SENATE ECONOMICS REFERENCES COMMITTEE INQUIRY INTO COMPETITION WITHIN THE AUSTRALIAN BANKING SECTOR

1. Overview

Over the past 25 years, Australian borrowers have enjoyed ready access to credit. There has been a continual expansion in the products available to both depositors and borrowers. Competitive forces have compressed the margin between lending rates and funding costs. These factors, combined with the lower interest rate environment associated with lower inflation and a gradual easing in lending standards, have provided a growing number of Australian households and businesses with access to credit that they would not have been able to obtain previously.

Throughout most of this period, funds were readily available to financial institutions and competition was mainly focussed on lending money. The global financial turmoil has reduced the availability and increased the cost of funds to financial institutions. Some business models, such as those based on securitisation, which benefitted greatly during the period when funds were readily available, are now facing a particularly difficult environment. There has been some lessening in the degree of competition on the lending side but competition to attract funds has increased.

The composition of funding has shifted towards higher-cost sources of funding as a result of changed attitudes to risk among banks, investors and regulators. In turn, this rise in funding costs, along with a repricing of risk margins, has seen lending rates increase relative to the cash rate. As a result, the two-decade long decline in banks' net interest margins has ceased and margins have fluctuated in a fairly narrow range over the past few years.

Notwithstanding these recent developments, the supply of credit in Australia, particularly lending for housing, has generally remained adequate. There has been a tightening in credit conditions for businesses, particularly in relation to commercial property. However, some part of the decline in business credit reflects a reduction in demand.

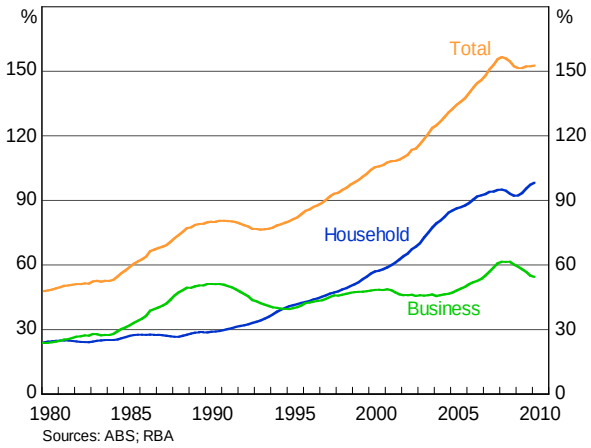
Unlike their international peers, Australian banks have not suffered a large fall in profitability over the past couple of years, which largely reflects better outcomes in terms of bad debt expenses. Australian banks' profitability is in line with other large Australian companies and the experience of their international peers before the crisis.

This submission is organised as follows. Section 2 describes the broad trends in lending over recent decades. Sections 3 and 4 provide details on banks' funding costs and lending rates, while Section 5 details developments in banks' net interest margins. Section 6 discusses banks' fee income while Section 7 discusses the profitability of Australian banks. Section 8 concludes with a brief discussion of some regulatory reforms and their potential effect on the banking industry.

2. Trends in lending

Australian borrowers have enjoyed ready access to credit, with credit growing at about three times the pace of nominal GDP over the past 25 years. As a proportion of GDP, credit increased from around 50 per cent in the mid 1980s to over 150 per cent by the late 2000s (Graph 1). A significant increase in demand, mainly from households, was accommodated by an increase in supply through new participants, more diverse products and some easing in lending standards.

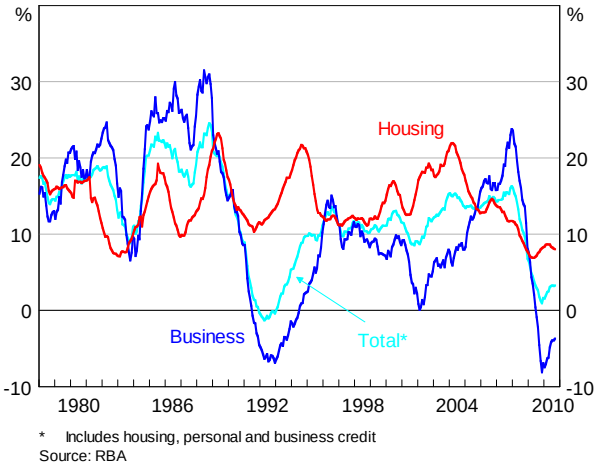
Graph 1
Credit
Per cent of nominal GDP



2.1. Housing

There has been a transformation of household balance sheets in response to the effects of financial deregulation and the lower interest rates as a result of the low inflation environment. Housing credit grew at an average annual rate of 15 per cent in the two decades to 2007, before slowing in the past three years to a pace of around 8 per cent per year, roughly in line with nominal income growth (Graph 2).

