

**BALANCING SAFETY, STABILITY, EFFICIENCY
AND
COMPETITION: FINDING THE BALANCE FOR AUSTRALIA'S MAJOR BANKS**

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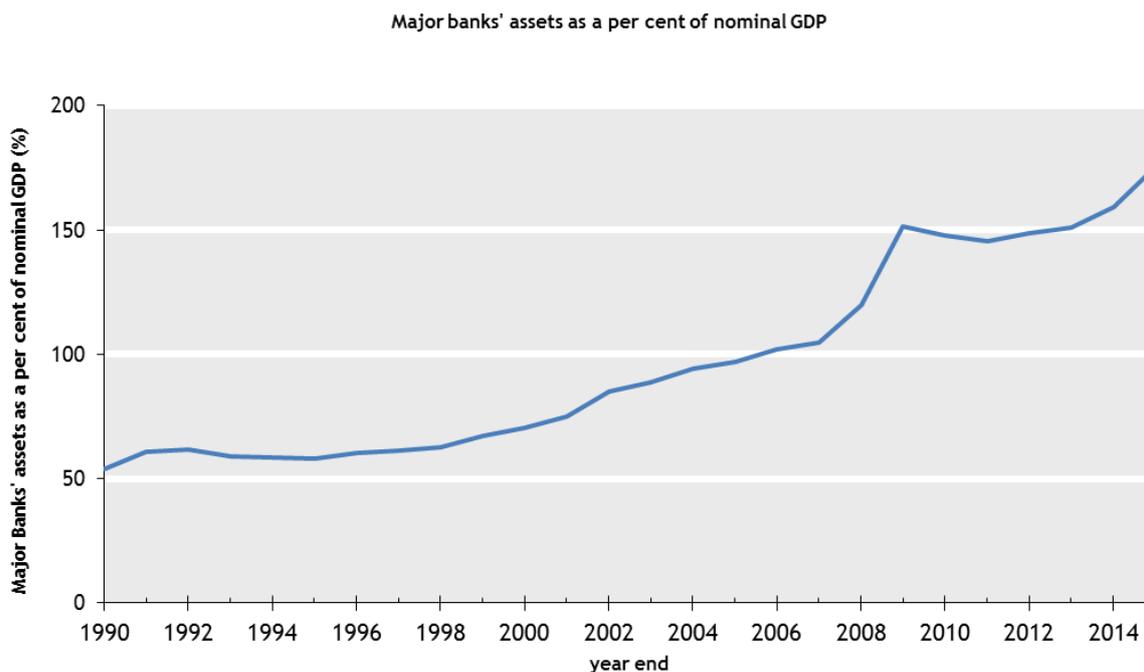
This paper provides insight into the way APRA thinks about capital requirements for Australia’s major banks, in the context of its prudential mission.

Under the *APRA Act*¹, APRA is required to balance safety with, amongst other things, efficiency and competition, and in doing so to promote financial system stability. This paper begins with a discussion of the degree to which the four major banks (ANZ, CBA, NAB and WBC) are systemic. The paper then reviews the degree to which the major banks are financially sound, competitive, and efficient. The paper closes with a look at how these characteristics influence the setting of capital requirements for the Australian major banks.

Just how systemic are Australia’s major banks?

In summary: very systemic indeed, and the four major banks have become more systemic over past two decades.

Figure 1



Note: Data is presented on a domestic books basis for major banks and their bank subsidiaries.

Figure 1 demonstrates that, in aggregate, the major banks are quite large as a proportion of GDP, and this share has grown substantially over time. There are surges of growth from 2000 to 2009, then a levelling off, and a more recent resumption of major bank asset growth as a proportion of GDP.

¹ Section 8 of the *APRA Act 1998*.

