



## SOME AUSTRALIAN PERSPECTIVES ON PROCYCLICALITY

Wayne Byres  
Executive General Manager, Diversified Institutions Division  
Australian Prudential Regulation Authority

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*"A banker is a fellow who lends you his umbrella when the sun is shining, but wants it back the minute it begins to rain."* Mark Twain.

## Introduction

Thank you very much for the opportunity to be a part of this very important conference, and for the opportunity to share some thoughts from Australia on the very important topic of procyclicality.

It is well known that banking, like all economic activity, is cyclical in nature. The reasons for that cyclicity extend far beyond the scope of this particular session, and indeed this particular conference. Suffice to say, each time there is an expansion or contraction in economic activity, the fortunes of the banking system almost invariably move in lockstep. This should not be surprising if, as has been its traditional role, the banking system performs its primary purpose of supporting and facilitating real economic activity.

Cyclicity in banking has therefore been a factor which banking supervisors have had to grapple with for as long as there has been banking supervision. More recently, however, there has been increasing concern about **procyclicality** within the financial system: that is, features or characteristics which serve to exacerbate or amplify the underlying cyclicity of economic activity. I would like to spend some time today discussing a few influences (positive and negative) on cyclicity, and providing some Australian perspectives on the issue. The general conclusion I would like to leave you with is that regulations and sound institutional frameworks can reduce procyclicality, but one of the most significant mitigants is strong prudential supervision throughout the economic cycle.

## Influences on procyclicality

There are a number of influences which contribute to the degree of procyclicality inherent within the banking system. At the risk of over-simplifying what is in reality a complex issue, I have identified six.

Three of these factors tend to be procyclical:

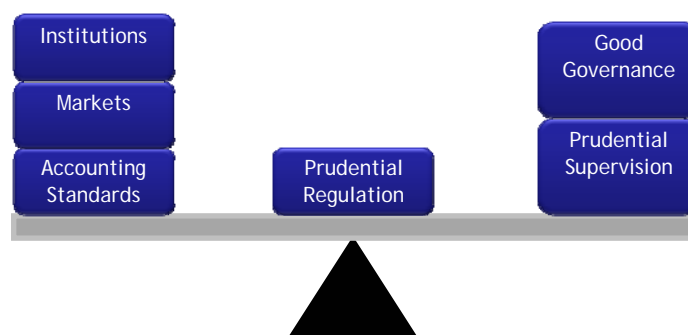
- **financial institutions** are often procyclical in their behaviour (as in the apocryphal Mark Twain banker);
- **markets** can often reinforce/encourage procyclical behaviour by focussing excessively on short-term performance and undervaluing long-term wealth creation; and
- **accounting standards** can also amplify procyclicality by introducing unnecessary volatility into financial accounts (in banking, two common examples are cited: incurred loss provisioning, and the use of market values at times when markets are dysfunctional).

**Prudential regulation** is, in my view, typically a neutral influence - there are procyclical and countercyclical factors within most systems of regulation - although I acknowledge there is a risk that, if not well founded, prudential regulation can be inadvertently procyclical.

The remaining two factors should be countercyclical if done well:

- **good governance** within institutions should temper procyclical behaviour, although evidence suggests even the most well-run institutions have not been able to withstand fully the tendency to procyclical behaviour; and
- **prudential supervision** should, if well applied, almost always be countercyclical.<sup>1</sup>

Figure 1: Influences on Cyclicity



### The role of supervision as a countercyclical influence

Recently, I have read a number of reports and studies advocating what needs to be done to prevent the current crisis happening again and how, in particular, procyclicality can be avoided or at least reduced.

What is striking when one reads these reports is the lack of attention given to supervision, as distinct from regulation. All manner of solutions have been advocated which would impose new regulations onto the financial system. But there seems to be a lack of attention given to whether supervision might do more (or even just help), and whether supervisors, adequately equipped with powers and information, might aid in the avoidance of procyclicality. As I noted above, good prudential supervision - seeking to temper bouts of excessive exuberance, and aiding institutions through tempestuous times - should always be countercyclical in nature.

