



# Discussion Paper

## **Implementation of the Basel II Capital Framework** **1. Standardised approach to credit risk**

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## Introduction

Capital provides a cushion to ensure banks' safety and soundness and a benchmark by which the financial condition of banks can be measured. The original 1988 Basel Capital Accord, developed by the Basel Committee on Banking Supervision (Basel Committee), was born out of a desire to align the capital requirements of banks that competed across national boundaries.

The world of banking has continued to develop since the Accord was released and its 'one size fits all' approach has been unable to deal with the increasing innovation and sophistication of the marketplace. The new Basel II capital adequacy regime, known as the Basel II Framework, seeks to harness into the regulatory process best practices in risk management. It includes a number of options for calculating an authorised deposit-taking institution's (ADI) minimum regulatory capital charge for each type of risk. These options range from relatively simple approaches to more sophisticated approaches that rely more heavily on an ADI's own quantitative risk estimates. By providing a spectrum of approaches, the Basel II Framework seeks to provide regulatory capital requirements that are both more comprehensive and more sensitive to risks. In the latter respect, the Basel II Framework rewards stronger and more accurate risk management, while aligning the capital requirements of banks to their risk appetite. The intention is not to reduce the overall level of regulatory capital but to leave the requirement for an average risk portfolio broadly unchanged.

APRA believes that adoption of the Framework, even if only in its standardised guises, will make the Australian banking system safer and more efficient. Safer, because ADIs, their supervisors and market participants will have available capital measures that better reflect ADIs' risk profiles and therefore their true financial condition. And more efficient because ADIs' business decisions will be more closely based on the underlying economics of transactions rather than the regulatory distortions created by the existing rules. As previously announced, the new Basel II Framework will be implemented in Australia from 1 January 2008.

## Prudential standards

The vast majority of Australian banks, building societies and credit unions will use the Basel II standardised approaches in determining their regulatory capital charge.

This discussion paper introduces a draft of the first of APRA's Basel II prudential standards, *APS 112 Capital Adequacy: Standardised Approach to Credit Risk* (APS 112). The standard is somewhat similar to the current prudential standard for credit risk, the main changes being:

- the removal of the OECD/non-OECD grouping for sovereign and bank exposures with risk-weights based instead on credit assessments by external ratings agencies;
- lower risk-weights for exposures to corporate counterparties where those counterparties have an external credit assessment of 'A-' or better;
- an expanded range of collateral and credit risk mitigation techniques;
- the introduction of a capital charge for short-term (less than one year) undrawn commitments; and
- revised risk-weights for residential mortgage loans (refer to the section titled 'Discretions exercised by APRA').

The draft APS 112 is available from the APRA web site [www.apra.gov.au](http://www.apra.gov.au). Written submissions on the draft standard and the proposals contained in this discussion paper should be forwarded by 30 September 2005 to:

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Over coming months, APRA will release a second discussion paper introducing the prudential standard for the standardised approach to operational risk, *APS 114 Capital Adequacy: Standardised Approach to Operational Risk* (APS 114). For many ADIs, the

proposed new prudential standards APS 112 and APS 114 are the only Basel II capital adequacy requirements that will apply to them. ADIs that carry a large interest rate risk in the banking book may also be subject to a specific capital charge under the relevant prudential standard. Aspects of the risk management, pillar 2 and pillar 3 prudential standards will apply to all ADIs and those ADIs involved in securitisation activities will face changes to the rules for those activities in prudential standard *APS 120 Securitisation*. The prudential standards will not be finalised until ADIs and other interested parties have been able to comment on the proposals.

## Outstanding issues

The following issues for APS 112 remain outstanding:

- the draft prudential standard does not include guidance notes on netting and credit derivatives in the banking book. It is expected that these guidance notes will be completed later this calendar year;
- as yet, APRA has not detailed the capital charge for failed foreign exchange and securities transactions, as required by the Framework. In APRA's view, it would be beneficial to see what other jurisdictions are doing in this area to ensure a relatively consistent approach;
- APRA is yet to define the terms 'recognised clearing organisation' and 'recognised exchange' that are used in the comprehensive approach to credit risk mitigation (included in the standardised approach to credit risk);
- APRA is giving further policy consideration to the capital charge for margin lending products under the comprehensive approach to credit risk mitigation. Given the market's current underwriting policies, the capital charge under the Framework for these products will likely reduce to zero (from eight per cent currently). In APRA's view, this outcome is not acceptable and requires further review; and
- APRA is yet to detail its approach to the recognition of external credit assessment institutions (ECAI). It is expected that APRA's recognition criteria for ECAI will be released in 2006 and will be separate to the

prudential standards. The mapping of ECAI ratings to risk-weights, as detailed in the draft APS 112, will be reviewed once the ECAI recognition criteria are finalised.