Figure 2

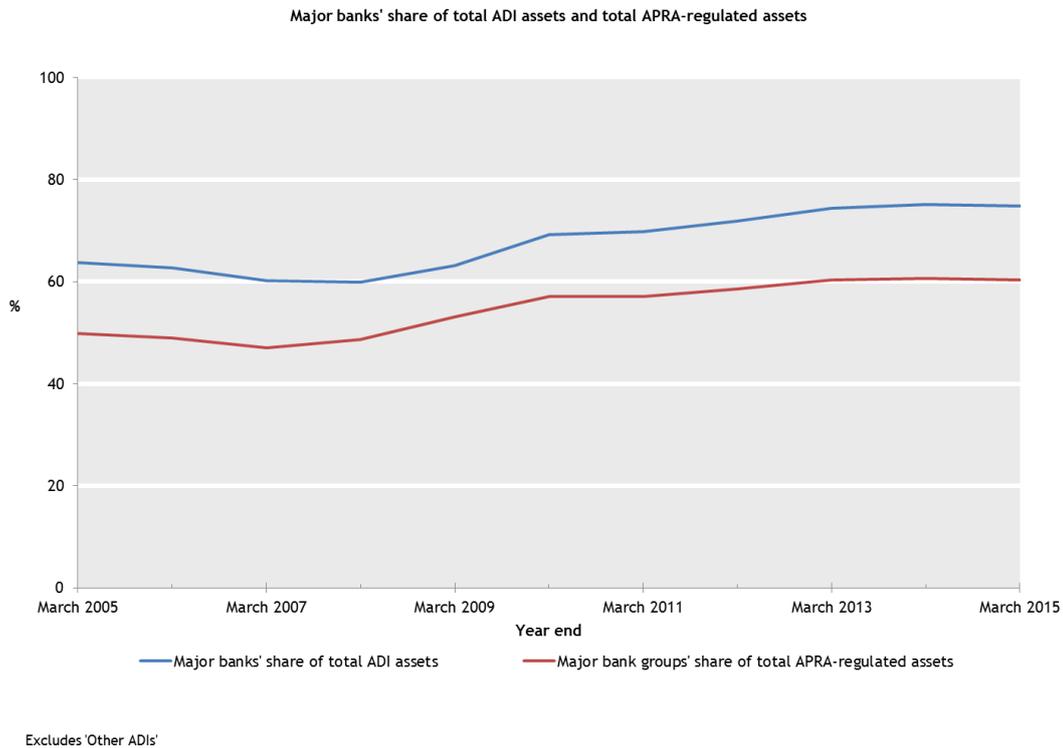


Figure 2 shows that the major banks comprise over three quarters of the banking industry balance sheet, and control about sixty per cent of prudentially-regulated assets. This pattern is not uncommon globally, with say three to six banks dominating the local financial system, although the degree of concentration varies somewhat. Australia's financial system is probably more concentrated than average, but is not the most concentrated system. It is clear, however, that given their size relative to GDP, and their share of the total financial system, should the four major banks become seriously impaired in their ability to operate normally, Australia would no longer possess a fully-functioning financial system.

Inter-bank exposures

There are currently 158 banks, building societies, and credit unions in Australia; collectively called "Authorised Deposit-taking Institutions" or ADIs. The numbers vary slightly over time, but APRA's most recent statistical returns identify that 138 ADIs report large exposures to at least one of the major banks.² The majority of aggregate large intra-ADI exposures in Australia involve a major bank counterparty, which is unsurprising given the major bank share of the industry's balance sheet. Again, there is some variance over time, but all the major banks typically maintain material exposures to each of the other major banks.

² A large exposure in this context exceeds 10 per cent of the relevant ADI's total prudential capital base.

These figures simply confirm the intuition that should a major bank or banks become seriously stressed, there is a material risk that it or they would quickly transmit substantial stress to the rest of the Australian banking system.

There are many other measures of systemic importance, several of which APRA collated when implementing the Australian capital regime for domestic systemically important banks³. In Australia, there are four systemic groups. As an example of the drop-off between the major banks and their competitors, the fourth largest bank, compared to the fifth largest bank:

- Is more than five times larger in terms of resident Australian assets;
- Is more than three times larger in terms of loans to financial corporations;
- Has issued more than four times the level of securities;
- Is about six times larger in total loans and advances; and
- In most of the above cases, the “fifth largest bank” is not the same entity. That is: there is no obvious fifth bank in the system, but several banks which are much smaller than any of the major banks.

Given this level of concentration, it is clear that maintaining Australian financial and banking system stability requires close attention to maintaining the financial soundness of each of the major banks.

What does “financial system stability” mean?

There is no single definition for financial stability, but there is a broad global consensus as to what is meant. The Reserve Bank of Australia’s (RBA’s)⁴ definition is:

A stable financial system is one in which financial intermediaries, markets and market infrastructure facilitate the smooth flow of funds between savers and investors and, by doing so, help promote growth in economic activity. Conversely, financial instability is a material disruption to this intermediation process with potentially damaging implications for the real economy.

