



Response to Submissions

Implementation of the Basel II Capital Framework

1. Advanced measurement approaches to operational risk

11 October 2006

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Preamble

In October 2005, the Australian Prudential Regulation Authority (APRA) released for public consultation and comment the discussion paper *Implementation of the Basel II Capital Framework 4. Advanced measurement approaches to operational risk* and a proposed *Prudential Standard APS 115 Capital Adequacy – Advanced Measurement Approaches to Operational Risk (APS 115)*. The paper and standard sought comments about APRA's proposals to introduce the most complex approaches available to an authorised deposit-taking institution (ADI) to determine its operational risk regulatory capital requirement under the Basel II Framework. The paper and standard are available on APRA's website at www.apra.gov.au.

The draft standard provided detail to assist ADIs in determining the criteria that are necessary to demonstrate compliance with the Basel II proposals. In particular, it included qualitative requirements on the basis of which an ADI can demonstrate to APRA that an advanced measurement approach to operational risk (AMA) permeates the management of the ADI's business.

Public consultation on the discussion paper and the draft standard took place between October 2005 and February 2006. Seven submissions were received by APRA. This paper discusses APRA's response to those submissions and other revisions to the first draft. The second draft of APS 115 that has been released with this paper refines APRA's proposals on the AMA and incorporates a number of amendments made in response to the comments made on the initial draft. The standard has also been aligned with APRA's new prudential standard and prudential practice guide format.

The next steps in APRA's consultation will be a final draft standard that will be released with the full suite of standards on the mandatory regulatory capital charges under the Basel II regime, which are expected to be released in the first half of 2007. The Basel II standards will be finalised in late 2007 for implementation on 1 January 2008.

Written submissions on the second draft of the AMA standard should be forwarded by 30 November 2006 and addressed to:

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Chapter 1

Introduction

There has been substantial progress in the international implementation of the AMA since APRA's release of its first draft of APS 115 in October 2005. In particular, as supervisors' thinking on AMA has progressed, the Accord Implementation Group on Operational Risk (AIGOR)¹ has issued a number of papers on specific AMA issues.

To progress the implementation of the AMA in Australia, APRA has conducted a number of on-site visits with ADIs that have applied for accreditation from 1 January 2008. These visits have assisted in highlighting issues where the standard could be better aligned with industry practice. The consultation period for the initial draft of APS 115 ended in February 2006 and a number of submissions were made on APRA's proposals.

This paper discusses APRA's response to submissions. The second draft standard released with this paper incorporates a number of amendments that APRA has made in light of those submissions, issues arising from APRA's accreditation visits and some of the key principles from the AIGOR papers that have been released since October 2005.

¹ AIGOR is a subgroup of the Basel Committee's Accord Implementation Group that develops principles in relation to operational risk under the Basel II Framework.

Chapter 2

Review of submissions

There were seven submissions on APRA's first draft of the AMA prudential standard. This chapter examines the main issues raised and APRA's proposed response in each area. This chapter also addresses issues raised through other channels.

Corporate governance and risk management

The initial proposal

The Basel II proposals on the AMA are relatively high-level in nature owing, in part, to the stage of development of operational risk quantitative techniques. The first draft of the AMA standard provided detail to assist ADIs in determining the criteria that are necessary to demonstrate compliance with the Basel II proposals. In particular, it included qualitative requirements on the basis of which an ADI can demonstrate to APRA that an AMA permeates the management of the ADI's business.

Comments received and issues raised

A number of industry comments were made regarding the following:

- the extent of requirements APS 115 imposed on an ADI's board of directors;
- the overlap between the requirements placed on the board and senior management;
- the level of prescription of the corporate governance and risk management requirements; and
- the overlap of corporate governance and risk management requirements between the standards for the AMA, internal ratings-based approach to credit risk and interest rate risk in the banking book.

APRA's prudential approach

The revised APS 115 has been better aligned with a principles-based approach to corporate governance and risk management. However, it retains a number of specific requirements which APRA believes are important given that the absolute amount of regulatory capital for operational risk under the AMA is determined by an ADI's own quantitative model.

The revised standard still makes it clear that the board is responsible for the overall operational risk profile of the ADI and the ADI's operational risk management framework. The revised APS 115 clarifies that the board's oversight role is separate from the detailed management responsibilities of senior management and does not define specific reporting formats or their timing.

APRA expects, however, that certain requirements in Attachment A to APS 115 may be included in the draft ADI risk management prudential standard that will be released for consultation in early 2007. Board responsibilities, a risk management function (or role) and internal reporting are core risk management issues that could be included in a single overarching prudential standard. In the interim, however, these issues remain in the draft APS 115 to provide appropriate guidance for ADIs intending to implement the AMA.

