

Appendix A

Financial system issues in the context of Wallis

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Key points

- Wallis was mainly involved in defining the regulatory structure appropriate to the future
- The future was seen as involving growth in superannuation funds and financial markets relative to ADIs
- Bringing super funds into the prudentially supervised world was seen a best done away from the RBA so as not to confuse the lender-of-last-resort the RBA provided to ADIs
- This justification for the twin peaks has disappeared so that the regulatory model should be considered on its own merits
- That said, the regulatory model has worked quite well
- APRA (post HIH) has proven a good prudential regulator with the main question whether it is too narrow to appropriately consider the broader economic implications of its decisions
- Away from the regulatory issues, the financial system has proven to be highly adaptive, facilitating very rapid growth in the demand for financial services with few problems; markets and institutions have integrated effectively
- The GFC proved that there was no problem funding Australia's future provided government retained its creditworthiness – essentially keeping public debt under control
- The RBA proved adept at keeping markets operating and thereby facilitating adjustment during the crisis
- The main weakness in crisis management arose from confusion in Canberra, with the roles of Prime Minister, Treasurer, their departments and advisors and requires careful reconsideration
- The main lesson is that the system can adapt, and does adapt, although in the process some pre-existing business models can prove to be inappropriate to the new environment

- Four issues stand out for the future
 - how the superannuation sector's role evolves as it comes to intermediate an increasing fraction of Australia's savings
 - how Australian regulators modify their approaches as Australia aligns more closely with the international, rule-driven (as opposed to supervisory-driven) model
 - how technology will impact the financial system, importantly by facilitating financial transactions away from existing institutions, but also through issues of data control and management
 - how to grow service sector exports, and more particularly financial sector exports

1 What and why Wallis was done

1.1 What

The Financial System Inquiry (the Wallis Inquiry) was set up in May 1996. One of the inquiry members (Harper 1997) has summarised the objectives as: “The Financial System Inquiry was set up ... to address three issues:

- to examine the experience of financial deregulation in Australia,
- to identify the main forces for change in the Australian financial system, and
- to recommend changes to the regulatory arrangements in the light of the continuing evolution of the Australian financial system”.

The formal terms of reference were rather more extensive:

1. The Inquiry will report on the results arising from the financial deregulation flowing from the Inquiry into the Australian Financial System ("Campbell Report") published in 1981. This will involve examining and reporting the consequences for:
 - a. the choice, quality and cost of financial services available to consumers and other users;
 - b. the efficiency of the financial system including its international and domestic competitiveness;
 - c. the economic effects of deregulation on growth, employment and savings;
 - d. the evolution of financial institutions and products offered by them and the impact on the regulatory structure of the industry.
2. The Inquiry will identify the factors likely to drive further change including:
 - a. technological and marketing advances;
 - b. international competition and integration of financial markets;
 - c. domestic competition in all its forms;
 - d. consumer needs and demand.
3. The Inquiry will make recommendations on the regulatory arrangements and other matters affecting the operation of the financial system (including prudential and other regulations made by the Reserve Bank and other bodies) as will:
 - a. best promote the most efficient and cost effective service for users, consistent with financial market stability, prudence, integrity and fairness;
 - b. ensure that financial system providers are well placed to develop technology, services and markets and that the financial system regulatory regime is adaptable to such innovation;

- c. provide the best means for funding the direct costs of regulation;
 - d. establish a consistent regulatory framework for similar financial functions, products or services which are offered by differing types of institutions.
4. The Inquiry in its consideration of financial system regulation may not make recommendations on, but will take account of:
 - a. the objectives or procedures of the Reserve Bank in its conduct of monetary policy;
 - b. retirement incomes policies;
 - c. the regulation of the general operation of companies through corporations law;
 - d. policies for the taxation of financial arrangements, products or institutions.
 5. In carrying out its investigations, the Inquiry may invite submissions and seek information from any persons or bodies.
 6. A final report is to be provided to the Treasurer no later than 31 March 1997.

The Inquiry members were Stan Wallis, then chairman of the Business Council of Australia and former Amcor CEO; Linda Nicholls, company director; Bill Beerworth, solicitor and merchant banker; Ian Harper, professor international finance; and Jeff Carmichael, professor of finance. The Inquiry was based in the Treasury building in Canberra, and Treasury provided more than half the staff of the Secretariat as well as the head.

The Treasurer in the newly elected government, Peter Costello, already had a strong sense of what he wanted to get from the Inquiry. Two months before he set up the Inquiry he was quoted as saying: “The regulatory system is hopelessly out of date. You have superannuation funds that are now in home lending and are essentially running banks and you have banks coming into superannuation – you have got different institutions offering the same product, different regulators regulating the same products because they are offered by different institutions. Why not cut all that away and say whatever the nature of the financial institutions we will have a regulator covering prudential {requirements} and a regulator covering consumer protection and we can sweep a whole lot of that away?” (Australian Financial Review 14/3/1996).

The central focus was clearly on regulation. Bakir’s 2003 analysed the politics behind the establishment of the Inquiry derived from interviews with many of the senior actors involved. He concludes that “[Treasury] proposed and supported the ‘twin peaks’ idea of a single prudential regulator which treats all providers of functionally similar products or services equivalently, and a single disclosure regulator responsible for consumer protection. Treasury convinced both [Treasurer] Willis and [Shadow Treasurer] Costello of the validity of the idea

before the 1996 federal election. The solutions already existed and were waiting for an influential political actor to connect them to problems and to the political process”.

Nevertheless it seems Costello’s attitude was the adoption of the lawyer’s rebuttable presumption. In April he was quoted as saying: “Everyone is going to get a fair hearing. I have not predetermined the outcome ... If anybody does not like the idea of a super-regulator they can come into this Inquiry and state the reasons ... the Inquiry will come up with certain recommendations that the Government will accept, reject or change” (Australian Financial Review 11/4/1996).

Most of the regulatory agencies, but not the Treasury, opposed the twin peaks proposal in their submissions.

The Inquiry recommended the separation of prudential responsibilities (to APRA) from the Reserve Bank which was to retain the systemic responsibilities, and ASIC to assume consumer protection responsibilities. The Government accepted almost all the recommendations including that of the twin peaks model of regulation.

1.2 Why

While there was no immediate trigger to the Inquiry, Australia had been through a period of significant financial upheaval around 1990. Macfarlane (2006) tells it thus: “In the process of unwinding various insolvent businesses and property projects a number of financial institutions failed. These included the State Bank of Victoria, the State Bank of South Australia, the largest credit union, the Teachers' Credit Union of Western Australia, the second-largest building society, the Pyramid Building Society, several merchant banks, Tricontinental, Rothwell's and Spedley's, a mortgage trust, Estate Mortgage, and a friendly society, the Order of the Sons of Temperance. In addition, a number of well-known businesses that had been bought by highly geared acquirers, had to be sold in distressed circumstances, and two of the Big Four private banks incurred losses and had to be recapitalised” (Carew 1997, Armstrong and Gross 1995).

The gradual opening up of the system following the Campbell Inquiry (set up in 1979) had swept away much of the older financial architecture. The Reserve Bank and most of the other financial players were learning as they went along, and crises were handled in a relatively ad hoc manner. Macfarlane’s list above captures some of the concerns, with failures of institutions regulated by a range of different regulators, competing across different sorts of products, and often interlinked through conglomerate structures.

Nevertheless it is not clear that failures of the past shaped the Inquiry. There is no specific reference to them in the terms of reference of the Inquiry and they do not feature in the speeches or writings of the members. It is interesting to read the RBA interpretation of the

place of the Wallis Inquiry in its summary of the decade of the 1990s: “With the completion by mid-decade of most of the reforms needed to correct the problems of the early 1990s, the Commonwealth Government established the Wallis Inquiry in 1996” (Gizycki and Lowe 2000).

This was however a period of very significant microeconomic reform. Markets were being opened up in electricity, water, rail, telecommunications, and new regulatory structures being put in place (King and Maddock 1996). The other important point of context is that 1996 was also the year in which the Government committed both to formal central bank independence, and to an inflation target. What is intriguing is however the scant reference to the potential impact of superannuation on the financial system, despite acknowledgement of the volume of assets it was expected to accumulate and following much policy discussion in the early 1990s. Gizycki and Lowe (2000) in their summary of financial events of the decade scarcely refer to it, and nor do Edey and Gower (2000) consider the way in which the growth of superannuation would change the operations of the financial system in their review of savings trends in the decade.

The focus of the Inquiry was clearly forward not backward. Part of the drive behind Treasury’s concern lay in the desire to ensure that the regulatory structures were structured to avoid the worst impacts of future crises. One Inquiry member has expressed it in these terms: “The emphasis in the terms of reference was on change and the benefits of competition and efficiency. In this way, the Inquiry was asked to be forward looking in its recommendations - seeking to avoid a potential future crisis rather than dealing with an existing one. These objectives of safety and efficiency were the guiding principles behind many of the Committee’s recommendations. Indeed, with its emphasis on competition and efficiency, the Wallis Report, unlike its predecessor, was not primarily deregulatory. Instead, the focus of the Report was on realigning and streamlining regulation to make it more efficient and conducive to competition, rather than on removing regulations per se” (Carmichael 2004).

1.3 Wallis: analysis and conclusions

The central philosophical position of the Inquiry was summarised as being that: “The efficiency of the financial system affects every business and individual in the nation. There are very large efficiency gains and cost savings which could be released from the existing system through improvements in the regulatory framework and through continuing developments in technology and innovation. Markets can deliver these outcomes where competition is allowed to thrive and where customers have confidence in the integrity and safety of the system” (Financial System Inquiry 1997, p.2). The focus was thus very explicitly on the reliance on markets to deliver efficient outcomes.

Competition and potential competition were thus seen as solving the Inquiry's two central concerns:

- it would render the system more adaptable in the face of change, and
- it would force participants to deliver services more efficiently.

This led directly to the basic analytical model used by the Inquiry: "... the Inquiry's main task was to design a regulatory framework which would allow industry participants to adapt to and profit from change while at the same time preserving the legitimate public policy objectives of financial regulation. In doing so the Inquiry sought as far as possible to promote efficiency and cost savings through enhanced competition and contestability while preserving financial system safety and stability" (Harper 1997, p295 emphasis added; see also Costello 1998 and Chapter 6 of the Financial System Inquiry Report).

The central conclusions of the Wallis review were that the system was evolving appropriately, that competition was leading to enhanced efficiency, and that the main focus should be on redesign of the regulatory structure to facilitate competitiveness while protecting the security of the system. The Inquiry's basic reading of other emerging forces (discussed more in the next Section) was that they were likely to increase contestability – through technology, globalization, more transparent pricing, and more informed consumers. The fundamental viewpoint was that even in market segments with few players the potential for entry would either force incumbents to become more efficient or new entrants would take the market away from them.

The weight of the recommendations thus rested on regulation. Consistent with the basic philosophy, the regulatory recommendations derived principally from the desire to heighten the contestability of the financial system, although overlain by concerns about public confidence in the integrity of the system.

One of the Inquiry members (Carmichael 2004) has classified the recommendations as essentially focussed around what the Inquiry saw as the four major problems that regulation had to deal with:

- anti-competitive behaviour – addressed by the ACCC
- market misconduct – addressed by ASIC
- information asymmetry – addressed by APRA and
- systemic instability – to remain the focus of the RBA.

Broadly the Inquiry tried to reduce barriers to entry in order to promote competition by making markets more contestable – for example into banking, or into the payments system. The main

thrust of changes around market behaviour focussed on enhanced informational requirements, licencing requirements and governance rules.

The most profound changes came in the separation of the prudential regulator (APRA) which was to focus on particular institutions which made what the Inquiry called 'intense promises' from the systemic regulator (the RBA).

The logic was that some institutions, such as banks, make promises to repay (say deposits) which are unconditional, but whose credibility the person making the deposit was unlikely to be able to monitor. This fundamental informational asymmetry justified a regulatory intervention, and possibly capital controls etc to ensure the promise could be met. Clearly this function could have been met within the pre-existing regulatory design but the Inquiry felt that since many superannuation funds and insurers also offered unconditional promises they need to be supervised in a similar manner to the banks. This was the key stumbling block. The Inquiry judged it to be inappropriate for the Reserve Bank of Australia to be supervising such a wide range of individual institutions, particularly since that might lead to the misconception that the RBA stood behind them in some way. This was the core rationale for the new regulatory design (Edwards and Valentine 1998).

2 How Wallis anticipated the future

The Inquiry saw three fundamental drivers of change:

- changes in customer needs,
- changes in skills and technologies, and
- changes in regulation.

The first of these, changing customer needs, was expected to be driven by concerns about: an ageing population; a better educated population; changes in workforce participation; a population increasingly exposed to the financial system and hence to financial risk; and one more sensitive to value in its purchases. These forces were seen as being likely to increase the demand for tools to manage risk, tools to manage life-cycle saving and spending better, and towards an increasing reliance on electronic channels of delivery. Broadly the financial sector was seen as deepening. Firms which responded best to these changes were expected to do best.

Technological change was expected to enhance electronic forms of delivery of financial services, in fact, these were expected to emerge as the dominant form of service delivery.

ATMs, EFTPOS, internet banking, smart cards, electronic cash, data mining and the deepening of derivatives markets were all foreseen. These were all interpreted as changing the underlying cost structures of financial organisations, and leading retail investors to adopt more sophisticated and market-oriented strategies, probably at the expense of traditional organisational models. The pace of such change was expected to accelerate as costs fell and parties became more accustomed to the new tools which would become available.

The Inquiry pointed to four fundamentally important regulatory changes: (i) closer integration of global financial markets, (ii) changes to superannuation, (iii) taxation, and (iv) the privatization of government institutions. Capital flows into and out of Australia were seen as increasing but the emphasis of the Inquiry was rather more on equity flows than on offshore borrowings.

The Inquiry saw the three fundamental drivers playing out in the financial system through four effects:

- An increasing focus on efficiency and competition
- A further globalisation of markets
- Further conglomeration and market widening
- A continuing shift away from intermediaries and towards markets.

3 What actually happened

Wallis's three fundamental drivers – changes in customer needs, changes in skills and technologies, and changes in regulation – all occurred.

With the benefit of hindsight we see three other major transformations:

- The first was the extremely rapid 'financialization' of the Australian economy
- The second was the transformation of global supply chains with the emergence of China as a major manufacturer, its demand for Australian resources, and the consequential change to the structure of the Australian economy.
- The third was the apparent increase in the fragility of an integrated global economy with shocks from the Asian crisis, the dot-com bubble, and the global financial crisis.

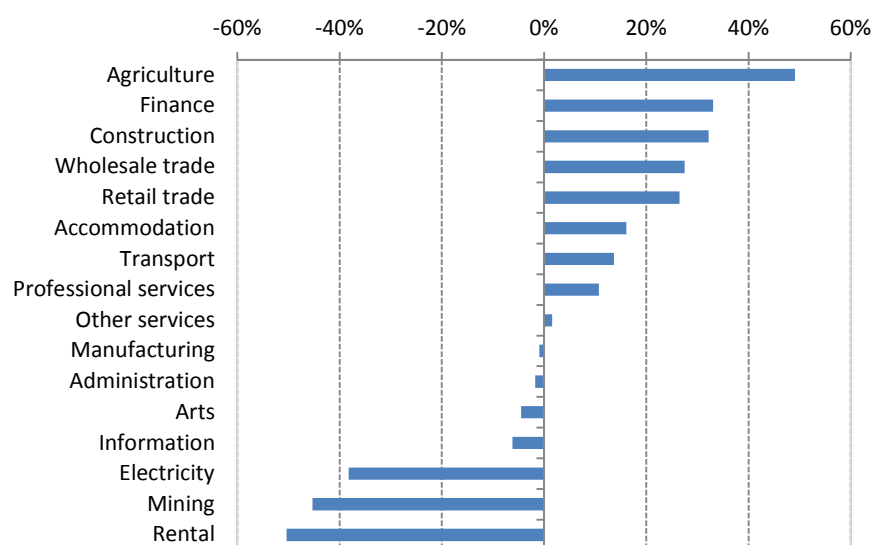
3.1 Wallis prediction: An increasing focus on efficiency and competition

- Wallis "Increased competition will result in the rationalization of pricing and costs. There will be no room in a competitive market for non-commercial mispricing.

Competitors with high cost structures will also be forced to rationalize their operations in order to remain competitive”.

There is very strong evidence in the financial sector of ongoing improvements in productivity. The ABS analysis of multifactor productivity suggests that many sectors of the economy have become more efficient over the intervening period with the financial sector performance being well above average.

Figure 3.1.1: Change in multifactor productivity: 2013 relative to 1996



Source: ABS 5260.0.55.002 Estimates of Industry Multifactor Productivity, Table 1

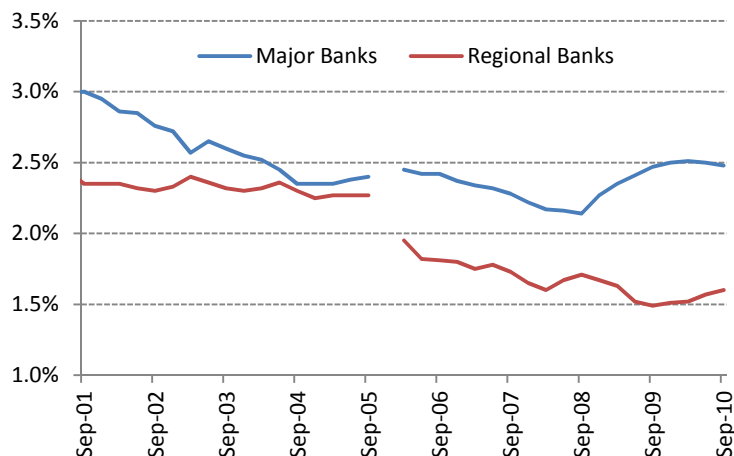
When we look at the major banks more narrowly, we see similar improvements with the cost to income ratios falling sharply. At the time of Wallis the typical level was around 0.60 while ratios around currently closer to 0.45. The Bank of International Settlements Annual Report for 2013 reports that the Australian banks have the fourth lowest level of operating costs (relative to assets) of any of the 15 countries included in its survey.

The extent to which the efficiency and productivity of the Australian banking system is the result of the increasing contestability of the system driven by Wallis is an open question. We have seen significant entry by companies like HBOS, Citi, ING and HSBC into basic banking but since they have captured little market share it is more likely that potential competition has been an important disciplining force than actual entry. The fact that the Australian banks (other than Macquarie) have made little headway overseas may simply imply that entry is difficult and that the heightened efficiency of the Australian banks is more the result of domestic pressures

rather than from contestability from offshore. The foreign banks have maintained leading roles in institutional banking, and in broking.

We did see however businesses, like Aussie Home Loans and Macquarie Bank, using the securitization market to fund attacks on products mispriced by banks. Monolines have also attacked other prices such as credit card rates; ING notably attacked the banks on deposit pricing and seized an important part of the market; online brokers cut deeply into the margins of traditional broking companies; banks took share from insurers; and competition between superannuation providers with different business models is intensifying. The downward trend in net interest margins is clear.

Figure 3.1.2: Banks' net interest margin (%)



Source: RBA, domestic operations half yearly

As suggested by Wallis, incumbents have been forced to match the offerings by entrants and competitors in order to remain competitive. Having lost share to entities like Aussie Home Loans which offered honeymoon rates etc, all the banks restructured their product offerings to meet the competition. We have also seen the banks move to match the online deposit framework put in place by ING after the latter quickly established a significant position in the deposit market. There is also strong evidence that banks have competed for business by offering under-the-counter discounts to their standard variable rate without necessarily cutting the notional price as a device targeted at winning new customers. They also moved to match the use of the securitization market in periods when that proved to be an efficient funding mechanism.

The general point made by Wallis, that institutions would need to adapt as competition and potential competition emerged if they were to survive has proven accurate.

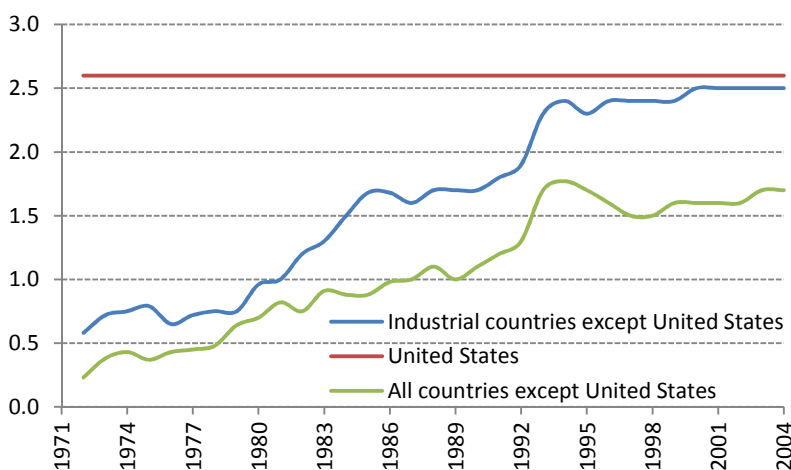
3.2 A further globalisation of markets

- Wallis: “The Australian economy and its financial system are now closely linked to international markets. Financial services participants in Australia face increasing competition from offshore providers and are simultaneously pursuing international opportunities themselves”.

The period around Wallis was one of reform of many financial systems globally and it is quite clear that world markets have become more closely integrated since Wallis. In Australia’s case whereas imports were just 19 per cent of GDP in 1996, they have grown to 22 per cent in the recent data. However given the fall in protection, and the sense that China has emerged as a vigorous competitor for our business, the number is lower was probably expected by Wallis. Financial flows however have increased considerably faster than goods flows, growing from about 20 to 30 per cent of all of Australia’s balance of payments transactions over the last two decades.

This is quite typical. Globalization has proceeded apace but financial globalization has become both absolutely and relatively more important.

Figure 3.2.1: Financial openness index

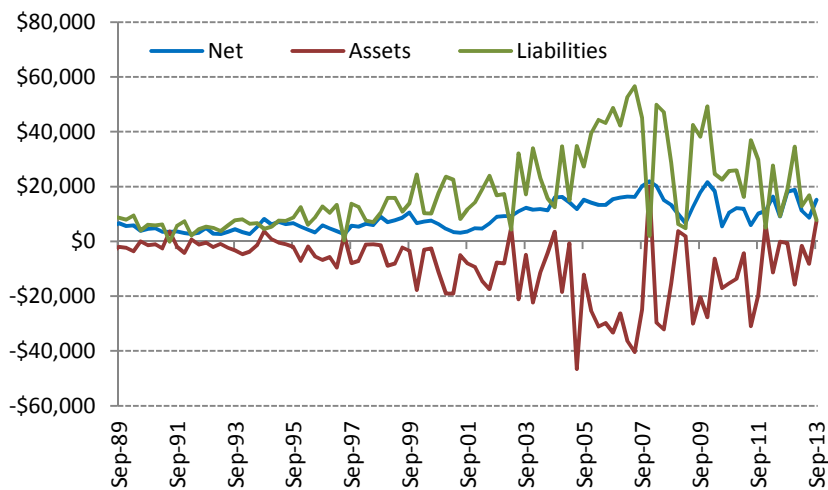


Source: Chinn and Ito (2005)

The increased flows to Australia in the post-Bretton-Woods period reflected a return to earlier trends when Australia was seen as a desirable location for investment. During the period of financial repression between 1945 and 1980, capital inflows had fallen by about two per cent of GDP, but rose sharply with the reforms of the 1980s (Maddock 2014). Strong economic growth, with significant immigration, provided returns to capital which justified investing here, with a reliable legal and regulatory structure ensuring foreign investors would be fairly treated which

lessened investment risk. It is also notable in the chart below that outward investment also rose significantly. Part of this was portfolio investment, particularly as superannuation funds accumulated, but more Australian companies also increased their offshore activities.

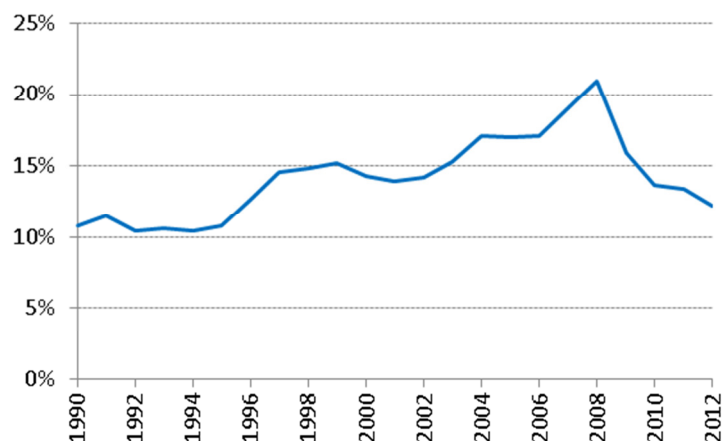
Figure 3.2.2: Capital flows (for transactions; \$m)



Source: ABS, International investment Position.

Wallis foresaw an intensification of competition across borders and involving Australian financial institutions. Some of this has clearly happened with the share of total ADI assets held by foreign institutions rising from 15 to 20 per cent in the decade to 2007 but falling subsequently (in part because of the CBA purchase of Bankwest). Much of the focus of the foreign banks has been on commercial lending.

Figure 3.2.3: Foreign owned banks in Australia: share of domestic banking assets (%)



Source: RBA Financial Stability Review, 2012

The Inquiry would probably be surprised however by how little headway Australian institutions have made offshore. There have been significant retreats. For instance, ANZ first sold Grindlays African and European branches and later sold the remainder of Grindlays to Standard Chartered in 2000; NAB sold its American subsidiary, Michigan National Bank, to ABN AMRO in 2001; and Westpac divested much of its international business in the early 1990s motivated by the bank's problems at home (Carew 1997). AMP too had its misadventures in the UK, and beat a retreat. The big success story has been Macquarie Bank which been able to establish a business which is roughly half offshore. ANZ too is advancing an offshore strategy while NAB appears to be pulling back further. The exception is New Zealand where the Australian majors all have significant positions.

It is important to distinguish assets from liabilities. The Australian banks have borrowed heavily from international funding markets to lend into Australia. The size of the imbalance is clear from the table below which comes from the RBA Bulletin (December 2012). About half of the liabilities are denominated in foreign currencies although mainly hedged back to Australian dollars. It is also notable that despite the large positions held by the Australian banks in New Zealand, that country only accounts for about six per cent of their assets.

Figure 3.2.4: Banks' international positions as % of GDP: selected countries

	International assets	International liabilities	International position (Net)
United Kingdom	236%	243%	-7%
Netherlands	148%	183%	-35%
Switzerland	116%	132%	-16%
France	90%	80%	9%
Germany	73%	57%	17%
Japan	53%	22%	31%
Australia	29%	52%	-23%
Canada	26%	21%	6%
United States	20%	23%	-3%

Source: Bailey et al (2012), RBA Bulletin

3.3 Further conglomeration and market widening

- Wallis: "Increased conglomeration and further market widening will continue to challenge traditional institutional and regulatory boundaries. New competitors are also emerging from outside the finance industry. As competition intensifies, many firms will seek to specialise in those activities they perform best, causing the value chain to disaggregate. Alliances, joint ventures and outsourcing are likely to become commonplace".

The most conspicuous area of conglomeration has been the move of the banks into wealth management with Colonial with CBA, BT with Westpac, and MLC with NAB illustrating the point. AMP has gone the other way, adding banking to its insurance and wealth businesses. The banks have also moved into equities broking, most notably through CommSec but the other banks have followed suit.

Since the crisis, APRA has moved to clarify its rules for the supervision of conglomerate groups, inspired by global problems with AIG failing because of problems in a particular division, and ING's insurance business being risked by failures in its banking business, in particular. The issue was on APRA's agenda from its formation – and inspired by changes to the Banking Act which clarified the role of non-operating holding companies for ADIs - but seems now to have got to the head of the queue.

There have been fewer entrants from outside the finance industry than foreseen by Wallis. It is not completely clear why this has occurred but the increasing regulatory burden on the sector has probably raised barriers to entry. Telstra which might have been an entrant was preoccupied with other issues, and the big retailers retreated after some experiments such as the EzyBanking tie-up between Woolworths and CBA. Credit cards are the one part of the industry where non-traditional entrants have been more aggressive.

The prediction that financial businesses would tend to disaggregate their businesses vertically has also been quite limited. The global move to outsource activities to take advantage of wage cost arbitrage has occurred to a limited extent, with a number of the banks now operating call centres and some limited processing offshore. The Bank of Queensland and Bendigo Bank have both experimented with franchising models but do not seem to be pushing the disaggregation approach vigorously.

Wallis may well have been mindful of the potential for financial institutions to outsource their IT development and operations. Here too the picture is very unclear. All of the banks appear to have experimented with outsourced technology but some like the CBA have decided that technology should be a core skill within a bank and have reintegrated its technological development and maintenance.

Broadly the Wallis conjecture about the microeconomics of the industry has not proven to be correct.

3.4 A continuing shift away from intermediaries and towards markets

- Wallis: “Markets are increasingly challenging intermediaries for the provision of finance and the management of risk. Large corporations have had access to financial markets for some time, but developments in securitisation now allow markets to provide finance to retail borrowers. An increasing range of risks can be managed through an array of market based instruments, while the needs of savers are also increasingly being met through financial market products. Balance sheet intermediaries will continue to perform an important role in meeting the financial services needs of their clients, but the form of their participation is likely to change”.

One of the fundamental differences much discussed in relation to financial systems is the extent to which they are bank-dominated (eg Germany) or market dominated (eg the USA). On this scale Australia was towards the bank-dominated end of the spectrum and continues to be so. The very rapid growth of financial sector assets relative to GDP is apparent from the figure below but so is the fact that ADIs retain their position with about 60 per cent of system assets, roughly where they were when Wallis reported. In the US the comparable figure is close to 40 per cent.

The fundamental mistake of the Wallis point of view was to assume that markets and institutions were alternative funding mechanisms. What has happened is that the ADIs have learnt how to use markets to advantage, borrowing directly from wholesale markets to expand their lending and securitizing loans where it was profitable to do so, so as to maintain their significant position in financial assets. In other countries we have also seen banks move to hold more of their assets as securities and fewer as loans, again taking advantage of some of the

benefits of markets. Essentially Wallis was correct in suggesting that there would be a continuing shift towards markets but was wrong to see this as involving a shift away from intermediaries.

Figure 3.4.1a: Assets of financial institutions: in aggregate (\$b)

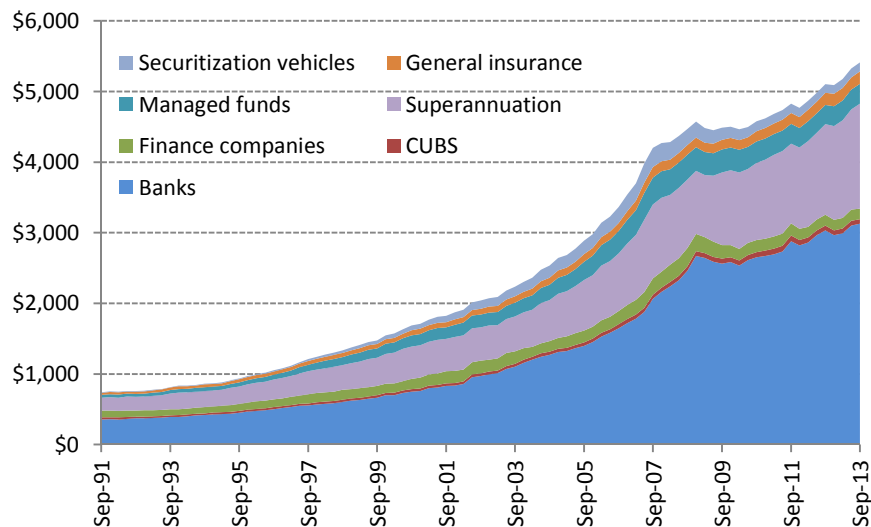
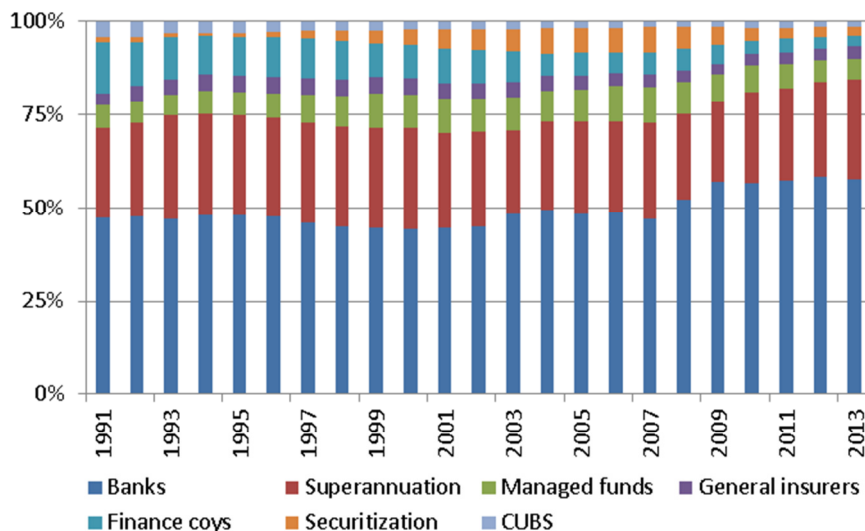


Figure 3.4.1b: Assets of financial institutions – percentage composition



Source: RBA database

Financial markets have clearly become more important, particularly as vehicles for managing risk, for reallocating risks within the financial sector, but not at the cost of the central role

played by banks. Indeed one of the notable features of the Australian financial system is how little of it sits outside the prudentially regulated sector.

4 How the system functioned between Wallis and the GFC

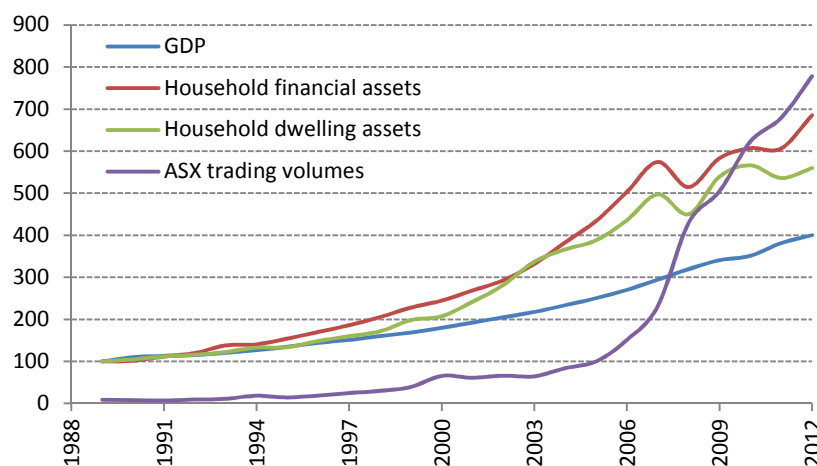
As we have seen the main thrust of the Wallis Inquiry was towards the better regulation of the financial sector. The ongoing growth and continuing change in the sector, with few problems, is evidence that the Inquiry did no harm and may have done some good. The industry appears to have effectively facilitated a realignment of asset prices and ownership after the long period of distortion between 1945 and 1980.

4.1 Growth

a. Sector growth is broadly based

The growth in the financial sector has been remarkable with value added as a share of GDP almost doubling. There appear to have been three main drivers although the ABS data are not adequate to separate out the different contributions. (Aside: The quality of the ABS data is an important problem with proper analysis of the sector).

Figure 4.1.1: Indicators of increased demand for financial services relative to GDP



Sources: GDP (ABS), financial assets (RBA), ASX turnover from Annual Reports (with some changes in classification). All based at 1989 = 100 except the market turnover based at 2005=100. Figure reproduced from Maddock (2013).

b. Household choice was the key underlying driver

The very considerable rise in household assets, both financial and in dwellings, appears to have been driven by choices made by individual households reflecting

- Greater freedom to manage the positions with the end of credit rationing
- The decline in global and Australian inflation rates allowing households to service larger loans
- A broadening of the products available for managing risk.

The fact that the period was one in which households made very significant adjustments is clear from the following table (taken from Davis 2013). On the data, the choice by households seems sensible – they have borrowed with some increase to their interest payments and have boosted their assets considerably as a result.

Figure 4.1.2: Household leverage trends 1987 -2012

	Debt/ Assets	Housing: Debt/ Assets	Debt/ Income	Total assets/ income	Financial assets/ Income	Interest Payments/ Income	Housing Interest/ Income
1987	8.7	11.9	43.3	430.1	169.1	7.6	5.2
1997	11.6	18.6	74.7	560.4	222.0	6.1	4.7
2007	16.1	25.8	153.5	841.1	350.6	11.3	9.2
2012	18.2	30.0	148.0	723.6	299.2	10.4	8.5

Source: Davis(2013) originally RBA. Income is disposable income.

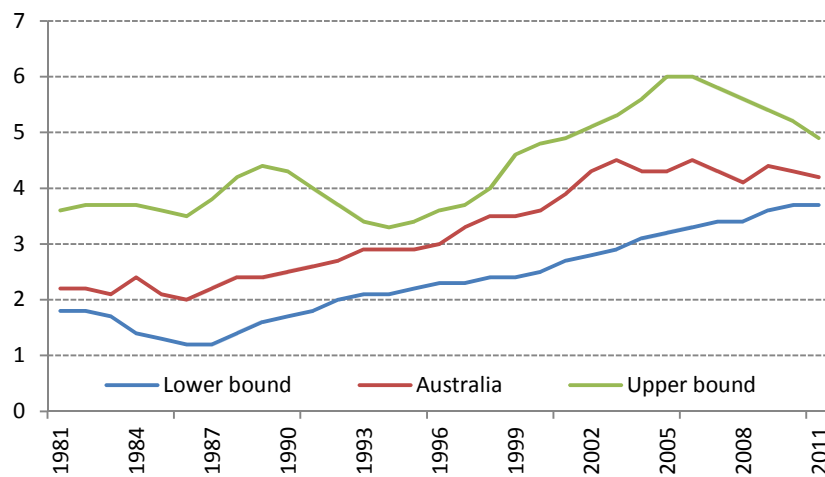
c. The particular role of house prices

The very big increase in the price of housing which lies behind the table is not confined to Australia: households globally made similar choices.

The Figure below shows the bounds within which house prices in a range of countries moved, and suggests that Australia's house price rise was not exceptional. (The upper bound is an amalgam of different countries depending on which had the highest ratio in that year, and the lower bound the lowest).

Households appear to have a strong preference for better housing, and the supply of such housing has been slow to respond to the increased demand. There is evidence for Australia that the quality of housing has also changed so that part of the price rise reflects a change in quality.

Figure 4.1.3: Average dwelling price to average disposable income in developed markets



Source: Extracted from RBA Bulletin, December 2012. Note: Countries covered are Belgium, Denmark, Canada, France, Germany, Ireland, Italy, Netherlands, New Zealand, Norway, Spain, United Kingdom.

d. Consequences of size

One consequence of growth (and the value of the Australian dollar and the high PEs) is that the major Australian banks are now amongst the most valuable banks in the world – and amongst the most expensive. This makes them relatively invulnerable to take-over. Corporate discipline is now mainly effected through their need to satisfy wholesale markets of their ongoing credibility and through their institutional investors.

While the individual superannuation funds are not large on a global scale, they have seen continuing consolidation and are likely to continue to grow quickly given their privileged place in the national savings system. Greater scale will have implications for how they source and manage assets but is also likely to subject them to much greater public and regulatory scrutiny. We are now seeing regular commentary that it would be in the nation's interest to require them to allocate more of their assets towards this or that particular sector.

The size of the local superannuation pool is attracting managers from offshore, and businesses which compete throughout the value chain.

4.2 Structural change

The very rapid growth of the system was accompanied by some structural change but perhaps less than might have been anticipated.

Most notably, and in contrast to some of the inferences in Wallis, the banking sector has grown in parallel with the wider industry. This is discussed in Section 3.4 above. By far the biggest

change has been the decline in the importance of registered financial corporations and the ongoing decline of building societies. Some of this reflects a continuing decline in their businesses from the pre-liberation period when those sorts of institutions had regulatory advantages over the banks. Perhaps a greater part has been the conversion of those institutions into banks, and the agility of the banking sector is bidding business away from the others.

a. Banks

Within the banking sector we have seen very considerable entry and (until the crisis) a gradual decline in the market share of the big four banks when it reversed. In the global context Australia is not unusual: “Of 105 countries for which data on bank concentration were available for 2005, 85 had three-firm concentration ratios above 50 per cent, 53 above 75 per cent, and 31 above 90 per cent” (Davis 2010). Davis continues “Turning to Australia ... [the evidence] suggests that, if anything, concentration has been declining slightly. Between 2004 and 2007, all indicators of the share of the four majors declined marginally, and the increased share between 2000 and 2004 can be primarily attributed to the takeover of the Colonial State Bank by the Commonwealth Bank of Australia (CBA) in 2001”.

The growth of securitization facilitated significant entry and growth of smaller banks during the period.

The Wallis Inquiry argued for the removal of the then six pillars policy, on the grounds that competition policy as applied by the Australian Competition and Consumer Commission (ACCC) would provide an adequate substitute for the evaluation of anti-competitive effects of potential mergers. The subsequent four pillars policy has prohibited mergers amongst the major banks.

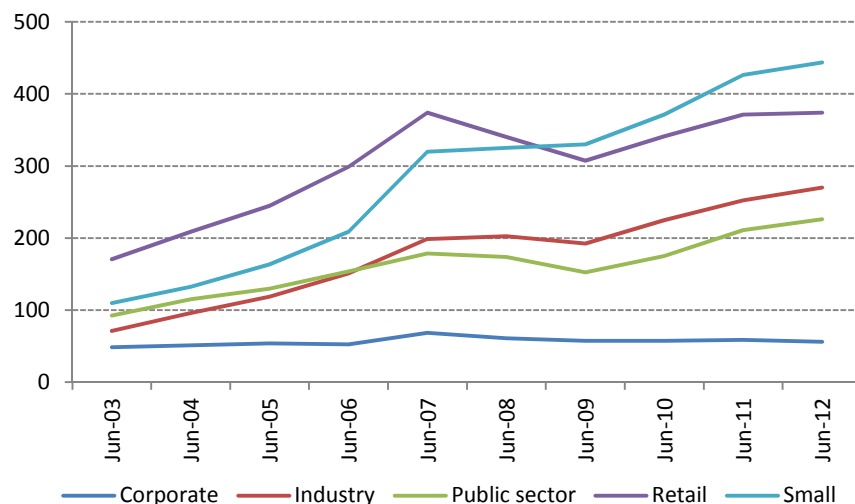
b. Superannuation

The superannuation sector too has seen very considerable shuffling within the broad phase of dynamic growth. The two biggest shifts have been:

- The rapid growth of self-managed superannuation, and
- The relative decline in corporate funds.

While there have been some changes in the composition of the sector, most notably with the share of public sector funds falling relatively, the underlying inflow has maintained a broad upwards momentum. Beneath the broad trend the sector has seen considerable increase in concentration.

Figure 4.2.1: Size and growth of different types of fund



Source: APRA statistical database

The system has been subject to its own separate Cooper Inquiry (2010) which made recommendations for significant reforms, mainly directed at reducing costs for most contributors, and to reforms mainly directed at behaviour of advisor (FOFA).

c. Insurance

The insurance sector saw profound change from the mid-nineties with the de-mutualisation of entities which had dominated the industry for 150 years – National Mutual and Colonial Mutual in 1996, and AMP in 1998 – and entry of the banks into insurance. Despite the change of legal structure profits contracted: “Operating profit after tax [of the insurers] fell from \$2605 million in 1997-8 to \$215 million in 1999-2000” (Keneley 2005). The banks increased their share of industry assets from 9 per cent in 1990 to 44 per cent by 2000, forcing the insurers to look for a different business model or be subsumed. In fact MLC Life was acquired by the National Australia Bank in 2000; Colonial Mutual was acquired by the Commonwealth Bank of Australia in 2000; and, with National Mutual having been acquired by AXA Asia Pacific in 1998, only AMP of the big mutuals survived as AMP Limited.

Broadly the insurance sector has been in relative decline as much of its activity has moved into the superannuation sector and even life policies are increasingly sold within superannuation packages. The ordinary business of the surviving insurers now only constitutes around 10 per cent of their activities and has grown far more slowly than other financial businesses.

General insurance is subject to quite a different dynamic and significantly insulated from the rest of the financial sector.

d. Markets

The markets business has grown rapidly as the table below indicates. There are two basic motivations for such growth:

- the most logical is that the growth of markets reflects economic agents making rational decisions to reallocate risks and increasingly able to do so because of a range of financial product innovations
- the other is that the new instruments have proven to be a useful tool for speculation which may or may not have a rational base.

This has clearly been one part of the sector subject to significant innovation.

Figure 4.2.2: Markets activity – turnover in AUD billions

Year	Debt		Turnover Currency		Equities	
	Physical	Derivative	Physical	Derivative	Physical	Derivative
2000	8804	11886	5706	10842	161	541
2005	17306	29767	9675	25156	806	950
2010	11134	46110	14680	27461	1359	2801

Source: AFMA: reproduced from Davis (2013)

4.3 Failures

There have been two spectacular failures in the post-Wallis phase.

The HIH failure in 2001 was subject to a Royal Commission. In his report the Commissioner wrote: “Where did the money go? ... in the main the money was never there. The deficiency of several billion dollars has arisen because claims arising from insured events in previous years were far greater than the company had provided for. Past claims on policies that had not been properly priced had to be met out of present income ... In the language of the industry, the failure to provide adequately for future claims is called ‘under-reserving’ or ‘under-provisioning’. This, in my view, is the primary reason for HIH failing—and not only failing but doing so in such an egregious way”. He was also critical of APRA: “APRA’s performance in supervising HIH was not good. It missed many warning signs, was slow to act, and made mis-judgments about some vital matters”.

The second important failure, that of Bankwest during the financial crisis, has been scrutinised by various Parliamentary inquiries, both in Australia and in the UK. Clearly part of the parent bank’s problem lay in its funding and this translated into failures of the parent to provide a solid funding model for Bankwest, but the very significant losses reported by the bank even after the

takeover by the CBA suggest a deeper malaise. Again, risks do not seem to have been appropriately priced.

Bankwest sought to grow rapidly. It achieved growth most particularly in its business arm by taking on more risk than its competitors. Some of this appears to have been related to lending disproportionately to lower quality borrowers, and some appears to have related to lending at lower rates than its competitors. In retrospect the regulator should probably have inferred that excessive risks were being taken in the pursuit of rapid growth, and scrutinised the business more closely. It is always possible to grow a financial institution by taking more risk than one's competitors.

5 What the GFC was

The GFC impacted Australia differently during the 'sub-prime crisis' period (Phase I), during the 'financial crisis' phase after Lehman Brothers collapsed (Phase II), and after the immediate crisis had passed (Phase III).

5.1 Phase I

The initial stage, timed locally from the July 2007 collapse of two significant local hedge funds, was mainly characterised by a sharp rise in the wholesale cost of funds from their pre-existing extremely low levels. It points in response to rising sensitivity to risk in the light of global uncertainties. August 2007 saw a sharp decline in global money markets as participants began to question each other's credit quality and to shore up their liquid asset holdings. For example, the spread between the OIS and BBSW rose from under 10 points to closer to over 40 points. Kearns (2009) concludes that during this period global influences drove almost all of the uplift in spreads. As with the money market spreads, the spread between differently rated borrowers opened up. Asset prices also began to fall – between November 2007 and January 2008 the ASX200 fell 17 per cent.

These changes put the business models of a number of highly-leveraged firms under pressure. This was the period during which Centro, Allco and MFS, with highly leveraged positions, failed in practice or in effect. As well, businesses built on margin lending suffered similar problems, with significant retracement and some direct failures, for example Opes Prime, and also with ramifications for some smaller cap stocks where principals had used margin loans to retain control post-listing and were caught out in a falling market. (Some Local Councils, particularly in NSW, had invested aggressively in CDOs and suffered losses on their investments in this phase – a poor investment decision rather than something caused by higher rates).

Weaknesses in the financial advice industry were also exposed by the prolonged bear market.

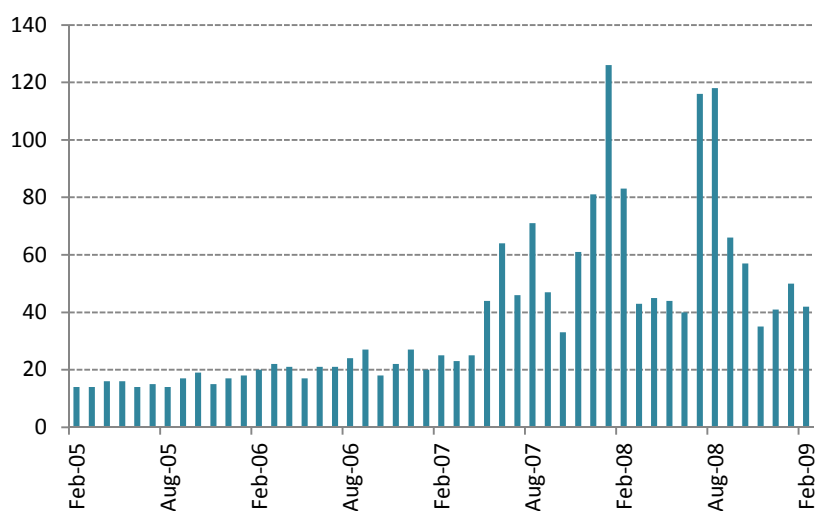
The major banks had few problems in this first phase. They faced some losses on loans to failed firms, and had difficulties restructuring some of these given the wide-spread use of syndication but had very limited exposures to CDOs or other toxic securities. The smaller banks, which relied more on securitization as a source of funding and which tended to have lower credit ratings, suffered relatively more as securitization markets congealed and credit spreads widened.

The Treasurer, Wayne Swan, did however put pressure on the banks which tried to pass on their higher borrowing costs with an initial attack in January 2008 criticising ANZ for raising its standard variable home loan rate by 0.2 per cent, after not commenting on NAB's earlier 0.12 per cent rise.

The Reserve Bank acted quickly. It expanded the range of repo-eligible securities to private and then own-name securities. It also increased the term of such repos – the pick-up is clear from the figure below. To offset the additional risk, the RBA increased the haircuts it required through excess collateralization. APRA increased the intensity of its stress testing of the banks.

Both Swan's advisor Barrett (2011) and journalists Taylor and Uren (2010) emphasise the rising levels of concern inside the government and the bureaucracy during Phase I about potential risks, and the extent of preparations for a possible worsening of the situation.

Figure 5.1.1: Duration of repos (days)



Source: RBA, Annual Report 2009

5.2 Phase II

Following the collapse of Lehman Brothers in September 2008, the crisis moved into a more severe phase with rises in global interest rates, the closure of some wholesale markets, large falls in some asset prices, a collapse in trade credit, and fears of global recession. These factors provoked and were overlain by a deep collapse in confidence.

As the Governor's Foreword to the RBA's 2009 Annual report outlines: "2008/09 was an even more turbulent year for the global financial system than the year before. After a lengthy period of escalating tension, the failure of Lehman Brothers in mid-September 2008 was the catalyst for the most serious and widespread financial crisis in generations. Confidence in the soundness of financial institutions and systems was seriously impaired. Share prices fell heavily, and demand for durable goods slumped as households and firms all over the world adopted a much more precautionary attitude both to current spending and to their financial positions".

In addition to the US decision to allow Lehman Brothers to fail, two other features stood out in this phase of the crisis: the fact that the problems mainly arose through banks' holdings of securities rather than the more traditional problem of banks' failing because of poor lending, and the rapid spread of the crisis through the failure of non-bank institutions like AIG and the US money market funds.

As the event unfolded, households, businesses and financial institutions all tried to reduce leverage simultaneously which reduced demand, raised unemployment, caused more failures, and helped transform the contraction into a more traditional, demand-deficient, business cycle event. The solution has however been more difficult because of the balance-sheet effects as everyone wants their income to grow but no one wants to increase their expenditure. While governments or foreigners have traditionally proven to be reliable sources of demand in most country-specific recessions, this has been rendered more difficult this time because governments too have wanted to de-lever and because the event is quite global in its impact.

Policy makers in Australia reacted quickly to address the collapse in confidence. Short selling of stock was banned on 21 September, on 12 October the government announced guarantee arrangements for deposits and wholesale funding of banks, and a fiscal stimulus in terms of cash payments was announced on 14 October, while the RBA cut the cash rate by 300 points in the final three months of the year.

Throughout the Treasurer maintained a steady and very public position of support for the domestic financial system. The Government however did send out mixed signals, floating proposals for a special fund to support car retailers, and even for a government bank, which was unsettling for the public and the industry. While the Government allowed the take-over of

St George Bank and Bankwest, it provided support for the securitization market but restricted it to smaller banks: “Swan ... determined that the Australian Office of Financial Management (AOFM) which manages the Commonwealth’s debt program, would invest \$4 billion in mortgage securities to help smaller banks such as ME [Members Equity Bank]” (Taylor and Uren 2010, p56).

It is however notable how well the financial system operated during this critical phase of the crisis:

- While economic agents almost universally increased their cash holdings (by about ten per cent), there was no significant retail run on deposits as seen in the UK and none on wholesale markets of the type experienced by some banks in other countries.
- None of the banks was downgraded by the credit rating agencies and all retained access to global markets albeit with the support during the most difficult period of government guarantees.
- Banks were able to access additional equity at small haircuts to their depressed share prices with institutional investors and particularly the superannuation funds proving willing to invest – Australia thus avoided the nationalisations seen in other countries.
- The rise in non-performing loans was limited partly reflecting the continuing strong operation of the economy but also the quality of the underlying pre-crisis lending decisions, and the full-recourse nature of most housing loans.
- Domestic banks continued to lend with credit available throughout the crisis although prices rose to reflect both higher borrowing costs and elevated levels of risk: foreign banks by comparison reduced their lending into the Australian market quite sharply, part of a global re-domestication of aspiring global banks.
- The major Australian banks continued to operate their NZ subsidiaries normally.
- CBA was able to absorb the smaller and failing Bankwest with few problems including being able to access the additional wholesale funding required to continue the bank’s operations at the height of the global crisis and without disruption to Bankwest’s business operations.

This period was marked by a continuing shake-out of weaker institutions and those with business models inappropriate to period where risk-taking was much more expensive. Tricom Securities upset the securities market in January 2008 when it was unable to settle its trades; ABC Learning failed in February 2008 as a result of excessive leverage; Opes Prime, a margin lender, failed in March 2008; NAB announced in July 2008 that it had over \$1 billion in exposures to the US CDO market; as was Suncorp’s banking business was downgraded in January 2009; Storm Financial, a large financial planning firm went into administration in

December 2008; Babcock and Brown failed in March 2009; and two large managers of agribusiness investment schemes failed in April and May 2009.

The crisis is discussed in more detail in Chapter 6.

5.3 Phase III

Once the immediate crisis had passed, and it seemed clear that the local institutions were out of immediate danger, the focus shifted to preventing future crises. The financial institutions themselves responded, regulators moved to provide greater long term assurance of stability, and both lenders and borrowers modified their behaviour.

This is the topic of Chapter 7.

6 What the system did in terms of crisis impacts – access to wholesale markets, price of funding, impact on players

6.1 Crisis impacts – financial markets

The crisis saw a number of abrupt changes from the way financial markets had operated during the ‘great moderation’.

Most of the changes reflected an increased concern about risk. Thus we saw an increase in credit spreads across the board; a flight towards safer, shorter and more liquid assets, and a flight back to home markets. These are all natural and predictable movements and ones which the financial markets accommodated reasonably comfortably.

One important difference was that some major corporates found it easier to borrow in global markets than did banks, even where they enjoyed the same credit rating. This suggests that lenders were suspicious of the ratings assigned by credit rating agencies and treated banks differently. The habit of an easy reliance on credit ratings was seriously undermined, and is perhaps a long term outcome of the crisis.

Markets also became more volatile with the average daily volatility of the ASX200 rising from under one per cent to over two per cent. This was a reflection of uncertainty rather than risk. At the same time, market correlations rose reflecting their tendency to move according to macro and global factors rather than news about particular stocks or bonds.

The Australian currency fell sharply and then recovered adding considerably to macro uncertainties. One consequence was that cost of the hedging offshore positions rose sharply.

Asset prices fell. Interestingly however the share prices of the banks were not impacted particularly relative to the rest of the market. Securities lending fell significantly.

Three market segments suffered particular damage:

- The securitization market effectively closed for a period, with offshore issuance ceasing from mid-2007. In part this reflected the closure of SIVs and the general negative perception by investors of the whole class following the problems in the US market.
- The mortgage trust industry froze redemptions, given the illiquid nature of their assets in the face of unit-holders desire to move to cash.
- The margin lending business contracted sharply with the long share price boom of mid-decade being replaced by share price falls and households reducing leverage where possible.

It is notable that the market infrastructures continued to operate normally. Equity and futures trading volumes fell but not precipitously, high value settlements functioned well as did foreign exchange settlements, and derivatives markets remained open even though there was a general move towards raising margin requirements and monitoring participants more closely than had previously been the case. While Lehman Brothers had been a participant in a number of these markets, and clearance of some of its trades was slower than normal due to legal uncertainties, the market handled the adjustment without major disruption.

Unlike the 1990s recession no financial institution suffered excessively from any of the (limited number of) corporate failures. This reflected well on the process of syndicating loans and the unwillingness of banks to expose themselves to large single-name risks. There were however some problems with disentangling such syndicates with the different banks, and especially the foreign banks, having quite different requirements.

6.2 Crisis impacts – households and businesses

Before we move to discuss how intermediaries reacted, it is appropriate to discuss how households and businesses reacted to the crisis.

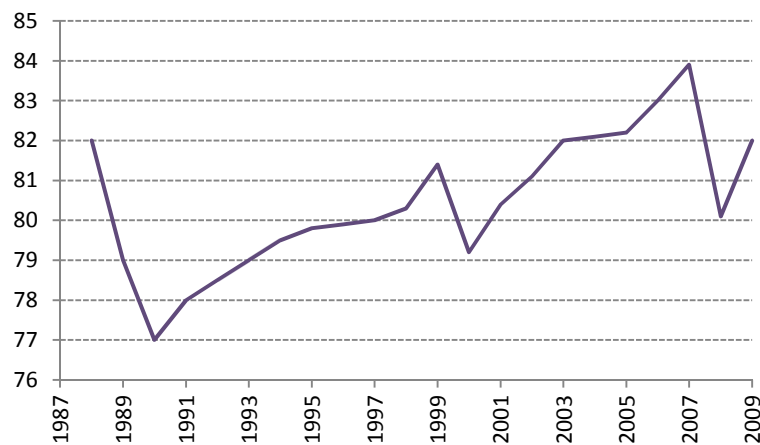
Understandably given the high levels of uncertainty, the response of both groups was cautious, with a move to reduce their leverage, to hold more liquid assets, and to delay expenditures until the situation became clearer.

Ellis (2013) for example points to the sharp turnaround in home equity withdrawals, which had added about 3 per cent to household disposable income in the years before the crisis and then reversed with households reverting to an older pattern and adding about 3 per cent per year to

their housing equity. This move by households to cut spending and increase savings is clear across many of their other activities. The effect seems to be one driven by uncertainty itself given just minor moves in objectively measured household risk as indicated by any substantial rise in unemployment.

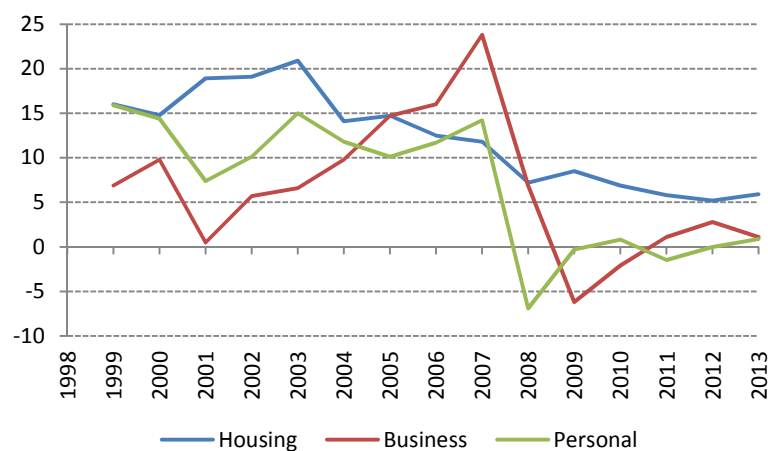
Businesses too became more cautious. The most obvious indicator of a downward shift in its demand for credit (ie one not driven by price movements or tighter credit rules) is the sharp drop in capacity utilisation as indicated in the NAB survey. This reflected a decline in utilisation across all sectors – firms with excess capacity are unlikely to borrow.

