

Australian Prudential Regulation Authority

Submission to the Basel Committee on
Banking Supervision

The New Basel Capital Accord

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1. This paper sets out the response of the Australian Prudential Regulation Authority (APRA) to the reform proposals detailed in the Basel Committee's second consultative package, *The New Basel Capital Accord*, issued in January 2001.
2. As noted in our submission on the Committee's first consultative paper, APRA supports the introduction of more risk-responsive standardised and internal measurement approaches to capital adequacy regulation. This includes measures such as the use of credit ratings in the allocation of credit risk capital and a separate, explicit charge for operational risk. APRA also supports the establishment of agreed international guidelines dealing with other aspects of capital adequacy regulation through the increased attention given to supervisory review (Pillar 2) and market disclosure (Pillar 3) within the new framework.
3. APRA endorses the new Accord's multi-tiered structure involving a menu of calculation methods for each key risk class. We see this as an appropriate response to the need for an evolutionary framework that is suitable for application in a changing environment and to institutions of varying levels of complexity and sophistication.
4. That said, our primary concerns with the proposals revolve around the calibration of the various calculation approaches under the multi-tiered structure. These concerns are detailed in the body of our submission. Although at this stage it is too early to assess fully the affects of the various operational risk proposals, as currently specified, overall minimum capital requirements for Australian institutions will rise substantially under the standardised approach for credit risk and are likely to fall substantially under the more sophisticated advanced internal ratings based (IRB) approach.
5. In our view, modifications to address this outcome are required. Other changes might also be necessary but should at least involve a lower risk weight for housing and possibly other retail exposures under the standardised approach, and revisions to the treatment of loss-given-default (LGD) under the both the foundation and advanced IRB approaches. Without such modifications, we believe that the Committee's prudential and competitiveness objectives are at risk. While APRA's preference is to continue operating as much as possible within an internationally agreed framework we would find it difficult to implement both the standardised and IRB approaches as they currently stand.
6. We have also commented and made some recommendations on a number of other aspects of the new Accord, which we hope will prove useful to the Committee in finalising its proposals.
7. Parts of the new Accord remain underdeveloped. We understand that shortly the Committee will be issuing a number of papers dealing with these areas which we will be

reviewing. We encourage the Committee to continue tabling for discussion details of its proposals as it works towards finalising the new framework.

8. As there is a considerable degree of complexity and subjectivity in many aspects of the new Accord, we also strongly endorse the Committee's intention to set up a framework to facilitate consistent application of the framework globally through the exchange of information and experience sharing. We are, however, very concerned with the suggestion that such mechanisms might be confined to member countries only. Given the international application of the Accord, it is imperative that all supervisors are able to participate in the co-ordination process.

Scope of Application

9. APRA fully supports the broader application of the Accord proposed in the latest consultative paper. In particular, the application of the Accord to holding companies situated above a banking entity, and to each level of banking group within a corporate structure, are welcome clarifications that will serve to ensure capital adequacy is not only measured accurately at the consolidated group level, but also ensure that capital is appropriately distributed among entities within the group.
10. As corporate groups become more complex, it is increasingly important that supervisors ensure that capital adequacy is adequately measured at the stand-alone, or 'solo', bank level. This in no way diminishes the importance of consolidated supervision, which remains the cornerstone of the supervisory assessment of capital adequacy. However, in considering the implications of a liquidation, supervisors need to be equally mindful of the various legal entities within a corporate group, and must ensure that the banking entity, itself, is adequately capitalised. It is not sufficient for the supervisor to ensure that a consolidated group has sufficient capital: that capital must also be appropriately allocated to the various individual members of the group (and to the banking entity in particular). As a result, APRA welcomes and strongly encourages the Committee's increased focus on capital adequacy at the 'solo' level.
11. Although the latest consultative paper does not deal with the definition of capital directly, it does have a potential impact on the level of recognised regulatory capital via the revised rules on capital deductions. APRA believes that these rules, which require 50% of any investment in 'deconsolidated entities' to be deducted from Tier 1 capital and 50% from Tier 2, are a significant improvement over the existing practice of deducting these amounts from total capital. It limits (but does not wholly restrict) the ability of banks to 'double gear' any such investments.
12. However, APRA is also of the view that some aspects of the current proposals require tightening and/or clarification. While deconsolidated entities are subject to the 50/50 deduction rule, it is not clear which other deducted investments are also intended to be subject to the new approach. Given that the rationale for deduction is the same regardless of whether an investment is in a deconsolidated (ie majority owned) entity, a minority investment (in another bank or, indeed, any other entity) or a first-loss facility in a securitisation scheme, we believe it would be appropriate for the 50/50 rule to be applied to all capital deductions (ie not just those for deconsolidated entities).
13. The current consultative paper is also silent on the treatment of goodwill arising from investments in deconsolidated entities. An important feature of the existing capital framework is the deduction of goodwill and other intangibles from Tier 1 capital; APRA sees no sound rationale to change this approach and therefore strongly advocates its continuance. Hence, the new Accord should also clearly specify that the treatment of deconsolidated entities requires the deduction of any goodwill associated prior to the 50/50 deduction of the remaining amount of the investment.¹

¹ At a 'solo' level, the deduction should refer to any excess over net tangible assets acquired.

Standardised Approach to Credit Risk

14. The capital framework for Australian institutions is based on the core principles of the 1988 Basel Capital Accord. It has proven to be a sound basis for the assessment of capital adequacy for the diverse range of institutions supervised by APRA (refer box below). We would expect the revised framework to be able to be applied to a range of banking organisations in largely the same way as the current Accord. Whilst we acknowledge that capital incentives are built into the framework to encourage institutions to progress through the spectrum of approaches, we do not support excessively heavy capital penalties under the standardised approach so as to over-penalise those institutions that are unable to advance onto the more sophisticated approaches.

The Australian Financial Sector and Markets

Australia has a sophisticated financial system, with relatively deep and well developed markets across the range of financial products. In terms of nominal GDP, Australia is the fourteenth largest economy in the world yet its financial markets tend to be ranked above this in importance. For example, the Australian dollar is among the top 10 currencies traded and turnover within the local market has a similar ranking. In terms of institutionally managed funds, Australia is also ranked in the top 10 countries globally. Our equity and fixed interest markets are in the top 15 in the world in terms of turnover, as are our corresponding futures markets. Australia's securitisation market, particularly the mortgage backed securities market, is one of the largest outside the United States, and even in the area of new products, such as credit derivatives, Australia's market is rapidly growing in terms of volume and product lines. Australian banking institutions are significant participants in these markets, as are many of the world's major financial institutions.

Total financial sector assets in Australia total USD 980 billion, of which Australian banking institutions account for 44%. As detailed in APRA's submission on the first set of reform proposals, these banking institutions demonstrate considerable diversity in terms of institution size and scope of activities (refer Table 1). The four major Australian banks operate internationally offering a full range of corporate and consumer financial services, including in securities, funds management and insurance markets. A number of other (mostly foreign) banks are engaged primarily in wholesale activities, while the regional banks tend to focus on the middle and retail end of the domestic market (including small to medium business borrowers). The many non-bank deposit takers are primarily involved in housing and personal finance with a small exposure to small business lending. These institutions often operate on a community or industry basis.

Table 1: Authorised Deposit-Taking Institutions in Australia

Institution	Number of Institutions	Assets (USD billion) ¹	% Share
Major banks	4	436	75
Regional banks	8	55	9
Other banks	38	76	13
Building societies	18	6	1
Credit unions	209	11	2
Total	277	584	100

¹ Data for consolidated group, ie includes banks' Australian operations and overseas activities.

Calibration of the Standardised Approach

15. For institutions on the standardised approach, the Committee is aiming to produce, on average, neither a net increase nor net decrease in minimum regulatory capital, after accounting for operational risk – an outcome, as noted in our submission on the first consultative paper, that APRA agrees with in the context of the Australian banking system. As the proposals currently stand, however, overall minimum capital requirements will increase substantially for virtually all institutions on the proposed standardised approach in Australia, both in absolute terms and relative to any institutions that might migrate to the more sophisticated internal ratings based (IRB) approaches.
16. APRA, in collaboration with the major Australian banks and several smaller institutions, is participating in the Committee’s global quantitative impact study (QIS) on the affects of the new Accord. The preliminary results of the QIS indicate that smaller institutions – those most likely to adopt and remain on the standardised approach – will generally experience minor, if any, savings (from the current position) in credit risk capital charges. Typically, these institutions have no or very limited exposures to externally rated customers (other than to Australian banks and governments for which low risk weights already apply). Also, these institutions will typically receive negligible benefit from the expanded range of credit risk mitigation techniques that are recognised under the new approach. With the proposed introduction of a credit risk charge on short-term commitments, most of these institutions will have little or no credit risk offsets with which to accommodate the new operational risk charge. Consequently, under the standardised approach, these institutions face a substantial increase in their overall minimum capital requirements in the order of 20% to over 30%.²
17. Even for the larger Australian banks (which have a wider business mix and larger externally rated portfolios) the survey results show a similar outcome, with capital savings from highly-rated customers being at least partly offset by the new charge for short-term commitments and, on average, increased capital for sovereign and bank exposures. The new credit risk mitigation proposals also have only a small impact. For these larger institutions, the net reported benefit from the proposed changes to the credit risk charge (averaging around 4%) is not sufficient to offset the new operational risk charge. On the other hand, should these institutions move on to the IRB approach as currently calibrated, the overall capital charge looks likely to remain largely unchanged or fall slightly under the foundation approach and to drop substantially under the advanced approach.³
18. Based on these results, the standardised approach requires modification. Unchanged, the standardised approach is inconsistent with both the Committee’s and APRA’s reform objectives:

² Based on the basic indicator approach for calculating the new operational risk charge.

³ Further detail is provided on the impact of the IRB proposals in the next chapter.

- (a) minimum required capital will not remain unchanged, on average, for institutions on the standardised approach in Australia but will increase; while
 - (b) the large reported disparities between the standardised and IRB approaches need to be addressed from a competitiveness perspective.
19. The difficulty is that, as proposed, the standardised approach assumes that the buffer in the existing capital adequacy rules to cover non-credit risks (such as those covered by the new operational risk charge) is concentrated in the rated corporate portfolio rather than being spread across all of a bank's business lines. Thus, to the extent that banks lend to the non-rated corporate and/or retail sectors, there is no mechanism under the standardised approach through which existing regulatory capital can be released to accommodate the new operational risk charge. In this regard, we note that the Committee has indicated that it is prepared to make revisions to its proposals in light of the results of the QIS and other on-going work that is being undertaken, notably in connection with the retail IRB approach. We believe that such changes are indeed warranted. APRA would find it difficult, nor do we intend, to implement the standardised approach without modifications designed to address the above issues.

Exposures Secured by Residential Property

20. One area where we consider that modification is necessary is the standardised risk weight applied to exposures secured by residential property.
21. As detailed in our submission on the first consultative paper, the existing 50% risk weight for housing loans is high when compared to actual credit loss experience in many countries, including Australia (refer box at end of chapter). However, as we feared at that time, the proposed overall capital charge on this relatively low-risk lending activity will actually increase under the standardised approach with the introduction of the new operational risk charge – an outcome that we consider cannot be justified.
22. Moreover, the QIS data are indicating that IRB housing loan risk weights will be around 5-10%. These IRB housing loan risk weights, which are based on the Committee's own proposed risk weighting function, fall within the ball park of banks' internal economic equity and general provisioning calculations as well as some of our own figuring based on historical loss rates. Not only do the IRB risk weights support a lower standardised risk weight based on relatively low housing (PD and LGD) loss experience, but maintenance of the 50% risk weight could introduce a major source of competitive inequality among institutions operating under the standardised and IRB approaches. The prospective risk weight differential equates to a potential earnings/pricing advantage for IRB institutions of as much as 30 basis points for what is a major lending activity of most Australian deposit-taking institutions (refer Table 2).

Table 2: Housing Lending¹

Institution	Number of Institutions	Assets (USD billion) ¹	Housing Loans (% Total Assets)	
			Average	Range
Major banks	4	266	38	32 – 43
Regional banks	8	54	43	0 – 66
Building societies	18	6	72	39 – 86
Credit unions	209	11	53	0 – 90

1 Non-consolidated assets on Australian books as at March 2001, ie excluding assets held by subsidiaries and offshore branches.

23. APRA therefore strongly recommends that the Committee reconsider its position on the standardised housing risk weight. A lower standardised risk weight for housing loans would be more consistent with the Committee's objectives of better aligning regulatory capital requirements with actual risk relativities and of promoting enhanced competitive equity. Given the importance of housing lending in regulated institutions' portfolios, a lower standardised risk weight would also go a long way towards addressing (though not completely) the broader calibration issues outlined in the previous section.
24. APRA suggests lowering the proposed standardised housing risk weight to 20%. While the IRB survey data might suggest a lower figure, we view a 20% weighting as being consistent with:
 - (a) the continuing broad-brush nature and international application of the standardised approach;
 - (b) other standardised risk weights applied to low-risk (ie AAA/AA-rated bank and corporate) exposures;
 - (c) the maintenance of a cushion based on the lower precision/transparency of the standardised approach and on-going need for coverage of other risks not explicitly dealt with under Pillar 1;
 - (d) reducing regulatory arbitrage incentives for institutions to securitise residential loans (mortgage backed securities typically achieve AAA/AA ratings); and
 - (e) avoiding further complexity, eg a lower risk weight could spur a compensatory search for greater precision in other areas; in particular, we might feel less comfortable about leaving the risk weight applied to small business loans at 100%.
25. Given variation in international experience, the Committee might prefer to permit national discretion for a lower than 50% housing risk weight where justified by historical loss rates and market characteristics (rather than mandate a blanket reduction in the risk weight). This could involve conditions along the lines of the criteria established by the Committee for the preferential treatment of claims secured by commercial real estate in some countries.

26. In this regard, our intention is to give a higher risk weight to loans with loan-to-valuation ratios (LVRs) > 80% unless mortgage insured by a highly rated (ie at least A-rated) insurer.⁴ As other indicators do not have as strong or as consistent a statistical relationship with PD or LGD, they do not seem suitable to be used in a similar manner. Pillar 2 assessments, however, can be used to identify and deal with instances where an institution's lending practices (in terms of acceptable debt servicing ratios etc) appear to lie outside industry norms or otherwise seem inconsistent with the lower risk weight (eg result in relatively high actual loss rates).
27. We do not consider that, at 20%, a lower housing risk weight would necessitate introducing threshold loss rates as has been proposed in the special case of claims secured by commercial real estate in some countries. However, such thresholds might be appropriate if a still lower risk weight were to be contemplated; in the latter circumstances, a threshold loss rate of around 15-20 basis points might be considered.

Non-Housing Retail Exposures

28. We note that the Committee will be considering further changes to the standardised risk weights for non-housing retail exposures in light of its on-going development of the retail IRB approach. Lower non-housing retail risk weights would contribute to solving the calibration issues outlined above but without further research we are less convinced of the potential for changes in this area. In particular, we would be predisposed to restricting any lower retail risk weight(s) to consumer (rather than business) lending products. We hope to give more thought to this issue as part of our analysis of the QIS data.

Higher Risk Exposures

29. Under the standardised approach, risk weights for non-impaired exposures are based on two forms of acceptable security: eligible financial instruments in the credit risk mitigation framework and mortgages over residential real estate.
30. As currently proposed, however, only eligible financial instruments will be recognised as eligible collateral in the special case of past due loans. In APRA's view, it would be more consistent with the general framework of the standardised approach if mortgages over residential real estate (subject, of course, to a prudent 'haircut') were also recognised as eligible collateral for past due assets.