APRA considers that a financial stability must recognise the inevitability that systemic institutions will from time to time, hopefully measured in decade scale, face critical and potentially fatal financial shocks. In promoting financial system stability, as required by its mandate in the APRA Act and the Banking Act, APRA’s prudential expectations for the major banks include:

- 1) they are financially sound, which in APRA’s context means they will meet their financial promises to depositors under any plausibly foreseeable adversity. APRA applies this standard to all regulated entities, not just systemic entities.
- 2) they are resilient, which means they will continue to support their customers, and be able to support new customers, under any plausibly foreseeable adversity. This is a *de facto* higher standard for systemic banks. Put simply, the major banks need

³ <http://apra.gov.au/adi/Publications/Documents/Information-Paper-Domestic-systemically-important-banks-in-Australia-December-2013.pdf>

⁴ <http://www.rba.gov.au/fin-stability/about.html>

to be able to continue to meet Australia's banking needs, when smaller and weaker competitors may not be able to do so.

- 3) should they no longer be able to meet conditions 1 and 2 above, there are arrangements in place to swiftly and effectively restore a major bank or banks to a sound and competitive footing (albeit potentially with new management and shareholders).

The fact that Australia relies so heavily upon four financial groups can be seen as a two-edged sword. On the one hand, should the Australian economy face material external shocks, but the four major banks remain sound, including remaining open for new business, then they function as a shock absorber for the financial system and the economy. A version of this story played out in Australia in 2008 through 2010, which is one reason why the major banks became larger in recent years.

On the other hand, should one major bank become seriously stressed, they might all quickly find themselves similarly impacted. This is akin to the situation in Ireland in 2008, with wide and adverse repercussions for broader economic activity.

APRA's prudential strategy for promoting financial system soundness in Australia is founded on the premise that all regulated entities can at least meet their obligations. The four major banks, however, need to not only meet their obligations, but remain able to take on new obligations, even in times of stress. APRA's regulatory and supervisory approach flows from this aspiration. In the absence of any ability to guarantee that major banks will remain able to service their customers in all circumstances, it is important that they remain as strong as is reasonably achievable in normal times.

Major bank strength

Two key dimensions of "safety" are the probability of failure, and the probability of illiquidity. This paper focusses on the former rather than the latter risk. APRA and the RBA have put in place arrangements to support Australia's banking system during extremely challenging liquidity stresses, equivalent to late 2008 when global markets failed. APRA expects that the major banks will continue to improve their liquidity risk profiles, but that is a subject for another day.

As to the probability of failure, there is a broad consensus that the Australian major banks are financially sound.. In debt ratings terms, the four major banks are mid- to low-AA rated, which makes Australia, along with Singapore and Canada, one of the highest rated banking systems in the world. In the post-crisis world, the majority of international banks tend to be rated either single A or BBB.

A major contributor to this relative ratings strength, however, derives from the rating agencies' assessment that the Australian public sector, and in some circumstances the Australian taxpayer, will stand behind the Australian major banks in times of stress, thereby protecting bank creditors. From APRA's perspective, however, a bank fails not only if it can't pay its debts, but if the taxpayer must take losses to ensure that a bank's debts are paid.

Accordingly, while APRA considers that the major banks are well-capitalised and financially sound, their relative strength may be less than that reflected in public debt ratings.

A bank's financial soundness is concentrated in its asset quality, earnings capacity, capital quality, and capital quantity, all backed by sound governance and management. APRA's assessment is that Australian bank asset quality is among the strongest in the world, albeit highly concentrated in home lending, where risk is higher than has traditionally been the case. Earnings capacity is also among the best in the world, as is the quality of capital.

The quantity of capital held by the major banks, by contrast, is well above minimum regulatory requirements, and above the average of global peers, but short of the top quartile positioning recommended by the Financial System Inquiry.⁵ The FSI concluded: "...although Australian ADIs are generally well capitalised, further strengthening would assist in ensuring capital levels are, and are seen to be, unquestionably strong."

The first recommendation from the FSI is that capital standards should be set to ensure Australia's banking system should be seen to be unquestionably strong. While APRA does not intend to tie Australian capital requirements directly to international capital percentiles, they do provide a useful 'sense check'. Given the reliance of the Australian banking system on offshore funding, international comparisons will inevitably feature in any consideration of the appropriate Australian bank capital levels.