Figure 6.2.1: Capacity utilization - annual (%)



Source: NAB website

Figure 6.2.2: Credit growth – year end (%)



Source: RBA Financial Stability Review

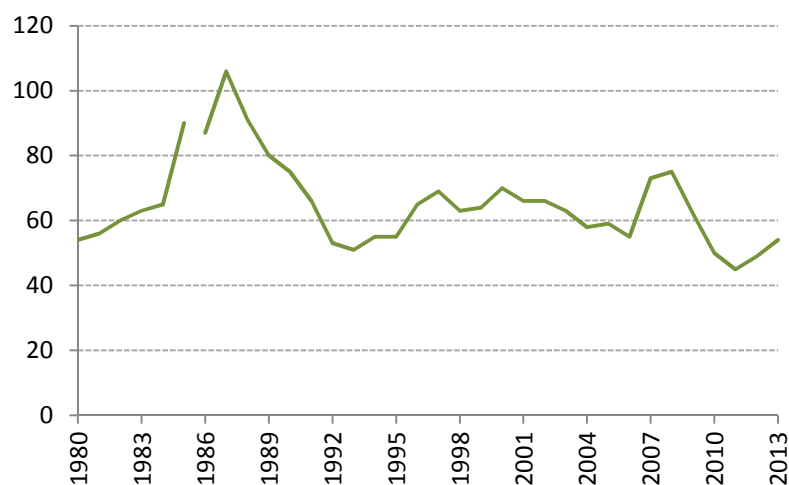
These downward shifts in the demand for credit were exacerbated by rises in the cost of borrowing as discussed above. There was also a clear tightening of lending criteria (discussed below). The net effect of this squeeze of both the demand and the supply side was for a sudden stop in the growth of credit. The shift was most pronounced for business credit although personal credit saw similarly marked declines with much of that being driven by the virtual cessation of margin lending.

The net effect of the unwillingness of both households and businesses to borrow was to stabilize rather than drastically reduce the leverage for each sector.

It is quite notable however that unlike in the US there has only been minor deleveraging by the household sector in Australia. This may partly reflect that fact that given the generally solid economic conditions and the full-recourse nature of borrowing has resulted in few write-offs of Australian household debt: instead household savings out of current incomes have risen, and this has gradually reduced debt relative to assets.

For the corporate sector, while there has been no major readjustment of the sort we saw after the recession of the early 1990s there was still a reduction in gearing. It is quite clear however that firms were hardly stretched before the event compared to the episode around 1990 when corporates had borrowed heavily in the newly liberalized market.

Figure 6.2.3: Corporate gearing: listed firms book value debt to equity ratios



Source: RBA Financial Stability Review 2013

6.3 Crisis impacts – institutional responses

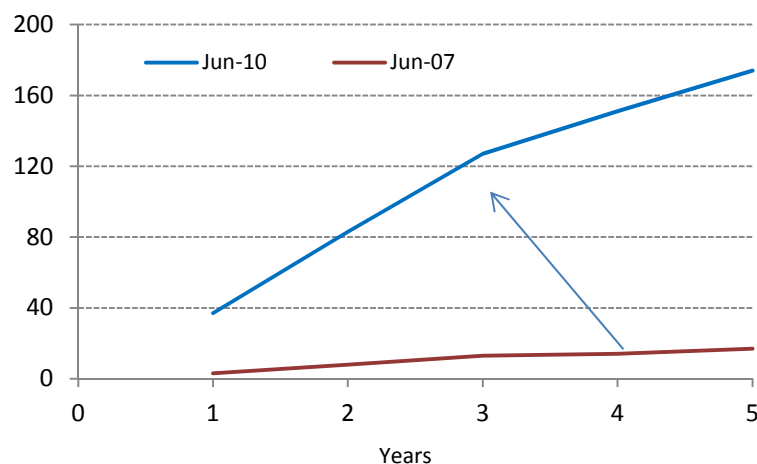
The first problem for all banks was to protect themselves against bankruptcy. This involved managing three risks – ensuring they had liquidity day-by-day, ensuring they were able to fund their businesses, and protecting themselves against losses from poor loans or investments. All banks immediately increased their cash holdings at the central banks (the RBA accommodating this expansion of exchange settlement accounts) and co-ordinated closely with the RBA to ensure liquidity would be available if necessary (at a price). Controllable costs, like wages, were quickly constrained or frozen.

Raising additional capital was one of the earliest priorities. This was accomplished quickly through the local market with institutions willing to acquire equity in the banks at depressed prices. In total \$100 billion in equity was raised by ASX200 entities in 2008 and 2009 - just under half in private placements to institutional and sophisticated investors, with an average discount of 12 per cent, and a 19 per cent average dilution of pre-existing shareholdings (Connal and Lawrence 2010). The banks increased their common equity lifting the tier 1 capital ratios from 7.3 per cent to 8.2 per cent in the six months to December 2008 in advance of any prudential changes mainly by the issuance of common equity. The four largest banks issued \$18 billion of the total \$25 billion raised in total on the market in the period.

The immediate concern about funding, either a retail run on deposits or a wholesale run effected through their being unable to access wholesale markets, were quickly removed by decisive government action with the introduction of the deposit and wholesale funding guarantees. Even with the guarantees, wholesale funding was tight for a period because of the size of Australia's requirements within the global pool and the skittish mindset of investors with banks collapsing in Europe and the US (Clyne 2012). Banks had continually to roll over their loans during this period, even if their books were declining, because of their maturity mismatch which is fundamental to banking. The situation with deposits was more comfortable as households ramped up their cash holdings, and parked more of their cash with the banks to take advantage of the security of the deposit guarantee. Nevertheless both wholesale funds and deposits became more expensive, particularly for borrowing at term which became particularly attractive to help manage risks.

The major banks quickly used their access to guaranteed borrowing to borrow in advance of their funding needs as a precaution against any potential future shocks in global funding markets. They paid the government for access to this facility.

Figure 6.3.1: Funding costs in basis points



Source: CBA results presentation, August 2010

While the major banks were mainly concerned with access to global wholesale markets, the smaller banks and non-ADI lenders faced a severe problem with the virtual closure of the securitization markets, and withdrawal of warehousing facilities. The situation with lending was different. Loans already made were effectively sunk, and banks had to live with the consequences, although all put additional resources into their credit analysis and recovery teams. This caused some disquiet amongst borrowers as loans which were rolled over incurred higher rates, and loan conditions were more strictly reviewed and enforced.

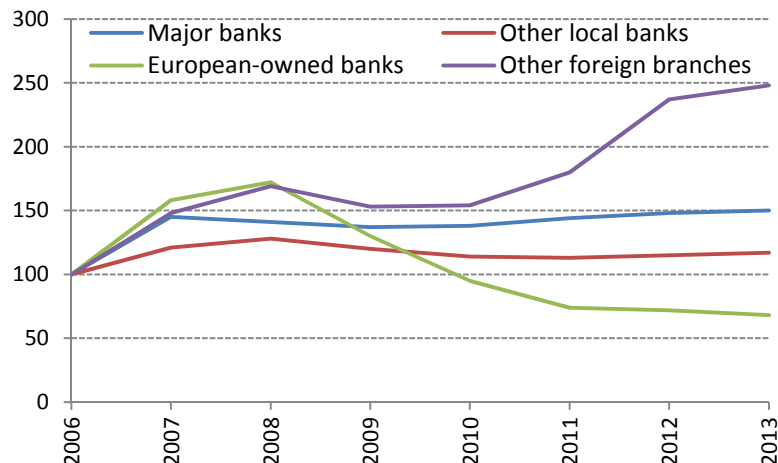
Risk analysis was also rethought. One lesson from the failures of Bear Stearns, Lehman Brothers and the problems at AIG was that banks needed to understand better their gross exposures to other institutions rather than automatically netting things out. A second was that much risk analysis had been undertaken based on short term data histories with, for example, value-at-risk models based on two year histories being shown to be inappropriate guides to risk in a severe event. Risk departments, and hence bank decision makers, became extremely cautious given such doubts of many of the standard tools of risk analysis.

As demand fell, costs rose and risks were reassessed, different types of banks responded differently. The European banks retreated quickly back to their home market apparently permanently, while other foreign banks retreated but have come back into the market more recently, most notably with Asian banks taking up the role in syndicates which was previously occupied by the European banks.

The smaller banks had difficulty funding their businesses, with the collapse of the securitization market, and with their lower credit ratings, and were squeezed. The major banks broadly

maintained their overall level of business lending (which still implied a sharp slowing in growth rates).

Figure 6.3.2: Banks' business lending book (index 1996 =100)



Source: Extracted from Financial Stability Review September 2013: major bank data includes St George and Bankwest

All of the banks saw their profits squeezed as they incurred losses on loans and moved rapidly to increase their general and specific provisions. Shareholders shared in the pain as their dividend were cut even though banks increased their payout ratios (on lower incomes). Appropriately, some of the adjustment to the crisis was borne by the shareholders through lower share prices and lower dividend payments.

The rising cost of funds caused greatest inconvenience for the smaller and lower rated banks. They start from a lower level of profitability (Figure 3.1.2), and their profit trended downwards after the crisis as their funding sources became tighter and more expensive relative to the more highly rated banks.

The higher base level of profitability for the larger banks probably reflects significant economies of scale - the best, recent research by Hughes and Mester (2013) suggests that the costs of large banks rise by about 7.5 per cent while those of smaller banks increase by 8.8 per cent, as they fund a 10% increase in all outputs: "Our results indicate that these measured scale economies do not result from the cost advantages large banks may derive from too-big-to-fail considerations. Instead, they follow from technological advantages, such as diversification and the spreading of information costs and other costs that do not increase proportionately with size. Significant scale economies in banking suggest that technological factors appear to be an important driver of banks' increasing size" (p.584). The information on banking margins in Australia provided in Figure 3.1.2 is consistent with this finding from global research.

The sharp difference in the performance between the national and more regional banks may also arise in part from the difference in their bad and doubtful experiences. The smaller banks have narrower businesses, some with heavy exposure to the lagging Queensland economy, and to some particular asset classes like margin lending and agribusiness investment schemes.

With the capital base improved, funding more assured, and bad and doubtful debt policies revised, the focus of the banks shifted to how to grow. Two notable steps were the acquisition of St George Bank by Westpac, and the acquisition of Bankwest by the Commonwealth Bank.

St George and Westpac announced their intention to merge on 15 May 2008, before the crisis intensified. The press release justified the merger as (i) creating Australia's leading financial services company, (ii) being an AA rated financial institution with strong capital and broad based funding, and (iii) providing a platform for growth. The ratings issue was important as "AA rated banks [are] well placed versus A rated banks given [that] material pricing differential [is] likely to persist" (from WBC presentation to analysts). In effect the funding cost differential which had opened up after Bear Stearns was an important driver of the merger. The ACCC in its announcement on 13 August, said "... the ACCC considered that competition in retail banking markets provided by the other major banks and regional banks along with credit unions, building societies and niche players, would be sufficient to constrain the merged firm after the acquisition". The deal was priced at 16.8 times earnings.

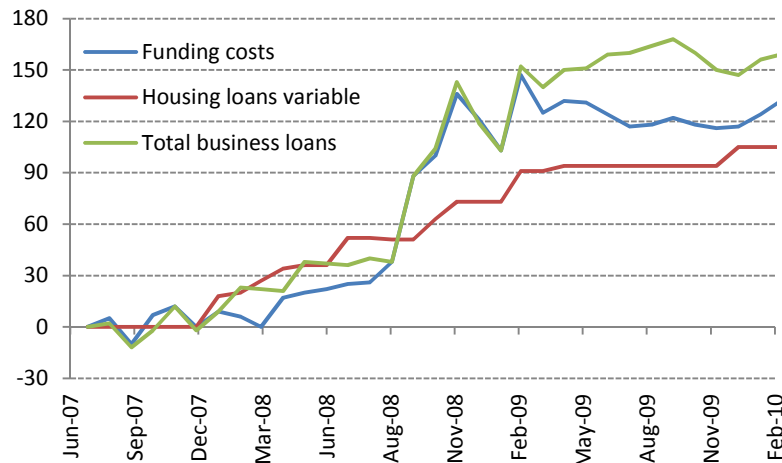
The CBA takeover of Bankwest occurred at the peak of the crisis, and in the process of the UK parent, HBOS, failing. The CBA investor pack of 8 October 2008 pitched the deal to investors as (i) complementary to the CBA footprint with its strong base in WA, and (ii) cheap, being priced at 11.2 times earnings and immediately earnings accretive.

The regulatory story was interesting: HBOS could no longer access funding so Bankwest was likely to fail unless it was sold; and CBA was the only party willing to find the \$16 billion of wholesale funding necessary to maintain the bank's Australian operations. As the ACCC press release expressed it: "Following inquiries with financial regulators, BankWest's parent company, Australian and overseas banks and other consortia which may have had an interest in acquiring BankWest, the ACCC concluded that an alternative buyer was unlikely in the current funding environment. The ACCC also concluded that, even if another buyer were in a position to acquire the business, it was highly unlikely that they would choose to invest the capital necessary to continue with its expansion plans".

Continuing public attacks on each move by the banks to raise the standard variable mortgage rate changed the way lending was priced. As is clear from the chart below that Guy Debelles used in one of his speeches, prices charged by banks rose as their funding costs rose, but

mortgage rates rise by less than did business rates. This may reflect the impact of political pressure but is also not inconsistent with the change in risk profiles.

Figure 6.3.3: Mortgage lending rates (versus the cash rate)



Source: RBA, Guy Debelle speech, March 2010

The wealth managers suffered a direct fall in their assets under management as asset prices fell – about 14 per cent in the year to December 2008 - a sharp turnaround from their previous 16 per cent growth rates. Inflows of new funds fell as income growth further slowed, and households rotated their savings towards deposits. The experience emphasised the extent to which wealth management is a leveraged play on the economy even when compared with the banks. Within superannuation too there was rotation away from equities.

Unit trusts could not escape the fall in asset prices. A number froze redemptions in the last quarter of 2008, with some slight relaxation early in 2009.

6.4 Crisis impacts – regulatory responses

The regulators were appropriately very active during the extreme phase of the crisis (Phase II above).

The RBA cut the cash rate sharply, six times during the crisis by a total of 425 points. That it had the scope to do this was the result of earlier decision to raise rates as the economy improved after 2002 – for example, the spread between Australian and US official rates had increased from 75 basis point in 2006 to 500 points in September 2008. The cuts were an important component of the macro stimulus to the economy at the height of the crisis. The other macro intervention was the action by the RBA to smooth some of the abrupt movements in the

exchange rate. The Bank also printed more banknotes as many households apparently increased their stocks of cash. Notes outstanding rose by some 10 per cent.

The other fundamental actions of the RBA were steps allowing money market participants to continue to rely on market instruments for the proper running of their businesses. The key steps were to increase the supply of exchange settlement accounts so that banks could continue to settle in a lumpy market, lengthening the term of its repo arrangements again allowing participants to operate with more certainty, widening the pool of eligible securities, and setting up a swap facility with the US Federal Reserve which made the flow of US dollar funding more certain. All these steps increased the risk the RBA took, but most of it was priced and protected so that the RBA limited its actual net exposures. Essentially it increased its risk but increased its collateral in parallel.

It is important to remember that the RBA charged the banks for all the enhancements.

APRA's broad summary reads "The heightened intensity of APRA's supervision ... has not required any change in the risk-based approach it has developed over many years ... APRA has been targeting its ... supervisory resources to those institutions judged to be at greatest risk ... interacting more ... and has concentrated its efforts on ... liquidity and capital" (Annual Report 2009).

The RBA, APRA and market participants all worked closely during this period to strengthen arrangements for dealing with extreme market disruptions. The cooperation between regulators was intense, and so effective that the first joint memorandum on how they proposed to deal with financial distress in Australian institutions was available to the Government just three days after the collapse of Lehman Brothers.

The regulators, and particularly the RBA, worked hard during this period to help educate the public (and probably Canberra) about how financial markets worked, and why institutions behaved the way they did. This was clear in speeches by the Governor and his team throughout the crisis, and by their submissions to the many Parliamentary inquiries.

6.5 Crisis impacts – government behaviour

Australia's government changed in November 2007 at which time policy focus was focused on how to manage the strong domestic economy and with the fallout from the sub-prime problems in the US appeared quite limited locally: interest rates were still rising.

Following the collapse and rescue of Bear Stearns in March 2008, the tone started to change. Over the next six months, government and regulators started to prepare for scenarios which involved a worsening of the global macroeconomic environment. Stress testing intensified, and

plans for potential deposit guarantees refreshed after the run on Northern Rock in the UK. Taylor and Uren (2010) detail the thinking behind the Labour government's decision to resist its initial preference for a strongly contractionary budget that year – an important decision in retrospect.

When the US allowed Lehman Brothers to fail, Merrill Lynch was sold into the Bank of America, and the US took control of AIG, the potential depth of the crisis became apparent. Prime Minister Rudd started holding daily crisis meetings in his office – PM, Treasurer, the heads of their departments and various officials. This created significant confusion because it was unclear during this period as to who was in charge, with the Prime Minister often appearing to act as Treasurer. It seems clear that despite the portents the Government had not war-gamed problems in the financial sector and lacked a clear management plan.

The two important immediate decisions - to stop runs on retail banking deposits (by the deposit guarantee) and in the wholesale lending market (by the government guarantee) - flowed from the memorandum of understanding amongst Treasury and the financial regulators about financial distress management although the political motivations are less clear, and implementation often confused.

While it may be a post hoc rationalization, the views of leading participants about the nature of the guarantees have longer term implications. Taylor and Uren (2010) cite former Treasury Secretary Henry saying "...when the crisis hits, is there any financial institution which is not systematically important? It was my view ... after the collapse of Lehman, that there was not any financial institution in Australia which could not be regarded as systemically important" (p58, emphasis added). Then Prime Minister is of a similar view: "a run against any bank, however small, was unconscionable" (p59).

The wholesale funding guarantee was forced on the Government by the precipitate action of the Irish and other governments "As Prime Minister of Australia I will not stand idly by while Australian banks are disadvantaged in international credit marketplaces because of the actions taken by foreign governments" said Rudd in his 12 October press conference. A by-product was that the Commonwealth also had to guarantee borrowing by State governments (in March 2009) to prevent further distortions of wholesale markets.

By contrast confusion reigned around the retail deposit guarantee implementation because the large size and (all banks and banks only) structure of the deposit guarantee caused considerable disruption in other financial markets. The Australian newspaper reported that Treasury had "ignored the RBA's strongly voiced concerns" about the scheme. It was an early suggestion that Treasury did not fully appreciate how financial markets worked.

The various spending packages had quite different motivations. The 14 October 2008 decision to quickly inject \$10.4 billion into consumer spending seems to have been taken relatively easily and targeted more at maintaining consumer confidence than anything else. Over the subsequent six months the quality of the decisions underlying spending appears to have been much less disciplined. In November \$6.2 billion went on a motor industry funding package and \$15.8 billion to State governments for housing, hospitals and schools; in December the Ozcar fund was announced to provide funding to car dealerships and \$4.7 billion for transport infrastructure; in January Ruddbank was announced to support property developers if lenders pulled out; and February saw the announcement of \$14.7 billion on school building and \$3.8 billion on home insulation as part of another major spending package.

The lack of discipline at this stage is clear from the following quotes from Taylor and Uren (2010, p141 and subsequent): Swan “We did not start out with a fixed figure in our mind” and “the ideas came from the ministerial offices rather than the departments”; while other ministers are quoted as saying “It was an iterative process”; and “chaotic”.

There appear to have been three broad rationalizations for the policies developed:

- The first is that a major fiscal expansion was appropriate and could be delivered in time to make a difference. This macroeconomic proposition is arguable and argued. What is clear that much of the spending occurred too late to have the macroeconomic impact intended.
- The second was that there might be particular problems in parts of the financial system which would require specific actions. The actions directed at parts of the financial sector reflect a fairly naïve view about how the financial systems operates. Once banks had funding guaranteed there was no reason to suspect that they would not lend to car dealerships, or property developers although (almost certainly) on more stringent terms in light of the increases in global uncertainty.
- And the third was that spending should be directed towards areas of political and/or philosophical importance to Labour. Whether one believes that specific support for the motor vehicle industry, school, home insulation, public housing etc were the most appropriate sectors in which to invest is a matter of political judgment. Obviously implementation was poor, perhaps reflecting the fact that the federal Government does not have a lot of experience in program delivery.

Rudd lobbied hard internationally for the G20 to address institutional weaknesses and incorporate a stronger political involvement in the re-regulation of the global financial system. This was an important change in global decision making, broadening the group of actors involved to include the major developing countries (as well as Australia) but also involved

political leaders directly. This provided the G20 with clout that the IMF did not have, given the latter's distorted voting structures and absence of direct political involvement.

The period was also marked by a plethora of Parliamentary inquiries. Because finance was so much in the news, it appears that parliamentarians could not resist the opportunities to be seen to be involved. The process was certainly distracting for the businesses concerned, and probably for the agencies having to make ongoing submissions.

Figure 6.5.1: List of RBA Submissions to various government inquiries

- *24 April 2008*: Hansard transcript of 24 April 2008 hearing before the Senate Select Committee on Housing Affordability in Australia
- *10 July 2008*: Submission to House of Representatives Economics Committee
- *14 August 2008*: Opening Comments to House of Representatives Standing Committee on Economics. Hansard transcript of 14 August 2008 inquiry before the Standing Committee on Economics
- *14 May 2009*: Report to the House of Representatives Standing Committee on Economics
- *24 July 2009*: Joint Submission (from the Reserve Bank and APRA) to the Inquiry into the Bank Funding Guarantees: Senate Economics References Committee
- *24 March 2010*: Submission to the Inquiry into Access of Small Business to Finance Senate Economics References Committee
- *30 November 2010*: Submission to the Inquiry into Competition within the Australian Banking Sector Senate Economics References Committee
- *February 2011*: Submission to the Inquiry into Access for Small and Medium Business to Finance Parliamentary Joint Committee on Corporations and Financial Services
- *31 May 2012*: Submission to the Inquiry into the Post-Global Financial Crisis Banking Sector Senate Economics References Committee
- *19 April 2013*: Submission to the Inquiry into the Corporations and Financial Sector Legislation Amendment Bill 2013: Parliamentary Joint Committee on Corporations and Financial Services

6.6 Assigning responsibility

Understandably everyone wants to claim responsibility for the solid performance of the financial system during this period. Inevitably it has to be shared.

It remains difficult to ascertain specific causes for the financial crisis. Just as scholars still debate the causes of the Great Depression, the recent crisis will be the subject of research for decades to come.

The current IMF view is characterized by the following quotation: “Although the relative importance of the sources of the current crisis will be debated for some time, the run-up to the current episode shares at least four major features with earlier episodes: rapid increases in asset prices; credit booms; a dramatic expansion in marginal loans; and regulation and supervision that failed to keep up with developments” (Claessens et al 2013).

While Australia saw the first two features, it largely avoided the latter two. The relatively low level of public debt and restrictive interest rates as we entered the crisis event, also allowed Australian policy makers greater scope of action in limiting the economic consequences of the crisis.

The banks had been well-managed, and well-capitalised. In part this seems to have been a consequence of their using significant wholesale funding. In order to obtain funds they needed to be able to show lenders that they had solid, clear and well-secured lending books. They also held capital well in excess of the regulated minima. Some of this conservatism may have been a hang-over from the near failure of two of the big banks in the 1990s crisis. It is also important to remember that they paid for any of the government guarantees they used. The exception was the privileged access some smaller institutions received to the securitization market.

The Reserve Bank was able to cut the cash rate sharply, and was able to do so because it entered the crisis with a quite restrictive stance. It also acted quickly and effectively to keep financial market open allowing parties to trade around positions they needed to establish. In doing this, the RBA took on additional risk but always insisted on big haircuts to help manage its positions.

APRA maintained close oversight but its biggest decisions were probably taken prior to the crisis. It had moved the major banks into Basel II compliance which meant they understood their risks better; it prevented the exploitation of off-balance sheet vehicles which caused havoc in some other countries; and it enforced capital rules which were tighter than those imposed in many other countries.

ASIC has been criticised for a number of cases of inappropriate behaviour within its regulator ambit. Given the dramatic fall in asset values, it is possible there were fewer failures than we might reasonably have expected. It is very hard to judge.

The government deserves credit for entering the crisis with little debt, giving it policy room to move. Quick action in the early stages also helped prevent any sense of panic, and a willingness to move quickly on to stop runs on deposits or wholesale funds was also important.

Obviously the underlying legal structure, the physical proximity of the financial regulators to one another, and pragmatic approach of the different actors were also important.

7 What the system did in terms of ongoing consequences (to the GFC)

The financial crisis resolved the conundrum of whether the 'great moderation' reflected a new reality or simply a lull in the business cycle.

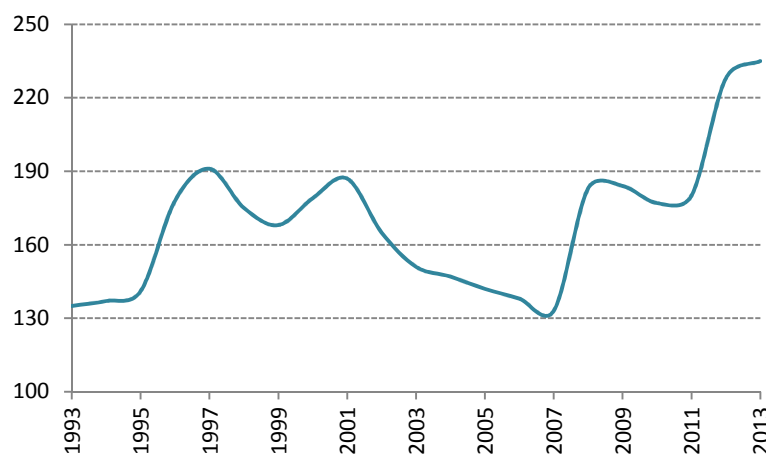
7.1 Renewed sensitivity to risk - institutions

It is now clear that risk premia had been far too low, and that many entities were taking risks far in excess of what they thought that were. The most fundamental adjustment post-crisis has thus been the insertion of larger risk premia into a wide variety of prices, even with the spreads on government bonds blowing out in many jurisdictions.

This has occurred quite smoothly in markets where prices can be passed through to purchasers, but has caused problems with a number of business models. Business which relied on paying small premia to borrow funds and compete against companies which were more highly rated and hence cheaper access to finance, were forced to modify their businesses or exit the market.

Lenders too have analysed more clearly the risk characteristics of borrowers and differentiated prices more sharply. The Figure below (from Stewart et al 2013) shows the standard deviation on the spreads in bank business loans reverted to levels it operated at before the 'great moderation' and has subsequently moved higher.

Figure 7.1.1: Small business lending rates (standard deviation, in basis points)



Source: Stewart et al 2013.

Household behaviour also changed to lessen its risk exposure. Notably this has involved a switch out of equities and into deposits. While this is consistent with an ageing of the population, with higher returns for deposits and capital losses experienced on share, Black et al (2012) reports for an underlying shift in household preferences against risk. Fund managers too have adjusted their portfolios to reduce their risk exposures and the ASX reports that whereas 40 per cent of Australian had direct shareholdings in 2000, the figure has now fallen to 35 per cent from its peak of 44 per cent in 2004. Where 7 per cent of Australian owned shares on overseas exchanges in 2006 the figure has now fallen to 4 per cent.

Regulators have responded strongly to the heightened perception of risk in the financial system by introducing a swathe of reforms designed to make the system safer. These have mainly occurred in the context of global reforms discussed below although the recent decision to impose capital surcharges on the major domestic banks – deemed to be of systemic importance locally – has important implications for the operation of the domestic system.

Arising from the freeze in markets post-Lehman, regulators have also decided that more derivative products should be shifted onto markets to lessen risks in clearing and facilitating netting out. Whether this will prove effective or not is unclear.

Government regulation has also expanded during the period, particularly around the issue of financial advice. This was largely provoked by advisors putting people into leveraged investments which proved to be inappropriately risks in the light of the declines in asset values. The whole issue of relying on informed consumers which was central to the Wallis approach is now under question, and being wound back to put more of the onus on institutions.

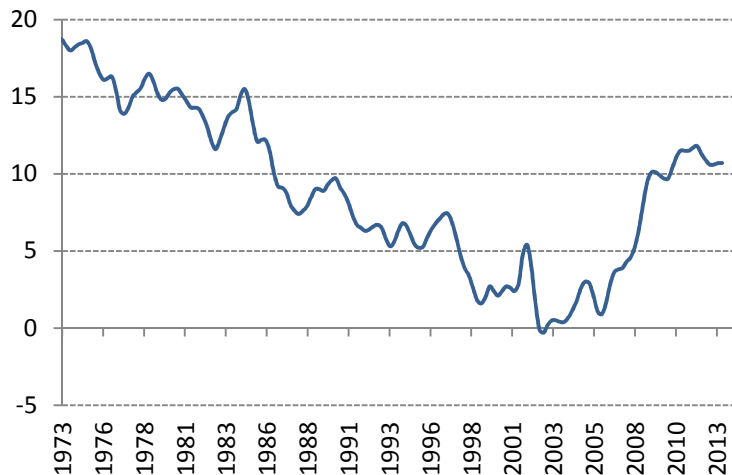
7.2 Renewed sensitivity to risk – households and businesses

As discussed above, households had increased their risk exposures significantly during the great moderation. Subsequently and even in the absence of any large increase in unemployment, they systematically reduced their risk exposures: they borrowed less, they increased their savings, and they shifted their savings into safer locations. While it is notable from the Figure that the household savings rate picked up from well before the crisis, it appears that the initial phase of the uplift was mainly driven by higher incomes as part of the resources boom and then augmented by a further lift after the crisis. The reduction in household investment in equities was commented on in an earlier section.

It is not clear whether household savings will persist at the current level – which is still below post-War peaks – or decline once the fear of crisis washes through the folk memory. The

ageing of the population and the higher rates on offer now from banks should both operate to ensure savings are sustained at a higher pre-crisis level.

Figure 7.2.1: Household savings ratio (%)



Source: ABS, National Accounts

Corporates were not particularly stretched before the crisis, except perhaps in the commercial property sector and so there was little reason to adjust. What we have seen however is an increasing willingness of Australian non-bank names to go directly to foreign markets to borrow (in some cases more cheaply than their banks could).

7.3 Concern about the failure/closure of markets

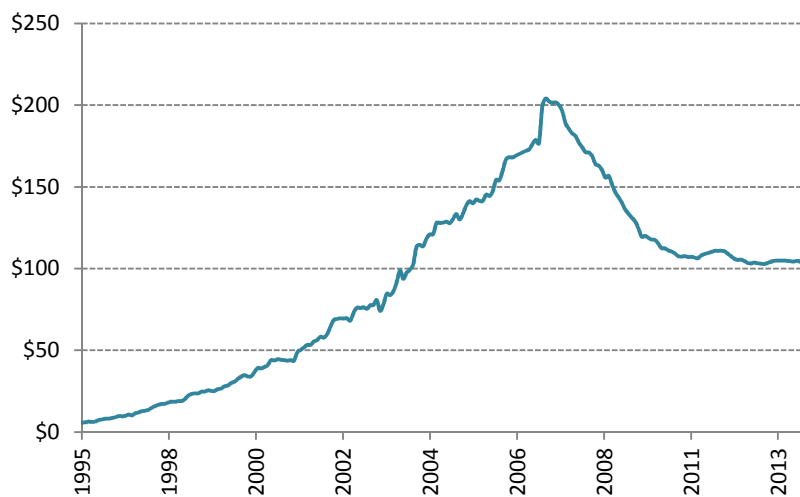
The failure of important markets in the period after Lehman's collapse came as a surprise to many market participants. Evidence given by the senior management of HBOS to the UK Parliament makes it very clear how dependent the business was on continuing access to financial markets, not just for funding but also for risk management.

In Australia the main concern focussed on the continuing ability of Australian banks to roll-over their offshore borrowings during the crisis. The situation became easier once governments globally guaranteed their banks' borrowings and Australia necessarily followed suit. Bank management however appreciated the concern and have worked quickly (in advance of any regulatory decisions) to diversify their funding sources, lengthen its tenor, raise more deposits domestically, and shift the weight of deposit funding towards term deposits to provide greater certainty.

The government assisted with the process by allowing the banks to issue covered bonds which allowed them to access a differentiated funding market, and to increase the average tenor of their borrowings as well.

The securitization market has had significant problems since the crisis. As the figure demonstrates issuance fell dramatically. Pricing blew out as institutions which relied on this source struggled for funding. Some of this adjustment is a reflection of the increase in deposit funding and the decline in the growth in demand for credit.

Figure 7.3.1: Australian RMBS issuance (quarterly)



Source: RBA statistical database.

Nevertheless it was not just the major banks, but the smaller banks and non-banks which were greatly inconvenienced by the sudden stop in the market. While the government supported the market for some players through the AOFM, the issue of whether businesses can afford to depend completely on this market is moot. Their fundamental business models may need to change.

An important aspect of the failure of markets was the diagnosis that the AIG and Lehman failures had a disproportionate effect on the operation of the financial system because of the opacity of transactions in derivative and shadow banking markets. The markets froze because of deep uncertainty about the status of counterparties (Diamond and Rajan (2010)). This has led regulators in the direction of forcing more financial assets to be distributed through markets, to facilitate cross clearing in a crisis, and with guarantees which entitle parties to operate in the market (eg posting collateral).

7.4 Concerns about globalization

The crisis heightened sensitivity to the transmission of financial risk between countries.

For individual institutions this has led to change in funding models to diversify risks more, and to protect themselves from perturbations in foreign markets by increasing their local funding and by lengthening the tenor of their borrowing, and to limit their liquidity risk by holding more liquid assets (or assets which can quickly be made liquid). Regulation is reinforcing these tendencies as are pressures from rating agencies.

This is part of a re-thinking of how financial globalisation operates. Whereas Australian banks operating outside the country would have preferred to operate branches in other locations, and to move funds between branches from a central or regional treasury, this is becoming increasingly difficult. In future the banks' offshore operations are increasingly likely to have to operate through subsidiaries backed by local capital. The actions of the New Zealand regulator have highlighted how this might operate by requiring the Australian banks to hold additional 'conservation buffers' in their New Zealand subsidiaries (Reserve Bank of New Zealand 2013).

This is part of increasing scepticism about financial globalization (eg Jeanne et al 2012, Cecchetti 2012). The standard arguments in favour of financial globalization - equalizing marginal returns to capital globally, enabling portfolio diversification and cross-national consumption smoothing – have found limited empirical support. Even the newer emphases on enhancing the efficiency of financial intermediation, and enhancing fiscal discipline have proven difficult to demonstrate in practice. On the other hand some of the problems associated with open flows between economies with different stages of financial development, and quite different regulatory systems, are clear to see in terms of excessive risk taking, asset pricing bubbles, and limited capacity of the real economy to adjust to exchange rate swings.

Part of the broad loss of enthusiasm for financial globalization is reflected in the fact that globally connected banks are now paying a premium set out in the G-SIFI regulations.

The second broad area of concern focussed on regulatory arbitrage between those markets which are connected. The problems of European banks with their holdings of CDOs manufactured in the US; the squabble between the UK and Iceland about deposit insurance; the big fines being handed out to European banks for failures to comply with US regulations; are all examples of the problem. Regulators are trying to limit the scope for such arbitrage by pursuing greater global consistency. This is still work in progress (see below).

While there has been a strong and ongoing effort by some policy makers and businesses to maintain the impetus towards greater financial globalization, there is an increasing level of

skepticism too about whether the momentum will be sustained (eg McKinsey Global institute 2013, The Economist 2013).

The regulatory view too has become more nuanced. For example Lord Adair Turner former head of the UK Financial Services Authority is of the view that: “Fears that bank regulation or capital controls could lead to a “balkanisation” of global capital markets are overstated ...but since the evidence for the benefits of financial integration is at best elusive and ambiguous, some ‘balkanisation’ of short term international debt markets could be a good thing”.

And he is quite explicit about the balkanisation he supports: “I would like ... to propose ... [that] major foreign banks which have significant domestic credit exposures be required to operate as subsidiaries not as branches, and [I] would impose supervisory requirements to reduce their reliance on short-term funding from abroad whether from their parent or from other parts of the banking system”. If pursued this would result in a sharp fall in international capital flows relative to the pre-crisis situation.

7.5 Regulatory actions

The Basel II rules were implemented by the Australian institutions just before the crisis. This had some positive consequences since the major banks had a much better understanding of their risks as a result of the work they had done in implementation. One consequence was that they were holding economic capital in excess of the regulatory standards, and hence were better insulated than they might have been.

The broad direction of the emerging regulatory actions (under Basel III) operate in the same direction as that managements and boards of directors have required: more capital, safer capital, and more liquidity. The difference is that the regulators have become deeply enmeshed in global solutions to problems – partly driven by Australia’s involvement with G20 – even if the solutions are not particularly appropriate to Australia’s needs.

The most important consequence for Australia is that the regulators (and basically APRA) have moved more towards ‘rule-based’ regulation compared to the earlier dependence on intense supervision. Thus we have liquidity standards (which had to be modified given the limited government paper in the market); we have D-SIFI capital requirements overlain on intense supervision rather than substituted for them, and seem likely to have net stable funding ratios which are not very helpful for a country which imports capital through its banking system, and seem likely to have a gross leverage ratio which effectively treats supervision as a luxury extra.

One important change we have seen involves depositor protection. Australia has finally fallen into line with most countries in imposing an explicit structure to its depositor protection. Since most people acted as if this was in place before the fact, its imposition may not make much difference.

There have been some unfortunate regulatory spill-overs, the most notable of which is FATCA, a US regulation which imposes significant costs of the Australian institutions for no benefit.

8 Where that leaves the system at the start of the Murray inquiry

8.1 The system has functioned extremely well

The first observation is that the financial system has expanded far more quickly than the Wallis Inquiry would have expected. In value added terms its share of the Australian economy is now twice as large, the net financial assets Australians now own has also far outpaced income growth, and much of this has been driven by households increasing their leverage (Section 4 above). Much of the borrowing has been to pay more for housing.

During this growth the system has negotiated two significant shocks to global financial markets (the Asian crisis and the dot-com bubble) and a significant global recession with no particularly difficulties.

It is remarkable that the system has worked so well. Institutions, markets, and their regulators, have adapted and in the process facilitated some of the major changes set out above. Clearly the benefits of flexible structures, extensive use of markets, and a pragmatic supervisory framework have paid dividends.

8.2 Concerns derived from domestic issues

a. Funding Australia's growth

Australia has depended on foreign investment for almost all of its history. There have been periods when the inflow stopped abruptly and caused large problems of adjustment. Importantly there are no records of this sort of event since the floating of the dollar, in Australia or in any other country with open capital markets and a floating currency. While it is possible to imagine that foreigners might be unwilling to lend to a particular bank (in the advent of a bank-specific Issue), the prospect of all Australian institutions finding it hard to fund their businesses appears remote. During the crisis we learnt that banks were able to borrow even in the most difficult market as long as they bore an Australian government guarantee.

The ultimate insurance then against closure of wholesale markets to our borrowers is the continuing ability of our government to be a trusted guarantor. Essentially this means that public debt should be kept within reasonable bounds.

In the extreme event that our banks were unable to borrow, our open capital account means that businesses could borrow directly, and our floating currency means that the exchange rate would depreciate sufficiently to make it attractive for foreigners to invest in Australia directly.

If we rely less on the prudentially-regulated entities borrowing offshore, then other entities will borrow, shifting risk, and as a result foreign ownership of Australian assets is likely to rise.

b. The role of the superannuation sector

The large superannuation system is already starting to shape the Australian financial system.

The superannuation sector played a very positive role during the crisis in quickly providing capital (at steep discounts) when institutions needed it. While there may be some concerns about the equity of institutional investors having better access to such opportunities than do retail investors, that is a regulatory issue ultimately for ASIC (Connal and Lawrence 2010). The point is that funds were provided quickly in times of greatest need.

The fact that the funds were able to provide the necessary capital is a demonstration of their increasing strategic importance within the financial system. The decisions they make are increasingly shaping financial flows through the economy. Where once a household may have maintained a term deposit with a bank, the same money might now flow into a similar deposit but having first been intermediated by the superannuation fund. The bank will almost certainly have paid more for the money (wholesale rather than deposit rates), increasing its funding costs, and the superannuation fund will have charged a fee along the way.

As the size of the funds managed by superannuation funds grows the funds are likely to expand the range of their activities competing with banks in the intermediation process. Funds having long-dated obligations to their contributors will have every reason to match these with long-dated investments. We can thus expect to see banks being pushed away from some of their traditional activities. Mortgages might be one example. Such a move might result in banks adapting their business models and move into shorter lending.

c. Access to credit

The large rebound in credit in the period since liberalisation in the 1980s underscores the extent of credit rationing which had taken place previously. Liberalisation and the effects of competition mean that credit is now readily available to most borrowers.

There were some particular concerns after the crisis, as banks reassessed their lending risk and raised the rates charged to some borrowers and cut lines to some others, but this is not

unusual following a sharp contraction in growth. It simply reflects the normal working of the capital markets.

The two areas of ongoing concern appear to be lending to small businesses, and home loan affordability. Lending to small businesses appears to be an area of vigorous competition between banks. As discussed above there may have been some distortion in lending rates while the previous government attacked the banks so openly for raising their standard variable mortgage rates, but absent that distortion it is not clear that there are significant problems. Small businesses are risky, and pricing should reflect the risk involved. New businesses face particular problems establishing their credibility with institutional lenders but usually solve the problem by borrowing against property.

The fact that house prices have tended to rise faster than income over time has meant that home affordability has fallen. This does not appear to be a problem of the banking system but reflects weaknesses on the supply side of the housing market.

We may also be in the throes of a long term adjustment to reduced rates of home ownership. Investors appear to have a strong preference to hold property directly (reflecting in part the tax rules), and are able to pay more for it than many entrants to the market. The net effect is that more people (investors) will own multiple properties and more people will rent (market entrants). This seems a natural outcome of current trends. The US went down the path of inducing investors into buying property indirectly (though securitization via Freddie Mac and Fannie May) to avoid this tendency, but that does not seem to be a satisfactory alternative model.

d. Competition

The takeovers of St George Bank and Bankwest during the financial crisis led to increased concentration in parts of the market. The ACCC on both occasions said that competition was not likely to be impacted negatively in the context of those decisions. Combined with the slow-down in securitization, this has meant that the four big banks manufacture some 90 per cent of Australia's mortgages. The market for distributing mortgages is still far more diverse (with brokers distributing some 40 per cent of mortgages). Most other financial markets have a wider array of players.

It is not clear that having just four manufacturers of mortgages is a particular problem. Many Australian markets have fewer manufacturers. It is also a market in which banks like Macquarie have entered whenever pricing allows. Such opportunistic entry provides a clear example of the disciplining effect of potential competition, a concept which lay at the heart of Wallis.

e. Consumer protection

Wallis pushed hard the approach that well-informed consumers should be able to make their own financial decisions. This philosophy sat at the heart of the regulations embedded in the Financial Services Reform Act of 2001, and implemented at great expense by all financial institutions and actors. In ASIC's view "The main objectives of the FSRA are to promote firstly, confident and informed decision making by consumers of financial products and services while facilitating efficiency, flexibility and innovation in the provision of those products and services. It is also intended to promote fairness, honesty and professionalism by those who provide financial services and create a fair, orderly and transparent market for financial products. The final objective is to reduce systemic risk and provide fair and effective services by clearing and settlement facilities" (Johnston 2002, emphasis added).

This approach was completely turned on its head by the National Consumer Credit Protection Act in 2009 which introduced a range of conduct obligations. Broadly, the responsible lending conduct obligations set in place expected standards of behaviour of licensees with the key obligation being to ensure they do not provide a credit contract or assist a consumer to enter into a credit contract or lease that is unsuitable for them. Licensees must assess that the credit contract or lease is not unsuitable for the consumer's requirements and that the consumer has the capacity to meet the financial obligations.

Essentially the onus of responsibility was shifted from the client to the provider (or advisor). It is not clear which is the better model, but having incurred the implementation costs of making the change there is little to be gained in the short term by reversing the onus once again.

While ASIC has been criticised because of the failures of a number of different financial institutions, and some cases of inappropriate behaviour during the crisis, it is not clear that the failures are more than one should expect given the breadth of the institutions covered. We should anticipate a certain level of misconduct in human behaviour and it cannot be regulated or supervised away entirely. What we currently lack is any sense of what is an acceptable trade-off between the cost of more extensive and intrusive regulation and the benefits which might arise from less corporate misconduct.

f. Trade in services

The financial sector contributes about 10 per cent to Australia's value added but less than two per cent of our exports.

As the resources boom gradually slows, the nature of Australia's export bundle will change. If we are to maintain living standards we need to retain our current command over imports. This will require a significant increase in the export of services. Finance should play a part.

One clear issue for the Inquiry should be a review of the barriers to the export of trade in financial services. The issues involved in wealth management have been canvassed in the Johnston review, but the issue of the export of banking services needs to be addressed urgently. Banks such as Banco Santander and BBVA have demonstrated that it is possible to export banking services safely, and to great benefit of the country (in their case Spain). Rather than making it hard for banks to export services, we need to establish a regulatory regime which encourages them to do so safely.

g. Twin peaks

The separation of prudential regulation of institutions (in APRA) from regulation of the systemic stability (in the RBA) and the product regulator (ASIC) was one of the standout recommendations of Wallis. At the same time, the range of entities prudentially regulated was broadened to cover the superannuation funds.

For most of the period (and subsequent to the failure of HIH in particular) the prudential model has operated well. The system survived a major shock during the GFC but continued to function effectively.

There are two major concerns.

First, superannuation funds were pulled into the prudential net because Wallis anticipated their importance and the potential overlaps with the functions they provided to the economy with those of the banks. This has now created a new boundary of concern, that between managed funds which are prudentially regulated and the burgeoning self-managed superannuation sector which is not.

In principle it seems appropriate to leave SMSF out of the prudential net, although they move be of systemic importance (responsibility of the RBA) and taking advice (responsibility of ASIC).

Second, setting APRA up with narrow terms of reference means it sees every issue through a prudential lens. The New Zealand discussion about limiting their banks' ability to lend at high LVRs where prudential issues, stability issues and distributional issues were all considered within a single institution (RBNZ), and it provides an alternative, possibly superior, model for us to consider.

We see a similar concern, about an excessively narrow focus, lying at the heart of the smaller banks' complaint in Australia about the way in which some of APRA's prudential decisions have significant implications for how competition evolves. Again in the same vein, we have seen ANZ complain that the rules APRA uses to assign capital against investments in foreign banks puts Australian banks at a disadvantage relative to offshore acquirers. The issue here is whether APRA is excessively focussed on one particular (important) function of the financial system to the detriment of other contributions finance can make to Australian development. It is not clear how we can address this issue in the current organisation set-up.

h. Crisis management

The regulators had put a system of coordination and agreement about most responsibilities for managing the failure of an institution before the crisis. This allowed them to prepare a coordinated plan for the Government within three days of the collapse of Lehman Brothers. The coordination appeared work well, particularly that between the RBA and APRA – this may well have been helped that many of the staff had worked together and that the both operated in the Sydney financial district.

The one place where tension was obvious was in the takeover of Bankwest by CBA. It seems quite clear that the ACCC felt pressured by the financial regulators to allow the deal through. Such tension is probably to be expected and ultimately it was a fine judgement as to whether failure of Bankwest would have produced the dire events feared by APRA.

Coordination of the Sydney regulators with Treasury in Canberra was less smooth. Tensions flared over into the press about the design of the depositor protection arrangements with the RBA feeling that the Canberra officials did not appreciate the broader consequences of their actions. Strengthening Treasury command of financial market issues, with perhaps more interchange of officials, appears to be called for.

The interaction between the politicians, and between the officials and the politicians, was much less smooth. It seems clear that there was no preparation for managing such an emergency. There was significant confusion through the heart of the crisis about whether the Prime Minister or the Treasurer was in charge, and even on the roles played by the two Departmental Secretaries. Equally, it seems that many of the ideas which came out of Canberra at the time were suggestions made by staffers and without Department support.

The confusion in Canberra added to uncertainty and made it more difficult for institutions to respond appropriately. It seems fundamental that all future governments should war-game a financial event early in their tenure, decide on who is doing what, and then stick to the plan. Some offshore governments had done this and their outcomes were smoother.

i. Crisis responses – regulatory overlays

The Australian regulators have responded to the crisis as might have been anticipated: tightening capital and liquidity requirements for banks, and paying greater attention to potential risks arising from the shadow banking sector.

The additional effect however has been a resolution, supported by Australia's involvement through G20, to align Australian regulation more closely with global regulatory actions. Australia is quite different from most of the countries which drive global policy moves – the US and Europe – so it is not clear that the global moves are necessary the most appropriate for Australia.

One clear example is the D-SIFI capital impositions. Australia has relied on deep and intrusive supervision of its systemically important banks, and much more powerful supervisors than most other countries. The move to limit risks from systemically important institutions by requiring them to hold more capital is, in effect, a substitute for intensive regulation. If Australia finishes up with intensive supervision and heavy capital requirements, we get the worst of both worlds.

As Australia moves to align regulation with global practices, the regulators need to adjust supervisory practices accordingly.

8.3 Concerns derived from offshore jurisdictions

a. Product design - skin in the game

While there were some examples of poorly designed products in Australia (Opes Prime case), the issue played out more powerfully in offshore markets, notably with 'jingle mail', 'ninja loans', excessive honeymoon rates, and AAA-rated CDO tranches with a potential to be wiped-out completely.

The policy question which arises is centred on the desirability of financial innovation and whether the risks of innovations are adequately understood. A consensus seems to be emerging that the risks from slower innovation are less important than the risks from inappropriate products.

b. Resolution and too big to fail

The failure of many institutions globally has produced two broad responses.

The first concerns how to resolve a bank, essentially can we structure the situation so that they can be allowed to fail without causing widespread problems. This has led

- to governments clarifying the powers of their regulators

- to the concept of ring-fencing certain essential operations of banks
- to experiments with capital structures whereby some bonds are able to be bailed-in, and
- to the concept of 'living wills' whereby institutions provide a playbook for any regulator which had to wind them up.

The second directly addresses the core issues arising from concerns that banks get some advantage from being too big to fail. The fact that some institutions might be so big can create the perception that governments will bail out the depositors, the bond holders, or the equity holders of such institutions rather than letting them fail. This leads to the inference that knowing the government stands behind the bank gives it an unfair advantage over others in that it has access to cheaper funds than they, and its management an incentive to take inappropriate risks.

Whether these are true or not, taking away any idea of government support to some institutions and not others, completely negates the concern. This is the first-best solution and clearly preferred to providing 'fixes'.

We appear to be well on the way to solving the problem.

- The provision of equal depositor protection to all the banks negates one of the concerns.
- A willingness to wipe out the equity holders of a failed bank easily removes another concern.
- APRA also has powers to give ADIs and general insurers to take actions to re-capitalize (bypassing normal shareholder consent requirements and other regulatory processes)
- APRA can also give binding directions to regulated entities (including ADIs, general insurers and life insurers) and their authorized non-operating holding company. The direction powers are wide-ranging and enable APRA to direct the entity to undertake (or cease) specified actions or activities, to remove and replace directors and senior management.

These actions and powers appear to meet the recommendations of the Financial Stability Board (2013) and remove much of the implied protection implicit in the too-big-to-fail argument (Tarullo 2013).

In addition, the introduction of D-SIFI rules has further bolstered the capital ratios of the major banks making them less likely to fail. This handicap protects the government and regulators further by providing an additional buffer of equity holders who would lose funds if a major bank got into problems.

However Australia's experience during the crisis was that the small institutions were most prone to collapse: Bankwest failed, and Suncorp was reported to have been very close. Regulators prevented their outright failures, and the government also supported the securitisation market specifically to help the smaller lenders. If there is government protection in the system it clearly extends well beyond the major banks.

In this vein, it is also worth remembering two quotes from Taylor and Uren (2010, pp58, 59):

- Ken Henry "It was my view ... after the collapse of Lehman, that there was not any financial institution in Australia which could not be regarded as systemically important"
- Prime Minister Rudd: "a run against any bank, however small, was unconscionable".

The strength of this viewpoint is evidenced by the government's appropriation of \$640 million to provide assistance to entities hurt in the HIH collapse.

c. Regulatory coordination, shadow banking and macro-prudence

The fashion in central banking over recent decades has been to move to isolate monetary policy from fiscal policy. The crisis however has bought home the extent to which the two must operate in a coordinated way to be effective. The tension and its resolution has been particularly clear in Japan but monetary authorities straying into fiscal policy area has been debated in Europe as well.

In Australia the current arrangements appear to be working satisfactorily.

However there is clear scope for disagreement however over macro-prudential policy. The ultimate question is who owns the issue. One dimension arises from the tension between the RBA's responsibility for systemic stability, and APRA's concern with macro-prudence which is ultimately about systemic stability but seen through a different lens (Littrell 2013).

A second concerns shadow banking. Tighter regulation of the formal banking sector is likely to see the growth in institutions and structures which achieve the same end outside the prudentially regulated system. This was Australia's experience during the 1960s and 1970s in particular (Maddock 2014). It is clearly possible that macro-prudential issues will arise from markets, one of the RBA's areas of expertise, rather than institutions (APRA's focus). As a former Bank of England executive expresses it: "It isn't enough to focus on large systemic institutions, or on banks more generally. Activities and markets matter for stability too" (Tucker 2014).

The issue poses difficult issues for the design of Australian regulation. The search for macro-stability cannot simply be as an issue for APRA, regulating institutions, if markets and activities are supervised elsewhere. Again it suggests the question of whether it makes sense in the long run to keep the two institutions separate.

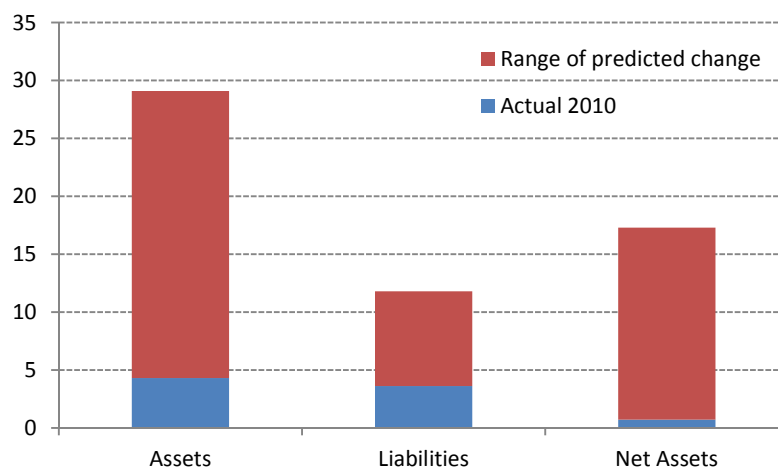
9 Emerging issues

9.1 China

China is in the process of opening its capital account. This is almost certain to lead to a very substantial inflow and outflow of capital with the outflow dominating (Bayoumi et al 2013). If allocated along MSCI-portfolio lines, the outflow would account for about three per cent of global financial markets' value.

These are very large flows and present real opportunities for Australian institutions. It also implies significant increases in the direct ownership of Australian assets by Chinese investors.

Figure 9.1.1: Predicted inflows and outflows from China as % of GDP



Source: Bayoumi et al (2013)

9.2 Technology and barriers to non-tradition entry

Wallis assumed that traditional non-banks would enter the financial markets. This is happening but very slowly. Technology however seems likely to make entry into existing markets easier, and to create new markets.

Regulatory requirements and prudential regulation seem likely to keep non-banks away from the main banking markets. Even GE, whose GE Money had been quite successful, has wound back its operations although Wesfarmers appears to have some appetite.

It does however seem likely that direct markets for money, direct exchanges, will grow in importance. Traditional informational barriers and difficulties of monitoring have been overcome by companies like eBay, PayPal and Amazon which suggests the shadow banking could emerge through markets rather than institutions. Bitcoin, a private money, is another similar experiment facilitated by technologies which have not long existed.

9.3 Tax

Much of the financial system is shaped by tax, starting with the deductibility of interest payments and differences between individual and corporate tax rates. Much of the growth in superannuation is predicated on tax advantages.

Given the pressure on government, and the likelihood that these will intensify in the future, tax changes seem inevitable. These will profoundly alter the financial system.

9.4 Ageing

One of the fundamental functions of a financial system is to assist individuals to manage their consumption over their lives. The aging of the population will impose slow but gradual pressure on the availability of funds (through the run up and draw down of savings), the profile of housing demand and the asset composition of superannuation funds.

Fortunately the effect is slow and gradual so it should not impose any particular strains on the financial system.

9.5 Data integrity

Information stored in digital form is compact and easy to move. All of the standard concerns about private information – theft, loss, fraud – become even more acute given the change in the nature of data. FATCA has also highlighted the cross-border concerns.

9.6 Hangover

The full ramifications of the financial crisis are still to play out. Historical experience, including our own, suggests that debt restructuring, financial repression, inflation and devaluation were normally involved (Reinhart and Rogoff 2013). We are yet to see much of that, especially in Europe.

These suggest that there could be further ructions in financial markets as these gradually are seen to be necessary.

There may also be important asset sales by European institutions in particular which provide opportunities for Australian institutions.

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Appendix B

Banking on our Future: Framing a vision for the Australian Banking Industry

A.T. Kearney

March 2014

This report has been prepared by A.T. Kearney for the Australian Bankers' Association to inform the industry's consideration of issues. The report reflects the views of its authors only. The report and points made within the report do not necessarily reflect the views of the ABA or any individual bank.

Banking on Our Future: Framing a Vision for the Australian Banking Industry

Five trends could create a vibrant economy or a stagnant one. The right banking sector vision can tilt the odds.



ATKearney

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Executive Summary

A compelling forward-looking vision can play a valuable role in informing and guiding the national debate on the evolution of Australia's banking industry. In the absence of such a vision, we run the risk of focusing on the urgent instead of the important.

This independent, self-funded paper by A.T. Kearney seeks to develop and propose such a vision for consideration by the industry and its various stakeholders. It has been developed in dialogue with a panel of global and Australian experts, including many from outside our firm, as well as discussions with senior industry executives.

To articulate this vision, we first need to frame the dialogue. Our approach is anchored in the core economic functions—deposits, lending, transactions, and advisory and managing the crucial interfaces between these functions—that banking plays in any economy and the three often-competing objectives—providing returns to shareholders, investing in customer protection and stability, and delivering value to customers—that banks must continually balance if the system is to grow and support a vibrant economy.

The Australian banking industry has performed remarkably well over the past decade.¹ Demand for the core economic functions has increased steadily, and banks have stepped up to satisfy a lion's share of this demand (more so than in many comparable markets). Additionally, the industry has managed to strike an enviable balance between the three competing objectives.

Rather than relying on expanding margins, the industry has created economic surplus by successfully meeting growing market demand. Further, banks have controlled their operating expenses, reinvested in the business, and redeployed the increased surplus towards shareholders, including a significant part of the Australian public who directly or indirectly hold bank shares.² Almost a third of investment spending was directed towards risk and compliance projects and a large part of the remaining investments was applied to enhancing the proposition to the customer.³

However, an objective analysis of the industry does also raise a few questions that suggest the need to challenge the status quo and embrace a new vision. Is the current return on equity (RoE) sustainable or likely to face downward pressure on average? Are current measures of customer satisfaction truly representative of how customers perceive and choose their banks? Can greater economic surplus be created through bolder, industry-wide productivity initiatives? And are all core sectors of the future Australian economy benefiting from an increased availability of funding?

To articulate a forward-looking vision, we need to first look ahead and imagine the future Australian economy. Our economic future will be shaped by five mega trends: a maturing population, emerging Asia, the rising impact of digitisation, risk averse and expensive global capital, and scarce natural resources. Crucially, these trends are double-edged and pose both opportunities and threats to the country's economic success. It is possible to articulate an optimistic and pessimistic outlook for the Australian economy with equal conviction.

We believe the banking industry must play a central role in helping tilt the odds in favour of an optimistic economic future. It should therefore aspire to be the **key enabler of the future Australian economy**. This vision has four dimensions:

¹ Data used is for the decade ending 2012 (2002-2012).

