BASEL II CHANGES AND OPERATIONAL RISK

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This afternoon's focus on operational risk is timely. Conferences such as this are important in fostering discussion on the implementation of the Basel II Capital Framework (Basel II). To date, much of the discussion has been on credit risk, and lately on Pillar 2. While they are important issues and I certainly encourage such discussion, we should not lose sight of the importance of operational risk, which for many banks comprises around a fifth of their economic capital. However, I am cognizant of the many people attending this conference who are not bankers and have no knowledge of Basel II. So allow me to provide a brief overview.

The business of banking is about taking and managing risks and banks use capital as a buffer against risk. Nevertheless, because of the crucial role that banks play in the financial system and because much of their funding is from unsophisticated depositors, it has long been considered appropriate that the activities of banks be prudentially supervised. The process of prudential supervision has evolved over the years, but supervisors now place great store on the capital held by banks. Initially, the various bank supervisors developed their own capital standards, but many banks compete in the global marketplace. The 1988 Basel Capital Accord (Basel I), developed by the Basel Committee on Banking Supervision at the Bank for International Settlements, was borne out of a desire to align the capital requirements of banks that competed across national boundaries. Bank supervisors in developed countries, and many less developed ones, have implemented Basel I for all their banks.

The world of banking has continued to develop since Basel I was released and its "one size fits all" approach has been unable to deal with the increasing innovation and sophistication of the marketplace. Internally, banks have been addressing this and have developed models for calculating economic capital. Supervisors, for their part, have been seeking to develop a better regulatory solution. Basel II seeks to harness into the supervisory process best practices in risk management in banking and market discipline. It provides a spectrum of approaches for determining regulatory capital that are more comprehensive, including for the first time operational risk, and are more sensitive to risks. Basel II is built around three mutually reinforcing pillars, consisting of minimum capital requirements, supervisory review and market discipline.

Against that background, I now wish to return to this afternoon's topic and to start with the Basel Committee's definition of operational risk – "the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events". The definition includes legal risk but excludes strategic and reputational risk. Some operational risk events are high frequency and low value and while they cannot be eradicated, banks are generally good at minimising their impact. Other events are low frequency and high value and as we know, there are examples of them being fatal, for example Barings. Other banks have survived significant operational risk events but the events have been quite damaging to the bank, as well as resulting in significant loss to shareholders, for example National Australia Bank.

Operational risks have, of course, always been present in banking. But they have not always been well recognised and to the extent that they have been recognised, they have largely been addressed through insurance. In addition, many banks have moved into "non-traditional" banking products, which often involve increased operational risk. With the passage of time banks have become much better at identifying operational risks and improvements in technology have allowed banks to better measure and manage them. For both bankers and supervisors, operational risk management has now emerged as a discipline in its own right.

From the Basel Committee's definition of operational risk, it is clear that much operational risk centres around breakdowns in internal controls and corporate governance. Such breakdowns can lead to financial loss through error and fraud, or cause the interests of the bank to be compromised, such as through staff exceeding their authority. The first line of defence then must always be sound and robust operational risk management, including internal controls. However, in the event that proves to be inadequate, a bank should hold sufficient capital so that it can survive all but the most catastrophic operational risk events. Banks have less control over external events and in many cases capital provides the sole defence.

Basel II contains two "standardised approaches" to calculating a capital requirement. Both use income as a proxy for operational risk. Alternatively, banks can take an analytical approach – the so called advanced measurement approaches (AMA), but they must be able to demonstrate a soundness that is comparable to a one year holding period and a 99.9th percentile confidence interval. It should be stressed that in introducing operational risk capital requirements, supervisors are not necessarily increasing total regulatory capital. Basel II adds greater precision into the calculation of capital held against credit risk, which for many Australian ADIs will result in a decrease in credit risk capital.

Income, which is used in the standardised approaches, is not always a perfect proxy for operational risk. For example, the risk profile of a business centred on clearing payments is dominated by operational risk. For a given "volume" of business, that risk profile is the same irrespective of the income that the bank derives from the business, so it is less than ideal to calculate operational risk capital on the basis of income. However, at this time, no one has been able to identify a better proxy.

One of the standardised approaches to operational risk requires banks to map their business to one of eight business lines. This requirement adds considerable complexity. For the smaller deposit-taking institutions (ADIs), most of whom have business concentrated in one or two of the eight Basel II business lines, there is arguably minimal benefit to offset the complexity. While it makes sense to attempt to differentiate between operational risk profiles on the basis of lines of business, this really only works well when there are risk proxies that appropriately mirror, and are accepted as mirroring, the operational risk inherent in those lines of business.