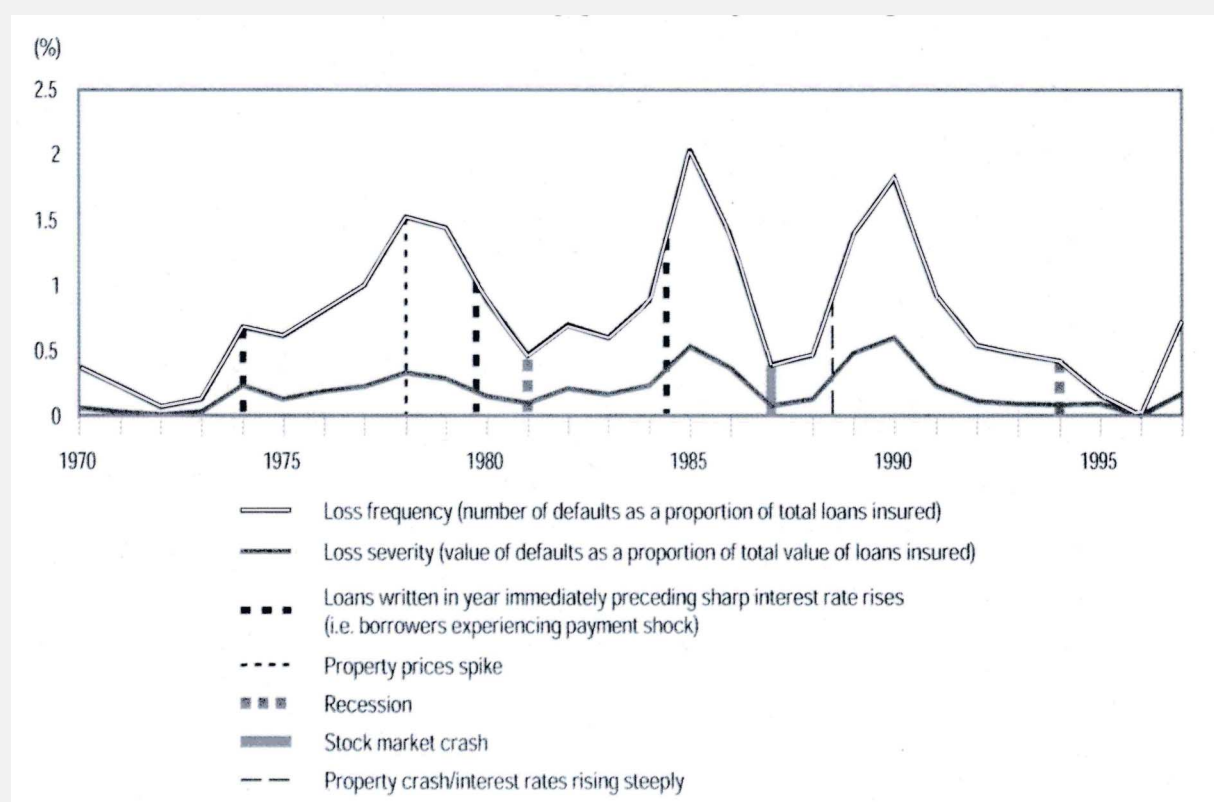
⁴ Excluded loans would be risk weighted at 100%. Mortgage-insured loans with LVRs > 80% would be risk weighted according to the insurer's external rating.

Australian Housing Loan Loss History

Average annual loss rates for Australian housing lenders typically fall within the range of 1-3 basis points, with peak historical loss rates of around 2-4 times each institution's long-term average loss rate. These loss rates are consistent across the spectrum of Australian lending institutions. One of the factors influencing this low loss history is that exposures with high loan-to-value ratios (ie with LVRs > 80%) are generally mortgaged insured. This effectively transfers the credit risk of these exposures to (typically AAA/AA-rated) mortgage insurers. Lenders mortgage insurance is generally not available in Australia for loans with LVRs beyond 95%; few Australian depository institutions fund loans above this threshold.¹

Even though mortgage insured loans are generally at the higher-risk end (the tail) of the housing loan market, loss experience of lenders mortgage insurers is also low. Since mortgage insurance was first introduced in Australia in 1965, average loss rates (by underwriting year) have averaged around 17 basis points of the total value of insured residential mortgage loans, with a peak annual loss rate of around 70 basis points (refer Graph 1).²

Graph 1: Claims experience of mortgage insurers (by underwriting year)



- 1 Capital adequacy rules for Australian institutions also restrict the existing 50% housing risk weight to exposures with LVRs of less than 80% unless mortgage insured.
- 2 Standard & Poor's, *Structured Finance: Australian & New Zealand*, April 1999, pp 24-25

Internal Ratings Based Approach

31. APRA supports the use of banks' internal ratings as a tool in assessing bank capital adequacy. We see little alternative, short of full recognition of banks' internal portfolio credit models, for maximising the risk sensitivity of the capital adequacy rules. While ideally supervisors would like to make greater use of the output from portfolio models in assessing capital adequacy, APRA shares the Committee's view that these models are not sufficiently well developed or validated at this point to be used directly in such a crucial component of the supervisory framework. In our view, the IRB approach, which makes use of some of the more well-developed inputs into full portfolio models, offers a sensible step in the evolution towards more risk-sensitive capital adequacy measures.

Calibration of IRB Risk Weights

32. That said, we have substantial concerns relating to the calibration of the IRB risk weights. Based on initial QIS data from Australian banks, it seems that without greater recognition of the value of collateral within the foundation approach, and the introduction of a non-proportional response to LGD in the IRB risk weighting function, the Committee's prudential and competitiveness objectives could be at risk (particularly as institutions move on to the advanced IRB approach).
33. The IRB proposals seek to balance objectives relating to the maintenance of prudent levels of capital and competitive equity while encouraging, where appropriate, the use of more sophisticated risk management techniques. Consistent with these objectives:
- (a) *for foundation IRB institutions*, the Committee is aiming for a small (2-3%) average decline in minimum capital requirements, after taking into account the new operational risk charge, compared to current capital requirements and the proposed standardised approach; and
 - (b) *for institutions on the advanced IRB approach* a further fall of similar average magnitude is being targeted. During the first two years of implementation a floor equivalent to 90% of a simplified version of the foundation approach has also been proposed. Our understanding is that the Committee envisages this floor as likely to be binding for only a small proportion of the institutions that migrate to the advanced approach.
34. However, we consider it likely that, under the current calibration of the risk weighting function, far larger average falls in regulatory capital requirements than those outlined above will occur as institutions move to implement the advanced IRB approach. As existing capital requirements are considered on average to be about right for well managed, well diversified institutions, larger average falls would make doubtful the adequacy of capital coverage under the advanced approach, as well as severely test tolerances from a level-playing-field perspective.
35. Preliminary QIS data from our largest banks indicate that:
- (a) *under the foundation approach*, at least for institutions like those sampled, reductions in regulatory credit capital seem broadly consistent with the size of the mooted new operational risk charge (and a small overall average decrease in regulatory capital).

This result arises because of the major Australian banks' large housing loan portfolios.⁵ By far the bulk of the estimated reduction in credit capital at sampled banks is due to the much lower IRB risk weighting of loans secured against residential property, providing stark support for our previous comments on the need for a lower standardised housing risk weight. Very broadly speaking, other parts of the credit portfolios appear to provide largely neutral contributions to the lower estimated credit capital charges. For example, depending on the particular respondent bank, the reported overall contribution from the corporate portfolio tends to be a relatively small net positive or negative amount. Savings from better-rated, typically larger, corporate customers are more or less offset by higher IRB capital charges for lower-rated, typically small and medium business borrowers;

- (b) *under the advanced IRB approach*, however, very much larger declines in regulatory capital are estimated (well below the 90% floor mentioned above) as more accurate LGD (and, to a lesser extent, maturity) estimates come into play. The initial QIS results are pointing towards possible overall declines in regulatory capital in the order of 30% after taking into account the new operational risk charge.
36. The above estimates of the impact of the proposals are, at this stage, preliminary. The short consultation period has meant that institutions have been hard pressed to complete survey questionnaires while more analysis needs to be carried out on the results to hand. Among other things, we need to test for consistency and the impact of assumptions used by respondent banks where required data were either not, or not easily, available without major changes to existing data and other systems. Also, some parts of the new Accord have still to be refined or developed and any resulting differences incorporated into the study. That said, we believe that the broad picture painted by the current estimates will remain largely unchanged.
37. For Australian banks generally (and we suspect for a good many institutions in other countries) the calibration and/or construction of the risk weighting function appears to be too heavily geared towards a large corporate/institutional book. The latter would generally exhibit lower default rates and security levels (and less granularity) than would be common in a book more heavily weighted towards the middle market (which would typically seek to mitigate higher default rates by taking higher levels of physical security).
38. Stated another way, under the foundation approach, the middle market/small business book appears to be unduly penalised relative to the large corporate/institutional book. One aspect of this is that there appears to be insufficient recognition of the value of physical security. While the 50% LGD assumption for unsecured exposures seems reasonable, an average LGD for the whole corporate book that lies between 50% (wholly unsecured exposures) and 40% (wholly secured by eligible commercial and residential real estate) does not. As the average LGD experience of the major Australian banks lies well below this level (using the Committee's 90-day definition of default), it appears that migration by these banks to the advanced approach could lead to

⁵ Refer Table 2 in previous chapter.

unacceptably large falls in required capital. This occurs as the wider recognition of collateral in the advanced approach cuts back considerably on some very high foundation approach risk weights attached to secured loans extended to lower-rated borrowers.

39. In our view, the QIS results are pointing to a need to recalibrate/reconstruct the risk weighting function. The Committee notes that in developing the IRB risk weighting function it examined, among other things, banks' internal capital allocations against *large corporate loans*. We are unaware of the specific details of the surveyed banks' economic equity calculations or of the Committee's own modelling. However, we suspect that, to have more general applicability, greater assumed average granularity and the introduction of a non-proportional response to LGD (perhaps by including an allowance for LGD volatility) in the risk weighting function are required. This should have the effect of producing a flatter (and more appropriate) risk weight response when moving from large, unsecured institutional-type exposures (which typically demonstrate lower PDs but higher potential LGD variability) to smaller, secured middle-market and small business loans (which will have higher PDs on average but potentially lower LGD volatility). Under the foundation approach, greater recognition should also be given to the value of real estate security, eg lower (and separate) average LGD assumptions for loans secured by commercial or residential property. Without such changes, based on current information, it seems doubtful that the introduction of the IRB framework – either the foundation or advanced approaches – in Australia would lead to an outcome that is consistent with the Committee's, and APRA's, reform objectives.. It would be surprising if similar results are not found in other banking systems.
40. Moreover, the QIS exercise is further highlighting the importance of obtaining reasonably accurate estimates of the impact of the proposals and not rushing the project to the detriment of the quality of the results simply to meet self-imposed deadlines. As noted above, we still need to undertake a good deal of work (in co-operation with surveyed institutions) to increase our confidence that the current estimates are anything other than broad indicators. Without a good understanding of likely impacts, launching the IRB framework (particularly the advanced approach) could prove to be a major leap in the dark for supervisors, with potential repercussions that are unlikely to be amenable to a relatively simple fix after implementation (as seems to be the proposition underlying the proposed 90% floor).
41. We also note that preliminary feedback from banks suggests that the impact of the proposed maturity adjustments (and three-year average maturity assumption under the foundation approach) appear to be more aligned with the Committee's expectations (though average maturities appear to be closer to 2-2½ years, at least, for the larger Australian banks). While this result needs further exploration, we note that a decision by regulators at some later date to allow institutions to use their own estimates of effective, rather than contractual, maturity could have an unexpectedly large impact on required capital. We understand that the Committee is examining this issue in its own analysis of the impact of the new proposals.

Minimum Eligibility Requirements

42. Regulators will need to feel comfortable that banks' internal ratings are reliable indicators of risk. In this regard, the proposals set out comprehensive sound practice

requirements that banks will need to meet. As important aspects of these requirements involve considerable subjective judgement, we see this as one of the main areas where the Committee will need to foster supervisory collaboration and experience sharing to facilitate consistent application of the framework globally (particularly in relation to implementing the advanced IRB approach). We are, however, very concerned with the suggestion that such mechanisms might be confined to member countries only. Given the international application of the Accord, it is imperative that all supervisors are able to participate in the co-ordination process.

43. While APRA is generally supportive of the proposed minimum eligibility requirements for the IRB approaches, as currently drafted, a few of the proposed requirements seem unduly prescriptive on a strict interpretation given they are meant to be minimum standards. Other requirements could perhaps be strengthened. Some suggested modifications are:

(a) *Independent assignment/review of ratings*

44. APRA supports the principle of independent assignment or review of ratings (and that internal ratings must play an essential role in the bank's decision to approve, deny or retain individual credit exposures). We read the requirements set out in paragraphs 245-6 of the New Basel Accord consultative document as not precluding an IRB bank from establishing reasonable thresholds above which individual ratings are independently assessed/reviewed and below which the ratings are subject to independent review but on a sample basis. We consider this to be appropriate but suggest the drafting could be clearer in this regard.

(b) *Rating grade structure*

45. We recommend that, similar to sovereign exposures, the requirement that no more than 30% of exposures should fall within any one borrower grade not be applied to bank exposures. The 30% guideline may also, in many cases, not be workable in other small or specialist sub-portfolios, such as project finance or equities.
46. More generally, there may be difficulties in applying the 30% rule in the case of certain smaller and/or specialist institutions, eg where institutions pool data in order to develop jointly a statistically reliable rating system. In these circumstances, the portfolios of some small institutions may not exhibit sufficient size or diversity to meet the 30% rule; or the institutions might seek to meet the requirement by introducing artificial exactness into their rating scales through the addition of extra rating grades that are not justified given the accuracy of the underlying rating model.
47. It would be helpful if the Committee was able to provide some guidance on how the 30% rule could be applied with some flexibility in such circumstances.

(c) *Frequent revaluation*

48. A strict interpretation of the requirements relating to frequent revaluation of real estate collateral (paragraphs 319 and 364) may not be commercial or needed for all classes of credit exposures. In particular, formal professional revaluation every three years seems excessive if strictly applied to all exposures, eg relatively small exposures secured against residential property, particularly if provided on an amortising basis and/or with

low original loan to valuation ratios. Institutions should satisfy supervisors as to the appropriateness of their valuation/revaluation policies and processes. In this regard, we support the three-year rule as a guideline but as a strict requirement across the full spectrum of property-secured loans it is overly simplistic.

(d) Data collection

49. We see no need to require that data systems maintain a complete history of the persons that have assigned ratings to each exposure. While it is important to be able to identify the current rater for management and oversight purposes, the historical information need not be mandated.

(e) Rating overrides

50. Many banks permit judgemental overrides of their credit rating models, however, the proposed IRB minimum eligibility requirements make no reference to this important aspect of many institutions' rating systems.⁶ We consider that the minimum eligibility requirements should specify that, where institutions permit rating model overrides, these should occur within an appropriate policy, procedural and control environment; data systems should enable overrides to be tracked; and override trends and the relative performance of exposures with overridden ratings should be an integral element of the institution's on-going validation of its rating system.

(f) Stress testing

51. Stress testing receives considerable mention in the minimum eligibility requirements but at this stage is likely to be quite crude at most institutions, particularly those with relatively short rating histories. This situation is unlikely to change quickly. We suggest that the Financial Stability Institute would be well placed to work in collaboration with Committee and supervisors etc to collate, undertake and disseminate studies of the impact of economic cycles on the main credit capital drivers incorporated into the new Accord proposals – banks' ratings, LGD and EAD. Over time, such studies would be useful in helping to scope realistic stress events.

⁶ Except in the specific case of exceptions to data inputs referred to in paragraph 304 of the New Basel Accord consultative document.

Definition of Default

52. APRA agrees that the definition of default plays a crucial role in the assessment of PD, LGD and EAD. For this reason we support the Committee's view that there needs to be a very clear reference definition used by all banks applying the new Accord. The key aim should be to ensure that the definition truly captures the event of economic default rather than some technical event that may have limited bearing on the ultimate collectability of a loan.
53. Our main concern with the Committee's proposed reference definition of default lies with use of the term 'past due more than 90 days'. Our experience from surveying a range of domestic and foreign banks is that this term can have a different meaning for different institutions. There are two key issues:
- (a) the first issue is whether the reference point for the commencement of the 90-day period is the day on which the client has a contractual obligation to make a payment, or the day on which the interest arrears actually begin. Where interest is charged in arrears (typically monthly) there is a one-month difference between the two reference points. We recommend that the former definition be used;
 - (b) the second issue is whether the reference to days in arrears refers to calendar days or to days worth of payments. The choice between these can have a dramatic impact on the number and volume of loans considered in default, particularly for retail types of facilities. As an example, consider a customer who fails to meet a single monthly repayment on his/her housing loan, then makes all subsequent payments. If the definition of default is in terms of calendar days this customer will be placed in default 90 days after the one contractual payment was missed. If the definition of default were in terms of days worth of payments, this customer would only ever be 30 days worth of payments in arrears and would not be placed in the default category. These problems can be exacerbated if unpaid fees, bank and government charges can also lead to the client falling into the default category. For example, although a customer might be making all scheduled principal and interest payments, because he/she has failed to pay an establishment fee (that could be picked up when the facility finally matures), the loan would be considered in default if 90 calendar days were chosen as the benchmark.
54. In APRA's experience, even banks that claim at the policy level to have consistent internal definitions along the lines of the Committee's definition, in practice have differing treatments at the working level due to the impact of the particular capabilities of general ledger and other banking systems and arrears management practices. From discussions with institutions, the differences in definitions can have a very significant, and highly variable, impact on reported default rates and on the correlation or 'signal-to-noise' ratio between reported defaults (more correctly delinquencies) and situations where actual loan losses arise.
55. Our experience indicates that, for the reasons discussed above, the 'signal-to-noise' ratio is much higher and more consistent under the 90 days worth of payments definition than the alternative 90-calendar days definition. This is an important consideration in terms of the new Accord because the less 'noise', the greater the degree of consistency there will be in the capital calculations under both the foundation and advanced IRB approaches. It is particularly true under the foundation approach as, in this case, there is

no partially offsetting LGD adjustment for a bank that reports relatively high 90-day delinquency rates but average actual loss rates.