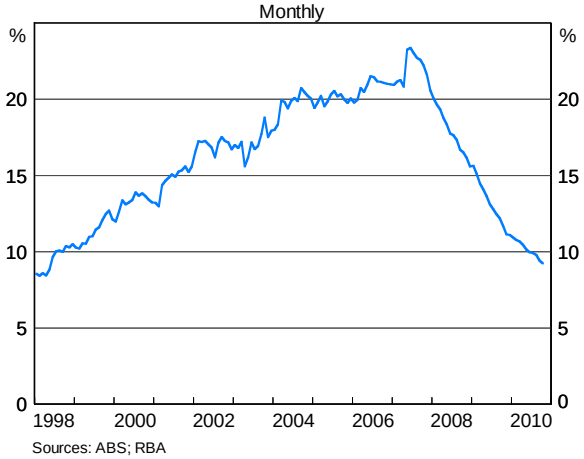
Graph 2
Credit Growth
Year-ended



The increase in the demand for housing credit was facilitated by the expansion in the activities of non-bank lenders, particularly mortgage originators.[1] These non-bank lenders were reliant on the securitisation market for their funding. They did not have either a balance sheet or a capital base from which to fund their lending. Mortgage originators took advantage of developments in the packaging and pricing of risk to package mortgages into a product that was attractive to investors. The banks also began to use securitisation as a source of funding given its relative cost and the potential for a broader investor base. As a result, by mid 2007, securitisation accounted for over 20 per cent of new housing loans (Graph 3).

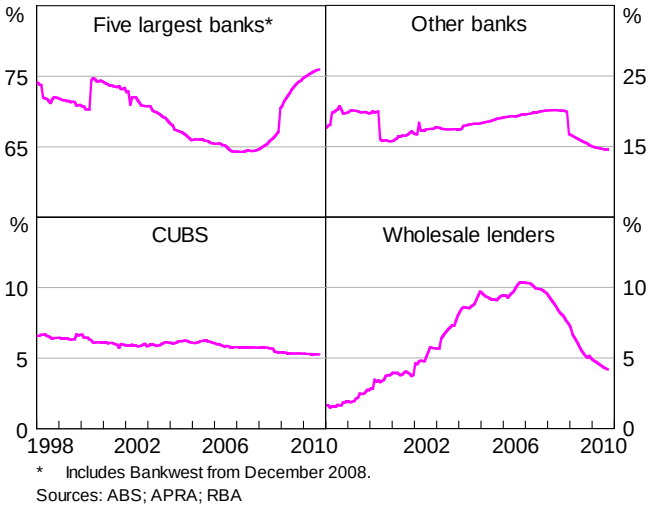
[1] See, for example, and Gizycki, M, and P Lowe, (2000), 'The Australian Financial System in the 1990s', in Gruen, D and S Shrestha (eds), *The Australian Economy in the 1990s*, RBA Conference, July and Ryan, C and C Thompson, (2007), 'Risk and the Transformation of the Australian Financial System', in Kent, C and J Lawson (eds), *The Structure and Resilience of the Financial System*, RBA Conference, August.

Graph 3
Share of Housing Credit Funded by Securitisation



Furthermore, lenders that had only a small presence in the Australian market – including some large foreign banks – were able to overcome their lack of branch networks through the use of the internet and brokers. In addition, the reduction in inflation and nominal interest rates eroded the banks' relative funding advantage from low-cost deposits. Together these factors saw the larger banks' share of housing credit fall from over three-quarters to around two-thirds (Graph 4).

Graph 4
Lenders' Shares of Housing Credit



The growth of housing credit was also supported by the expansion in the range of mortgage products, including:

- *Home equity loans* began to be offered in the mid 1990s and provide a line of credit against residential property. Home equity loans currently account for about 7 per cent of owner-occupied housing loan approvals.