In searching for solutions to the issue of procyclicality, we therefore need to ask whether the international community has given enough attention to the **quality of supervision**. It gets a mention, but does not seem to feature prominently in many reports and reviews: that could imply that supervisors are seen as perfect and no improvement is possible, or else that supervisors are deemed useless and beyond help!

As a supervisor, I see the reality as neither of these extremes. Supervision can always be improved. In addition, the fact that many countries have had broadly similar

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<sup>1</sup> The distinction between the terms 'prudential regulation' and 'prudential supervision' is not always well understood. The former relates to the laws and standards which govern the prudential conduct of banks (that is, the 'rules of the game'), while the latter refers to the day-to-day monitoring of banks by the supervisory agency to (i) ensure banks are conducting their affairs within the rules and in a prudent manner, and (ii) insist on corrective action where this is not the case.

regulatory frameworks, but quite diverse outcomes with respect to the health of their financial systems, suggests something more than just changing the rulebook might be needed.

One question I think worth asking, particularly in a forum hosted by the IMF and World Bank, is whether we are placing enough attention on compliance with the Basel Core Principles as we search for ways to strengthen the resilience of the financial system? I know a huge amount of work has been undertaken in FSAP and other reviews to assess countries against the Core Principles, but I wonder whether - if we are all as compliant as we claim to be - how did the world banking system end up in such a mess? In particular, do we all meet the Core Principles in substance as well as form?<sup>2</sup> Is, for example, Core Principle 23 (which deals with the supervisors' capacity to take corrective action) really being applied in practice?

### Some Australian perspectives

Let me make some general observations on procyclicality from an Australian perspective (in doing so, I stress that we in Australia don't suggest we have all the answers, and in some cases I will pose questions, rather than answer them). I will then elaborate some more on each of these points:

- procyclicality is a known feature of the system - and has been evident well before Basel II came into being - but institutions have not necessarily managed for it (largely in response to market influences which did not encourage saving for a rainy day);
- accounting standards substantially depleted provisioning levels in the banking system, close to the peak of the cycle - this 'release' has proven temporary and provisions are now having to be rebuilt;
- procyclicality should be minimised within the regulatory regime, but not to the extent of reducing risk sensitivity - put another way, prudential regulation should favour a risk-based approach as a means of reducing cyclicity overall (dampen exuberance in good times), and not simply attempt to limit it in bad times (risk is higher in bad times); and
- prudential supervision and good governance should be permanently countercyclical, so we should be attempting not just to write new rules but also to strengthen supervisory and Board oversight of regulated entities.

### Some Australian perspectives on supervision

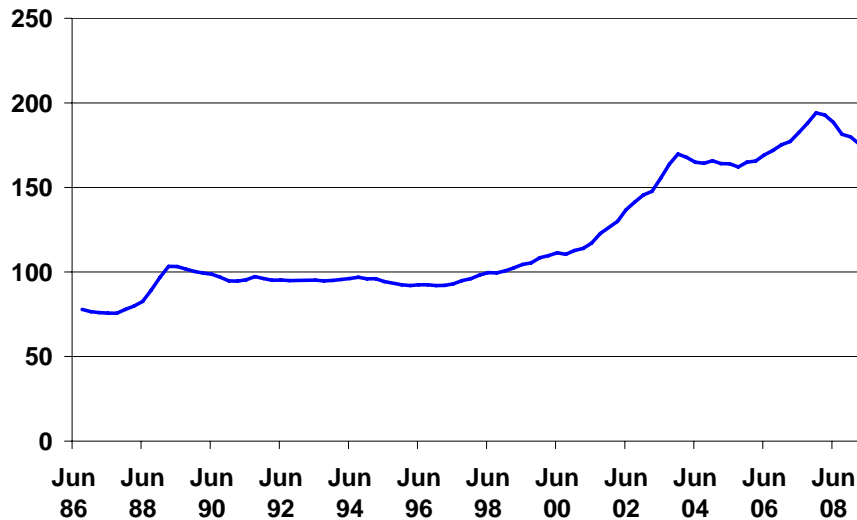
Let me start with the last point first, and I will use our own experience with a potential house price bubble as an example.

From early this decade, the Australian authorities became concerned about a sharp increase in house prices. Both APRA and our counterparts at the Reserve Bank of Australia were cautioning banks to ensure their lending practices were robust against the risk that the rapid increase in house prices could quickly reverse.