56. We therefore suggest that, in order to achieve greater consistency, the Committee provide more detailed guidance with regard to the definition ‘past due more than 90 days’. For the same reason, we also strongly recommend that, at least for retail (or non-individually managed) exposures, the 90 days worth of payments definition be used. This definition is certainly more consistent with actual loan management and reporting practices in Australia (and we suspect in other countries). It also provides a much better (and for some institutions, dramatically better) predictor of eventual loss than the alternative 90-calendar days definition.

Adoption of IRB Approach Across All Exposures

57. At present, the proposed new Accord will restrict the use of the IRB approach to those institutions that are able to apply the approach to their entire loan portfolio. Given the significant differences between the standardised and IRB approaches, this stance can be justified as a solution to the possibility of ‘cherry picking’, ie banks choosing between the standardised and IRB approaches for individual portfolios according to whichever produces the lower capital requirement.
58. However, a strict application of the ‘all or nothing’ rule may not be appropriate in some circumstances. For example, for institutions with well-developed ratings on, say, their retail portfolios but which do not have adequate data on their corporate books, the supervisor is prevented from granting recognition to a strong retail rating system until such time as sufficient corporate data are obtained. That is, the movement to the IRB approach is dependent on the slowest area of development.
59. Similarly, for institutions with large retail portfolios and minimal corporate lending, the corporate portfolio may be below some de minimus level, and hence the supervisor can approve the institution’s IRB retail model. However, if the institution begins to grow its corporate book such that it exceeds the de minimus level, it is unlikely that the bank will have the data or resources to move its corporate activities onto the IRB approach immediately (or even in the short to medium term). Is the supervisor now obliged to withdraw the retail IRB approval?
60. In our view, the solution to this issue is to allow ‘partial model approval’ but with accompanying wording in the Accord that recommends this only be done in conjunction with strong use of Pillar 2. Assuming that a supervisor that has the skills to approve IRB approaches is also able to identify broad instances of ‘cherry picking’, we would recommend that the supervisor use Pillar 2 to ensure that overall capital levels remain adequate. A supervisor that is unwilling or unable to use Pillar 2 actively should not provide approval on a ‘partial models’ basis. This would seem preferable to unnecessarily restricting the use of the IRB approach.

Categorisation of Exposures

(a) Project finance

61. APRA has received several industry submissions suggesting that the definition of project finance is too wide. Specifically, these submissions recommend that income-

producing real estate-based lending, at least, should be excluded from the proposed definition of project finance. The detailed project finance proposals have not yet been released, however, we believe there is merit in this suggestion, at least with respect to non-specialised property lending.

62. In justifying the need for a separate approach for project finance exposures, the Committee has focussed on lending in support of large, long-term business operations backed by relatively unique and illiquid business assets that often exhibit a lack of recourse to sponsors, a track record or other comparables – all of which greatly increase the difficulty and complexity of assessing a project's repayment prospects.
63. In contrast to such lending, much income-producing real estate lending is more granular and less specialised. Generally speaking, such lending has more observable LGDs and default probabilities, and greater liquidity of assets. Consequently, it tends to exhibit characteristics that are more akin to normal corporate lending than those characteristics used to justify the separate approach to project finance. Reflecting this, associated rating approaches are also closer to other forms of corporate lending than is usual for more complex infrastructure and other projects.
64. In supporting a narrower definition of project finance, we note that while property lending often forms an element of relative concentration in credit portfolios, our reading of the consultative papers suggests that this is not an issue that the project finance proposals would be seeking to address.

(b) Retail exposures

65. The Committee has indicated its intention to develop additional criteria for the inclusion of small business lending in the retail IRB approach. We agree that additional criteria will be required, though coming up with a simple definition that is applicable globally will be difficult.
66. One aspect of any additional criteria, given that corporate exposures tend to be 'relationship managed', could be to focus on the degree of portfolio/product versus individual management of an exposure. However, this could open up differences in capital treatment among banks operating in the same market that are not justifiable on the basis of differences in risk management practices (particularly as credit scoring and mass management – as opposed to individual relationship management – becomes more widespread). Perhaps where credit scoring or similar techniques have been introduced, national supervisors could develop definitions that could be applied more generally based on the types of exposures/customers to which such portfolio management techniques are being applied by some institutions.

Granularity Index

67. In line with our comments on the first consultative paper, APRA is pleased that the Committee has sought to deal with large single-obligor exposures within Pillar 1. We note that initial feedback from large Australian banks suggests that the proposed granularity adjustment would result in little change to their risk weighted assets. Presumably, this outcome reflects the make-up of their particular portfolios, as we understand that for some overseas banks the granularity adjustment is not insignificant. We would be interested in further feedback on the sensitivity of the granularity

adjustment and intend exploring this issue further with our banks. If the adjustment factor indeed proves not to be sensitive, and not easy to recalibrate in a sensible way, then as a practical matter it may not be worthwhile continuing with the proposal.

Credit Risk Mitigation

68. APRA welcomes the changes implemented by the Basel Committee to the credit risk framework, allowing for greater recognition of credit risk mitigation techniques and enhanced alignment of the economic effects of these techniques to overall regulatory capital. We also support the introduction of a specific capital framework for credit derivatives, alleviating some of the discrepancies that currently exist in the international regulatory treatment of these products. While the proposed approach goes some way to recognising the benefits of credit risk mitigation, there are a number of areas which need to be better addressed.

Recognition of Collateral Under the Standardised Approach

69. APRA supports the expanded definition of collateral proposed by the Committee and the guidance on the frequency of mark to market valuations. However, we do not believe that the distinction between collateral under the standardised and IRB foundation approaches is warranted and feel that recognition of some forms of physical collateral should be a feature of both approaches, rather than just the foundation IRB approach. The IRB foundation approach is intended for use by those banks that possess appropriate internal grading systems for determining regulatory capital. The ability of a bank to move onto the foundation IRB approach is largely determined by the resources it has invested in sophisticated credit risk measurement techniques and not necessarily by the appropriateness of its valuation policies and guidelines. Allowing physical forms of collateral to be recognised within the IRB approach and not within the standardised approach, suggests that IRB banks have superior valuation policies to banks using the standardised approach and introduces (unnecessary) inconsistencies in the capital treatment for banks using the two different approaches. That said, any additional recognition of additional types of collateral would need to be accompanied by a corresponding increase in the risk weights applied to unsecured corporate lending to ensure that overall capital requirement for banks' corporate/consumer portfolios remains appropriate.
70. Furthermore, the exclusion of physical collateral within the standardised approach (particularly residential real estate) also impacts unduly on the capital charged to past due assets. As the proposed treatment does not recognise the relevant collateral, the entire past due asset will be risk weighted at 150%. For the majority of smaller Australian banks, the bulk of exposures are secured by residential and commercial real estate. Most of these banks will likely adopt the standardised approach as the scale of their operations are such that a more advanced approach is not warranted. It is APRA's view that the proposed treatment of past due assets overstates the unexpected losses resulting from such loans. Broadening the definition of collateral could alleviate this problem.
71. As noted in paragraph 29, residential real estate is recognised as collateral by way of the reduced risk weight applied to exposures that are fully secured by mortgages over residential property. Hence broadening the definition of eligible collateral to at least include residential property in the case of past due assets, would add additional consistency into the proposed framework.

72. APRA supports the requirements dealing with revaluing financial collateral and the incentives surrounding more frequent marking to market. We are concerned, however, that the proposals do not go far enough in reducing opportunities for arbitrage between transactions dealt in banks' trading and banking books. This is especially the case under the comprehensive approach where the effective risk weight is, to some extent, determined by the volatility in market value of the collateral in much the same way as the market risk capital charge is determined for positions in the trading book. Repo-style transactions pose particular problems, with different capital treatments in the banking and trading books, but similar operational and marking to market requirements for both books. While we acknowledge that some element of arbitrage is unavoidable, whilst ever the banking book/trading book distinction remains, we would encourage harmonisation of approaches across trading and banking books to the extent that this is possible.

The Comprehensive Approach to Recognition of Collateral

73. APRA accepts the Committee's reasons for proposing two distinct approaches to collateral recognition as a means of reflecting the varying levels of sophistication across the industry. However, we are of the view that the comprehensive approach is unnecessarily complicated and is likely not to be used by the majority of Australian banks that adopt the standardised approach to credit risk measurement. We feel that the comprehensive approach could be simplified to some extent by relating the haircuts applied to the collateral directly to observable market volatility. Thus, the adjusted value of the collateral, C_A , would be set equal to:

$$C - C \times \text{haircut}.$$

74. Such an approach would allow for comparability with the specified risk weights in the standard method for banks' traded market risk exposures and is consistent with the value-at-risk type methodology used by many banks for calculating their exposures to market risk. The approach, as currently proposed, sets the current value of the collateral equal to the adjusted value of the collateral scaled up by the haircut (ie $C = C_A + C_A \text{ haircut}$). In our view, this has the potential to significantly underestimate the amount of the haircuts to be applied. For example, a market volatility measure of 40% when applied to a \$100 collateral amount should produce an adjusted collateral value of \$60. Under the Committee's proposed approach, however, the adjusted collateral value is only \$71. Clearly, the approach proposed is not recognising, in full, the volatility in that collateral's value and should be amended to take into account the full extent of any market volatility.
75. As indicated by the Committee, the treatment of cash-collateralised transactions gives rise to a discrepancy between the comprehensive and simple approaches. With the exception of transactions secured by cash, the capital requirements for all collateralised transactions are more conservative under the simple approach. This is appropriate given the additional operational requirements/minimum standards required under the comprehensive approach. For cash-collateralised transactions, however, the comprehensive approach applies a risk weight to the collateralised position of 15% of the risk weight of the underlying exposure. Under the simple approach, a zero risk weight is applied (provided that the cash and the underlying exposure are denominated in the same currency). Hence, where an underlying exposure attracts a 150% risk

weight, the effective risk weights on the cash collateralised position under the simple and comprehensive approaches are, respectively, zero and 22.5%. This outcome is not justified. It is our view that cash collateralised transactions should be carved out from the comprehensive approach and be subject to the same special treatment as government repo-style transactions (ie a zero risk weight).

76. In determining the treatment of cash collateral within the comprehensive approach, care should be taken to ensure that credit-linked-notes receive a treatment consistent with other types of credit derivatives. Under the new proposals, credit-linked notes are treated as cash-collateralised transactions and thus, as proposed above, would be subject to a zero capital charge. However, credit-linked notes are subject to the same sorts of operational considerations as other types of credit derivatives and should be treated accordingly (refer paragraph 79 for discussion of the w factor).

Margin Lending

77. The Committee's proposals require banks to assess an exposure on the basis of the borrower's creditworthiness, irrespective of whether or not that exposure is collateralised. APRA is of the view that such borrower credit analysis may not be necessary in some limited circumstances, such as where a bank is engaged in margin lending and has in place a sound operational risk control framework commensurate with the nature of the bank's margin lending activities. Such a framework would need to include, amongst other things, an adequate system for monitoring and revaluing positions (with the capacity to do this on a real-time basis) and policies and procedures consistent with the nature of the shares transacted. In addition, the bank would need to be able to demonstrate a strong understanding of stock selection and share market activity, and be able to make intraday margin calls when required. The approach would need to be supported by appropriately conservative collateral haircuts and the requirement that liquidation of the collateral by the lender in the event of a failed margin call is done within a timely fashion, such as on a next day or day two basis. Provided that a robust risk management framework supports margin lending, the potential for loss from exposure to the original borrower is sufficiently low. While a full credit assessment and review of the borrower may not be required, the potential for reputational issues arising from a share market downturn means that some basic 'know your customer' requirements would still be needed (particularly in the case of retail customers).

Forward Sales and Put Options

78. The proposals also do not recognise forward sales and bought put option contracts as credit risk mitigation tools. Both forward sales and bought put options provide the same credit risk mitigating effects as other products recognised under the proposed framework. Further, as both of these products are currently recognised for capital purposes within the market risk guidelines applicable to banks' trading books, the recognition of these products would rectify this inconsistency in treatment between the trading and banking books. As such, it is our view that these products should be recognised as eligible collateral within the banking book.

The ‘w’ Factor

79. An interesting addition to the new proposals for credit risk mitigation is the ‘floor’ requirement or ‘w’ factor. This factor is designed to account for the various documentation and operational risks which have the potential to nullify the credit risk mitigating effects of collateral, guarantees and credit derivatives, thereby exposing the bank to the full credit risk of the underlying exposure. As such, the *w* factor ensures that the capital requirement remains a function of the credit quality of the obligor.
80. APRA agrees that there may be some uncertainty surrounding the degree to which the credit risk of an exposure is transferred by a guarantee, credit derivative or collateral holding. The extent of this uncertainty will depend on a range of factors, including the nature of the credit risk mitigant, the strength of a bank’s operational control and legal framework and the bank’s experience with similar credit risk mitigating techniques. We acknowledge that this uncertainty should be factored into the regulatory capital held against collateralised and protected exposures, and support the approach taken in the advanced IRB proposals. For the standardised and foundation IRB approaches, however, we are of the view that there already exists a sufficient buffer for this type of risk in the risk weights and loss-given-default requirements of these approaches. For this reason, the *w* factor should be removed from the Committee’s approach to credit risk mitigation.
81. The proposals also distinguish between guarantees provided by banks and sovereigns, and all other forms of credit risk mitigation (with the exception of cash and sovereign and PSE securities), with the *w* factor applied only to the latter. The extent of uncertainty associated with credit risk mitigation is, in some respects, independent of the credit protection provider and thus we regard this distinction as unwarranted.

Double Default

82. The concept of ‘double default’ (ie the need for the original obligor and the guarantor to both default in order for a loss to occur) is an important issue, however, we agree with the Committee that determining a satisfactory proxy for correlation is a non-trivial task. Further work will need to be carried out before allowance for double default can be incorporated into the capital guidelines for credit risk mitigation.

Range of Credit Derivatives

83. As indicated above, APRA welcomes the Committee’s move to implement specific guidelines for credit derivative products. APRA introduced guidelines on the capital adequacy treatment of credit derivatives in April 2000. These guidelines are provided in Attachment 1 to this submission. Conscious of the inconsistencies in treatment by regulators around the world, we await further guidance on the treatment of credit derivatives from the perspective of the protection seller. While the new proposals have identified the credit risk mitigating benefits of credit derivatives and outlined various capital guidelines for these products, the types of credit derivatives captured are limited.
84. The proposed framework recognises credit default swaps, total-rate-of-return swaps and credit-linked notes as being eligible for consideration as providing credit protection. The proposals do not recognise other commonly used credit derivatives such as first-to-default credit derivatives. While such products do not afford full protection on all of the

underlying exposures, partial protection is obtained and should be accommodated within the credit risk mitigation framework. The capital treatment of first-to-default credit derivatives varies from country to country. In some jurisdictions, protection derived from first-to-default products is afforded the highest risk weight within the basket of reference entities. In others, banks are allowed the choice as to which exposure can be regarded as protected. Clearly, a uniform set of guidelines is required.

85. On a related point, the Committee has identified the need for a specific capital framework for synthetic securitisation (APRA's views on this matter are expressed in paragraphs 109-115). The distinction between synthetic securitisation and credit derivatives based on baskets of reference entities can be quite blurred. Hence, it is important that regulatory treatment of these two activities, in terms of both the credit-mitigating effects that they yield and the risk to which investors are exposed, is consistent.