## National discretions

The Basel Committee has identified a number of aspects of the new Framework which it believes supervisors should be able to tailor to reflect local prudential approaches; it refers to these as 'national discretions'. For ease of reference, Attachment 1 includes a list of the national discretions in the standardised approach to credit risk and APRA's determination for each discretion. The draft APS 112 has been prepared on the basis of those discretions.

## Discretions exercised by APRA

Beyond the list of national discretions referred to above, the Basel Committee has allowed local supervisors to apply more stringent requirements or to tailor the prudential criteria where considered necessary or appropriate. APRA has determined two areas in the standardised approach to credit risk where it considers such discretions are appropriate.

## Risk-weight for other retail exposures

APRA does not propose to adopt the 75 per cent 'other retail' risk-weight proposed in the Basel II standardised approach to credit risk; these exposures would continue to be risk-weighted at 100 per cent. The proposed risk-weights under the standardised and internal ratings-based (IRB) approaches are meant to pertain to large, diversified portfolios. Australian ADIs using the standardised approach, however, will generally not have a high degree of geographic or product diversification. Generally they will also have a higher average risk profile than the large, internationally operating banks considered by the Basel Committee when determining the risk-weight for these exposures. In addition, for Australian ADIs, the results of quantitative impact studies suggest that a 75 per cent risk-weight would offer an inadequate buffer for the other risks captured under the more sophisticated approaches but not under the standardised approach. At 100 per cent, the

buffer would be similar to that in the proposed 35 per cent risk-weight for eligible residential mortgage loans.

### Risk-weights for residential mortgage loans

APRA proposes to introduce a risk-weighting scheme for residential mortgage loans which is based upon the loan-to-valuation ratio (LVR) of a loan, the loan type (whether the loan is a standard or non-standard housing loan) and whether the loan has acceptable mortgage insurance covering a minimum of 40 per cent of the original loan amount. Depending upon these characteristics, a loan may be risk-weighted at 35, 50, 75 or 100 per cent, as detailed in Table 1.

This compares to the current arrangements where, in order to qualify for a 50 per cent (concessional) risk-weight, a residential mortgage loan must have an LVR of less than 80 per cent (or 60 per cent for a non-standard loan) or be 100 per cent mortgage insured through an acceptable lenders mortgage insurer.

The proposed model is consistent with the Basel Committee’s intent to make the Basel II Framework more risk-sensitive and to apply the 35 per cent concessional risk-weight in accordance with strict prudential criteria. Compared to the current system of two risk-weights, it has the following advantages:

- regulatory capital is more closely aligned with the relative riskiness of particular housing loans;

- it provides for improved risk management incentives for ADIs;
- it removes potential regulatory distortions that would have arisen had APRA implemented an alternative system with only two risk-weights (35 and 100 per cent); and
- overall system capital is the same as that of the alternative risk-weight system.

### Aligning capital requirements with risk

The new risk-weighting scheme places much greater emphasis on the relative riskiness of housing loans. For example, under the new scheme, a standard loan with an LVR of 90 to 100 per cent that is not mortgage insured will require an ADI to hold 50 per cent more capital than if the loan is in the 80 to 90 per cent LVR range. This is consistent with historical data which shows a strong significant relationship between LVR and the probability of default. By way of comparison, under the current arrangements, capital requirements for such loans do not change as the LVR increases above 80 per cent.