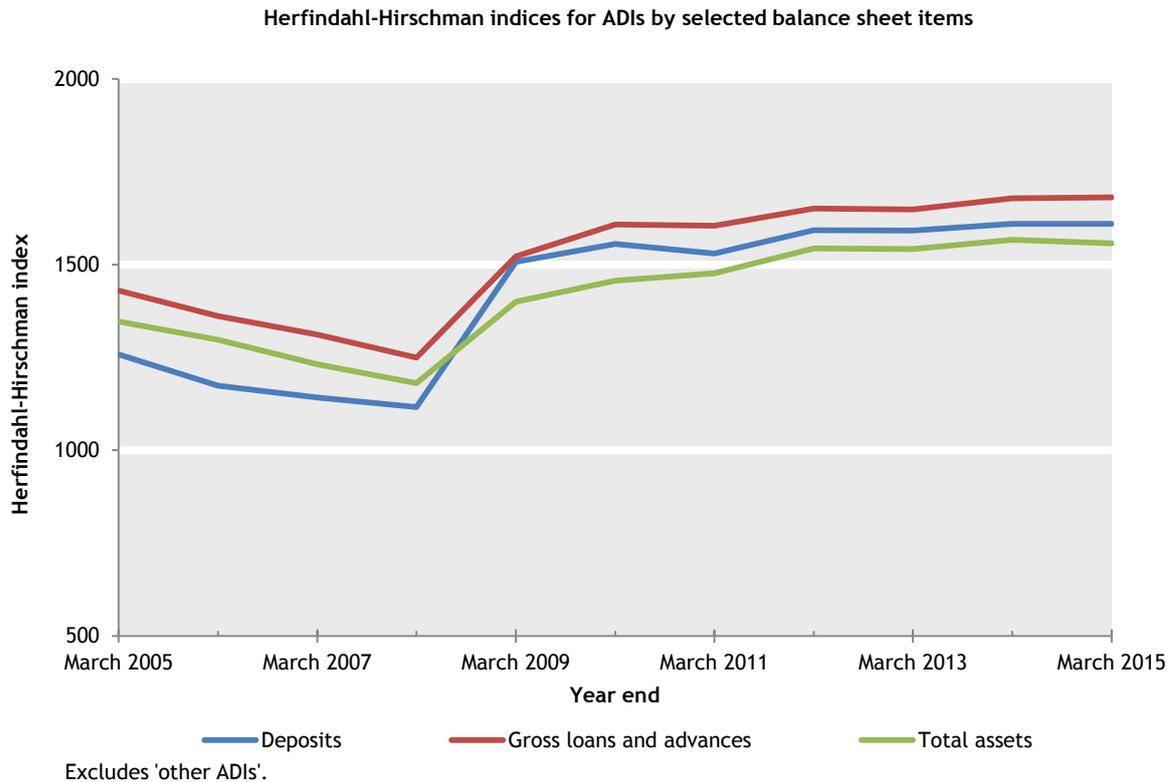
In summary, Australia's major banks are well-capitalised and financially sound, and should be able to act as shock absorbers should the Australian economy and financial system encounter unexpected external adversity. It would be fair to say, however, that this strength is primarily derived from bank asset quality and earnings, and less so from (relative) bank capital levels.

How competitive are Australia's major banks?

The Herfindahl-Hirschman Index is often used when considering industry concentration. This index has increased for Australian banking in recent years, particularly after the major banks acquired two regional banks seven years ago.

⁵ <http://fsi.gov.au/>

Figure 3



The U.S. Department of Justice has a long established rule of thumb that markets are considered concentrated when the HHI exceeds 1500, and highly concentrated above 2500. On that basis the Australian market for bank assets and deposits became moderately concentrated a few years ago.

The competitive position of the major banks can be considered in three contexts:

- compared to other ADIs;
- compared to the unregulated sector; and
- compared to foreign-owned ADIs.

Relative to other ADIs

Figures 2 and 3 above demonstrate that the major banks have a high and, over time, growing share of the total Australian banking market, and a high and growing share of the total financial market. Had this time series been extended back to, say, 1990, the results would have been even more striking. At that time, the Australian financial system included:

- large state banks;
- large building societies;
- large finance companies (often owned by banks);
- 16 recently licensed foreign banks;
- merchant banks; and
- solicitors' mortgage funds, among many other smaller investment schemes.