Credit Event Definitions and Operational Requirements for Credit Derivatives

86. As a general comment, APRA is of the view that the definitions and terminology used as part of the proposed credit derivative capital guidelines should be consistent with market practice. This is particularly important given the relatively recent development of the credit derivative market. In this regard, standard ISDA terminology should be applied, to the extent that this is possible. This will enable a consistency of approach and will allow the regulatory community to move forward as the credit derivative market evolves.
87. On this point, one important inconsistency between the Committee's proposals and prevailing market practice is the use of the term 'reference asset'. The reference asset is often regarded as that asset on which a credit event must occur for the credit event payment to be made. In practice, however, it is the reference entity that determines whether or not a payment should be made, with the reference asset or reference obligation determining the amount of that payment. Other differences between the Committee's and ISDA/market terminology are also evident, particularly within the operational requirements for recognition of credit derivatives as a form of protection. Credit event definitions, post-credit event valuation periods and asset mismatches are all areas where differences in terminology can have important ramifications.
88. The Committee favours the use of physical settlement for credit derivative contracts, in the sense that only credit derivatives that allow for physical settlement can be recognised for regulatory capital relief. Although this requirement is not emphasised in APRA's current credit derivative capital guidelines, it is our understanding that the market is already moving in this direction.
89. The proposals also require a legally effective cross-reference clause (eg cross-default or cross-acceleration) in the event of an asset mismatch between the underlying exposure and the 'reference asset'. It is our experience that the prevalence of such clauses are rare, with the covenants of a majority of bond issues not including cross default or cross acceleration clauses. This is particularly the case where the reference asset was issued before the underlying asset was created. It is APRA's view that effective credit risk mitigation can be achieved without inclusion of such a requirement.

90. In a similar vein, the proposals state that the same obligor (ie the same legal entity) must issue the reference asset and the underlying asset. Again, APRA's experience is that companies may use specific, but guaranteed, subsidiaries for public debt raisings that differ to the entity to which the exposure has been acquired. Amending the requirement to one where the underlying asset is an obligation of an entity that is unconditionally and irrevocably guaranteed by the reference entity would allow recognition of credit protection in these cases. Such a requirement is currently in place within the APRA credit derivative guidelines for asset mismatches.

Asset Securitisation

91. As noted in our submission on the first consultative paper, APRA supports explicit recognition in the revised capital framework of the risks associated with asset securitisation. As in other areas, prudential supervisors should aim to ensure that the particular risks involved in securitisation transactions are not only adequately captured by regulated institutions' risk management systems but that minimum capital requirements also provide adequate coverage where risks are retained (or acquired) rather than shed by institutions and that there is appropriate disclosure of institutions' securitisation activities. Australian banks have been subject to similar rules to those proposed by the Committee for quite some years.
92. In seeking to achieve these aims, we agree that the capital rules should focus on ensuring clear separation of regulated institutions and securitisation vehicles if regulatory capital relief is to be afforded to securitised assets. The capital guidelines should recognise where regulated institutions take on disproportionately large shares of credit risk through credit enhancement, potentially large implicit risks (including risks of association or 'moral' risks) and other residual risks.
93. At the same time, supervisors need to be mindful of the potential benefits of securitisation. Properly effected, securitisation can assist institutions to access a broader range of wholesale funding sources, improve earnings and better manage the credit, liquidity and other risks associated with originating and funding loans (as well as other assets), with flow-on benefits for the efficient operation of the financial system and wider economy.
94. APRA is concerned that the Committee's proposed treatment of securitisation transactions is overly conservative in places, and creates inconsistencies among various exposures of a similar nature. In particular, the proposed approach does not achieve an appropriate balance between the potential benefits of securitisation and the prudential concerns that such transactions can give rise to, and could unduly discourage regulated institutions' involvement in the securitisation market. As outlined below, we believe that there are a number of areas where the Committee could achieve a better balance. While in some cases we consider that a less conservative stance should be taken, in others the requirements should be strengthened.

Differential Treatment of Originator, Sponsor and Investor Banks

95. Having considered the issue during a fundamental review of our securitisation guidelines some years ago, we do not believe it is necessary to treat institutions differently depending on their role as originator/servicer, sponsor or investor in a securitisation scheme. Industry participants have expressed similar views.
96. For example, under the current proposals:
 - (a) risk weights applied to rated credit enhancements vary but are as high as 1250% (ie deducted) if provided by an originator or sponsor bank and as little as 20% in the case of an investor bank. The potential differentials for what can be the same exposure in the hands of different banks seem excessive and hard to justify, especially for independently rated exposures;

- (b) proposed higher risk weights for originator and sponsor banks compared to investor banks reflect concerns about association (and other residual risks though the latter are, at least partly, covered by the proposed new operational risk charge). Even if it is accepted that higher credit risk weights are an appropriate response to such risks, the proposed risk weights for credit and liquidity enhancements vary according to whether a bank is an originator or a sponsor. The basis for making this distinction is unclear and it is difficult to see how the residual risks associated with these particular roles differ in such a way as to justify the proposed differences in capital treatment. Rather, an unnecessary layer of arbitrariness appears to have been added. Moreover, definitional issues are likely to arise; for example, where there are multiple providers of credit or liquidity enhancements there may be considerable blurring of the line between sponsor and third-party providers. In the case of liquidity enhancements, it is also unclear how third-party providers would be treated.
97. We consider that these issues can be avoided. Risks of association, at least in the first instance, should be capable of being adequately addressed through separation and associated disclosure requirements to potential investors, such as those proposed in the new Accord. As also proposed in the new Accord, these requirements must be supported by more penal capital treatment (removal of capital relief) where institutions go, or demonstrate a willingness to go, beyond their legal obligations in providing support to any poorly performing securitisation schemes with which they are associated. If a bank demonstrates that it is willing to provide implicit support, then the whole basis for allowing regulatory capital relief disappears, not just for a poorly performing scheme but for any other schemes with which the bank is associated.
98. Where segregation is deemed effective, however, Pillar 1 credit capital charges need only focus on the explicit credit risks involved in securitisation transactions. Charges need not differ according to whether a regulated institution takes on the role of originator, servicer or scheme sponsor.
99. We believe that such an approach, which separately addresses the implicit and explicit risks involved in securitisation, remains prudential while offering a more balanced and consistent approach to securitisation risks that is more straightforward and easily defended.
100. Accordingly, where appropriate separation is achieved:
- (a) and where exposures to securitisation schemes are rated (eg investments in rated securities), risk weights should simply be based on the rating, as the latter embodies an assessment of the explicit credit risks involved, including the effect of any credit enhancement provided to more senior security tranches or obtained from more junior tranches. If relevant, usual credit conversion factors should also be applied, though admittedly the types of exposures for which such factors are applicable would rarely, if ever, be rated;
 - (b) in the case of unrated exposures, risk weights ought generally to be calibrated by reference to how the facilities rank in priority to other (rated) claims on the resources of a securitisation structure. Again, where relevant, usual credit conversion factors should generally be applied.

For example, an unrated facility (eg a liquidity or interest rate protection facility) that ranks *pari passu* with 'AAA' rated securities should attract a risk weight equivalent to a 'AAA' rated exposure (20%), while a facility (eg a credit enhancement) that ranks equally with a 'B+' rated security or worse should be deducted from capital.⁷ Where facilities rank between rated exposures, eg a facility that ranks after 'A' rated securities but before 'BBB' rated securities, then the higher of the two relevant risk weights (associated with the lower of the ratings) should be utilised.

In some circumstances, it may not be appropriate to link a facility's risk weight to the rating of a scheme's issued securities, even though the two may have equal priority in the event of a wind-up, eg a revolving liquidity facility supporting short-term commercial paper funding. In such cases, it might be more appropriate to 'look through' to the risk weights that would attach to the underlying assets (ie provided the facility is not subordinated to other facilities or issued securities within the structure, or otherwise provides credit enhancement).⁸ Where such a facility does provide credit enhancement, it should be treated as an unrated credit enhancement (refer following paragraph);

- (c) in the case of unrated exposures that rank below rated facilities, a less granular approach is necessary. As in our existing securitisation guidelines, we support taking a deduction approach if first-loss protection is provided and, in principle, treating second-loss facilities as direct credit substitutes (where first-loss protection is substantial).

Determining a reasonable risk weight for second-loss facilities is not clear cut (as an appropriate weight will depend on the quality of the underlying assets and the extent of available first-loss protection). However, as has been proposed by the Committee, we would support 'looking through' to the risk weights of the underlying assets (though we would consider restricting the application of this approach to high quality assets).

APRA also agrees that deduction should generally apply to the total amount of credit enhancement where an institution provides both first and second loss facilities. The requirement should apply to all regulated institutions, not just originator or sponsor institutions. An exception could possibly be made where the second-loss facility comprises marketable *rated* securities.

Treatment of Unrated Securitisation Schemes

101. APRA supports the adoption of a preferential 'look-through' approach for senior asset backed securities that form part of unrated securitisation structures, such as proposed in paragraph 527 of the New Basel Capital Accord consultative document. However, we are uncomfortable with the proposition in paragraph 528 of extending a blanket 100% risk weight to mezzanine or subordinated asset-backed securities in such schemes held

⁷ NB this example uses the risk weighting scale set out in paragraph 526 of the New Accord consultative document. We note that the Committee has indicated that it may revisit these risk weights.

⁸ This compares with the Committee's proposal to apply a 100% risk weight to such facilities.

by non-originator investor banks. Excluding originator banks from this concession seems insufficient of itself to minimise regulatory arbitrage opportunities, particularly in future years as investor interest in non-investment grade securities grows. We note that the Committee is examining further how to proceed with this issue but as currently proposed we would support deduction irrespective of the holder of the securities.

Application of Look-Through Approach

102. In applying the above-mentioned ‘look-through’ approach, the Committee notes that a qualifying asset pool might be composed of assets from different risk weight categories. In these circumstances, the risk weight assigned to senior unrated asset backed securities is to be the highest risk weight of any asset in the underlying asset pool. A similar approach is to be used when applying the ‘look-through’ approach elsewhere in the new Accord. Instead, we suggest that where risk weights in the underlying asset pool vary (and sufficient information to permit the calculation is regularly disclosed), then the risk weight for any relevant associated facility could be determined on a pro rata basis.

20% Credit Conversion Factor for Liquidity Facilities

103. No rationale has been provided as to why a 20% credit conversion factor should apply to all securitisation liquidity facilities (that are not deemed to be credit enhancements) irrespective of the term of the facility. While we appreciate that such facilities are usually structured to avoid the higher conversion factor applied to facilities longer than one year, we do not see any justification for treating securitisation facilities any differently to non-securitisation facilities. Presumably, the proposal will simply result in longer-term facilities being written with no capital impact.

Internal Ratings Based (IRB) Approach

104. Many aspects of the IRB approach to be applied to securitisation are in a state of flux; however, we do not support the proposed 100% LGD assumption and strongly encourage the Committee’s consideration of alternative approaches (such as the ‘two-legged’ approach).⁹ Consistent with our comments above, the IRB proposals should avoid distinguishing between issuer and investor institutions; thus, we would support the proposal in paragraph 60 of the Asset Securitisation Supporting Document. Additionally, we do not agree with the proposal that the IRB capital charge for retained credit risks (including deductions for first-loss positions) should not be capped at the IRB capital requirement that would otherwise be assessed against the underlying pool of securitised assets.

⁹ Industry submissions that we have received support the two-legged approach, eg in determining the risk weight for unrated first-loss positions. The submissions suggest that in order to operationalise the approach, the total amount of capital allocated to a securitised portfolio should not be in excess of the balance sheet requirement (as the aggregate amount of credit risk associated with the underlying assets should not increase as a result of securitisation). Of course, this assumes that the amount of risk transferred to external investors has not been overestimated – a possibly optimistic assumption as the external ratings agency will likely take a conservative approach. That said, the Committee may need to take an on-balance view of this possibility in its investigations compared to the alternative of, say, utilising a 100% LGD assumption.

Implicit and Residual Risks

105. We note that the Committee is conducting further work to assess the nature, frequency and consequences of banks providing implicit recourse to securitisation schemes and other residual risks not directly captured by the proposed securitisation capital charges. This work may lead to an *ex ante* minimum capital charge designed to address these risks.
106. APRA has strong reservations about the desirability of basing an *ex ante* charge on the possibility of banks providing implicit recourse to securitisation schemes. As previously mentioned, the provision of implicit recourse undermines the basis for providing regulatory capital relief to banks for securitised assets. Logically, if relief is to be given, then the possibility and incentives for banks to provide implicit recourse need to be reduced as much as possible via appropriate separation requirements and *ex post* penalties (ie removal of capital relief) if these requirements are breached. An *ex ante* charge would tend to erode the rationale for providing relief because:
- (a) the assumption underlying the charge is that implicit recourse will be provided regardless of the separation requirements (if this is the case then capital relief should not be provided in the first place);
 - (b) if banks hold capital against the possibility of providing implicit recourse, they might reasonably expect to utilise that capital for such purposes;
 - (c) banks might also reasonably question the evenness with which the prohibition against implicit recourse is being applied by regulators across the industry; and
 - (d) if capital is held *ex ante*, then the rationale for imposing *ex post* penalties is lessened and supervisors might be inclined to treat instances of implicit recourse less seriously.
107. Moreover, the issue of implicit recourse is more wide-ranging than just the securitisation activities of banks. Banks' funds management operations, for example, raise similar issues – arguably more so given the much higher proportion of retail business undertaken by banks in the funds management area. Indeed, as far as we are aware, the incidence of implicit support that has been provided globally to banks' funds management operations has been more prevalent than in the securitisation arena. Thus, rather than introduce an *ex ante* charge solely on banks' securitisation operations, there may be greater benefits in considering how the issue of implicit recourse should be dealt with more generally. In Australia, for example, the same broad framework (covering separation, relevant customer disclosure and *ex post* penalty provisions for providing implicit recourse) that we have applied to banks' securitisation activities has also been extended to banks' funds management operations.
108. While APRA does not support the introduction of an *ex ante* capital charge aimed at implicit recourse, we would welcome additional measures that could be incorporated into the new Accord framework dealing with this issue. One area would be the use of prudential limits (these could be reporting or pre-approval rather than hard limits)

relating to the ability of a bank to purchase or deal in issued asset backed securities, and/or purchase assets from, or supply assets to, a scheme.¹⁰

Synthetic Securitisation

109. APRA supports the Committee's commitment to providing firmer guidance on the treatment of synthetic securitisation structures as a means of minimising regulatory capital arbitrage and encouraging consistency in treatment internationally. We acknowledge that the proposals are not yet complete, but nonetheless wish to highlight a few issues that we feel should be addressed in the final guidelines.
110. As noted in paragraph 85, the framework for synthetic securitisation should be consistent with the capital treatment of other credit mitigation techniques, namely, collateral, guarantees, credit derivatives, tranching of individual loans and traditional asset securitisation, all of which yield similar economic effects. Moreover, many of the issues raised in the proposals for synthetic securitisation (eg degree of risk transference, materiality and payout clauses) are common to credit derivative transactions also. While consistency may be difficult in some cases, a rigorous conceptual approach to all forms of credit risk mitigation will assist in application of the guidelines, and discourage banks from structuring transactions for the sole purpose of taking advantage of differences in regulatory capital.
111. On a related point, the proposals outline a range of 'typical' synthetic securitisation structures transacted by banks and explore possible capital treatments for these transactions. There are numerous ways to structure synthetic securitisations over and above those outlined by the proposals. It is APRA's view that the Committee should avoid, to the extent possible, an approach that requires banks' to retain/invest in particular portfolio tranches as such an approach will serve to promote alternative transaction structures to circumvent such requirements.
112. The definition of synthetic securitisation refers to the transfer of credit risk on a pool of assets. We note that some synthetic securitisation transactions involve credit risk transference of off-balance sheet instruments, such as credit derivatives, thereby compounding issues such as documentation and asset mismatch. These sorts of transactions need to be taken into account when formulating the capital guidelines. Additionally, the proposals seem to imply that structured credit derivative transactions, such as synthetic securitisation activities, are undertaken only in banks' banking books. Increasingly, however, such transactions are being included in banks' trading books and the guidelines should be amended to recognise this.
113. The proposals also suggest that all (eligible) synthetic securitisation transactions are undertaken through an SPV. Increasingly, synthetic securitisation are being undertaken directly off banks' balance sheets. Again, the guidelines should be broadened to capture both SPV and non-SPV transactions.

¹⁰ For examples, refer *Australian Prudential Standards (APS 120): Funds Management & Securitisation* and associated guidance notes (available at www.apra.gov.au).

114. APRA agrees with the rationale for equating a first-loss piece to the expected loss on the underlying portfolio, and acknowledges the Committee's dilemma with respect to the capital treatment of traditional securitisation. Regulatory approaches to traditional and synthetic securitisation should be consistent, for the reasons noted in the previous paragraphs. While the suggested approach to first-loss amounts is conceptually sound, we are concerned that the outcome may well give rise to insufficient capital being held against an unrated mezzanine tranche of a structured transaction. Hence, there should be scope to impose additional capital requirements on an unrated mezzanine tranche where deemed necessary. A simple approach would be to apply the capital charges for traditional security structures and require a capital deduction for any unrated mezzanine tranche.
115. The operational requirement that notes or securities issued to the market by the SPV/bank should be rated by two rating agencies is, in APRA's view, onerous. The market has adopted the practice of only requiring a rating from a single rating agency. Requiring banks to adopt a second rating would cause them to incur additional and unnecessary expense. An alternative (or complement) to the requirement of two agency ratings would be for one rating agency rating plus an internally developed rating by the issuing bank (akin to the requirements for qualifying securities within the market risk capital guidelines).

