WHAT IS THE DIFFERENCE BETWEEN MACROPRUDENCE *and macroprudential supervision?*[1]

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APRA's statutory mission[2] includes the requirement to balance safety with competition, efficiency and contestability in our regulated industries, and also to promote financial system stability. This paper explores some emerging international and Australian themes in safety and stability, in the context of systemic effects. In particular, it considers the differences between macroprudential supervision (MPS), and macroprudence. An earlier version of this paper was presented to the 2013 Australian Centre for Financial Studies' Melbourne Money and Finance Conference.

For the purposes of this paper, I will focus on two aspects of financial stability that are most relevant to the Australian Prudential Regulation Authority (APRA):

> depositors, policyholders, and other creditors of regulated institutions are justifiably confident that their claims on these institutions will be met in full and without difficulty

> there is neither a mania nor a panic in the Australian credit, insurance, or investment markets.

This definition ignores many elements of financial stability that are not APRA's primary responsibility, including sound payment and clearing systems, and macroeconomic stability measures such as exchange rates, interest rates and inflation.

Furthermore, given their relative size and systemic impact, this paper will focus upon Australian banking institutions (hereafter 'banks' for convenience). This is not to say that insurance companies and (increasingly) the superannuation industry are not systemic, but that the systemic issues in those industries require consideration that is beyond the scope of this paper.

The above restrictions mean that this paper is not intended to address financial stability in a broad sense, but instead will focus upon how systemic issues are relevant to ensuring that Australia's banking system is sound, and continues to allocate credit in a reasonably efficient and confident manner.

Systemic duality—endogenous and exogenous

The banking system and the broader economy are closely linked, in ways that mean problems in one sector usually affect the other, and the direction of causation may be difficult to determine.

We know that banking sectors may become impaired by exogenous forces, usually a recession or depression in an important industry or the general economy. Conversely, we know that banks can become too exuberant in their lending, which creates short-term and unsustainable apparent prosperity, followed by a bust which impairs not only the banking sector but the general economy.

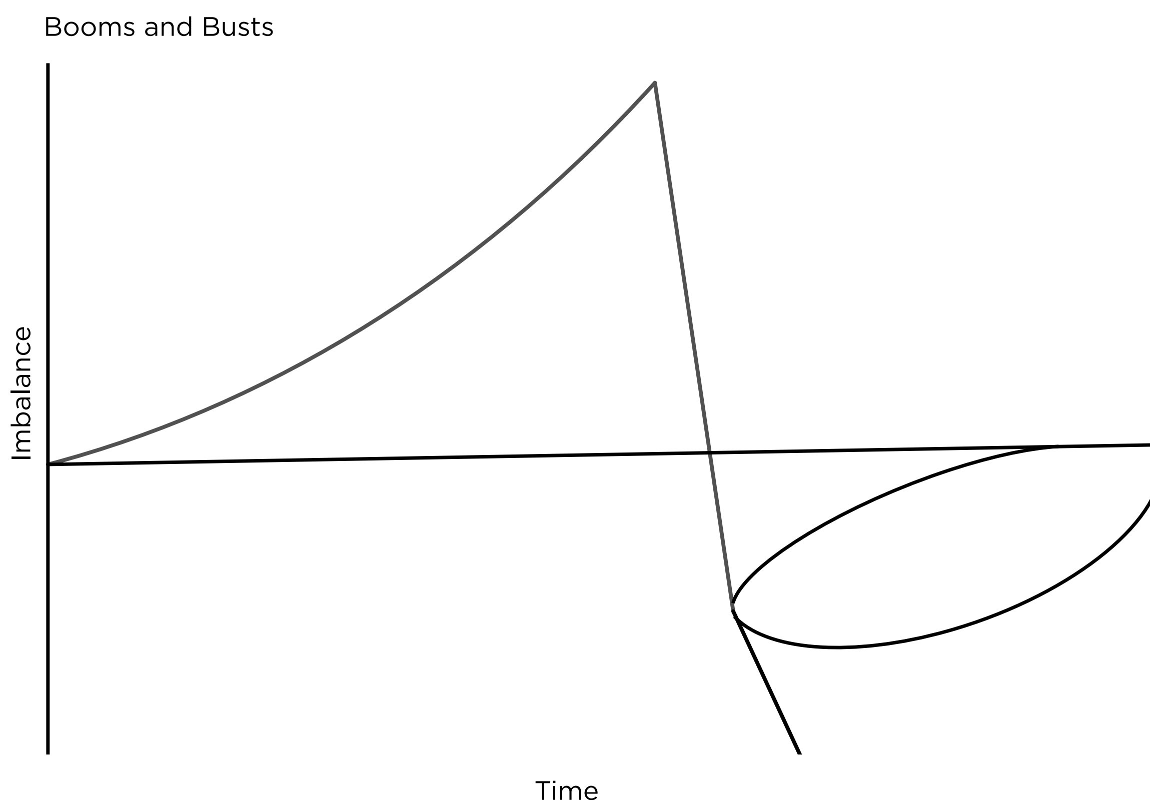
The global focus upon MPS has its origins in the post-2008 insight that economies need to be protected from the banking system's excesses. We should not forget that the inverse might too easily apply as well: the banking system needs to be protected from the economy's vulnerabilities. Some vulnerabilities might originate from poor banking practices, and others might be entirely exogenous to the domestic banking industry. In the Australian case, for example, the economy and the banking sector have greatly benefitted from historically high terms of trade. Neither the economy nor the banking system could be expected to perform so well should Australia find itself facing much more adverse terms of trade.