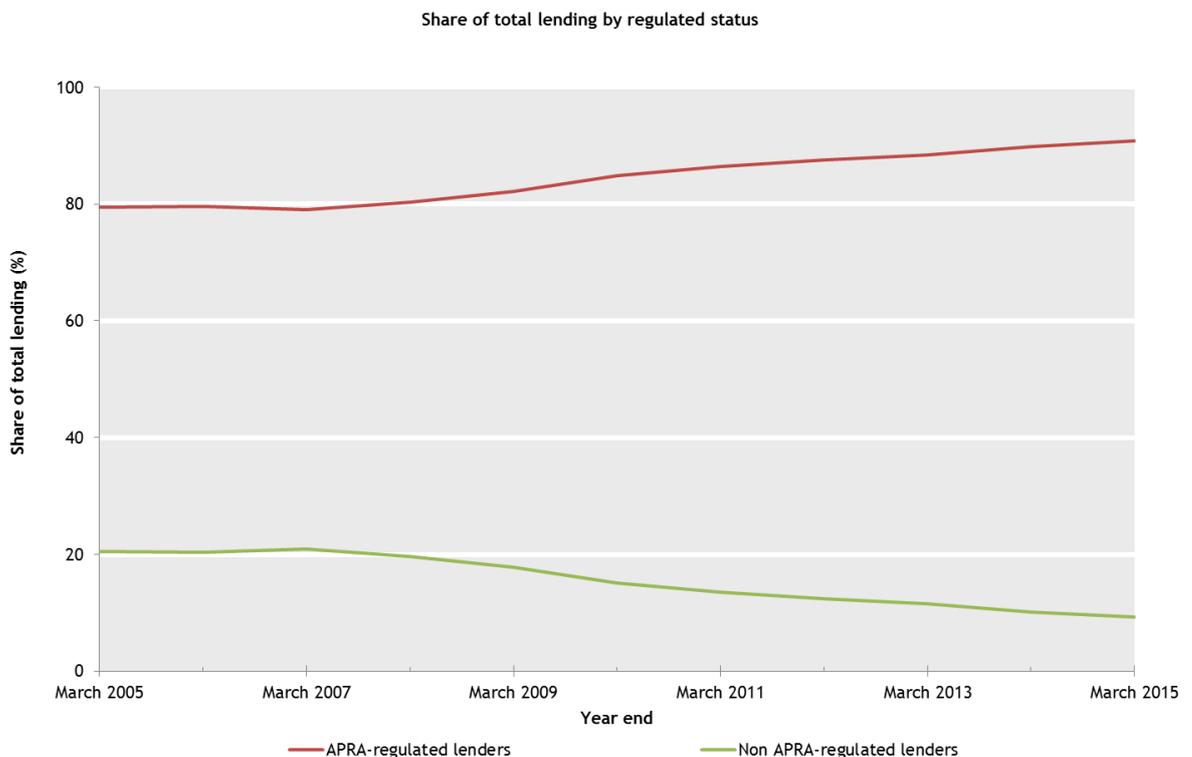
A remarkable proportion of these competitors to the major banks are no longer active. Many were absorbed or acquired by the major banks, and quite a few failed.

There is a meme in the banking world that safe banking is somehow “uncompetitive”. The facts seem contrary to this proposition: the four major banks have generally been the surest and most sustained competitors in the Australian (and for that matter, the New Zealand) financial system over the past twenty years. Many competitors have come and gone, often unable to continue to serve the Australian community during times of financial stress. The lesson from Australia, and elsewhere in the world, is that the only reliably competitive banks are financially sound banks.

Relative to the unregulated sphere

In some countries, notably the United States, the banking system holds a relatively low share of business, relative to capital market/shadow banking sectors, both for lending and for deposits and near-deposits. This is not the case in Australia.

Figure 4



Source: APRA data and RBA Statistical Table D2

From the mid-1990s to the mid-2000s, unregulated lenders led by mortgage originators grew market share to approximately 20 per cent. When the global financial crisis hit, many of these unregulated competitors closed, failed, or were forced to change their business models. Currently, unregulated lending is on the order of 10 per cent of total lending, and falling.

If the prudentially-regulated sector controls 90 per cent of total lending, this is rather strong evidence that prudential regulation is not making the regulated sector uncompetitive against unregulated lenders.

Comparison to foreign-owned ADIs

It is theoretically possible that foreign-owned ADIs could comply with the Australian prudential regime, but reverse elements of this regime through transactions offshore. If this were the case, and Australia’s bank regulation made local banks uncompetitive, then foreign-owned banks would be expected to grow their market share.