- *Low-doc loans* are targeted at self-employed borrowers, or those with irregular incomes, who lack the documentation required for a standard loan. Low-doc loans are estimated to currently account for about 7 per cent of owner-occupied housing loans approvals.[2]

- *High loan-to-valuation ratio (LVR) loans* were marketed by an increasing number of lenders, allowing borrowers to access the property market with either a small or no deposit.

[2] See Reserve Bank of Australia, (2005), 'Developments in the Low-doc Loan Market', *RBA Financial Stability Review*, September.

- *Interest-only loans*, especially among investors, for whom the reduced payments and potential for increased tax benefits are important.

- *Non-conforming, shared appreciation and reverse mortgages*, although each remains a niche product.

There were very few mortgages offered that were similar to the US sub-prime mortgages. In 2007, less than 2 per cent of mortgages were of such a type (and almost none of these mortgages was issued by a bank).[3] Since then, most of the companies that offered such products have ceased writing new business. As a result, sub-prime equivalent mortgages now account for less than 1 per cent of the stock of housing loans outstanding.

Beyond the expanded product range, competition also contributed to a gradual easing in credit standards over the past couple of decades. There was a relaxation of permissible debt-servicing caps and genuine savings requirements, an increase in maximum loan-to-valuation ratios and the introduction of less onerous property valuation techniques. Recently there has been some tightening in standards, but this has only partially retraced the easing in standards that occurred over the past couple of decades.

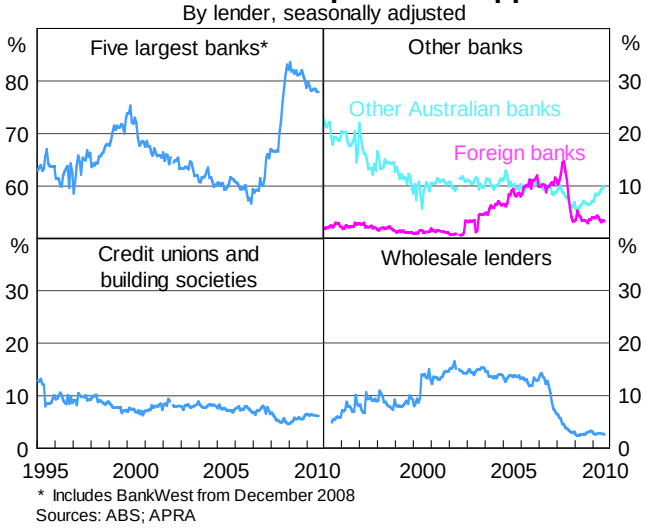
While the easing in standards was nowhere near the scale that occurred in other countries, most notably the United States, there was some evidence that the lowering of credit standards did contribute to subsequent increases in housing stress in some parts of the country. Parts of south-west Sydney were particularly affected earlier in the decade.[4]

The securitisation market was particularly adversely affected by the financial crisis. The contraction in securitisation markets was not unique to Australia, but was a world-wide trend driven by changes in global markets. The business models of some of the Australian lenders reliant on it were no longer viable and they either ceased lending or were bought by a larger institution.[5] This has seen the major banks' share of housing lending rise to a little above 75 per cent. However, the fact that the major banks were able to fill the gap created by the withdrawal of the non-banks allowed the supply of credit to the household sector to be maintained at a satisfactory level.

In recent months, there are signs that the market share of the larger banks has started to decline again, with loan approvals data indicating the major banks' share of new lending has fallen from a peak of 84 per cent to around 78 per cent. At the same time, the share of smaller Australian banks has increased from a trough of just under 5 per cent to around 9 per cent, and credit unions and building societies have also seen their share increase to around 6 per cent (Graph 5).

[3] See Debelle, G (2008), 'A Comparison of the US and Australian Housing Markets', *RBA Bulletin*, June.
[4] See Australian Prudential Regulation Authority and Reserve Bank of Australia, (2007), Inquiry Into Home Lending Practices and Processes, Submission, August.
[5] For a detailed discussion on developments in the Australian securitisation market, see Debelle, G (2009), 'Whither Securitisation', *RBA Bulletin*, December.