Other Credit Risk Capital Issues

Treasury Credit Counterparty Add-On Factors

116. The Committee's proposals maintain the status quo in relation to the measurement of treasury credit risk, restricting banks to the existing original or current exposure methods. The add-on factors within both of these approaches have also been left unchanged. APRA believes that the Committee should assess the viability of banks using their own internally developed add-on factors for regulatory capital purposes. These factors could either be incorporated into the current exposure method or applied as part of an internal model approach to treasury credit risk capital requirements. Such a step would be consistent with the Committee's move towards a regulatory capital regime based on internally developed risk measurement models. We do not see implementation as being difficult, with many of the requirements already in place for traded market risk being directly transferable to treasury credit risk measurement.
117. A significant number of Australian banks have already constructed their own treasury credit risk measurement models or add-on factors for internal capital allocation purposes. These factors are, on the whole, more detailed than those contained within the current capital guidelines in that they differentiate between a greater range of products (eg different factors for interest rate swaps and forwards) and maturities, and take into account historic volatility for different pairs of currencies. As such, the add-on factors would provide a more precise measure of risk than is possible using the current add-on matrix.
118. Additionally, the current matrix does not adequately address credit-based products, ie credit derivatives. APRA's credit derivative guidelines currently require the equity add-on factors to be used for credit derivatives that have as the underlying a qualifying security (as defined in the traded market risk guidelines). Where the underlying is non-qualifying, we require the commodity add-on factors to be used. This approach is less than ideal and we suggest that the current matrix be expanded to include add-on factors for credit derivatives.

Definition of the Trading Book

119. Application of the trading book definition proposed in the 1996 market risk guidelines has proven to be difficult for many regulators and, in this regard, we welcome the Committee's move to refine the definition of a bank's trading book. That said, significant divergence across jurisdictions is likely to remain in respect of those products that fall within the Committee's trading book guidelines. Synthetic securitisation is one example of an activity that does not fit neatly within the trading book definition. Other examples are repurchase transactions and interest rate derivatives undertaken to position a bank's balance sheet. Proposed changes to the international framework will likely further blur the distinction between trading and non-trading. APRA is of the view that further guidance on an appropriate expected holding horizon could reduce some of these inconsistencies.

Specific Risk Capital Charges for Credit Derivatives in the Trading Book

120. The Committee's guidelines propose an 80% specific risk offset for credit default swaps and credit-linked notes hedging underlying positions. APRA remains unconvinced that the market value of credit derivatives and underlying assets are negatively correlated to the degree implied by a complete or near complete offset. For this reason, our credit derivative guidelines require a single specific risk capital charge against the hedged position. As the market develops and more data become available, we will be better placed to refine our specific risk treatment of credit derivative hedges.
121. The treatment of specific risk offsetting across two equal and opposite credit derivatives is not addressed in the consultative document. APRA's requirements allow complete offsetting for equal and opposite credit derivatives and we suggest that this approach be incorporated into the Committee's guidance.
122. As identified in an earlier section of this submission, structured credit transactions involving credit derivatives are, increasingly, being included in banks' trading books. Treatment of such transactions should be considered in the Committee's final guidance on credit derivatives and synthetic securitisation.

Operational Risk

123. As indicated in our response to the Committee's first consultative paper, APRA supports the introduction of a capital charge for operational risk. We believe that it is a necessary development in the evolution of capital management and it would bring an important focus on this area of risk, that is both timely and appropriate.
124. Although all details on the various approaches proposed by the Committee – basic indicator, standardised and internal measurement approaches – are not yet available, we have a number of observations and comments to make. These are set out below.

Definition of Operational Risk

125. Within the latest consultative paper, the Committee has narrowed its focus from 'other risk' (ie all risks other than credit and market risk) to operational risk. Although the definition of operational risk is broad – losses due to people, process, systems and outside events – it is also narrower than that envisaged originally. For example, risks such as strategic risk and reputational risk have been excluded. Although we acknowledge the difficulty in trying to quantify these risks, it is our view that these risks can lead to problems that require the retention of capital. If certain risk types are excluded from the new calculation methodology, the Committee needs to ensure that a regulatory capital 'gap' is not created.
126. Despite the narrower focus, we are still of the view that there needs to be greater robustness around the definition of operational risk. In particular, given the importance of developing detailed data on operational risk losses, it is imperative that the definition is clear and concise. There needs to be a leader in this development, be that the Committee itself or by regulators working in collaboration, to ensure consistency of definition is achieved. From our experience, leaving it to industry to come up with a common definition is unlikely to be effective due to a wide disparity of views.
127. In a market in which alliances, partnerships and outsourcing are of increasing importance to banks' operations, we believe greater attention should be paid to reputation risks. Alliances and/or outsourcing arrangements can severely damage a bank's reputation if not properly managed and monitored. For this reason, we are of the view that reputational risk should be included within the 'operational risk' definition. Banks do not shed responsibility for risk management by arranging for a particular activity to be undertaken by another party – a failure by that party to perform as required can have serious repercussions for the bank. We would encourage the Committee to review this issue further.
128. For example, outsourcing is looked upon in the latest consultative paper as providing an opportunity for operational risk relief. APRA is concerned that, if the operational risk calculations are not carefully structured, there could be the potential for that relief to be obtained without recognition of the associated counterparty and reputational risk. Outsourcing arrangements may change some types of risk faced by a bank, but they do not necessarily decrease them. In this sense, we believe that there should be scope for regulatory assessment of the effectiveness of the risk transfer or mitigation of outsourcing, and that this should include the possibility of recognising new risks exposures created by outsourcing. Our view is that the advantages of outsourcing (such

as cost savings and access to specific expertise etc) should be recognised equally with the disadvantages (such as possible reputational consequences, legal risks, loss of key personnel etc) so there can be an assessment of the net impact of the outsourcing decision. If a bank that chooses to perform functions in-house is penalised by an operational risk charge vis-à-vis another bank with an otherwise identical risk profile that chooses to outsource those functions – that is, without recognition of the new risks incurred – then a strong incentive for outsourcing (and regulatory arbitrage) may be created.

129. APRA also supports further research into the circumstances in which insurance products could be recognised as a mitigant for operational risk. Any such recognition would need to provide clear contract standards, as well as a very clear matching of the insurance product and the actual recognised classes of operational risk, to ensure that no mismatches or holes are created where a bank could find itself not covered by either insurance or capital. The credit exposure to the insurance provider, and any potential concentration of insurance providers, would also need to be addressed. Nevertheless, we believe there can be a number of instances where insurance provides a valid and reliable mitigant for operational risk, and banks that take advantage of insurance to lay off their risk should receive some regulatory recognition of this.

Calibration of the Operational Risk Charge

130. The premise of the Committee is that operational risk accounts, on average, for approximately 20% of a bank's economic capital; this benchmark is being used to calibrate the operational risk charge. We believe that international surveys of operational risk capital are heavily influenced by the definition of operational risk being used by the banks concerned. Although estimation techniques are still in their infancy, the evidence from Australian banks seems to suggest that the 'narrow' definition of operational risk now being employed by the Committee produces a capital requirement below the 20% benchmark being advocated. However, if other risks such as reputational risk and strategic risk are included, the benchmark could be as high as 40%-50%. Therefore, in calibrating the new operational risk capital charge, the Committee needs to scrutinise closely the definitions of operational risk being employed by the banks it is surveying. In APRA's view, a benchmark below 20% would be more appropriate for the definition of operational risk currently proposed.

Development of Operational Risk Data Sets

131. Given that collection of data and data sharing or pooling is a key feature of the proposals, there is a real question about data definition, consistency and categorisation of data. At this stage, many institutions use widely divergent definitions or categorisations of loss, making it extremely difficult to collect a data set that is actually meaningful and consistent. The Committee is suggesting that the banking industry come up with this data set, but this will be very difficult to achieve if there is little or no direction in the setting of data sets and definitions. As noted above, we believe that the Committee should be proactive here and encourage regulatory bodies to take the lead to come up with a consistent set of definitions in consultation with industry groups and commercial consultancies, and that these definitions become the basis for data collection and ultimately data sharing or pooling.

132. The view of the Committee is that wide sharing of loss data will help to ensure all operational risk types are being captured. However, there are some activities where there has been little experience of loss. ‘Key person’ risk is a prime example where there may be no history of loss, but where the supervisor inherently knows that problems can occur. That said, we recognise that this is a starting point in developments in capital allocation for operational risk, and we are of the view that there will be developments in sophistication and risk sensitivity as time progresses.
133. There has been quite a deal of industry comment about the inclusion of indirect losses in the capital charge. Views have been expressed that because indirect losses are often hard to define and quantification difficult, that they should be excluded from the scope of operational risk capital allocation. Whilst we recognise the difficulties, particularly in terms of quantification (this could include money, time, quality losses etc), APRA is of the view that removing indirect losses could in fact lead to under-allocation of capital should a risk event occur. Consequential losses are often considered indirect losses and they are sometimes greater than the original direct loss. To exclude such losses could lead to situations where insufficient protection is available to cover such events. The problems of definition and capture of these losses should be part of the scoping process for regulators to come up with appropriate and consistent data sets.
134. A precondition of the use of the standardised approach is the need to be able to collect loss data. We understand that this is to try to encourage banks to move toward the more sophisticated approaches by ensuring data sets are available. However, we note that to actually utilise the standardised approach as envisaged no loss data are needed to perform the calculations. There may well be institutions whose size precludes them from further development in this area and the use of a more risk sensitive approach such as the standardised approach may be a desirable regulatory outcome. We are of the view that regulatory discretion should be allowed with respect to this condition.

Linearity

135. Some criticism has been leveled at the linear nature of the proposed operational risk framework, ie the proposed approaches assume a linear relationship between size and operational risk incurred. We have some sympathy with the view that larger institutions obtain some benefit from their greater diversification of business lines, products and geographic location. In addition it is likely that certain operational risk events such as fraud, or those associated with a ‘rogue trader’, are limited in (relative) size to some extent. Larger institutions may therefore be disadvantaged by the adoption of a linear approach.
136. That said, whenever the Committee proposes a calculation methodology using a proxy for the underlying risk (such as the use of gross income in the basic indicator approach), it is important that the practical impact of that methodology is carefully examined. For Australian deposit-takers, the relation between the size of the operational risk capital charge and the size of the institution is shown in Table 3. This table shows that, despite the basic indicator approach using a simple linear calculation methodology, the impact of the new charge falls more heavily on smaller institutions. In other words, there is non-linearity in the impact of the capital charge, even if not in the calculation methodology itself.

Table 3: Impact of Operational Risk Charge by Size of Institution

	Average Risk Weighted Assets per entity (USD million)	Basic Indicator Charge (% of RWA)
Major banks	81,496	1.5
Other Australian banks	4,100	1.8
Building societies	207	2.1
Credit unions	36	2.7

137. This result reflects the different income and cost structures of the various institutions. Larger institutions increasingly operate in low-margin, low-cost markets, while smaller institutions tend to operate in higher-margin, higher-cost markets. Due to the use of gross income as the proxy for operational risk, this difference in cost-income structure has the practical effect of producing non-linearity into the operational risk capital charge. As a result, we would not favour attempts to engineer non-linearity into the simpler operational risk methods – these are simple methods that should not overly penalise the smaller institutions that will, in all likelihood, need to use them. APRA is of the view that the answer to this issue is to improve the sensitivity of the most sophisticated methodologies to the underlying risk profiles of the larger institutions that will wish to adopt them.

Recognising the Quality of Internal Controls

138. Trying to find a basis for measuring operational risk is a difficult exercise in that this is a relatively new field and industry experience in measuring operational risk is limited. Methodologies have been chosen based on historic data that provide a basis for measuring or ‘modeling’ this risk for future activity. However, this premise – that historical data is a guide to the future – is debatable for a number of reasons. Obviously, there may be no history of loss being caused by a particular operational risk weakness, but that does not mean that the inherent risk of an activity does not exist. Similarly, after incurring an operational risk loss of any significant magnitude, management behaviour is typically to improve internal controls, and hence reduce the probability of a repeat event. At present, none of the three approaches proposed by the Committee anticipate risk in this way. APRA is strongly of the view that there needs to be a forward-looking element to the operational risk charge, particularly for the more advanced approaches.
139. The structure of the proposed operational risk capital charge allows for any severe deficiency in internal controls detected by the supervisor to be dealt with under Pillar 2. That is, where a supervisor forms the view that a bank’s operational risk is high due to a poor internal control environment, the supervisor can require additional capital to be held under Pillar 2. This is particularly important for banks using the basic indicator and standardised approaches – these do not in any way reflect the quality of a bank’s internal controls. Even for the internal measurement approach, it will take a considerable period of time for improvements in internal controls to be evident in operational risk data.
140. Where additional capital has been imposed by the supervisor under Pillar 2, the bank has a clear incentive to improve its control environment. However, if no Pillar 2 capital has been imposed, there is no scope for regulatory recognition of improvements to the

internal control framework. We believe this is an area the Committee should examine further.

141. APRA is of the view that the internal measurement approach (IMA) in its current form is flawed. In the short- to medium-term, the IMA is likely to be based on under-developed and (given the current disparity of views over the definition) possibly inconsistent data sets. It is also purely backward looking. We believe there are two possible alternatives that could be explored:
 - (a) include within the IMA framework some form of (subjective) recognition for the quality of the internal control environment; or
 - (b) include, either as an alternative to the IMA or as a separate option, the scorecard approaches being advocated by a number of major international banks within the Institute of International Finance.
142. Recognising that neither of these methods is perfect, the acceptance of one or both of these alternatives comes down largely to issues of practical implementation. Even in its current form, we believe that the IMA would be very difficult for a supervisor to implement. We have serious concerns about the ability of existing data sets within the industry to produce a robust and reliable capital charge. While we would advocate some recognition of the quality of the internal control environment within the calculation methodology, we also acknowledge that this will only make the supervisor's task even more difficult.
143. Against that background, APRA is of the view that the scorecard approaches offer a number of advantages to both banks and supervisors:
 - (a) it does not require immediate agreement on the definition of operational losses and the establishment of adequate databases (although we see no reasons as to why this would reduce the incentives to collect this information);
 - (b) it provides the right signals and incentives – it is forward-looking, providing higher capital when control weaknesses are evident and lower capital when these have been corrected;
 - (c) it would link well with existing management practices, as the bulk of international institutions already use scorecard-type self-assessments as part of their own internal management and audit processes; and
 - (d) it is a much easier method for the supervisor to employ, and due to its transparency, would require less supervisory intensity to monitor.
144. APRA is of the view that the scorecard approach provides a significant improvement over and above the standardised approach, and can be used by supervisors where existing data is not adequate, ie as a stepping stone to the future use of either the IMA or even to full-scale operational risk capital models. Because of the standardised nature of the scorecard approach, and the ability to base the assessment on information that is largely objective and auditable, it provides a methodology that can be implemented with limited supervisory resources – most of the assessment is completed by the bank itself, and can be verified/validated by a combination of the bank's own internal processes and

external review (eg by auditors). As a result, the supervisory intensity required is considerably less than that required under the IMA, where deep and detailed supervisory review of data collection and integrity, and (in our view) banks' internal controls, are likely to be required.

145. Further, we believe that there is considerable benefit in providing a wide range of options in an area of risk measurement that remains embryonic. To have a single methodology dictated by regulators at this point runs the risk that experimentation and research will be stifled. We believe this would run counter to the philosophy the Committee has adopted to date, and which we strongly support, of leveraging off best practice within the industry, rather than have regulators attempting to dictate or determine best practice themselves. As a result, APRA strongly encourages the Committee to examine the merits of the scorecard approach as an additional option within the operational risk framework.