Figure 5

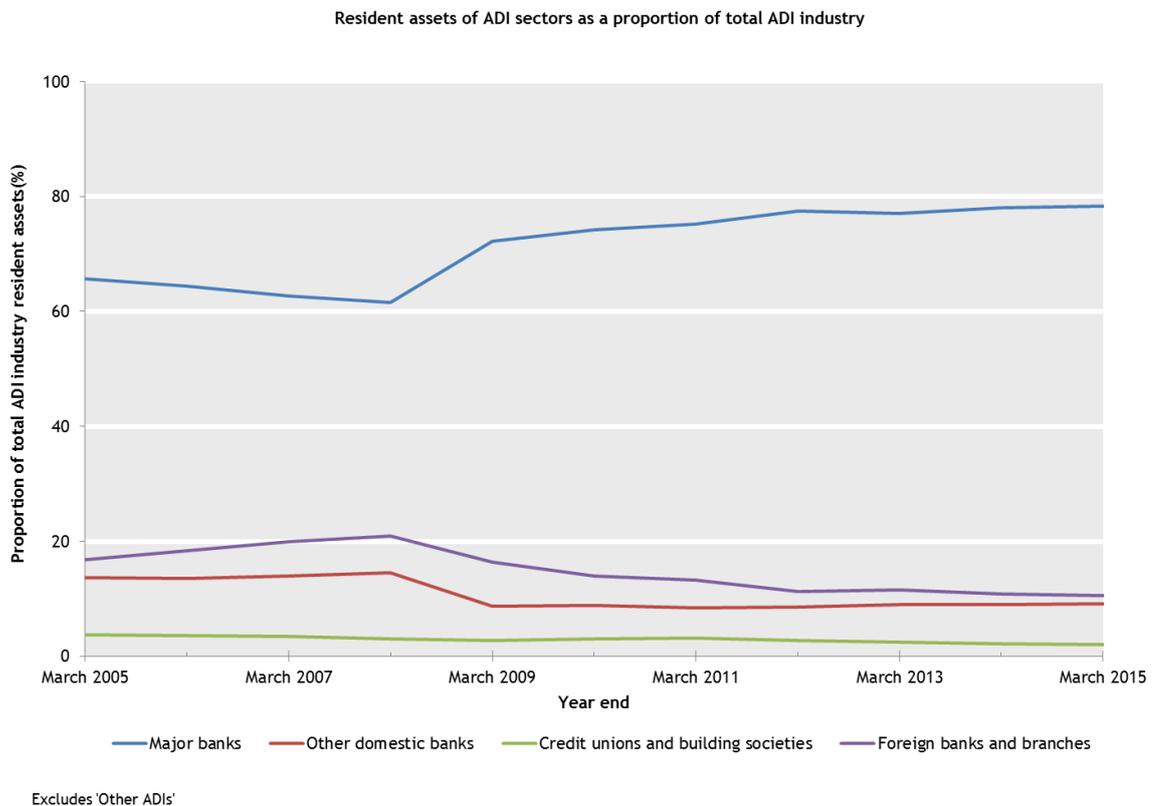


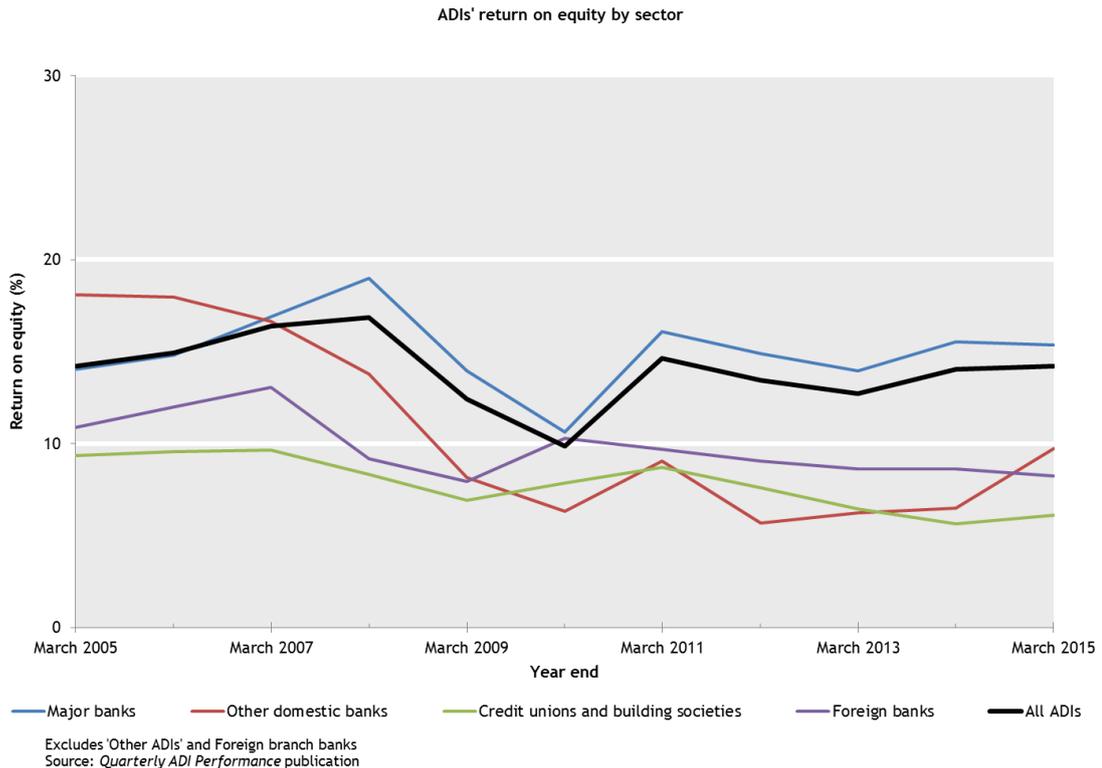
Figure 5 makes clear, however, that foreign banks and branches have a small and static share of Australian banking assets. A similar case applies for Australian banking deposits. There is no evidence here that foreign-owned competitors are taking market share away from Australian-owned ADIs.