Distribution approaches and model granularity

The initial proposal

The initial APS 115 included details of the types of operational risk distributions that could be used as the basis for determining the operational risk regulatory capital requirement. The standard included criteria around the use of a single distribution and, separately, criteria around the use of multiple distributions.

The initial standard also included key data inputs an ADI must consider as part of its approach to operational risk measurement, i.e. internal and external data, scenario analysis and business environment and internal control factors.

Comments received and issues raised

Comments were made on the need to ensure that a principles-based approach to modelling is included in the AMA to allow sufficient flexibility given the rapidly evolving state of the operational risk discipline. It appears that the initial standard was interpreted as prescribing a particular approach to AMA modelling and the incorporation of data inputs into an ADI's operational risk measurement model.

APRA's prudential approach

The intention of the initial standard was not to prescribe an approach to operational risk modelling but to detail certain criteria an ADI would be required to meet depending upon its own approach. The revised standard has been amended to make this clear.

In terms of the necessary data inputs, consistent with the Basel II Framework the revised standard does not distinguish between the use of such inputs in operational risk measurement, mandate their direct input into operational risk capital or specify the degree of granularity required in modelling operational risk exposures. The revised standard does, however, state that the elements must be combined in a way that allows the ADI to ensure the continued effectiveness of its operational risk measurement system. The revised standard makes it clear that a broad approach to operational risk measurement is acceptable provided it incorporates all data factors with an appropriate degree of granularity. This approach is consistent with AIGOR's principles in that flexibility is necessary given the stage of development of operational risk modelling and the continued need for innovation.

The revised standard retains the requirement for an ADI's operational risk measurement system to be sufficiently granular to capture the major drivers of operational risk and incorporate key data inputs of internal and external loss data, scenarios analysis and business environment and control factors.

Expected losses

The initial proposal

The initial APS 115 stated that an ADI's operational risk regulatory capital requirement had to cover expected losses and unexpected losses unless the ADI had accounted for its expected losses in a manner equivalent to holding regulatory capital.

Comments received and issues raised

Industry comments indicated that APRA's proposed approach was inconsistent with approaches likely to be taken in other jurisdictions and was viewed

as restrictive, since the use of the term 'equivalent to holding regulatory capital' purported to exclude the use of budgeting and pricing as a method for measuring and accounting for expected losses.

APRA's prudential approach

The initial APS 115 was released prior to AIGOR's paper *The treatment of expected losses by banks using the AMA under the Basel II Framework*, which includes key principles on the coverage of expected operational risk losses. The second draft of APS 115 has been amended to be better aligned with international practice on this issue.

Independent review

The initial proposal

The initial APS 115 included separate sections regarding the requirement and scoping for independent review of the operational risk management framework (excluding the operational risk measurement system), the operational risk measurement system and data.

Comments received and issues raised

Industry comments sought clarification regarding the definition, nature, timing and structure of an independent review.

APRA's prudential approach

APRA wishes to ensure that both the operational risk management framework and the operational risk measurement system are seen as being equally important components of the AMA. The revised APS 115 has combined the independent review requirements of the operational risk management framework and the operational risk measurement system. In addition, in an effort to reduce the level of prescription of the standard, much of the guidance on the scope of such reviews has been moved to the prudential practice guide.

The revised standard makes it clear that independent reviews must be conducted at least once every three years or when a material change is made to the operational risk management framework.

The definition of independence has been refined. It now requires an absence of improper influence and the concepts of functional and structural separation have been clarified.

The separate section on the requirement for an independent (annual) review of an ADI's operational risk data has been retained in the revised standard. The requirement is, however, less prescriptive and more in line with a principles-based approach in that the review includes an assessment of the controls surrounding the data collection and maintenance processes and tests the confidentiality, integrity and availability of the data.

Data management

The initial proposal

The initial APS 115 included specific requirements around data management.

Comments received and issues raised

Comments were made that the standard could use similar terms in a more consistent manner and provide greater clarity of the data characteristics of confidentiality, integrity, availability and retention.

APRA's prudential approach

APRA's AMA accreditation visits have also identified the need to clarify the definitions of the necessary data characteristics included in APS 115. The revised standard clarifies the data characteristic definitions and the retention period as five years.

Risk mitigation

The initial proposal

The initial APS 115 allowed certain insurance arrangements to be recognised as an operational risk mitigant.

Comments received and issues raised

A number of comments were made that the standard should clarify the requirements (especially in relation to certainty of cover) necessary to demonstrate that insurance will cover potential operational risk losses in a manner equivalent to holding regulatory capital.

