expressly requests that all or part of the submission is to remain in confidence. Automatically generated confidentiality statements in emails do not suffice for this purpose. Respondents who would like part of their submission to remain in confidence should provide this information marked as confidential in a separate attachment.

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. Information in the submission about any APRA regulated entity which is not in the public domain and which is identified as confidential will be protected by section 56 of the Australian Prudential Regulation Authority Act 1998 and therefore will ordinarily be exempt from production under the FOIA.

Attachment – Illiquidity Premium

APRA has previously indicated that it would consider allowing an illiquidity premium to be added to the risk-free discount rate for the purpose of calculating the liabilities for immediate life annuities, term certain annuities, fixed term/rate products and funeral bonds.

In deciding whether a methodology for calculating an illiquidity premium can be accepted for the purpose of calculating regulatory capital, APRA considered a number of principles. These were that:

- the method for determining the illiquidity premium must be robust;

- the method must have a sound theoretical justification;

- the method must have reasonable assurance of giving appropriate results in both normal and stressed conditions;

- the amount of insurer and actuary discretion involved in determining the illiquidity premium should be limited, so that all insurers use approximately the same illiquidity premium at the same point in time; and

- the calculation should be based on publicly available sources of data.

Proposed formula

APRA proposes that the illiquidity premium (in basis points) added to risk-free forward rates for the first 10 years after the reporting date be:

- 15% x AA spread + 15% x A spread

'AA spread' and 'A spread' are the spreads over bonds issued by the Australian Government for corporate bonds with broad credit ratings (as determined by Standard and Poor's) of AA and A respectively. The spreads must be obtained from "Table F3 Capital Market Yields and Spreads – Non-Government Instruments" published by the RBA on its website.[1]

APRA also proposes that:

- the maximum illiquidity premium would be 150 basis points and the minimum would be zero;

- the illiquidity premium added to risk-free forward rates beyond 10 years after the reporting date would be a constant 20 basis points; and

- the same illiquidity premium would apply to Australian and overseas liabilities.

Example

At 31 December 2011, the AA spread was 203 basis points and the A spread was 320 basis points. The resulting illiquidity premium to be added to risk-free forward rates would therefore be 78 basis points for the first 10 years and 20 basis points thereafter.

Rationale for proposed formula

The formula attributes a constant proportion of credit spreads for corporate bonds to the illiquidity premium, with the remainder being regarded as attributable to credit risk. The formula uses the spreads for AA and A rated corporate bonds because these constitute the majority of corporate bonds on issue in Australia.

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[1] http://www.rba.gov.au/statistics/tables/pdf/f03hist.pdf

It is APRA's view that corporate bonds are the most suitable reference for identification of the illiquidity premium. Corporate bonds are issued by a broad range of companies and market data for spreads is readily available. Corporate bonds are normally less liquid than government fixed interest securities or interest rate swaps. Credit risk for corporate bonds can be largely, but not completely, eliminated by matching them with credit default swaps (CDS).

One method that can be used for estimating the illiquidity premium for a corporate bond is to deduct the premium for a credit default swap with the same maturity and seniority from the bond spread. This is referred to below as the CDS basis for measurement of the illiquidity premium.

APRA does not consider it appropriate to allow the CDS basis to be used directly in the calculation of the illiquidity premium for the following reasons:

- the method is too subjective as the results depend on the choice and weighting of the corporate bonds that are included in the reference portfolio;

- the CDS basis may not always be an accurate measure of the illiquidity premium. The corporate bond and CDS markets in Australia are relatively small and both markets can be illiquid. The two markets may at times be priced inconsistently;

- the CDS basis is not completely free of credit risk. The issuer of the CDS may default prior to the default of the issuer of the corporate bond; and

- the result of the CDS basis would be likely to reduce if an insurer with a large annuity portfolio attempted to de-risk by matching its liabilities with corporate bonds and credit default swaps at a time when markets were stressed.

Instead, APRA proposes that a proxy formula with a conservative fit to the CDS basis be used. The proxy formula is simple to calculate and does not require the exercise of judgement.

APRA has adopted a level of conservatism in setting the parameters in the proposed proxy formula as:

- there is limited relevant historical data;

- a proxy formula with best fit to the historical data for the CDS basis would overstate the illiquidity premium at some points in time;

- a conservative approach limits the risk that the proxy formula overstates the illiquidity premium in the future;

- there are few corporate bonds on issue with maturity greater than 5 years. It would be more difficult for an insurer to access the illiquidity premium implicit in corporate bond yields for maturities greater than 5 years.