In summary:

- prudentially-regulated ADIs dominate Australian lending;
- the four major banks dominate the ADI sector;
- there is no evidence that foreign-owned ADIs have any competitive advantage; and
- all these trends tend to indicate that the major banks are growing more rather than less dominant.

It is also a market in which the four major banks earn much higher returns on equity than their smaller competitors.

Figure 6

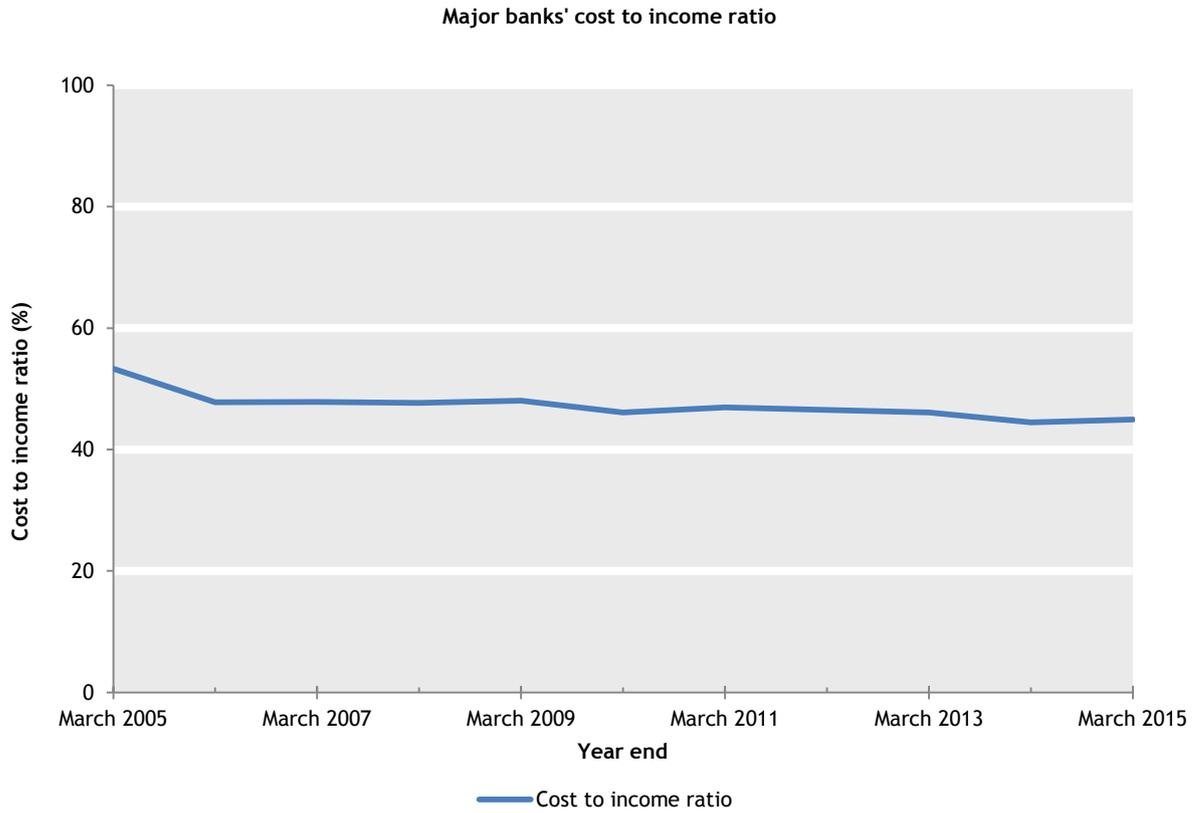


How efficient are Australia's major banks?

As with safety and competition, efficiency can be measured in many ways. This paper considers two measures: cost efficiency and margin efficiency.

An uncompetitive industry is less likely to control costs, either over time or compared to more competitive industries. In Australia, major bank cost-to-income ratios have fallen steadily over time to reach around 45 per cent in 2010, and then have held around this level in the past five years. A 45 per cent cost-to-income ratio is quite low in global terms, where ratios of 60-70 per cent are more common.