² From the 2012 net profit after tax of the major banks, 83 percent has been paid out in the form of dividends, and 17 percent was retained.

³ Analysis is based on information in annual reports from ANZ, Commonwealth Bank of Australia, National Australia Bank, and Westpac.

Support the unlocking of capital to fuel the future economy. Banks play a significant role in the country's economy. They must therefore play a central role in unlocking capital in real estate investments, cash, and deposits and making these funds available for growth. Funding options in the economy need to be broadened, and banks can play a vital role in leading this development.

Develop and deliver financial solutions to core growth sectors of the economy. Small and medium-size enterprises (SMEs) and potentially crucial growth sectors such as agriculture, services, infrastructure, and environment need continued access to funding and other financial solutions to become economic growth engines. While some argue whether this is indeed a challenge today, it is harder to argue the challenge will not grow with time. Banks again can play a valuable role in ensuring these needs are met efficiently and effectively.

Facilitate Asian integration through superior insight into the risks and rewards of doing business in Asia. Increased trade and capital flow to and from Asia demands a deeper understanding of the risks and rewards involved in dealing with these markets. Banks are well-positioned to help businesses navigate these risks. Further, to facilitate the mobility of talent, banks need to explore ways to provide a seamless multi-geographic banking experience.

Pioneer the charge into the digital economy. Australian industries must embrace the use of technology to become smarter, more productive, and more innovative to create both economic value and customer value. Banks must lead the way, along with other sectors, and create the infrastructure for others to follow.

There is much to do for the industry to realise this vision. Individual banks have a significant part to play but cannot succeed alone. As listed, for-profit enterprises themselves, banks will (and should) always behave in a way that is economically rational. Thus, the alignment and support of regulators, policy makers, and even the analyst community will be essential to create the environment in which economically rational choices for banks and the long-term interest of our nation are aligned.

Should Australian banking embrace the bold vision of becoming a key enabler of our economy? Whether we agree or have reservations, we can benefit from a rigorous dialogue to avoid continuing with the status quo. If this paper contributes—even in a small part—to fuelling such a dialogue, we will have succeeded in our objective.

Framing the Dialogue

The public dialogue on Australian banking focuses at times on a few topics, such as the perceived low levels of sector competitiveness, concerns regarding supernormal profitability, and the need for more stringent or more lax prudential and customer protection regulations. We believe a forward-looking vision is vital to informing a healthy debate at the national level.

At this stage, we seem to lack an independent, forward-looking narrative on how the industry should evolve over the next decade. This paper aims to narrow this gap. This independent, balanced view of the industry provides a framework for a forward-looking discussion, paints a picture of how the banking system can and should look in the next decade (“the industry vision”), and suggests actions for individual banks and other key stakeholders to move towards this vision.

Defining the required state of Australian banking tomorrow provides the necessary backdrop for a well-informed debate on the industry today. In this chapter, we introduce the principles, or foundations, for this discussion.

Foundational principles of a banking system



Banking plays a crucial role in an economy’s success through core value-creating functions. At the same time, the system needs to balance three often-competing objectives. The success of a banking system should be viewed against how it performs these functions and balances these objectives. Discussion about a future vision must be anchored in a clear understanding of the needs that banks address (among other alternatives) and how they create value.

The core functions considered in this paper are deposits, lending, transactions, and advisory (see figure 1). By effectively and efficiently meeting the needs of customers (both individual and businesses) in each of these areas and by thoroughly managing the interdependencies between these core functions, banks create real value for the economies in which they operate.

- **Deposits.** An economy needs a safe house for surplus liquidity and a low-risk, low-return investment destination. To satisfy this demand, banks provide current accounts, saving accounts, and term deposits, which offer the public convenience, safety, and transparency. Banks create value by providing protected returns on excess liquidity, bearing the burden of any risks.
- **Lending.** Banks provide funding to the economy in two main ways: lending against future cash flow and lending against tangible assets. Examples of the former are personal loans, credit cards, and factoring; examples of the latter are mortgage loans, car loans, and leasing.

Figure 1
Four core functions of banking

	What the economy needs	What banks provide	How value is created
Deposits	<ul style="list-style-type: none">• Safe house for surplus liquidity (interest-free accounts)• Low-risk returns (interest-bearing accounts)	<ul style="list-style-type: none">• Convenience• Transparency• Safety	<ul style="list-style-type: none">• Providing protected access to money market and returns on excess liquidity
Lending	<ul style="list-style-type: none">• Funds against future cash flow (personal loans, credit card, factoring)• Funds against tangible assets (mortgage, car loan, leasing)	<ul style="list-style-type: none">• Risk assessment• Risk management	<ul style="list-style-type: none">• Bearing the risk between long-term lending and short-term funding• Assessing and pricing credit risk, allowing available funds to generate positive yields
Transactions	<ul style="list-style-type: none">• Ability to make and receive payments accurately and efficiently• Efficient conversion of currency across markets	<ul style="list-style-type: none">• Efficient infrastructure• Connectivity	<ul style="list-style-type: none">• Providing benefits of economies of scale and guaranteeing security of transactions
Advisory	<ul style="list-style-type: none">• Advice to retail customers on adjacent financial needs investments, retirement, and protection• Advice to corporates on M&A, capital markets, and risk management	<ul style="list-style-type: none">• Risk assessment• Risk management	<ul style="list-style-type: none">• Leveraging scale, professional skills, and market access to create opportunities for customers

 Balance-sheet business  Fee-based business

Source: A.T. Kearney analysis

As part of their lending business, banks provide risk assessments and risk management. They create value by assessing and pricing credit risk, allowing available funds to generate positive risk-adjusted yields. As the intermediary between depositors and lenders, banks bear the risk between long-term lending and short-term funding and receive an interest rate spread in return.

- **Transactions.** In addition to deposit and lending functions, the economy needs the ability to make and receive payments accurately and efficiently and to convert currencies across markets. For example, banking provides an efficient infrastructure and connectivity in the form of a payments system. By doing so, banks provide economies of scale while also guaranteeing the security of transactions.
- **Advisory.** Banks provide advisory services by counselling retail customers on adjacent financial needs investments, retirement, and protection and by advising corporate customers about mergers and acquisitions (M&A), capital markets, and risk management. To do this, they provide intelligence, information, and professional, unbiased advice. Value is created by leveraging scale, professional skills, and market access to create opportunities for customers.

The competing objectives banks face

The primary challenge for a healthy banking system is to run these four core functions—and balance or manage the interdependencies between them—in a way that allows the system to simultaneously meet the often-competing objectives of shareholder returns, customer value, and regulatory compliance.

A banking system that creates sufficient economic surplus to continually invest in these three objectives is likely to enjoy a virtuous cycle of stability, profitability, and growth. Growth of the banking system in turn drives growth of the economy and vice versa. Put more simply, successfully balancing these objectives enhances the ability for the banking system to support economic growth. The nature of these objectives is shown in figure 2.

Figure 2
Banks need to balance competing objectives



Source: A.T. Kearney analysis

Shareholder return. Satisfying shareholders' demand for healthy and consistent returns is a vital objective in any commercial business. Banking is no exception. Healthy, predictable returns are essential to ensure sustained funding and an ongoing ability to serve the economy. Shareholder returns can be compromised if customers and competitors demand service or price levels that are unsustainable or if regulators demand excessive protections.

Regulatory investment. As part of a regulated industry, banks must continue to meet the increasing demand from regulators through sustained investments in compliance and increases in capital reserves to ensure the stability of the industry and customer protection. The system's stability can be compromised if customers can access funding too cheaply or banks take on excessive risks to drive up short-term shareholder returns.

Customer expectations. Customers demand value (safety, convenience, price, or expertise) across all of the core functions. Meeting or exceeding customers' expectations is imperative. For example, customers demand innovative products for a competitive price while being able to use state-of-the-art technology to access these products. This objective can be compromised if, for example, regulatory requirements are too onerous or returns to shareholders come at the cost of market innovation.

Given the industry's current focus on productivity, it is also useful to understand how productivity fits into this model. In a growing economy, economic surplus is continually generated by meeting additional demand. However, in the absence of growth or to supplement slow growth, productivity must increase to create more economic headroom to fund competing objectives and to ensure the system does not slide backward.

How has Australian banking performed in terms of these four economic functions? How well has it balanced the three competing objectives? The next section explores answers to these questions.

Holding Up a Mirror

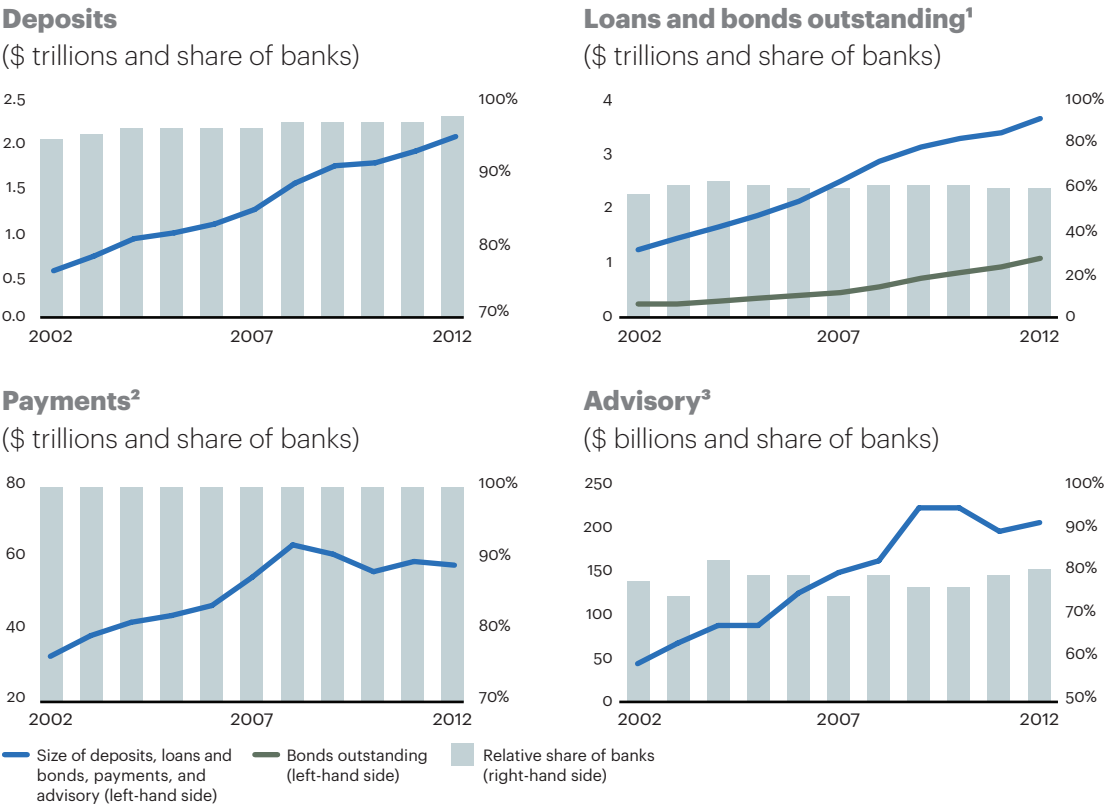
Banking has played a significant role in Australia's economy. The industry has delivered on the four core economic functions discussed in the previous section to a larger extent than in most comparable markets, and it seems to have managed the delicate balancing act of meeting the three competing objectives relatively well. However, a deeper look raises some questions that reinforce the need to challenge the status quo and create a refreshed, forward-looking vision for the industry.

Demand for all four core economic functions in Australia has increased significantly over the past decade, with banks playing a larger role in meeting this demand (see figure 3 on page 9).

- **Deposits.** The volume of deposits almost quadrupled from 2002 to 2012 (see figure 4 on page 9). Rising from \$0.5 trillion to \$2 trillion, growth has been more aggressive than in other countries, partly because of the buildup of funds through the superannuation pool and the battle for customers' money over the past couple of years to fund a rise in mortgage lending.⁴
- **Lending.** Funding supplied by Australian banks and capital markets grew 190 percent over the past decade to \$3.7 trillion in 2012. Funding supplied in the form of loans grew from \$1 trillion in 2002 to \$2.7 trillion in 2012, with banks increasing their share of the loan market from 72 to 85 percent. During the same period, funding supplied in the form of bonds grew from \$0.24 trillion

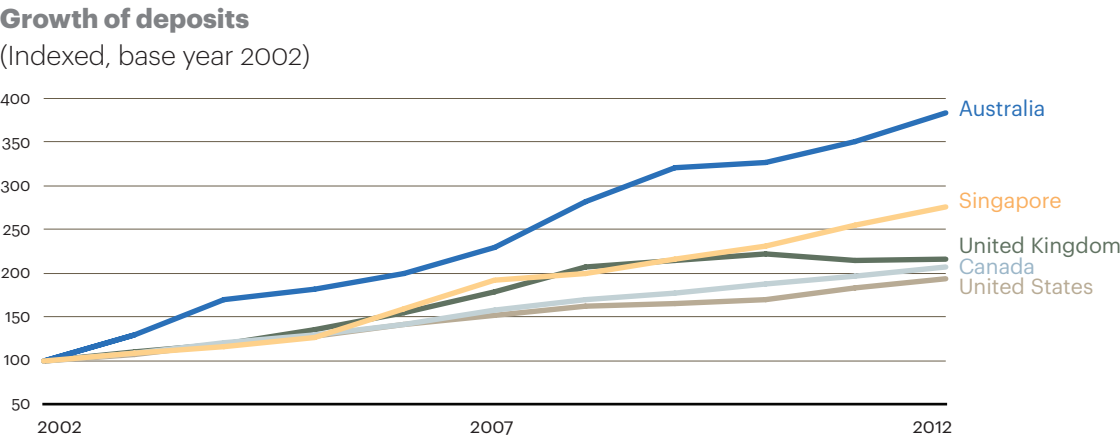
⁴ "\$" is used for Australian dollar and "USD" for U.S. dollar.

Figure 3
Australia's demand for the core functions of banking has grown



¹Bonds outstanding for all sectors in the economy, in market value
²Transaction volume of cards (credit, debit, and charge cards), cheques, direct entry payments, and real-time gross settlements
³Transaction volume of equity and debt capital markets
 Source: Australian Prudential Regulation Authority, Reserve Bank of Australia, Australian Bureau of Statistics, Bloomberg; A.T. Kearney analysis

Figure 4
Deposits in Australia have nearly quadrupled



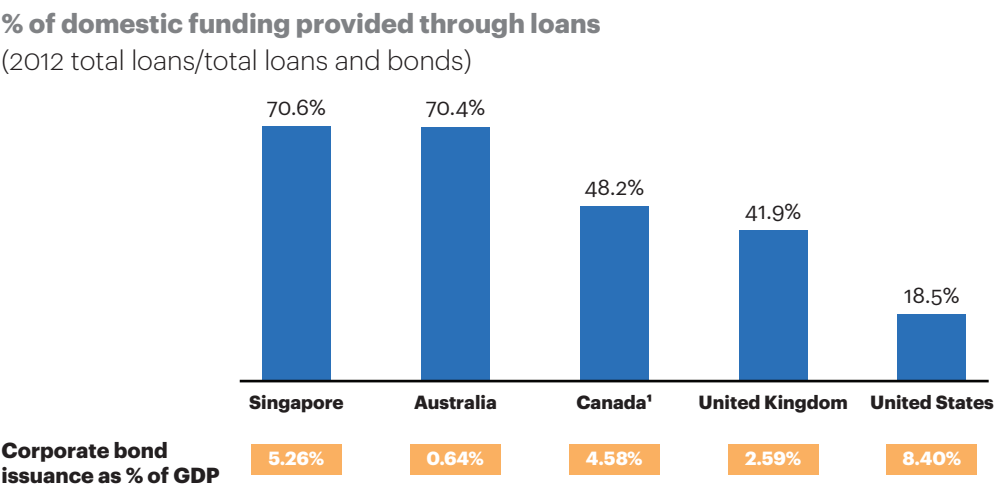
Sources: Bank for International Settlements, Bloomberg, Australian Prudential Regulation Authority, Reserve Bank of Australia, Bank of England, Federal Deposit Insurance Corporation, Monetary Authority of Singapore, Bank of Canada; A.T. Kearney analysis

to \$1.1 trillion.⁵ Further, the share of total domestic funding fulfilled by loans (70.4 percent) is high compared to peer countries, pointing to a smaller role of the bond market as a source of funding (see figure 5). In fact, a look at the amount of money raised in the local corporate bond market reveals that Australia’s bond market is small, with raisings only being 0.64 percent of GDP in 2012.⁶ Although the appetite for bond funding is there, corporates often decide to raise funds overseas (\$169.5 billion or 76 percent) instead of domestically (\$52.4 billion).

The role that banking plays in “servicing” the deposit and lending markets is substantial compared to peer countries.⁷ Only Singapore’s banks (among those profiled) have a higher share of serving these economic functions in their market (see figure 6 on page 11).

- **Transactions.** The amount of money flowing through the payments system in Australia has grown 80 percent between 2002 and 2012, reaching \$17 trillion. This category includes transactions by card, ATM, cheque, direct-entry payments, and real-time gross settlements. The share of payments being processed by Australia’s banks is similar to peer markets.
- **Advisory.** The advisory business includes equity capital market (ECM) and debt capital market (DCM) transactions on the corporate side and advice given for superannuation, insurance, and investments on the retail side. The ECM and DCM transaction volume grew steadily from 2002 till 2012 from \$44 billion to \$208 billion. Banks’ market share has hovered around 80 percent. On the retail side, the funds under advice by financial planners reached \$387 billion in 2012. The share of banks in this market (the funds under advice of dealer groups owned by banks) has been stable around 46 percent.⁸

Figure 5
A large share of Australia’s domestic funding is met by loans



Note: The share of loans in domestic funding is calculated as loans as part of total funding (loans and bonds). Data is for 2012.
¹For Canada, bonds issued abroad have also been included due to data unavailability.
Sources: Australian Prudential Regulation Authority, Monetary Authority of Singapore, Bank of England, Federal Deposit Insurance Corporation, Securities Industry and Financial Markets Association, ASB, United Kingdom Economic Accounts, Statistics Canada; A.T. Kearney analysis

⁵ Bond market size measured by market value
⁶ Compared to 2.59 percent in United Kingdom, 8.40 percent in United States, and 17.36 percent in Singapore, according to A.T. Kearney research. Corporate bonds issuance data represents face value of bonds issued onshore by non-financial corporations.
⁷ A.T. Kearney research
⁸ Bank market size and share calculated over the top 50 financial planner groups according to *IFA Magazine*.

An enviable balance

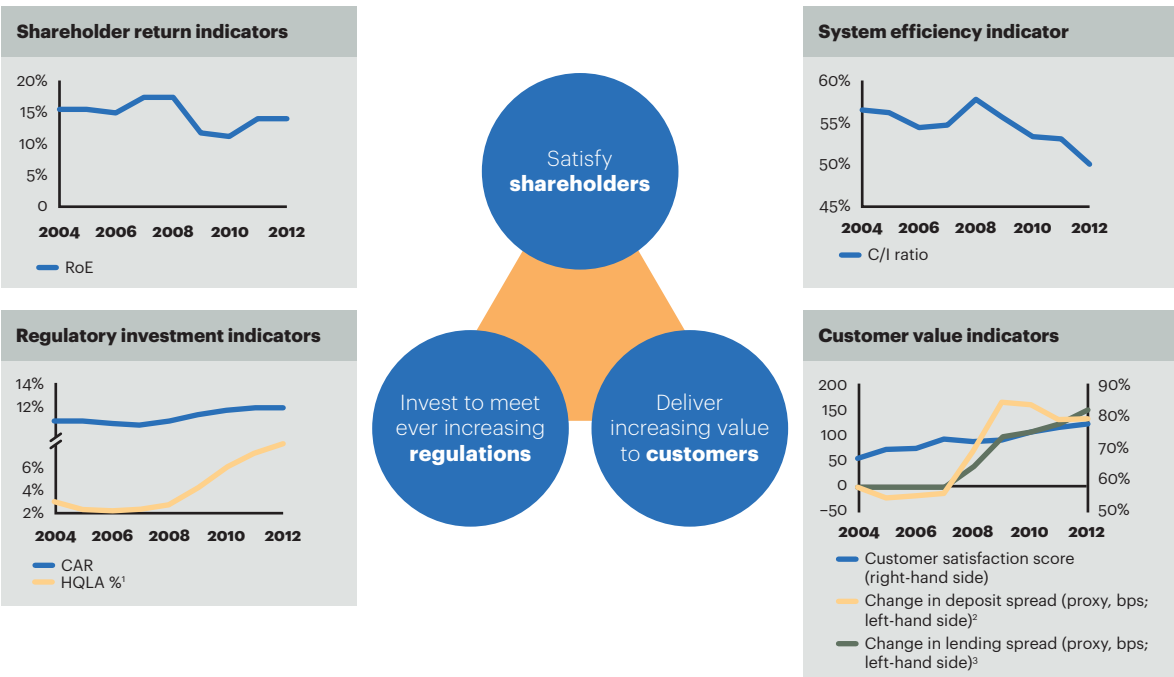
A look at how the industry balanced potentially competing objectives reveals that Australia's banks achieved an enviable balance when compared with the struggles and compromises seen in several global markets (see figure 7).

Figure 6
The role of banking in the deposit and lending market is substantial

Country	Market share of banks		Market growth (2012 vs. 2002)	
	Deposit	Lending	Deposit	Lending
Singapore	98.6%	95.6%	2.8x	3.2x
Australia	97.2%	85.7%	3.8x	2.5x
United States	92.6%	84.1%	1.9x	1.5x
Canada	82.7%	75.1%	2.1x	2.0x

Sources: BIS, Bloomberg, Australian Prudential Regulatory Authority, Reserve Bank of Australia, Bank of England, Federal Deposit Insurance Corporation, Monetary Authority of Singapore, Bank of Canada, Stat Canada; A.T. Kearney analysis

Figure 7
Australian banks successfully balanced competing objectives



¹ High quality liquid assets as a percentage of short-term liabilities

² Movement of special term deposit rate versus cash rate, in bps, relative to 2004

³ Movement of variable mortgage rate versus cash rate, in bps, relative to 2004

Sources: Australian Prudential Regulation Authority, Reserve Bank of Australia, Bloomberg, Roy Morgan Research; A.T. Kearney analysis

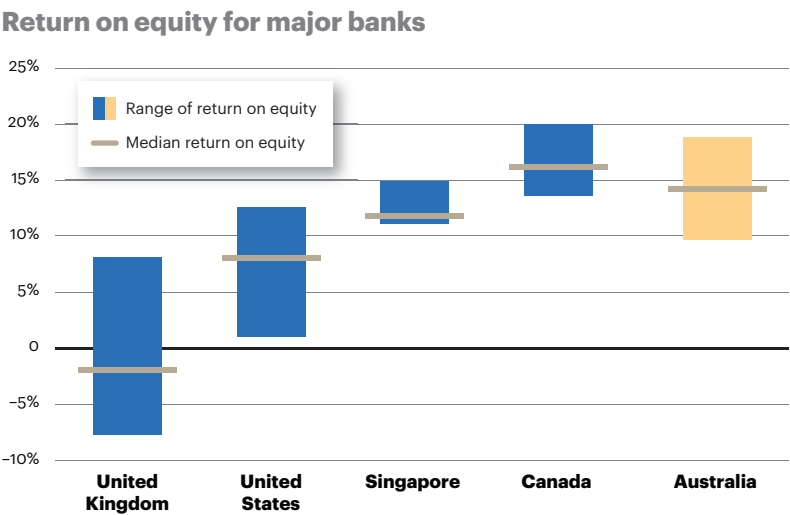
Shareholder return. On average, shareholders’ RoE has been fairly stable at around 15 percent after tax. A comparison of the RoE of the major banks in Australia with those in a set of peer countries reveals healthy RoE (see figure 8). The United Kingdom performs especially poorly, with significant funds being allocated to customer redress issues.

Regulatory investment. Australian banks managed to maintain a stable RoE on average despite increases in investments directed towards stability and protection. Investments to meet regulatory requirements around the stability of the financial system increased after the global financial crisis. The amount of high-quality liquid assets, including cash and securities held, grew from around 2 percent of short-term liabilities before the global financial crisis to 8 percent in 2012 in anticipation of the implementation of Basel III. The capital adequacy ratio, which is the ratio of a bank’s capital to its risk, increased from 10.6 to 11.8 percent.⁹ Additionally, Australia’s major banks currently allocate about a third of their investment spending to risk and compliance.¹⁰

Customer satisfaction. During the past decade, Australian banks have placed greater emphasis on customer satisfaction. This decade has seen a tremendous rise in customer convenience and control. After expanding their branch network and building out a large infrastructure of owned and third-party ATMs, the industry has invested in digital channels and mobile applications that are in many ways global firsts. For example, Australians take “pay anyone” online functionality for granted without realising this is a rare convenience that is alien to many other developing markets.

This growing focus on customer convenience and service levels has resulted in a rise in customer satisfaction scores from 66.8 percent in 2004 to 78.2 percent in 2012.¹¹ At the same time, the increased gap between the term deposit rate and the cash rate, driven by banks competing for deposit money, benefited customers tremendously.

Figure 8
Australia’s banks have seen a healthy return on equity

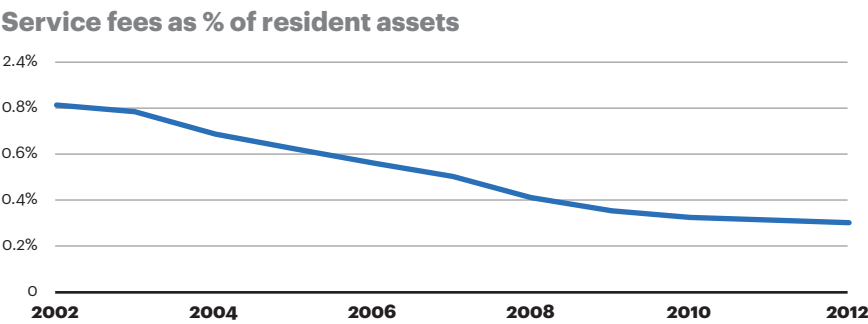


Note: This data comprises the major banks in each economy.
Sources: Bloomberg; A.T. Kearney analysis

⁹ Risk weighted assets divided by total capital base, according to the Australian Prudential Regulation Authority
¹⁰ 2013 annual reports from ANZ, Commonwealth Bank of Australia, National Australia Bank, and Westpac
¹¹ Roy Morgan Research

Bank service fee revenue adjusted for asset growth decreased in this period, falling almost 50 percent, from 0.85 percent in 2002 to 0.44 percent in 2012 (see figure 9). But not all costs dropped. While loan rates are driven by multiple factors such as cost of funds, expected losses, marketing, and sales costs, the difference between the variable mortgage rate and the cash rate began to creep up to offset the benefits received by the broader customer base.

Figure 9
Service fees as percentage of assets have declined



Source: Reserve Bank of Australia

This balance does not appear to have been so easily achieved in other markets. In the United Kingdom, for example, banks' RoE came under pressure after the global financial crisis because of levies, as the financial services compensation scheme and the bank levy to protect customers and increase the stability of banks as well as the significant customer redress because of mis-selling and selling overly complex products. Or put more simply, returns to shareholders were compromised as regulatory and customer value took precedence.

What enabled Australia's banks to achieve this balance? The impetus behind the industry's improved performance seems to be the growing demand from the market.

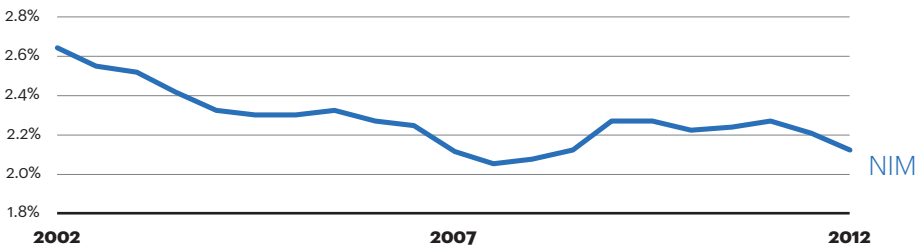
Profit for the collective banks increased from \$17 billion in 2005 to \$26 billion in 2012. This growth has been fuelled by a surge in net interest income (NII), which doubled from \$30 billion in 2005 to \$60 billion in 2012. The portion of fee and commission income, as pointed out above, declined from 29 to 22 percent because of regulation and competition.¹²

Contrary to public perception, overall margins have not increased but have in fact declined pre-GFC and have remained relatively stable since then. However, these margins over increased balances have resulted in increased NII. Net loans doubled from \$1.1 trillion in 2004 to \$2.2 trillion by 2012, while the net interest margins declined slightly from 2.30 to 2.13 percent over the same period (see figure 10 on page 14).

This increasing economic surplus has brought many benefits. Profits have been distributed across all three objectives. Shareholders have benefited in the form of dividends, with the percentage of profits being distributed as dividends increasing from 73 to 83 percent. This is highly relevant in an Australian context since Australian households own more than \$300 billion in bank equity either directly or indirectly via their superfund investments.

¹² Australian Prudential Regulation Authority, Statistics: quarterly authorised deposit-taking institution performance, June 2013 and A.T. Kearney analysis.

Figure 10
Net interest margin has contracted over the decade



Note: Net interest margin includes major banks.
 Source: Australian Bankers' Association

Of the remainder (retained earnings), more investments have been made in regulation and compliance, estimated to be a third of investment spending.¹³ The rest of investment spending has been directed towards increasing customer value through innovation, technology, and convenience.

At the same time, the overall system efficiency improved, creating economic headroom to invest simultaneously in the three competing objectives. The efficiency of the banking system, indicated by the cost-to-income (C/I) ratio, of Australian banks has been on a positive trend over the past decades. The major banks in Australia have a C/I ratio that is at the bottom end of their peers around the world.¹⁴

This delicate balancing act had one significant benefit: It allowed the system to grow to meet increasing demand. Without balance, a large share of demand would have gone unmet in a market where banks play a vital role in meeting demand and few scale options are available.

Is the status quo sustainable?

Although Australia's banking sector has performed well over the past decade, a closer look reveals some trends that merit evaluation. Five thought-provoking questions indicate a need to challenge the status quo and chart a new vision for the industry:

1. Are all sectors of the economy benefiting equally from the increase in funding availability and the strength of Australia's banking industry?
2. Is the stable average RoE for the industry sustainable?
3. Are current measures of customer satisfaction truly representative of how customers perceive and choose their banks?
4. Can banks continue to inject equity at rates required by more conservative regulations?
5. Can greater economic surplus be created through bolder, industry-wide productivity initiatives?

The following focuses primarily on the first two questions and touches lightly on the remaining three.

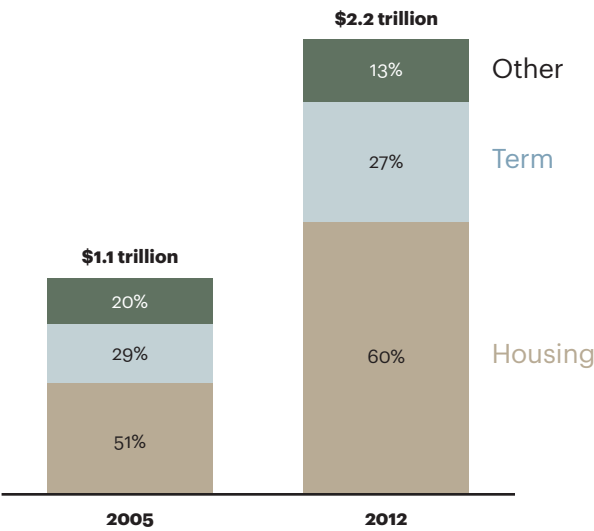
¹³ Major banks are ANZ, Commonwealth Bank of Australia, National Australia Bank, and Westpac. Investment spending is for the 2012 reporting year.

¹⁴ Reserve Bank of Australia, Financial Stability Review, September 2013

1. Are all sectors of the economy benefiting equally from increase in funding availability and the strength of Australia’s banking industry?

From 2004 to 2012, the amount of loans provided by banks doubled to \$2.2 trillion. A strong contributor was the growth in housing loans, which increased from 52 to 60 percent of the total loan balances (see figure 11).

Figure 11
Loans provided by banks doubled, mainly driven by home loans



Source: Australian Prudential Regulation Authority

Is there a challenge with SME lending, as an illustration of a skewed funding pattern in Australia towards some sectors and away from others? Answering this requires understanding how important SMEs are to Australia’s economy.

As in several markets, SMEs seem to be volatile and challenging but are also a vital part of the economy. More than two million SMEs in Australia contribute 57 percent of the private-sector industry value while employing approximately 70 percent of the workers in the private sector. This is in line with Europe where SMEs represent 58 percent of the gross industrial value and employ 67 percent of the workers in the private sector.^{15,16}

SME funding has become a topic for debate, particularly since the financial crisis. While SMEs have often said they receive a raw deal relative to corporate and residential customers, major banks claim they have made enough funds available for SMEs. The amount of business loans to non-financial corporations in the past decade confirms that major banks are more forthcoming than regional banks in financing the sector (see figure 12 on page 16).

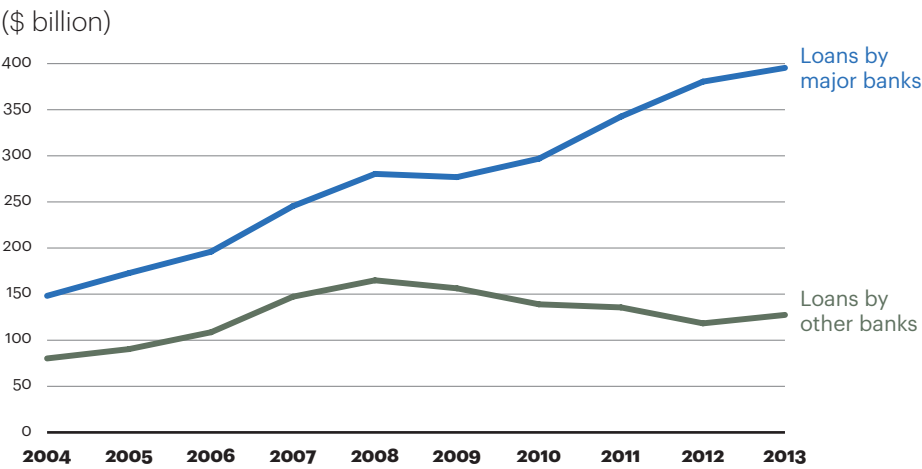
However, the distribution of new business loans seems more skewed towards larger corporates (loan value of more than \$2 million). While the distribution of outstanding business loans is

¹⁵ Australian Government, Department of Industry, Innovation, Science, Research and Tertiary Education, Australian Small Business, Key Statistics and Analysis, December 2012
¹⁶ Edinburgh Group, Growing the global economy through SMEs

two-thirds to corporates and a third to SMEs, for new loans this ratio is 78 percent to 22 percent in favour of corporates, based on average values since 2008 (see figure 13).

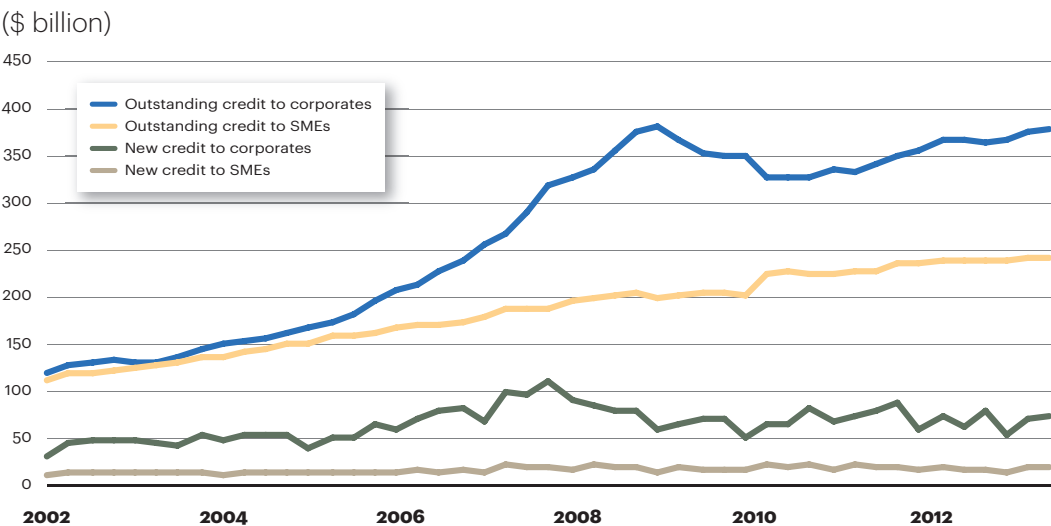
The situation is complicated for SMEs by a preference for property-backed loans. Over the years, the banking industry has become—some would argue understandably and prudently—more conservative towards non-property-backed loans. This trend can trace its origins to lessons learned from previous crashes (the property crash of 1990-1991 and the global financial crisis) and the capital provision under Basel norms that promotes property-backed loans.

Figure 12
Loans outstanding to non-financial corporations by bank type



Source: APRA—Outstanding loan values as of 31st December of the relevant years

Figure 13
Growth of business lending primarily driven by corporates



Source: Reserve Bank of Australia

Through this evolution, capabilities to underwrite areas such as specialised inventory-backed loans, receivables, and cash flow financing have understandably also begun to fade across the sector. Today, only two of the four majors provide debtor financing.

A further issue has to do with property-backed loans: The interest differential of about 100 basis points between a secured business loan and a housing loan is often questioned as to whether higher documentation requirements, more capital provisions under the Basel system, and the riskier nature of business loans justify such a differential.

This reality seems to have led to debt products designed for households being used for business purposes, though it is hard to find accurate data to establish this fact.

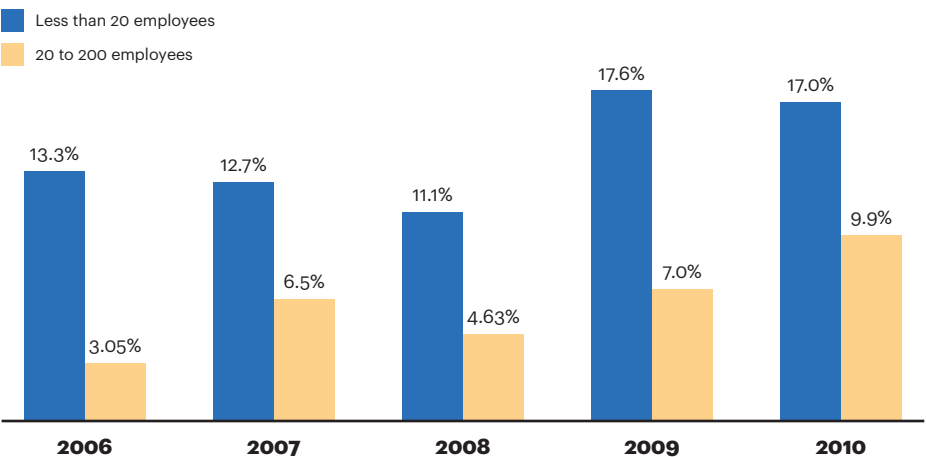
Potentially as a result of some of these trends, Matic, Gorajek, and Stewart found that the percentage of SMEs failing to obtain external finance has increased.¹⁷ This issue is more acute for smaller firms (see figure 14). Startups find it more difficult to fund their ventures as well. More than 40 percent of those seeking outside funding do not get it (see figure 15 on page 18).

Some banks have made an observation that SMEs are not financially savvy enough to get financing. SMEs, on the other hand, point out that more documentation is required for raising a loan, and the process takes a long time. In about 15 percent of the cases, potential borrowers withdrew their applications because the process took too long, according to an East & Partners survey.¹⁸

There is likely to be merit on both sides of this debate. However, the debate itself points to the fact that further discussion and effort on both sides are likely to be required to ensure that all sectors of the economy—of which SME is only one example—receive the support they need from the banking industry as a whole.

Figure 14
The percentage of SMEs failing to obtain external financing increased

Firms in size category that sought financing

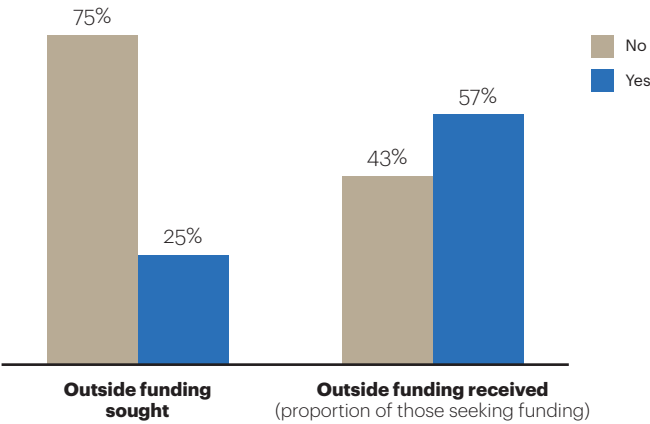


Source: *Small Business Funding in Australia*, 2012

¹⁷ Reserve Bank of Australia, *Small Business Funding in Australia*, Matic, Gorajek, and Stewart, 2012

¹⁸ BankingDay

Figure 15
The experience of startups seeking outside funding



Source: Department of Industry, Innovation, Science, Research and Tertiary Education, “Australian small business key statistics and analysis”, December 2012

2. Is the stable average RoE for the industry likely to be sustained?

For a rational investor, expected return is a function of the estimated risk of an investment. The previous section showed that the RoE for Australian banking on average has been stable around 15 percent over the past decade. However, some argue that the industry’s inherent structural risks have been reduced, and therefore, RoE expectations could drop over time.

Thanks to the efforts of individual banks and the regulator, banking in Australia is indeed structurally less risky than before. Four indicators of risk are shown in figure 16 on page 19.

Capital position. When a bank holds more capital, its stability increases, and its risk is lower. The ratio of high-quality liquid assets more than doubled over the past five years to more than 4 percent of domestic assets, and the capital adequacy ratio rose from 10.6 to 11.8 percent.

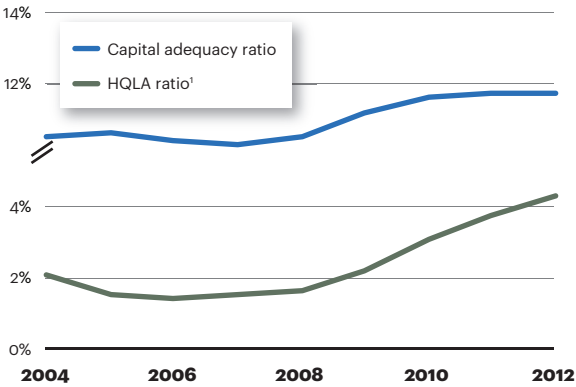
Thanks to the efforts of individual banks and the regulator, **banking in Australia is indeed structurally less risky than before.**

Leverage. The lower the leverage of the industry, the lower its systemic risk. Leverage is the amount of loans a bank provides relative to its deposits. A bank’s risk profile increases if the leverage goes up. In Australia, this leverage has been declining since the 2008 financial crisis, dropping from 130 percent just before the crisis to 112 percent in 2012.

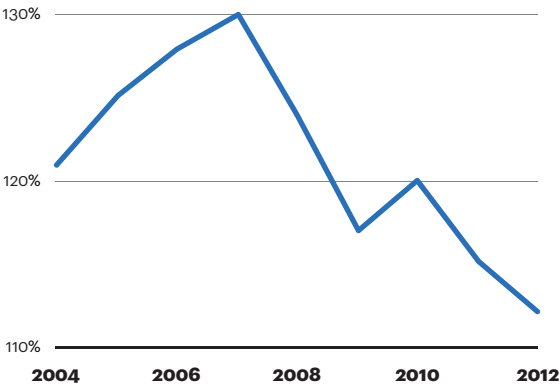
Funding composition. There are three main sources for funding for a bank: short-term wholesale funding, long-term wholesale funding, and deposits. The larger the part of short-term wholesale funding, the riskier a bank is perceived to be. This is because short-term

Figure 16
Australian banking is becoming less risky

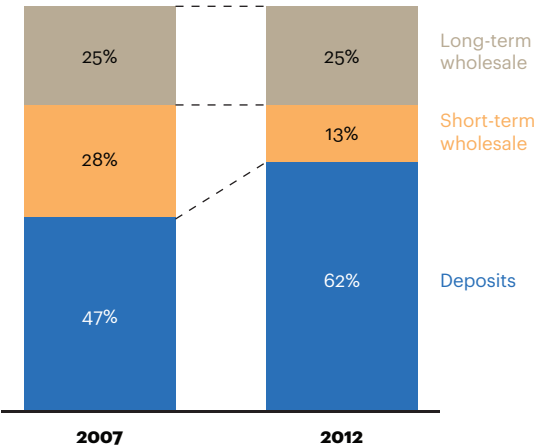
Capital position



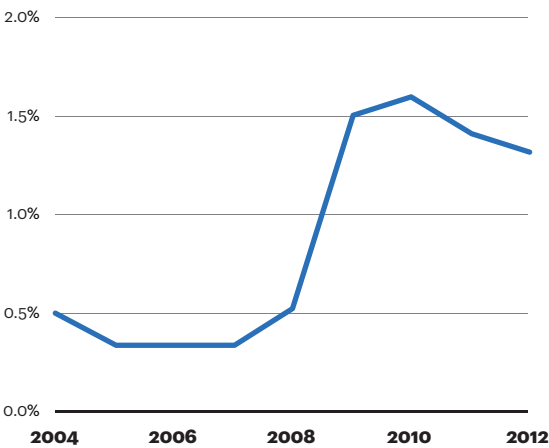
Leverage²



Banking funding composition



Non-performing loans ratio³



¹ High quality liquid assets as a percentage of short-term liabilities

² Net loans and advances divided by deposits

³ Impaired facilities to loans and advances

Source: A.T. Kearney analysis

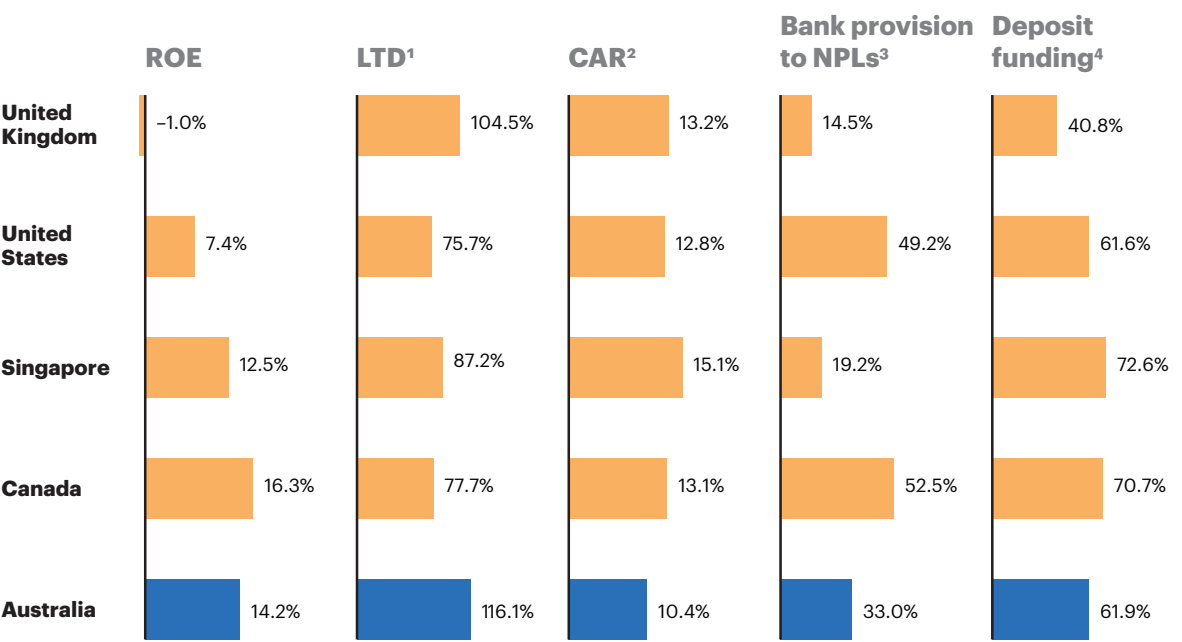
wholesale funding is perceived as the least “sticky” source of funding because its short duration means it has to be renewed more often. This renewal can become more difficult if market conditions change. To lower the risk in their funding footprint after the financial crisis, Australian banks reduced their exposure to short-term wholesale debt from 28 to 13 percent of their total funding needs while increasing their exposure to more sticky deposit funding from 47 to 62 percent.

Non-performing loans. If a bank has a significant number of bad loans in its books, it is a riskier bank. The non-performing loan ratio of Australian banks has been historically low, hovering around 0.4 percent.¹⁹ During the financial crisis, it grew to 1.7 percent and is now on the decline (1.3 percent for 2012).

¹⁹ The Australian Prudential Regulation Authority defines the non-performing loans ratio as impaired facilities to loans and advances.

How does Australia’s situation compare with other markets? Singapore is one example of a low-risk sector commanding lower RoEs than Australia. However, Canada seems to be an exception, given that its structural risks appear less but its RoE on average appears higher (see figure 17).

Figure 17
Comparison of key ratios of leading banks across multiple geographies



Note: Data set consists of the major banks in each economy
¹ Loans to total deposits
² Capital adequacy ratio (core capital expressed as a percentage of its risk-weighted assets)
³ Provision for loan losses over non-performing loans
⁴ Total customer deposits and liabilities
Sources: Bloomberg, A.T. Kearney analysis

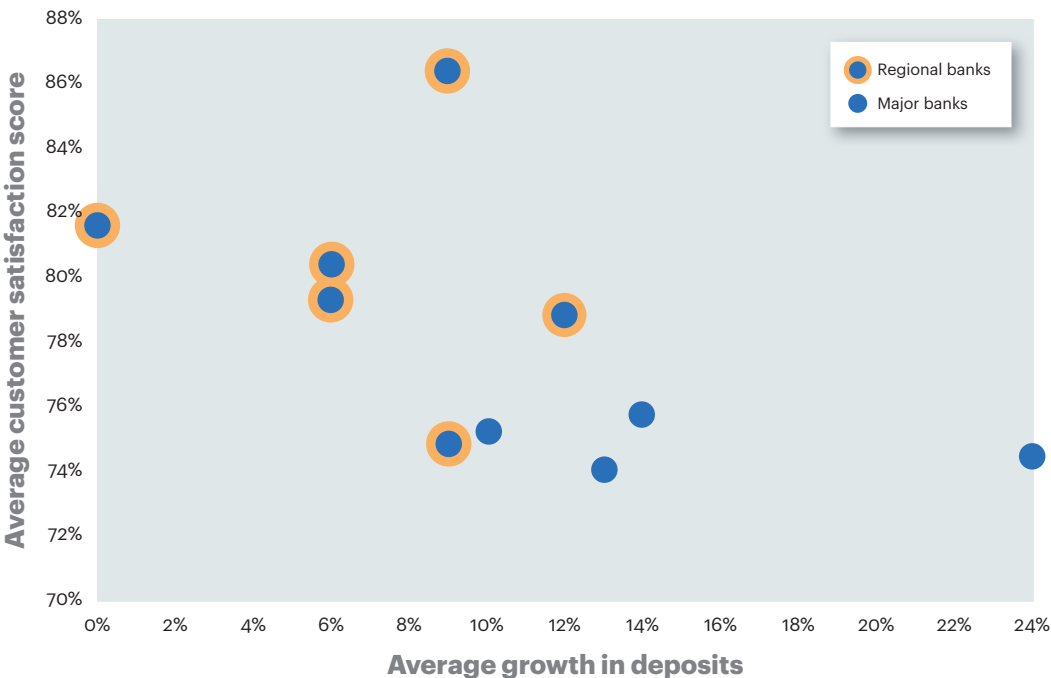
Across all these indicators, systemic risk seems to have been reduced. On one hand, this should result in lower RoE expectations. On the other, given the “scared” nature of global capital (as discussed in the next chapter), RoE expectations for the same risk level are rising. These competing forces raise a compelling question: Will RoE levels remain stable on average (fully acknowledging that individual banks may always perform far better or worse than the industry average)?

3. Are current measures of customer satisfaction truly representative of how customers perceive and choose their banks?

Perhaps a less crucial question, but a thought-provoking one nonetheless, addresses the measures banks use to assess customer value, specifically customer satisfaction scores. Overall customer satisfaction scores have risen from 66.8 percent in 2004 to 78.2 percent in 2012.²⁰ The underlying scores for most banks have continuously improved over the past few years. Some

²⁰ Roy Morgan Research

Figure 18
Some smaller banks are outperforming bigger players in terms of customer satisfaction



Note: Customer satisfaction scores and deposit growth have been averaged over five years (2008–2013).
Sources: Australian Prudential Regulation Authority, Roy Morgan Research; A.T. Kearney analysis

smaller banks, however, have consistently outperformed the major players in absolute customer satisfaction numbers (see figure 18).

Higher customer satisfaction would be expected to increase loyalty and drive business growth. However, the assumption that banks with the highest customer satisfaction rating get the highest business growth does not hold. In fact, the highest growth rates are with the major banks, not with the banks that deliver the highest customer satisfaction score. For example, all four major brands have higher growth rates than some regional banks, which have the highest customer satisfaction scores.

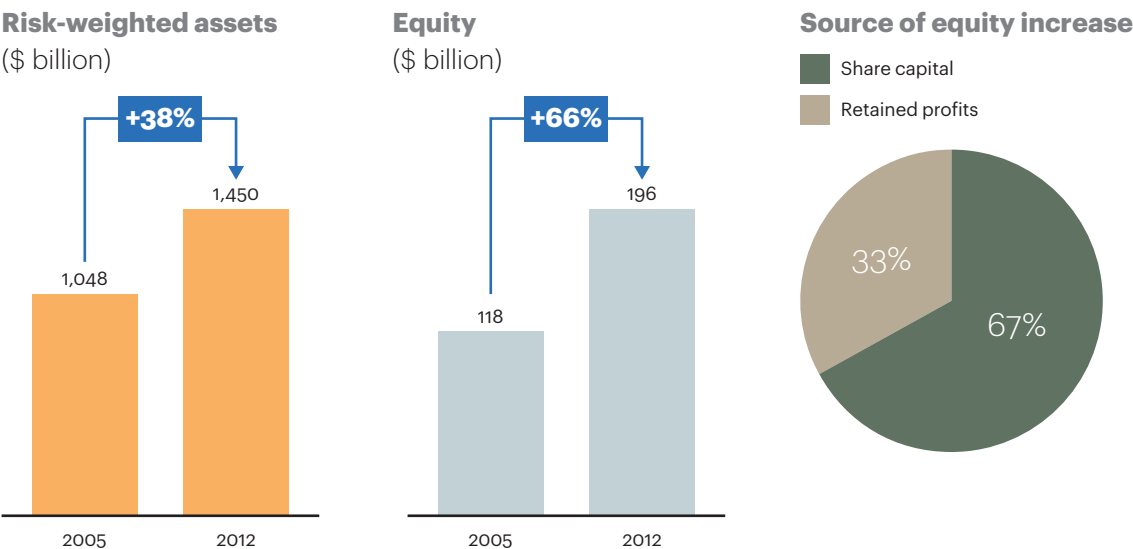
Are banks therefore justified in celebrating these scores as comprehensive indicators of customer value, or do they paint a meaningful but incomplete picture that points to the need for more customer value creation in the decades ahead?

4. Can banks easily continue to inject equity at rates required by more conservative regulation?

From 2005 until 2012, banks’ risk-weighted assets have grown by 38 percent.²¹ However, to support this growth, banks’ equity had to increase 66 percent (see figure 19 on page 22). This has been driven by more stringent prudential regulations. However, to facilitate future growth, equity on the balance sheet will need to grow faster than risk-weighted assets if more conservative regulations are introduced.

²¹ Risk-weighted assets are the risk-weighted sum of a bank’s individual credit exposures.

Figure 19
Banks' risk-weighted assets have grown, but equity also had to grow



Sources: Australian Prudential Regulation Authority; A.T. Kearney analysis

If banks are to keep up with funding the economy, the demand for equity will grow faster than before. Assuming regulations don't become more conservative (and expensive), will growth imply the need to raise additional equity if retained earnings do not keep pace? Otherwise, growth of lending through banks will be curtailed, and new sources of funding will need to be discovered. Neither scenario is appealing for the industry.

5. Can greater economic surplus be created through bolder, industry-wide productivity initiatives?

The final question focuses on the industry acting in a coordinated fashion to identify and capture further productivity improvements. As discussed, the C/I ratio of Australian banks has dropped over the past decades and is one of the world's lowest. However, this drop does seem to be driven more by an increase in income without a proportional increase in costs. (Income has grown 38 percent with a cost increase of 23 percent.)²²

While this is indeed a major achievement, are there ways the industry as a whole can explore sector-wide or multi-bank initiatives to reduce costs and increase productivity more dramatically? Given that banking's role in the economy is larger than the people it directly employs, should banks explore more ambitious productivity initiatives such as industry-wide utilities, as we have seen globally and in the superannuation industry (for example, shared administration platforms across industry funds)?

Success in such sector-wide experiments could mean higher economic surplus available to meet competing objectives without compromising any one of them, and as we have seen, this is crucial for the virtuous cycle of growth in the industry and the economy.

²²A.T. Kearney analyses on data from Australian Prudential Regulation Authority comparing 2012 with 2005.

A Tale of Two Futures

Coming out of the global financial crisis and the natural resources boom, Australia is about to write the next chapter of its economic history buffeted by five mega trends, which pose both opportunities and threats to the country’s economic success and provide an essential backdrop to shaping a vision for the banking industry.

Collectively, these trends present a double-edged sword. For example, consider growth in Asia. On one hand, Asia’s growing population and burgeoning middle class could give Australian companies an almost endless marketplace. However, if they miss this opportunity, they could be driven out of their home market by cheaper products coming in from Asia.

The following section looks at each trend and aggregates the impact of these trends into two extreme economic scenarios.

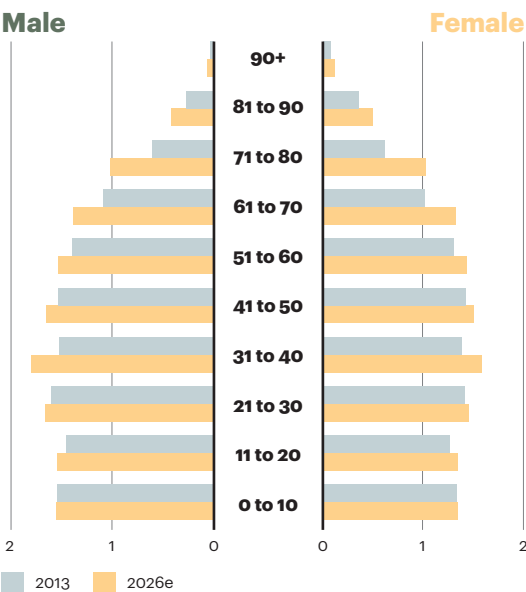
Mega trend 1: The ageing population

Australia’s population is not only growing, it is also maturing. Over the past three decades, the economy has benefited from this larger population and its growing share of people who are of working age. Going forward, the population is expected to continue to grow, but the relative share of the population that is of working age—the labour force—is expected to shrink (see figure 20). Therefore, over time, a decreasing share of the population will support an increasing share.