In Australia's case, however, it may be possible to tailor a standardised approach that better meets our needs. That is because APRA's requirement that all banks adopting one of the sophisticated, or internal ratings based approaches, for credit risk must also adopt the AMA for operational risk. As a consequence, all Australia's larger banks, and certainly those that are internationally active, will adopt the AMA. Thus, without breaching the spirit of Basel II, APRA is able to explore implementing a standardised approach to operational risk that is less complex and more appropriate for Australia's smaller ADIs. For many of these ADIs, the bulk of their business is retail and commercial banking and their assets consist primarily of retail and commercial loans and advances for which Basel II provides scope for assuming a consistent income stream of 3.5 per cent. One possibility APRA is looking at is to calculate operational risk capital on the basis of a much reduced number of business lines with one being retail and commercial banking assets. We expect to shortly issue a discussion paper on a simplified approach to operational risk.

For all Australian ADIs adopting the standardised approaches, there will, then, be a capital requirement against operational risk. But, as I have discussed there is limited science in that capital calculation, so the importance of ADIs having robust risk management processes in place can't be over-emphasised.

I now wish to turn to the AMA, where the issues are different. For many years banks have been modelling credit risk and there is broad agreement on the methodologies and inputs, such as probabilities of default. Unfortunately there is neither a history, nor broad agreement on the methodologies, for modelling operational risk. The Basel Committee recognises this and does not specify the modelling approach to use when determining how much capital is required for operational risk. It does, however, require banks to:

- track internal loss data and to use that data to directly build loss measures or to validate them;

- use relevant external data and to have a systematic process for determining the situations for which external data must be used and the methodologies used to incorporate the data;

- use scenario analysis or expert opinion in conjunction with external data to evaluate exposures to high-severity events; and

- capture key business environment and internal control factors that can change a bank's operational risk profile.

A bank's AMA must take into account each of the four elements in deriving a total operational risk capital amount. The extent to which each of the four elements is used will vary from bank to bank, and possibly across business lines within each bank.

Having modelled its operational risk capital, a bank is able to allocate the capital to its various business units. Through that allocation process the business units will have the incentive to better manage and to reduce their operational risk, and therefore reduce the capital allocated to them. However, to ensure that there is symmetry around this process, APRA will require banks to continuously review the operational risks to which they are exposed and to regularly update their modelling.

APRA acknowledges the appropriateness of the flexibility and subjectiveness inherent in the AMA, but it does believe it is essential that there be some broad guidelines around the process. Irrespective of how the four elements are used, each bank will be required to have a well documented and verifiable approach for weighting each of the elements in its AMA and for ensuring that the operational risk capital model draws on the elements as appropriate, such that the data or scenarios that are being used reflect adequately the operational risks across the bank. Further, the rationale for all assumptions made in the operational risk capital model must be documented, including the choice of data inputs (or elements), any distributional or other assumptions made, and the weighting of quantitative and qualitative modelling components.

That brings us back to my earlier comment about a sound and robust operational risk management system being the first line of defence. Basel II contains a hierarchy of operational risk qualitative requirements, depending on the methodology used to calculate regulatory capital. As a minimum, it encourages banks to comply with the Basel Committee's guidance on "Sound Practices for the Management and Supervision of Operational Risk", which was issued in 2003. That document contains 10 principles within four broad categories.

1. Developing an appropriate risk management environment; that the board of directors must be actively involved in the oversight of operational risk, that the operational risk framework should be subject to effective review, and that senior management be responsible for implementing the approved framework.

2. Risk management, identification, assessment, monitoring and mitigation/control; that banks should identify and assess the operational risk to which they are exposed, monitor it, have processes for mitigating it, and have business continuity plans.

3. Role of supervisors; banking supervisors should require all banks to have an effective operational risk framework in place and should regularly evaluate banks' operational risk policies, procedures and practices.

4. Role of disclosure; that banks should have in place arrangements for adequate disclosure of their operational risk approach.

Before a bank can use an AMA approach, Basel II requires it to have in place qualitative standards on the independence of the operational risk management function, integration of the risk measurement system into the day-to-day risk management processes, regular reporting, documentation, independent review, and validation.

For those of you whose job does not require you to live and breathe Basel II, I apologise for burdening you with so much detail. But I think that is a necessary process to understand the changes that Basel II has made to the way Australian ADIs will approach operational risk.

This afternoon I have not attempted to discuss all the operational risk qualitative requirements of Basel II, but rather to give you a flavour of them. And we have seen that there is a hierarchy of requirements depending on the business mix and the sophistication of the ADI. Hopefully your sense is that that the requirements are neither unreasonable nor onerous. If you have concluded that the requirements are a sensible way of minimising and managing a known risk, you will have no argument from me. I suggest that what Basel II does do is to mandate what prudent bankers are already doing.

As we have seen, Basel II also imposes a specific operational risk regulatory capital charge. For the smaller Australian ADIs this capital charge is calculated using a regulatory formula. Within the confines of its existing business there is nothing an individual ADI can do to reduce the capital requirement. On the other hand, for those larger ADIs that have the resources to model their risks, Basel II provides a mechanism and an incentive to better manage and to minimise their operational risks.