Pillar 2: Interest Rate Risk

146. The Committee has proposed a set of minimum standards for the management and supervision of the interest rate risk inherent in banks' activities, encompassing guidance on the role of senior management, internal controls and reporting, stress testing and limit frameworks. APRA welcomes these principles as a means of enhancing regulatory oversight of this important aspect of a bank's operations and ensuring consistency of approach across the banking industry.
147. It is further proposed that a capital charge for interest rate risk in the banking book should apply only to 'outlier' banks. As noted in our response to the Committee's first consultative paper, APRA remains of the view that an explicit capital charge for interest rate risk should be applied to all institutions as a component of Pillar 1, and not just those institutions with excessive levels of risk. The capital charge would, to the extent possible, draw on banks' internal risk measurement methodologies for interest rate risk.
148. Such an approach would promote a stronger relationship between a bank's regulatory capital requirement and the degree of risk assumed, would reduce the opportunities for arbitrage between a bank's banking and trading books, and is consistent with banks' own economic capital allocation models. A regulatory capital requirement would also encourage development of improved management and modelling techniques, in much the same way as the 1996 market risk guidelines focused many banks' attention on refining the methods used to manage market risk in the trading book. An outlier approach to interest rate risk would not achieve these aims. Amongst other things, requiring banks to calculate their interest rate risk exposure, without offering a capital incentive to those banks who have devoted considerable resources to refining that calculation, will not provide banks with the incentive to further develop techniques for measuring and managing interest rate risk.
149. Although a regulatory capital requirement for banks' overall exposure to interest rate risk is, in our view, a desirable objective, we recognise that it is not an objective that can be met in the near term. Keeping in mind the Committee's goal of not increasing the total regulatory capital requirement of the banking system, further refinement and calibration of the credit and operational risk frameworks must first be undertaken such that the implicit buffer for interest rate risk in the prevailing capital framework is removed.

Current Earnings versus Economic Value

150. As highlighted by the Committee, banks' methodologies for measuring and managing interest rate risk are continuing to evolve and both banks and supervisors are yet to resolve many practical and conceptual issues. While this should not inhibit progress towards the objective of a capital charge for interest rate risk (certainly the issues are no more complex than those involved in the modelling of credit and operational risk), further consultation will be beneficial. APRA has been reviewing the asset and liability management practices of Australian banks with a view to developing appropriate benchmarks for interest rate risk measurement.
151. Most fundamental is the need to determine an appropriate balance between the degree of supervisory reliance placed on economic value based risk measures and those derived

from current earnings considerations. For the purposes of establishing an ‘outlier’ bank, the Committee clearly favours an approach based on economic value. In terms of supervisory oversight, however, it is proposed that supervisors monitor the impact of interest rate changes on either current earnings or economic value. It is well known that there exists a potential trade-off between these two measures in the sense that a neutral interest rate risk position, measured on an economic value basis, can imply large swings in banks’ reported earnings. The reverse may, of course, also be true.

152. The majority of Australian banks focus on net interest income over time horizons ranging from twelve months to five years. Interest-sensitive non-interest income is not incorporated into the analysis. Some of the more sophisticated Australian banks complement the net interest income measure with economic value calculations based on static and/or dynamic balance sheets. For these banks, interest rate risk management involves consideration of both perspectives and board-approved limits govern the extent of exposure that can be assumed.
153. Clearly, both approaches can provide important information from a supervisory viewpoint and we do not readily resign ourselves to one methodology over the other. Notwithstanding this, in the interest of putting in place a single relatively simple interest rate structure for supervisory purposes, an approach based on economic value is preferable. An economic value approach is consistent with supervisors’ regard to the longer-run value of an institution and could be supplemented by banks’ own net interest income calculations. Such an approach would also be consistent with the objective of determining an overall measure of banks’ exposures to variations in interest rates, across trading and banking activities and is in line with the direction of the international accounting framework.

Appropriate Interest Rate Variations

154. As mentioned above, APRA supports the Committee’s proposal for interest rate risk measurement to be based on banks’ internal measurement techniques. To the extent that these techniques are not appropriate, any standardised approach to interest rate risk measurement in the banking book should be aligned to the standard methodology applied to banks’ exposures to general market risk on interest rate positions in the trading book.
155. To this end, the Committee’s decision to base interest rate variations on a 99% confidence interval is a reasonable one. We also support the Committee’s proposal to allow banks to determine their own interest rate shocks, subject to specified parameters, but note that, for some non-G10 currencies, it might be difficult for banks to acquire five years of historical data across all yield curve buckets. In these cases, we suggest that the 200 basis point shift, developed as the default option for G10 currencies, be applied.
156. Analysis of Australian markets shows this shift to be appropriate for Australian interest rate exposures. Interestingly, this analysis also reveals:
 - (a) no evidence of higher volatility at the short end of the Australian yield curve over historical data periods greater than six years, alleviating concerns that a parallel shift might be unnecessarily crude;

- (b) a significant increase in volatility, at all yield curve points, as the holding period is increased from 20 days to one year, with six month shifts falling slightly below the 200 basis points, based on six years of historical data, and one year rate changes above this shift for the first percentile (significantly above in some cases); and
 - (c) a substantial increase in volatility, at all yield curve points, as the length of historical data is increased from six to ten years, highlighting the importance of taking into account the actual interest rate variations applied when interpreting the results of an outlier approach to interest rate risk measurement.
157. The choice of an appropriate holding period is a difficult one and there is no ready answer. That said, APRA is of the view that a one-year holding period is too long. This follows from consideration of the time it would take for a bank to restructure its interest rate risk profile. Australian banks tend to assume a holding period of between one and three months for calculating interest rate variations and believe that there is sufficient liquidity in the derivatives market for a bank to change its overall exposure to interest rates within a one to three month time frame.

Pillar 3: Market Discipline

158. APRA fully supports the emphasis given by the Committee to the role of market discipline in complementing the role of capital regulation and other supervisory tools. We agree with the Committee that supervisors need to encourage disclosure by their banks of information that would assist a market's understanding of their risk profile and capital adequacy. Australian banks in their comments on the proposed New Basel Capital Accord have also supported the principle of increased disclosure. The growing complexity of bank operations, including both the means by which risk can be incurred and by which risk can be managed, necessitates a much broader and detailed range of information which needs to be disclosed.
159. While the purpose of disclosure is to improve market understanding, increases in the volume and detail of disclosed information carry some risk of confusing and hindering an assessment of the risk profile and capital adequacy of a disclosing bank, especially amongst less financially aware market participants. Limited but appropriately targeted disclosure may produce a more effective outcome towards assisting market discipline than requiring a bank to disclose large volumes of raw data. Similarly, cost alone should not be a bar to requiring disclosure of important information. A supervisor should not, however, ignore the costs associated in disclosing information and should aim to ensure that the benefits of disclosure justify the costs involved.
160. The Committee has previously outlined general criteria for disclosure in its 1998 paper, 'Enhancing Bank Transparency', ie comprehensiveness, relevance and timeliness, reliability, comparability and materiality. APRA agrees that these criteria should be applied to the Pillar 3 requirements.

Detail of Disclosures

161. While we fully support the need for increased disclosure by banks we have some concerns with the quantum and breadth of disclosure contained in the Committee's Pillar 3 proposals. It would appear that some of the required disclosures offer marginal benefit when set against the cost of producing and disclosing such information.
162. APRA acknowledges there is no simple way of describing banks risk management systems and their performance. This is, of course, not unexpected where banks develop their own proprietary systems for assessing and pricing for risk. It would appear to us that this has resulted, not unreasonably, in the detailed disclosure requirements proposed by the Committee with respect to banks use of their own systems for measuring risk. This approach however, imposes a heavy burden on banks as well as raising issues of disclosure of proprietary information.
163. We believe it might be useful if the Committee engaged in further dialogue with key users of information (including banks as information users, broking analysts, investors etc) to ascertain the information they would wish to access. These discussions, along with an appreciation of the costs and sensitivities of providing such information, may lead to some constructive suggestions as to what information is important and should therefore be disclosed. In order to achieve this outcome however, participants in this process will need to move away from ambit claims and blanket resistance. We believe

this would facilitate the development of more focused and less burdensome disclosure requirements.

Disclosure of Sub-Consolidated Capital Adequacy Ratios

164. We note that while the proposed levels of disclosure are very comprehensive, some areas of disclosure could be strengthened. Pillar 1 of the new Accord places some emphasis on measuring capital adequacy at every tier within a banking group as well as on a fully consolidated basis. However, there appears to be no proposal (even in summary form) for banks to disclose their capital positions at each tier. We believe these positions should be disclosed. In addition, the focus of disclosure on capital adequacy (refer Appendix 7 in the Pillar 3 supporting document) appears to be on total capital. This absence of Tier 1 numbers is particularly puzzling given the focus that banks and markets appear to give to Tier 1 capital positions. Arguably, on a going concern basis, Tier 1 capital is a more relevant benchmark than total capital.

Core and Supplementary Disclosure

165. The Committee has divided proposed disclosures into core and supplementary. Both types of disclosures are of equal importance. The Committee emphasises that core disclosures must be made by all institutions whilst supplementary disclosures need only be made by banks to which they have some particular relevance. These types of disclosures are broadly referred to as recommendations. Notwithstanding this general description, the Committee proposes that banks should make these disclosures. Pillar 3 also classifies some disclosures for credit risk in the banking book into 'requirements' and 'recommendations'. APRA believes that these two sets of nomenclature for disclosures is potentially confusing.
166. APRA believes that a common terminology should be used across all disclosures, ie disclosures should be classified as either core or supplementary. We would argue strongly against a classification of disclosures into required or recommended. Thus all disclosures by definition should be required disclosures with their application dependent on the particular circumstances of a bank. We envisage that supervisors will face difficulty in requiring banks to implement so-called 'recommended' disclosures. APRA considers the question of whether or not supervisors can impose disclosure requirements, as a matter of implementation and this should not reflect in the status afforded disclosures.
167. We would suggest that all levels of disclosure are inherently subject to a relevance test. Thus all core disclosures would need to be made where relevant, ie if a bank does not use an IRB approach then clearly it need not comply with any core disclosure requirements applicable to use of an IRB approach. Similarly, supplementary disclosure would be required to be applied where relevant to a particular bank. A supervisor would apply the same test of materiality and relevance to core and supplementary disclosure when applied to measuring credit risk on the banking book as it would to disclosures on capital numbers, market risk, operational risk etc.
168. Rather than defining a new set of disclosures as 'required' we would suggest that the Committee state, for example, that if a bank did not fully satisfy all 'core disclosures' and relevant 'supplementary disclosures' for the use of an IRB approach, the bank could not report its risk profile and capital adequacy using this approach. In effect, this is

simply adding another device which a supervisor might implement to enforce desired disclosures.

Materiality

169. APRA agrees with the Committee that disclosed information needs to be material and that it is not possible to set fixed rules as to what constitutes materiality. We also agree that not all information required to be disclosed is material for every institution. The proposed definition of materiality would appear to represent an appropriate test to be applied in deciding whether items specified by the Committee need to be disclosed. However, changes in business and systems of banks will necessarily require a review of the disclosures which a bank may need to make, including as to the materiality of information. Supervisors will need to ensure they have resources and processes in place to ensure they implement required reviews.

Proprietary Information

170. The need for banks to disclose proprietary information is perhaps the most contentious part of the Committee's disclosure requirements. Where a bank wishes to utilise its own systems (in part or full) for the measurement of risk and assessment of capital adequacy, then markets clearly will require some information on those systems if it is to fully understand the assessment of capital adequacy. On the other hand, of course, banks' competitiveness increasingly depends upon their ability to gather information and access risk in a superior fashion. This places a premium on proprietary systems (databases, models etc) which enable a bank to accurately and efficiently assess and price risk.
171. The information needed by a market does not, however, necessarily mean that the market should be placed in a position whereby it could easily replicate the bank's systems. What it needs is information to allow it to reach some key judgments, ie does a bank's approach to assessing risk look reasonable (eg a broad system description noting whether modelling is used and key factors may suffice), are risk numbers produced by the system reasonable (eg what sort of risk factors are applied to significant types of risk may suffice), and what has been the performance of the systems vis-a-vis actual outcomes (eg actual losses against predicted losses may suffice).
172. Supervisors should carefully assess whether the information which a bank is required to disclose adds substantially to the ability of the market to assess a bank's risk profile and capital adequacy. If not, and if such information is proprietary, then we believe there is a reasonable case for banks not disclosing this information. On the other hand, should such proprietary information be of some importance to such an assessment, then we believe a supervisor should insist on disclosure of such relevant information. It is our perception at this time that some of the proprietary information which the Committee's disclosure proposals capture would not add substantially to the market's assessment of an individual bank's risk profile and capital adequacy.

Timeliness

173. For market discipline to function effectively, markets clearly need to have access to pertinent information as soon as possible. The Committee has indicated that it believes proposed disclosures should be made on a semi-annual basis, although information on the overall framework of a bank, for instance its risk management function, could be

provided annually, while other more time sensitive information should be provided quarterly. We agree that the frequency of different disclosures may vary.

174. APRA agrees that disclosures of systems descriptions (including models) etc, need only be provided on an annual basis. Of course, where a bank undertakes a major change in systems, then it may be more appropriate to disclose this event closer to the time of change rather than waiting for an annual reporting cycle. Disclosures relating to the performance of systems can also be best left to an annual cycle. In the normal course, these details should not change significantly from quarter to quarter, so that the information which these disclosures provide regarding the details of banks' systems and their effectiveness, can be safely reviewed on a less frequent basis.
175. Against this background, we believe that much of the qualitative disclosures proposed by the Committee could be made on an annual cycle. In addition, we would suggest that a number of items included as part of quantitative requirements, notably with respect to the IRB approach, relate to how a bank's systems produce particular risk measures. Such information that pertains to the workings of a system need only be disclosed on an annual basis, eg distribution of external rated obligors over internal rating classes.
176. On the other hand, there are a number of proposed disclosure items that we believe should be disclosed quarterly by all banks, even if for some banks they do not change substantially within a year. These items relate to broad measures of risk and holdings of capital which enable a market to assess the current status of a bank's risk profile and capital adequacy, and any shifts in these items. These numbers are fundamental to the exercise of market discipline over banks and we believe should be made regularly available by all banks, even if only to confirm unchanged position.

Comparability

177. APRA considers that an important feature of any disclosure regime is to ensure comparability between information disclosed by individual banks. While markets will need to analyse disclosed information individually, markets (and supervisors) also need an ability to compare information across all disclosing banks. The ability to highlight differences between banks is an important tool in any assessment of a bank's capital adequacy.
178. Against this background, APRA believes there is a strong case for the Committee mandating disclosure of core quantitative information in a fixed form. While we have some reservations about some specific disclosure templates proposed by the Committee, we disagree with the Committee's proposal to allow banks to provide information in a different format to the suggested templates. Once templates are established we believe there would be considerable merit in ensuring all banks report on this common basis. Should banks wish to qualify the information (numbers) reported, or to propose a different presentation, they should be able to do so separately. This will ensure markets will at least have some common platforms from which they can make comparisons.
179. The issue of definitions is also of some significance. Comparison of disclosures is undermined where information is prepared according to different definitions. This is relevant, for example, with respect to definitions of 'business lines' and 'economic value' which different banks may apply when meeting proposed disclosure requirements on operational and interest rate risk. In disclosing interest rate risk, banks may also

apply different yield curves and buckets for exposures. It would be highly useful if the Committee could provide definitions for key disclosure items. We accept this is not always practical or appropriate. Where the Committee cannot provide definitions, it should consider mandating banks providing definitions underpinning their disclosures. While this may not improve comparability of disclosures it will necessarily alert the market to differences between disclosed information. The identification of such differences may contribute over time to the development of a market consensus on definitions.

180. Clearly there is less scope for the Committee to provide for standardised disclosure of qualitative information beyond the requirements set down already. The detail and form of qualitative disclosure undertaken by individual banks will necessarily need to vary far more than for quantitative disclosure reflecting the differences in individual banks business and systems. The challenge for supervisors in implementing a Pillar 2 assessment of the adequacy of banks' disclosure will be in assessing the adequacy of individual bank's qualitative disclosures. Differences in such assessments carries the risk of reducing comparability of qualitative disclosures both domestically and internationally.

Verification

181. The Committee has indicated that it expects information to be subject to a suitable verification process on at least an annual basis, probably in the context of the annual report. This verification process will necessarily impose additional costs upon banks. APRA supports the principle of requiring disclosed information to be subject to a verification process. We would not, however, envisage this requirement as applying to all quarterly disclosures provided that such disclosures were verified once a year.
182. Verification may occur in a number of forms - from a full check of all numbers to a review of systems that produce numbers. There is also a question as to whether every item of disclosure necessarily needs to be verified each year. Systems (including models) are particularly relevant in this regard. Arguably, where banks' systems do not undergo any substantive changes from year to year it may be unnecessarily costly for a bank to have to verify those systems each year. Against this background, a program of revolving verification of disclosures might be acceptable. A supervisor would, of course, need to be satisfied that in the event of systems undergoing any material changes an appropriate verification process would be applied notwithstanding the schedule of verification that would otherwise have been applied.
183. There is also the question of who should undertake a verification process. APRA would suggest that the Committee provide some guidance as to the type of verification process it would wish to be applied to disclosed information. In particular, the Committee should clarify as to whether it is committed to an annual verification across all forms of required disclosures.