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<sup>2</sup> The same questions should be asked for all of the other relevant standards and codes as well.

Figure 2: Real House Price Index  
(89/90 = 100)



Source: Australian Bureau of Statistics

APRA's response to this concern was a combination of:

- jawboning - there were numerous speeches given with the message that (with apologies to Chuck Prince) 'the music may be playing, but you don't have to dance';
- supervision/research - primarily based on stress testing and detailed data analysis; and
- supervisory (eg individual capital requirements) and regulatory (eg policy change) responses.

It was also notable that, as an integrated supervisor, APRA was able to implement a cross-industry response to the issue.

Let me elaborate a little more. Prior to 2003, the capital requirements for housing loans in Australia were such that they received a 50 per cent risk weight if they had an LVR below 80 per cent and/or were mortgage insured. Our concern at the run up in housing prices led us to conduct a housing loan stress test on 120 housing lenders.<sup>3</sup> The stress test was based on what at the time was described as a hugely unrealistic 30 per cent fall in house prices, and took into account variations in loan size, age, purpose (owner-occupied or investment), mortgage insurance status (including the prospect that claims would be declined in some cases), and resource costs to manage arrears and defaults.

The key finding was a pleasing one: that over 90 per cent of authorised deposit-taking institutions (ADIs) would survive the stress event without breaching minimum regulatory capital requirements. However, the stress testing process also highlighted issues with

<sup>3</sup> Full details of the test are available at <http://www.apra.gov.au/Policy/upload/Stress-Testing-Housing-Loan-Portfolios-A-Regulatory-Case-Study-Sep-2005.pdf>

data quality, systems capabilities and policy procedures at some ADIs, as well as the heavy reliance of some ADIs on lenders mortgage insurers (LMIs) in preventing large losses. Furthermore, it identified substantial weaknesses in the regulatory framework for LMIs, including the potential for regulatory arbitrage between the capital requirements for the ADI and insurance sectors for the same portfolio of loans.

This stress test led to further supervisory work at individual institutions identified as most vulnerable, as well as to a tightening of the eligibility requirements for the 50 per cent risk weight (by explicitly excluding non-conforming loans, and requiring a lower LVR for 'loc doc' loans). It also led to a follow-up stress test on the mortgage insurance sector which, in turn, led to substantially toughened capital requirements for those insurers being introduced in 2005.

By 2006, we also undertook a debt serviceability study. This involved collecting the details of every housing loan written by regulated lenders in September 2006, to enable us to better understand the debt serviceability characteristics of borrowers and, in particular, their capacity to withstand further interest rate increases.

By 2007, all this supervisory/research work had produced three important policy outcomes:

- the revised capital requirements for mortgage insurers that I have already mentioned;
- a floor on the loss-given-default (LGD) estimate that ADIs approved to use the advanced IRB approaches under Basel II can use when determining their capital requirements for residential mortgages;<sup>4</sup> and
- a more risk-sensitive grid of risk weights for mortgage lending for ADIs using the standardised approach to capital (see Figure 3).

**Figure 3: Standardised Approach-Housing Loan Risk Weights**

Loan to Value Ratio (%)	Standard eligible mortgage		Non-standard eligible mortgages	
	Risk weight (insured by an acceptable LMI)	Risk weight (no mortgage insurance)	Risk weight (insured by an acceptable LMI)	Risk weight (no mortgage insurance)
0 to 60	35%	35%	35%	50%
>60 to 80	35%	35%	50%	75%
>80 to 90	35%	50%	75%	100%
>90 to 100	50%	75%	75%	100%
> 100	75%	100%	100%	100%

<sup>4</sup> Based on the stress test outcomes, APRA was not convinced that the downturn LGD estimates produced by the ADIs for residential mortgage lending were sufficiently realistic, and so imposed a 20 per cent floor (rather than the 10 per cent minimum provided in the Basel Framework) until such time as ADIs are able to demonstrate robust downturn LGD estimates.

I would like to sum up all this work by making two key points.