Is systemic failure inevitable?

The historic record[3] on systemic crises is not encouraging; Western economies and banking systems have regularly failed over the centuries. The failure rate in recent decades does not indicate that we have learned both how to avoid systemic failure, and maintain dynamic and competitive financial systems. Australia is relatively well placed in a historic sense. Our last banking crisis, defined as multiple failures of systemic banks and a general loss of confidence, was in the 1890s.

As at 2013, and depending upon the analysis used, the Australian banking system is typically rated

FIGURE 1: A simple model of cyclical risk



among the two or three soundest in the world. But prior ratings of soundness, by credit ratings agencies or others, are no guarantee of actual soundness. APRA is confident that the Australian banking industry is sound, on both an absolute and relative basis, but we are always aware that soundness is a perishable commodity, and needs constant replenishment across many inputs.

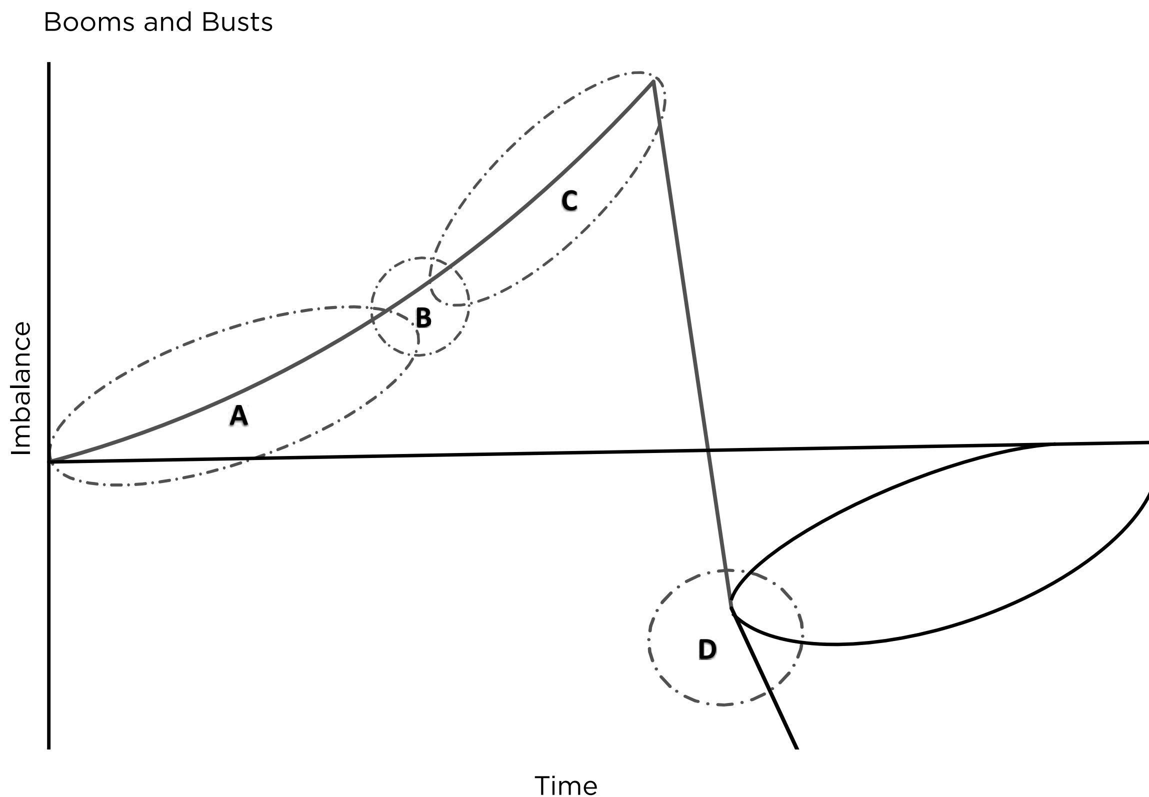
In a statistical sense, given that there is a non-zero chance of systemic bank failure, it is arithmetically inevitable that at some point Australia will face a banking and/or economic crisis. But some point need not be this year, this decade, or possibly even this century. There is also scope to minimise the damage from any crisis that eventually erupts.