In deciding on the degree of conservatism to apply, APRA also considered the spreads on semi-government bonds. These bonds have minimal credit risk and higher yields than Commonwealth government securities but are more liquid than corporate bonds.

The proposed cut off point of 10 years between the formula-driven illiquidity premium and the proposed long-term rate of 20 basis points was chosen to recognise that there are few corporate bonds with maturity beyond 5 years, whilst semi-government bonds are available in reasonable quantities for maturities up to 12 years.

The illiquidity premium of 20 basis points applying to forward rates beyond 10 years is a conservative estimate of the long-term average illiquidity premium that might be accessible to investors in the future.

A cap to the illiquidity premium of 150 basis points is proposed due to uncertainty about whether the proxy formula would remain appropriate in extremely stressed circumstances.

The maximum value of the proxy formula during the period from 2006 to 2011 would have been about 120 basis points.

Australian life insurers have a small amount of overseas liabilities for which an illiquidity premium could be used. For reasons of simplicity and given the immateriality of these liabilities, the same illiquidity premium is proposed to apply for the purpose of calculating Australian and overseas liabilities.

Asset risk charge

The proposed stresses for the credit spreads risk charge component of the asset risk charge include an 80 basis points stress for AA-rated bonds and a 120 basis points stress for A-rated bonds. There is an implicit allowance for an increase in the illiquidity premium within these stresses to bond spreads. The implicit allowance needs to be made explicit so that an appropriate increase can be made to the illiquidity premium used in calculating the post-stress liabilities. The increase to the illiquidity premium can be calculated by applying the proxy formula to the prescribed credit spread stresses for AA-rated and A-rated bonds.

APRA proposes that in the calculation of the credit spreads risk charge component of the asset risk charge, the illiquidity premium (used for discounting the liabilities) would increase by 30 basis points (for the first 10 years only and subject to the overall cap of 150 basis points for the illiquidity premium).

The reduction in liabilities due to the increase in the illiquidity premium would be allowed to offset the reduction in assets due to the increase in credit spreads. However capital would still be required for potential asset defaults over the following 12 months. A minimum credit spreads risk charge component would be calculated by multiplying the asset values by the credit spread default factors and summing the results for all assets affected by the credit spreads stress. APRA expects this minimum would only be relevant in the case of a statutory fund with a high proportion of illiquid liabilities and a low proportion of assets subject to credit risk.

Prudential Standard LPS 112 Capital Adequacy: Measurement of Capital

The draft LPS 112 released in December 2011 will be revised by including the following wording in paragraph 7 of Attachment D:

> "*The illiquidity premium (in basis points) added to risk-free forward rates for the first 10 years after the reporting date is:*
>
> *Illiquidity premium = 15% x AA spread + 15% x A spread*
>
> *'AA spread' and 'A spread' are the spreads over bonds issued by the Australian Government for corporate bonds with broad credit ratings (as determined by Standard and Poor's) of AA and A respectively. The spreads must be obtained from "Table F3 Capital Market Yields and Spreads – Non-Government Instruments" published by the RBA on its website.*
>
> *If the RBA ceases to publish this information, APRA will specify in writing an alternative method of calculating the illiquidity premium.*
>
> *The maximum illiquidity premium is 150 basis points and the minimum is zero.*
>
> *The illiquidity premium added to risk-free forward rates more than 10 years after the reporting date is 20 basis points.*
>
> *The same illiquidity premium applies to both Australian and overseas liabilities.*"

Prudential Standard LPS 114 Capital Adequacy: Asset Risk Charge

An additional sentence will be added to paragraph 54 of the draft LPS 114 released in December 2011:

> *"This stress also applies to liabilities whose value depends on the illiquidity premium."*

New paragraphs will be inserted after paragraph 64 in the section specifying the credit spreads stress. The new paragraphs are:

> *"64(a) Liabilities whose value depends on the illiquidity premium must be revalued using a stressed illiquidity premium. The stress adjustment to the illiquidity premium is an increase of 30 basis points to the forward rates for the first 10 years after the reporting date and zero thereafter. The stressed illiquidity premium is subject to a maximum of 150 basis points.*
>
> *64(b) The risk charge component for the credit spreads stress must not be less than an amount calculated by multiplying the value of each asset by the default factor specified in paragraph 55 and adding the results for all assets to which the credit spreads stress applies."*