Specific Comments

184. We would like to offer some specific comments on aspects of the Pillar 3 proposals:
- (a) We are not sure why disclosures relating to securitisation have been specifically identified as being required to be included in a bank's 'statutory accounts'. For

other disclosures, the Committee has only suggested a suitable verification process, ‘probably in the context of annual reports’. We do not believe that securitisation activities, more than any other, need to be disclosed in this fashion.

- (b) In the event that information needs to be reported for securitisation activities we would suggest details should be provided specifically on any basis swaps provided by banks. We also believe disclosed data should capture assets originated by the group other than by way of sale of assets which have been securitised, ie where a group establishes arrangements with parties (mortgage brokers) to originate loans directly into securitisation vehicles sponsored by the bank.
- (c) We note that proposed Template 2.1 does not separate out deductions from Tier 1 and Tier 2 capital. Given that deductions will need to be made separately from these two tiers of capital, disclosure should accommodate this event. Such an approach would make more transparent policies adopted by supervisors with respect to deductions from capital.
- (d) In Template 2.4, we suggest the addition of a column to capture maturities between 3 and 5 years. Such information would allow a market to determine the amount of a bank's Lower Tier 2 capital which will drop out of eligible capital over the next year (ie 20% of Lower Tier 2 capital with maturities less than 5 years will disappear from a bank's capital each year under amortisation provisions). There should be a separate identification of any amounts of Tier 1 innovative capital instruments which have been included in Tier 2 capital because of limits on amounts of innovative capital instruments included in Tier 1 capital. Such amounts would represent a standing source of potential Tier 1 capital in the future.
- (e) Templates 3.1.1 through to 3.1.4 would be better classified by broad types of counterparty rather than loans, securities and derivatives categories. Classifying by counterparty better highlights the source of credit risk. With respect to template 3.1.1, such a classification is more relevant to the impact of CRMT, ie a substantial part of CRMT is about transferring the counterparty risk weight applied. Alternatively, the exposures could be broken up into on-balance sheet and off-balance sheet (with perhaps some further break-up of the off-balance sheet component).
- (f) With regards to Template 3.1.4, we presume that the column reporting net exposures only reflects the impact of netting. In the normal course, other forms of CRMT should not alter the underlying maturity of an exposure. However, in so far as netting in effect allows transactions with different underlying maturities to be offset, it is not clear how netted exposures would be reported for maturity purposes.
- (g) Template 3.II.1 does not enable an estimate of the total exposure in each risk weighting category that is actually rated. Such a number would be useful to the market in assessing a bank's risk weighting.
- (h) Template 3.IV.5 focuses on on-balance sheet netting. Arguably, similar information should also be provided for off-balance sheet netting.

- (i) Template 3.IV.6 provides information on the affect of guarantees/credit derivatives. To help the market understand how active a bank may be in portfolio risk management some break-up of guarantees/credit derivatives sold (and not just purchased) by a bank might also be useful. In terms of Template 4.1, credit derivatives might constitute a portfolio.
- (j) Templates 5.1 and 6.1 are heavily dependent on definitions used, eg what are covered by business lines, what is meant by economic value, how are maturity buckets organised? As noted above, if definitions are not standardised, they should be disclosed.
- (k) Template 7.1 should include under Market Capital Risk Requirement a row for credit derivatives. We also note no provision for any Tier 1 capital ratios to be reported.

Attachment 1: Australian Guidance Notes on the Treatment of Credit Derivatives in the Banking and Trading Books

Treatment of Credit Derivatives in the Banking Book

1. This Guidance Note details the approach to be used by locally incorporated ADIs to determine the capital to be held against credit derivative instruments in the banking book. The capital adequacy rules pertaining to credit derivatives in ADIs' trading books are described in [AGN 113.4 – Treatment of Credit Derivatives in the Trading Book](#).
2. When determining whether a credit derivative transaction should be allocated to the banking or trading book, consideration should be given to the trading book requirements detailed in [AGN 113.1 – The Trading Book and Trading Book Policy Statement](#) (paragraphs 1-2).
3. The approach set out here is broadly consistent with the existing capital adequacy rules applied to other banking book instruments, with credit derivatives being regarded as similar to guarantees or other direct credit substitutes. APRA recognises that the relatively simple structure on which the existing rules are based constrains the ability to accommodate the flexibility of credit derivatives without undermining the efficacy of those rules. While the capital treatment is conservative, APRA is of the view that such an approach is justified given the uncertainties present in the global credit derivatives market.
4. While there are currently no internationally agreed capital adequacy guidelines for credit derivatives, work is continuing. It is APRA's intention to be involved with, and closely monitor, any developments in this area and, if deemed necessary, amend this Guidance Note accordingly.

Scope

5. This Guidance Note applies to the most commonly traded credit derivatives: credit-default swaps, total-rate-of-return swaps¹¹, credit-linked notes and first-to-default baskets. APRA is aware that more complex credit derivative products will undoubtedly emerge. ADIs transacting in more complex credit derivatives or in structures with non-standard features (such as those involving portfolios of reference obligations, other than first-to-default baskets) will be expected to approach APRA to discuss an appropriate capital treatment for such instruments. If, over time, these other types of credit derivative product are seen to become commonplace, APRA will, where practicable, incorporate the capital adequacy treatment of such products into this Guidance Note.
6. The evolution of instruments capable of transferring credit risk raises many important issues for prudential supervisors, many of which are common to a range of products. Of particular concern to APRA is the effect of credit derivatives on the transparency of individual credit portfolios. Since credit derivatives facilitate the transformation of credit risk profiles, large exposures and concentrations within ADIs' portfolios may become increasingly difficult to identify. Where APRA considers a particular ADI to be undertaking significant credit derivative activity, as either a purchaser or seller of protection, such that large exposures and concentrations are a potential concern, APRA may require the ADI to adopt an alternative capital treatment to that which is described in this Guidance Note.
7. Under APRA's current reporting framework, ADIs will be expected to provide APRA with details of credit derivative transactions that give rise to large exposures as required by the Large Exposures Return.
8. Where an ADI has purchased protection in the absence of an underlying asset (ie it has an open short position in the banking book), or where the protection is not recognised by this Guidance Note, the credit derivative is not taken into account for the purposes of capital adequacy. In general, ADIs with open short positions in credit derivatives are expected to include those positions in the trading book (refer [AGN](#)

¹¹ All total-rate-of-return swaps, except those that are hedging an underlying banking book exposure, should be included in an ADI's trading book. These instruments differ from typical direct credit substitutes in that they cover not only the default of the reference obligation but any changes in its market value. Changes in market value may be settled frequently, exposing an ADI to significant market risk that is not captured by the capital treatment of the banking book.

[113.4 – Treatment of Credit Derivatives in the Trading Book](#)).¹²

Terminology

9. Credit derivatives are part of a broader family of instruments that enable users to transfer the credit risk of an asset from one party, the *protection buyer*, to another, the *protection seller*, in isolation from other risks.
10. In this Guidance Note, the following terminology has been used when describing a credit derivative transaction:
 - (a) *underlying asset* – the asset which is being protected by the credit derivative;
 - (b) *protection* – this reflects the extent of risk transference from the protection buyer (or risk seller) to the protection seller (or risk buyer). The protection provided by a credit derivative reduces the amount of capital that must be held by the protection buyer to cover the credit risk on the underlying asset;
 - (c) *reference entity* – the legal entity whose credit risk is being transferred by the credit derivative. In the case of first-to-default baskets, the reference entity is not a single entity but a ‘basket’ or portfolio of reference entities;
 - (d) *obligation* – any financial obligation of the reference entity or of an entity that is unconditionally and irrevocably guaranteed by the reference entity, as defined under the terms of the credit derivative contract, on which a credit event must occur for the credit derivative to be triggered;
 - (e) *credit events* – events affecting the reference entity that trigger a credit-event payment under the terms of the credit derivative contract;
 - (f) *credit-event payment* – the amount that is paid following the occurrence of a credit event. The payment can be in the form of physical settlement (payment of par in exchange for physical delivery of a deliverable obligation of the reference entity) or cash settlement (payment of a fixed amount, or payment of the par value of the reference obligation less that obligation’s recovery value);
 - (g) *deliverable obligation* – any obligation of the reference entity that can be delivered, under the terms of the contract, if a credit event occurs. A deliverable obligation is relevant for credit derivatives that are to be physically settled; and
 - (h) *reference obligation* – the obligation which determines the amount of the credit-event payment. A reference obligation is relevant for obligations that are to be cash settled (on a par less recovery basis).

Calculating the Amount of Protection Purchased or Sold

11. An important component of the regulatory capital calculation for credit derivatives is the amount of protection purchased by the protection buyer or the amount of protection sold by the protection seller.
12. The types of *credit event* specified in the credit derivative contract determine the extent of risk transference from the protection buyer to the protection seller. To ensure that an event of default occurs on the underlying asset with a payment occurring under the terms of the credit derivative, the set of credit events should contain as wide a range of triggers as possible. If the set of credit events is restrictive, it is possible that the credit derivative hedge will transfer insufficient risk.
13. For capital adequacy purposes, an ADI will only be regarded as having purchased protection if the range of specified credit events is such that it is clear the credit risk of the underlying asset has been transferred

¹² Open long positions in total-rate-of-return swaps should also be included in the trading book.

to the protection seller.¹³

14. Where an ADI has sold protection using a credit derivative, it should be assumed that 100 per cent of the credit risk is purchased irrespective of the range of credit events specified.
15. The size and nature of any *materiality thresholds* specified in the credit derivative contract may also reduce the amount of credit risk transferred from the protection buyer to the protection seller. Materiality thresholds require a given level of loss to occur before the credit derivative is triggered. If these thresholds are set too high, it is possible that a significant loss could be incurred on the underlying asset without a credit-event payment being made.
16. When determining the amount of protection purchased using a credit derivative, the ADI should take into account any materiality thresholds written into the credit derivative contract, which may reduce the protection amount. An ADI will not be regarded as having purchased protection if there exist any materiality thresholds that require a comparatively high percentage of loss to occur before the credit derivative is triggered.
17. When determining the amount of protection sold by the credit derivative, the ADI should assume that any materiality thresholds written into the credit derivative contract do not reduce the acquired credit risk.
18. The type of *credit-event payment* specified in the contract will also impact on the amount of protection purchased or sold under the credit derivative. Where the credit-event payment is defined as the par value of the reference obligation less its recovery value (ie the credit derivative is cash settled), or there is payment of the par value of an obligation in exchange for its physical delivery, the amount of protection purchased or sold must be set equal to the par value of that obligation. Where the credit-event payment is defined as a fixed amount, the amount of protection purchased or sold must be set equal to that amount. While APRA acknowledges that this latter approach may be conservative in some cases, it is not possible to adopt an alternative approach within the current capital adequacy framework.
19. Credit derivatives that include options to extend or reduce the term of the contract may affect the protection purchased or sold. Where embedded options exist in credit derivative contracts, an ADI must adopt the most conservative approach for the purposes of calculating regulatory capital. Application of this principle implies that:
 - (a) where an ADI as *protection buyer* has *purchased* an option to extend the contract term, the ADI may assume that the option will be exercised; where the option is to reduce the contract term, it can be assumed that the option will not be exercised;
 - (b) where an ADI as *protection buyer* has *written* an option to extend the contract term, the ADI must assume that the option will not be exercised; where the option is to reduce the contract term, it must be assumed that the option will be exercised;
 - (c) where an ADI as *protection seller* has *purchased* an option to extend the contract term, the ADI must assume that the option will be exercised; where the option is to reduce the contract term, it must be assumed that the option will not be exercised; and
 - (d) where an ADI as *protection seller* has *written* an option to extend the contract term, the ADI must assume that the option will be exercised; where the option is to reduce the contract term, it must be assumed that the option will not be exercised.
20. Credit derivatives that include provisions to vary the cash flows paid or received (eg step-up provisions) may also affect the protection purchased or sold. At this stage, ADIs transacting in credit derivatives containing these types of provisions should approach APRA to discuss an appropriate capital treatment.

¹³ APRA expects that the transfer of credit risk will require at least the specification of bankruptcy, obligation acceleration or obligation default and failure to pay as credit events under the terms of the credit event contract.

Credit-Default Swaps

21. Where *protection is purchased* using a credit-default swap referenced to a single reference entity, an ADI may replace the risk weight of the underlying asset with the risk weight of the protection seller. The amount of protection that may be recognised is bound by the requirements outlined in paragraphs [10-19](#) and [28-35](#).
22. Where *protection is sold* via a credit-default swap referenced to a single reference entity, the ADI acquires an exposure to the credit risk of that entity. In this case, the risk weight that must be applied to the exposure is the risk weight attached to the reference entity. The amount of the exposure is the maximum possible amount payable under the terms of the credit derivative contract if a credit event were to occur (refer paragraphs [10-19](#)).

Total-Rate-of-Return Swaps

23. Where *protection is purchased* using a total-rate-of-return swap, an ADI may replace the risk weight of the underlying asset with the risk weight of the protection seller. The amount of protection that may be recognised is bound by the requirements outlined in paragraphs [10-19](#) and [28-35](#).
24. *Protection sold* via a total-rate-of-return swap should be included in an ADI's trading book, as explained in [footnote 1](#).

Credit-Linked Notes

25. Where *protection is purchased* using a credit-linked note, the ADI may replace the risk weight of the underlying asset with the risk weight of any funded protection acquired.¹⁴ The amount of protection that may be recognised is bound by the amount of funding received and by the requirements outlined in paragraphs [10-19](#) and [28-35](#).
26. Where *protection is sold* via a credit-linked note, the ADI acquires an exposure to both the reference entity and the protection buyer, with the amount of the exposure being the face value of the note.¹⁵ To account for this exposure, the higher of the risk weights applicable to the reference asset and the protection buyer must be applied to the exposure.

First-to-Default Baskets

27. Where an ADI has *purchased protection* using a credit derivative that is referenced to more than one entity and that protection terminates after a credit event occurs on one or more of those entities (ie a first-to-default basket product), protection is only recognised against one entity in the basket. The ADI may choose which entity is protected, with the risk weight of that entity being replaced by the risk weight of the protection seller. The amount of protection that may be recognised is bound by the requirements outlined in paragraphs [10-19](#) and [28-35](#).
28. Where an ADI has *sold protection* using a first-to-default basket product, capital must be held against all the reference entities in the basket. The risk-weighted exposure arising from the credit derivative will be the sum of the individual risk-weighted exposures in the basket, with the amount of capital held capped at the maximum payout possible under the contract. An example of this treatment is provided in the [Attachment](#) to this Guidance Note.

Asset Mismatches

29. Where an ADI has purchased protection using a credit derivative and the reference obligation (in the case of cash settlement), or deliverable obligation(s) (in the case of physical settlement), is different from the underlying asset, the amount of protection provided by the credit derivative may not be sufficient to

¹⁴ Subject to APRA's collateral guidelines as set out in [AGN 112.1](#).

¹⁵ Where the credit-linked note is structured such that the protection seller receives some percentage of the note's face value if the credit derivative is triggered, the amount of exposure is the difference between the face value and this percentage amount.

constitute an effective hedge. For this reason, APRA requires a range of criteria to be met before the protection buyer can apply the treatment specified in paragraphs [20](#), [22](#), [24](#) or [26](#).

30. For credit derivative hedges requiring *physical settlement*, if the underlying asset is a *deliverable obligation* under the terms of the credit derivative contract, the ADI will be regarded as having purchased protection. Where this is not the case, the guidelines for cash settlement, detailed in paragraph 30 below, will apply.
31. For credit derivative hedges requiring *cash settlement*, an ADI may recognise the protection acquired under a credit derivative if the following criteria are met:
 - (a) the underlying asset and the reference obligation are obligations of the same reference entity or the underlying asset is an obligation of an entity that is unconditionally and irrevocably guaranteed by the reference entity to the credit derivative contract;
 - (b) the underlying asset is an *obligation* under the terms of the credit derivative contract; and
 - (c) the reference obligation is ranked *pari passu* or lower, in seniority of claim, relative to the underlying asset.
32. Where an ADI has sold protection using a credit-default swap or credit-linked note in the banking book, and hedged that exposure with another credit derivative, the ADI will be regarded as protected if the hedged credit derivative and the hedging credit derivative are equal and opposite transactions in all respects (when a maturity mismatch exists, ie the credit derivatives are equal and opposite in all respects other than tenor, paragraphs 32-[33](#) apply).¹⁶

Maturity Mismatches

33. Where an ADI has purchased protection using a credit derivative and the maturity of the credit derivative contract is less than the maturity of the underlying asset, the amount of protection that is recognised for capital adequacy purposes must be reduced. The amount of this reduction depends on the residual maturity of the credit derivative relative to the residual maturity of the underlying exposure. For example, in the case of a ten-year exposure hedged by a credit derivative with a residual maturity of nine years, 90 per cent of the exposure may be risk weighted on the basis of the protection seller, with the remaining 10 per cent risk weighted on the basis of the underlying exposure.
34. At a minimum, the credit derivative would need to have a residual maturity of at least one year to be eligible for this treatment.
35. Where an ADI has purchased protection using a credit derivative and the maturity of the credit derivative contract is greater than the maturity of the underlying asset, the amount of protection that is recognised for capital adequacy is unaffected by the maturity mismatch.