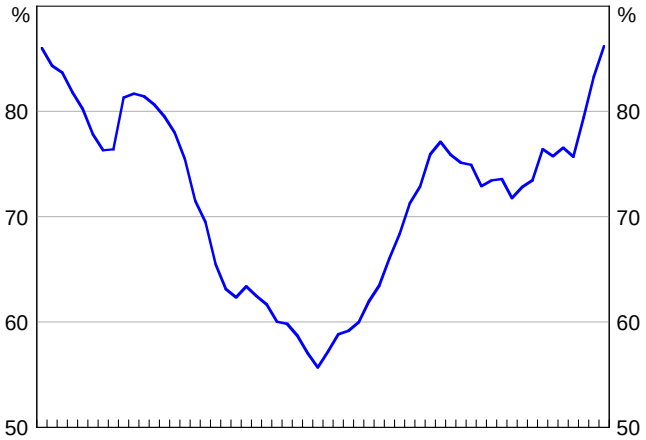
Graph 5
Share of Owner-occupier Loan Approvals
By lender, seasonally adjusted



* Includes BankWest from December 2008
Sources: ABS; APRA

Such large movements in the competitive position of lenders have occurred in the past. Banks had steadily lost ground to non-banks for many years prior to deregulation in the early 1980s, before recovering much of the fall over the following decade (Graph 6).

Graph 6
Banks' Share of Intermediaries' Assets



Sources: ABS; APRA; RBA

To support competition in residential mortgage lending, in September 2008, the AOFM was mandated to purchase up to $8 billion in residential mortgage-backed securities (RMBS), of which $4 billion was to be made available to non-ADI mortgage originators. In October 2009, the Treasurer announced that the program would be extended by a further $8 billion, with an additional objective of providing support for lending to small business. In all, the AOFM has invested just over $12 billion in Australian RMBS which has supported total issuance of $26 billion from 17 lenders.

The purchases by the AOFM as a 'cornerstone' investor have been at below-market yields to make securitisation more economic for the lenders. While this has supported activity in the market, securitisation has been slow to recover from the fallout of the financial crisis for a number of reasons including the 'brand damage' suffered by RMBS because of the US experience and a number of entities that had previously purchased RMBS have exited the market. Offshore structured investment vehicles (SIVs) were significant purchasers of Australian RMBS and were forced to liquidate their portfolios during the crisis as they were wound up. As a result, there was an overhang of supply of RMBS in the secondary market which has only now been run off, and importantly, there is less demand for RMBS given the SIVs are no longer around.

In terms of providing support to the market, the AOFM program has a number of advantages relative to alternative means of support: it can be directly tailored to help specific types of institutions; the support can be phased out easily; the likelihood that the Government loses money on its investment is very small; and there is no ongoing contingent liability to the Government from the support. If instead a government guarantee of RMBS were provided, it would be difficult to phase out, creating a commitment that could ultimately generate a large contingent liability for the Government.

Securitisation is again becoming a more viable funding option for lenders. While the volume of securitisation currently is considerably smaller than in the pre-crisis period, relative to the flow of new housing lending, the decline is not nearly as dramatic, given the slower growth in housing credit. A rough calculation would indicate that for securitisation to maintain its current share of housing credit, annual issuance would need to be around $25 to $30 billion, compared with the current pace of $18 billion.

2.2. Business

Business credit grew particularly rapidly in the second half of the 1980s following financial deregulation and the entry of a number of foreign banks into the domestic market. It declined sharply in the early 1990s recession before returning to average growth of around 10 per cent per year. Prior to the onset of the financial crisis, business credit expanded at an average rate of around 15 per cent over the year to June 2007.

The onset of the financial crisis saw a temporary increase in business credit growth as some businesses that had difficulty accessing non-intermediated debt markets turned to the domestic banks for their financing needs. Since then, the growth of business credit has fallen reflecting both supply and demand factors. There was a general tightening in supply, particularly in the commercial property sector. But a number of businesses have chosen to rely more upon internal funding and equity raisings to fund their investment and working capital plans.

On the supply side, there has been some exit of foreign banks that had a small presence in the market, but at the same time, a number of other foreign banks have looked to expand their presence in the local market. Nevertheless, the largest decline in business lending was from foreign banks, many of which had expanded credit rapidly in the years prior to 2007, particularly to the commercial property sector (Table 1).