- First, the bulk of the work designed to deal with what was essentially a concern about procyclical behaviour (the potential for lending standards to be reduced in good times) was largely research/supervisory in nature. Yes, new rules did emerge from it, but the primary objective was to provide better visibility of the risk from a supervisory perspective. There is no doubt that the dialogue with the institutions concerned, particularly those identified as higher risk, did maintain a spotlight and focus on maintaining lending standards in a manner which simple rule-making could not.
- Second, some of the rules are, of themselves, procyclical in nature. The housing risk weight grid shown above, for example, will increase capital requirements as housing prices fall in value since this will increase LVRs and lead, across a portfolio, to some housing loans attracting higher risk weights. If, as is likely, falling house prices are highly correlated with weak economic conditions and pressure on bank balance sheets, this might be seen by some as an undesirable outcome. However, APRA's view is that the risk weight grid provides the right incentives to write good loans in good times, and ensures that those institutions that chase higher risk business are backing that business with additional capital for the day when the risk comes home to roost. To reiterate a point made earlier, procyclicality in regulation may be necessary at times if we are to create the right incentives flowing from risk-based capital requirements.

Before moving off supervision, let me also touch on the issue of supervisory response (or corrective action). In 2004, a trading fraud at a large Australian bank highlighted, beyond the control weaknesses that led specifically to the fraud, broader problems in governance, risk control and culture at the bank. In response, APRA:

- closed the bank's FX Option desk (where the fraud had occurred) for an extended period;
- revoked the bank's approval to use its internal model for calculating its trading book capital requirements;
- imposed a higher minimum capital requirement; and
- insisted on substantial governance and management changes.

The importance of these actions was two-fold. Obviously, the bank concerned clearly understood how seriously APRA viewed the situation. In addition, it also provided an important deterrence effect more broadly across the industry: the fallout from the episode was notable in terms of its impact on industry attitudes. For example, we heard quickly how the Boards of regulated institutions were now viewing APRA correspondence directly rather than receiving a management summary, and a number initiated substantive reviews of their own trading activities to provide assurance that the same problems were not evident in their own operations.

I raise this episode because, looking at the disasters that have befallen many international financial institutions, it is difficult to see evidence of firm supervisory action to hold those responsible to account. In some cases, markets and/or shareholders have demanded action, but on the whole supervisory action has not been highly visible. This could mean it is still happening behind the scenes (which is where a

prudential supervisor usually seeks to operate), but if that is so an important message is not being sent. In terms of avoiding another bout of euphoria, some memory of the supervisory penalties imposed in the aftermath of the current bout would be a useful dampener on the enthusiasm of those minded to 'bet the bank' next time around.

### **Some Australian perspectives on governance**

Let me also quickly touch on good governance, which is the other countercyclical influence that should always be present in the financial system. Boards of directors are ultimately responsible for the sound operation of financial institutions, but regulators need to do what they can to encourage and assist Boards to manage their financial institutions in a manner which provides for long-term success and financial health.

In Australia, we place considerable emphasis on Boards providing genuine governance: they must provide real oversight of, and challenge to, management and cannot simply be a rubber stamp. Our Australian requirements are designed to provide support for Boards to fully and active undertake their roles, and include:

- an insistence on a majority of independent directors;<sup>5</sup>
- to avoid an obvious conflict of interest, a prohibition on the Chief Executive also being the Chair of the Board;
- a three-year 'time out' period before an executive can become an independent director; and
- formal roles for Audit and Risk sub-committees of the Board.

Beyond regulations, however, APRA is working to increase its direct engagement with Boards, and has insisted on their involvement in certain regulatory and supervisory initiatives. For example, ADIs seeking to use the advanced approaches under Basel II must have their Board sign-off and submit their application. And last week we released additional material regarding the setting executive remuneration: this includes some high level requirements (eg the need to have a Remuneration Committee, and that it be comprised entirely of independent directors) and, just as importantly, some guidance material designed to help Boards set and maintain appropriate remuneration arrangements for their executives and other relevant staff.