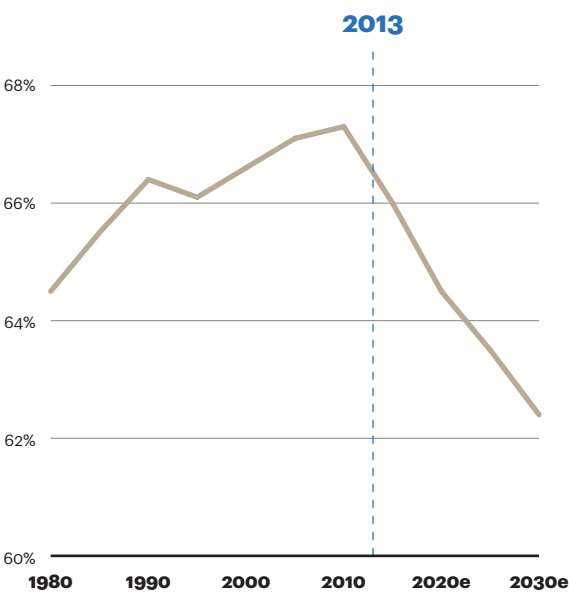
This ageing population will create both opportunities and obstacles for the economy. The opportunities will be mostly around wealth accumulation. While becoming older, Australians

Figure 20
Demographics of Australia

Number of people by age bracket
(in millions)



Working-age population
(% of total population)



Sources: Australian Bureau of Statistics; Reserve Bank of Australia

have also become richer with average net worth rising more than 40 percent from \$0.5 million to \$0.7 million in the past 10 years.²³ Australians are also accumulating funds at a faster rate with a net saving rate of 11 percent of disposable income.²⁴ Both these trends point to larger balances and faster growth of funds available for investment in building the new economy. In addition, average superannuation funds available at retirement and the total superannuation pool will keep growing, primarily driven by a higher guaranteed contribution.²⁵

The obstacles could emerge on three sides. First, the funds accumulated in the superannuation system are substantial, but is it enough to support the retirement of an expanding part of the population? Retirement costs are due to increase because of the rising cost of living, higher medical costs, and greater longevity. Costs from increased longevity are expected to rise from 10 percent to 12 percent of GDP by 2030, with higher costs for health services because people are living longer.²⁶ This could result in superannuation balances that, although higher, will not be enough for a population that is living longer than ever before.

Second, a growing part of the population is fast approaching retirement. This group will not have a long-term horizon to invest in riskier asset classes to ensure adequate wealth accumulation, and there is a lack of investment opportunities with a suitable risk-return profile.

Finally, overall GDP could fall if productivity does not offset what the demographic dividends (that is, the benefit of an expanding workforce). Because the relative size of the working-age population is declining, workforce productivity needs to increase to sustain the same GDP growth. To sustain a 3 percent GDP growth towards 2030, the productivity growth rate needs to increase at least 0.3 points (from 1.5 to 1.8 percent) to offset the impact of a shrinking labour pool.²⁷

In an optimistic scenario, Australia will be rich in capital and funds from savings and pensions being productively deployed. These funds find their way to growth investments to build the new economy and allow the country to become a net exporter of capital. In turn, investments result in productivity improvements, which sustain GDP growth despite the demographic discount. However, in a pessimistic scenario, capital is cautious, and GDP growth declines. Wealth balances are substantial, but they are locked in unproductive, low-risk investments that don't fuel the economy. In addition, low yields combined with high longevity costs translate to a high social bill. As a result of productivity initiatives not finding funding, GDP growth begins to drop.

Mega trend 2: Emerging Asia

Asia is growing. A rapid increase in income and an expanding population are creating a larger middle class. Growth in the region is forecasted to be higher than in any other part of the world. GDP growth for developing Asia is forecasted to be around 6.8 percent for 2014 and 2015 versus 2.2 percent for advanced economies.²⁸ In an Asia-driven world economy, a close integration is instrumental for Australia's future, and some would argue, it is inevitable. Australia's economy is connected with Asia on three important dimensions: trade, capital, and people.

²³Household Wealth and Wealth Distribution Australia, Australian Bureau of Statistics, August 2013

²⁴Economic Outlook: Statistics and Projections – Household saving rates, OECD iLibrary, November 2013

²⁵Speech by Bill Shorten MP at the Conference of Major Superannuation Funds, March 22, 2013

²⁶An Ageing Australia: Preparing for the Future, Productivity Commission Research Paper, November 2013

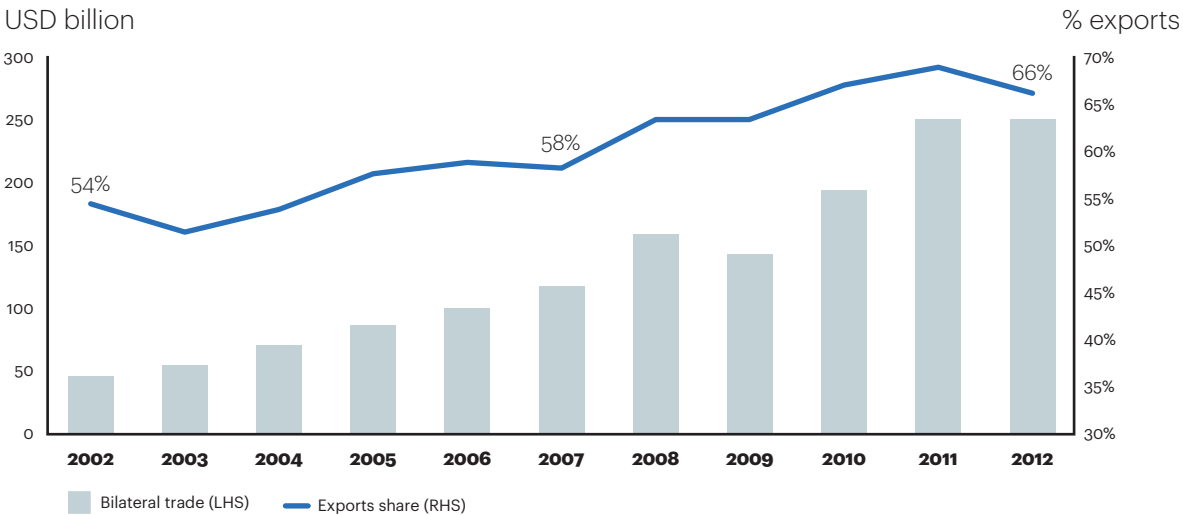
²⁷Intergenerational Report, Australian Treasury, January 2010

²⁸World Economic Outlook, International Monetary Fund, 21 January 2014. Developing Asia includes China, India, Indonesia, Malaysia, Philippines, Thailand and Vietnam.

● **Bilateral trade with key Asian economies has seen strong growth over the past decade.**

Trade grew with an average of 18 percent per year, rising from USD 46 billion in 2002 to USD 250 billion in 2012 (see figure 21). Exports from Australia to Asia have grown faster than imports to Australia, primarily driven by the increased demand for resources in Asia, particularly China.

Figure 21
Bilateral trade with key Asian economies¹



¹ China, India, Indonesia, Japan, and South Korea
Sources: UN Comtrade; A.T. Kearney analysis

- **Capital investments from Australia into Asia and vice versa have increased.** Incoming investments from Asia have grown steadily, increasing 50 percent over 10 years to reach \$20 billion in 2011.²⁹ Outgoing investment has been more volatile but has grown 200 percent in the same period, reaching \$3 billion in 2011. Currently, Australia is a net importer of capital.
- **People are more mobile.** Migration from Asia to Australia grew 12 percent per year in the decade leading up to 2011, with China and India as major contributors.³⁰ This growth includes permanent and temporary migration, which encompasses Asians spending a limited amount of years in Australia for their education and Australian workers on assignments in Asia. Of Australian emigrants, 40 percent are moving to Asia.³¹

Opportunities will occur in all three dimensions. In trade, the large and growing Asian countries could represent a highly attractive export market beyond the resources sector that currently accounts for a big part of exports. In capital investments, a closer integration with Asia could provide Australia with access to capital that is seeking returns in a low-risk environment. This in turn can be used to fuel Australia’s growth investments. In migration, the local market in Australia could grow thanks to permanent and temporary migration, which will bring a bigger marketplace in general and more opportunities for products and services focused on immigrants in particular.

²⁹ Economic Outlook: Statistics and Projections – FDI flows by partner country, OECD iLibrary, November 2013
³⁰ Includes: Korea, Vietnam, Sri Lanka, Malaysia, Philippines, India, China; OECD, International migration database
³¹ Australia in the Asian Century White Paper, Australian Government, October 2012

The same dimensions, especially trade and capital, can pose threats to the Australian economy. For instance, closer integration with Asia could cause stiffer competition for local players as Asian players enter the Australian market, leading to value degradation for local businesses. Also, closer economic relations can trigger a flood of low-cost imports. Finally, if international opportunities prove to be an attractive risk-reward proposition, there will be greater competition for capital.

The potential economic impact of a close integration with Asia is twofold. In an optimistic scenario, local businesses could grow because of access to Asian consumers and the bigger marketplace. In addition, foreign investment and immigration could drive growth of multiple local sectors, including education, tourism, real estate, professional services, and financial services. In a pessimistic scenario, competition from low-cost imports could increase, leading to a progressive demise of the local sector and growing dependence on Asia. Value could also be eroded by low-cost Asian competitors. Economic growth could be constrained by limited access to capital if Australia fails to appropriately attract Asian capital.

Mega trend 3: The rising impact of digital

A digital tsunami is driving structural changes in industries across the world. The impact of this change on Australia's economy, individual businesses, and consumers will be significant. The overall economic impact of implementing the National Broadband Network, for instance, is expected to be more than 1.2 percent of GDP per year.³² On a business level, rapid growth of the online distribution channel is bringing radical changes. Australian online retail sales rose to \$14.4 billion in the year to October 2013, a level that is equivalent to 6.4 percent of traditional retail spending.³³ The number of mobile handsets with Internet access has tripled in the past year to around nine million. By 2014, more mobile devices than personal computers will be accessing the Web.³⁴ This accelerated mobile Internet penetration has led to aggressive growth in m-commerce. Australia's sales in this channel have surged from \$0.16 billion to \$5.6 billion in two years.³⁵ Broadband data usage is estimated to grow 40 percent per year towards 2025, with individual monthly consumption expected to rise from 10 gigabytes to one terabyte.³⁶

The opportunities for the Australian economy can be divided into four major themes:

- Increased efficiencies through the use of technology and improved productivity via automation, transparency, and simplicity in business transactions
- Maximised customer value through faster access to better and cheaper products and services
- Greater access to the global marketplace for local businesses as more people are connected to the Internet at faster connection speeds
- Use of more local talent leads to more innovation around digital technology; new startups contribute to GDP growth and job growth

The digital tsunami brings threats as well:

- Gradual competing away of margins because of highly automated processes, low barriers to entry, and increased transparency of options

³²Australian Business Expectations for the National Broadband Network, Access Economics, November 2010

³³NAB Group Economics, Online Retail Sales Index: Indepth & Special report, October 2013

³⁴OpentoExport.com, article by UK Trade and Investment, 2013

³⁵Consumer Discovery Australia, Secureinsight, November 2012

³⁶A snapshot of Australia's digital future to 2050, IBISWorld, 2012

- More volatile digital environment due to shorter development cycles and low barriers to entry
- Stiffer competition in all sectors as additional foreign players gain access to the Australian market
- Security and privacy risks if doing business online comes with a loose or absent regulatory structure

The rising impact of digital and the subsequent structural changes can have a positive economic impact. An optimistic scenario is characterised by a boost in economic growth as Australian companies expand into global markets, powered by increased connectivity and innovation across all sectors of the economy, including a thriving tech startup sector. At the same time, digital developments substantially increase productivity and boost economic output. Foreign players will enter the Australian marketplace but will nurture a healthy competitive environment across all sectors.

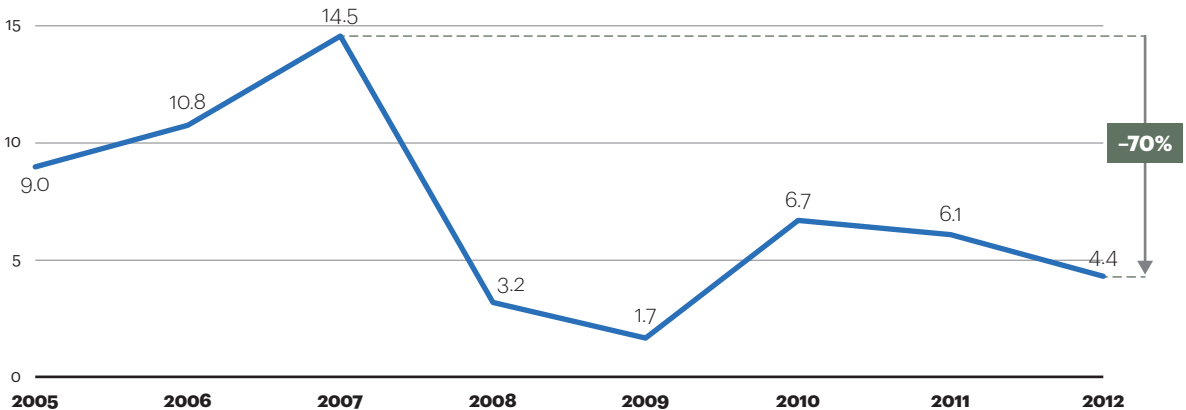
In a pessimistic scenario, economic surplus gradually erodes across sectors and has a negative impact on GDP growth. Lack of consumer trust because of the security and privacy risks of doing business online hinders innovation and limits growth. Growth of local businesses slows down or declines as a result of increased foreign competition from companies riding the digital tsunami unencumbered by the requirements of brick-and-mortar businesses.

Mega trend 4: Global capital is “scared” and expensive

Although the quantity of global capital has recovered and even surpassed levels from before the global financial crisis (estimated at USD 240 trillion mid-2013), capital remains more risk averse than pre-GFC.³⁷ The flow of cross-border capital has dropped 70 percent from the 2007 peak (see figure 22).

Figure 22
Cross border capital flows have fallen 70% since 2007

Global cross-border flow of capital¹ (USD trillion)



¹Includes direct investment (net incurrence of liabilities excluding exceptional financing), portfolio investment (net incurrence of liabilities excluding exceptional financing), and other investment (net incurrence of liabilities, debt instruments, other financial corporations excluding exceptional financing)
 Sources: International Monetary Fund Balance of Payments; A.T. Kearney analysis

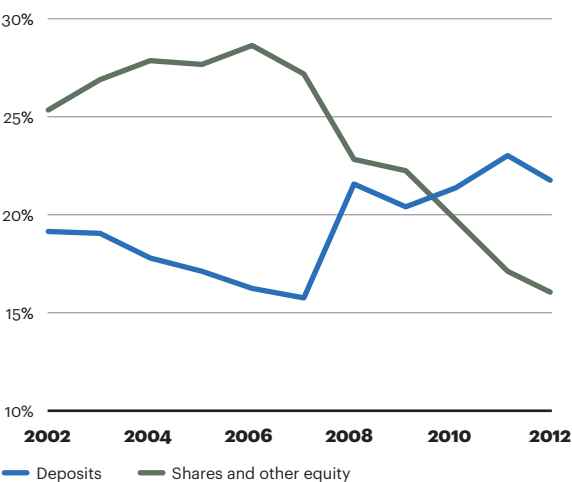
³⁷Credit Suisse Global Wealth Databook 2013

Capital also became more risk averse on a household level, where investments in equity dropped in favour of holding funds in deposits. In the wake of the financial crisis, the allocation to equity has dropped, and the allocation to deposits has increased (see figure 23).

Capital is more expensive to attract. Investments with similar risk levels now demand higher returns than a few years ago. The spread for A-rated corporate bonds has increased compared with pre-crisis levels, implying that a higher risk premium is demanded for the same levels of risk (see figure 24). Looking ahead, it does not seem likely that the cost to attract capital will decline.

Figure 23
Australian households have become more risk averse

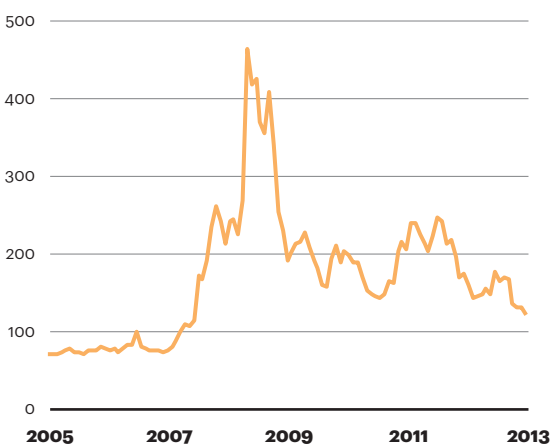
Deposits and equity share for Australian households (% of total financial assets)



Sources: Reserve Bank of Australia; A.T. Kearney analysis

Figure 24
Risk premiums have declined since GFC but are higher than a decade ago

Spread of A-rated non-financial corporate bonds (basis points over government bonds, tenor five years)



Sources: Reserve Bank of Australia; A.T. Kearney analysis

This development can bring opportunities for Australian capital in the form of increased potential returns and a broader variety of investment opportunities. High returns could be expected if there is excess domestic capital willing to venture into global opportunities, while other countries stick to home markets. A wide range of investment opportunities will become available as developing countries seek capital to fund accelerated growth. The infrastructure investment needs in Asia are massive, requiring lots of funding. Indonesia, for example, needs more than \$300 billion in infrastructure investment.³⁸

However, as pointed out earlier, risk averse and expensive capital brings threats as well. If capital is not available or invested in low productive alternatives, local enterprises become capital starved, which in turn stifles growth. In addition, innovation and new business ventures will struggle to access the capital pool because of their risk profile.

³⁸Masterplan for Acceleration and Expansion of Indonesian Economic Development (2011 to 2025) from the Indonesian government

In an optimistic scenario, Australia could become a capital-exporting country. Its capital will generate healthy returns in the global marketplace, the abundance of investment opportunities will make diversification easier, and the country would benefit from a healthy global portfolio.

In a pessimistic scenario, domestic capital is locked up, forcing Australia to import capital for which high returns will be demanded. This will slow down investments and lead to on average low returns, low innovation, and high costs.

Mega trend 5: Key natural resources will become more scarce

Demand for energy, steel, food, and water has been growing over the past several decades. In the years to come, demand for natural resources will continue to grow, putting more pressure on prices and potentially on geopolitical stability. The increase in demand is underpinned by a worldwide population expansion and accelerated income growth in emerging economies with up to three billion more middle-class consumers expected by 2030. Price volatility, which has already increased over the past decade, is expected to continue to rise as a result of increasingly harder-to-find resources and the use of more expensive methodologies to source the supply.

Greater demand for resources will also bring development opportunities in various sectors, including agriculture and infrastructure, **which in turn will attract foreign investment.**

For Australia, global scarcity of resources can be good news. If the country can maintain its surplus of key resources, opportunities will be plentiful. As a resource-exporting country, Australia will be well-positioned to profit from the increased global demand and higher prices on global markets. Greater demand will also bring development opportunities in various sectors, including agriculture and infrastructure, which in turn will attract foreign investment. In addition, the limited availability of resources and the rising costs associated with more complex methods to extract resources from harder-to-reach locations will drive technological innovation. This knowledge can then be exported, creating new income streams. Finally, the fact that most of the demand growth is expected to be driven by Asian economies gives Australia a geographic advantage as well.

A downside of scarce natural resources is that if productivity in the Australian resource sector drops to suboptimal levels in combination with higher extraction costs, there could be a resource shortage. In addition, investors could be deterred by price volatility and hold back investments in resources sectors, which would limit economic development in Australia and in the recipient economies. Finally, if competition from other resource-supplying countries intensifies, accessing capital and customers could become more difficult.

In an optimistic scenario, Australia is a diversified resource-exporting country. The economy will benefit from domestic resource availability and high export prices. Investments in and innovation

by resource sectors such as infrastructure, agriculture, and mining will underpin economic growth. Innovation becomes a competitive advantage and is leveraged on a global scale.

In a pessimistic scenario, Australia is no longer a pure exporter but relies more on imports. More imports creates more exposure to price volatility on global markets, which will add costs to sectors of the economy and stifle growth. Constrained investments lead to suboptimal resource productivity as a result of a lack of technological developments and innovation.

Australia’s Economy 20 Years Out

These mega trends will have a significant impact on Australia’s economy. Taking these trends into account, we can paint a picture of two future extreme scenarios (see figure 25).

Figure 25
Two possible scenarios for Australia’s future

Optimistic	Pessimistic
<p>Australia as a rich, diversified, integrated, and digital economy</p> <ul style="list-style-type: none">• Two growth engines at work:<ul style="list-style-type: none">— A vibrant SME sector underpinning economic stability— Agribusiness, infrastructure, education, tourism, services, and technology• Asia regarded as an opportunity rather than a threat with linkages through migration, trade, and capital• Wealth of the mature generation is available to the economy through many paths (bond market, long-term investment instruments)• Digital innovation used to drive up productivity across the economy and create new sources of value	<p>Australia as an isolated, stagnant, old economy with unproductive capital locked up in property and low-risk investments</p> <ul style="list-style-type: none">• Growth engines have not flourished because of lack of funding and entrepreneurship:<ul style="list-style-type: none">— SME sector steadily eroded through Asian competition and scale players dominating locally• Asia opportunity missed because of aversion to migration to and from Asia, hesitation to deploy Australian capital overseas, and a trade balance in Asia’s favour• Mature generation’s wealth locked up, leading to increase in social costs and low economic growth• Digital innovation takes foot in other markets before Australia, creating a competitive disadvantage

Source: A.T. Kearney analysis

Optimistic scenario: Australia as a rich, diversified, integrated, and digital economy

Four dimensions describe a successful future for Australia’s economy:

Several growth engines are at work. The resource sectors, including agribusiness, infrastructure, and mining, are flourishing thanks to increased domestic resource availability and high export prices. The services sectors, including education and tourism, are growing and in turn increasing economic growth and attracting foreign money to Australia. The country is leveraging its knowledge advantage, supported by strong innovation in the domestic market. A healthy technology sector is positioning Australia at the forefront of digital innovation. Innovation is thriving across the economy, including more tech startups, leading to a boost in economic growth and stimulating innovation in other sectors. A vibrant SME sector is underpinning the country’s economic stability by providing employment to a significant number of Australians and making a healthy contribution to GDP.

Asia is regarded as an opportunity rather than a threat. Strong linkages have developed in several areas. Bilateral trade has flourished. Australian companies make full use of the growing Asian market, and Asian companies create a healthy competition in the domestic market. Asian investments in Australia fuel the growth sectors and innovation, contributing to economic growth. Australian investors looking for a different risk-return proposition invest in the Asian growth story, for example with infrastructure investments. More people migrate between Australia and Asia. Asian people migrating permanently or temporarily to Australia drive population growth and boost sectors such as education. More Australians move to Asia, exporting skills and building close ties between Australian and Asian companies.

Accumulated wealth is used productively. Capital has stayed risk averse and become more expensive. However, Australia has unlocked the mature generation's wealth and made it available to the economy. Capital is channelled through a range of pathways, such as the bond market and long-term investment instruments, to growth engines. The country exports capital in a world suffering from a lack of accessible funding.

Digital innovation drives economic growth. Digital innovation has led to increased productivity across all sectors of the economy, for example through automation of production processes and by offering customers easier and faster access to service providers. Australian companies successfully tap into the global marketplace, using online platforms to increase sales.

Pessimistic scenario: Australia as an isolated, stagnant, old economy with large swathes of unproductive capital locked up in property and low-risk investments

If Australia is unable to capitalise on the five mega trends, a pessimistic scenario is likely to unfold:

Growth engines have not flourished because funding is lacking and entrepreneurship is stifling economic growth. Resource sectors such as agribusiness, infrastructure, and mining struggle to attract funding and lack innovation, leading to lower production levels and higher costs. Foreign competition is plentiful in the global marketplace, and foreign players reap the benefits of scarce goods. Domestic supply cannot meet demand, so Australia must import resources at a high price. Services growth stalls and dampens economic growth. The country loses its knowledge advantage in the region, leading to a decline in sectors such as education. Australia becomes an expensive tourist destination, and the tourism sector fails to attract foreign capital. The climate for technology firms is no longer seen as attractive, leading to an exodus of companies and talent. This stifled innovation in the technology and other sectors results in lower economic growth. SMEs are steadily eroded by Asian competition and scale players.

The Asian opportunity has been missed. Trade is impacted when increased imports from Asia create tougher competition in the domestic market, putting unhealthy pressure on local players. Exports decline because they are too expensive in the global market, resulting in a trade balance in Asia's favour. The economy has been unsuccessful in attracting investments from Asia to fund growth sectors, and innovation is stifling economic growth. Because Australia is perceived as too expensive, entrepreneurs have moved abroad. Australian companies have hesitated to invest in Asia, which has made Australia miss the boat. Financial ties with Asia are not well-developed, and the gap has become too big to close. Aversion of migrating to and from Asia has resulted in less integration and understanding between cultures and missed economic opportunities associated with increased mobility of people between Australia and Asia.

The mature generation’s wealth is locked in unproductive investments. Capital remains risk averse and expensive. Australia has been unable to unlock the wealth of the mature generation. Capital sits in real estate and low-risk, low-return investment destinations such as deposits, and it is not being used to fund economic growth. As a result, social costs are rising, and economic growth is dampened. Australia needs to import capital, which comes at a high cost.

Digital innovation takes foot in other markets, leaving Australia at a competitive disadvantage. Other countries capitalised sooner and better on the advantages of productivity, putting Australia at a disadvantage in the global marketplace. Opening up of the global marketplace as a result of greater connectivity has increased foreign competition in the domestic market, leaving Australian companies with much less market share and slimmer profit margins.

Both the optimistic and pessimistic scenarios are plausible. Political leadership, national enterprise, and vibrancy of business will play crucial roles. With this backdrop and recognising the significant role banking plays in the economy, the value of a vision for the industry’s future is clear.

Banking as a Key Enabler of the Future Australian Economy

As we have seen, Australia’s banking industry can make a substantial economic impact. Depending on how one believes the forces will play out, one can take an optimistic or pessimistic view of the country’s economic future. Against this backdrop, it is neither possible nor advisable to try to predict which future will materialise. However, the banking industry can and should play a pivotal role in tipping the odds in favour of an optimistic outcome. Thus, becoming the key enabler of the future Australian economy should be at the core of the vision for the industry. Banking can bring this vision to life over the next crucial decade. This section explores four dimensions of our proposed vision (see figure 26).

Figure 26
How banking can enable Australia’s vision and future



Source: A.T. Kearney analysis

1. Support the unlocking of capital to fuel the future Australian economy

What if Australian banking could lead the world in its ability to mobilize multiple sources of funding—efficiently and effectively as well as directly and indirectly? What impact would this national capability have on the country's ability to weather the storms of the mega trends?

To increase the funding options for Australian companies, banks may have to consider the role they can play in stimulating the development of the domestic bond market, developing new products to attract and unlock funds from less-productive assets (such as property), and play a pioneering role in facilitating new funding markets.

Funding options in the Australian market are limited. A shallow bond market and unfavourable pricing have caused large corporates to look overseas for funding. As mentioned earlier, only 24 percent, or \$52.4 billion, of Australian non-financial corporations' outstanding corporate debt securities is domestic versus 76 percent, or \$169.5 billion overseas.³⁹ When we look at total funding, including bonds and loans, we find that 31 percent is overseas.⁴⁰ In Australia, the value of bonds issued by non-financial corporations was only 0.64 percent of GDP in 2012, compared to 2.59 percent in the United Kingdom, 8.40 percent in the United States, and 17.36 percent in Singapore.

What if Australian banking could **lead the world in its ability to mobilize multiple sources of funding?**

Paradoxically, with the maturing of Australians, this ratio of assets to GDP is only likely to grow. However, more than half of total household assets are locked up in property investments, and more than 20 percent of financial household assets are in low-yielding deposits.⁴¹ This raises the question as to whether these assets will be enough for maturing Australians to fund their increasing lifespans (referred to as a longevity risk).

Multiple interventions are possible through policy, regulation, and new market participants. Here the banking industry could play three significant roles.

- **Explore new products.** Banks in other markets have developed equity-release products that can be used to unlock value from property and free up equity. These products are a way for the owner to sell part of the real estate structured as a bond. In the United Kingdom, this sector has grown 15 percent, and £284.1 million of equity was released in the third quarter of 2013.⁴² Similar products have been explored in Australia but have not flourished for various legitimate reasons. With real-estate equity only climbing, it may be prudent to consider how to reapproach this opportunity. Cooperation with the government may be required to introduce regulation around equity-release products and potentially develop a government guarantee on the equity-release bond to give investors additional protection, resulting in a more attractive risk-return profile. Alternatively, partnerships with insurance players can help provide the necessary hedge to protect customers.

³⁹ Reserve Bank of Australia, Statistical Table D4

⁴⁰ A.T. Kearney Analysis

⁴¹ Reserve Bank of Australia, Statistical Table B20

⁴² FTAdviser.com

Beyond this specific product opportunity, investment banking arms may want to revisit the manufacture of longer-term instruments aimed at attracting more funding from superannuation balances at a time when more consumers are seeking to manage longevity risks. However, doing so will most likely require a more efficient bond market, as outlined below.

- **Facilitate efficient markets.** To attract additional funding for the economy's growth sectors, banks may want to explore developing sector-specific securitised lending products. With these products, smaller loans can be aggregated to a bigger ticket size, which can then be sold to institutional investors in Asia and Australia. Regulations would need to be reviewed to ensure such a market could function efficiently.

Conversely, banks could channel smaller-ticket fund providers to the bond market by designing products to bundle contributions to overcome minimal ticket sizes often associated with participation in bond issues. This could help attract additional funding for new corporate bond issues and will also provide Australian retail investors with new investment options.

Peer-to-peer lending can give clients that need credit but do not match the risk-return criteria of standard banks a chance to access funding. This in turn will create a new asset class for investors with a higher risk-and-return profile. Lending Club, America's largest peer-to-peer lender, has facilitated USD 3.4 billion of loans since inception. Rather than see this as a threat, banks could consider how they can embrace this market by facilitating, servicing, and adding value to the market.

Originate to sell is emerging as a compelling way for large investment-grade fund consumers to access fund providers in a more efficient way. Banks can consider ramping up their role in growing this model to the benefit of all parties, but this will include investments in origination capabilities and developing the skills of the organisation to succeed in this new approach to funding.

Public-private partnerships (PPP) can lead to increased long-term funding relationships between banks and government. Currently, the involvement of banks, advisory firms, and other financial institutions in PPPs is mostly related to the deal itself. Banking could take the lead in providing the necessary advice to PPP participants in developing more innovative infrastructure investment relationships and solutions that are more in line with the nation's development plans, more forward looking, and more prepared to value longer-term relationship by sharing risks.

Indices (for example, for the agricultural sector) are crucial for asset managers to have a benchmark index and bundle smaller credit needs into bigger tickets. Banks can again consider playing a valuable role in constructing such indices, as they have done in other markets.

- **Stimulate the domestic bond market.** Dialogue with governments, regulators, and market operators is required to grow an active, liquid, and deep domestic bond market. Much has been said about this topic in Australia. As seen in other markets, the government must anchor the development of a yield curve, often through the regular issuance of government bonds. Regulators need to implement supportive regulations to stimulate the bond market by launching and marketing innovative products such as special purpose bonds (for example, general or specific infrastructure bonds) that are tradable in Australia and by reaching out to offshore parties interested in longer-term investments. Banks may want to consider how they can actively support these efforts, potentially even initiating and leading the dialogue while also being prepared to participate as anchor clients through domestic bond issues.

2. Develop and deliver financial solutions to key growth sectors

What if each growth sector, including SMEs, could find a partner in the Australian banking industry that was specialised and focused on serving their needs? To what degree would such a utopia help ensure that the country can build a portfolio of growth options to ensure long-term success? To move closer to this situation, perhaps the most important question is this: What is the full risk-return spectrum we are comfortable with the banking industry operating across?

Within that risk-return spectrum, it is likely that both banks and customers will need to evolve to ensure the needs of growth sectors are met profitably and prudently. Sectors such as SMEs, agriculture, infrastructure, and the environment are likely to be vital growth engines in tomorrow's Australian economy and will need to access funding and tailored financial solutions if they are to succeed.

- SMEs make up a significant share of Australia's economy. In fact, 99 percent of the country's businesses are SMEs, employing 70 percent of the workers in the private sector, or seven million people, and contributing 57 percent of the private-sector industry value.^{43, 44, 45}
- Agriculture is expected to experience accelerated demand thanks to population growth and the changing diets of a growing middle class, particularly in Asia. There will be constraints in the growth of the production capacity because of scarcity of water, declined soil fertility caused by the use of chemicals, and agricultural land turned into urban areas. Australia's government is keen to tap into this profit pool with its vision of becoming Asia's food bowl. However, the agricultural output per square kilometre of agricultural land in Australia is only 11 percent of the Organisation for Economic Co-operation and Development average, and it is estimated that it would require a \$500 billion investment in equity to make Australia the food bowl of Asia.^{46, 47}
- Infrastructure investment needs are substantial. Domestically, there is estimated to be a shortage of \$200 billion to \$800 billion, and aggressive urbanisation plans in Asia could require up to USD 8 trillion of new infrastructure investment to 2020 to support the current levels of economic growth.^{48, 49}
- Environment. With increasingly scarce natural resources such as water, food, and fossil fuels, addressing the demand for robust sustainable environmental practices is an urgent priority that requires funding.

To ensure enough funding is available, the industry as a whole needs to reconsider the prevalent risk-reward spectrum and rebuild bank capabilities to serve these segments.

- **Expand the risk-reward spectrum—licensing and credit guarantees.** The banking industry will need to serve a broader spectrum of clients with a greater variation in risk-return. A challenging but interesting solution is to expand the set of licenses available to allow new entities that cater to the high risk-return growth sectors. In the past, we have seen this with non-banking finance companies and authorised deposit-taking institutions. Going forward,

⁴³ Australian Government, Department of Industry, Innovation, Science, Research and Tertiary Education, Australian Small Business, Key Statistics and Analysis, December 2012

⁴⁴ Edinburgh Group, Growing the global economy through SMEs

⁴⁵ Small Business Access to Finance, NSW Business Chamber, 2013

⁴⁶ Downunder digest, HSBC Global Research, November 2013

⁴⁷ Extract from the Global Food Forum, The Australian, April 2013

⁴⁸ InvestorDaily, Australian Treasurer on infrastructure deficit

⁴⁹ Australia in the Asian Century, white paper by the Australian Government, 2012

are there new license structures that should be considered that do not interfere with the level playing field between banks and non-banks? Is there scope for a new license for higher risk-return banking?

Another way to manage a broader risk-reward spectrum is for the government or insurance sector to evaluate possibilities for a credit guarantee scheme. A government guarantee or lenders mortgage insurance type of scheme will lower the risk profile of the loan, which will make it attractive for a bank to supply the loans within their risk appetites while making the loan more affordable for these growth businesses.

- **(Re)build SME banking capabilities.** As discussed, SMEs and banks have yet to see eye to eye about the extent to which their funding needs are being met. Most banks see the potential of increased SME banking, but there is an opportunity for a differentiated player to emerge in this space. At its core, this will require an upgrade and could transform SME risk assessment to support a wider range of risks and rewards, especially as this is seen by many industry experts as a dying art. Furthermore, using new techniques, new data, and new warning systems can help banks manage risks more efficiently by taking advantage of new capabilities to capture and respond to data about SME businesses.

What if each growth sector, including SMEs, could find a partner... that was **specialised and focused on serving their needs?**

Beyond product availability, the customer experience needs to be simplified further to support SME access to a broader range of more appropriate banking solutions. SMEs, especially micro enterprises, often lack professional office administration capabilities and rely on streamlined processes to manage business complexity that would otherwise be a barrier to widespread adoption of banking solutions.

Finally, the use of household debt products for business purposes needs to be better understood and possibly addressed. Failure to do so could result in risks called out by the business bank side going unmanaged. Success is likely to drastically increase the convenience that business customers face in meeting their banking needs without having to explore alternative pathways.

- **Build deeper industry specialisation.** Because new growth segments are likely to emerge, banks may want to consider developing industry-specific solutions and capabilities designed to deliver highly efficient financing solutions to business customers in these sectors. Most banks have capabilities in agribusiness, but customer feedback suggests that gaps exist.

Solutions founded in a robust understanding of the priority industry sectors that bring industry-wide benchmarks and insights to business customers can help influence the success of these ventures. Banks have the opportunity to play a strong role in using their scale and access to customer information to develop these valuable solutions in a cost-effective manner that others cannot.

Finally, solutions must go beyond lending. Banks are on a journey to move out of their product silos and deliver multiproduct solutions to meet customers' needs at "critical customer episodes" (for example, for a technology company that needs to start building a supply chain into Thailand). Doing so will raise the game in commercial banking and ensure a win-win outcome for both customer and bank.

3. Facilitate Asian integration through superior insight into the risks and rewards

What if Australia finds itself on the front foot in navigating the Asia opportunity because its banks have invested in building and then leveraging a distinctive understanding of the risk and rewards of doing business in each Asian market?

Risks are inherent in all flow to and from Asia, be it capital, trade, or people. Given the very nature of their business, banks are in a superior position to help businesses understand and navigate these risks. Doing so would require banks to see themselves as more than a provider of funds or facilitator of transactions. They would have to see themselves as advisors on Asia.

Asia holds significant opportunities for the Australian economy. However, Australian businesses have yet to fully embrace these opportunities. Banks should help Australian companies capture those opportunities by facilitating integration around trade, capital, and people, primarily by being the go-to entity to understand and manage bilateral risks.

Asia already represents significant economic value for Australia. Bilateral trade with key Asian economies—China, India, Indonesia, Japan, and South Korea—grew at an annual rate of 18 percent from USD 46 billion to USD 250 billion over the past decade.⁵⁰ In the decade ending in 2011, capital investments from Asian countries into Australia grew 50 percent, reaching \$20 billion, while investments from Australia into Asia grew 200 percent and reached \$3 billion.⁵¹ On the people side, migration from Asia to Australia is growing 12 percent per year, and 40 percent of all Australian emigrants choose Asia as their destination.⁵² However, Australia is still in the early stages of capitalising on the opportunities that Asia brings.

First, there is an opportunity to attract more capital from Asia and increase investments in Asia. Until now, capital investments into Australia have been dominated by the United States (27 percent of total investments) and the United Kingdom (23 percent of capital investments), while the whole of Asia only accounts for 10 percent. The other way around, only 6 percent of Australia's foreign investments find their way to Asia.⁵³ Australian superannuation funds have a minimal exposure to Asia. Only a few funds invest in Asia while the region provides more than 50 percent of the global economic growth. The ones that do invest in Asia have a fairly limited exposure with only 2 to 6 percent of their assets invested in Asia.

Second, there is an opportunity to increase exports to Asia, especially services. Asia is already Australia's biggest export destination for goods and services, with 63 percent of exports going to Asia. However, export to Asia is skewed heavily towards resources; of Australia's top 50 exporters to Asia, 40 percent are resources companies. Goods make up 92 percent of the exports to Asia, while services represent only 8 percent.⁵⁴

⁵⁰ UN Comtrade, A.T. Kearney analysis

⁵¹ Economic Outlook: Statistics and Projections – FDI flows by partner country, OECD iLibrary, November 2013

⁵² Australia in the Asian Century White Paper, Australian Government, October 2012

⁵³ Trade at a Glance 2013, Australian Government Department of Foreign Affairs and Trade

⁵⁴ Trade at a Glance 2013, Australian Government Department of Foreign Affairs and Trade

Third, there is an opportunity to better serve Australia's domestic market by more efficiently catering to the increasing migration from Asia and to strengthen the country's ties and understanding of Asia by better serving Australians who migrate to Asia.

To best capitalise on these Asian opportunities, banks must facilitate integration at all three levels:

- **Facilitate capital and trade out of Australia.** One main factor inhibiting the flow of capital and trade is a lack of understanding about the inherent risks of doing business in Asia. By developing a better understanding, either directly or through selective partnerships, and potentially underwriting risks with Asia, banks can lubricate exports of capital, goods, and services. Investment banks in particular can bring investment opportunities to Australia by connecting institutional investors, especially superfunds, to the right partners and by providing them with the appropriate intelligence. Corporate banks can scale up back-to-back arrangements in key trade corridors with a special focus on the next set of opportunities, such as Indonesia and Indochina.
- **Facilitate capital and trade into Australia.** There is already a significant flow of capital driven by the stability of the Australian dollar, but more is possible. For example, as discussed in the previous section, securitisation could be explored to give Asian investors access to small-ticket borrowers such as SMEs and growth sectors. Conversely, Australian investors may want to enjoy the returns of Asia, and an originate-to-sell model aimed at mobilising international borrowers finding funding across a breadth of Australia companies might be an exciting opportunity to continue to explore.
- **Facilitate the flow of people.** Banks are focusing on migrant communities. The biggest hurdle left to cross is creatively providing continuity of credit history, allowing people to access local financing despite regulatory and other obstacles. Similarly, Australians going abroad need domestic banks to establish partnerships with foreign banks, enabling them to set up services upon arrival and giving them access to their credit histories. However, while having an Australian network of international branches may be convenient, it is not the only way to serve home customers abroad.

4. Pioneer the charge into the digital economy

Technology presents three opportunities for Australia's economy: improving productivity, enhancing customer value, and creating new business opportunities. What if our banks became the poster child for Australian businesses at home and globally, modelling what the country can achieve with digital innovation? What if the creative energy arising out of Australia's banks were to systematically seed and nurture communities of technological innovation centred around them, like supply chains and service networks arose around the country's mining players in the past 10 years?

One of the effects of an ageing population is pressure on productivity growth. As mentioned earlier, to sustain a 3 percent GDP growth rate towards 2030, the productivity growth rate needs to increase at least 0.3 percentage points (from 1.5 to 1.8 percent) to offset the impact of a shrinking labour force as the population matures.⁵⁵ One way to counteract this and increase the productivity growth rate is to use labour-saving technologies and increase digitization by, for example, adopting connected digital technologies and applications.

Technology has already boosted customer value through greater convenience and transparency provided by online channels. Customers can buy products and get support online 24/7

⁵⁵Intergenerational Report, Australian Treasury, January 2010

from the convenience of their home. Online product offerings and comparison sites have increased transparency in the market, creating stiffer competition, which translates into better value for the customer. Already, 62 percent of Australian shoppers—online and offline—compare prices online before making a purchase. There is, however, room for improvement. Only 51 percent of Australians shop for goods or services online, while 60 percent of UK consumers shop online. And while Australia's online sales growth is 3.8 times stronger than traditional retail sales growth, online channels account for only 6 percent of sales, compared with 10 percent in the United States and the United Kingdom.⁵⁶

Technology has already delivered—and will continue to bring—new business opportunities. Digital channels give companies easy access to the global marketplace, and the fast-growing tech sector will provide opportunities for new business and talent. Banks should lead the way and foster the necessary new technology infrastructure for other sectors to build on.

In all three areas—productivity, customer value, and new business opportunities—banks are in a strong position to become more innovative. Innovation can emerge around new ways to provide existing services. For example, a company called Simple, which is not a bank but uses the infrastructure of an existing bank, transforms the traditional current account into a financial planning tool. By looking at past transactions, Simple forecasts future payments and expense patterns, providing customers with an “available to spend” number instead of a traditional current account balance. This is coupled with highly sophisticated customer interaction facilities.

Innovation can also emerge around the use of new technologies to optimise the customer experience. Examples include digital credit card startup Coin, which allows customers to hold multiple credit cards in one digital card, and Apple's iBeacon, which lets banks communicate with customers' phones when they pass by or are in a branch. This has the potential to become the basis of a mobile payment system.

There is much hype around big data (massive, real-time amounts of information created on a minute-by-minute basis). Rather than consider this as a technology question, banks—indeed, all companies—must first approach analytics as a tool to create business value. Technology exists that will allow banks to create mass customisation and predictive offers. Triggers can help anticipate customer needs and proactively solve problems before they arise. In time, meeting customer needs will not be enough. Banks will need to anticipate and over-deliver.

Analytics has relevance and value across the entire banking value chain beyond sales, products, and risk. Operations costs can be reduced through better cash-demand prediction capabilities. Call-centre service levels can improve through better demand forecasting. More creatively, analytics can be used to select and hire talent and better manage performance.

Perhaps the most powerful use of analytics is to create a central intelligence advisory capability that allows the front line, no matter how junior, to speak with the authority of the bank and provide robust, consistent advice to all clients. This has immense benefits for customer protection and capability building. Banks around the world that have begun experimenting with these approaches are finding that staff retention rates improve, as does customer satisfaction and business.

Beyond the individual bank, opportunities may exist for more creative and systemic reduction of cost structures. Examples exist in other markets, and it merits further consideration by Australian banks. For example, HSBC Bank and Morgan Stanley are exploring the use of a

⁵⁶eCommerce disruption: a global theme, Morgan Stanley, 2013

centralized service for on-boarding new clients and other know-your-customer requirements.⁵⁷ Barclays, HSBC Bank, and Lloyds Bank established a joint venture with Unisys for cheque processing, image archiving and retrieval, lock-box services and reconciliation, and other related back-office functions.⁵⁸

In creating new business value, banks' focus on driving digital innovation is likely to have a positive effect on the broader economy. Networks of startups may emerge around an ecosystem anchored by individual banks. This would lead to growth in the vital technology sector, leading to job creation and accelerated innovation. Intellectual property rights can be exported globally, creating value for the Australian economy.

A Collective Way Forward

Moving towards an industry vision where banking plays a crucial role in tilting the economy towards an optimistic outcome is not likely to be achieved through the efforts of any one institution alone. If the industry and its key stakeholders accept such a vision to inspire the journey ahead, individual banks will need to preemptively consider which dimensions of the vision to focus on and excel in, choosing different aspects to together deliver the holistic vision.

This is easier said than done. Being a first mover is challenging because it involves venturing into unknown, unproven territories. However, being a follower is also challenging because it involves playing catch-up with those that had the courage to invest in capabilities ahead of the curve. Each bank will have to evaluate these opportunities and choose where it is confident to sow new strategic options.

Whatever the choices, they will surely be economically rational. Therefore, the alignment and support of regulators, policy makers, analysts, and the public are essential to creating an environment in which economically rational choices align with the country's long-term interest and, in doing so, make this bold vision of Australian banking as a key enabler of our economy a reality.

This vision opens up a range of opportunities for individual banks. While many have been presented in this paper, five opportunities are central to the vision and hold vast potential to create substantial value. Each bank will need to explore the relevance of these opportunities to their strategic direction, existing capabilities, target risk profile, and investment appetite.

1. Facilitate the creation of new funding markets

As Australia grows and diversifies, the demand for funding from a range of sectors will only increase. At the same time, the spectrum of investors looking for a broader range of risks and returns will also widen. Beyond banks' traditional role as fund recipients and fund providers, they are uniquely placed to facilitate the creation of crucial funding markets. For example, a retail-focused bank might choose to concentrate on building frameworks and infrastructure to encourage peer-to-peer lending in a way that allows it to be regulated and successful. A corporate-focused bank may choose to champion the originate-to-sell route to fund mobilisation or partner with the government and other anchor corporates to encourage the growth of the bond market. An Asia-focused bank might opt to explore the securitisation of SME debt across Asian markets.

⁵⁷Wallstreetandtech.com

⁵⁸Business Wire

In the near term, these efforts are not likely to rival the profitability of a bank's core business, but a player with vision can sow the seeds for its future growth engines by exploring these opportunities at an early stage.

2. Innovate to support our SMEs

Australia will (and must) have a diversity of growth engines. But a vibrant SME sector is perhaps more important than any one large corporate sector because it is through these SMEs that innovations will develop and flourish. Diversity brings resilience and builds an economy that does not rise and fall with the success of any one sector.

However, SMEs are volatile. This is a fact across markets. Banks that deal with SMEs beyond securitized lending need to underwrite risk portfolios that are different from the ones on the bank books today (but perhaps similar to those from a decade ago). Terms and conditions of lending, cost to serve, cost of operations, and cost of talent all need to be fundamentally scaled to this market—and not just a simplified version of corporate lending or a more sophisticated version of retail banking, as we have seen in other markets.

Whether holding on to or looking to substantially gain market share, systematically exploring bolder moves into this space is likely to be the key to determining the winners and losers in Australian banking over the next decade.

More than any other industry in Australia, **banks are well-positioned to develop robust insights into Asian risks.**

3. Help Australian business navigate Asian risks

Integration with Asia is an unstoppable reality. Benefiting from Asia is in many ways a holy grail for Australian banks.

Winning in Asia will require banks to go beyond simply planting flags in various markets. At its core, the challenge of Asia for Australian businesses is a lack of understanding about the risks and rewards associated with Asian opportunities. More than any other industry in Australia, banks are well-positioned to develop robust insights into Asian risks and help Australian businesses benefit from these insights. Providing funding stands second to providing knowledge in this opportunity.

A bank seeking to explore this option needs to understand the risks that are holding Australian businesses back and invest in developing the necessary insights, tools, capabilities, and partnerships to help its clients navigate these risks. Trade flow is the obvious part of the equation. However, capital flow is likely to become more important and people flow to become more common. Banks need to think through their triple-corridor strategies and invest smartly to maximise returns without overinvesting capital.

4. Nurture a network of innovation start-ups

Banks represent some of the largest pools of technology investments in the Australian economy—creating a pole position to influence the extent to which technology innovations shape the economic landscape.

One interesting opportunity to explore is to become a hub for technology innovation by acting as the epicentre for tech talent—much like a Silicon Valley. While there are good reasons for banks to rely on internal IT divisions, there is considerable potential to create value—for themselves and for the economy at large—by nurturing a confederation of startups and technology innovators. There is some limited evidence of this model in other parts of the world. However, we believe this is an idea whose time is about to come as new technologies and development methodologies reach maturity. A bank that takes the first steps in this direction could be well-positioned to tackle the next decade of unpredictable evolution.

5. Champion system-wide initiatives to reduce the structural cost of the banking system

Banks in Australia have thought hard and invested heavily in productivity improvement. At first, the focus was on cost containment, then cost reduction, then cost transformation. Are the opportunities to increase economic surplus through cost reduction fully exhausted? We think not.

As discussed in the previous section, there are encouraging experiments in other parts of the world, with banks coming together to create industry utilities to structurally reduce costs further. In those markets, banks are being pushed to do so because of rapidly deteriorating economics. In Australia, banks don't yet need to pull these levers but would be wise to do so to create a war chest of economic surplus that can increase their appetite to invest in longer-term strategic options.

We have seen early examples of shared cash management infrastructure across banks and can look to the super industry for examples of industry-wide utilities. It may be implausible to expect the entire industry to come together; government or regulatory mandates in this regard are fraught with challenges and have a limited likelihood to succeed. However, two banks may choose to partner on specific opportunities, such as call centres, loan processing operations, or staff training. These opportunities take time to be realised. Conversations need to start today if there is to be any hope of success.

Pursuing the vision requires coordination

Undoubtedly, banks play a crucial role in realising the stated vision. However, they cannot do it alone. Regulators, policy makers, the analyst community, and the industry collective all need to play their part to tilt the Australian economy towards an optimistic future.

Regulators

Regulation is a complicated and challenging balancing act. It is difficult to be prescriptive, given the various considerations involved in almost every decision. However, a few key aspects are worth further considering to create the necessary environment for the vision to materialise.

If the vision of banking as outlined in this paper is agreeable in part or as a whole to the regulator, each aspect of the articulated vision will require regulatory support in eliminating barriers, more so than creating incentives or directing the market.

Unlocking capital will require collaboration on the creation of new products illustrated in the previous section and alignment on the nature, function, and role of banks in the funding markets that we believe need to evolve in Australia, including peer-to-peer lending.

Investing in SMEs and new growth engines will require asking if the industry's risk-reward spectrum needs to expand, if new forms of licenses are required, and if new regulatory frameworks might be considered to encourage smaller players looking to fulfil niche needs or cater to specific segments to flourish while remaining well-regulated. Particular to SME lending is perhaps the need to explore harmonisation of household and business debt products where they are effectively used by end consumers. Either these products are seen as truly interchangeable and hence terms and conditions, criteria, pricing, and regulatory requirements are harmonized, or they are seen as fundamentally different. The industry may need to move away from the current grey zone.

Helping navigate integration with Asia can only benefit from policy harmonisation (where possible and in the best interests of our economy) and collaboration with regulators across Asian markets. The dialogue on the funds passport in the asset management world is a good parallel of what is possible as well as how painstaking the journey is to reach pan-jurisdictional alignment.

With regard to digital innovation, regulations around security and interaction in a digital age are already recognised as crucial. Taking the lead among other markets in framing these regulations will be essential to determine the extent to which Australia's banks thrive or stall in leading the digital charge.

Finally, when considering offering a broader range of solutions to a larger share of the market, it will be necessary to ensure that regulations build a level playing field. This is a challenging, widely debated task. Regulating on the basis of economic function provided (rather than by the entity that is delivering the function) is an idea that merits consideration. For example, mobile banking could be regulated as one function regardless of whether the service is provided by a telecom player or an authorised deposit-taking institution. Failure to ensure this inclusive but standardised regulatory playing field may inadvertently push more parts of the banking sector outside the regulatory boundaries, creating a dual market—one highly conservative and lacking innovation and one innovative but lacking stability. Avoiding this outcome is crucial if the banking industry is to fulfil its vision as an enabler of the Australian economy.

Policy makers

Banks and regulators operate within their economic spheres and, in doing so, influence the rest of the economy. However, policy makers, have a far more direct and profound influence on the broader economy, and hence, their commitment to this vision will be essential if it is to be realised sooner, or indeed at all.

Policymakers recognise the need to take actions to support the development of areas in the economy that will drive future economic diversity and growth. There are several ways in which their efforts can be symbiotic to those of banks trying to realise a new vision for the industry.

- **Develop the bond market.** Policy makers will be instrumental, just as they have been in every other market, to developing the bond market. In other markets, this was achieved by the government announcing a long-term programme of government bond releases to support the development of a yield curve and a deepening of the market.

- **Explore new funding pathways for SMEs.** To support SME growth, governments around the world have explored mechanisms such as grants and guarantees for business funding. Alternatively, new funding pathways, such as equity funding, might find higher support in Australia. Funding for non-traditional business, such as foreign expansion, is difficult for SMEs to obtain. Recent research from Australia's Export Finance and Insurance Corporation (EFIC) identified obtaining finance as a major obstacle for establishing a footprint overseas: "Australian SMEs are primed and keen to invest overseas but are often restrained by difficulty in accessing finance and professional advice and support, new research from Australia's export credit agency, EFIC, has found. However, despite a strong appetite and the best of intentions, obtaining finance was identified as a major obstacle for SMEs establishing a footprint overseas. 58 per cent of Australian SMEs that have already established overseas facilities reported difficulties in accessing finance for these investments."⁵⁹

Beyond these examples, the extent to which policy makers can influence and encourage banks to invest in new opportunities ahead of the curve—such as offering incentives to fund the environment sectors, seeding innovation hubs, establishing Asia partnerships, and encouraging the proliferation of PPP in infrastructure finance—is worthy of a deeper look. We are not proposing major government intervention, but a close scrutiny of roadblocks and a concerted policy to eliminate these roadblocks will go a long way to help the banking industry, and hence our economy, achieve its full potential.

Undoubtedly, banks play a crucial role in realising the stated vision. But regulators, policy makers, the analyst community, and the industry collective all need to play their part to **tilt the Australian economy towards an optimistic future.**

Analysts

The analyst community has the power to shape industries, standing at arm's length and offering measured opinions about the potential success of strategies and the relative success of companies. Given this level of influence, the extent to which this community appreciates and endorses the efforts of individual banks to develop new strategic options will have a sizable impact on how aggressively the banks, and therefore the industry as a whole, can pursue these opportunities.

We believe analyst foresightedness is anticipating these shifts and evaluating the impact of these shifts in a fact-based, objective manner—potentially articulating both the short-term implications as well as long-term value creation potential and confidence levels. This will be vital for the industry to move ahead with confidence.

⁵⁹Export Finance and Insurance Cooperation media release, 18 November 2013

The industry collective

Navigating the road to the new vision will require constant communication across all stakeholders as well as alignment on the strategic questions that will arise over the course of the industry's journey. This crucial role is likely to fall on the shoulders of the industry collective. An effective dialogue will require the collective to identify the industry's goalposts and report back to the various stakeholders, and potentially the public, about progress towards—or away from—these goalposts.

Communication is key. Beyond building support for industry efforts, it will also position the industry in the minds of the next generation so that banking, a core sector of the economy, continues to attract the best and brightest talent.

Shaping the Banking Industry's Destiny

In conclusion, in shaping the destiny of Australia's banking industry, it is not surprising that the main protagonists are the banks themselves. On them lies the primary responsibility to anticipate and reach for the future before it becomes the present, when it may be too late to exert any influence on the course of the economy.

However, there is a limit to what an individual bank can do. The full cast of stakeholders—regulators, policy makers, the analyst community, and the industry collective—need to be aligned to create a positive, supportive environment in which the industry can flourish and innovate, individual players can compete, and the economy can find a new vitality that will sustain it for years to come.

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The signature of our namesake and founder, Andrew Thomas Kearney, on the cover of this document represents our pledge to live the values he instilled in our firm and uphold his commitment to ensuring “essential rightness” in all that we do.

Appendix C

Sustainably funding Australia's prosperity

PricewaterhouseCoopers

February 2014

This report has been commissioned by the Australian Bankers' Association to inform the industry's consideration of issues. The report reflects the views of its authors only. The report and points made within the report do not necessarily reflect the views of the ABA or any individual bank.

Sustainably funding Australia's prosperity

*Australian Bankers'
Association*

February 2014

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1 Overview

1.1 Introduction

This research paper has been prepared for the Australian Bankers Associations (ABA) to support its submission to the Financial System Inquiry in 2014. The research objective was to produce a concise and accessible report addressing the implications of different levels of credit demand on the banking sector and to consider potential sources of funding.

Supporting this objective is the use of a purpose built dynamic econometric model to generate scenarios for low and high demand for credit. The outputs from the model are three scenarios for credit demand based on different levels of economic activity, including the changes in aggregate deposits generated by each level of economic activity. The paper considers the impacts of these scenarios on the banking system and potential funding challenges which may arise under each scenario.

Market consultation was undertaken with all the major banks and a number of regional banks as part of this project.

1.2 Executive summary

Australia must ensure that any increase in domestic demand for credit can be sustainably funded, as a key plank of securing future economic prosperity. A package of reforms including taxing investments and savings more equitably, encouraging a deep and liquid domestic bond market and the prudent exercise of regulator discretion in the context of Basel III would assist banks in meeting an increase in demand for credit in a sustainable manner.

As economic growth starts to accelerate from its current below-trend growth rate, the demand for credit is expected to increase. There is, however, real potential for serious impediments to arise in funding this growth and now is the time to consider prudent policy changes to ensure this does not happen.

As a small open economy with a large resource base, Australia has consistently generated investment opportunities in excess of domestic savings, resulting in a current account deficit funded from offshore equity and debt. For much of the post-war era, most of this borrowing was by government and government-owned enterprises. Following the liberalisation of Australian banking in the mid-1980s and the sustained reduction in government borrowings, the banks took on the role previously undertaken by government, that of borrowing funds in offshore markets to meet the demand for credit at home. In the years leading up to the Global Financial Crisis (GFC), strong demand for credit and falling savings rates saw the banks increasing their reliance on wholesale debt, including an increase in the proportion of short duration debt.

The GFC brought home the extent of vulnerability arising from placing too heavy a reliance on short duration wholesale debt to fund longer term assets. The Australian banking system, whilst resilient through the GFC, has taken heed of the lessons from the GFC and undergone an orderly process of adjustment to funding and risk policies, including preparation for Basel III regulatory reforms, resulting in banks now relying more on bank deposits and diversified portfolios of longer term wholesale debt for funding.

This adjustment process has been accompanied and assisted by a more cautious approach by Australian business and households, which has seen household savings rates rise and the demand for credit fall. This has meant banks have been able to fund increases in lending almost exclusively from increases in deposits in recent years.

A policy objective for the Government is to return the economy to trend economic growth. Based on the scenarios generated by the economic modelling, the “8% scenario” for credit growth best reflects this objective. This scenario estimates that if the economy returned to trend growth, credit growth would roughly double from its current levels of between 3 per cent and 4 per cent per annum to at least 8 per cent per annum. In the current circumstances, the banks are best placed to meet any increase in demand for credit but such a significant increase in demand for credit could test the current funding model for banks, in part because deposit growth is unlikely to also double. In this situation it is uncertain whether wholesale debt funding will be a viable option to cover the short-fall, as the required amounts would surpass those seen in 2008.

It should be stressed that for an individual bank, and hence for banks in aggregate, assets (mostly made up of loans) will always equal liabilities (predominately deposits, wholesale debt and capital), meaning that the banking system always balances in an accounting sense. The key question is whether the balance is at an optimal level from an economic perspective—can it meet the demand for credit consistent with achieving trend economic growth? Everything possible should be done to answer this in the positive.

By their nature, these are complex issues with many uncertainties and Australia’s recent performance gives confidence in sensible adjustment. However, given the critical importance of returning Australia to trend economic growth, it would be foolhardy to underestimate the risks ahead.

The report presents for careful consideration, a package of balanced reforms to enhance funding of the Australian economy. These include the more equitable taxation of investments and savings such as deposits, steps to encourage deeper domestic bond markets, and the exercise of regulator discretion.