APRA's prudential approach

The standard has been revised and additional guidance has been included in the prudential practice guide.

Day-to-day risk management

The initial proposal

The initial APS 115 required the integration of the operational risk measurement system into an ADI's day-to-day operational risk management. The initial standard required the ADI to have techniques for the allocation of operational risk capital to business lines.

Comments received and issues raised

Industry comments noted that clarification was required on the meaning of the term 'incorporation into day-to-day risk management'.

APRA's prudential approach

APRA understands that the regulatory capital estimate for operational risk may differ from an ADI's economic capital estimate. The objective of the requirement is that capital for operational risk must play an integral role in an ADI's decision-making, corporate governance, risk management and internal capital allocation processes, i.e. it must influence behaviour within an ADI. In practice, it is not the amount of regulatory capital that an ADI will use to influence behaviour but rather, its own internal economic measure.

The revised APS 115 makes it clear that an ADI's operational risk measurement system must be capable of allocating economic capital for operational risk to internal business lines.

In order to ensure there is an appropriate degree of similarity between an ADI's economic and regulatory capital estimates for operational risk, the revised standard states that data sources and methodologies utilised for the purposes of determining an ADI's economic capital estimate for operational risk must be consistent with the operational risk measurement system used to determine the ADI's operational risk regulatory capital requirement. Where there are differences, the ADI will be required to explain to APRA's satisfaction the reasonableness of those differences.

Business unit mapping

The initial proposal

The initial APS 115 required the ADI to 'allocate' its total operational risk regulatory capital requirement to the eight Basel-defined business lines. For this purpose, an ADI's own internal business lines could be used which, in turn, could be mapped to the Basel-defined business lines.

Comments received and issues raised

Comments were made that operational risks are managed within business units using allocated economic capital as a key performance measure. It was noted that, from a management perspective, the allocation of regulatory capital to Basel business lines is not useful. Industry also observed that the regulatory capital mapping requirement is likely to be manually intensive.

APRA's prudential approach

APRA's original intention was for ADI's to map the total amount of operational risk regulatory capital to a common set of business lines in order to undertake benchmarking across ADIs, i.e. to allow comparison of the operational risk regulatory capital amount across consistently defined business activities. Benchmarking is seen by APRA as an essential supervisory tool. It is recognised, however, that the application of the terms 'allocate' and 'map' must be clear.

The requirement to map regulatory capital to the Basel-defined business lines has not been removed from the revised standard. However, the revised standard clarifies the distinction between the allocation of economic capital and the mapping of regulatory capital.

Conservatism

The initial proposal

The initial APS 115 stated that, given the considerable uncertainty and potential error in an ADI's operational risk measurement system, a degree of conservatism would be required to be built into an ADI's approach to modelling operational risk to reflect its evolutionary status and its impact on data capture and modelling.

Comments received and issues raised

Industry recommended that the requirement for conservatism be removed as it appeared to over-ride the soundness standard and make the operational risk regulatory capital requirement unduly onerous.

APRA's prudential approach

APRA remains of the view that an ADI must be conservative in the assumptions used in its operational risk measurement model, including the assessment and incorporation of severe loss events. This requirement is necessary to ensure the sufficiency of the operational risk regulatory capital requirement.

Chapter 3

Additions to the revised standard

As detailed in APRA's October 2005 discussion paper, there were a number of outstanding issues in relation to the first draft of the AMA standard. The revised AMA standard now addresses these issues.

Allocation mechanisms and cross-border guidance

The initial APS 115 indicated that APRA would release further guidance and requirements on the allocation of operational risk capital within a banking group and cross-border guidance.

As cross-border guidance and information-sharing between supervisors are issues that are relevant to all supervisory activities, not just operational risk, it is proposed that these issues not be included in APS 115.

Stress testing

The initial APS 115 did not include specific requirements regarding stress testing of the operational risk regulatory capital requirement.

Stress testing exercises undertaken by ADIs provide valuable insight into the levers and drivers of operational risk capital and, in particular, the sensitivity of operational risk capital to changes in data factors and parameters.

The revised standard includes stress testing requirements.

Calculation of the operational risk regulatory capital requirement

The initial APS 115 stated that an ADI's operational risk regulatory capital requirement must be reviewed at least annually to ensure it adequately reflects the ADI's operational risk profile and incorporates changes in the ADI's operational risk management framework.

The revised standard has been amended to require an annual calculation of the operational risk regulatory capital requirement or when there is a material change to the ADI's operational risk management framework or its operational risk profile. This is considered necessary as 'review' can be interpreted differently to 'calculate'. The half yearly review requirement remains in the revised standard.



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