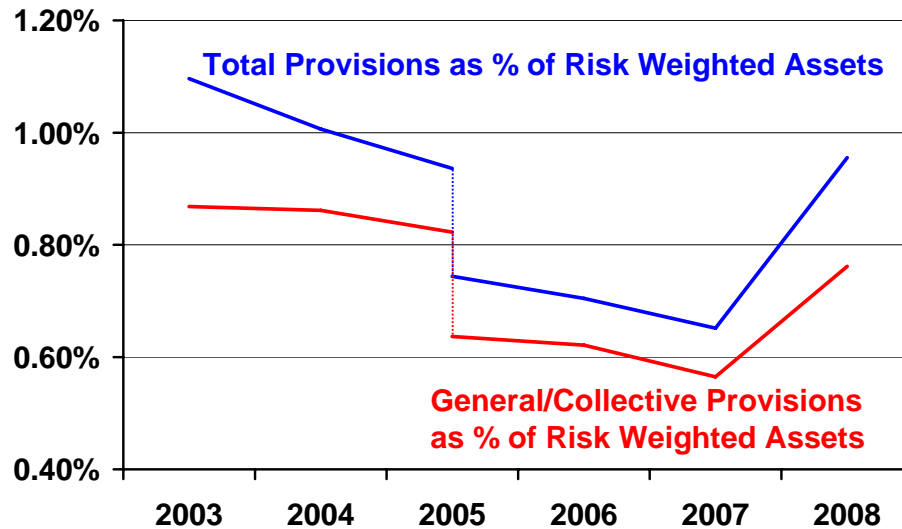
### **Some Australian perspectives on provisioning**

Australia adopted IFRS in 2005. The result was an immediate and substantial reduction in ADI provisioning based on the new incurred loss methodology (see Figure 4). The reduction in provisions also had the effect of bolstering regulatory capital ratios.

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<sup>5</sup> Subsidiary entities need not have a majority, but must have at least some genuinely independent directors, and a majority of non-executives.

Figure 4: IFRS Impact on Provisioning  
Major Australian Banks



In response, APRA sought to mitigate the impact of IFRS by proposing a non-distributable reserve in a bank's prudential accounts. We introduced the concept of the *General Reserve for Credit Losses* (GRCL): a reserve established that, as a minimum, covers credit losses prudently estimated but not certain to arise over the full life of all the individual facilities making up the business of the bank. The GRCL must be freely available to meet any credit losses that subsequently materialise.

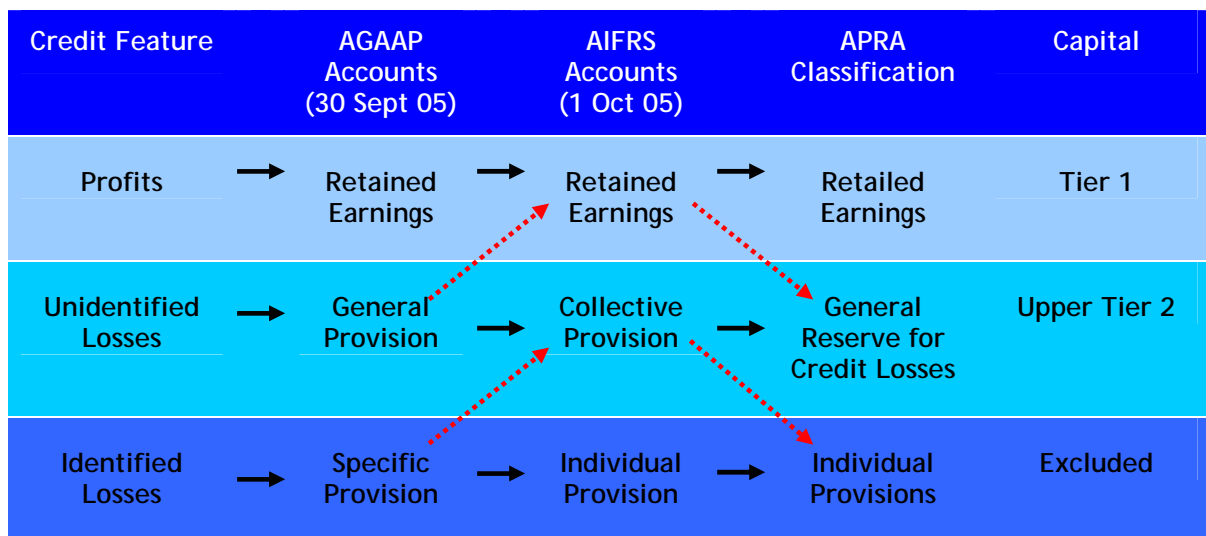
The intention behind the GRCL was to promote forward-looking provisioning, and to reverse provisioning releases (i.e. capital boosts) associated with IFRS by:

- moving the credit loss reserve out of Tier 1 capital; and
- moving certain collective provisions out of Tier 2 capital.