Figure 7



Source: *Quarterly ADI Performance* publication

Cost efficiency can also be considered across national borders, in which case the ratio of operating costs-to-assets is a standard measure. Table 1 below demonstrates that Australia's major banks perform very well against international peers on this measure. There are individual national banking groups that are more efficient than Australia in costs-to-assets terms, but very few in the developed world.

Table 1: Cost efficiency (operating costs as a percentage of assets)

COUNTRY	OPERATING COSTS		
	2000-07	2008-12	2013
Australia	1.99	1.20	1.11
Canada	2.73	1.85	1.78
United Kingdom	2.02	1.27	1.55
United States	3.58	3.01	3.03
Europe	1.88	1.40	1.51

In summary, cost measures suggest that the major banks are quite low cost, both when measured over time or against international peers. These cost figures, by themselves, do not prove that the major banks are efficient. Cost-to-income ratios could be low because income is very high, for example, due to a lack of competition. To test this, income-based measures need to be examined.

Competition re-examined: from market share to margins

Table 2: Major bank net interest margins

COUNTRY	NET INTEREST MARGIN			
	2000-07	2008-12	2013	2014
Australia	1.96	1.81	1.79	1.75
Canada	1.74	1.58	1.65	1.60
Japan	1.03	0.89	0.83	0.81
United Kingdom	1.75	1.12	1.08	1.14
United States	2.71	2.49	2.32	2.23
Europe	1.19	1.23	1.23	1.20

Table 2 suggests that the Australian major banks maintain relatively high net interest margins. Australia's relative performance on this measure may be temporarily impacted because many peer nations are operating with official interest rates at or near zero. This makes it difficult for banks in these countries to earn a reasonable margin from their deposit businesses.

Table 3: Major bank Return on assets

COUNTRY	PRE-TAX RETURN ON ASSETS			
	2000-07	2008-12	2013	2014
Australia	1.58	1.09	1.28	1.28
Canada	1.03	0.85	1.05	1.06
Japan	0.21	0.40	0.59	0.70
United Kingdom	1.09	0.19	0.22	0.39
United States	1.74	0.53	1.24	1.11
Europe	0.75	0.27	0.14	0.35

Return on assets is, in arithmetic terms, a profitability measure, but it also reflects competitive dynamics. Profitability is driven by a bank's safety, efficiency, and competitiveness. Australian major bank returns on assets are lower than in the pre-crisis period, but remain among the highest in the developed world. As with many other measures, the relative performance of the Australian banks may be temporarily flattered by adverse macroeconomic conditions in other parts of the world.

When considering a range of competition and efficiency metrics, the following picture emerges:

- 1) Australian major banks are low cost. Both their cost-to-income and cost-to-assets ratios are low in international terms;
- 2) the Australian major banks earn high margins and high returns in international terms; and
- 3) despite the apparently very attractive conditions applicable to the major banks' business in Australia, they continue to take market share, or at least hold market share, against unregulated competitors, foreign competitors, and other ADIs.

Implications for setting the capital requirements for Australia's major banks

On this paper's evidence, the Australian major banks have been highly successful enterprises. They are simultaneously:

- generating higher returns than their local competitors, or almost any other developed economy banking system;
- financially sound, and among the most highly-rated banks in the world; and
- operating at levels of efficiency that are rarely bettered in world terms.

The major banks have generated this outcome despite, or more probably because, they have been so competitive that they now dominate the Australasian banking and financial systems.

Faced with these conditions, what are the implications for setting an appropriate capital regime for banks, including major banks? The following issues are important considerations:

- 1) the major banks have over time become increasingly systemically important, so their impairment would be more damaging to the Australian economy than has historically been the case;
- 2) the global financial crisis demonstrated the need to think more deeply about systemic protection, as well as individual bank protection, when designing prudential capital regimes;
- 3) APRA's stress testing, in the context of an Australian economy 24 years removed from its last recession, suggests that a larger major bank capital cushion may become quite valuable when Australia eventually faces more adverse economic circumstances; and

- 4) although APRA largely considers capital strength in an absolute rather than a relative context, international banks are continuing to increase their capital ratios. Given the degree to which Australia's major banks rely upon international capital markets, it is important that the Australian banks are seen to remain leaders in financial strength, including capital strength.

In summary, there are good reasons to think that the Australian economy would be better served by major banks that, to borrow a phrase from the FSI, are unquestionably strong. Any increase in capital would make the major banks, and therefore the banking system, appreciably better positioned to deal with unexpected shocks. Furthermore, because the major banks are currently profitable, competitive, and efficient, increasing their capital requirements would be unlikely to unduly impair, and might marginally improve, the financial system's competitiveness.