The proposed model also overcomes several limitations associated with the current treatment of non-standard loans. At present, there is no discrimination in capital requirements for non-standard loans where the LVR is above 60 per cent. That is, a non-standard loan with, for example, an

**Table 1 Risk-weighting scheme for residential mortgage loans under the standardised approach to credit risk**

LVR (%)	Standard loans		Non-standard loans <sup>*</sup>	
	Risk-weight (no LMI) (%)	Risk-weight (with LMI)** (%)	Risk-weight (no LMI) (%)	Risk-weight (with LMI)** (%)
0 – 60	35	35	50	35
60.01 – 80	35	35	75	50
80.01 – 90	50	35	100	75
90.01 – 100	75	50	100	75
> 100.01	100	75	100	100

<sup>\*</sup>Defined as loans not meeting specified criteria; for the most part, this refers to ‘low-doc’ loans.

<sup>\*\*</sup>A minimum of 40 per cent of the original loan amount must be insured.

LVR of 95 per cent has the same capital charge as a non-standard loan with a 65 per cent LVR. Clearly, the risk of the two loans is significantly different and capital requirements should reflect these differences. The proposed model addresses this deficiency. This is an important change, given the continual growth and development of non-standard loans and the fact that the performance of these loans can, at present, only be assessed in the favourable economic conditions that have prevailed in Australia in recent years.

### **Improved risk management incentives**

An important feature of the proposal is that concessions associated with mortgage insurance cover require, at a minimum, the first 40 per cent of a loan to be insured by an acceptable lenders mortgage insurer. This 'top-cover' requirement is consistent with international practice and is based on the evidence that 100 per cent mortgage insurance creates poor risk management incentives within ADIs. Although an ADI is in the best position to evaluate and monitor a loan, its incentive to do so is considerably reduced when it perceives there is no risk of loss. This creates moral hazard problems and is the basis for a model of 'top-cover' as adopted in the United States and United Kingdom.

### **Removing regulatory distortions**

The greater risk sensitivity of the capital requirements will reduce potential regulatory distortions. To illustrate, had APRA simply reduced the concessional risk-weight from 50 per cent to the 35 per cent risk-weight proposed by the Basel Committee for eligible residential mortgage loans, a system with two risk-weights (35 and 100 per cent) would have resulted. Such a large difference in capital requirements around the 80 per cent LVR cut-off would have created incentives to circumvent the capital requirements, since the increase in regulatory capital above the 80 per cent LVR cut-off would have been disproportionately large, relative to the increase in economic risk. The proposed model significantly reduces such distortions by ensuring that increases in capital requirements around a particular LVR cut-off are much smaller (35 to 50 per cent; 50 to 75 per cent; and 75 to 100 per cent) than the jump from 35 to 100 per cent.

### **Overall capital requirements**

APRA has assessed the capital impact of the new proposal and has determined that, relative to a system with just two risk-weights for housing loans of 35 and 100 per cent, the proposed model results in roughly the same level of overall capital requirements. The proposed model has the advantage of being more risk-sensitive and will therefore require relatively more capital for those institutions bearing greater risk. This is in line with the fundamental objectives of the Basel II reforms.

# Attachment 1: List of national discretions

Australian discretions for the standardised approach to credit risk		
Basel II June 2004 Framework paragraph reference	Summary of the Basel II Framework discretion	APRA's proposed approach
<b>Claims on sovereigns</b>		
54	Apply a lower risk-weight to Australian dollar claims on the Commonwealth Government and the Reserve Bank of Australia where funded in Australian dollars	Yes
54	Recognise the lower risk-weights of other supervisory authorities for domestic currency sovereign exposures funded in that currency	No
55	Allow the recognition of export credit agencies' country risk scores for risk-weighting claims on sovereigns	No
201	Apply a lower risk-weight to claims guaranteed by the sovereign (or central bank) when denominated and funded in domestic currency	Yes – for the portion of Australian dollar exposures guaranteed by the Commonwealth Government and the Reserve Bank of Australia
<b>Claims on non-central government public sector entities (PSEs)</b>		
57	Claims on domestic PSEs to be risk-weighted using option one or option two for claims on ADIs	<ul style="list-style-type: none"> <li>• Claims on Australian and international local governments and non-commercial PSEs: option one (i.e. a risk-weight that is one category less favourable than that assigned to claims on the sovereign of that country)</li> <li>• Australian and international commercial PSEs: treated the same as claims against corporate counterparties</li> </ul>
58	Claims on domestic PSEs may be treated as claims on the sovereign in the jurisdiction the PSE is established	Claims on Australian and international regional governments: to be treated the same as claims on the sovereign
<b>Claims on ADIs</b>		
60-64	Claims on ADIs may be risk-weighted one category less favourable than claims on the sovereign (option one) or based on the ADI's own external credit assessment (option two)	Option two
64	Allow a preferential risk-weight for claims on ADIs with an original maturity of three months or less that are denominated and funded in the domestic currency	No – option two allows a preferential risk-weight that is one category more favourable for claims with an original maturity of three months or less, subject to a 20 per cent floor