Much is presently being made of the need to converge accounting and regulatory provisioning rules. While undoubtedly useful, it is not a disaster if it cannot be achieved. It is quite possible for the accounting and prudential rules for provisioning to exist side-by-side, just as our divergent views on the value of goodwill<sup>6</sup> have existed for decades. To the extent accounting rules in relation to provisioning are seen as procyclical, then there are solutions beyond simply seeking to have the accounting profession change its rules. Accountants have a mandate to serve a different group of beneficiaries than do prudential regulators, and provided the differences in our frameworks are sufficiently transparent so that market participants can understand the different viewpoints, one option is to simply adjust the accountants' approach to suit our needs. The GRCL concept is unlikely to be the exact solution chosen by the regulatory community to deal with provisioning, but the forward-looking approach is certainly the direction being taken.

<sup>6</sup> Goodwill and similar intangibles are assigned a value by accountants and included on balance sheets. Prudential supervisors generally assign these assets zero value, and effectively write them off capital.

Figure 5: Accounting vs Prudential Provisioning Approaches



### An integrated regulator's perspective on provisioning

I cannot let the discussion on provisioning pass without commenting from the perspective of an integrated regulator, since insurance provisioning provides an interesting contrast. In provisioning for loss (i.e. claims), an insurer must:

- provide for incurred claims (including an estimate for those not yet reported); and
- provide for claims in the future (i.e. losses from events which haven't occurred yet).

As an insurance supervisor, it would simply be unacceptable for an insurer not to provide in its accounts for future loss events: why should it be acceptable for a bank not to do so?

### An Australian perspective on capital

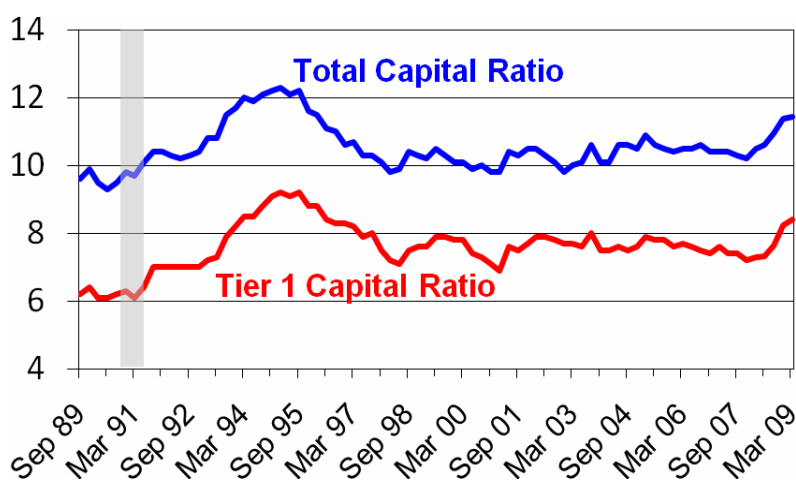
At the heart of the debate on procyclicality has been a long-known concern that capital requirements under the advanced approaches of Basel II will vary in inverse proportion to the quality of bank loan portfolios: credit migration will mean that in good times capital requirements will be (too?) low, and will then increase as loan books deteriorate in quality.

Thus far, procyclicality driven by Basel II has been manageable in Australia. Our estimates are that over the past 15 months, credit migration (and risk estimate revisions) have added, on average, roughly 2 per cent to risk weighted assets per quarter to those ADIs using the advanced approaches. This is certainly material, but within the capacity of the ADIs concerned to manage at this stage.