Furthermore, it is economically observable that the risk of such a crisis is not constant but cyclical. Successful survival of each test, typically a recession, earns the right to continue for another cycle.

As shown in Figure 1, economies and banking systems run in cycles, with the following general pattern:

1. *After some period where economic fundamentals, asset prices and bank behaviour are more or less in balance, we see a growth in confidence*. This growth in confidence in turn leads to more open lending windows, and growth in asset prices somewhat in excess of long-term trends.
2. *At some point, the confidence phase segues into a boom*, possibly an unsustainable boom. We move from sound investments to speculative investments, in the worst cases to manic investments. In this last phase, investments are made and financed under the assumption that asset price growth will make the investment profitable.
3. *At some point this trend becomes unsustainable,* and we know that when a trend can't continue forever, then it will eventually stop. There is a proverb that markets go up by the stairs, and down by the lift; sometimes banking systems and economies do the same thing.
4. *Once we get to the bust, the economy can go one of three ways*. If the initial response to the bust is particularly ineffective, it can continue into a full-fledged depression. We hope that the public and private sectors between them have learned enough over the past century to avoid this fate, though unfortunately there are no guarantees. In any event, at least so far the global financial crisis has not evolved into a full-blown depression in either the United States or most of Europe, though some of the smaller and most afflicted European countries have experienced or are experiencing depression conditions.
5. *Ideally, the public and private response to the crash results in a V-shaped recovery*, with the economy rapidly returning to its long-term equilibrium.

FIGURE 2: Key elements in a simple model of cyclical risk



In 2008 and 2009, Australia and most of Asia generated this pattern in response to contagion from the crisis.

6. *Less ideally, we see a U-shaped recovery*, when the economy takes several years to recover its equilibrium.

Effective public and private sector responses to cyclical risk

One of the great frustrations for economics and public policy, not to mention for corporate finance, is: if we all know about cyclical risk, why can't we prevent this well-known risk from so frequently leading to disaster? The simple answers are that we collectively under-respond to booms, because it is so easy to accept apparent success as normality. Later in the cycle, we over-respond to busts, because we collectively accept continued disaster as more likely than it really is.

Conversely, the only way to disrupt this cycle, particularly for the banking industry, is to induce more timidity into bankers during the boom, and more courage into bankers during the bust and recovery. As noted early in this paper, the problem is broader than just banks, but this paper's focus is limited to the banking industry.

How do we induce the necessary changes in attitude for banks and bankers to smooth the credit cycle?

Figure 2 identifies the key elements in the cyclical form shown in Figure 1. APRA's greatest value-added probably lies at point B, where a confident economy and/or banking system crosses an unknowable inflection point into overconfidence. From this point and with increasing urgency and force, APRA's challenge is to push the system back towards normal confidence, and away from a cyclical boom and bust. Put another way, if APRA, our public sector colleagues, and the banking sector respond effectively at point B, we revert to A, rather than progressing to the exuberant C and disastrous D.