Basel II June 2004 Framework paragraph reference	Summary of the Basel II Framework discretion	APRA's proposed approach
<b>Claims on corporates</b>		
67	Increase the standard risk-weight for unrated claims when a higher risk-weight is warranted by the default experience of the jurisdiction	No
68	Allow all corporate claims to be risk-weighted at 100 per cent without regard to external ratings	Yes – requires APRA's approval in writing
<b>Claims in the regulatory retail portfolio</b>		
69	Expand the definition of claims included in the regulatory retail portfolio	Not applicable
70	Set a numerical limit on the regulatory retail portfolio so that no aggregate exposure to a counterparty exceeds 0.2 per cent of the overall regulatory retail portfolio	Not applicable
71	Increase risk-weights for regulatory retail exposures	Refer to the section titled 'Discretions exercised by APRA'
<b>Claims secured by residential property</b>		
72-73	Increase the preferential risk-weight (i.e. 35 per cent) for claims secured by residential properties	Refer to the section titled 'Discretions exercised by APRA'
<b>Claims secured by commercial real estate</b>		
Footnote 25 to paragraph 74	Allow certain commercial property loans to be risk-weighted at 50 per cent (subject to conditions)	No
<b>Past due loans</b>		
75 and 78	Allow the risk-weight for the unsecured portion of a past due loan, net of specific provisions, to be reduced to 50 per cent when specific provisions are more than 50 per cent	No
Footnote 26 to paragraph 75	Treat non-past due loans extended to counterparties subject to a 150 per cent risk-weight the same way as past due loans	No
Footnote 27 to paragraph 76	Allow a transitional period of three years for the recognition of a wider range of collateral for higher risk (past due) loans	No
77	Allow a 100 per cent risk-weight for past due loans that are secured by other forms of collateral where provisions are greater than 15 per cent of the outstanding amount of the loan	No

Basel II June 2004 Framework paragraph reference	Summary of the Basel II Framework discretion	APRA's proposed approach
<b>Other categories</b>		
80	Apply a risk-weight of 150 per cent or higher to other assets (e.g. venture capital and private equity investments)	Yes – a risk-weight of 300 per cent will be applied to listed equities and a risk-weight of 400 per cent for unlisted equities
Footnote 28 to paragraph 81	Allow gold bullion held in ADIs' own vaults or on an allocated basis to the extent it is backed by bullion liabilities to be risk-weighted at zero per cent	Yes
Footnote 28 to paragraph 81	Allow cash items in the process of collection to be risk-weighted at 20 per cent	Yes
<b>Use of external ratings</b>		
Footnote 31 to paragraph 102	Allow the use of a borrower's domestic currency rating for an exposure in foreign currency if the exposure is to a multilateral development bank	No
108	Allow an ADI to use unsolicited ratings in the same way as solicited ratings	No
<b>Credit risk mitigation techniques</b>		
154	ADIs may calculate haircuts using their own internal estimates of market price volatility and foreign exchange volatility	Yes – requires APRA's approval in writing
170	Allow a zero haircut for certain types of repurchase and reverse repurchase agreements where the counterparty is a core market participant	Yes
171	Definition of core market participants	Australian core market participants are: <ul style="list-style-type: none"> <li>• Commonwealth Government and Reserve Bank of Australia</li> <li>• ADIs and overseas banks</li> <li>• Other financial companies</li> <li>• Recognised clearing organisations</li> </ul>
172	Recognise other supervisors' preferential treatment with regard to haircuts for repurchase and reverse repurchase agreements	No



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