1.3 Report structure

The report is structured as follows:

- **Chapter 2** provides a brief overview of the role that banks play in supporting economic growth by intermediating financial flows, between users of funds (*borrowers*) and providers of funds (*depositors* and *investors*)
- **Chapter 3** demonstrates that a structural change has occurred in the relationship between credit and deposit growth over the last 20 years resulting in an increased reliance on wholesale debt funding. It also identifies an emerging source of new bank deposits in the form of superannuation fund deposits as well as showing that the banks’ role in the intermediation of these financial flows in the economy has grown significantly over this period.
- **Chapter 4** presents the results of the economic modelling which indicates that returning the economy to trend growth will generate credit growth of 8 per cent per annum. Currently credit is growing at 3 per cent to 4 per cent per annum. The modelling also shows that bank deposit growth is not expected to keep pace with the required demand for credit, creating a potentially significant challenge for funding the acceleration in credit growth.
- **Chapter 5** recommends a package of policy reforms to increase the funding options available to banks and other borrowers of funds and so provide maximum opportunity for Australia to fund its future prosperity on a sustainable basis.

Technical appendices accompany these chapters.

2 The banks' role in funding credit

Australian banks play a central and unique role in the economy, providing \$2 trillion of credit to the economy¹ and facilitating the flow of funds between Australia and the rest of the world. The bank originated credit (lending) is used by households and businesses to invest in fixed assets such as homes, factories and information technology, as well as working capital for business and personal finance for individuals. These investments generate returns, which in turn generate increased wealth and living standards.

2.1 The role of banks in funding credit

This report focuses on the banks' role as financial intermediaries. In receiving deposits and generating loans, banks transform deposits into longer term loans ('maturity transformation'). In performing this process, they assess and pool borrowers with differing credit risks to create a lower aggregate credit risk ('credit transformation'). This simple description of the intermediation process hides the considerable complexity of undertaking these core functions in the real world, with its many attendant risks and uncertainties. Like all businesses, banks hold capital as a buffer against these risks and as a signal of strength to those they deal with ('counterparties').

In order to ensure the safety of both depositor funds and the financial system as a whole, banks are subject to exhaustive regulation and supervision. Improved understanding in banking markets, and improved regulatory frameworks, have contributed to a secular fall over the past century in the amount of capital banks hold as a proportion of their assets. In simple terms, if a bank has a ratio of capital to assets of 10 per cent it means that 10 cents in every dollar of lending is funded with capital (shareholder funds). The remaining 90 cents will be funded by borrowed funds.

2.2 The complementary nature of deposits and loans

Bank deposits have historically provided the overwhelming proportion of the borrowed funds banks use for making loans.

Deposits provide an important source of stable funds for banks. Funds held in individual deposit accounts might vary significantly over time, but in aggregate the total pool of deposits tends to be very stable.² This reflects, in part at least, the two-sided nature of all economic transactions – one person's expenditure is another person's income, or in banking terms, one person's loan is another person's deposit.

The stability of deposit portfolios is a natural source of risk mitigation in the highly-g geared business of bank lending. However, in undertaking their maturity transformation activities, banks also focus on 'matched maturity' to manage their risks. That is, they seek to match the timing of cash outflows (e.g. a maturing term deposit) with cash inflows (e.g. loan

¹ By contrast, the corporate bond market only accounts for \$200 million of credit funds for non-financial corporations.

² The exception is when public confidence in a particular bank or the system overall is tested – hence the need for comprehensive bank supervision and regulatory frameworks.

repayments). In a world of long-dated loans, a longer-dated deposit (e.g. a two year term deposit) is generally more attractive than an at-call deposit.

However, in determining “maturity”, the behavioural characteristics of depositors play an important role. Many depositors favour “at call” or short-term “term” deposits but then leave them in this arrangement for long periods of time. This behaviour creates pools of relatively stable funds, notwithstanding the short-term contractual maturity. This is particularly true of retail depositors and so many retail deposits are treated as stable, longer term funding.

In short, the ‘tenor’ (i.e. maturity) of a loan or deposit is an important factor in determining the relative attractiveness of an individual transaction from a bank’s perspective. There is an old banking adage that *‘a dollar is not a dollar’*. The fact that maturity transformation goes to the heart of banking means that the maturity characteristics of each and every deposit and loan is fundamentally important and a banks’ demand for funding of differing maturities will vary depending upon the maturity profile of its lending and its chosen risk appetite for maturity mismatch risk.

2.3 Wholesale funding and liquidity

As noted above, Australia is a small open economy with a large resource base, and has consistently generated investment opportunities in excess of domestic savings, resulting in a current account deficit. This current account deficit needs to be financed by selling equity or borrowing debt from the rest of the world to generate a capital account surplus. The consequent increase in investment activity has had a material positive impact on economic growth and living standards relative to relying exclusively on domestic savings.

For the first part of the post-war era, the foreign borrowing component tended to be undertaken overwhelmingly by government or government business enterprises. Following financial deregulation in the mid-1980s, the foreign borrowing component tended to be undertaken by the banks and this provides important context for the third major component of bank funding, wholesale funding.

So, the third source of bank funding is the wholesale or ‘institutional’ debt markets. This form of funding has always had an important role to play in bank funding because it represents a way for banks to diversify their funding risks. Wholesale funds borrowed for say three or five years will see you through most periods of market turbulence, providing a useful counterbalance to at-call customer deposits. This is simply another example of bankers’ adage that a *‘dollar is not a dollar’*.

Typical providers of wholesale funds are large corporations, other banks and pension funds with banks paying a higher price for longer dated funds. Banks access these wholesale funds from both domestic and global wholesale debt markets.

As noted above, banks hold capital as a buffer against risks. Banks also hold liquid assets as a risk buffer. These are assets that banks have a high degree of confidence they can convert to cash under all circumstances, including periods of market stress. Typically these liquid assets pay low rates of interest and hence are quite expensive for banks to hold. However, from a bank’s perspective this is simply a necessary cost of doing business.³

³ The introduction of the Basel III Liquidity rules will make these costs more explicit. See for example Debelle, *Remarks on Liquidity*, Address to the Australasian Finance and Banking Conference, 17 Dec 2013.

3 Australia's divergent credit and deposit growth

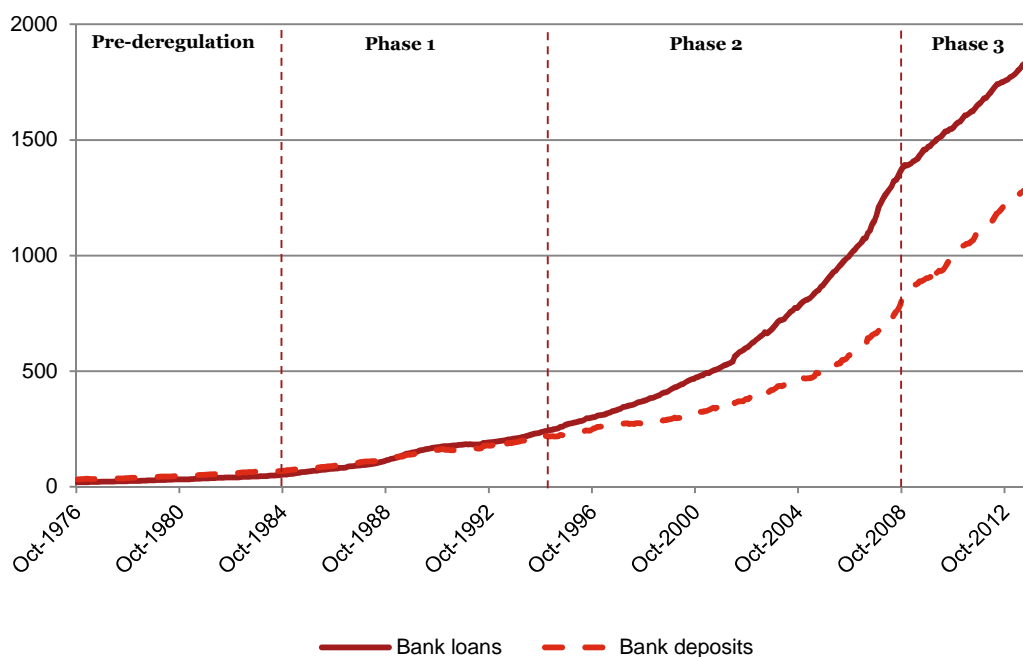
This chapter discusses banking operations in the context of the history of the banking system since liberalisation commenced in 1983/84. The purpose is to set the scene for explaining, in Chapter 4, why the banking system is potentially entering uncharted territory on bank funding which could ultimately restrict the Government's ability to achieve trend growth in the economy overall. Chapter 5 sets out policy recommendations to mitigate these risks.

3.1 Bank loans have outstripped deposits

There have been three distinct phase of growths since the liberalisation of the banking system:

- **Phase 1 (1984- 1995)** where deposits were sufficient to fund all loans in aggregate;
- **Phase 2 (1995- 2008)** where loans grew much more quickly than deposits, requiring increasing reliance on wholesale funding , predominantly from offshore markets; and
- **Phase 3 (2008 onwards)** where loans and deposits are growing in tandem again.

Figure 1: Bank loans and deposits (A\$bn)



Sources: RBA, PwC analysis, 2013.

Phase 1 and **Phase 3** conform more closely with the traditional banking practice of relying predominantly on bank deposits to fund new lending growth.

3.1.1 Growth in bank lending during the long boom

Australia is not alone in having an extended period where loans generally grew more quickly than deposits. With the benefit of hindsight, the decade leading up to the GFC in 2008 is now widely regarded as a time when the value of traditional banking and risk management practices⁴ were underestimated and the benefits of some banking innovations⁵ were overestimated around the world. These trends, along with favourable macroeconomic conditions, including lower global inflation and interest rates, helped to set a confident tone in global banking markets.

The confident tone generated a virtuous cycle globally of rising asset prices, increased confidence to borrow, and declining risk spreads on virtually all borrowings. It was not until fault-lines appeared in Northern Hemisphere housing and banking markets in 2007/08, that it became clear that important underlying risks had been underestimated.

Through a combination of good banking and regulatory practices, as well as some good fortune, Australia avoided the worst of these excesses and the consequent financial market disruptions during the GFC.

Nonetheless, the impact of the period to 2008 is very relevant for the Australian banking system today:

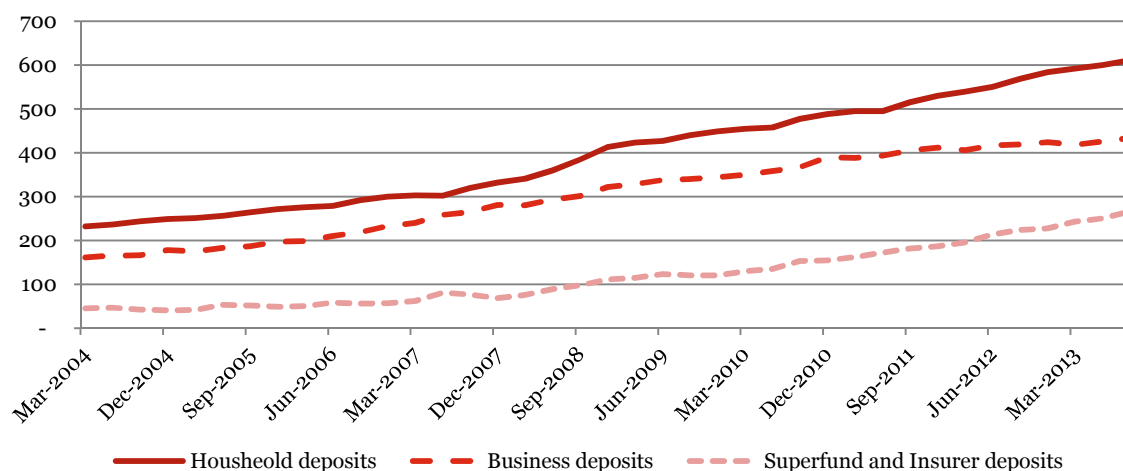
- Housing credit grew at an average rate of 15 per cent per annum in the period 1995 to 2008, driven by rising household income, a secular fall in interest rates and strong house prices. The result was both an increase in household wealth and a significant increase in household borrowings. The ratio of household debt to household income rose from 50 per cent in the early 1990s to over 150 per cent by 2008. This helps explain why housing credit is only growing by 5 per cent per annum at present, notwithstanding very low interest rates.
- Business lending grew at an average of 10 per cent per annum over the period 1995 to 2008, reflecting the confident environment and easy access to credit. The aftermath of the GFC has seen business lending reduce as businesses have had to adjust to the tougher economic conditions. Whilst the period of business deleveraging seems to have come to an end, there has not yet been a sustained pick-up in business demand for credit, despite the very low interest rates.

3.1.2 Superannuation as a new source of bank deposits

Over the last ten years bank deposits have also undergone an important transformation. In the Australian banking system there have traditionally been two primary groups of depositors, households and businesses, but more recently a third critical source of bank deposits has emerged – deposits from the superannuation sector.

⁴ For instance, funding and liquidity.

⁵ For instance, complex securitisation and value-at-risk measures.

Figure 2: Bank deposits (A\$bn)

Sources: RBA, APRA, PwC analysis, 2013.

From about 2005, cash from the superannuation sector has been providing a growing source of deposits for the banks. Starting from close to zero in 2005, these deposits now stand at approximately \$220bn, or nearly 17 per cent of all bank deposits.⁶ In particular, this trend reflects the growth in Self-Managed Superannuation Funds (SMSFs) which has occurred over this period. SMSFs tend to invest in bank deposits rather than more sophisticated debt securities such as fixed interest bonds. It is evident from Figure 2 that this category has been a significant contributor to deposit growth in recent years.⁷

3.1.3 Household and business deposit growth has remained more stable

Household deposits are the largest single pool of deposits, reflecting security and convenience for consumers. This category has had somewhat of a renaissance in these risk-adverse times, especially during the GFC itself, and has continued to grow steadily despite the fall in interest rates.

Businesses largely hold bank deposits as a convenient source of short-term liquidity to compensate for swings in cash-flow and as a result they can mirror the economic cycle. Having grown quite strongly over 2003 – 2008, their growth has been closer to 2.5 per cent per annum over the past two years as economic growth and business free cash-flow has weakened.

In short, the strong growth in superannuation funds held as bank deposits has provided an important source of funding growth for the banks in recent years. To date, this has more than offset the slower growth in business deposits and is proving to be a useful addition to growth in household deposits.

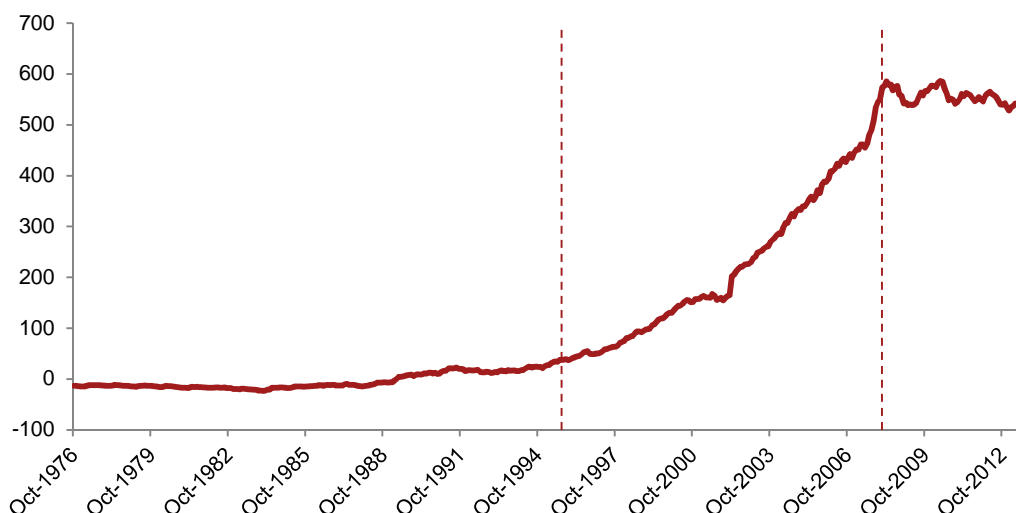
⁶ Note that this \$220bn is for the superannuation component of Superfund and Insurer deposits (Figure 2). Over this period, the Insurer component has remained relatively consistent.

⁷ Superannuation deposits, including SMSF deposits, form part of the deposit category described as “Financial Corporations” in the APRA monthly banking statistics. This category includes deposits from both ‘other depository institutions’ and ‘other non-bank financial institutions’. Up until around 2005 the non-bank financial institution segment of this category consistently mainly of deposits from life offices and similar types of institutions. From 2005 onwards deposits from superannuation entities, including SMSF, have been a growing source of deposits in this category.

3.2 Emergence of the structural change

The difference between bank lending and bank deposits, the non-deposit funding gap (the 'gap')⁸ is funded by the banks with capital (shareholder funds) and from the wholesale debt markets. Figure 3 below expresses the data shown in Figure 1 in terms of the difference between loans and deposits. It demonstrates starkly the point made above that this 'gap' really emerged and grew during 1995 to 2008, and has remained steady in nominal terms since then.

Figure 3: Banks non-deposit funding 'gap' (A\$bn)



Sources: RBA, APRA, PwC analysis, 2013.

From 1995 – 2008, the banks funded this increasing 'gap' between lending and deposits primarily by an increase in wholesale funding. This wholesale funding came from a variety of sources; it was both short-term and long-term, and sourced both domestically and offshore. As noted in Chapter 2, wholesale funding can be beneficial from a risk management perspective, especially if it is long-dated. However, as the GFC evolved, the short-term component of banks' wholesale funding mix attracted increasing investor concern. This flowed into concern, globally and in Australia, about the continued appetite during periods of market turbulence, for offshore investors to be prepared to renew or extend longer-dated debt. Finally, this affected both the willingness of investors to buy these securities and the risk spreads demanded by investors.

In 2008, in response to both the actions of foreign governments and the implications these had for Australian banks, the Australian Government offered a guarantee, for a fee, for wholesale funding raised by the Australian banks.

These events also led to a substantial rethinking by both banks and regulators about funding and liquidity management. Common ground on all sides was that bank funding needed to be reweighted towards more stable and better maturity-matched sources of funding, such as deposits and longer-dated wholesale funding. This has since been codified in the Basel III rules which set out clear requirements around stable funding and liquidity (see Appendix B). However, it is important to stress that the trend back towards deposit funding relative to

⁸ This 'gap' has emerged due to structural changes in the financial system, namely the extended period where loans grew more quickly than deposits prior to the GFC (as explained in section 3.1) and the increasing role of banks in intermediating credit (as explained in section 3.3).

short-term wholesale funding was driven in the first instance by the banks' own assessment of proper risk management policies and practices in light of the GFC.

These factors explain the shift in the relationship between bank loans and bank deposits since 2008 noted above. Having (re-)appreciated the value of more stable funding such as deposits, banks have aggressively sought to grow their deposit books, including by increasing the interest rates paid on deposits relative to wholesale interest rates. These efforts have been assisted by increased risk aversion by business and households. Households in particular have increased the proportion of their income which they save: part of this increase is being held in deposits and another part is being used to repay existing borrowings. At the same time households and businesses have reduced their willingness to take on fresh borrowings, resulting in a slowing of the banks' overall loan growth.

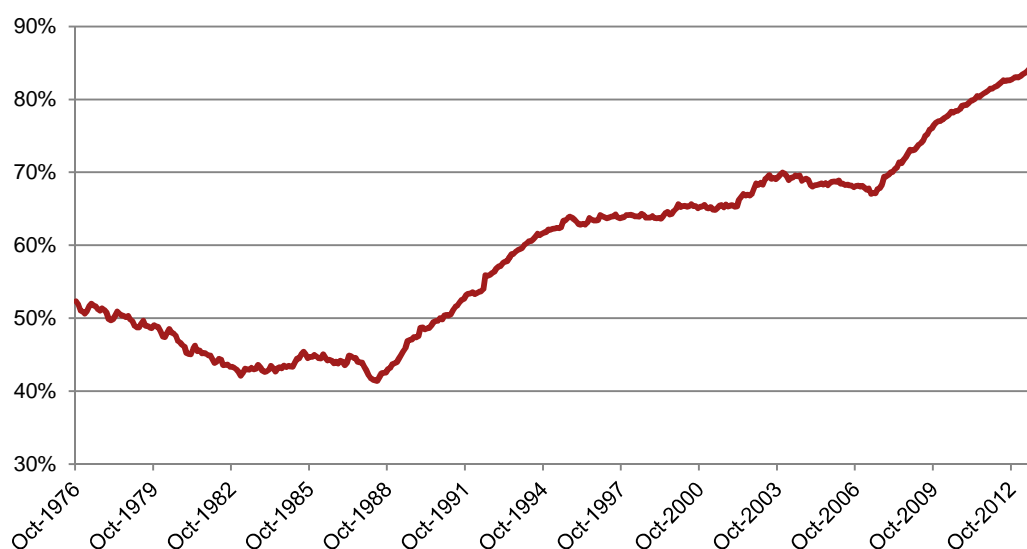
3.3 *Reliance on bank funding has increased*

Finally, bank lending is not the only form of intermediated credit in the economy. Banks are however the largest source of intermediated credit, with their importance continuing to grow. In addition to bank lending, there are three other forms of intermediated credit:

- Loans from non-bank financial intermediaries such as credit unions;
- Bills of exchange endorsed by banks and non-banks; and
- Loans originated by banks or non-banks which have subsequently been securitised.

The proportion of credit supplied through these three other channels has decreased. As demonstrated in Figure 4, bank loans as proportion of total system-wide credit have increased from a low point of 41 per cent of credit in 1988 to 84 per cent today.

Figure 4: Bank loans as a proportion of credit (per cent)



Sources: RBA, PwC analysis, 2013.

The relatively low proportion of bank loans in the 1980s reflected the restrictions on bank lending which had been in place for much of the post-war period, resulting in the growth of non-banks to meet credit demand. The removal of these restrictions from 1983 onwards enabled banks to operate more freely, and over time they provided a greater proportion of total credit.

Figure 4 also demonstrates that conditions since the GFC in 2008 have tended to benefit banks at the expense of non-banks. The non-bank category captures a variety of institutions and accordingly a variety of competitive positions and funding sources. Those funding sources

tend by nature to be less stable, with more of a wholesale market characteristic. Hence, these institutions have found funding their activities much more difficult and expensive in the post-GFC era and accordingly have found their business models under pressure (including for regulatory reasons) and so have not been able to compete as aggressively.

4 *The future size and implications of the 'gap'*

Economic growth in Australia over the last four years has been fuelled by investment in the resource industry, with the funds required to support this investment having been predominately sourced directly by companies from wholesale markets rather than relying on bank credit. A rebalancing of economic growth away from resource investment requires growth to accelerate in other sectors of the economy – sectors which tend to rely much more heavily on domestic banks to fund their investment activities.

The modelling of credit demand and bank deposit scenarios implies that if Australia is to return to trend level economic growth in a post-resource investment environment, credit demand needs to double from its current growth rate of 3 per cent per annum to 4 per cent per annum to at least 8 per cent per annum.

If the current trend of banks meeting virtually all the demand for credit being generated by the economy continues, increasing credit growth could test the current funding model for banks. The risk is that credit growth will outstrip deposit growth, requiring the banks to increase their reliance on overseas wholesale funding to a level that might become unsustainable. An alternate scenario to this reliance on overseas wholesale funding is proposed through a balanced package of reforms, discussed in Chapter 5, which aim to sustainably fund Australia's future credit demand.

4.1 *Economic growth is supported by credit and deposit growth*

Demand for credit growth is driven by both the business and household sectors. For business, credit demand is heavily influenced by investment intentions and working capital needs, which in turn reflect:

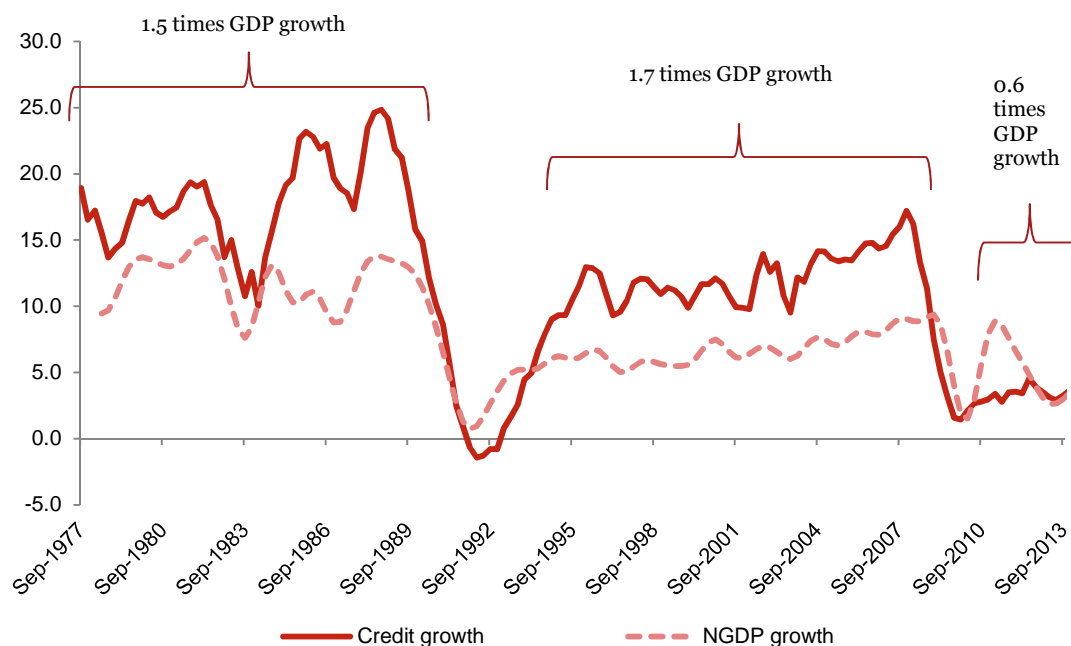
- Overall levels of economic activity;
- Business confidence; and
- Lending interest rates.

Credit demand from the household sector is driven largely by consumer confidence and demand for housing, which in turn reflects unemployment rates, average weekly earnings and lending rates.

As the economy is currently in a period of below trend economic growth⁹ the pertinent question becomes: what level of overall credit growth is required to support a return to trend level economic growth?

⁹ Commonwealth Treasury, *Pre-Election Economic and Fiscal Outlook*, August 2013; Commonwealth Treasury, *Mid-year Economic and Fiscal Outlook*, December 2013. Real trend growth is currently taken to be slightly above 3.0 per cent per annum, compared to current growth in the range of 2.0 - 2.5 per cent per annum.

Figure 5: Relationship between nominal GDP growth and credit growth (per cent change, y-o-y)



Sources: RBA, PwC analysis, 2013.

Figure 5 sets out the relationship between credit growth and nominal GDP growth since the late 1970s:

- Economic growth between 1977 and 2009 was supported by average credit demand of between 1.5 to 1.7 times higher than growth in nominal GDP. While this period of growth was disrupted by the recession in the early 1990s, credit demand rebounded strongly back to these trend levels as interest rates fell on a sustained basis.
- Post-GFC, credit growth has remained weak, both from households and business. For households this reflects a conservative approach to household gearing, following a period of balance sheet consolidation. For business, much of the investment during this period has been driven by favourable terms of trade and resource investment, which is typically funded by equity and non-bank debt. The demand for credit and economic growth of other industries during this period has been significantly below historic trends, despite low lending rates.

Looking forward, there is a recognised need to manage the transition from resource investment driven growth to broader levels of growth across the economy. Government has also targeted a return to trend level economic growth, which will need to be supported by the corresponding increase in credit growth. The key point is that this credit demand will differ from high levels of resource investment in that it will need to be sourced through Australian banks.

However, credit demand can only support economic growth if it can be funded in a sustainable manner and, as discussed in Chapter 2, deposits play a critical (but not exclusive) role in this. The complex interactions between nominal GDP growth, total credit and total deposits touched on above have been captured and tested within a purpose built dynamic macroeconomic model (see Appendix C). The model has been used to test three growth scenarios:

- **Low credit growth:** Credit growth remains around recent levels of 4 per cent per annum, and correspondingly economic growth is consistently below trend GDP growth.
- **Medium credit growth:** Credit growth is 8 per cent per annum, roughly double existing levels. The modelling suggests this will be required to achieve trend GDP growth in the phase of the cycle where business investment in non-resource (and

hence more credit intensive) sectors will be required. Household demand for credit is likely to remain subdued, given high household debt leverage.

- **High credit growth:** Credit growth is 12 per cent per annum, which is the level achieved consistently prior to the GFC when households were increasing debt leverage in response to a secular fall in interest rates. This is considered to be the least likely scenario.

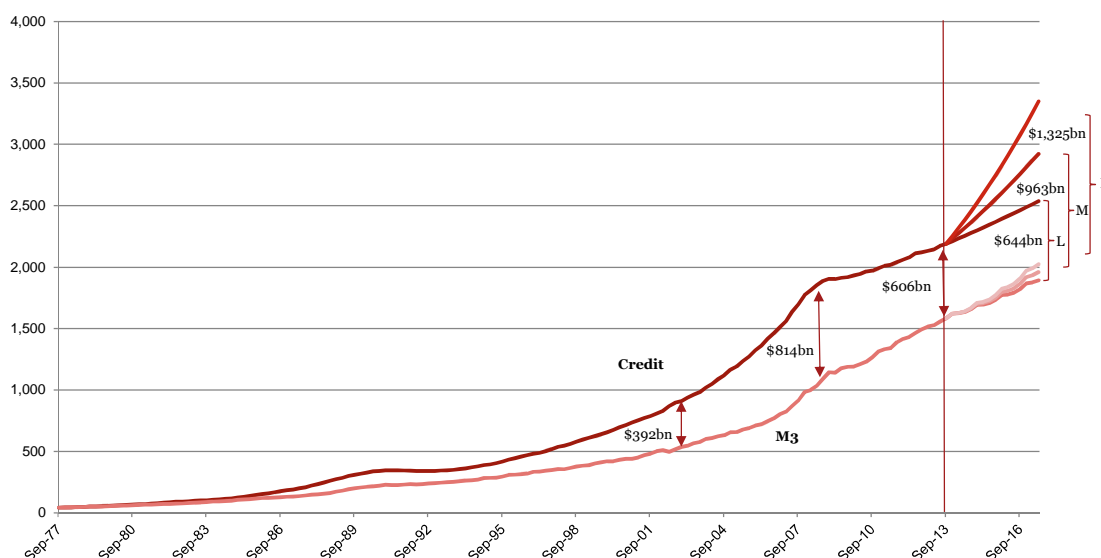
In all scenarios, key variables have been calibrated and then adjusted from Commonwealth Treasury baseline forecasts. The scenarios test the impact of different macroeconomic conditions on credit demand and deposit growth and the subsequent magnitude of the 'gap' between credit demand and deposits. The scenarios are run across a four year forecast horizon (consistent with the Treasury horizon). However, the point of the scenario analysis is to test the potential magnitude of the 'gap' under various credit growth and economic growth conditions, not to arrive at a predicated requirement at the end of this horizon (2017).

The scenarios consider system-wide credit and deposits, given the banks' role in meeting system demand is increasing. Based on current trends, bank lending will provide an increasing share of the system requirements, up from 84 per cent currently. On the supply side, bank deposits (household deposits, business deposits and superannuation fund and insurer deposits) make up an estimated 82 per cent of monetary supply (M3), with this proportion also set to increase given the trend in superannuation fund and insurer deposits driven by SMSFs as discussed in Chapter 3.

4.2 Size of the non-deposit funding 'gap' is set to grow

In the low growth scenario associated with subdued economic activity, demand for credit is expected to move in line with deposits. As such, the magnitude of the 'gap' remains relatively stable in nominal terms, moving from the current estimated level of \$606bn to \$644bn, with banks likely to bridge this 'gap' in a sustainable manner through wholesale markets.

Figure 6: Magnitude of the system 'gap' between credit demand and M3 (A\$bn)

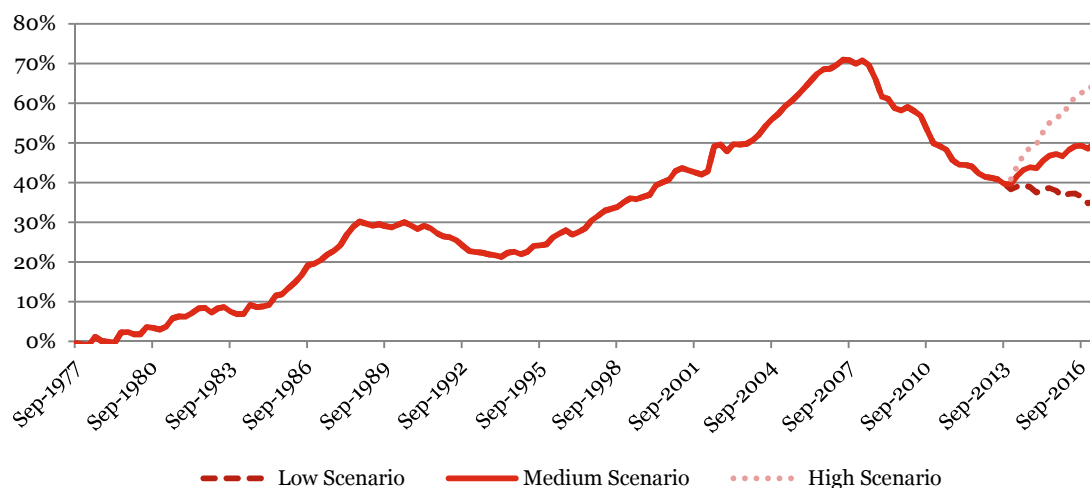


Sources: APRA, RBA, PwC analysis, 2013

Under the medium and high growth scenarios, the magnitude of the 'gap' between demand for credit and deposit growth is expected to widen and the reliance on banks to fund this 'gap' is expected to increase. In these scenarios, demand for credit and deposits grew more quickly than the low scenario, but with the rate of credit growth being considerably faster than deposit

growth. This results in the magnitude of the 'gap' increasing to approximately \$963bn and \$1,325bn respectively. This implies the magnitude of the 'gap' will surpass the levels seen during the market disruptions of 2008 where the Australian banks' reliance on short-term wholesale funding became a potential risk to the Australian economy. It is however important to note that the size of this 'gap', relative to nominal GDP, remains below the levels seen during 2008, as shown below in Figure 7. In addition, the duration of wholesale debt has lengthened.

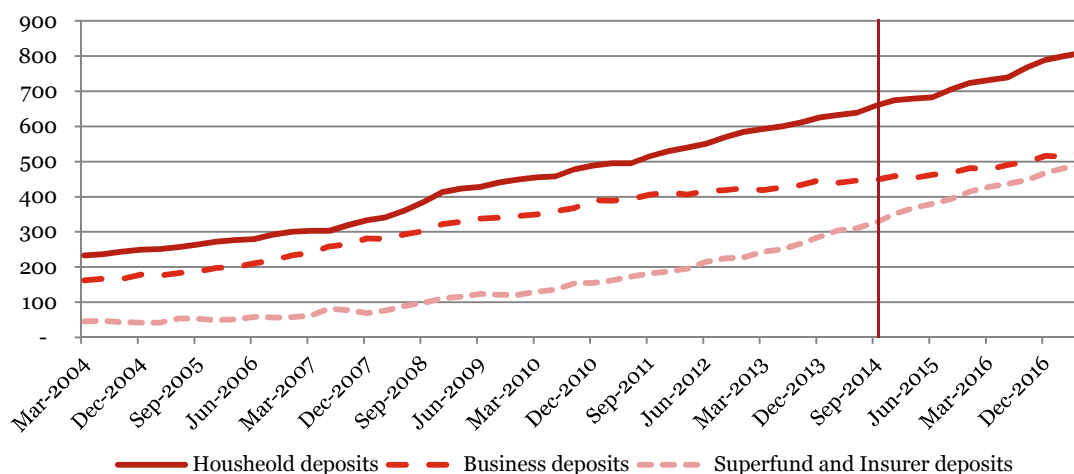
Figure 7: System credit requirement as a share of nominal GDP under the three scenarios



Sources: ABS, PwC analysis, 2013.

In both the medium and high scenarios the demand for business credit is driving the growth in total demand, which is to be expected in times of accelerating economic growth. Total deposits are forecast to grow at a slower rate than credit demand under both these scenarios; however, this total hides differing growth paths of household, business and superannuation fund and insurers deposits. The notable finding is that superannuation fund and insurer deposits are the strongest growing class of deposits, implying they could play an increasingly important bank funding role, equal in magnitude to the level of business deposits (Figure 8).

Figure 8: Demand for deposits – Medium (8 per cent) credit growth scenario (A\$bn)



Sources: APRA, RBA, PwC analysis, 2013.

4.3 Implications for funding the future demand for credit

The results of the medium and high scenarios suggest that Australia will face an increasing 'gap' between credit demand and deposits. Although current levels of economic and credit growth are weak, higher credit growth will be required only if and when Australia moves back towards sustained levels of trend economic growth.

From the banks' perspective, there are four potential responses:

- Encourage deposit growth, especially those deposits which tend to be most stable over time;
- Source additional wholesale funds from the domestic market;
- Source additional wholesale funds from offshore markets; and
- Limit credit supply to potential borrowers.

Limiting credit growth, especially to business, is suboptimal, as it would hamper the economy returning to trend growth. Sourcing increased levels of wholesale funds from overseas markets could create increased risks and, in the long-run, potentially be unsustainable. The rationale behind these conclusions is discussed below. The solution, therefore, lies in encouraging deposit growth and sourcing wholesale funding from the domestic markets. These options are considered in the next chapter.

Regulatory requirements and how they interplay on these two areas also need to be considered, specifically:

- Banks are in the process of implementing a number of significant regulatory changes. Basel III is the most significant of these, moving the industry to a regime where there are much tighter rules around liquidity and funding for banks.¹⁰ In this new regime, it is certainly possible that banks may have to forgo otherwise profitable lending opportunities for want of being able to access sufficient funding or liquidity which meets the requirements of Basel III. This is in sharp contrast to the period prior to the GFC where the Australian banks (and other lending institutions) faced virtually no constraints on the availability of wholesale funding and such funding was available at very low cost.
- This new regime also entails much more discretion to national regulators in applying the new rules, both for capital and funding. Regulators have the discretion to increase capital requirements for banks under a broad range of circumstances, especially where they judge credit growth to be unsustainable. Australia is also somewhat unique given the shortage of government bonds relative to the liquidity needs of banks under Basel III. In response, Australian banks have access to a 'committed liquidity facility' (CLF) from the RBA to ensure sufficient liquidity to meet the Basel III rules. Access to this facility is at the regulators' discretion and it is clear that the regulators will exercise the discretion with caution. This is all uncharted territory, making forecasting particularly difficult.

¹⁰ See Appendix B.

4.3.1 Limiting credit growth would be suboptimal and stifle economic growth

Limiting credit growth could result in a sub-optimal economic outcome. The Australian economy is currently experiencing weak demand for credit, especially from the business sector, despite the historically low interest rate environment. As the scenario modelling indicates, returning the economy to trend growth requires a pickup in credit growth; limiting credit growth would be counter-productive to achieving the objective of improving economic performance.

Remember that a major objective of the liberalisation of the banking system in the 1980s was to move away from a system where credit was rationed. The ready availability of credit has been an important factor underpinning Australia's economic growth since that time. The important point for the next few years is that a scenario where credit is constrained for want of bank funding would not be consistent with Australia returning to trend economic growth.

It is important here to repeat the banker's adage that '*a dollar is not a dollar*'. A funding constraint on bank lending would not arise for want of aggregate funds in the Australian economy; it would arise because the mix of funds available from depositors and investors did not sufficiently match the funding and liquidity needs of the banks, given their risk parameters and regulatory requirements. Indeed, precisely the reason this trend in bank funding is such an important topic is that the GFC exposed the risks of excessive reliance on wholesale funding, especially short-dated and offshore funding.¹¹

Put another way, for an individual bank, and hence for the banking system as a whole, there can never be an actual gap between assets (mostly made up of loans) and liabilities (i.e. deposits, wholesale funding and capital) – the system will always balance in an accounting sense. The question is, however, whether the balance is achieved at an optimal level for the economy – will credit growth be consistent with achieving trend economic growth required to support Australia's current standards of living?

4.3.2 Sourcing increased wholesale funding from overseas markets is most uncertain

As noted above, the GFC exposed the risks to banks of excessive reliance on wholesale funding, particularly short-dated funding. The GFC also showed that offshore investors' attitudes towards Australia as a whole can change very quickly, reflecting reliance on volatile commodity exports.

Those two factors were a challenging combination for the Australian banks during the GFC, resulting in a rapidly diminished appetite for their unsecured wholesale debt by offshore investors. Since the GFC there have been periods of market turbulence when offshore wholesale markets have effectively been closed. More recently, offshore markets have been more accommodating, including some evidence of a broader pool of investors interested in holding Australian bank paper. This widening of the investor pool is to be welcomed, as previously there was evidence of the pool of potential investors in Australian bank wholesale debt reaching portfolio limits on exposure to this debt class.

Since the GFC, there has also been much more focus by ratings agencies in assessing the funding mix of Australian banks, and in particular treating over-reliance on wholesale debt by individual banks as a business model weakness. Being keen to preserve their debt ratings, the

¹¹ It is sometimes argued that the fact every loan becomes a deposit (see Chapter 2) means that necessarily there is never likely to be a funding issue for banks. One error with that argument is to ignore the bankers' adage – not every deposit is equally useful in creating loans.

banks have responded by reducing the use of short-term wholesale debt, especially as all these factors have contributed to a substantial rise in the price (risk margin) of such debt.

In consequence, the Australian banks have reassessed their funding and risk policies, to reduce their reliance on offshore wholesale debt. Preparation for the introduction of the Basel III rules has been another factor contributing to this, along with uncertainty about the changes to collateral requirements for over-the-counter currency swaps to convert offshore borrowings into AUD. This entire adjustment process has been much assisted by weak demand for credit and strong growth in deposits (especially from SMSFs).

Market consultation suggested that, given their risk assessments, the trend for Australian banks in general will be to not want to start increasing their relative exposure to offshore wholesale debt in the foreseeable future. However, a situation where the demand for credit rose more quickly than domestic funding sources would take us into new territory and it is not clear about how banks will respond in aggregate, especially given different circumstances and potential approaches by individual banks.

For instance, except in the most extreme periods of market disruption, incremental domestic funding can be accessed at a higher price. The banks' assessment of risk-adjusted benefit of such funding relative to incremental offshore wholesale funding, in the context of both market conditions and the new Basel III rules, is impossible to judge ahead of time. Likewise, how would credit demand respond to the inevitable increase in lending rates?

In essence, the three key points are these:

- Australia will not return to trend growth without a substantial pick-up in the demand for credit;
- This will take us into uncharted territory in the post-GFC era; and
- The question is not will the banks be able to fund themselves in an accounting sense. The question is whether the consequent level of available credit given their funding decisions is optimal in an economic sense - will credit growth be consistent with achieving trend economic growth required to support our current standards of living?

Together these considerations highlight the importance of ensuring that domestic markets can provide the most efficient funding options for the Australian banks. The next chapter looks at ways to increase funding from stable reliable sources within Australia, thus reducing reliance on offshore debt markets to fund our future prosperity.

5 Sustainable improvements in bank funding options

This chapter outlines potential policy recommendations to achieve sustainable improvements in bank funding options. This would minimise the banks' need to increase reliance on offshore wholesale funding and also minimise the risk of their having to restrain credit growth for the want of appropriate funding. Consistent with this, the policy recommendations only related to the funding side of the equation, in effect taking the demand for credit as given. Likewise, the impact of the Basel II/Basel III capital requirements for lending, are considered to be outside the scope of this work. Given this focus, policy options to actively increase the demand for credit have not been considered.

The previous chapter highlighted that a pre-requisite for the economy returning to closer to trend growth is increased credit growth, from where it is currently, in the order of 3 per cent per annum to 4 per cent per annum to closer to 8 per cent per annum. This level of credit growth has not been achieved since late 2008.

Our scenario analysis in Chapter 4 showed that credit growth of 8 per cent per annum will result in a widening of the 'gap' between credit and deposits. That chapter outlined four potential responses which could either reduce or meet this funding requirement:

- a) Encourage deposit growth, especially those deposits which tend to be most stable over time;
- b) Source additional wholesale funds from the domestic market;
- c) Source additional wholesale funds from offshore markets; and
- d) Limit credit supply to potential borrowers.

However, as explained in Chapter 4, neither point c) nor point d) are seen as viable options. In this chapter focuses on a) and b), ways to increase deposits and ways to improve the overall functioning of the Australian wholesale debt markets. It also discusses some specific regulatory settings that could be adjusted to better support these objectives.

5.1 Increasing deposit growth

The current tax treatment of deposits *vis-à-vis* other investment options reduces the attractiveness of deposits as a saving option and hence reduces deposit growth.

One way to reduce the 'gap' between credit and deposits is to grow deposits faster by attracting more savings into deposits. Current differences in the way various investments are taxed influences investor preferences and have the unintended consequence of diverting potential additional deposit savings into other asset classes.

Changing the taxation of deposits, to make it more equitable when compared to other savings options, should have a positive effect on deposit growth.

5.1.1 How are different investments taxed?

Deposits are only one of a number of investment options available to households and businesses when they are deciding where to place their savings. Others include home ownership, shares (equities), commercial property and bonds (debt securities).

Since the mid-1980s deposits have continued to grow on a sustained basis of about 7 per cent to 10 per cent per annum. However, other forms of investment most notably housing and equities (through superannuation), have also grown strongly.

Whilst return for risk is probably the most influential driver of asset allocation decisions, taxation also plays a significant role. The Henry Review noted:¹²

‘There is considerable evidence that tax differences have large effects on which assets a household’s savings are invested in. Based on an examination of the literature and OECD data, the OECD concluded that while low-income individuals respond to tax incentives with more saving, for high-income individuals in particular savings are diverted from taxable to tax-preferred savings (OECD 2007a).’

In essence, taxpayers will seek out investments that both satisfy their investment objectives and reduce or defer their tax bill. Both the timing of taxation and allowance for inflation can impact the amount of tax paid and therefore the investment decision.

The table below sets out the tax treatment of common investment and savings options. The key point is that deposit interest is taxed at the taxpayer’s marginal rate, with no allowance for inflation or tax deferral relative to other options which provide greater opportunity for tax planning. In particular, The Henry Review concluded that real effective tax rates on bank deposits were nearly double relevant marginal rates and significantly higher than other asset classes.

Figure 9: differing tax treatments across asset classes

Investment	Income		Capital Gains & Losses			
	Income type	Taxpayer Deductions**	Taxed	Indexed for Inflation	Deferral	Transferrable
Home	None	n/a	X	n/a	n/a	n/a
Investment Property	Rent	✓	✓	✓	✓	✓
Shares	Dividends (post tax, with franking)	✓	✓	✓	✓	✓
Bonds	Interest	✓	✓	✓	✓	✓
Deposits	Interest	X	n/a	X	n/a	n/a

Source: PwC

Note: ** Taxpayer deductions include depreciation, interest on borrowings used to fund purchase of investment assets (negative gearing), and repairs and maintenance for investment properties.

In addition to the varying tax treatments of the different investments outlined above, superannuation provides a tax effective way of saving. Investments held with a superannuation

¹² “The Henry Review” -Report prepared by Dr K Henry called ‘Australia’s future tax system, Report to the Treasurer’, published in December 2009, for details refer to Part Two, Detailed Analysis, volume 1 of 2, chapter A1, A1-3 Taxation of income from savings.

fund are subject to tax as described in the table above, but at a lower tax rates, e.g. contributions and investment returns are taxed at 15 per cent, rather than taxpayer's marginal rate of tax.

Chapter 3 discussed factors impacting household deposit growth since deregulation, with one of these factors being the increasing role of superannuation as a source of deposits.

Since being introduced in 1988, compulsory superannuation has forced households to save for their own retirement through mandated compulsory superannuation contributions. In doing so it has increased households' exposure to investment options other than bank deposits. Households are now better informed about a broader range of investment options and their related tax implications, and use this knowledge when choosing where to invest both their superannuation and discretionary savings, with home ownership and equities being most notably favoured.

5.1.2 Moving taxation of bank deposits to a level playing field

The Henry Review carried out a substantial review of the tax treatment of investments including bank deposits and concluded that the tax treatment of bank deposits should be amended to put them on a comparable basis with other investment products. It recommended that interest derived from bank deposits should be tax at a discounted rate for individuals and non-business purposes.

A bank deposits is the only investment product that is taxed on its nominal returns and has no opportunity for tax planning by deferring gains (and attracting indexation from inflation) or negative gearing.

The recently seen growth in deposits from SMSFs, discussed in Chapter 3, is evidence that superannuation funds are willing to invest in bank deposits and changing the tax treatment of deposits would be expected to add additional impetus to this trend.

Recommendation 1:

Adopt The Henry Review Recommendation 14 in respect of a discount for savings income for taxation purposes.

5.2 Domestic wholesale markets

The nature of the Australian banks' balance sheets means that wholesale debt funding will be an important part of their overall funding mix for the foreseeable future, reflecting wholesale debt funding volumes undertaken prior to the GFC. During that era, offshore debt markets were seen to be more attractive to the banks than domestic bond markets, which tended to be less deep and liquid than offshore markets.

Since the GFC the banks have concentrated on funding additional lending out of deposit growth. They have tended to only use wholesale debt markets to refinance existing wholesale debt, and because the domestic market remains relatively shallow and illiquid that refinancing has tended to be done in offshore markets.

Funding options for banks would clearly be increased if the domestic bond market became deeper and more liquid, thus expanding a potentially less-risky source of additional funding for banks.

There would be broader benefits for the economy as well. Non-bank corporates would have more funding options, while investors would have more investment options. Superannuation funds could be particular beneficiaries, given their need for long-dated fixed interest investments, as well as the scale and growth prospects for the superannuation industry.

Australia has a long-established bond market but this market has declined somewhat in recent decades. Trends over the last 30 years have tended to result in a lack of diversity amongst types of issuers and investors. If these trends continue unabated they could lead to market instability and result in banks being unable to obtain the level of stable, longer term wholesale funding they require to meet the \$963bn 'gap' discussed in Chapter 4. This has the potential to limit their ability to continue to intermediate credit growth, which in turn will limit credit growth and prevent the economy returning to trend growth.

This situation has arisen because of a number of factors¹³ including:

- 1. Government has declined as an issuer of debt.** Whilst it has been government policy to reduce public debt levels, this has removed a valuable participant from the market and pushed the burden of funding the economy into the private sector. Long-term government bonds on issue have declined from 50 per cent of the market in 1988 to 29 per cent in 2013.
- 2. Households have declined as direct investors.** Households' direct holdings of bonds have declined as a proportion of the market from a range of 33 per cent to 50 percent in the 1950s and 1960s to less than 1 per cent today. There are multiple reasons for this, including growth in superannuation, a reduced supply of government bonds, and an increased preference for equities (in part due to tax considerations). Disclosure requirements on issuers may also have played a role. The effect has been to remove a key investor segment from the market, thus reducing liquidity and market depth.
- 3. Corporates have tended to rely on banks for their debt financing.** Banks enjoyed a comparative advantage over all but the largest corporates in fund raising for much of the post-deregulation era, and could pass these lower credit costs to corporates thus reducing corporate bond issuance.

5.2.1 The key to a deeper and more liquid domestic bond market

The bond market requires more participants and a greater diversify of the types of bonds (issuer, credit rating, tenor and structure).

Recommendation 2:

Adopt extension of the domestic bond market as a central plank of Commonwealth Government policy to improve economic growth, recognising that active Government participation is inherent in all mature bond markets.

Bond securities are long-dated, sometimes up to 30 or 50 years. Observed market experience globally is that Government participation is critical for underpinning the market's effective functioning even for tenors as short of five years because of the uncertainties involved (although mechanisms of government participation differ). A recent report by the IMF makes this point very strongly.¹⁴

This is an area where the Australian Government's strong balance sheet could be sensibly used to improve the flow of finance in the economy. This could be achieved by:

¹³ Refer RBA Research Discussion Paper 'A History of Australian Corporate Bonds' by Susan Black, Joshua Kirkwood, Alan Rai and Thomas Williams, published in September 2012

¹⁴ International Monetary Fund, *Local Currency Bond Markets - A Diagnostic Framework*, July 2013.

- Looking at innovative ways to partner with the private sector to issue debt to fund projects with an economic and/or social benefit, including infrastructure, housing and other growth industries;
- Using the government's credit rating to enhance private debt, where funding is going to projects that have a clear social and economic benefit; and
- The Government may provide aggregation services for smaller banks (for a fee).

Regardless of the mechanism, the critical point here is that the Australian bond market will not deepen sufficiently in any relevant timeframe without active Government participation. The Government's recent decision to issue 20 year bonds for the first time is a welcome step in this direction.

5.2.2 Specific steps to achieving this deeper and more liquid market

The recommendations below introduce measures aimed at attracting more investors and diversifying the types of bonds on issue (issuer, credit rating, tenor and structure). This specifically requires removal of barriers that prevent potential participants entering the market.

Recommendation 3:

Complete the work started by the Treasury discussion paper issued in late 2011 that looked at barriers to issuing bonds to retail investors, "Development of the Retail Corporate Bond Market: Streamlining disclosure and liability requirements".

Recommendation 4:

Enact the proposed legislation: Corporation Amendment (Simple Corporate Bonds and Other Measures) Bill 2013.

Recommendation 5:

Increase accessibility to trading infrastructure to facilitate timely and accurate price discovery and easier settlement. This could include facilitating more bonds being traded on an exchange and more tools to facilitate access via electronic platforms.

Recommendation 6:

Review the structure and regulation of superannuation funds to determine if there are changes to both superannuation funds and the types of bonds on offer that would result in superannuation funds holding more bonds. For instance, consideration could be given to implementing requirements for retirees to access their superannuation through a combination of lump sum withdrawals and annuities.

It should be noted that suggestions have been made from time-to-time that superannuation funds be mandated to hold a proportion of their assets in long-dated bonds issued by banks. In other words that a proportion of the national pool of superannuation assets be allocated to providing wholesale funding for banks, especially given the rapid growth expected in superannuation assets. However, it is preferable that trustees remain accountable for asset allocation decisions and that the better path is to ensure that the domestic bond market is sufficiently deep and liquid to attract investors. The recent rapid growth in bank deposits held by superannuation funds shows that there is an interest by trustees in holding bank risk, strengthening the case for actions to improve our domestic bond market.

5.3 Regulatory considerations

Basel III

As a package, the Basel III reforms are a significant advancement in bank risk management. However, there are some areas that if changed could have positive impact on the challenge of funding the ‘gap’ between credit and deposits, by reducing the overall level of liquid assets required.

5.3.1 Bank deposits held by superannuation funds

Basel III requires banks to manage their liquidity needs under strict parameters and distinguishes between different deposit types according to their expected stability during times of market stress. (This is an example of the regulators recognising that ‘a dollar is not a dollar’). These requirements are stricter than previously, reflecting the experience of the GFC.

Under APRA’s liquidity rules, a proportion of bank deposits held by superannuation funds (including SMSFs) may be classified as less stable reflecting the view that the superannuation trustees are financially sophisticated and will, therefore, respond more rapidly to stress conditions than other, less sophisticated retail depositors.

Given the critical importance of superannuation fund deposits as a growing source of funding (refer Chapters 3 and 4), the high proportion of SMSF deposits within this category, and the different levels of sophistication among those trustees, APRA’s current ruling may warrant further consideration ahead of the formal commencement of these rules in 2015.

Recommendation 7:

Review the behaviour of deposits linked to superannuation funds to determine if they are actually less stable than other forms of deposits, such as retail deposits, and adjust the classification for Basel III liquidity if warranted.

5.3.2 Liquid assets

Because of Australia’s relatively low level of government bonds, our wholesale debt markets are short of assets that qualify as liquid assets for the banks to hold under the Basel III liquidity rules. Recognising this, APRA and the RBA have established the CLF, to enable the banks to supplement their liquid asset requirements. APRA is enforcing strict eligibility and fee criteria to ensure the use of the CLF is minimised.

While the CLF has been carefully designed, it does nonetheless represent a significant departure from recent regulatory practice. It has the appearance of giving the authorities an explicit quantity lever to influence overall bank operations whereas since liberalisation the emphasis has been on price rather than volume levers.¹⁵ In particular, there is the risk that credit growth could be restricted if it is not sufficiently responsive to changing market conditions.

One aspect of the issue here is that Australia’s relatively under-developed wholesale debt markets means that the markets for eligible securities for liquidity purposes are somewhat

¹⁵ One analogy is that the regulatory framework has set the boundaries of the bank “sand pit”, whereas the CLF is more like a “line in the sand” for the banks to follow.

thin. In addition, it makes sense that APRA's operation of the CLF be subject to appropriate oversight.

Recommendation 8:

Review the markets in which eligible securities are traded to improve market participation, so that they become more liquid. Refer 5.2 above where ways to improve the functioning of the Australian bond market are discussed.

Recommendation 9:

Formally require APRA to report in its Annual Report, specific analysis of the system costs and benefits associated with the operation of the CLF.

5.3.3 Securitisation

Securitisation allows banks to issue secured debt, as an alternative to unsecured wholesale funding, and so access a broader pool of investors and generate potential capital and funding benefits. For smaller banks, it enables them to access the wholesale market at a price they cannot otherwise achieve due to their credit rating. Following the GFC, this type of funding has attracted increased regulatory scrutiny and current regulatory settings make it relatively unattractive as a source of funding for banks.

APRA is currently reviewing the regulatory requirements for securitisation in Australia including whether issuers should continue to hold an interest in the securitised notes ("skin in the game") over the life of the deal, the overall loss absorbency structure of the securitisation entities, and whether or not there should be a capital impost for banks against assets that have been securitised.

It is important that this review be completed as quickly as possible and recognises the benefits to the economy of a liquid and transparent securitisation market, where the investors understand that originators retain a meaningful ongoing interest in these securities.

In completing this review, APRA should recognise the benefits to the economy which can flow to smaller institutions from having access to securitisation on terms approaching those available to larger institutions. For instance, it could be beneficial to introduce a master trust structure (as allowed in some overseas jurisdictions) where lenders with a particular regional footprint could issue joint securities thus providing investors with the benefit of regional diversification.

Finally, the securitisation framework should be flexible over time as the operation of the securitisation market becomes better understood and in light of other developing trends in bank funding.

Recommendation 10:

Regulatory settings for securitisation should be finalised as quickly as possible and recognise the benefits of a liquid and transparent securitisation market, including for smaller institutions.

5.3.4 Covered Bonds

Covered bonds have been introduced as a special form of secured funding against specific portfolios of residential mortgages (“the covered pool”). As such they have a higher credit rating – and hence lower cost to banks – than unsecured wholesale funding and hence have been used by banks to reduce such funding costs.

APRA has sensibly imposed a cap on the total size of the covered pool given these bonds alter the security position of unsecured investors, including depositors. This cap is currently 8 per cent. The 8 per cent is a matter of judgement and it is recommended that a flexible approach be considered over time as the operation of the covered bond market becomes better understood and in light of other developing trends in bank funding. For instance, an increase in the cap could be a useful step in the face of a notable uptick in the demand for business credit or for residential construction finance to meet underlying demand for new housing.

Recommendation 11:

The cap on the covered pool should be reviewed over time in light of the operation of the covered bond market and other developing trends in bank funding.