Far more concerning from a procyclicality perspective has been market-driven increases in capital. For almost all of the past decade, the Australian banking system has typically operated with a Tier 1 capital ratio in the order of 7-8 per cent (see Figure 6). During this time, market pressure was constantly on the listed ADIs to find ways to free up

capital and return it to shareholders: for our larger banks, a Tier 1 ratio over 7 per cent was often regarded as a sign of surplus capital. In the past 12 months, however, investors have changed their tune. Now an 8 per cent Tier 1 ratio is seen as a minimum by the market: any bank dipping towards that mark is seen as needing to raise capital quickly to avoid being 'short'. As a result, Australian banks have raised substantial capital over the past 12 months in an effort to meet this new 'requirement'. That they have been able to do so easily is a testament to their fundamental strength and on-going profitability: for example, the four major banks are still able to produce returns on equity in the mid-teens despite rising bad debt expenses. However, it highlights the importance of market-driven procyclicality and, at least for Australia, the extent to which this dominates any procyclicality within the regulatory framework at this stage.

Figure 6: Australian Banking System Capital Ratio



Another interesting observation is the extent to which markets continued to push Australian banks to hold considerably higher capital ratios, well after the last recession in the early 1990's had ended. This reflects the lag in bad debt expenses, which typically continue to be incurred at higher levels even after economic growth has become positive again, and the consequent continued market uncertainty over bank valuations. The important point is that this procyclicality has nothing to do with the regulatory regime - rather, it is a function of market confidence in the balance sheets of the banks. Whether such a trend occurs this time around will be both interesting and important to observe.

To the extent the regulatory regime is to be altered to seek to reduce procyclicality, any proposals need to avoid unduly reducing risk sensitivity and dampening incentives for prudent behaviour in good times. At present, there are a number of proposals being considered that involve the creation of countercyclical buffers. It is difficult to argue against the premise that, in good times, banks should put something aside for a rainy day. However, there is an interesting debate to be had about whether they interact with the numerator or denominator of the capital ratio. Capital ratios are a measure of the amount of capital held (the numerator) against the amount of risk held (the denominator). If we are keen to also reduce some of the market-driven procyclicality I referred to earlier, then building the buffers into the denominator of the ratio (i.e. the measure of risk) may well temper market procyclicality by introducing stability in capital ratios over time. Given the evidence suggests markets will not really allow capital ratios, once built up, to fall back in times of stress then we need to find counterbalancing adjustments to offset the impact of rating migration on risk weighted assets.

Another topical issue is whether countercyclical buffers, however they are formulated, should be automatic/mechanical or should be the subject of supervisory discretion. Having made a strong case for the benefits of strong supervision before, you might assume I am also in favour of discretionary adjustments. In fact, I think when dealing with system-wide countercyclical measures, automatic adjustments have advantages over discretionary changes:

- automatic adjustments provide greater certainty to market participants;
- automatic adjustments also enhance the integrity of the system, and avoid any (perception of) forbearance.

Regardless of how it is done, the key issue in addressing procyclicality in capital is the calibration of any buffers. If we expect banks to build up additional buffers in good times, are we effectively saying we expect them to be able to hold enough provisions/capital for the downturns at all times? Will stress tests become the new binding constraint on regulatory capital?

### Some concluding remarks

The key point I have tried to make today is that much of the discussion on mitigating procyclicality seems to be heavily focussed on regulation and rule-making - but supervision and governance have just as important a role to play in mitigating procyclical behaviour. They seem to have been somewhat forgotten in the desire to develop new rules.

Beyond that, I've probably done little more than pose some questions that we need to give further thought to:

- Instead of devoting all our attention to developing new rules, I've suggested that perhaps we need a harder look at existing compliance with the Basel Core Principles - since good supervision should be countercyclical, we need to ask ourselves whether we are really as compliant in practice as we claim to be?
- Good governance plays a role in mitigating cyclicity too - given what has happened over the past two years, how good is governance at the largest financial institutions? And what can be done to improve it?
- Is harmonisation with the accountants the only way forward on provisioning? Instead of seeking agreement with the accounting profession, should we just accept they are mandated to serve a different set of beneficiaries and adjust their approach to suit our needs?

Finally, I would stress that mitigating procyclicality in capital rules is important, but not at the expense of sound risk-based capital requirements which provide the right incentives to do the right things in good times (after all, risk is higher in bad times).

Thank you