Currency Mismatches

36. Where a credit derivative contract is denominated in a different currency to the underlying asset, the amount of protection purchased (as defined in paragraphs [10-19](#) above) must be valued at the current exchange rate. Where the value of that protection (valued in terms of the currency of the underlying asset) is equal to or greater than the value of the underlying asset, the underlying asset may be regarded as protected. Where the mark-to-market value of that protection is less than the value of the underlying asset, the residual must be risk weighted on the basis of the underlying asset. For example, if protection on an Australian dollar denominated underlying asset is purchased via a credit derivative that pays US dollars if triggered, the amount of protection is the US dollar payment valued at the current exchange rate.

Example - Capital Adequacy Treatment of the Protection Seller in a First-to-Default Basket Product in the Banking

¹⁶ Where the protection purchased and sold is for different amounts, the matched portion may be offset with the residual regarded as an open position and subject to the guidance detailed in paragraphs [20-27](#).

Book ([Paragraph 27](#))

Assume an ADI sells protection on a basket of 10 reference entities, each risk weighted at 100%.

The terms of the credit derivative contract require the ADI to pay \$100 if a credit event occurs on any one of the 10 reference entities, after which time the product will terminate.

The ADI is exposed to the 10 entities in the credit derivative basket. The amount of the exposure is \$100 (because this is the amount the ADI stands to lose if a credit event occurs on any one of the 10 entities in the basket).

As per [paragraph 27](#), the sum of the risk weights applicable to all the entities in the basket must be applied to the exposure to determine the risk-weighted exposure. Since all entities in the basket are risk weighted at 100%, the risk-weighted exposure of the ADI is $10 \times 100\% \times \$100 = \$1,000$. The amount of capital to be held against this risk-weighted exposure is \$80 (8% of \$1,000).

The amount of capital held against the exposure is capped at the maximum payout possible under the contract. The maximum payout in this example is \$100. Since the amount of capital required to be held against this exposure is \$80, the cap will not take effect.

Suppose that the basket contained 13 entities with exposures to each entity required to be risk weighted at 100%. The risk-weighted exposure of the ADI in this case is $13 \times 100\% \times \$100 = \$1,300$. The amount of capital that would normally be held against this risk-weighted exposure is \$104 (8% of \$1,300). Since the Guidance Note allows the amount of capital held against the product to be capped at the maximum possible payout, the ADI need hold only \$100 in capital against the position. This equates to a risk-weighted exposure of \$1,250 (ie $\$100 \times 1/0.08$). Hence, \$1,250 should be added to the risk-weighted assets of the ADI.

Treatment of Credit Derivatives in the Trading Book

1. This Guidance Note details the approach to be used by Australian ADIs to determine the capital to be held against credit derivative instruments in the trading book. The capital adequacy rules pertaining to credit derivatives in ADIs' banking books are described in [AGN 112.4 – Treatment of Credit Derivatives in the Banking Book](#).
2. When determining whether a credit derivative transaction should be allocated to the banking or trading book, consideration should be given to the trading book requirements detailed in [AGN 113.1](#) (paragraphs 1-2). Consistent with the approach applied to interest rate and equity related instruments, each ADI will be required to seek APRA's approval before credit derivative transactions can be included in the trading book. Amongst other requirements, an ADI will be required to demonstrate to APRA that such credit derivative positions have been taken on with a trading intent and can be marked-to-market on a daily basis.
3. The approach set out here is broadly consistent with the existing capital adequacy rules applied to other trading book instruments. APRA recognises that the relatively simple structure on which the existing rules are based constrains the ability to accommodate the flexibility of credit derivatives without undermining the efficacy of those rules. While the capital treatment is conservative, APRA is of the view that such an approach is justified given the uncertainties present in the global credit derivatives market.
4. While there are currently no internationally agreed capital adequacy guidelines for credit derivatives, work is continuing. It is APRA's intention to be involved with, and closely monitor, any developments in this area and, if deemed necessary, amend this Guidance Note accordingly.

Scope

5. This Guidance Note applies to the most commonly traded credit derivatives: credit-default swaps, total-rate-of-return swaps, credit-linked notes and first-to-default baskets. APRA is aware that more complex credit derivative products will undoubtedly emerge. ADIs transacting in more complex credit derivatives or in structures with non-standard features (such as those involving portfolios of reference

obligations, other than first-to-default baskets) will be expected to approach APRA to discuss an appropriate capital treatment for such instruments. If, over time, these other types of credit derivative product are seen to become commonplace, APRA will, where practicable, incorporate the capital adequacy treatment of such products into this Guidance Note.

6. The evolution of instruments capable of transferring credit risk raises many important issues for prudential supervisors, many of which are common to a range of products. Of particular concern to APRA is the effect of credit derivatives on the transparency of individual credit portfolios. Since credit derivatives facilitate the transformation of credit risk profiles, large exposures and concentrations within ADIs' portfolios may become increasingly difficult to identify. Where APRA considers a particular ADI to be undertaking significant credit derivative activity, as either a purchaser or seller of protection, such that large exposures and concentrations are a potential concern, APRA may require the ADI to adopt an alternative capital treatment to that which is described in this Guidance Note.
7. Under APRA's current reporting framework, ADIs will be expected to provide APRA with details of credit derivative transactions that give rise to large exposures as required by the Large Exposures Return.
8. ADIs have the choice of using either the standard method or, with APRA's approval, an internal model to measure the general market risk and specific risk charges on credit derivative positions in the trading book. This Guidance Note details how the capital charge for credit derivatives should be calculated under the standard method only. ADIs will need to seek APRA's approval before an internal risk measurement model can be used to generate the regulatory capital charge.

Terminology

9. Credit derivatives are part of a broader family of instruments that enable users to transfer the credit risk of an asset from one party, the *protection buyer*, to another, the *protection seller*, in isolation from other risks.
10. In this Guidance Note, the following terminology has been used when describing a credit derivative transaction:
 - *underlying asset* – the asset which is being protected by the credit derivative;
 - *reference entity* – the legal entity whose credit risk is being transferred by the credit derivative. In the case of first-to-default baskets, the reference entity is not a single entity but a 'basket' or portfolio of reference entities;
 - *obligation* – any financial obligation of the reference entity or of an entity that is unconditionally and irrevocably guaranteed by the reference entity, as defined under the terms of the credit derivative contract, on which a credit event must occur for the credit derivative to be triggered;
 - *credit events* – events affecting the reference entity that trigger a credit-event payment under the terms of the credit derivative contract;
 - *credit-event payment* – the amount that is paid following the occurrence of a credit event. The payment can be in the form of physical settlement (payment of par in exchange for physical delivery of a deliverable obligation of the reference entity) or cash settlement (payment of a fixed amount, or payment of the par value of the reference obligation less that obligation's recovery value);
 - *deliverable obligation* – any obligation of the reference entity that can be delivered, under the terms of the contract, if a credit event occurs. A deliverable obligation is relevant for credit derivatives that are to be physically settled; and
 - *reference obligation* – the obligation which determines the amount of the credit-event payment. A reference obligation is relevant for obligations that are to be cash settled (on a par less recovery basis).

General Principles – General Market Risk

11. General market risk is the risk that the market price of a security will rise and fall owing to changes in the general level of market interest rates and/or the general level of credit spreads. For ADIs that use the standard method, credit derivatives based on a single reference entity are treated in the same way as interest rate related derivatives (refer Section “Interest Rate Risk” of [AGN 113.3](#)) for the purposes of calculating a general market risk capital charge. Each credit derivative instrument is broken down into a notional debt instrument, to reflect the interest rate or fee-paying leg (if regular fees are paid under the terms of the contract) and, where applicable, a position in the reference obligation.
12. These positions should be included in the maturity ladder applicable to the currency of the cash flows and reported at their market values.

General Principles – Specific Risk

13. Specific risk is the risk that the price of a particular security will rise and fall due to factors other than those explained by general market movements. Although similar in nature to credit risk, specific risk is a broader concept in the sense that it captures the risk of shorter-term fluctuations in the value of the security (termed idiosyncratic risk) as well as event and default risk. This distinction has implications for the treatment of matched positions (refer [paragraphs 29-33](#) below). While default risk is captured by the cash flows attached to all the credit derivative instruments covered by this Guidance Note (ie credit-default swaps, total-rate-of-return swaps and credit-linked notes), the idiosyncratic component of specific risk may only be captured by the cash flows associated with total-rate-of-return swaps.
14. The amount reported for specific risk purposes depends on the type of credit-event payment specified in the credit derivative contract. Where the credit-event payment is defined as the par value of the reference obligation less its recovery value (ie the credit derivative is cash settled), the amount reported should be the par value of the reference obligation. Where the credit-event payment is defined as a fixed amount, the amount reported should be the fixed amount. Similarly, where there is payment of the par value of an obligation in exchange for its physical delivery, the amount reported should be the par value of the obligation. In the latter two cases, the amount reported should reflect a position in the reference entity with maturity equal to the term to maturity of the credit derivative.

General Principles – Counterparty Risk

15. In general, counterparty risk charges are calculated for all off-balance sheet derivatives whether in the banking book or the trading book. ADIs undertaking particular types of credit derivative transaction in the trading book will be expected to calculate a counterparty risk charge using the Current Exposure Method described in [AGN 112.2 – Risk-Weighted Off-Balance Sheet Credit Exposures](#). This method calculates the regulatory capital charge for counterparty risk as the sum of the mark-to-market value of the derivative (if positive) and a measure of future potential credit exposure, where the latter is based on an ‘add-on’ factor that depends on the type and maturity of the derivative transaction.
16. The current add-on factor matrix does not include a specific factor for transactions such as credit derivatives, which have debt as the underlying asset. APRA intends to consider appropriate add-on factors for credit derivatives in due course. In the interim, the add-on factors to be used to determine regulatory capital will be based on the existing matrix. Where the reference entity is ‘qualifying’ (refer paragraph 8 of [AGN 113.3](#)) the equity add-ons are to be used, otherwise commodity add-ons will apply.

Credit-Default Swaps

17. The *protection buyer* in a credit-default swap should enter into the maturity ladder a short position in a notional debt instrument, where regular interest or fee cash flows are to be paid, to reflect the general market risk associated with those cash flows. A specific risk capital charge must also be calculated on a short position in the reference entity (refer [paragraph 14](#) above).
18. The *protection seller* in a credit-default swap should enter into the maturity ladder a long position in a notional debt instrument, where regular interest or fee cash flows are to be received, to reflect the general market risk associated with those cash flows. A specific risk capital charge must also be calculated on the long position in the reference entity (refer [paragraph 14](#) above).

19. The protection buyer must always calculate a counterparty risk charge, however the protection seller need only calculate a counterparty risk charge if interest payments or fees are outstanding.

Total-Rate-of-Return Swaps

20. The *protection buyer* in a total-rate-of-return swap should enter into the maturity ladder a position in a notional debt instrument, where regular interest or fee cash flows are to be exchanged, to reflect the general market risk associated with those cash flows. General market risk and specific risk capital charges must also be calculated on the short position in the reference obligation (refer paragraphs [12](#) and [14](#) above).
21. The *protection seller* in a total-rate-of-return swap should enter into the maturity ladder a position in a notional debt instrument, where regular interest or fee cash flows are to be exchanged, to reflect the general market risk associated with those cash flows. General market risk and specific risk capital charges must also be calculated on the long position in the reference obligation.
22. In a total-rate-of-return swap payments are made to settle any changes in the mark-to-market value of the reference obligation. Each party may be exposed to the other for payment. This means that both the protection buyer and the protection seller should calculate a counterparty risk charge.

Credit-Linked Notes

23. The *protection buyer* in a credit-linked note should enter into the maturity ladder a short position in the underlying interest rate instrument for general market risk purposes. A specific risk capital charge must also be calculated on the short position in the reference entity (refer [paragraph 14](#) above).
24. The *protection seller* in a credit-linked note should enter into the maturity ladder a long position in the underlying interest rate instrument for general market risk purposes. A specific risk capital charge must be calculated on the long position in the reference entity (refer [paragraph 14](#) above) and the long position in the underlying interest rate instrument (ie the long position in the protection buyer).
25. No counterparty risk charges are required for transactions in credit-linked notes.

First-to-Default Baskets

26. The *protection buyer* in a first-to-default basket should enter into the maturity ladder a short position in a notional debt instrument, where regular interest or fee cash flows are to be paid, to reflect the general market risk associated with those cash flows. A specific risk capital charge must also be calculated on a short position in only one reference entity in the basket, with that entity being chosen by the ADI (refer [paragraph 14](#) above).
27. The *protection seller* in a first-to-default basket should enter into the maturity ladder a long position in a notional debt instrument, where regular interest or fee cash flows are to be received, to reflect the general market risk associated with those cash flows. A specific risk capital charge must also be calculated on the long positions in all reference entities in the basket (refer [paragraph 14](#) above). The amount of capital held should be capped at the maximum payout possible under the credit derivative contract.
28. The protection buyer must always calculate a counterparty risk charge, however the protection seller need only calculate a counterparty risk charge if interest payments or fees are outstanding.

Offsetting between credit derivatives

29. In line with the existing trading book treatment (refer paragraphs 32-35 of [AGN 113.3](#)), an ADI may only offset the specific risk capital charges on equal and opposite credit derivative positions.¹⁷ Where the credit derivatives are equal and opposite in all respects other than tenor, the specific risk capital charges cannot be offset. Instead, a single specific risk capital charge should be calculated, based on the reference

¹⁷ The general market risk capital charges may also be offset.

entity (refer [paragraph 14](#) above).

30. The specific risk capital charges arising from different credit derivative product structures cannot be offset (refer [paragraph 33](#) below).

Offsetting between a credit derivative and the associated underlying asset

31. For total-rate-of-return swaps, an ADI may offset the specific risk capital charges on the credit derivative and the corresponding underlying asset, provided the position is both ‘asset matched’ and ‘maturity matched’.¹⁸ An asset-matched position requires the reference obligation and the underlying asset to be identical in all respects (ie the same issuer, coupon, currency and maturity). A maturity-matched position requires the maturities of the total-rate-of-return swap and the underlying asset to be the same. Where the reference obligation and the underlying asset are asset-matched, but the position is not maturity matched (ie the tenors of the total-rate-of-return swap and the underlying asset differ), a single specific risk charge should be calculated on the position in the reference obligation.
32. For credit-default swaps, credit-linked notes and first-to-default baskets, the specific risk capital charges on the credit derivative and the corresponding underlying asset cannot be offset. Where the reference entity and the underlying asset are asset matched (as defined in [paragraph 31](#) above), a single specific risk charge should be calculated on the position in the reference entity. The protection seller in a first-to-default basket may only apply this offsetting treatment to a single specific risk position in a reference entity, with that reference entity being chosen by the ADI.

Review process

33. APRA plans to review the arrangements for specific risk offsetting over the course of the year and, as part of this process, will examine in more detail the credit derivative pricing models being used by Australian ADIs.

¹⁸ The general market risk capital charges on the reference obligation may also be offset.

Attachment 2: Industry Submissions

APRA held discussions with a number of institutions and interested parties in preparing this submission. We also received written submissions from the following organisations:

- Adelaide Bank Limited
- Australia & New Zealand Banking Group Limited
- Australian Association of Permanent Building Societies
- Australian Securitisation Forum
- Bank of Queensland Limited
- Bank of Western Australia Limited
- Bass & Equitable Building Society Limited
- Bendigo Bank Limited
- Commonwealth Bank of Australia
- Credit Union Services Corporation Australia Limited
- Elders Rural Bank Limited
- Greater Building Society Limited
- Heritage Building Society Limited
- Hume Building Society Limited
- Illawara Mutual Building Society Limited
- ING Bank (Australia) Limited
- Lifeplan Australia Building Society Limited
- Macquarie Bank Limited
- Newcastle Permanent Building Society Ltd
- PricewaterhouseCoopers
- St. George Bank Ltd
- Suncorp-Metway Limited
- The Rock Building Society Limited
- Westpac Banking Corporation

While the views contained in this submission are our own, their formulation has benefited greatly from the discussions and submissions received from participants in the Australian financial sector.