Appendix A: Definitions and data sources

Data Terminology	Definition	Source
Credit	Includes: <ul style="list-style-type: none"> Bank loans (refer below); Loans made by other financial institutions to households, and businesses (including public trading enterprises and charities); Bills of exchange and Loans that have been securitised 	RBA Do2- Lending Aggregates
M3	Includes: <ul style="list-style-type: none"> Notes and coins; Bank deposits (refer below); Deposits received by other financial institutions such as credit unions and building societies; and Certificates of deposits 	RBA Do3 – Monetary Aggregates
Bank loans	Includes loans made by banks to: <ul style="list-style-type: none"> Households (mortgages, credit cards and other personal loans); and Non-financial private sector businesses (including public trading enterprises and charities) 	RBA Do2 – Lending Aggregates
Bank deposits	Includes all types of deposits received by banks from: <ul style="list-style-type: none"> Households; Businesses; and Superannuation funds and Insurers. 	RBA Do3 – Monetary Aggregates
Household deposits	Includes all types of deposits received by banks from households including: <ul style="list-style-type: none"> Transaction accounts; Term deposits; and Savings accounts. 	APRA Monthly Banking Statistics Table 4
Business deposits	Includes all types of deposits received by banks from non-financial private sector businesses and charities households including: <ul style="list-style-type: none"> Transaction accounts; Term deposits; and Savings accounts. 	APRA Monthly Banking Statistics Table 4
Superfund and Insurer deposits	Includes all types of deposits received by banks from financial institutions such as superannuation funds (including SMSF) life insurers; and general insurers including: <ul style="list-style-type: none"> Transaction accounts; Term deposits; and Savings accounts 	RBA Do3 Monetary Aggregates, and ABS 5232 – National Accounts, Financial Accounts; Table 8

Appendix B: Liquidity and stable funding requirements

In December 2010, the Basel Committee on Banking Supervision (BCBS) issued a global regulatory framework known as Basel III aimed at creating more resilient banks. The framework focused on capital and liquidity. This Appendix provides a brief outline of the Basel III liquidity requirements

The Basel III liquidity framework is being introduced progressively over a period of time extending out to 2018. However, capital markets expect banks to implement the requirements a head of the official deadlines.

The framework includes both qualitative and quantitative requirements. The qualitative requirements reinforce the need for banks to adopt sound risk management practices reflected through the governance and risk appetite setting processes, the adoption of documented policies, procedures and controls and appropriate monitoring and reporting to senior management. In Australia, bank directors are accountable for ensuring compliance, including risk appetite and governance processes.

The quantitative requirements include two new ratios that measure short-term and longer-term liquidity.

Liquid Cover Ratio (LCR)

This measures a bank's short-term liquid position by comparing potential cash outflows with hypothetical inflows from assets in a stressed environment over an extended period of time, which has been defined as 30 days. Banks are required to hold unencumbered high quality liquid assets (HQLA) to cover the net cash outflows over the period.

The LCR is expressed as:

$$\frac{\text{High Quality Liquid Assets}}{\text{Total net cash outflows over the next 30 calendar days}} > 100\%$$

Net cash outflows are calculated based on weighting assumptions which reflect both the behaviour of different bank customers, and product characteristics. For example, at-call deposit accounts held by retail customers have different behavioural characteristics to those held by large corporates and so attract a different, more favourable weighting in the net cash outflow calculation.

The HQLA can neither be encumbered nor re-hypothecated (i.e. they must sit freely on the bank's balance sheet). They are assumed to be easily converted in cash, with no substantial loss at any time during the 30 day period. Assets meeting these requirements include highly rated government, semi-government and corporate debt instruments that are demonstrably traded in markets to which the bank has on-going access. Excluded assets include securitisation securities and other bank paper.

In Australia there is a shortage of qualifying HQLA, so the RBA has put in place a CFL, which banks can access by offering certain less liquid assets (such as residential mortgages) as security and by paying a fee (set to mirror the estimated liquidity costs of holding relevant assets). Banks apply to APRA for approval for their CLF limit. APRA and the RBA check that the amount being applied for is reasonable, including based on the bank's relative size and the proportion of total system HQLA the bank is holding. This encourages banks both to

purchase assets in the market and to better manage the duration of their deposits and other funding.

The LCR must be met by banks from 1 January 2015. Further significant testing is planned by APRA over the course of 2014 to ensure that banks have made all necessary preparations.

Net Stable Funding Ratio (NSFR)

This ratio considers longer term liquidity by measuring the amount of stable longer-term funding available to fund longer-term assets.

The NSFR is expressed as follows:

$$\frac{\text{Available amount of stable funding (ASF)}}{\text{Required amount of stable funding (RSF)}} > 100\%$$

In the ASF, the bank's liabilities are categorized according to maturity and stability. Each type of liability is assigned a scaling factor. Liabilities that have a contractual maturity of greater than one year are not scaled, whereas liabilities that are expected to mature within one year are scaled according to type, e.g. wholesale debt receives a scaling factor of 50 per cent and stable deposits receive a scaling factor of 90 per cent.

In the RFS, the bank's assets are categorized according to their likely holding period; with assets that are likely to be held for greater than one year, such as residential mortgages receiving a lower scaling factor (65 per cent) than assets, such as marketable securities which are easily sold, which receive a more substantial scaling factor (5 per cent to 20 per cent).

In effect, the NSFR sets requirements to limit maturity mismatch on bank balance sheets, to balance the benefits and risks of maturity transformation.

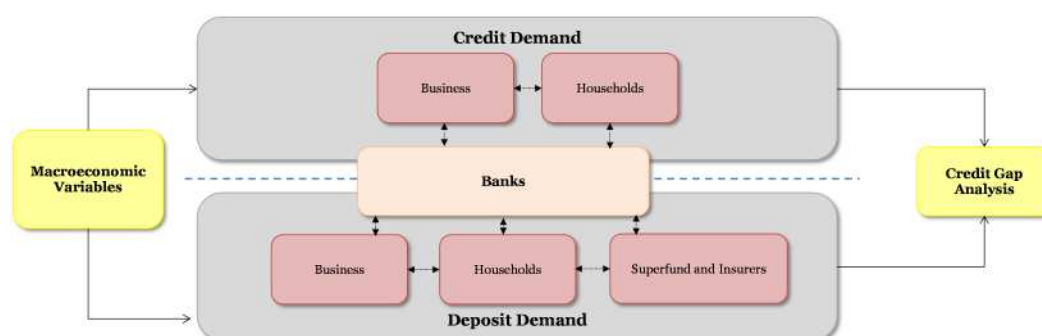
The NSFR must be met by the banks from 1 January 2018.

Appendix C: Model Specifications

Overview

The interactions between the macroeconomic environment, total credit and total deposits discussed throughout our report have been captured and tested within a purpose built dynamic macroeconomic model. This model is summarised below:

Figure C1: Model framework (specified at the banking sector level)



Source: PwC Economic & Policy, 2013

Model inputs

The model is built from, and calibrated to, publicly available data sources. Macroeconomic assumptions are aligned with Commonwealth Treasury forecasts¹⁶ with data sourced from the Australian Bureau of Statistics (ABS).¹⁷ Credit and deposit data are sourced from the Reserve Bank of Australia¹⁸ and Australian Prudential Regulatory Authority (APRA).¹⁹ The modelling approach and structure has been refined in consultation with all major banks and a number of regional banks.

Key variables driving each module in the dynamic macroeconomic model are detailed below. Variables highlighted in *italics* had the greatest explanatory power. In all modules, season dummy variables were specified as well as a GFC dummy variable (5 quarters).

Business Credit Demand

- *Interest rates*
- *Nominal GDP*
- *Business Confidence*
- Market capitalisation of corporate equity

¹⁶ Commonwealth Treasury, *Pre-Election Economic and Fiscal Outlook*, August 2013; Commonwealth Treasury, *Mid-year Economic and Fiscal Outlook*, December 2013.

¹⁷ ABS, *National Accounts*, 5206, Sept 2013.

¹⁸ RBA, DO2 and DO3, 2013

¹⁹ APRA, Monthly Banking Statistics Table 4, 2013

Household Credit Demand

- *Compensation of employees*
- *Interest rates*
- *Nominal GDP*
- Population
- Household income
- Consumer confidence

Business Deposit Demand

- *Interest rates*
- Business confidence
- Retained earnings from investment
- *Market capitalisation of corporate equity*
- *Investor confidence*
- Nominal GDP

Household Deposit Demand & Superannuation fund and Insurers Deposit Demand

- *Nominal GDP*
- *Compensation of employees*
- *Interest/cash/lending rates; spreads*
- Household saving ratio
- Compulsory contribution rate
- Unemployment/ consumer confidence

Model outputs

Both a *system-wide* and *banking sector* component are captured within the model framework. At the system level, the key forecasts include:

- Total household and business credit demand
- M3

At the banking sector level, the key forecasts include:

- Household and business credit supplied by banks
- Household deposits
- Business deposits
- Superannuation fund and Insurer deposits

In all scenarios, key variables have been calibrated and then adjusted from Commonwealth Treasury baseline forecasts. The scenarios test the impact of different macroeconomic conditions and credit demand on deposit growth and the subsequent magnitude of the 'gap' between credit demand and deposits. The scenarios are run across a four year forecast horizon (consistent with the Treasury horizon). However, the point of the scenario analysis is to test the potential magnitude of the 'gap' under various credit growth and economic growth conditions, not to arrive at a predicated requirement in 2017.

Disclaimer

PwC was engaged by the Australian Bankers' Association (ABA) to analyse potential scenarios for credit demand and make policy recommendations in response to the outcomes of these scenarios. This process was undertaken in consultation with the ABA and its members.

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Appendix D

Linking Superannuation to funding and the broader economy

RiceWarner

February 2014

This report has been commissioned by the Australian Bankers' Association to inform the industry's consideration of issues. The report reflects the views of its authors only. The report and points made within the report do not necessarily reflect the views of the ABA or any individual bank.

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Linking superannuation to funding and the broader economy

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1. Executive Summary

1.1 About this report

This report considers the role of fixed interest investments in a superannuation portfolio. It explains why Australia has a relatively low allocation to fixed income and considers whether there are barriers to changing this situation.

Section 2 describes the different sectors of the superannuation industry, the liabilities of the funds and the needs of members in each sector.

Section 3 describes the current investment profile and liabilities of these members and the current barriers preventing funds from increasing their allocation to fixed income (and alternative longer term) investments.

Section 4 provides a high-level comparison to other jurisdictions including the UK and USA. It covers retirement products and investment strategies but also draws out reasons why comparisons may not be appropriate due to differences in legislation, taxation, and social welfare benefits.

Section 5 provides a consideration of the role and benefits of fixed income investments to superannuation investors, funds and the economy.

1.2 Different Superannuation Segments

There are three distinct homogenous segments to the Australian superannuation market and each has a different profile for asset allocation.

The market is divided as follows:

Table 1. Major superannuation segments as at 30 June 2013

Segment	Segment Size (\$bn)	Share of market (%)
Not For Profit Funds	643.1	37.6
Commercial Funds	466.9	32.6
SMSF	507.2	29.8
Total	1,617.2	100.0

A further breakdown of these segments is shown in Section 2.

1.3 Current use of fixed interest investments

Australian superannuation funds hold a significant amount of defensive investments. The amounts vary by segment based on the demographic profile of the members and the structure of each segment.

Generally, fund managers and superannuation funds build portfolios of 'Australian Fixed Interest' through a mix of medium to long-term Australian bonds together with some high-yield corporate loans.

However, most defensive investments are held in cash and term deposits, particularly in the Self-managed Superannuation Fund Segment (SMSF) segment. The amounts of corporate and government bonds held are low by international standards, being only 11.5% of all assets (the sum of the Australian and International fixed interest columns in Table 2 below).

The levels of defensive assets as at 30 June 2013 are set out in Table 2. They represent \$463 bn of the \$1,617 bn assets of superannuation funds.

Table 2. Defensive investments by segment as at 30 June 2013

Segment	Australian Fixed Interest (\$m)	International Fixed Interest (\$m)	Cash and Term Deposits (\$m)	All Defensive investments (\$m)	Defensive Assets (%)
Not For Profit Funds	48,404	34,609	51,377	134,390	21
Commercial Funds	67,918	29,085	69,818	166,822	36
SMSF	7,101	0	154,696	161,797	32
Total	123,423	63,694	275,892	463,009	
% of all assets	7.6%	3.9%	17.1%	28.6%	

1.4 Barriers

It is clear that Australia lacks a large market for corporate and government bonds. There are no structural impediments to investing in these markets but there are factors that inhibit growth, including:

- The absence of a lifetime annuity market, which would of necessity match liabilities with long-term bonds
- The gross returns paid on Term Deposits which satisfy the needs of SMSF retirees and have government guarantees
- The relatively low level of borrowing and short-term duration of Australian government bonds (only recently increased to 15 years)
- The attraction of overseas borrowing for corporations
- The absence of an efficient secondary bond market which SMSF investors could access. We note that the ASX now does provide a service for trading government bonds. This and the new *mFund* service will improve access to these products and reduce this barrier.

1.5 Conclusions and Recommendations

The lack of a significant fixed interest market reflects the asset allocation of each segment of the superannuation industry:

- The not-for-profit segment has 75% or more of its default investments in growth assets. This high percentage is needed to meet the objectives which are to generate returns of CPI + 3% (or more) over rolling ten year periods. The strong cash flows of most funds reduce their liquidity needs so

they can, for instance, invest in a long term property portfolio, which although classified as a growth asset, provides much less capital value volatility than equities as well as a regular and attractive rental return.

- The commercial segment has many products sold by financial advisers. They tailor investments to meet their clients' needs. While they do utilise managed funds with pools of fixed interest, these are a low portion in current portfolios due to low interest rates and the desire to provide returns equivalent to those from the not-for-profit segment.
- The SMSF segment uses Term Deposits for its fixed interest investments. As these are easily accessed and provide an acceptable gross return, there has been limited demand for corporate or government bonds from this segment despite the expanding availability via ASX.

There are several opportunities to develop a dynamic fixed interest market. The key ones are:

- Development of a lifetime annuity market
- Development of a debt market for superannuation funds wanting to purchase infrastructure
- Listing of managed fund portfolios of fixed interest securities which an SMSF could access through the ASX.

Whilst not an opportunity, changes in the price (yield) differential between term deposits and bonds would lead to more yield seeking investors being attracted to bonds.

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2. Background

2.1 Scope of paper

The Australian Bankers' Association (ABA) has engaged Rice Warner to undertake research to support a submission to the Federal Government's Financial System Inquiry.

Australian superannuation funds have a relatively low level of fixed interest products (11.5% of Funds under Management (FUM) if cash and term deposits are excluded).

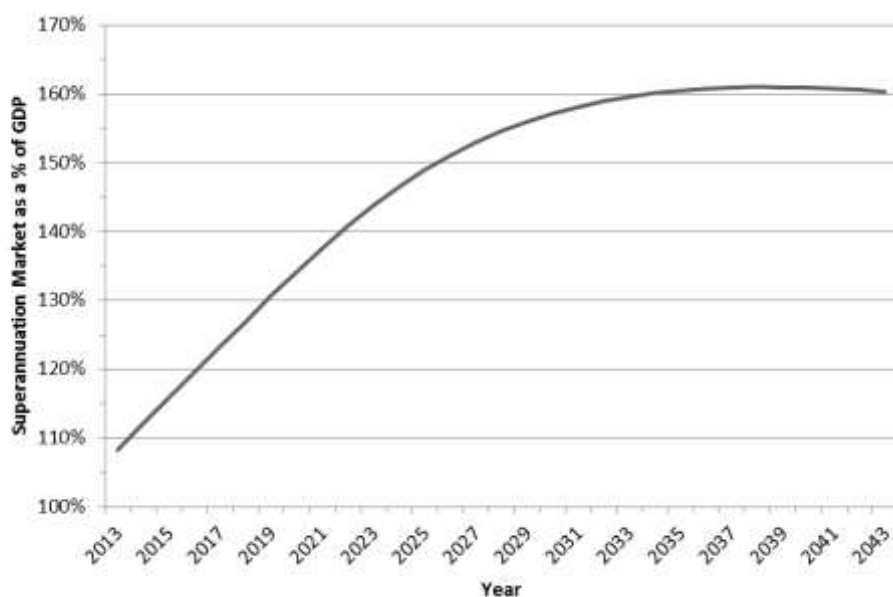
This paper includes consideration of:

- Barriers to diversification (into fixed interest assets) and how to overcome them
- The extent of or demand for funding within superannuation funds to match liabilities
- Benefits of fixed income investment to superannuation funds
- Benefits of increased fixed income investment to the wider economy including to banks
- Other investment options for superannuation funds, such as infrastructure and social benefit bonds.

2.2 Size of superannuation industry

The superannuation industry is growing strongly, largely due to the mandatory employer contributions – now 9.25% of salary and increasing to 12% over the next seven years. The assets held by the industry already exceed GDP and will peak at over 160% of GDP in 25 years.

Graph 1. 30 year projected superannuation assets as a percentage of GDP (2013 dollars)*



* Projected GDP has been estimated using smoothed growth rates from *Treasury's 2010 Intergenerational Report* and applying these to GDP as at 30 June 2013 as published by the ABS.

2.3 Sectors of the superannuation industry

There are four homogenous groups which together comprise the superannuation industry. The different characteristics of these groups mean that each has a different attitude to asset allocation.

The groups are:

- defined benefit funds
- not for profit employer-sponsored funds
- commercial funds
- self-managed superannuation funds.

The defined benefit funds are not a separate segment but are included within the Not for Profit and Commercial fund segments.

The current and projected size of the three generic segments is set out below, including the major product types within each. Assets include defined benefit and defined contribution benefits. Rice Warner estimates the market will grow at a compound annual growth rate of 8.1% over the next 15 years.

Table 3. Summary of projections results (2013 dollars)

Market segment	Today		In five years		In 15 years	
	30 June 2013		30 June 2018		30 June 2028	
	(\$m)	(%)	(\$m)	(%)	(\$m)	(%)
Not-for-Profit Funds						
Corporate Funds	67,804	4.2	47,292	2.2	0	0.0
Industry Funds	329,678	20.4	478,622	22.6	830,713	24.8
Public Sector Funds	245,576	15.2	312,731	14.7	429,842	12.8
Not-for-Profit Funds	643,058	39.8	838,645	39.5	1,260,555	37.6
Commercial Funds						
Employer Master Trusts	116,771	7.2	178,809	8.4	284,037	8.5
Personal Superannuation	182,731	11.3	242,668	11.4	459,036	13.7
Commercial Retirement Products *	158,632	9.8	199,215	9.4	349,373	10.4
Retirement Savings Accounts	1,900	0.1	579	0.0	0	0.0
Eligible Rollover Funds	5,468	0.3	0	0.0	0	0.0
Unallocated Reserves **	1,407	0.1	0	0.0	0	0.0
Commercial Funds	466,910	28.9	621,271	29.3	1,092,446	32.6
Self-Managed Super Funds	507,200	31.4	660,729	31.2	1,000,177	29.8
Total superannuation market	1,617,169[#]		2,120,645		3,353,178	

* Most of these assets represent account-based pensions but the figure also includes term certain and lifetime annuities.

** This amount is held within the Statutory Funds of life insurance companies to back annuities and capital guaranteed business.

2.4 Defined benefit funds

Whilst they are not a separate segment of the market, defined benefit funds represent a significant legacy within the market – especially in relation to Corporate and Public Sector funds. Virtually all are now managed alongside defined contribution funds generally for older members. They do, however, represent a significant pool of assets and have different investment requirements from accumulation funds. Their characteristics are therefore important in understanding their asset allocations.

Defined benefit funds provide a retirement benefit based on a formula, usually linked to salary in the last three to five years of work. These funds can provide a lump sum at retirement or a pension. Both types exist in Australia and some funds offer a choice between a lump sum and a pension.

These funds exist in the Not for Profit and Commercial segments but not in the SMSF segment. Usually they are managed by governments or large corporations.

Most companies and all governments have closed their defined benefits to new members. Only a few remain open, including the Military fund (for defence personnel) which is sponsored by the Federal government and ESSS, the fund for emergency services workers in Victoria.

All the State governments and several large companies (such as Australia Post) have closed defined benefit funds. Most of these will experience negative cash flow now or in the next few years.

As the guarantees are borne by the employer, the members are not concerned about the assets matching the liabilities.

2.5 Corporate funds

Corporate funds were once the main channel for superannuation in Australia. However, the growth of mandatory employer superannuation contributions and the shift from defined benefits has led to most employers closing their corporate funds.

According to APRA, there were 108 corporate funds as at 30 June 2013, a reduction from the 1,862 that existed a decade earlier. Rice Warner expects all remaining corporate funds to be wound up over the next 15 years.

As corporate funds close, members and assets have been transferred to funds which cater for multiple employers, such as industry funds (in the Not for Profit segment) or master trusts (in the Commercial segment). Sunsuper is an industry fund that caters for corporate sub-plans. Plum and Mercer are the two best examples of corporate master funds. Further, many large companies (typically with fund assets exceeding \$20m) became a quarantined sub-plan often with their own investment and insurance arrangements – but without any trustee representation.

The recent legislation requiring all funds to hold a MySuper licence also led to many corporations closing down their fund. In addition, many of the corporate sub-plans have converted their arrangements to a standard MySuper offer where the trustees manage the default investments.

There are only about 30 tailored MySuper products where the companies decided to maintain their existing structure (as a sub-plan) and still control the investment strategy. These funds all have assets exceeding \$100 million.

Corporate funds are characterised by high average balances and a higher percentage of members approaching retirement. Some employers pay more than the required mandatory contribution rate.

The consequences of these structural features are that:

- Corporate funds represent a small and a declining share of the market.
- The defined benefit component of this segment represents a declining share of the segment.
- We anticipate all stand-alone corporate funds will close within 15 years.
- Most have high average benefits and an older membership profile. Those with defined benefit pensions generally retain these older members as they move into retirement, but those with lump sum benefits generally lose the members and the assets causing negative cash flows.
- Those with negative cash flows need to invest more conservatively with an emphasis on liquidity and a matching of assets to cash flow. These funds generally have high allocations to fixed interest and cash.

2.6 Public sector funds

The Federal and State governments (and their agencies) all have defined contribution funds. Some funds pay high contribution rates. For example, the Queensland government pays 13% of salaries and the Federal Government pays 15.4%

As a result of high contribution rates and long periods of employment, these funds tend to have higher than average balances. While all governments used to have defined benefit funds, all the major funds (apart from the Military) have been closed to new members. The results are similar to those described for Corporate funds. The defined benefit sections of many of these funds are not growing and some are declining as older members leave. This decline, and the desire to match assets with liabilities, however, forces the funds to invest for liquidity.

2.7 Industry funds

Most industry funds were created after a 1985 centralised wage decision to grant employees a 3% superannuation contribution. At that time, 60% of the population had no superannuation so many workers started with nothing. As a result, this segment has the lowest average balances.

These funds receive mandatory employer contributions under industrial awards. This provides a guaranteed strong cash flow which allows the funds to invest in illiquid assets and have a long-term investment perspective.

2.8 Commercial funds

These products are offered by organisations which manage superannuation as a business. AMP and the four wealth management subsidiaries of the large banks hold a significant share of the assets in this segment.

As well as employer-sponsored superannuation, this segment manages money for individuals (including self-employed persons). It also provides separate pension products for individuals whereas pensions tend to be held in the same fund in other segments.

2.9 Shift to pensions

As members move into retirement, many tend to change the investment profile of their superannuation assets. Many people with small balances take lump sums but those with more than

about \$100,000 tend to take some or all of their benefit as a pension – usually an account based pension. They will often seek more capital security rather than remain heavily invested in growth-oriented assets. Pension accounts therefore tend to have higher allocations to fixed interest than the accumulation accounts do. They will still, however, have meaningful allocations to growth assets.

The \$1,617 billion of assets set out in Table 3 comprises \$1,123 billion of pre-retirement assets and \$492 billion of retirement assets. The retirement assets are shown in Table 4 together with our projections for the next five and fifteen years.

Table 4. Current and projected retirement assets (2013 dollars)

Market segment	Today		In five years		In 15 years	
	30 June 2013 (\$m)	(%)	30 June 2018 (\$m)	(%)	30 June 2028 (\$m)	(%)
Not-for-Profit Funds						
Corporate Funds	3,661	0.7	5,491	0.8	0	0.0
Industry Funds	27,034	5.5	81,061	11.7	232,923	17.8
Public Sector Funds	54,272	11.0	76,584	11.0	139,104	10.6
Not-for-Profit Funds	84,967	17.3	163,135	23.5	372,027	28.5
Commercial Retirement Products	158,632	32.2	199,215	28.7	349,373	26.7
Self-Managed Super Funds	248,528	50.5	330,846	47.7	586,168	44.8
Total retirement market	492,128		693,196		1,307,567	
Retirement assets as percentage of all superannuation assets		30.4		32.7		39.0

This table shows that pension assets will increase by a compound annual growth rate of 9.9%, which is greater than the whole market, due to the bulge of baby-boomers approaching retirement. Consequently, the assets in pension phase will grow from 30% of the total market to 39% in the next 15 years.

As retirees are more conservative, this is likely to lead to a shift in asset allocations within superannuation funds given a growing demand for investments that will preserve the retiree's capital or assist in managing longevity risks – ie there will be a growing demand for annuity type products and fixed income investments.

3. Asset Allocation

Asset allocation varies by segment due to the different demographic profiles. The industry funds tend to have strong growth portfolios as they have a younger average membership. Because they have strong cash flows, they also hold large amounts of illiquid assets such as property, infrastructure and private equity and low allocations to fixed income products. These funds are likely to be in this phase for the medium term and will take many years to reach a stable age profile.

The commercial funds have a much higher number of members who select their own investment portfolios (often with the assistance of an adviser). They also have more members approaching retirement or in the pension phase. Therefore, they hold higher levels of fixed interest investments.

SMSFs have traditionally concentrated their asset allocations in two areas – Australian Equities and Cash and Term Deposits. The ATO Statistical report for June 2013 shows 35.3% allocated to Australian listed assets, 30.5% allocated to Cash and TDs, 15% allocated to real property and only 1.4% allocated to debt and loans (See Table 10).

Traditionally, superannuation funds have separated their portfolios into 'growth' and 'defensive' assets. The former comprises all equity investments including shares and property. The latter comprises all debt investments (mainly government and corporate bonds) and cash and term deposits. Although these categories have become blurred with hybrid investments and the use of derivatives, they provide a broad guide to overall asset allocation.

Generally, fund managers and superannuation funds build portfolios of 'Australian Fixed Interest' through a mix of medium to long-term Australian bonds together with some high-yield corporate loans. These portfolios can include short-term debt such as Treasury Bills.

However, most of the defensive investments held within the Australian superannuation industry, particularly in the SMSF segment, are cash and term deposits (typically of up to three years in duration). The high allocation to cash and term deposits is unusual compared to other countries but it reflects gross interest rates which have prevailed on these assets for most of the last thirty years.

The amounts of corporate and government bonds held are low by international standards being only 11.5% of all assets.

The levels as at 30 June 2013 are set out in Table 5.

Table 5. Defensive investments by segment as at 30 June 2013

Segment	Australian Fixed Interest (\$m)	International Fixed Interest (\$m)	Cash and Term Deposits (\$m)	All Defensive investments (\$m)	Defensive (%)
Not For Profit Funds	48,404	34,609	51,377	134,390	21
Commercial Funds	67,918	29,085	69,818	166,822	36
SMSF	7,101	0	154,696	161,797	32
Total	123,423	63,694	275,892	463,009	
% of all assets	7.6%	3.9%	17.1%	28.6%	

All defensive investments together are about 29% of all assets – and most of these are held in Australia. The foreign fixed interest assets are mainly sovereign bonds. These are about \$64 billion or 14% of all defensive investments.

The detailed table for all products is set out in Table 6.

Table 6. Asset allocation by sector as at 30 June 2013

Sector	Aust Equities	International Equities	Listed Property	Direct Property	Australian Fixed Interest	International Fixed Interest	Cash and Term deposits	Other
	(%)							
Corporate Funds	31	27	2	7	12	5	8	8
Industry Funds	30	22	1	10	7	5	5	19
Public Sector Funds	24	24	3	7	7	6	12	17
Total Not for Profit	27.8	23.3	1.9	8.5	7.5	5.4	8.0	17.1
Employer Master Trusts	27	22	4	3	14	6	14	10
Personal Superannuation	27	22	4	3	14	6	14	10
Commercial Retirement Products	24.1	19.6	3.6	2.7	15.9	6.8	15.9	11.4
Retirement Savings Accounts	0	0	0	0	0	0	100	0
Eligible Rollover Funds	27	22	4	3	14	6	14	10
Total Commercial	25.9	21.1	3.8	2.9	14.6	6.2	15.0	10.4
Self-Managed Super Funds	49.1	0.8	7.6	7.6	1.4	0	30.5	3.1
Total	33.9	15.6	4.2	6.6	7.6	3.9	17.1	10.8

3.1 Defined benefit funds

The negative cash flow of the closed defined benefit funds influences asset allocation. As a guide, these funds will want liquid assets (so they tend to move away from property and infrastructure investments). They also need more certainty, so they tend to match assets to liabilities. This leads to a shift away from equities towards bonds.

In Table 7, we set out the asset allocation from the actuarial report as at 30 June 2012 of State Super NSW, one of the largest closed defined benefit funds. This fund now has a negative cash flow but it still has a large amount of growth assets. It needs them to match the liabilities which are related to the salaries of members.

Table 7. Asset allocation of State Super as at 30 June 2012

Category	Sector	%	\$m
Liquid growth	Australian Equities	27.3	9,513
	International Equities	22.9	7,992
Sub total		50.2	17,505
Alternatives	Property	8.7	3,045
	Alternative assets	13.1	4,566
Sub total		21.8	7,610
Liquid defensive	Australian fixed interest	5.1	1,767
	International fixed interest	2.4	840
	Cash	20.4	7,107
Sub total		27.9	9,714
Total		100	34,829

Source: Report on the Actuarial Investigation of the State Authorities Superannuation Scheme as at 30 June 2012.

As the assets gradually decline, they will be matched to the remaining liabilities and the fund will hold a higher percentage of fixed interest assets. However, the change has not yet started at State Super.

Once cash flow is permanently negative, funds will hold much higher levels of cash, as in this example. However, in time, there will be a shift out of unlisted assets (which are less liquid) and a move towards assets which provide more stable returns.

If there were a corporate bond market of any size, this would suite investments for a defined benefit fund. They would provide a real interest rate and the term of the bonds could be matched to the term of the liabilities.

3.2 Not-for-Profit funds

This segment comprises corporate, industry and public sector funds. The default investment strategy (MySuper) for these funds has a target return¹. This is usually expressed as CPI + 3% to 4% after fees and taxes. Thus, funds might have a gross earnings target of about 8% a year over the medium term. The target is based on historical returns for funds investing with 70% or more in growth assets.

Due to the target and investment horizons of their generally younger membership, the investment profile of not-for-profit funds typically follows a 'balanced' 75/25 allocation to growth and defensive assets respectively. This usually results in high allocations to equities and property and relatively lower allocations to fixed interest and cash investments. Larger industry funds have strong positive net cash flow and invest a greater proportion of assets in alternative asset classes such as private equity and infrastructure.

¹ Under prudential standards all funds must have an investment management framework. As part of this, they must define the risk return profile of each portfolio. CPI + 3 to 4% is what can be achieved from the risk profiles adopted. It is also what is needed to provide decent retirement benefits.

Corporate and Public Sector funds tend to have a relatively higher number of members in the retirement phase drawing down pensions which results in higher allocations to fixed interest relative to Industry funds. Consequently, average allocations to defensive assets tend to be 20-25% of fund assets for not-for-profit funds. Corporate funds are close to the upper limit and industry funds at or below the lower limit.

Most assets are held in a default investment strategy. Although funds offer a number of alternative investment options, collectively these represent less than 10% of all assets. The concentration within the default fund provides certainty for the fund and it can invest long-term against the known cash flows.

Table 8 shows the strategic asset allocation for the default (MySuper) option of the largest industry fund – AustralianSuper – as published in the product disclosure statement dated January 2014.

Table 8. AustralianSuper Strategic Asset Allocation – Balanced Option (default) as at January 2014

Asset class	Strategic Asset Allocation (%)	Range (%)
Australian shares	29	20-45
International shares	31	10-40
Direct property	12	0-30
Infrastructure	14	0-30
Private equity	4	0-10
Fixed interest	7	0-25
Cash	3	0-15
Absolute return strategies		0-10

As can be seen, the fund has an aggressive asset allocation reflecting its high target of CPI + 4% over rolling ten year periods. While the allocation to fixed interest is lower than normal, this reflects the fund's view that Bonds will be low-yielding for some time and they will be a drag on the required performance of the fund.

In this case, the barrier to investing in fixed interest is the high return targets set for members and the current low interest environment where bonds are likely to give low yields.

3.3 Commercial funds

The typical default asset allocation for Commercial funds follows the 70%/30% split to growth and defensive asset similar to the not-for-profit sector. Despite this, Commercial funds typically have higher allocations to fixed interest investments than the typical not-for-profit fund due to:

- a greater variation in the asset allocation of default options between different funds and there are more funds with older age profiles needing more conservative investments
- a larger number of alternative options that a member may select under investment choice with many of the older members selecting significantly more conservative profiles and these funds not usually offering direct investment in TDs
- many commercial funds having changed their default options to lifecycle investments resulting in a more defensive asset allocation for older members
- members of Commercial funds being more likely to receive advice and invest in an option that better meets their personal risk and return expectations.

Commercial funds also tend to have a more liquid investment profile than funds in the not-for-profit sector and consequently have lower allocations to alternative asset classes such as infrastructure, private equity and unlisted property. This structure is largely driven by the need to set daily unit pricing of all investment options and to have the liquidity to meet withdrawals as required. It is also driven by the diverse needs of investors and the different views of their financial advisers.

Table 9 shows the benchmark asset allocation for the AMP MySuper Balanced investment option (default) within the Flexible Super product range as an example of the flagship product from the largest provider.

Table 9. AMP Benchmark Asset Allocation – MySuper Balanced (Flexible Super) – 1 January 2014

Asset class	Benchmark (%)	Range (%)
Australian shares	27	12-32
International shares	30	15-48
High yield credit	5	0-10
Listed infrastructure	5	0-10
Listed property	5	0-10
International fixed interest	13	0-30
Australian fixed interest	10	0-30
Cash	5	2-40

This fund has a lower portion of growth assets than an industry fund and a higher amount of fixed interest investments. Once again, the overall portion of Australian fixed interest investments is low (15% including high yield credit) largely due to current concerns about yields.

The broad range for each asset class would allow for a much higher allocation to fixed interest investments but it is unlikely that funds would move to the top of the range (60%) unless interest rates were much higher.

The allocation between International FI and Australian FI are the usual investment reasons of yield, risk and correlation subject to currency risk.

3.4 Self-managed superannuation funds

The current investment profile of the superannuation funds within the SMSF segment reflects the unique features of these plans. Table 10 shows the dominance of Australian investments, particularly listed equities and Term Deposits amongst the \$507 billion of assets.

Table 10. SMSF Asset Allocation – 30 June 2013

Asset Class	%
Australian Listed Assets	35.3
Cash & TDs	30.5
Real Property	15.1
Managed Assets	13.2
Debt & Loans	1.4
Overseas (All)	0.9
Collectibles	0.1
Unlisted Shares & Other	3.5
Total assets (\$m)	100.0

Investors in the accumulation phase have a strong preference for listed Australian equities, with a sizable minority interested in unlisted properties.

Members in the pension phase hold more than half the assets in the SMSF segment. Their preference is also for listed Australian equities, though many shift into term deposits as they seek to preserve their capital and generate income.

These preferences are supported by the ease of investment through online share broking services and access to bank term deposits. Investing elsewhere requires more effort and adds to reporting. Consequently, there are very few bonds held in this segment.

The implementation of the ASX mFund service may well offer an opportunity for the development of specialist bond portfolios. The online broking services will provide a convenient portal for investors and an attractive distribution channel for product providers.

3.5 Retirement

The circumstances of retirees are different to members accumulating funds. The key differences are:

- Contributions cease so the assets peak at the time of retirement and then decline over time
- Retirees withdraw funds for consumption. So they need some certainty about capital (otherwise they could draw payments when asset prices are low)
- Retirees have a long-term horizon due to improved longevity. Most retirees have a life expectancy of 15 to 25 years at the time of retirement.

Retirees tend to use their superannuation proceeds efficiently in line with the following table:

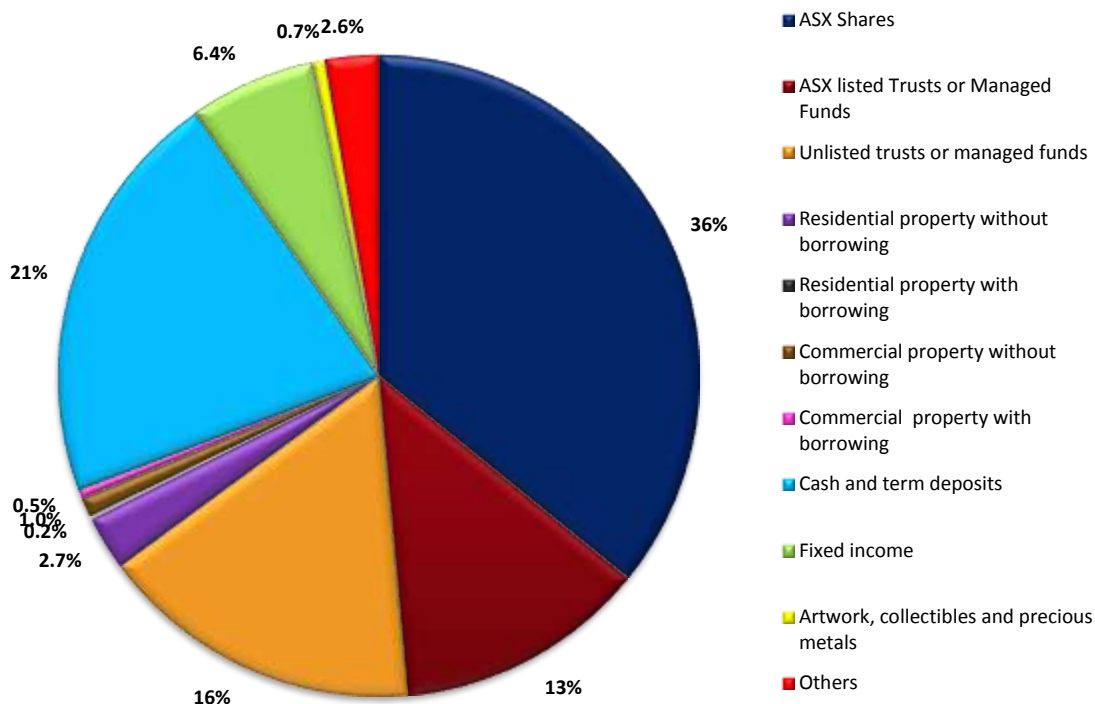
Table 11. Utilisation of retirement benefits

Account balance	Lump sum	Liquidity	Nest egg	Growth
<100,000	ALL	-	-	-
100,000 to 200,000	75,000	25,000	50,000	-
200,000 to 400,000	75,000	45,000	50,000	130,000
400,000 to 600,000	75,000	75,000	50,000	300,000
600,000 to 1m	100,000	120,000	80,000	500,000
1m to 2m	150,000	150,000	100,000	1,100,000
>2m	250,000	150,000	100,000	1,500,000

As can be seen, those with small balances simply transfer money into their bank account. Those with larger balances transfer some funds but hold most of the remainder in an account-based pension. Even in retirement, the balanced funds (used by most members) still have a high portion of growth assets (60% to 75%).

A recent survey of SMSF retirees gave the following allocation of investments. Even though it is normally expected that retirees are conservative in their investments, this group has a high tolerance for growth assets. Fixed interest investments make up a small part of their portfolios.

Graph 2. Average asset allocation as at October 2013



Those retirees who want capital protection do not buy lifetime annuities. Instead, they buy term deposits in their SMSF or one of the funds that offer this facility.

Some buy short-term 'term certain annuities' which have the same characteristics of a term deposit but are issued by life companies. Only Challenger and CommInsure are still active with these products.

Several organisations, including the Actuaries Institute, have promoted lifetime annuities as a means of pooling longevity risks. These products tend to have a high proportion of fixed interest investments to match liabilities (and to more easily meet APRA's capital requirements). Should there be a shift towards these products, the amount of fixed interest investments would grow strongly.

4. Other jurisdictions

4.1 Australia's unique characteristics

Australia's retirement income system has a number of unique features that influence asset allocation choices. It is therefore not possible to make simple like for like comparisons with markets like the USA and the UK as to the proportionate allocation to fixed interest and similar assets. There are good reasons why they should be different and why Australian investors will have lower allocations to fixed interest assets.

All employed Australians receive a mandatory employer contribution (Superannuation Guarantee payments) of 9.25% of income plus any extra personal contributions invested to accumulate a retirement lump sum. Only a minority of superannuation funds are Defined Benefit and most of those pay their benefits in the form of a lump sum as opposed to the higher proportion of defined benefit funds overseas paying pensions and requiring fixed interest assets to match pension liabilities.

4.1.1 *Age Pension*

Underpinning the system is the Age Pension which is available from age 65 with this age increasing gradually to 67 by 2023. The pension is means tested (on both assets and income), but the exclusion of the family home from the asset test plus other allowances means that around 50% of new retirees receive a partial or full pension with this rising to more than 80% by age 85.

The Age Pension provides an income which, through indexation, is now equivalent to the ASFA Modest benchmark of income for retiree couples. As the pension is indexed to wages and ASFA's indices relate to prices (CPI), the pension will keep growing in real terms.

Therefore, the Age Pension provides a longevity guarantee via a solid long term income. It permits retirees to take a more aggressive investment stance in relation to their other assets. Many retirees with assets in the range \$200,000 to \$750,000 will invest in equities knowing that any fall in value will be offset by an increase in their part Age Pension. The tapering on assets is 50c in the dollar.

4.1.2 *Tax*

During the accumulation phase, income is taxed at 15%. Dividend income derived from the Australian tax paid profits of Australian companies enjoys a franking credit at the corporate tax rate of 30%. When members retire and switch their accounts to the pension phase, the tax rate falls to zero, but the franking credit remains at 30% for dividends derived from Australian shares. This tax treatment makes Australian equities an attractive investment for superannuation investors and drives the current allocation to Australian equities seen today.

After age 60, the benefits can be withdrawn without any restrictions tax-free. There is no limit on withdrawals, but there is a required minimum annual drawdown being 4% of the account balance at age 65 and increasing slowly with age. This minimum withdrawal requirement encourages funds to ensure that there is cash to meet the payment so that it need not be met from depressed assets if there is a market correction.

4.1.3 Investment horizons

Retirees at age 65 still have long investment horizons. They need to allocate a good proportion of their assets to long term growth in order to maintain their income against inflation while also providing an allocation to capital protected assets to meet short term expenditure requirements. The need to provide for income growth has seen retirees resist annuities.

The combination of these three factors favours investment in Australian shares. They provide very attractive after-tax rates of return on income while maintaining the opportunity for capital growth. It is also the case that these franked dividend flows have been remarkably stable even if the capital value of the assets have fluctuated. This has meant that for that portion of an asset portfolio that does not need to be realised in the near future, Australian shares may well be more attractive than fixed interest assets.

4.2 UK

The UK provides a Base Pension linked to National Insurance contributions paid by employers and employees. As it is not means-tested, all UK employees therefore receive this benefit up to the limit imposed by the National Insurance scheme.

Britons may also contribute to occupational or private pension plans. Many of the occupational plans are still defined benefit plans that provide benefits in the form of pensions rather than lump sums at retirement. Increasing numbers have been converted to defined contribution, or accumulation, to reduce employer liabilities. Private pension plans are also accumulation funds.

The difference from Australia is that up until 2011 all balances in accumulation funds had to be converted to annuities by age 75. From 2011, accumulated benefits can be moved into a structure equivalent to the Australian account based pension and funds can be drawn down from the account. Unlike Australia there are restrictions on the amount that can be drawn down. For most retirees, the amount that can be drawn down must not exceed the amount they would receive at their then age should they choose to purchase an annuity.

Retirees with guaranteed incomes from pensions and other sources of at least £20,000 per year have no restrictions on their drawdown amounts.

The result of the history of the UK pension system is that the bulk of the pensions in payment are guaranteed pensions (annuities) which require asset/liability matching and a strong demand for bonds and gilts. The large base of defined benefit pension schemes which also require careful asset/liability matching will also mean a strong demand for bonds and gilts. As the UK has a large national debt, it has a deep liquid government bond market (gilts) and funds and annuity providers are able to match their liabilities relatively easily.

The growing pool of accumulation funds and the ability to invest and draw down instead of purchasing an annuity will see a growth in asset pools with investment outlooks similar to those in Australia and a possible move to a lower weighting to fixed interest assets. However, this will take time both because the assets need to accumulate and because the financial advice industry needs to develop to service retired investors instead of just helping them buy an annuity.

4.3 USA

In the USA, retirement income provision is by means of defined benefit pension plans or 401k accumulation plans. The pension plans generally pay incomes for life. The 401k plans provide for the drawdown of assets from age 60 on a tax preferred (but not tax free) basis. There are no restrictions on these drawdowns.

Defined benefit pension plans have the same requirements of asset/liability matching as they do elsewhere and a commensurate higher allocation to fixed interest securities.

In many ways, 401k plans present similar opportunities and challenges as accumulation plans do in Australia. The differences in their asset allocations are driven by the operation of US shares and their tax treatment. US companies generally pay much lower dividends than those on Australian shares and the dividends do not qualify for franking credits. Some companies do not pay dividends or do so infrequently (e.g. Apple). They therefore provide much lower incomes and higher volatility risk. They do not provide the income stability that Australian Blue Chip shares do.

Those needing income and income stability must therefore invest in corporate and government bonds and the allocations to these asset classes must therefore be higher than in Australia.

4.4 Other regions

There is no comparable region to Australia in terms of tax systems, access to social security pensions and the rules around private accumulation of pensions are all different. Some countries, for example Austria, mandate asset allocation (particularly in government bonds) so their asset allocation is a function of their regulations.

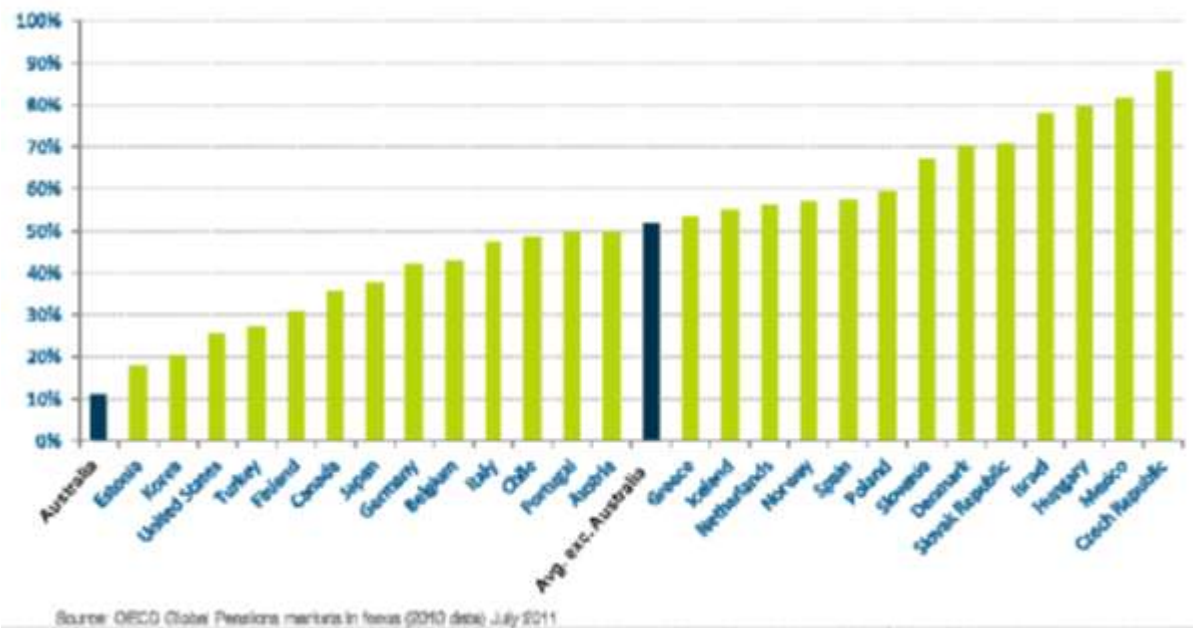
Note Australia once had a prescribed minimum investment in government bonds. Until abolition in 1985, superannuation funds had to invest 30% of their assets in Australian government bonds including a minimum of 20% of all assets in Commonwealth securities.

Graph 3 shows the allocation of pension assets to fixed interest securities for selected OECD countries. As can be seen, Australia has the lowest allocation.

We will not analyse all the countries presented in Graph 3, but can make some general comments:

- Canada also has a system with a heavy emphasis on defined benefit pension plans
- Many countries limit exposure to volatile assets and some prohibit them.

Graph 3. Allocations to fixed interest securities



5. Fixed income investments

As discussed in previous sections, asset allocations to fixed interest instruments via Australian superannuation funds are low by world standards. This is frequently presented as a problem that needs to be fixed, but there are in fact sound reasons for the higher allocations to growth assets, especially Australian equities, in Australia.

It is likely that this weighting to growth assets will continue for some time and that growth of a fixed interest market will depend on changes to both the supply and demand side.

5.1 Bank funding

The ABA report *Bank Funding* published July 2013 quotes results from the Reserve Bank of Australia and the Australian Bureau of Statistics. These show that deposits made up some 53% to 61% of bank funding. This was up from some 40% to 45% in 2007. Bendigo and Adelaide Bank has recently publicised that it now raises some 75% of its funding from customer deposits.

The growth has been driven partly by the security of bank deposits because of the government guarantee introduced after the GFC and because banks have been aggressively seeking deposits in order to gather more funding from lower risk weighted liabilities. The result has been attractive cash and term deposit rates offered to retail investors directly and via their superannuation funds.

The Rice Warner report *Personal Investments Market Projections* shows that these products have attracted some 29% of the personal superannuation market that includes the strongly growing SMSF sector – See Table 12.

Table 12. Personal superannuation at 30 June 2013 – look through basis

	Cash	Term Deposits	Australian Equities	International Equities	Fixed interest and Loans	Investment Property	Others	Total
	(\$m)							
Superannuation master trusts *								
Superannuation Wraps	18,557	8,968	30,509	12,231	8,176	3,663	2,787	84,892
Superannuation master trusts (excl. Superannuation Wraps)	35,562	14,133	75,113	38,402	40,580	13,122	6,534	223,445
Sub-total superannuation master trusts	54,119	23,101	105,622	50,633	48,757	16,785	9,320	308,337
SMSFs								
Wrap platforms held by SMSFs	5,684	6,720	15,008	1,779	1,705	6,383	1,909	39,189
Directly held by SMSFs	67,634	79,950	178,558	21,176	20,384	75,939	22,712	466,353
Sub-total SMSFs	73,318	86,670	193,566	22,955	22,088	82,322	24,622	505,542
Total Personal Superannuation*	127,438	109,772	299,188	73,587	70,845	99,107	33,942	813,879

5.2 Ageing population

The population structure is clearly ageing and there is a large group of Baby Boomers now moving inexorably into retirement. This will, over time, see a growing demand for defensive assets, but there are a number of factors that will affect this demand.

The current group of retirees still have significant life expectancies and half can expect to live beyond these life expectancies. They therefore still have long investment horizons and the need to dedicate a material proportion of their assets to growth assets in order to ensure that their income is maintained against inflation.

Unlike superannuation members in the accumulation phase, they also have a need to provide income and capital certainty over the short to medium term. This need, particularly in the SMSF segment, has generally been met via cash and term deposits. The rates on offer are good and for TD's have generally been above inflation – and they have a government guarantee.

Fixed interest and hybrid securities are seen as riskier than TDs because their value is market linked and dependent on ruling interest rates and they do not have the government guarantee. Interest rate differentials have not been seen as sufficient to cover this additional risk. This may change with the reduction in TD rates which has taken place over the last two years – but the early trend has been for investors to re-enter the share market rather than reinvest maturing TD's.

The allocation of funds to cash, tiered tranches of TDs and growth assets has therefore been seen as optimal.

There are some signs amongst self-directed retirees and advisers to this segment to include fixed interest securities as part of a more balanced portfolio approach to long allocations, but this is unlikely to drive any big movements in the short term. Over time, especially as the average age of the retired population increases, this trend is likely to increase, but it is unclear as to the long term impact if deposit rates remain as attractive as they have been.

5.3 Bond market

5.3.1 *Why the market is small*

The corporate and government bond markets in Australia are very shallow. This appears to be both a demand and supply problem.

Australian governments have had little demand for borrowing so there is limited government paper although it seems that this will change over the next period because of ongoing projected deficits.

Australian companies have a ready market in which to raise debt, but have generally chosen in the recent past to go to overseas markets which they have found both cheaper and deeper. They have therefore obtained better prices at lower risk.

The investors, as already discussed, have found the prices offered generally unattractive when compared to bank deposits.

In summary, there is a fully functional market available, but both borrowers and investors have found rates not to be commensurate with risks. As the Baby Boomers retire, there will be an increased demand for fixed interest securities but the growth will be moderate.

5.3.2 *Would Australia benefit from a larger fixed interest market?*

Australian businesses would benefit from a larger demand for fixed interest securities. This would provide an alternate source of debt funding for their business growth. However, there do not appear to be any barriers for issuing these facilities at present so we suspect the market is small as a result of alternate facilities. If global interest rates increase, it is likely that there will be an increasing demand for domestic funding and the market might grow at that time.

The ASX has recently launched a facility to issue simple managed funds to complement other services such as equities and ETF's. It is possible that a fund manager will develop a bond portfolio and promote this to SMSF members. However, the take-up is likely to be small.

5.4 Annuities

Australian retirees to date have avidly avoided lifetime annuities although short term annuities have been used as they provide both guaranteed capital and income returns. The term annuities are competitors for tranches of TDs and their use will depend on the interest rates being offered on the respective products from time to time.

It is likely that, in time, lifetime annuities will also gain more traction. The reason is that they do not just offer a fixed interest return, but also provide an insurance element. Those dying early effectively subsidise those who live longer so the payments from these products exceed what can be obtained via pure investment products.

This insurance element is only attractive for older retirees. Younger ones consider the potential for 'losing' their investment on early death too high a price to pay for the long term certainty of income. The difference between the annuity payment and the returns from a TD or fixed interest instrument is not perceived to be high enough to compensate for the loss of capital on early death.

This differential, however, becomes much more attractive at older ages - over 80. The insurance element becomes a larger part of the annuity payment. We are therefore likely to see older retirees allocating at least a portion of their assets to annuities and some will incrementally allocate all their assets to these products and as their numbers increase, the market will grow. When this occurs, there will be an increased demand for fixed interest investments from the life companies supplying lifetime annuities.

Annuity products require fixed interest assets to back them. Insurers need to build carefully constructed fixed interest portfolios to match the annuity liabilities. Growth of the annuity market will therefore increase demand for fixed interest securities.

5.5 Project financing

The banking sector has participated strongly in the increasing demand for infrastructure and direct property investments through the larger superannuation funds. These assets are 'chunky' and investors have

generally sought to gear their participation with material proportions of debt. There is a continuing appetite for these investments and the associated debt.

The unanswered question is whether this debt will continue to be sourced via banks or whether it too will increasingly be sourced from superannuation funds or tradeable markets.

5.6 Future developments

The fixed interest market is likely to grow as the retired population ages and their average investment horizons shorten, but this will take some time. The attractiveness of the fixed income market will also depend on the rates issuers are prepared to pay in comparison to overseas raisings and investors are prepared to take in comparison to bank deposits.

The continuing demand for infrastructure and other large direct investments may also generate both a primary and secondary market for associated debt instruments.

Lifetime annuities will become more attractive in time as current retirees, especially the Baby Boomers, reach their 80's with a commensurate increase in demand for fixed interest securities.

Australia has a large pool of required infrastructure developments. It is clear that superannuation funds will be a major source of funding for these national developments over the next decade. A typical infrastructure purchase requires a combination of equity and debt. While funds will seek equity, the debt could be provided by domestic banks, superannuation funds or foreign providers of capital.

We consider that the Australian fixed interest market will grow quickly as infrastructure debt is developed.

Appendix E

Competition in retail banking

Deloitte Access Economics

March 2014

This report has been commissioned by the Australian Bankers' Association to inform the industry's consideration of issues. The report reflects the views of its authors only. The report and points made within the report do not necessarily reflect the views of the ABA or any individual bank.

Competition in retail banking

Australian Bankers'
Association Inc.

March 2014

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Glossary

ABA	Australian Bankers' Association
ABACUS	Association of Building Societies and Credit Unions
ACCC	Australian Competition and Consumer Commission
ADI	Authorised deposit-taking institution
AFR	Australian Financial Review
APRA	Australian Prudential Regulation Authority
ATM	Automatic Teller Machine
BBSW	Bank Bill Swap Rate
BIS	Bank for International Settlements
CIE	Centre for International Economics
COBA	Customer Owned Banking Association
CR	Concentration ratio
CUBS	Credit unions and building societies
DAE	Deloitte Access Economics
GDP	Gross Domestic Product
GFC	Global Financial Crisis
HHI	Herfindahl-Hirschman Index
NFC	Near-Field Communications
NIM	Net interest margin
OECD	Organisation for Economic Co-operation and Development
RBA	Reserve Bank of Australia
RMBS	Residential mortgage backed securities
SMH	Sydney Morning Herald

Executive Summary

The Australian economy has prospered over the last quarter of a century. In part, this can be attributed to the robustness and competitiveness of its financial system. Both of these factors have contributed towards improving consumer welfare.

The Global Financial Crisis (GFC) recently has disrupted the financial system, including retail banking. In particular, it has led to changes in the dynamics that influence the competitive environment arising from two main areas:

- international institutions adopting less aggressive strategies or withdrawing from the Australian banking industry as a result of developments overseas; and
- deterioration of securitisation markets, both in price and volume.

The GFC led to:

- a more risk-averse approach by investors, bankers and regulators; and
- some consolidation in retail banking through withdrawals, mergers and acquisitions.

Against this background, the Australian Bankers' Association (ABA) has commissioned Deloitte Access Economics (DAE) to undertake an independent review of the state of competition in the Australian retail banking sector (defined in this report as individual consumer's banking, excluding small business and farmers). If competition is operating well, this will deliver benefits to consumers and the economy more broadly, as it will drive efficiencies, lower prices and encourage innovation and choice.

There can be a trade-off between efficiency and stability. Policy makers have focused on supporting stability in recent years. There is now an opportunity for policy makers to consider whether competition could be improved further without undermining stability or creating distortions which have an adverse impact on the efficient functioning of the system.

Competition can take many forms. Financial institutions compete through many different means. Different business models will prevail in the market at various times, reflecting their strengths and weaknesses. As long as conditions allow different models to proliferate, there will be a competitive environment. For example, financial institutions of different sizes will have different advantages that allow them to compete effectively against each other.

The **cost of funds** is an important determinant of an organisation's ability to price competitively. Large banks have an advantage in securing funds in a cost effective manner as their credit ratings are higher than small banks on a stand-alone basis, and their ratings also benefit because they are deemed 'systemically important' and, as such, are believed to be more likely to receive government support in times of stress (Standard & Poors, 2012). However, there are differing views as to whether a systemically important bank would receive government support.

The reported **profits** of the major domestic banks have raised concerns about the effectiveness of competition in the sector. The performance of Australian banks since the GFC and global economic downturn has highlighted that they are well managed, and not excessively profitable.

“Our assessment is that, if you look at the rates of return on equity in our banks over a lengthy period of time, say 20 years, they are good but they are actually broadly in line with the listed company sector in general in Australia. I do not think it is obvious from that comparison that they are in some sense excessively profitable.”

- RBA Governor Glenn Stevens, 2012

There are a range of measures of competition. Guided by the Australian Competition and Consumer Commission (ACCC) merger assessment guidelines, we consider:

Market concentration: In transaction accounts, interest-bearing accounts, mortgages, personal loans and credit cards, the concentration ratios do not exceed ACCC thresholds. Thus, the level of concentration does not indicate any problems with competition despite the increase in concentration since the GFC.

Barriers to entry: Technology and globalisation have worked together to reduce the barriers to entry in all areas of retail banking in recent years, and are set to continue to do so in the future. Technology has reduced distribution costs, allowing low cost players to enter. Globalisation and policy changes have allowed overseas banks and non-banks to enter and compete aggressively.

However, some submissions to recent government inquiries have cited concerns that regulatory barriers could limit the level of competition in the market.

Availability of substitutes: There is a wide variety of products and suppliers in the Australian retail banking market. Recent policy changes and technology have made it easier to switch, both for individual products or bundles of products.

“In the more subdued post-GFC credit environment, competition remains keen and considerable switching is occurring.”

- Fraser, 2011

Innovation and product differentiation: Innovation in retail banking has taken a number of forms including using different distribution channels, different sources of funds and product innovation. Innovation has come from all parts of the markets. Along with the main incumbents, this has included, for example, innovation from non-ADI home lenders using capital markets to source funds, global banks using online distribution channels or non-financial institutions using technology to provide customers with new ways to access financial services (such as brokers or co-branding credit cards).