The MPS approach to countercyclicality

APRA and the Reserve Bank of Australian (RBA) have jointly written[4] about macroprudential topics, and my colleague Dr Luci Ellis at the RBA has given[5] a number of speeches and papers on the topic. One can argue at the margins about the definition of MPS, but there is an emerging global consensus that MPS features include:

> The use of prudential rules to counteract systemic risk, as well as to reduce failure rates for individual regulated entities. Macroprudential supervision is probably more accurately named macroprudential regulation, as the focus is normally on the use of rules across the banking industry, not upon supervisory activity.

> Very often but much less so in Australia, the triggers for using MPS tools are controlled by parties other than or additional to the prudential regulator. Central banks, treasuries, and inter-

agency committees feature prominently in international MPS arrangements.

> MPS tools generally have the effect of constraining credit creation by banks, either in aggregate, such as the Basel Committee's planned introduction of a countercyclical capital buffer or, for particular exposures, most commonly property lending.

We see several threats to good supervision emanating from an overly rules-based MPS approach.

Implementing MPS in many national jurisdictions runs the risk of the central bank or the finance ministry telling the prudential regulator how to use the regulator's tools, even when the regulator doesn't necessarily want to use them in that way. There are a great many problems with such an approach. The list starts with a resultant fuzziness in responsibility for prudential outcomes, continuing through the potential to impair relationships between the key public sector agencies, and finishing with a reduction in confidence on the part of the prudential regulator. In the Australian context, these would be disastrous results.

Fortunately, there is no intent in Australia to take such an approach. APRA, and only APRA, uses the regulatory tools related to prudential supervision, and the more general tools of supervision for sensible behaviour by our regulated flock.

A second problem with MPS is that it has become something of a 'magic wand' in the global regulatory debate. Overconfidence in a regulatory tool risks under-reliance upon supervision, and good supervision is the best countercyclical tool available to us.

At its best, MPS is something that the prudential regulator already undertakes, and at APRA we hope that we are in this category. Our macroprudential work receives substantial assistance from the Reserve Bank of Australia (RBA) in particular and the public sector in general, but at the end of the day, all supervision, micro and macro, is in APRA's hands.

MPS creates the further problem that, at its current state of development, it is a one-sided countercyclical tool. That is, MPS only works to restrain a boom, if it works at all. In theory MPS would also work to ameliorate a bust and accelerate a recovery, but the global MPS mindset is very much about adding constraints to bank credit creation, not easing these constraints when such an approach is suitable.

APRA observes that many countries have used MPS techniques with evident success. To take the leading examples from this part of the world, Singapore, Hong Kong, and China have implemented loan-to-valuation restrictions on property lending. This approach seems to have had a good effect on bank safety. Over the longer term, it will be interesting to see what effects such an approach has on the shadow banking sector.

Macroprudence

> Macroprudence is in essence a shared mindset among the relevant public sector agencies, which in Australia's case comprise APRA, the RBA, the Commonwealth Treasury, and the Australian Securities and Investments Commission (ASIC). Common elements in this shared mindset include:

> A strong commitment to coordinated effort to protect the economy and the financial system from material shocks, and to assist the recovery of the economy and the financial system when such shocks, despite our best efforts, inevitably emerge.

> The use of prudential tools remains with the prudential supervisor, and the lead tool is typically supervision, not new regulation. Furthermore, supervisory intensity is most intense on those banks contributing most to systemic risk, as opposed to the MPS approach of applying rules across the board.

> The lead agency or agency for macroprudence varies depending upon where we are in the economic cycle, but all agencies work throughout the cycle to support each other.

In this context, the four core agencies need to achieve three outcomes:

> we need to know and agree, at least approximately, where we are in the financial stability cycle

> we need to know what responsibilities accrue to each agency in each part of the cycle

> above all, we need to coordinate and help each other achieve our respective tasks.

We can define the economic cycle in four phases: normal (more or less), boom, crisis, and recovery. Table 1 outlines which agencies have which roles in these phases.