Implications for consumers

Compared to overseas, Australians are well served by their retail banking system. Australians have some of the highest levels of access to banking services and customer satisfaction in the world:

- over 99% of Australians have an account at a formal financial institution;
- Australia’s banking system is one of the five least-risky in the world (Liondis, 2014); and

- Australian banks rank fourth in the world in providing a positive customer experience (Capgemini and Efma, 2013)

Looking to the future

Based on the assessments of the level of concentration and market dynamics surveyed in this report, it can be concluded that there is no basis for serious concern about the level of competition in retail banking markets.

There will however be more benefits for consumers if more competition returns to the market. This can be expected as global markets and suppliers of funding continue to recover from the GFC. To date, the pace of this has been slower than expected and the extent of the recovery remains unclear. This has made it difficult for some participants, including those that have made extensive use of capital markets to fund their lending, to innovate and compete.

Yet, overall, the Australian banking system remains stable and competitive. Consequently, while it is appropriate for policy makers to review the competitive landscape, Australian consumers still have a very robust banking system by world standards, which continue to add to consumer welfare. This is illustrated by the ability of participants throughout the industry to develop and promptly adopt solutions using new technologies across the suite of retail banking products.

1 Introduction

Australia has prospered economically over the last quarter of a century. In a large part, this can be attributed to its robust and competitive financial system. Both of these factors have increased consumer welfare through improved efficiency and innovative products.

The retail banking industry in Australia is characterised by close competition between the major banks. Since the 1980s, competition has been further bolstered by smaller firms exerting significant competitive pressures.

Barriers to entry decreased following the financial deregulation of the 1980s and technological growth through the 1990s. This process allowed other authorised deposit-taking institutions (ADIs), foreign banks and niche players to more readily enter the retail market. Their competitiveness was also supported by the introduction and growth of new sources of funding – in particular, securitisation – through the 1980s and early 1990s (Australian Prudential Regulation Authority (APRA), 2000).

Competition within the sector led to positive outcomes for customers, including:

- more innovative product offerings and delivery channels;
- better value for money, as evidenced by decreasing net-interest margins from the 1980s through to the mid-2000s;
- improved access to credit, especially for groups such as first-home buyers and the self-employed;
- provision of no-cost and low-cost basic bank accounts; and
- extensive choice of products and providers.

The Global Financial Crisis (GFC) has disrupted the financial system, including retail banking. In particular, it has led to changes in the dynamics that influence the competitive environment arising from two main areas:

- international institutions adopting less aggressive strategies or withdrawing from the Australian banking industry as a result of developments overseas; and
- deterioration of securitisation markets, both in price and volume.

The GFC led to:

- a more risk-averse approach by investors, bankers and regulators; and
- some consolidation in retail banking through withdrawals, mergers and acquisitions.

Issues in global markets continue to have significant effects. Australian banks have been faced with some sources of funding being less available, and being offered at higher costs. In addition to intensified risk management, this has forced banks to restructure their funding arrangements and increased competition for deposits (Senate Economics References Committee, 2012). Higher funding costs have made it more difficult for players without sizeable balance sheets and/or strong reputations to compete as vigorously as before. These tightened conditions have led to consolidation within the market and the withdrawal of some players.

There is still close competition between the major banks. This is evident through the speed of their competitive response to price changes and technological developments (see Section 3.1). Other product markets and suppliers of funding have begun the process of recovery from the GFC. However, the pace of this has been slower than expected and the extent of the recovery remains unclear. This has led to discussion of whether regulatory intervention should be considered to enhance competition across the industry. In response to public concerns, the Government introduced the *Competitive and Sustainable Banking System Package*.

To assist public understanding of the level of competition that currently exists, the ABA has asked DAE to prepare a report examining the level of competition in retail banking in Australia. This report is not intended to serve as a comprehensive analysis. Rather, it considers key issues at a high level.

The report proceeds as follows. Chapter 2 discusses competition in the primary product markets in retail banking, as well as trends in competition in the retail banking sector more generally. It also explains that competitiveness is not the only important consideration for a financial system. It briefly discusses the importance of stability, and evidence on the trade-off between the two factors.

Chapter 3 explores the context of the retail banking sector in Australia. It considers some of the key trends which have shaped the industry in recent years. This includes discussion of changes in the cost of funds, and the extent to which this impacted on different parts of the industry. It discusses the profitability of Australian banks relative to those overseas and to other domestic industries.

Chapter 4 outlines the approach used by the Australian Competition and Consumer Commission (ACCC) to assess competition. It defines the relevant markets for retail banking products, and calculates concentration ratios, which are used as an initial indicator of the level of competition in the market. These are compared with other jurisdictions.

Chapter 5 contains a more detailed analysis of the most significant factors which contribute to the level of competition in retail banking. It concludes by discussing the value that the current system creates for consumers. Finally, it considers how competitive dynamics are likely to evolve in the future.

2 The role of competition

Competition is an important characteristic of a market, and drives better outcomes for consumers, such as lower prices and more choice. Competition for market share in retail banking, including from non-banks, improves consumer welfare through lower prices, more choice, better products and improved quality and access to services.

In the long term, consumer benefits are also crucially dependent on a stable and robust financial system.

2.1 Consumer welfare

Competition between suppliers is important to outcomes for consumers. The more competitive a market is, the more value producers must offer in order to attract consumers. These offerings can take a range of forms. In retail banking, this leads to a range of benefits:

“The Committee believes competition is good. It should result in intermediation services being provided at low cost, finance being directed to where it can be best used and consumers and small business being able to access it on fair terms.”

- Senate Economics Committee, 2011.

One of the ways in which producers seek to attract customers in a competitive market is through **lower prices**. By offering a similar product for a lower price, suppliers entice consumers to switch away from their existing provider. The ability to purchase the same goods for less has clear benefits for consumers. For example, in interest-bearing savings accounts, a depositor would benefit from being offered higher interest rates.

However, the willingness of customers to switch will depend on how sensitive they are to changes in price. In banking, consumers might be less willing to move to capture any gains because of the inconvenience of changing institutions. Their decision will also be influenced by switching costs. These issues are discussed in more detail in Section 5.2.

A competitive market offers consumers **more choices**. There are more suppliers and/or products available, allowing individuals to be more discerning and choose the products which are most appropriate to their needs. This is important in retail banking where some features are more important to some consumers than others. For instance, branch networks are important to some consumers, while others value comprehensive digital offerings more highly.

Competition also encourages **innovation** to retail existing customers and attract new ones. In a more competitive market, producers have more incentive to innovate. It provides them with the opportunity to differentiate their products, thus attracting a greater market share. This has benefits for consumers. Innovative products could be more convenient, cheaper and/or easier to use, thus creating more value. For example, recent competition in the

industry has led to the development of products such as mobile banking which increase accessibility and convenience for customers.

In retail banking, competition has also facilitated consumer **access to financial services**. In modern society, access to services can be very important. It can affect an individual's ability to purchase goods and services, access credit and even obtain employment. However, given the risks associated with some retail banking products, institutions may prefer not to provide products to all potential customers. Those who are least likely to be granted access to products are often the ones who are most disadvantaged.

Competition can drive wider accessibility, as well as industry and individual institutions' financial literacy initiatives. Institutions may seek to increase their market share by offering their services to a broader group of individuals. This can benefit those who are given access which they would not have otherwise been granted. For example, competition and innovation led to the creation of low-doc loans. This enabled more self-employed would-be homeowners to procure mortgages.

Competition is important. Ultimately, however, a market should be assessed by the level of benefits which flow to its users and consumers.

2.2 The stability/efficiency trade-off

As part of the broader financial system, stability is another desirable feature of retail banking. Ensuring the industry's overall stability is a key social and policy objective. The adverse consequences of financial instability to the wider economy were demonstrated through the GFC. As a result, stability has become a focal point for regulation at the expense of competition. However, there can be a trade-off between stability and competition.

There is broad agreement among competition agencies from OECD countries that the purpose of competition policy is to protect competition, not competitors.

- Organisation for Economic Co-operation and Development (OECD), 2011

Financial stability also is a key consideration for policy makers, especially in the wake of the GFC. Ian MacFarlane explained:

"To some, the word 'stability' sounds unexciting, and probably more so if I use the term 'economic stability'. But stability is not just an economic concept; it has a profound impact on the lives of people. Instability can create havoc, damage institutions, and leave a legacy from which some families and nations will take many years to recover."

- MacFarlane, 2006

Australia experienced considerably less financial instability than many countries in the GFC. Other factors – such as the Asian boom – played a part in this. The costs of financial instability ranged from triggering recessions to undermining confidence in the financial system. In the United States, for example, the GFC triggered a recession in which gross domestic product (GDP) fell 6%, and the unemployment rate almost doubled to 10.1%

during the crisis. The Federal Reserve Bank of Dallas estimated that the GFC cost the American economy between \$6-\$14 trillion and 40-90% of 2007 US output (Sheng, 2013). In 2013, despite economic recovery, actual GDP still was 4.6% lower than potential GDP (Center on Budget and Policy Priorities, 2014).

The research on the trade-off between these two characteristics can be distilled to:

- too much competition “reduces bank charter values and may increase incentives to take risks”. This does not imply, however, that low levels of competition are necessarily ideal – it “leads to inefficiencies and may add to the too-big-to-fail problem” (Ratnovski, 2013).

These two effects are reconciled at an “optimal” level of competition from a stability perspective. This occurs at a point where market concentration is neither too high nor too low.

The trade-off between competition and stability was summarised by the OECD:

“Competition and stability can co-exist in the financial sector... the results of empirical studies linking competition and stability are ambiguous, however. Structural and non-structural measures of competition are found to be both positively and negatively associated with financial stability, depending on the country and the sample analysed and the measure of financial stability used.”

- OECD, 2011

The retail banking industry in Australia has been subject to several shocks over recent years – in particular, the Asian Financial Crisis, GFC and the post-GFC effects. Despite this, the system has been praised for its overall resilience. This can be attributed to a number of factors: Australian banks are well managed, however, banking policy and strict prudential regulation have clearly played an important part.

There is general consensus that the regulatory focus on stability during the GFC was well founded and in the interests of the general population. However, with the crisis having passed (even if some of the effects linger), it is appropriate that this focus should be re-evaluated.

According to the Senate Economics Committee’s Inquiry in to Competition within the Australian banking sector:

The Australian Government, like those overseas, placed greater emphasis on stability than competition during this period. As the effects of the GFC pass, and regulators respond to the lessons learned from it, competition has heated up for deposits but not yet for loans. The Committee believes the time has come to again place more emphasis on boosting competition... allowing the benefits of competition to emerge without such a loss of stability is the role of the authorities.”

- Senate Economics Reference Committee, 2011

The OECD's report on Competition in Retail Banking and Financial Stability had this to say:

Encouraging new entry may therefore be better achieved in the longer run by reducing regulatory barriers: for example, by removing unnecessarily anti-competitive regulation and making the entry process as easy and inexpensive as possible, especially in markets where mega mergers have been allowed as an emergency measure.

- OECD, 2011

There can be a trade-off between efficiency and stability. Policy makers have focused on supporting stability in recent years. Post-GFC, there is an opportunity for policy makers to consider how to support competition. The challenge is to improve competition without undermining stability or creating distortions which have an adverse impact on the efficient functioning of the system.

3 Competition in retail banking in Australia

This chapter places the analysis of the current level of competition in retail banking in Australia in context.

Competition within an industry can take a number of forms. At a base level, firms compete in two ways – product and price. However, the exact nature and focus of this competition varies between industries. In retail banking, context is provided by examining business models, cost of funds and profitability.

3.1 Differing business models

In retail banking, competition to attract customers occurs through a number of means:

- price;
- product features;
- quality and access to services;
- innovative product offerings; and
- branding.

Between the larger banks, prices (i.e. interest rates, fees and charges) tend to be closely matched, with rate changes by one major quickly responded to by others (including smaller players). Over the last two years, for example, Reserve Bank of Australia (RBA) rate changes have been at least partly passed through by the four major banks in an average of nine days (DAE calculations based on media releases). This reflects how closely the competitors monitor each other and suggests competitive pricing. Given that the products tend to be matched on price, the major banks compete with each other by differentiating their products through other means (e.g. innovative products and quality of service).

Most small players price at a margin to majors and try to differentiate by service. Some smaller players may only focus on one product, as discussed below. Where this is the case, they tend to have lower overhead costs, e.g. because they have a less extensive physical presence to maintain. This is particularly true in some products which lend themselves well to online models, such as online savings accounts. Where institutions do operate these lower cost models, they may compete with the major banks on price. The major banks react to these competitive pressures by lowering their own prices to be in line with those charged by their competitors. The Wallis Committee noted that:

“Regional banks have been an increasingly important competitive force in recent years. In particular, along with credit unions and building societies, they have led the way on service, innovation and pricing on some products.”

- Wallis et al (1997)

Competition can take many forms. Financial institutions compete through many different means. Different business models will prevail in the market at various times, reflecting their strengths and weaknesses. As long as conditions allow different models to proliferate, there will be a competitive environment.

3.1.1 Price competition

As discussed above, retail banks in Australia compete on prices, with quick competitive responses between major banking competitors, and pressure exerted by niche players.

Analysis of competition tends to focus on price factors. This is partly because prices often are more easily observable and quantifiable than other indicators. In a more competitive market, prices charged to customers will be closer to the costs incurred by firms. The speed with which a firm reacts to price changes by competitors can also be an indicator of the level of competition. Depending on data availability, these dynamics can be formally tested using econometric or other modelling.

Price competition in financial services is clearly important to consumers, and a key element of competition between producers. However, in practice, measuring prices in banking – and thus, the level of price competition – is complicated:

- **products are bundled.** Many of the services offered by retail banking are complementary. Customers often value the convenience of centralised service. As such, individual institutions often offer bundled services to customers. This is generally coupled with bundled pricing. This can make it difficult to determine prices for single products within the bundle.
- **there are two-sided markets.** Banks are intermediaries between borrowers and depositors. Individual institutions have different models, under which costs may be recovered from depositors, borrowers, or a mixture of the two. On the other hand, some institutions only act on one side of the market, such as acquirers of credit card payments. Net interest margins are often used as a price measure which accounts for these factors. However, in practice, competition in retail banking is often assessed on a product market basis, where only a single rate applies. As such, higher prices in a given market might not, in and of itself, reflect less competition.

Even when banks and other lenders compete on price in a pure product, it can be difficult to determine the actual price charged. Standard published rates and fees can differ from those actually charged. Banks typically discount advertised standard variable mortgage rates by 50-70 bps for preferred (lower risk) customers. Similarly, promotions or differing non-price terms may not be captured in data.

Australian banks compete on price terms, quickly reacting to movements by competitors. In practice, it is difficult to assess price competition in individual product markets due to bundling and the two-sided nature of banking products.

3.1.2 Non-price competition

The retail banking industry in Australia competes on a number of non-price factors, including:

- product features;
- quality and access to services;
- innovative product offerings; and
- branding.

3.1.2.1 Product features

The features of product or sets of products on offer can attract customers to a specific institution. Product differentiation can also allow financial intermediaries to charge a premium to reflect the additional value customers gain.

Traditionally, one method that Australian banks have used to differentiate their products is through **bundling**. Many banking products are complementary. For example, a consumer will tend to get more value from a transaction account if it is linked with an interest-bearing savings account. By providing bundled goods, banks are able to provide more value to consumers by reducing their internal duplication and administration costs.

Many of the major banks offer bundled products to their clients. This is in keeping with their business models, which focus on comprehensive service offerings. The business rationale for selling bundled goods in retail banking has three main elements:

- customers value the complementary products;
- where customers have differing or diverging valuations for various products (for example, households who have mortgages are likely to value interest-bearing savings accounts less), bundling allows firms to gain more of the customer's business; and
- it allows for cross-subsidisation between products.

Other institutions have focused on selling individual products. Of the more recent entrants to the market, many have initially sold only one or two retail banking products, for example interest-bearing savings accounts and mortgages, such as NAB's UBank. The new entrants begin by making the features of one of these products attractive (either on price or non-price terms) relative to other players. This is sustainable in the long term if these players operate at a lower cost than full-service banks and other competitors.

3.1.2.2 Quality and access to services

Banks compete on service. This is particularly the case for smaller ADIs and non-banks that are not able to compete on price. Customer satisfaction surveys, such as Roy Morgan's monthly report *Customer Satisfaction – Consumer Banking in Australia* show that credit unions and building societies (CUBS) and smaller banks consistently outperform their major bank competitors in customer satisfaction. However, the surveys also show that banks are responding, raising the quality of their service, resulting in steadily increasing their satisfaction rating from around 60% to 80% in the decade to 2012, while the CUBS have maintained a 90% satisfaction rating.

For some retail banking products – particularly transaction accounts – consumers value the ability to conveniently interact with their financial institutions. This interaction may take many forms, such as via mobile apps, telephone, internet banking and face-to-face branch interaction. Consumer preferences over these are idiosyncratic. As such, institutions may compete by offering multiple platforms for interaction or prioritising one mode over others.

In transaction accounts in particular, physical presence, including ATM access is particularly important to consumers (ACCC, 2008). This is because consumers currently can only access cash in person and the use of other bank facilities, e.g. credit cards, for this purpose often incurs an additional cost. Banks compete with each other by providing these facilities in locations which are convenient to their customers. However, the importance of this has declined in recent times, due to technological advances. This is discussed in greater detail in Section 5.1.

A second element of providing access to services is producer willingness to supply. In most products, suppliers are indifferent as to the nature of their customers. Firms tend to sell indiscriminately to all willing customers so as to maximize revenues, and ultimately profits.

Retail banking products are unusual in that this is not the case. Most banking products involve the banks taking on risks. The levels of risk involved vary according to the characteristics of a particular customer. As such, banks may choose not to provide services in some cases.

Given the importance of retail banking products to facilitating purchases and financial inclusion, access to finance can be very important to individuals. This could be particularly true for those who might be considered high risk. For example, lower income individuals could value credit cards or personal loans very highly.

One means of competing in retail banking products is the level of access provided. Some institutions differentiate themselves by focusing on providing more exclusive products to higher net-worth customers with minimal risk. For example, this could include discounted mortgages. Others may differentiate themselves by offering their products to those who may not otherwise be able to access credit. Innovations in this field include, for example, low-deposit mortgages. These offerings are supported by products such as lenders mortgage insurance and funding from securitisation. This is explored in more detail in Section 5.3.

3.1.2.3 Innovative product offerings

Product differentiation can be an important method for producers of largely homogenous products to make themselves “different from the pack”, thus enticing more consumers. In recent years, innovation – particularly in technological offerings – has been a key aspect of this in retail banking.

Some institutions’ business models revolve around competing for consumers by seeking to be innovation leaders in the market place. The aim of this strategy is to create products and/or services which are valuable to consumers and sufficiently differentiated. In doing so, innovation leaders seek to capture new customers from competitors who do not offer the same products.

These leaders may obtain a “first-mover advantage”. Successful innovation may be attractive to customers, and it may be difficult for competitors to quickly develop similar offerings. This allows an innovative firm to quickly capture increased market share.

However, over time, innovations will be diffused, as other institutions leverage the available knowledge to meet the new consumer expectations. In order to retain their advantage, financial institutions operating under this model may need to:

- develop means of deploying these innovations at a lower cost;
- continually innovate; and/or
- put other measures in place to encourage retention of their customers.

As noted above, a key source of innovative models in retail banking in recent years has revolved around technological advances. This is because digital offerings have intrinsic value to consumers, as well as the potential to reduce bank operating costs. Consumers of retail banking products value the “anytime, anywhere” convenience offered by digital technologies. For financial institutions, it can mean a reduced reliance on labour and physical presence, as well as greater efficiencies.

Some institutions compete for consumers by seeking to be digital leaders in the market place, offering customers early access to new technologies. Historically in Australia, these players have tended to be foreign banks or niche players. For example, ING Direct, a foreign pure-play internet bank, was credited as being the first to allow customers to establish an account without the need to attend a branch or fill out physical paper-work in Australia. As noted in the House of Representatives report on competition in the banking and non-banking sectors:

“The Australian Bankers’ Association (ABA) agreed that foreign banks and the non-banking sector forced the banks to ‘accept reduced margins and to roll out new technology and new products, and to otherwise respond to competitive pressures.’”

- House of Representatives Standing Committee on Economics, 2008

However, major domestic banks are also sources of innovation. Examples include:

- the CBA’s recent developments of Facebook-based banking and NFC-based POS payments;
- The announcement of mobile contactless payment by Westpac in December 2013;
- ANZ have also unveiled several such services, this includes Fastpay™ and goMoney™;
- NAB’s first ‘smart store’ in Docklands, incorporating a number of intelligent self-service machines that interact with customers and their mobile devices to deliver the next-gen banking experience.

Innovation as a source of competition is discussed in more detail in Section 5.3.

However, initially establishing these offerings can be challenging and expensive, especially in retail banking products, where there is a high degree of regulation, extensive networks are often required and information security is particularly important. There is also a degree of risk which is inherently imbedded in designing and selling innovative products, given that

they may not have been commercially tested and consumer appetite cannot be guaranteed.

3.1.2.4 Branding

Another method which has been widely used to differentiate competing products in the Australian retail banking market is branding and marketing. This is an important means of attracting and retaining customers.

Trust in their bank is important to customers. Hence, a key aspect of branding is developing a reputation for stability, security and reliability. Well-known incumbents tend to have an advantage in this field.

Financial institutions can also use innovative marketing and branding to compete with others. This can include:

- discounting (e.g. ING Direct);
- re-branding or establishing a new brand (e.g. a “no-frills” subsidiary such as NAB’s UBank);
- campaigns in non-traditional mediums (e.g. CBA’s “Can” campaign); and
- targeted marketing through the use of data analytics (e.g. Wesfarmers credit cards).

Retail banking products have also been characterised by differing levels of disaggregation. Some institutions have integrated models, where the bank itself conducts end-to-end sales (i.e. product origination, distribution and management is all contained internally). The major banks are primary examples of this. Other organisations, such as credit unions, have adapted segregated models, under which parts of the process are contracted externally. For example, in mortgage products, mortgage brokers can be used for distribution, while aggregators and security dealers can be involved in packaging and managing risks off the originator’s balance sheet.

The availability of these different forms of models allows financial institutions of various sizes to compete, by providing a means for mitigating the importance of scale. It also creates more areas for competition; e.g. there could be competition between brokers, and competition between institutions for alliances with brokers.

3.1.3 Impact of regulation

Regulation affects bank structure and the activities banks can undertake. For example, responsible lending obligations prevent lending to some individuals who request loans, and prudential regulation (higher capital requirements) limits the attractiveness of more risky loans.

There is competition between APRA-regulated entities and other financial intermediaries (so-called shadow banking); regulation influences the level of shadow banking activity.

“Increased capital and liquidity standards for depository institutions and insurance companies will likely heighten the returns to shadow banking activity.”

- Pozsar et al, 2010

3.2 The cost of funds

Supply costs – in particular, the cost of funds – can be a significant determinant of the ability of any given player to compete effectively. If an institution faces relatively higher costs, they may not be able to price their products attractively.

There are several different sources of funds. The relative costs vary over time, according to factors such as:

- fluctuations in the business cycle;
- risk appetites;
- the availability of credit; and
- international developments.

Given that funding arrangements differ between institutions, variations in costs over time can influence the competitiveness of any given business model. It is important to consider the composition of funding sources – how these have changed over time, and how they vary between institution types and the causes of this variation.

Chart 3.1 shows how sources of funding have changed over time – particularly following the GFC. One of the key trends over the period has been an increased reliance on deposit funding.

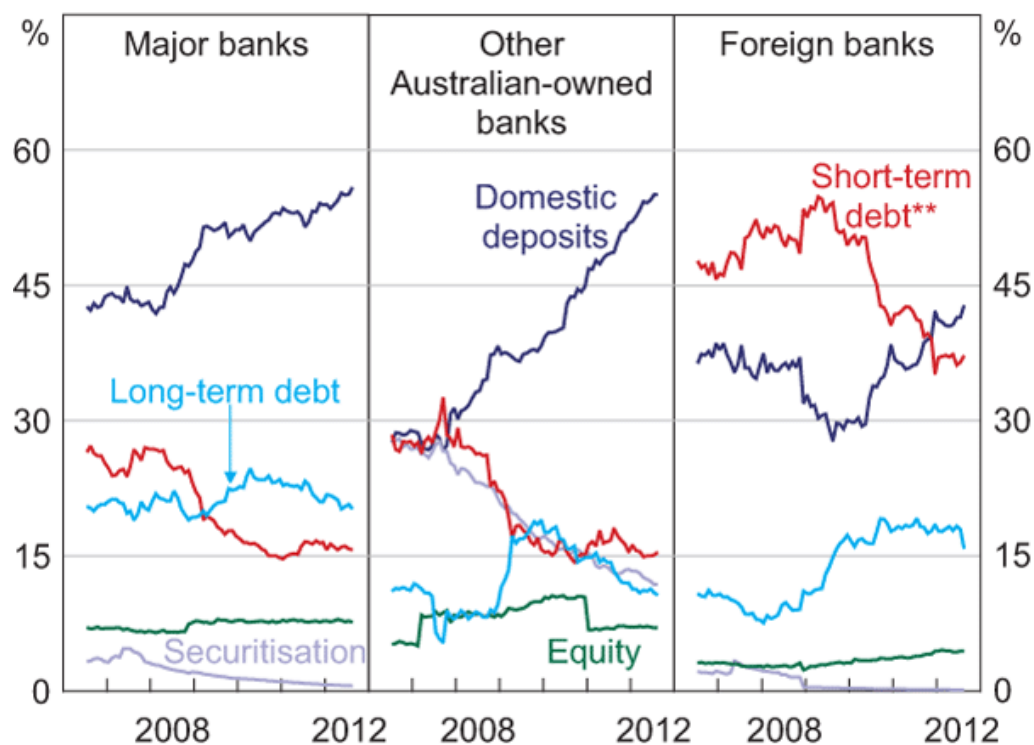
The greater importance of deposit funding has been reflected in a decline in the use of other sources – in particular, short-term debt and securitisation. This can be attributed to increased costs of obtaining some types of external funding, including through regulatory change. New regulatory standards such as the forthcoming Basel III liquidity requirements also have played a role in this shift.

Chart 3.1 illustrates how different types of institutions rely on different modes of funding. It illustrates that, whilst all banks operating in Australia are reliant on deposits, the extent of this reliance has changed in recent years:

- **non-major banks** have become much more dependent on domestic deposits. These are making up a larger portion of funding, as use of short-term debt and securitisation decreases. These institutions used securitisation to a greater extent than the major domestic banks. Since the GFC, however, securitisation issuance has diminished, and prices of issuing asset-backed securities have increased. More recently, conditions for non-major banks have improved, with securitisation market depth and pricing improving and banks being able to access unsecured term wholesale funding.
- **major banks'** sources of funding have also changed over the period. Securitisation funding decreased from an already low base to become a comparatively insignificant source of funding. Equity levels remained fairly steady. Long-term debt has become a more significant source of funds than short-term debt. Again, deposits have become more important over the period; however, the shift is less marked than it is for other Australian-owned banks.

- **foreign banks** have also shifted their primary source of funding towards deposits in recent years. This was a move away from short-term debt funding, including intra-group transfers.

Chart 3.1: Funding composition of banks in Australia – share of total funding



* Adjusted for movements in foreign exchange rates; not adjusted for mergers and changes in capital structure

** Includes deposits and intragroup funding from non-residents

Sources: APRA; RBA

Source: RBA, 2012.

Ultimately, the ability of institutions to vary their funding composition is dependent on their ability to access various sources of funding at affordable costs, as well as regulatory and equity/credit stakeholder expectations. In practice, the major banks have an advantage on this front. This is because they can access wholesale markets – both domestically and overseas – at a lower cost as a result of broader and stronger franchises, larger capital bases and higher ratings. The Association of Building Societies and Credit Unions (Abacus) (now the Customer Owned Banking Association, or COBA), in its submission to the Senate Inquiry on the Post-GFC Banking Sector, noted that:

“The only distinction I would make between us and the banks, and why the deposit cost is so critical for us, is that we do not have the same diversity of funding that the major banks have, for instance, and therefore we do not get to spread that cost—it is all largely in one bucket.”

– Degotardi, 2012.

Larger banks have the following characteristics which facilitate access:

- issuing debt on a wholesale basis is affordable given the scale of their operations and balance sheets;
- large banks that have their own risk models approved by APRA (specifically, those designated ‘advanced’ banks) can hold relatively lower capital reserves than smaller ADIs (even accounting for the 1% “higher loss absorbency” ratio imposed by APRA on “systemically important financial institutions” (APRA, 2013a)); and¹
- their credit ratings, which are higher than smaller banks on a stand-alone basis, and include an assessment of the level of government support resulting from their being deemed to be systemically important.

In Australia, securitisation developed largely as a means of funding for smaller non-bank lenders, notably non-ADIs, although covered bond issuance is effectively only practical for large banks. Since the GFC it has diminished in importance. Types include:

- **asset-backed securities**, under which loan originators package loans and sell them on to other parties, effectively taking them off balance sheet; and
- **covered bonds**, under which originators issue bonds against assets which are specifically quarantined so that, in the event of insolvency, they can only be used to meet the bond liability.

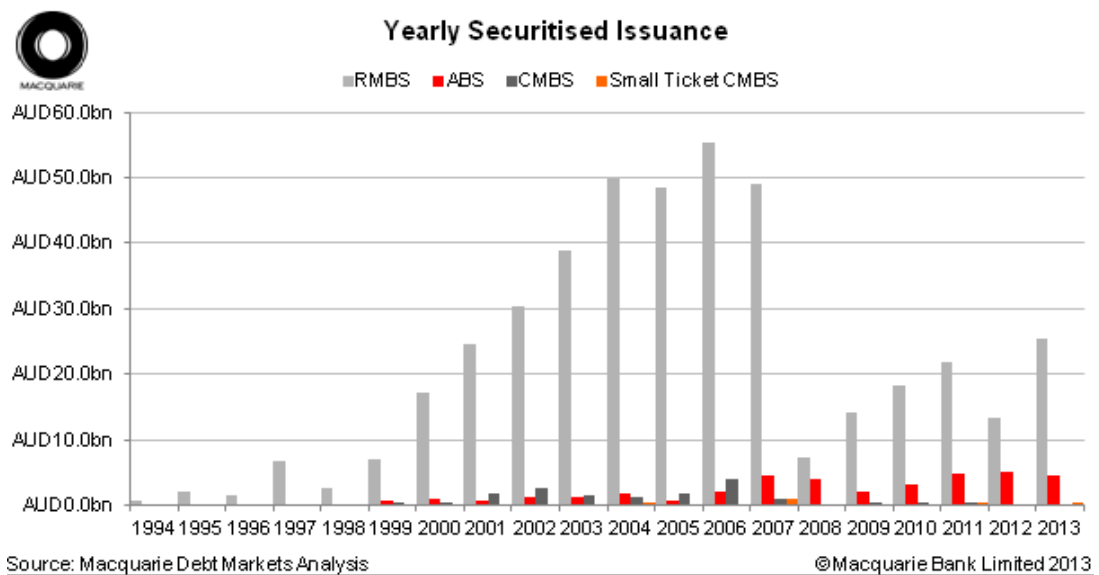
As shown in Chart 3.1, smaller lenders have tended to use asset-backed securities more heavily than major banks. Covered bonds, which were only permitted in Australia since October of 2011 (RBA, 2012a), have been issued by larger banks, with approximately \$50 billion of issuance since introduction. Robertson and Rush (2013) attribute this to “their higher credit ratings, given their dedicated collateral backing, and the expanded investor base to which [they] appeal”. However, the use of covered bonds as a source of funds is limited to 8% of Australian assets by legislation; as such, there is likely to be an upper limit on growth (Australian Prudential Standards 121-7).

Asset-backed securities – in particular, residential mortgage backed securities (RMBS) – were widely used pre-GFC. However, issuance of RMBS collapsed in the GFC, as can be seen in Chart 3.2. While issuance has increased recently, with a temporary setback when covered bonds were introduced in 2012, it remains substantially below pre-GFC values according to the Reserve Bank of Australia (Robertson and Rush, 2013).

¹ According to requirements first set out in Basel II, ADIs are able to determine capital reserve requirements held for regulatory purposes, that is, calculate their capital adequacy ratio, according to one of two methods:

1. a standardised (default) method (the *standardised method*) or;
2. an advanced, model based approach which is more aligned with the risk profile of individual ADIs (the *internal ratings based (IRB) or model-based approach*). APRA approval is required for ADIs utilising this method.

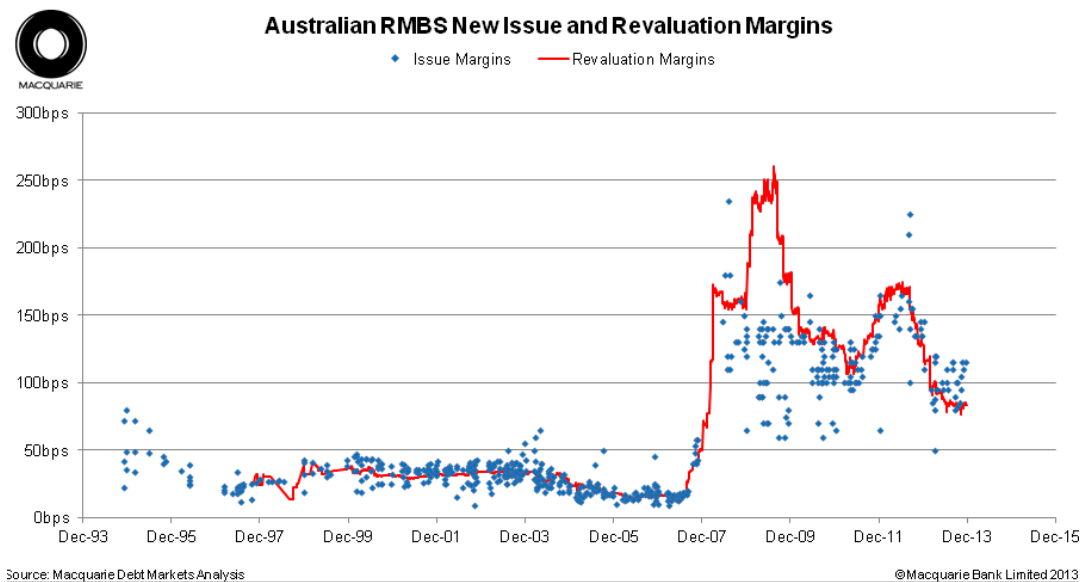
Chart 3.2: Securitised issuance, Australia, 1994-2013



Source: Australian Securitisation Forum, 2013

Issuance costs also rose, and this harmed the ability of financial institutions which were heavily reliant on these instruments to compete (Chart 3.3). Typically, RMBS were issued at around 20-30 basis points (bps) over the benchmark bank bill swap rate (BBSW) immediately prior to the GFC. Currently, even the highest-rated issues are yielding around 85bps over swap.

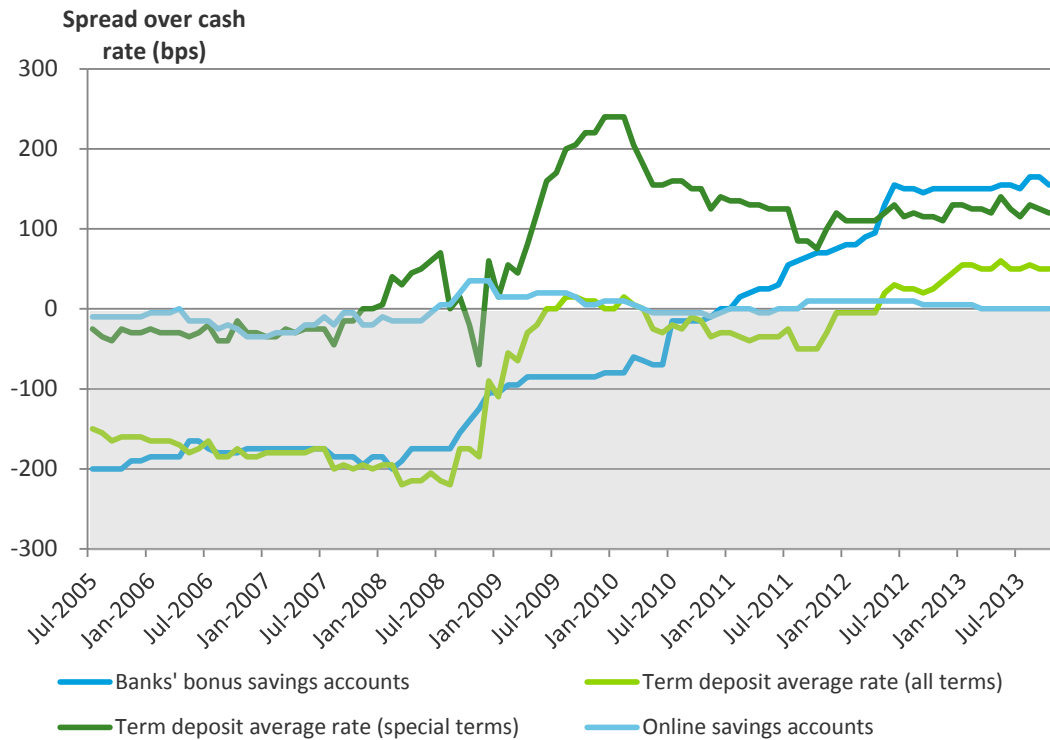
Chart 3.3: Australian RMBS new issue and revaluation margins



Source: Australian Securitisation Forum, 2013

The increasing reliance on deposits as a source of funding has intensified competition for deposits, resulting in a rise in deposit rates. This has led to an increase in the average cost of new deposits relative to the cash rate (Chart 3.4).

Chart 3.4: Interest rate spreads on savings accounts and term deposits

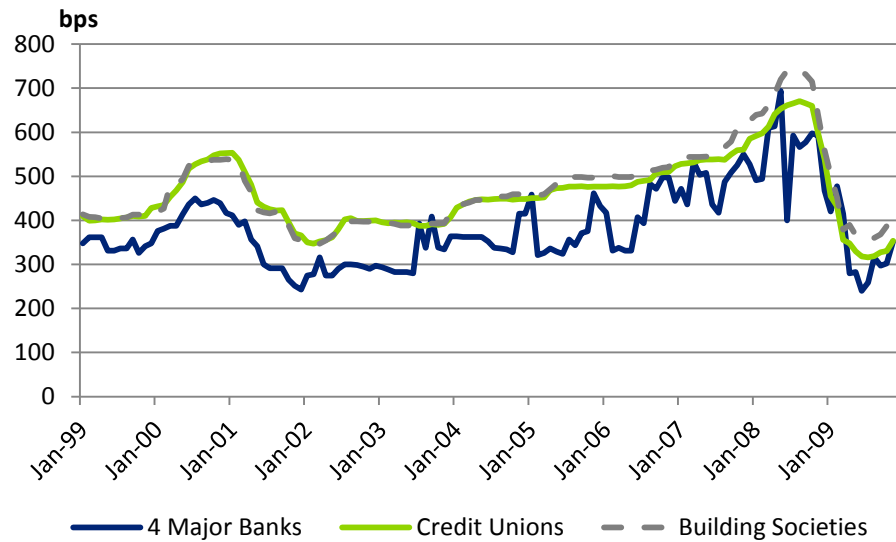


Source: RBA, 2013; DAE calculations

The average rate on banks' term deposit specials is more than 100 bps above market rates for debt of equivalent terms, compared with an average rate 60 bps below before the GFC. Bonus savings accounts are more than 150 bps above the cash rate. This reflects increased competition for funds forcing ADIs to pay customers more for deposits.

Chart 3.5 illustrates the average interest rate for 30-day term deposits over \$10,000. The interest rates offered by credit unions and building societies were typically higher than those offered by the major banks. However, the major banks are now offering rates comparable to those offered by credit unions.

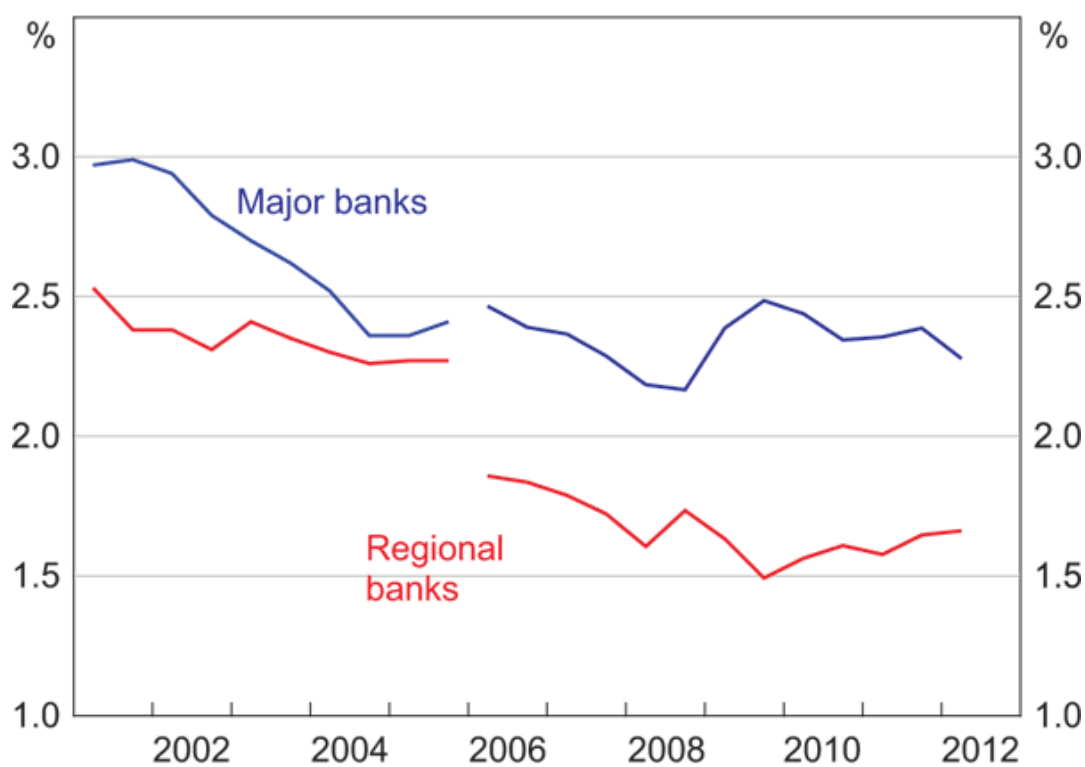
Chart 3.5: Average term deposit rates (\$10,000 for 30 days)



Source: CANSTAR CANNEX as cited in Deloitte Access Economics (2012).

Ultimately, increased competition for funding combined with price competition has led to net interest margins (NIMs) reducing significantly over time. A differential of over 450 bps percentage points at the start of the 1980s has almost halved, with NIMs under 250 bps since 2005. However, the gap between the major banks and other banks has widened in recent years, as can be seen in Chart 3.6. Between 2010 and 2012, major bank NIMs decreased to around 225 bps, and they remain at this level in 2013.

Chart 3.6: Banks' net interest margins (domestic operations; half-yearly)



* From 2006 data are on an IFRS basis; prior years are on an AGAAP basis
Sources: RBA; banks' annual and interim reports

Source: RBA, 2012.

In conclusion, the cost of funds has risen disproportionately for smaller players relative to major banks. This is a result of multiple factors, including:

- smaller players' reliance on securitisation and subsequent shift in their funding mix towards deposits;
- a market view that small players are more vulnerable to shocks due to their smaller balance sheets;
- implied government support for major banks, based on systemic importance;
- difficulties in accessing wholesale markets at a competitive cost of funds; and
- increased competition for deposits.

As noted by the RBA,

"The available evidence suggests that, in aggregate, the increase in the regional banks' funding costs since the onset of the financial crisis has been larger than that experienced by the major banks. This reflects the fact that smaller banks have experienced a larger increase in funding costs and have made a larger shift in their funding mix towards deposits."

- RBA, 2012

Regulations which discriminate between banks also have a role to play in the differential between players.

- For example, in mortgage markets, “standardised” banks (generally smaller institutions) are required to hold larger capital reserves against loans than “advanced” banks. This effectively means that they are required to fund the same asset at a higher rate, thus incurring additional costs.
- A 1% “higher loss absorbency” ratio imposed by APRA on “systemically important financial institutions” (i.e. larger institutions), which will be introduced in 2016 will reduce the difference.

The cost of funds is an important determinant of an organisation’s ability to price competitively. Large banks have an advantage in securing funds in a cost effective manner, as major banks’ credit ratings, which are higher than small banks on a stand-alone basis, benefit further because they are deemed “systematically important” and are believed to be likely to receive government support in a stress (Standard and Poors, 2012). This can be offset by, for example, their higher distribution costs compared to some other providers. This advantage in the cost of funds has been exacerbated by the GFC.

3.3 Bank profits

Australian major banks are relatively profitable compared to other banks in the developed world. The report of the Senate Inquiry into competition in the Australian banking sector noted that “even during the period of the GFC, when the real economy slowed down markedly, the profits of the major banks held up well... their very high profits are ultimately paid for by households and small businesses. They are also a reflection that competition is not as keen as it should be” (Senate Economic References Committee, 2011). This raises the question of whether increased financial stability may come at a cost to consumers.

3.3.1 Bank profitability

High profitability does not, in and of itself, equate to low levels of competition and contestability within a market – indeed, it should attract new players. Similarly, it does not necessarily lead to worse outcomes for consumers. As effectively run financial institutions operating within a resilient financial sector in a growing economy, it can be expected that Australian banks should be profitable. Sustained high profitability could be the result of factors which are not detrimental to consumers. For example, it could be the result of productivity gains from technological advances being captured for shareholders.

3.3.2 Comparisons of profitability

Comparisons with returns on equity internationally are difficult and can be flawed. Returns on equity are reported for an entire institution, rather than one of the sectors it operates in. The returns arising from retail banking arms cannot be separated from other parts of bank activities, such as commercial and investment banking and non-banking activities.

Regardless, on a pre-crisis basis, the RBA considered that major Australian banks’ returns on equity were comparable to those in other countries. Following the GFC, it is difficult to directly compare profits between Australia and these other countries. As noted by then

Treasury official, Jim Murphy, in response to questioning by the Senate Economics Committee:

“The traumas that other countries have had with their banking systems, to me, probably reflects the market and that they are being reasonably well run. We have had strong prudential regulation. The banks came through the GFC in a very strong position and that means that the whole ADI sector— I am not saying just the majors. One would think that you have got to get some benefit out of that.”

- Murphy, 2012

In the period leading up to the GFC, Australian banks’ returns on equity and assets, as illustrated in Table 3.1 and Chart 3.2 respectively, were towards the upper end of the range. Since the GFC, bank failures, lending losses and recessions in other countries in many cases have reduced the profitability of overseas banks. This is largely attributable to much lower lending losses incurred by banks in Australia compared to countries that experienced significant declines in profitability.

Table 3.1: After-tax return on equity (%)

Country	2007	2008	2009	2010	2011
Australia	17.8	13.7	9.5	13.1	14.1
Brazil	26.6	8.5	14.3	13.0	13.3
Canada	9.7	10.4	8.1	18.1	25.3
China	20.4	18.2	18.6	19.7	13.0
France	5.8	-12	6.4	9.1	3.4
Germany	16.1	-11.6	-4.3	2.3	0.7
India	17.1	14.1	15.7	15.4	14.0
Italy	9.7	5.6	2.5	3.1	-11.3
Japan	5.7	-3.3	5.1	6.2	5.6
Russia	14.7	8.9	3.7	8.3	10.0
Spain	15.9	12.1	9.9	7.7	-0.3
Sweden	22.6	15.5	14.9	7.1	11.0
Switzerland	1.9	-42.7	-4.0	5.9	8.6
United Kingdom	22.2	1.4	-1.6	-0.6	3.8
United States	8.6	1.4	1.4	5.9	7.3

Source: World Bank, 2013

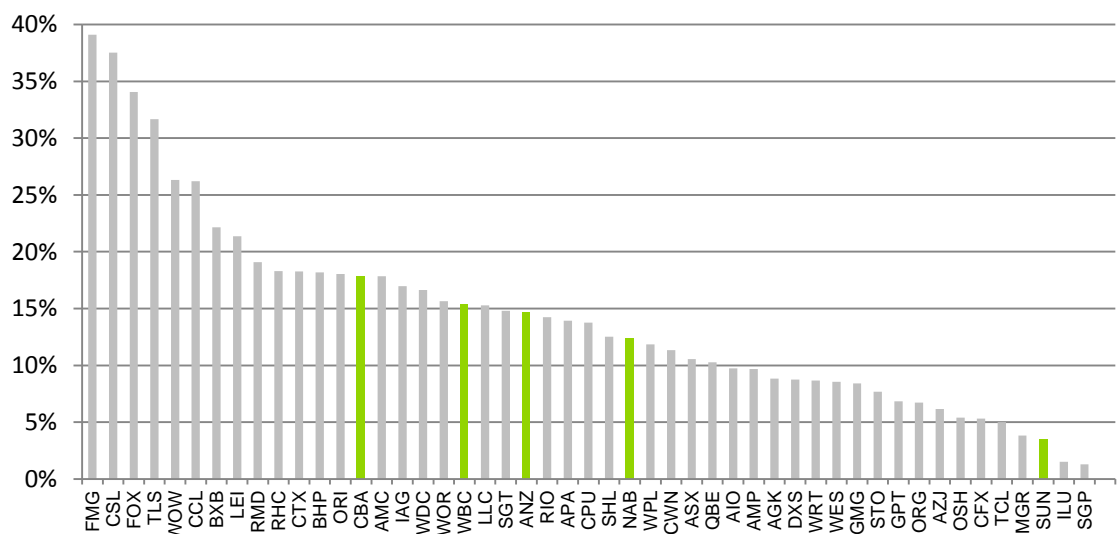
Table 3.2: Pre-tax profitability of major banks (% of total assets)

Country	Average (2000-07)	Average (2008-11)	2012
Australia	1.58	1.07	1.18
Brazil	2.23	1.61	1.50
Canada	1.03	0.80	1.07
China	1.62	1.56	1.83
France	0.66	0.29	0.19
Germany	0.26	0.06	0.09
India	1.26	1.34	1.45
Italy	0.83	-0.03	-0.06
Japan	0.21	0.36	0.56
Russia	3.03	1.46	2.39
Spain	1.29	0.94	0.08
Sweden	0.92	0.56	0.68
Switzerland	0.52	-0.05	0.03
United Kingdom	1.09	0.19	0.20
United States	1.74	0.42	0.96

Source: BIS, 2013

Ranking the top 50 companies in Australia (based on market capitalisation) by their return on equity shows that the four major banks are mid-ranked: CBA ranks 14th, Westpac 19th, ANZ 22nd and NAB 27th, with Suncorp ranking 48th.

Chart 3.7: The top 50 companies (by market capitalisation) RoE for 2013



Source: ABA, 2014

The reported profits of the major domestic banks have raised concerns about the effectiveness of competition in the sector. The performance of Australian banks since the GFC and global economic downturn have highlighted that they are well managed, and not excessively profitable.

“Our assessment is that, if you look at the rates of return on equity in our banks over a lengthy period of time, say 20 years, they are good but they are actually broadly in line with the listed company sector in general in Australia. I do not think it is obvious from that comparison that they are in some sense excessively profitable.”

- RBA Governor Glenn Stevens, 2012

Australian retail banks are amongst the most profitable in the developed world. In part, this reflects other foreign banking industries moving down the league ladder due to bank failures in the GFC and the recessions that followed, a supportive financial system and stronger economic conditions than other countries in recent years and institutions that did not have to absorb the costs of significant impaired loans and bad lending practices.

However, profits by themselves do not provide a useful measure of competition. Competition needs to be assessed directly, by, for example, seeing how easy it is for others to enter into the market to compete with the incumbents.

4 Preliminary evidence of competition in retail banking

Competition within a market can take many forms. At a base level, it can be broken down into two categories – competition between existing players, and potential competition from new entrants.

There are several methods and metrics which can be used to assess the level of competition in an industry. In Australia, the most commonly used is the ACCC approach, as outlined in the Merger Guidelines (ACCC, 2008b) (Appendix B).

Under this approach, assessments of competition begin by defining the relevant market. Once markets have been defined, initial concentration ratios are calculated. The purpose of this calculation is to assess whether further competition analysis is warranted; if concentration ratios fall below a pre-defined cut-off, then the ACCC is less likely to analyse the situation further. However, if further assessment is warranted, it then considers a series of other factors which are indicative of the level of competition in the market. These are based on the *Competition and Consumer Act*. This report examines the elements of this approach that are relevant to retail banking markets.

4.1 Defining markets

Defining the relevant market is a key element of analysing competition. As noted in the ACCC's Merger Guidelines:

"Section 50 of the Act requires that a substantial lessening of competition occur in a substantial market for goods and services in Australia, or a state, territory, or region of Australia. Accordingly, in assessing [the level of competition], the ACCC will examine the competitive impact of the transaction in the context of the markets relevant..."

- ACCC, 2008b

How a market is defined can determine the outcome of a competition analysis. Narrower markets are more likely to be assessed as being less competitive.

The competitiveness of any given financial institution will differ between products, reflecting varying business strategies and historical incumbencies. Given these variations within the sector, it is prudent to assess the level of competition in each individual product category. This can then inform an overall discussion of the level of competition in the retail banking market in Australia.

In recent analyses, the ACCC has defined retail banking markets as including personal banking markets and business banking markets. This analysis focuses on personal banking, which, according to the ACCC, has the following product dimensions (ACCC, 2008):

- transaction accounts;
- deposit/term products;

- credit cards;
- home loans;
- personal loans; and
- hybrid personal loans (margin loans).

As noted above, the dimensions of a market may vary geographically. For example, hairdressers only compete within a suburb or local region, whereas online retailers compete with each other nationally.

To assess whether there was a geographic element to these markets, the ACCC considered the importance of physical presence (including branch and Automatic Teller Machine (ATM) networks) to consumer choices of provider and the geographic scope of decision making. They found that – with the exception of transaction accounts – competition for all of the products above occurred on a national scale. While competition for transaction accounts was assessed as local, the ACCC noted that price competition in the market was national.

Following from these assessments, this report will look at competition in the following markets:

- transaction accounts;
- interest-bearing savings accounts (including term deposits);
- mortgages;
- personal loans; and
- credit cards.

Retail banking markets provide a range of products. Competition occurs on a product-by-product basis in a national market. Some firms compete in all markets, while others specialise.

4.2 Concentration ratios

A starting point in analysing competition in any industry is looking at concentration ratios. This is a useful indicator of the level of market power which can be exerted in the industry. A more concentrated market is likely to be less competitive.

Many different measures of concentration can be used. Some examples include basic CR(n) ratios, such as Four-Firm Concentration Ratio and Eight-Firm Concentration Ratio, which measure the market share of the four and eight largest firms in a market respectively.

The measure preferred by the ACCC is the Herfindahl-Hirschman Index (HHI). This calculates market concentration in an industry by summing the squared market shares of all (or the top 50) firms in the market. Mathematically, this is defined as:

$$HHI = \sum_{i=1}^{i=50} (\text{market share}_i)^2$$

The significance of using an HHI is that it provides greater weight to bigger firms, meaning that the measure becomes larger if some firms are substantially larger than others.¹

4.2.1 Concentration in Australian retail banking

Table 4.1 below shows the HHIs which have been calculated for the retail banking products mentioned above, on a national basis, using APRA's *Monthly Banking Statistics* data. They only include banks, due to a lack of disaggregated data for non-bank ADIs and other financial institutions. However, the calculations cover over 90% of the market.² As it is on an institutional basis, it does not account for potential capital market competition.

Table 4.1: Concentration ratios (banks only)

Market	HHI - 2007		HHI - 2013	
	Score	Flag? ³	Score	Flag?
Transactions ⁴	1505	✗	1828	✗
Interest-bearing savings ⁵	1505	✗	1828	✗
Mortgages ⁶	1535	✗	1908	✗
Other personal loans ⁷	1428	✗	1904	✗
Credit cards ⁸	1750	✗	1962	✗

Source: APRA data, DAE estimates

The HHI cut-off of 2000 is provided in the 2008 Guidelines. Table 4.1 shows that concentration levels in retail banking have increased since the onset of the GFC. This is due to a number of factors, including acquisitions and withdrawals from the market. Given that APRA's statistics are provided at an institutional level, it does not account for intra-brand

¹ The HHI is computed by taking the market shares of the firms in the market, squaring them, and then summing the squares. Thus, the HHI measure of pure monopoly is 100², or 10,000.

² Estimated upper bounds for HHIs for the entire market are also provided in footnotes.

³ The ACCC benchmark criteria for further analysis, or a "flag", is HHIs over 2000, as set out in the ACCC Merger Guidelines (2008)

⁴ This covers 94% at the market (measured by 2013 "call/on demand" deposits on Quarterly ADI Performance). If all of the market was included, the maximum that the HHI could be using available data is 1843

(Bank HHI + Market share²_{all building societies} + Market share²_{all credit unions} + Market share²_{all mutuals}).

⁵ This covers 92% at the market (measured by 2013 term deposits on Quarterly ADI Performance). If all of the market was included, the maximum that the HHI could be using available data is 1851 (calculated as above).

⁶ This covers 93% at the market (measured by 2013 total outstanding housing loans on Quarterly ADI Performance). If all of the market was included, the maximum that the HHI could be using available data is 1929 (calculated as above).

⁷ This covers 99% at the market (measured by 2013 "other loans" outstanding on Quarterly ADI Performance). If all of the market was included, the maximum that the HHI could be using available data is 1905 (calculated as above).

⁸ Calculated using outstanding balances on banks' books only. This covers 99% at the market (measured by 2013 "other loans" outstanding on Quarterly ADI Performance). If all of the market was included, the maximum that the HHI could be using available data is 1963 (calculated as above).

competition. As such, concentration ratios are likely to be overstated to the extent that brands within the same institution compete with each other. However, using the currently preferred HHI metric, none of the products have concentration ratios which are sufficiently high to warrant further assessment, as they are all under the ACCC threshold of 2000.

This suggests that the retail banking market is fairly competitive. Regardless, concentration ratios should only ever be considered as indicative. A robust assessment of competition requires a more complete analysis. As such, Chapter 5 considers particular factors which are influencing the dynamics of competition in retail banking.

Concentration ratios are used as an initial indicator of the level of competition in a market. In transaction accounts, interest-bearing accounts, mortgages, personal loans and credit cards, the concentration ratios calculated do not exceed ACCC thresholds. This suggests that these markets are competitive, if less so than before the GFC.

4.2.2 International comparisons

Table 4.2 presents measures of bank concentration (HHIs) for credit institutions in European jurisdictions. Declines in concentration over time are consistent with major institutions losing market share. “Credit institutions” are defined by the European Central Bank as “an undertaking whose business is to receive deposits or other repayable funds from the public and to grant credits for its own account” (European Central Bank, n.d). These statistics do not separate out the retail banking sector, or retail banking product markets more specifically. Thus, the HHIs in Table 4.2 are calculated differently to those calculated for Australia in Section 4.2. Notwithstanding the qualifications set out above, concentration ratios in Australian retail banking are higher than those in most European countries.

Table 4.2: Bank concentration in the European Union (HHIs), 2007-2011

Country	2007	2008	2009	2010	2011
Austria	527	454	414	383	423
Belgium	2,079	1,881	1,622	1,439	1,294
Denmark	1,120	1,229	1,042	1,077	1,192
Finland	2,540	3,160	3,120	3,550	3,700
France	679	681	605	610	601
Germany	183	191	206	298	317
Greece	1,096	1,172	1,184	1,214	1,278
Ireland	700	800	900	900	800
Italy	328	307	298	410	407
Luxembourg	316	309	310	343	346
Netherlands	1,928	2,168	2,032	2,052	2,061
Portugal	1,098	1,114	1,150	1,207	1,208
Spain	459	497	507	528	596
Sweden	934	953	899	860	863
United Kingdom	509	370	360	424	523

Source: ECB, 2012.

4.2.3 Implications for competition

Since the GFC, ex-ACCC head Graeme Samuels had publicly stated that some of the mergers that took place may not have been allowed if policy makers had not elevated financial stability above competition (ABC, 2009).

However, as noted above, the level of concentration in retail banking in Australia, while relatively high still is below the ACCC threshold and, therefore, is not prima facie a cause for concern about the level of competition.

The level of concentration is also partially the result of intentional policy design. The “four pillars policy”, for example, is intended to prevent rationalisation amongst the largest players, which limits the potential for market concentration to increase.

5 Dynamics of competition

As discussed in Chapter 4, concentration ratios should only be considered as an initial indicator of whether further analysis of the level of competition is required. The ratios calculated suggest that the industry is relatively concentrated by global standards, but not overly concentrated, as measured by the ACCC benchmarks.

Nevertheless, market competition is more dynamic and complex than concentration ratios alone can explain. This chapter contains a more nuanced analysis of the relevant factors which determine and contribute to the level of competition in retail banking, drawn from the ACCC's 2008 *Merger Guidelines*.

Based on these indicators of effective competition, the chapter assesses competition overall at a high level. It then looks to the benefits that the system creates for consumers. The chapter concludes with a discussion of how competitive forces are likely to evolve over coming years.

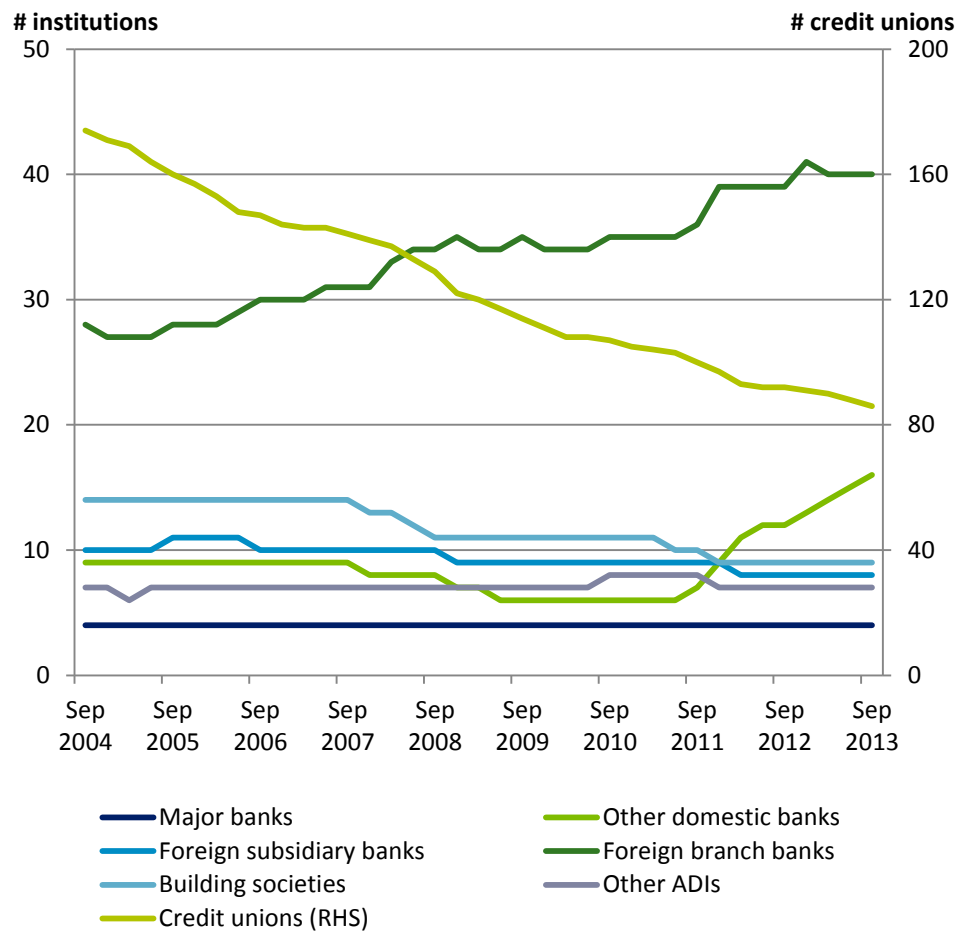
5.1 Barriers to entry

The height of barriers to entry – and exit – is an important factor which can affect levels of competition over time. The entry of new firms increases the level of competition in an industry. If there is a credible threat of new entrants, existing firms are less likely to exercise any market power which they might have. This is because, e.g. if they raise prices, they may be faced with a new competitor who sells at a lower cost, thus attracting existing customers away.

However, if there are significant barriers to overcome before a new player can enter the market, potential new entrants will be discouraged. This will slow and/or prevent these players from entering the market. Similarly, if it is costly or difficult to leave the market, the risks of entry increase, which will discourage players from joining in the first place. Thus, high barriers to entry or exit, by changing incentives for new players, enable existing institutions to exercise market power.

There have been a number of entries to, and exits from, the market in recent years. Chart 5.1 shows there are a large number of players in the industry, but consolidation continues, particularly between credit unions. However, new banking licenses are still being issued, with seven new entrants over the last 8 years. This suggests that, while barriers to entry and exit may exist, they are not insurmountable. While some European banks have exited the market, Asian banks are expanding their presence in commercial and investment spheres, and may consider a move to retail in the future.

Chart 5.1: Number of ADIs, 2004-2013



Source: APRA, 2013

Even in concentrated markets, low barriers to entry and ease of exit can ensure robust competition. In Australian retail banking, technology and globalisation has reduced these barriers in recent years and will continue to do so. However, due to its important role in the economy, retail banking is more regulated than other industries. This favours the incumbents.

5.1.1 Scale

Entry to retail banking markets could occur at three different levels:

- entry of existing players to new sub-markets (e.g. a savings-only institution who moves into mortgage markets);
- entry of players with an existing banking presence into the retail banking market (e.g. foreign banks or non-ADIs with existing asset bases entering the Australian market); and
- entry of new players without existing banking presence into the market.

Providing retail banking services at any level tends to require access to a substantial balance sheet. Establishing this from scratch can be difficult. Historically, Australian ADIs

were built on equity, such as customer ownership and mutualisation. However, recent rationalisation in the mutual sector suggests that this path may be difficult to follow in current circumstances.

As such, scale can be a significant barrier to entry for “fresh” new players. In practice, it appears that new entrants are more likely to have established balance sheets. This could be from non-financial operations, or from existing financial operations overseas. One particular strategy which has been successful in recent years is staged entry. For example, Virgin Money began by offering credit card products in 2003. They then moved into mortgage products in 2008 (FirstFolio, 2014).

5.1.2 Regulatory barriers

Retail banks – and the institutions that provide these services – underpin the financial system. Maintaining the stability of these institutions is thus an ongoing high-order objective for regulators and governments.

To maintain stability and confidence, the Australian system has established barriers to entry into the system. These are aimed at ensuring that the market participants are prudentially sound and have the skills, expertise and incentive to manage their institutions appropriately.

These barriers were relaxed in the 1980s and 1990s, with the most notable change being allowing foreign banks to enter the market. However, significant barriers still exist, including but not limited to:

- costs and requirements associated with **licensing** and related conditions;
- ongoing regulatory burdens and **compliance costs**;
- increasing **prudential standards**, such as Basel III; and
- the need to obtain approval from the Treasurer for **ownership** in excess of 15%.

Some submissions to recent government inquiries have cited these factors as limiting the level of competition in the market. One potential new entrant, FirstMac, a non-ADI operating as a specialised home loan lender and servicer, claimed that it wished to enter retail banking, but had been prevented from doing so by regulatory barriers:

“Over the past three years FirstMac has actively sought access to an ADI license either through establishment of a new start-up license or alternatively through strategic alliance and equity investment in an existing ADI licensed entity.

A significant barrier to entry has been the ownership of FirstMac Group which is 100% held by private family interests. Legislation prevents an individual from owning greater than 15% of an ADI. It is understood that this requirement is in place to facilitate capital raising if required by that ADI. This appears inconsistent with the licensing of Mutuals which by their membership design have numerous owners but limited capital raising capability. In contrast FirstMac Group has limited owners but far greater capital raising capacity.”

- FirstMac, 2010.

Similarly, the Commonwealth Bank noted regulatory barriers relating to ownership which could dis-incentivise both entry and exit:

“The key barriers to exit are the legislative requirements that a shareholding in an Australian financial sector company in excess of 15% requires the approval of the Treasurer under the Financial Sector (Shareholdings) Act. If the sale involves a foreign purchaser then the purchase (if over certain thresholds) must also be considered by the Treasurer under the Foreign Acquisitions and Takeovers Act. Under that Act “the Treasurer can block certain proposals that are contrary to the national interest or apply certain conditions to the way proposals are implemented to ensure they are not contrary to the national interest”. In addition, an acquisition of a substantial interest in an ADI would require the approval of APRA under the Banking Act.”

- Commonwealth Bank, 2012.

Regulation can be a barrier to entry and exit. Rules are generally designed with incumbent products and players in mind. This can make the introduction of new business models challenging. However, this reflects policy choices about societal desire for a stable financial system, as discussed in Section 2.2. Policy makers must consider the impact that these decisions can have on the ability of new players to enter the market.

5.1.3 Geographical footprint

Traditional banking was founded in physical networks. To access bank products, customers had to attend a branch or – later – automatic teller machine in person. As such, the extent of a financial institution’s geographical presence was important to its ability to compete with others.

For many retail banking products, this need has reduced substantially over time. Technological advances and innovations in banking mean that individuals are increasingly willing and able to access banking services remotely. For example, one can apply for a new personal loan online, or manage transactions between an interest-bearing online savings account and a transaction account on a mobile app. This has reduced barriers to entry, as the costs of establishing these technological offerings is often lower than establishing an extensive physical presence. In the proposed merger between Westpac and St. George Bank, the ACCC noted that:

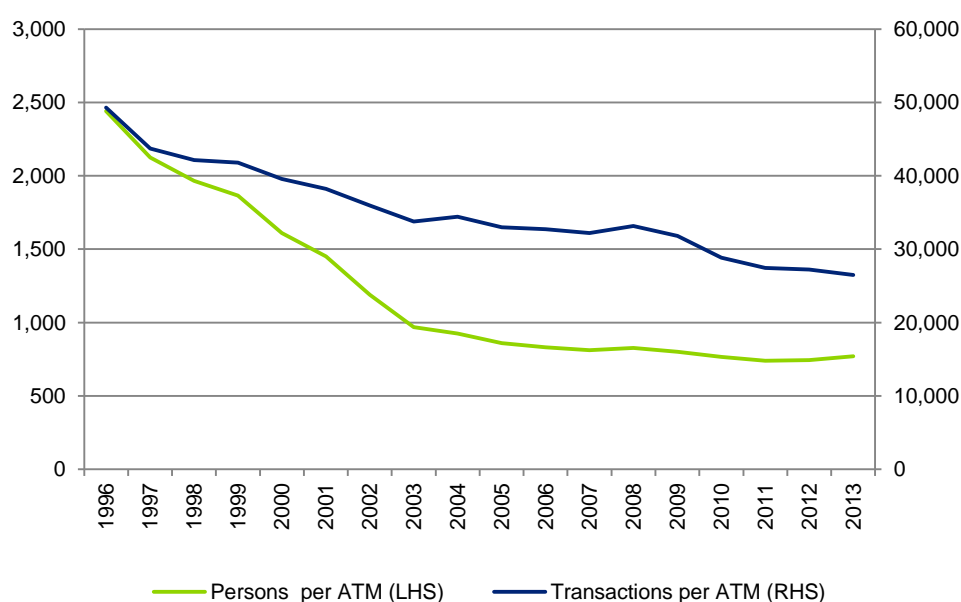
“evidence... illustrates that branch usage for these [non-transaction account] products is very low... service levels, fees and interest rates, and the availability of internet banking are more important to customers of these products than the location of branches and ATM availability.

Changes in the modes of distribution for each of these products in particular greater reliance on the internet, telephone and broker channels, has meant that a customer can obtain one of these products, transact and manage their relationship with their financial institution without visiting a branch. This trend has allowed institutions to compete in regions where they do not have a physical presence – for example, ING Direct has attracted a significant share of the Australian savings account market by distributing its products solely through the internet.”

- ACCC, 2008.

Convenient access to services for Australian consumers is also demonstrated through the availability of ATMs, as shown in Chart 5.2. Decreasing numbers of individuals per ATM suggest that availability has increased over the last decade. This has occurred despite the decline in transactions per ATM caused by the convenience of online transactions.

Chart 5.2: ATM access



Source: ABA, 2014

As such, the need for an expansive physical presence is no longer a significant barrier to entry in most retail banking products. However, as discussed in Section 4.1, the exception to this is transaction accounts, which are still associated with a need for physical presence.

The need to withdraw and deposit cash – a physical product – means that the location, spread and number of points of presence can be a significant factor in customer choice of transaction account provider. The continued preference for cash in low-value transactions suggests that this is likely to persist in the near future. However, potential new entrants to the market may leverage existing distribution networks for this purpose. For example,

supermarkets have substantive geographical presence that could be used to deliver retail banking products in the future.

5.1.4 Incumbency

In mature markets which are served by large players, it may be more difficult for new entrants to join the market and compete effectively. Pre-existing players will have established intangibles which are important for capturing and maintaining customers, such as reputation, branding, and networks. This can make it difficult for new entrants to build customer awareness and attract clients.

This is especially true in retail banking, where trust and reputation can be very important to a consumer's choice of institution. In a 2011 Ernst & Young global survey, 22% of individuals who switched their main bank attributed this move to a lack of trust (Ernst & Young, 2011).

There is evidence of the importance of incumbency both in Australia and worldwide. The market share of the major banks in Australia has held up over time. New entrants thus face more difficulties in gaining substantive market share, given that the market is mature and the major banks have tended to maintain their positions.

Incumbency tends to govern product choices globally. This is partially as a result of the convenience of bundling services, as discussed in Section 3.1.2.1. New entrants may perceive that it will be difficult to attract consumers away from their existing banking arrangements.

5.2 Availability of substitutes

The existence and availability of alternative products is important to competition. Even in a concentrated market, there may be a high level of rivalry or contestability between firms. If the products on offer by rival firms are similar (the degree of product differentiation is low), customers can more easily switch between providers. This would stimulate competition between suppliers to attract customers.

Overall, retail banking products offered by different institutions tend to be fairly similar. While the specific features of these products may vary, they tend to achieve the same purposes to a great degree. For example, while a transaction account may be attached to different levels of ATM access and fees may differ, customers would find that many of the products on offer would meet their needs.

Despite relative product homogeneity, there is a proliferation of services on offer from a wide variety of institutions. For example, as at December 2013, Canstar listed over 500 variable rate owner-occupier mortgage products on offer from over 100 companies. This suggests that there is a wide array of fairly close substitutes in the market. A broader definition of the industry suggests even more players:

"Australian banking customers are currently served by a wide range of providers. These include 12 Australian-owned banks; 9 foreign-owned bank subsidiaries; 35 foreign bank branches; 11 building societies and more than 100 credit unions. Further, there are currently around 111 providers of over 2,200

mortgage products; 66 providers of over 420 different credit cards; and 114 providers of over 992 different types of deposit account.”

- Treasury, 2010

In practice, however, the accessibility or validity of these external options can be limited by a number of factors. One of these is **switching costs**. If consumers perceive that they will have to incur significant costs in order to change products or providers, they will be less likely to change. This is because higher costs may outweigh the benefits of moving to another provider.

Some level of switching costs may be naturally occurring as a result of the nature of the product or service on offer in a market. These are evident in retail banking. Customers may be unwilling to swap because of resistance to change. They value having all of their products with one provider because this is more convenient, and they may also get a sense of familiarity resulting in greater comfort in staying with an existing provider.

However, switching costs can also be imposed, either by individual institutions or by the overall structure of the market. In retail banking, these include:

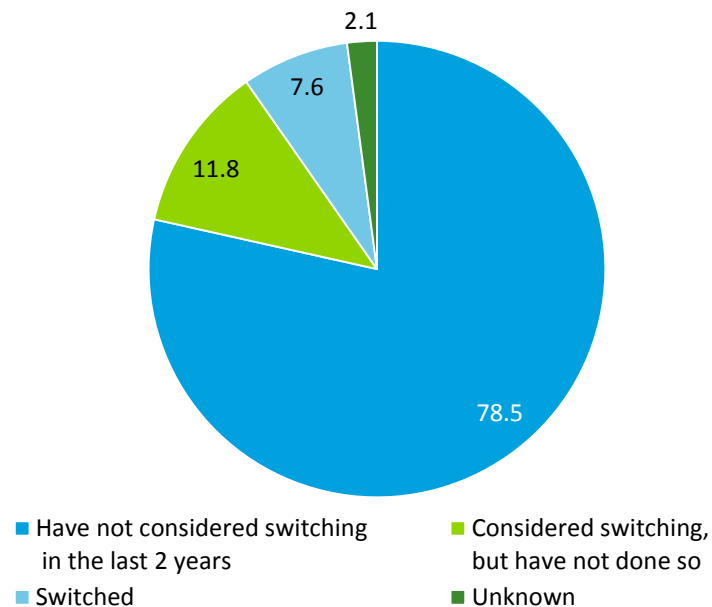
- **bundling** behaviour, as discussed in Section 3.1.1, can impose additional switching costs. Buying bundles makes it more difficult for consumers to readily compare products, because they might have different features and inclusions;
- difficulties associated with **porting**, such as the inconvenience of setting up a new account and communicating new account details to relevant parties; and
- **exit/establishment fees**, where institutions charge customers for changing providers.

This behaviour has, in part, been curtailed by regulatory changes, in particular the ban of mortgage exit fees introduced by the *National Consumer Credit Protection Amendment Regulations* (2011).

Evidence suggests that, overall, the level of switching in retail banking products in Australia is indicative of a fairly competitive market. *The Banking Services: Switching Arrangements* report, published in 2011, noted that there was a considerable amount of switching in mortgages. It cited ABS data that indicated that fully one third of new housing loan approvals in the first half of 2011 were refinances of existing mortgages (ABS, 2012). While this does not necessarily mean that these mortgages moved to other providers, it nevertheless suggests that there is the potential for mobility in mortgages. The report also found that while there were greater barriers to switching in the transaction accounts market, significant quantities of switching activity still occurs.

Chart 5.3 further supports this assessment. While only 7.6% of consumers surveyed by Choice magazine in 2011 switched banking providers, the vast majority – over three quarters – had not considered switching at all. This suggests that most consumers are either comfortable with their current provider, are experiencing inertia, and/or do not perceive that there would be substantive gains from switching.

Chart 5.3: Transaction account switching (%), Australia



Source: Choice Magazine, 2011.

The *Banking Services: Switching Arrangements* report also suggested that switching behaviour in mortgages had increased in recent years:

“not all existing mortgage holders are likely switchers; many will be quite content with their present provider. Some may have considered switching only to be discouraged by exit fee imposts. Others again will have been persuaded by their existing provider’s retention team (and the offer of better terms) to stay, rather than switch. The bottom line, however, is that the housing mortgage market over the past couple of decades has seen significant switching by borrowers who have been motivated to change providers to gain a better deal.”

- Fraser, 2011.

Elsewhere in retail banking, where switching costs are low, banks respond promptly to competition.

“In the online account world, the transactions costs of switching are very low, and the evidence is that the response rate to small interest rate differentials is rapid.”

- RBA Assistant Governor Guy Debelle, 2013

“There is a wide variety of products and suppliers in the Australian retail banking market. Recent policy changes and technology have made it easier to switch, either for individual products or bundles of products” (RBA Assistant Governor Guy Debelle, 2013). Moreover, the threat or possibility of losing existing customers will prompt lenders to respond promptly when gaps to their competitors emerge.

5.3 Innovation and product differentiation

Industries with high levels of innovation could compete for customers based on product features by providing new products or services which consumers value. This is particularly relevant in retail banking, which, worldwide, has been a source of innovation through digital technologies, globalisation and business model changes in recent years.

Traditional retail banking models are associated with fairly high overhead costs, as a result of the need to maintain branch networks. This is because the traditional model is centred on building and maintaining customer relationships. Major players underwent a process of branch rationalisation in the 1990s. However, this process has since slowed significantly, as a minimum level of presence is required for relationships to be maintained and thus to avoid customer attrition.

One of the key innovations in recent years has been the evolution of business models based on other factors. New players evolved who targeted only certain product types – such as savings accounts and mortgages – which rely less heavily on relationships and physical presence. By utilising new platforms and technologies, new players were able to distribute and manage these products at lower costs, e.g. ING Direct.

One of the advantages of traditional banking models is scale. As discussed in Section 3.2 and Section 5.1.1, larger sizes allowed these institutions to develop a significant balance sheet, which had the advantage of increasing customer awareness and brand exposure, as well as providing access to lower cost funds.

Dis-intermediation and the “unpacking” of some retail banking products has been an important innovation to business models in recent years. This trend has allowed smaller players to compete more effectively by granting them access to funding and wider distribution networks without the need to build scale. As noted in Section 4.1, this relates in particular to mortgage products and credit cards.

Essentially, this process involved disaggregating the supply chain for these financial services. Instead of a single player providing end-to-end services, the value chain could have multiple players, including, for example:

- **brokers**, who are responsible for distributing and “selling” products to final customers;
- **originators**, who create the loan products and provide them to brokers; and
- **balance sheet owners**, who buy packages of loans through the process of securitisation.

This process was facilitated by and spurred the entry of a range of new market participants, many of whom were not ADIs. New brokerage groups such as Aussie Homeloans and RAMS emerged as significant competitors in the market, attracting significant client bases and putting competitive pressure on major banks.

Brokers provide additional value to consumers by helping them to make informed choices. It can be difficult for individuals to identify the products on offer, understand their features and compare products. This placed competitive pressure on lenders by lessening information asymmetries.

Competition in capital markets has also spurred innovation. In particular, the emergence of securitisation as a major funding source was key to the process of dis-intermediation. It allowed smaller originators to sign loans but keep the liabilities off balance-sheet, instead focusing on other aspects of the value chain. Section 3.2 details the importance of these funding sources to mortgage originators in the pre-GFC environment.

Treasury, in a submission to the *Inquiry into Competition within the Banking Sector* refers to a list of innovations that have occurred in the 10-15 years prior to 2010 including:

- High Interest Online Savings accounts
- “All you can eat” transaction accounts with a simplified fee structure and unlimited transactions (of certain types) for a fixed monthly account fee
- “Basic bank accounts” targeted at low income consumers
- “no frills” credit cards
- Mobile phone banking
- Low-doc and no-doc loans
- Zero or low deposit home loans
- Reverse mortgages
- Shared equity mortgages
- “capped rate” variable mortgages

The influence of one source of innovation - dis-intermediated business models - declined during the GFC. This can be attributed to a range of factors, in particular:

- a decline in RMBS issuances as investor sentiment shifted due to the sub-prime crisis in the USA; and
- anxiety around system stability leading to a move towards major banks which were perceived as being safer.

This change in sentiment has slowed the progress of disintermediated models and thus innovations coming from new business models and players. For example, securitised issuance has declined dramatically, however, this does not mean that innovation activities have ceased during this period.

Instead, innovation has continued, with competition for product differentiation persisting between existing players, in particular, major banks. Recent innovations have focused on improving convenience for customers. Some examples of this in Australia include online-only banking platforms and mobile banking services.

A lot of innovation has been focused in particular on payments systems. Competition in payments fuels competition in retail banking, with banks seeking to provide the best choices and most convenience for their consumers. The market in Australia is contested by numerous players with differing value propositions, from BPay to eftpos and international credit card schemes. Many of these are not direct participants in retail banking. Some retail banking service providers are partnering with these external payments systems to offer value to customers.

Others are developing their own innovative approaches. For example, the CBA has invested heavily in improving its internal systems to provide customers with same-day clearance and real time value.

A number of banks have developed mobile applications. The announcement of mobile contactless payment by Westpac in December 2013 puts Australia at the forefront of mobile phone enabled transaction technologies. The mobile platform builds upon the industry's already innovative mobile banking framework to deliver an enhanced customer experience (Westpac, 2013). The CBA has begun to roll out Facebook-based payments, claimed to be the first service of this nature in the world (ZDNet, 2012). ANZ's FastPay, launched in October 2012, offers small business owners with same day settlements of merchant payments processed using iPhones or iPads (ANZ, 2013).

In the wake of the GFC, the pace of innovation has accelerated, particularly in the digital space. A recent example is Defence Bank, which has opened a prototype digital-only "teller-free" bank in Canberra. Similarly, NAB's first "smart store" in Docklands will incorporate a number of intelligent self-service machines that interact with customers and their mobile devices to deliver next generation banking services.

As discussed in Section 3.1.2.3, financial institutions develop differentiated products with services which appeal to customers. Indeed, some business models focus on innovation as a source of competitive advantage in the market. Where this is successful, competitors have generally been fairly quick to adapt new offerings accordingly.

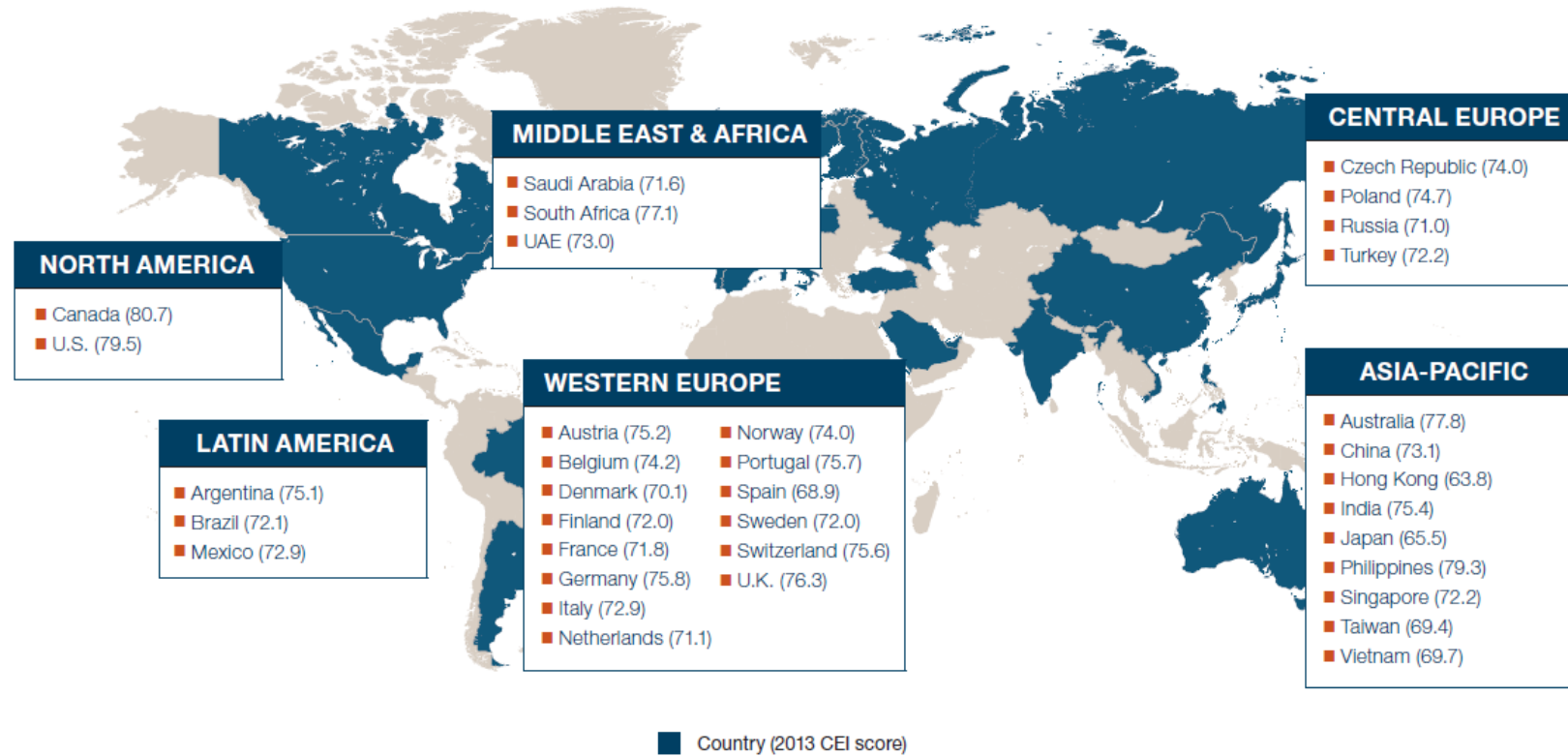
Innovation in retail banking has taken a number of forms including using different distribution channels, different sources of funds and product innovation. Innovation has come from all parts of the markets. Along with the main incumbents, this has included, for example, innovation from new entrants using capital markets to source funds (e.g. non-ADIs), global banks using online distribution channels or non-financial institutions using technology to provide customers with new ways to access financial services (such as brokers or co-branding credit cards). The GFC has disrupted the ability of some potential innovators to provide services that require capital markets to source funds (notably through securitisation). However, technological advances continue to drive product innovation as highlighted by banks' offerings in mobile banking.

5.4 Implications for consumers

As discussed in Section 2.1, a competitive market can lead to great benefits for the welfare of individuals and households. This Section surveys the evidence for the Australian retail banking market.

One of the most commonly cited metrics for assessing banking systems is customer satisfaction and the customer experience. In a large-scale survey of over 18,000 retail banking customers in more than 30 countries, Capgemini found that Australians had one of the best customer experiences in the world – second in the Asia Pacific region and fourth in the world – as can be seen in Figure 5.1. This result was arrived at after surveying customers on a range of issues based around the perceived quality of their interactions with banks. It included 80 indicators encompassing product dimensions, different distribution channels and customer lifecycle (i.e. what the customer is seeking to achieve). Questions revolved around items such as quality of service, trust and customer perceptions that their financial institution understood their needs.

Figure 5.1: Customer experience index by country, 2013



Source: Capgemini and Efma, 2013

This supports the suggestion that building a positive customer experience and relationship is one of the ways through which banking product providers compete with each other in Australia. The fact that the market ranks so highly suggests that this is leading to positive outcomes for customers.

Further, banks compete to attract customers through improving their service offerings, leading to improved customer satisfaction, as discussed in Section 3.1.2.2.

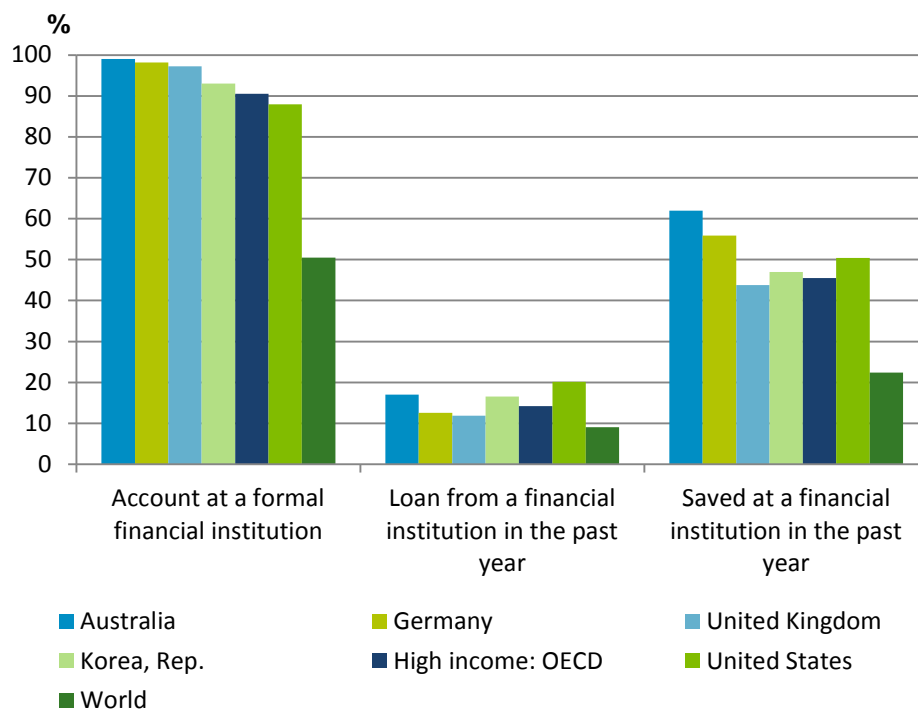
Australian consumers have also benefited from a less risky banking system – a characteristic which is expected to persist into the future. A recent assessment by Standard and Poors found:

“Australia is currently one of the five least-risky banking systems of the 86 for which Standard & Poor's has published banking industry country risk assessments”
 – Liondis, 2014

As detailed in Section 3.1.2.2, increased access to financial services has been another benefit of competition. The development of business models based on widening accessibility has meant that these services are available to individuals for whom retail banking products are especially important, but who might have otherwise been excluded from accessing these services.

As shown in Chart 5.4, Australians have some of the world’s highest rates of participation in the financial system, with over 99% of individuals aged over 15 having an account with a financial institution (World Bank, 2013).

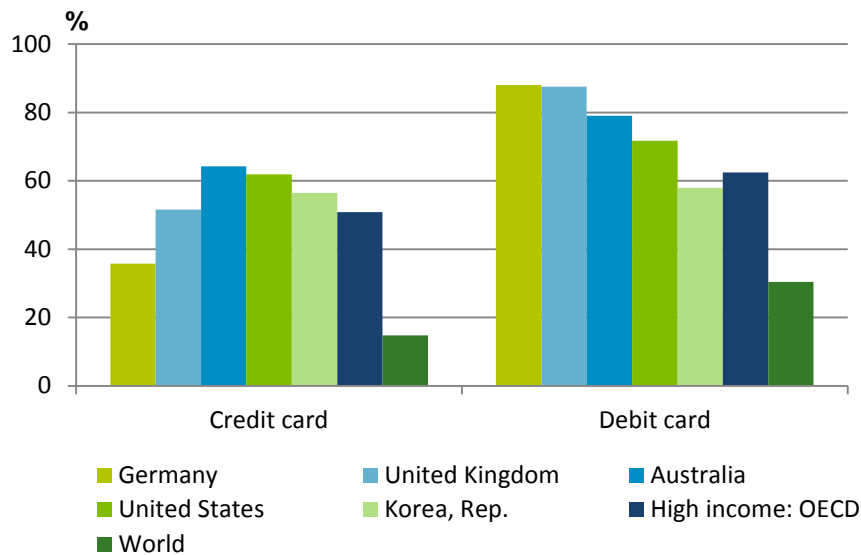
Chart 5.4: Use of banking services, 2011 (population >15)



Source: World Bank, 2013

An innovative and well-developed system has led to increased convenience for Australian consumers. This is illustrated through the availability and take-up of new channels, such as mobile and online banking. Similarly, Australians have comparatively high levels of credit and debit card usage, well over the high-income OECD country average, as can be seen in Chart 5.5.

Chart 5.5: Use of cards, 2011 (population >15)



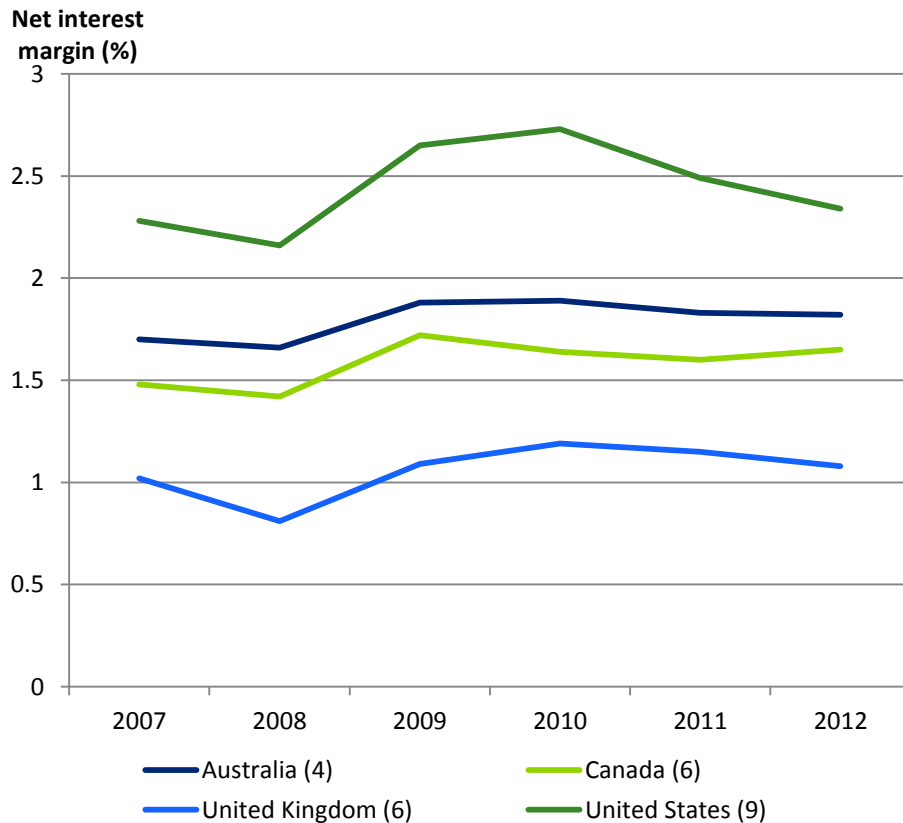
Source: World Bank, 2013

Competition within the market has also resulted in improving outcomes and “value for money” for consumers. This is evident through falling NIMs over the period, as shown in Chart 3.6. More specifically, competition for deposits as a means of funding has led to increasing deposit interest rates. Comparison rates for key products including term deposits and online savings accounts are now consistently exceed the cash rate, as can be seen in Chart 3.4.

NIMs are one a measure of value, because they represent the difference between deposit rates received by customers and lending rates paid by customers. Smaller margins represent better value to consumers, as they imply that a greater proportion of the interest being paid by lenders is being returned to borrowers in the form of interest income.

Prior to the GFC, these margins were in the middle of the range of comparative international banking systems, such as the USA, Canada, and the UK, as shown in Chart 5.6. Australian NIMs have overall remained fairly stable over the period, and have not grown significantly, up from 1.7% in 2007 to 1.82% on 2012 (BIS, various years). This would suggest that, on this indicator, the level of price competition in retail banking in Australia is comparable to pre-GFC levels.

Chart 5.6: Net interest margins of major banks, 2007-2012¹



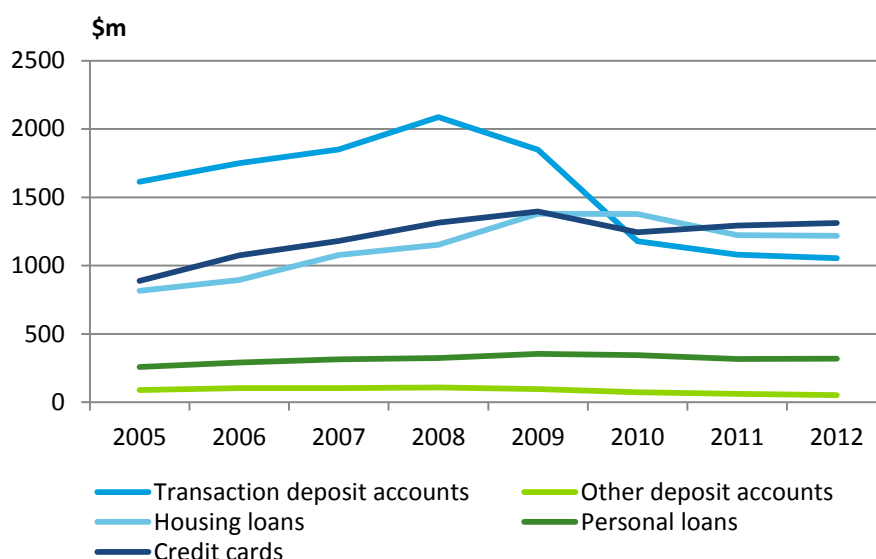
Numbers in brackets reflect the number of major banks included in the analysis.

Source: BIS Annual Report (various years)

Banks may also derive profits from non-interest revenues. In particular, under the “fee for service” model encouraged following the Campbell Inquiry, significant revenues might be gained from banking fees. Chart 5.7 shows that domestic banking fee income from most product types has declined in recent years, despite overall levels of service remaining high. Banks have continued to compete on fees, as shown by the provision of no-fee and low-fee bank accounts.

¹ This series only examines the average margins for major banks in selected countries. It does not encompass the entire sector. Further, it encapsulates bank activity in its entirety; that is, it includes commercial and investment banking as well as retail banking.

Chart 5.7: Domestic banking fee income from households



Source: RBA, 2013

Compared to overseas, Australians are well served by their retail banking system. Australians have some of the highest levels of customer satisfaction and access to banking services in the world.

While Australian consumers still receive a range of benefits, the distribution of these has changed. For example, greater competition in deposit markets has led to greater relative returns on deposits.

5.5 Looking to the future

Overall, the retail banking market in Australia is robust and competitive. As detailed in previous Sections, this has been supported by a range of factors, including:

- price matching and competitive pricing behaviours;
- narrowing net-interest margins in the long-term;
- dis-intermediation and the entry of new competitors and business models along the supply chain;
- falling barriers to entry as a result of new technologies;
- innovation activities within the market; and
- stability and robustness through the GFC.

Despite this, there could be further benefits which could arise from encouraging greater competition. This could be driven, as before, by international banks, smaller ADIs and non-ADIs, as well as the recovery of capital markets. It will also be supported by the general trends of innovation, technology and globalisation.

Technological change, business model innovation and capital markets have continued to be a driving force for innovation and competition in the sector despite the GFC. Consumer demand

and the rapid rate of digital improvement are the main motivators of adoption of new offerings within the industry. This trend can be expected to continue to have a material impact in coming years. For example, in payments systems, Near Fields Communication (NFC) technology, online payment security, digital wallets and contactless payments have all emerged recently. These new technologies continue to gain popularity while yet others are still being developed.

A range of market participants have played a role in creating and fostering this competition throughout the years. However, continuing to maintain a competitive but stable financial environment will require further recovery. Smaller banks and non-bank ADIs bring an agility which is important to the market and as broader market conditions and customer sentiment start to return to their pre-GFC states, this recovery process will be facilitated by enhanced competition from other participants, in particular those depending on securitisation markets, or being replaced by players with new business models. For example, in a sign of change within the foreign bank sector, Asian bank lending to non-financial corporations in Australia has recently exceeded lending by European banks (Australian Financial Review, 2013). While Asian banks have tended to focus on trade and project financing, this is beginning to change, with the Bank of China now offering retail products. Asian banks have a large presence globally, and are likely to be exerting more pressure in Australian retail banking markets.

Potential new players are also starting to express interest in the market. Supermarkets have issued credit cards, and are rumoured to be considering entry in to mortgage products (Sydney Morning Herald, 2013). Google has begun to offer payments services through products such as the Google Wallet. The threat of new entry will put competitive pressure on incumbents.

Despite the forces described above, there is ongoing debate as to whether levels of competition in retail banking are returning to pre-GFC levels quickly enough, and to what extent competition from niche players will return. While some elements of the financial system are likely to have changed permanently as a result of lessons from the GFC, it is important that other characteristics of the market ultimately return to their previous operating circumstances.

To the extent that the speed of recovery is sub-optimal, regulatory interventions may play a role in stimulating parts of the market. However, any regulatory response should be carefully thought out to avoid introducing distortions that undermine the efficiency of the system. There is a risk that inappropriate legislation may introduce adverse incentives for both consumers and financial institutions. Too high a regulatory burden could encourage shadow banking. It is clear that, while legislation could play an important part, any intervention needs to be appropriately nuanced and considerate of potential long-term effects as the global and domestic markets recovers.

Conclusions

On a range of indicators, the Australian retail banking industry is competitive in both price and non-price terms. While the sector is concentrated, calculated concentration ratios are not high enough to warrant concern against ACCC criteria. The range of product offerings and industry participants suggests that the market is contestable and contested.

The onset of the GFC disrupted some of the drivers of competition. Increased funding costs and the decline of securitisation markets impacted more on smaller players. International developments also impacted on the ability of overseas banks to compete aggressively.

These developments have resulted in changes to the nature and extent of competition in the industry. The increasing differential in funding costs, mergers and acquisitions, as well as a shift in consumer preferences towards safety and certainty, has led to the major banks increasing their market share. Concentration is higher than it was prior to the GFC.

However, competitive forces continue to operate in the market. Technology advances and consumer demand have continued to drive innovation in product and service delivery. Increased reliance on deposit funding has intensified price competition for deposits.

Despite the impact of the GFC, the banking system continues to deliver value for its customers. This is evidenced by some of the highest levels of access to financial services in the world. Net interest margins are similar to those in comparative economies, such as the UK and New Zealand. Research also suggests that, by world standards, Australians are amongst the most satisfied with their banking experiences.

Overall, Australians are well served by their retail banks in comparison to other countries. However, there are still potential gains from encouraging further competition. Many of the drivers of competition – in particular, innovation and technology – have continued strongly through the GFC. Other factors, such as securitisation markets, have not fully recovered. However, they may revert to pre-GFC levels in coming years.

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Appendix A: Concentration ratios

This Appendix details the concentration ratios calculated for every product market examined in this report:

- transaction accounts;
- interest-bearing savings accounts (including term deposits);
- mortgages;
- personal loans; and
- credit cards.

As discussed in Chapter 4, concentration ratios are calculated using the market share of various organisations. They are used as an initial indicator for the level of market power within an industry. In this report, they are derived using data from APRA's *Monthly Banking Statistics*. As such, they only include data about institutions which are registered as banks. These were annualised for the purpose of calculation. The benchmark cut-offs used are based on the ACCC's current or previous *Merger Guidelines*.

Market share graphs are also provided. These graphs have been compiled using different sources. The relative advantages of each of these sources is summarised in Appendix C.

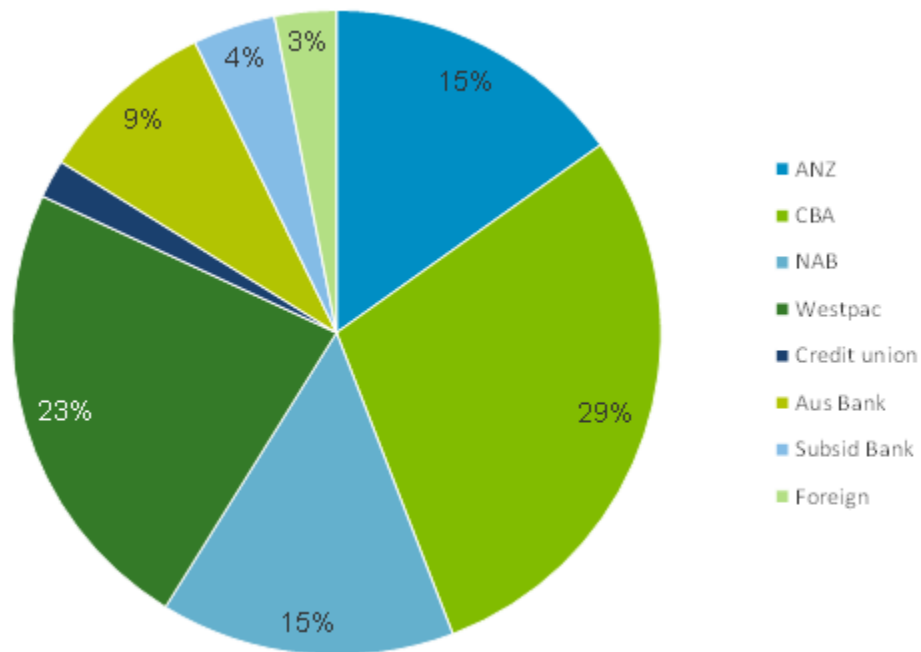
Transaction accounts

Table A.1: Transaction account concentration ratios (banks only)

Metric	Criteria for flag	2013		2007	
		Score	Flag?	Score	Flag?
HHI	> 2000	1828	✗	1505	✗

Source: APRA; DAE

Chart A.1: Market shares in transaction accounts based on value, 2013¹



Source: APRA, Quarterly ADI Performance

Aus Bank = other Australian banks

¹ Each of the major banks' market share was calculated using APRA's Monthly Banking Statistics. This was then multiplied by the total major banks market share to approximate individual institutions' market share.

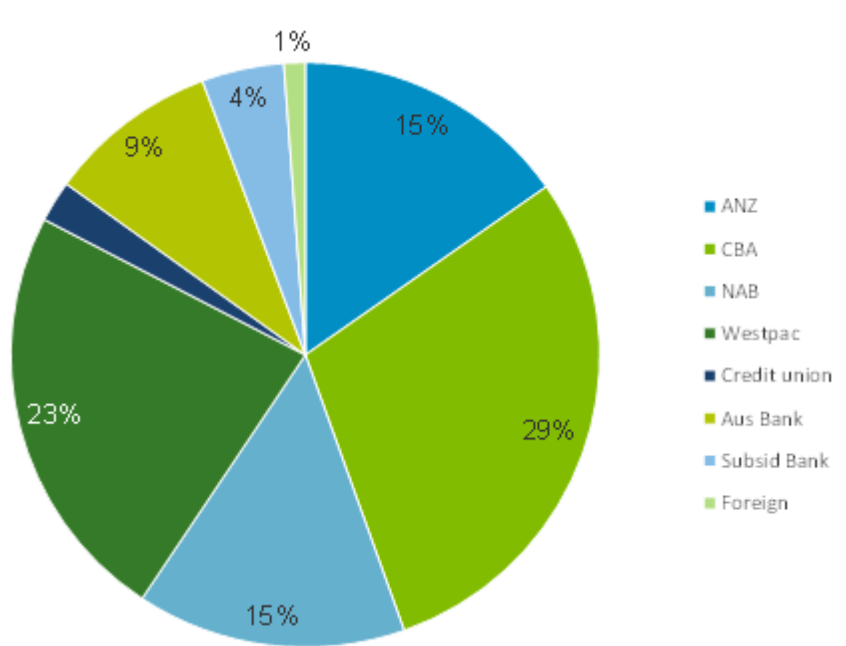
Interest-bearing savings accounts

Table A.2: Interest-bearing savings account concentration ratios (banks only)

Metric	Criteria for flag	2013		2007	
		Score	Flag?	Score	Flag?
HHI	> 2000	1828	✗	1505	✗

Source: APRA; DAE

Chart A.2: Market shares in interest-bearing accounts based on value, 2013¹



Source: APRA, Quarterly ADI Performance

Aus Bank = other Australian banks

¹ Each of the major banks' market share was calculated using APRA's Monthly Banking Statistics. This was then multiplied by the total major banks market share to approximate individual institutions' market share.

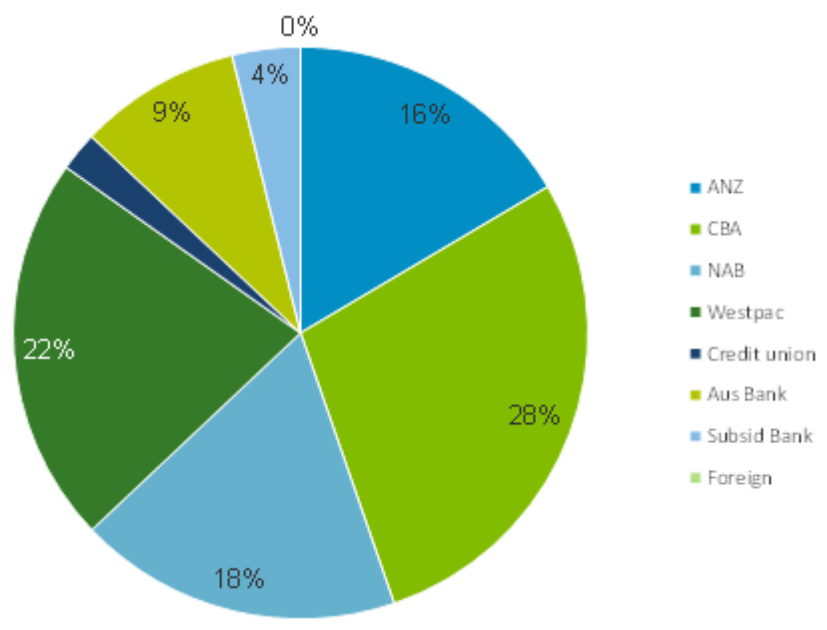
Mortgages

Table A.3: Mortgage concentration ratios (banks only)

Metric	Criteria for flag	2013		2007	
		Score	Flag?	Score	Flag?
HHI	> 2000	1908	✗	1535	✗

Source: APRA; DAE

Chart A.3: Market shares in housing loans based on value, 2013¹



Source: APRA, Quarterly ADI Performance

Aus Bank = other Australian banks

¹ Each of the major banks' market shares was calculated using APRA's Monthly Banking Statistics. This was then multiplied by the total major banks market share to approximate individual institutions' market share.

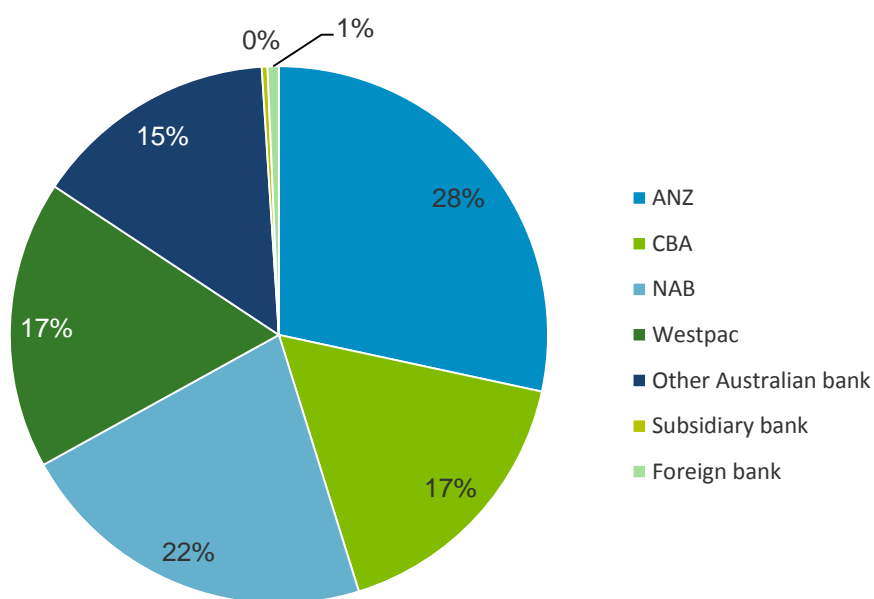
Personal loans

Table A.4: Personal loan concentration ratios (banks only)

Metric	Criteria for flag	2013		2007	
		Score	Flag?	Score	Flag?
HHI	> 2000	1904	✗	1428	✗

Source: APRA; DAE

Chart A.4: Market shares in other household loans based on value, banks only, 2013



Source: APRA, Quarterly ADI Performance

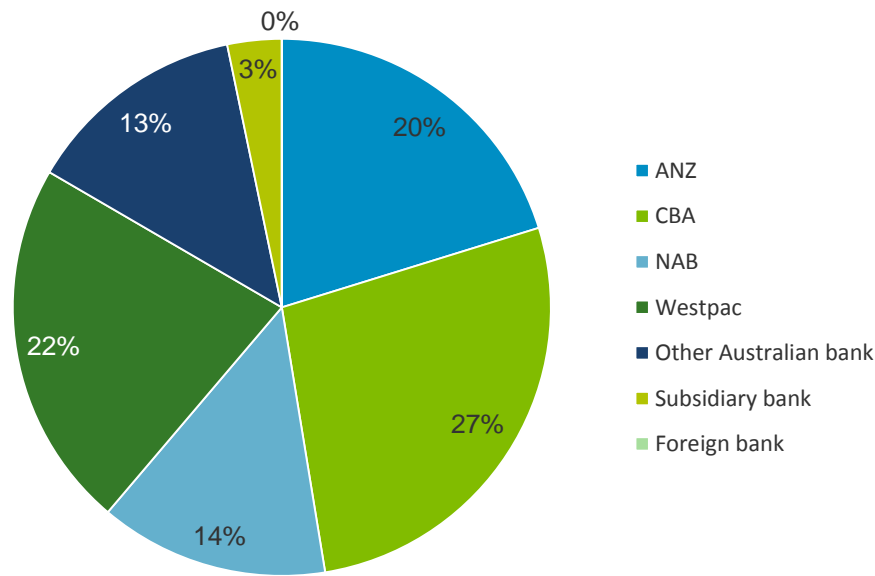
Credit cards

Table A.5: Credit card concentration ratios (banks only)

Metric	Criteria for flag	2013		2007	
		Score	Flag?	Score	Flag?
HHI	> 2000	1962	✖	1750	✖

Source: APRA; DAE

Chart A.6: Market shares in other credit card loans based on value, banks only, 2013



Source: APRA, Quarterly ADI Performance

Appendix B ACCC merger assessment criteria

Section 50(3) of the Competition and Consumer Act (2010) sets out a (non-exhaustive) list of matters which are taken into account by the ACCC when assessing competition matters:

- (a) the actual and potential level of import competition in the market;*
- (b) the height of barriers to entry to the market;*
- (c) the degree of countervailing power in the market;*
- (d) the likelihood that the acquisition would result in the acquirer being able to significantly and sustainably increase prices or profit margins;*
- (e) the extent to which substitutes are available in the market or are likely to be available in the market;*
- (f) the dynamic characteristics of the market, including growth, innovation and product differentiation;*
- (g) the likelihood that the acquisition would result in the removal from the market of a vigorous and effective competitor; and*
- (h) the nature and extent of vertical integration in the market.*

These are intended to be used in merger analysis; as such, not all of them are relevant. Further, some may not be as pertinent to the banking industry in particular. For example, in an analysis of retail banking, there is not likely to be a large degree of consumer power. This is because alternative industries which can fulfil the same needs are not readily available.

Those which could be applied to retail banking markets are briefly described below.

Actual and potential level of import competition. Where the domestic producers of a good are not very competitive, the market may also be supplied by overseas producers. This international presence could make the overall market more competitive. However, this is not a strong consideration in Australian banking markets. Many foreign banks, and subsidiaries of foreign banks, have a presence in Australia. However, they are not significant competitors, having a very small share of total retail banking. Further, given the need to obtain licenses from APRA and the low profitability of foreign banks in Australia, it is unlikely that further, significant competitors will emerge from overseas.

Height of barriers to entry. The entry of new firms can increase the level of competition in an industry. If there is a credible threat of new entrants, existing firms are less likely to exercise any market power which they might have. This is because if they raise prices, they may be

faced with a new competitor who sells at a lower cost, thus attracting existing customers away from their current supplier.

Availability of substitutes. The existence and availability of alternative products is important to competition. Even in a concentrated market, there may be a high level of rivalry or contestability between firms. If the products on offer by rival firms are similar (the degree of product differentiation is low), customers can more easily switch between providers. This would stimulate competition between suppliers to attract customers.

Degree of countervailing power. A producer's ability to leverage their market power may be curtailed by buyers. If a buyer is sufficiently large, they can threaten the producer by setting up rival operations (that is, integrating vertically so that the good/service does not have to be purchased externally). They could alternatively sponsor or support the entry of a new player into the market.

Customers in retail banking markets are, by definition, individuals, households, and small businesses. These do not generally have the resources available to establish a banking facility. As such, countervailing power is not likely to mitigate any competition concerns in this market.

Dynamic characteristics, including growth, innovation and product differentiation. The evolution of a market over time can affect the extent of competition. In a market or industry with historically high levels of growth which are expected to persist over time, it is likely that there will be higher levels of competition. Similarly, industries with high levels of innovation could compete for customers based on product features by providing new products or services which consumers value.

This is particularly relevant in retail banking, which, worldwide, has been a source of innovation through digital technologies in recent years. Financial institutions develop differentiated products with services which appeal to customers. Where this is successful, competitors have generally been fairly quick to adapt new offerings accordingly. Some examples of this in Australia include online-only banking platforms and mobile banking services.

Nature and extent of vertical integration. Where firms in an industry operate at more than one level – for instance, both as wholesalers and retailers – then they are said to be vertically integrated. Industries with a higher level of vertical integration could be less competitive, because firms which are integrated might have a cost advantage.

Appendix C Data sources

Table C.1: Data sources

Source	Public Data?	Markets*							Frequency	Time series?	Disaggregate by institution?	Retail only?	Include non-banks?	Include non-ADIs?
		T	I	D	M	L	C	S						
APRA, <i>Monthly Banking Statistics</i>	✓			✓	✓	✓	✓		Monthly	✓	✓	✓		
APRA, <i>Quarterly ADI Performance</i>	✓	✓	✓	✓	✓	✓	✓		Quarterly	✓			✓	
ABS 5609.0, <i>Housing Finance Commitments</i>	✓				✓				Monthly	✓			✓	✓

Source: DAE

* This category shows which markets (as defined above) the data source can be used for: T = transactions; I = interest-bearing savings accounts; D = deposits (not specified); M = mortgages; L = personal loans; C = credit cards; S = SME lending.

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