The task allocation indicated in Table 1 means that APRA is most valuable when it is least valued. When overconfidence is turning into a boom, by definition there is a consensus that risk is low, and a lax supervisory hand is warranted. APRA takes the unpopular but necessary lead role in constantly but generally mildly intervening with the banking industry, to prevent overconfidence leading to disaster. Similarly, after a bust, APRA needs to refrain from unduly constraining the banking sector during the recovery. Regulators, as with bankers, are tempted to act with the cycle, when acting against the cycle should be a core competence.

When crises arise, on the other hand, the RBA and Treasury come to the fore, as agencies with funding and legislative expertise.

TABLE 1: Agency roles in macroprudence through the economic cycle

	Normal	Boom	Crisis	Recovery
APRA	Discipline outliers, ensure sound prudential framework	Active restraint of most aggressive; possibly tighten standards	Advise on which entities are sound and which troubled, estimate losses	Avoid undue conservatism, manage exits
RBA	Analysis, deepen understanding of potential threats	Jawbone to support APRA, maybe monetary policy	Liquidity support, systemic risk estimates	Monetary policy
Treasury	Advise government, lead on legislation	Support APRA, emphasise the cost of complacency	Advise government on ad hoc responses	Recovery initiatives
ASIC	Discipline outliers	Proactive enforcement	Protect market operations	Cleanup enforcement
All Agencies	Building intra-agency cooperation, capacity building, contingency planning	Coordinate anti-boom strategy	Close coordination and crisis response	Learn from experience, adjust statutory framework, encourage recovery

The role of government

Globally, prudential supervisors require three inputs from governments: enough funding to operate a reasonably resourced agency; sufficient statutory powers; and moral support. Globally, prudential regulators have reasonable funding and powers expressed in black letter law. The large difference seems to come from the degree to which there is relatively more political support for a large financial sector, or a safe financial sector. Since 2008, this difference in political preference seems to have dominated any other criterion for determining which countries suffered most from the financial crisis. Countries with a strong political consensus for sound financial sectors have included Australia, Canada, Asia and the Nordic countries. These countries generally had a good crisis, if any crisis can be described as good. Financial disasters in the United States, the UK, Ireland, Switzerland, and Spain, among others, were highly correlated with political systems preferring to let at least some bankers and other financiers operate under less tight control. It is not the case that prudential regulators in these countries were somehow less committed to financial soundness, or less able to deliver it; it was more the case that these regulators may not have been allowed to deploy the tool set necessary to achieve systemic soundness.

In the Australian context, there is bipartisan support for a sound banking system ahead of a large banking system. This support allows APRA to supervise in an appropriately sceptical and, where necessary, intrusive manner. Curiously, by focusing upon safety first, the Australian banking system does not seem to have suffered any loss of size or profitability. Australia's largest banks are simultaneously among the most valuable in the world, measured by shareholder returns, and the safest in the world, measured by debt ratings and similar means. This combination suggests that there is a remarkably high long-term value associated with conservatism in banking, and that this value is shared among the banking sector's stakeholders.

As long as Australia's parliamentarians continue to favour sound banking, APRA can continue its focus upon delivering a sound banking system.

Summary

APRA recognises the potential value of MPS, but in our approach, MPS is simply part of ongoing supervision. With our colleague agencies, we look beyond individual banks, and consider the likely effects arising from broader industry and economic shocks.

APRA considers that the global deployment of MPS, while generating much that is positive, risks muddling the role and effectiveness of prudential supervisors. Our preferred strategy is a broader reliance, with our colleague agencies, on proactive macroprudence. ■

Notes

1. This paper has benefited from seminar presentation and discussion at the Third Annual Macquarie University Centre for Financial Risk Seminar, March 2013.
2. See section 8 of the *APRA Act 1998*.
3. See Carmen M. Reinhardt and Kenneth S. Rogoff, *This Time is Different: Eight Centuries of Financial Folly*, 2011, for an 800-year review of financial system failure.
4. *Macroprudential Analysis and Policy in the Australian Financial Stability Framework*, joint APRA and RBA paper, September 2012, available on the APRA website.
5. See, for example, *Macroprudential Policy: A Suite of Tools or a State of Mind?*, October 2012, available on the RBA website.