Table 1

Business Credit*

	Peak Nov 2008 $ billion	Dec 2009 $ billion	Change $ billion	Change per cent
Total	781	711	-71	-8
Major banks	512	488	-24	-6
Foreign banks	107	89	-18	-19
Other Australian banks	47	46	-2	-4
Non-bank financial institutions	103	77	-26	-11
Additional securitisation	12	11	-1	-8

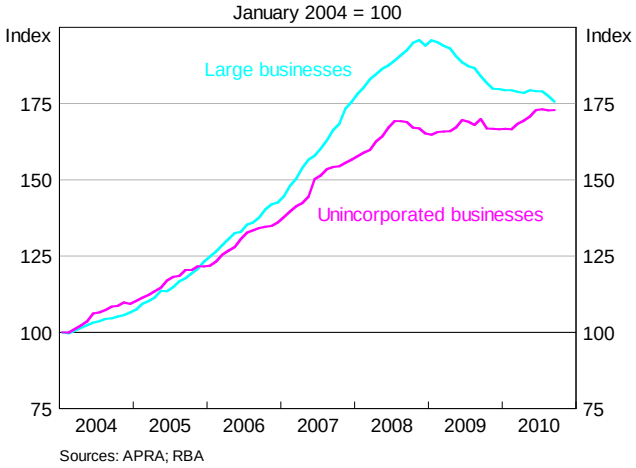
* Credit levels are non-seasonally adjusted and non-break adjusted, and include securitisation. Reported percentage changes are break adjusted and seasonally adjusted.

** Includes Bankwest in November 2008 and December 2009

Sources: ABS; RBA

As noted above, there has been a tightening in lending conditions for business borrowers, both large and small. Liaison suggests that small business borrowers have faced lower maximum loan-to-valuation ratios, stricter collateral requirements and higher minimum interest coverage ratios. Nevertheless, developments in business credit indicate that lending to small businesses has risen over the past year (Graph 7).

Graph 7
Business Credit by Type of Borrower

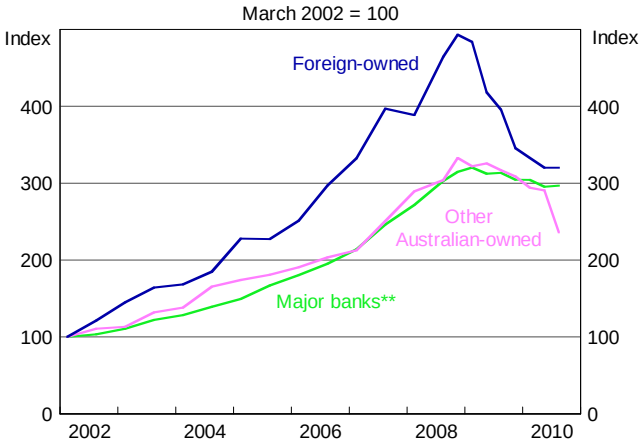


Sources: APRA; RBA

The decline in credit outstanding to large businesses reflects a number of factors, including the record level of equity raisings by these businesses in 2009, which enabled them to repay debt. This decision was often taken by management as a precautionary action given the uncertain financial environment, as well as reflecting the increased cost of intermediated credit. The decline in lending to large businesses also reflects the fact that some businesses have found it more cost effective to access credit directly from the market rather than through the banking system. Finally, a number of large businesses, particularly in the mining sector, have been able to fund their activities and repay debt from their retained earnings resulting from their strong cash flow.

A sector where there has been a significant tightening in credit conditions is the commercial property sector. This tightening has been driven by banks reassessing the risks of, and reducing their desired exposures to, this sector. The reduction in credit has been particularly marked in light of the very strong growth in lending to this sector in the years immediately prior to the crisis, particularly from foreign-owned and the smaller Australian-owned banks (Graph 8). Those banks which expanded their lending the fastest through the boom have experienced the sharpest increases in impaired loans. As a consequence, a number of banks are concerned that their exposure to the sector remains too large and are reluctant to extend new lending.

Graph 8
Banks' Commercial Property Exposures*



* Consolidated, Australian operations; sample of 26 banks
** Includes St George and Bankwest
Sources: APRA; RBA

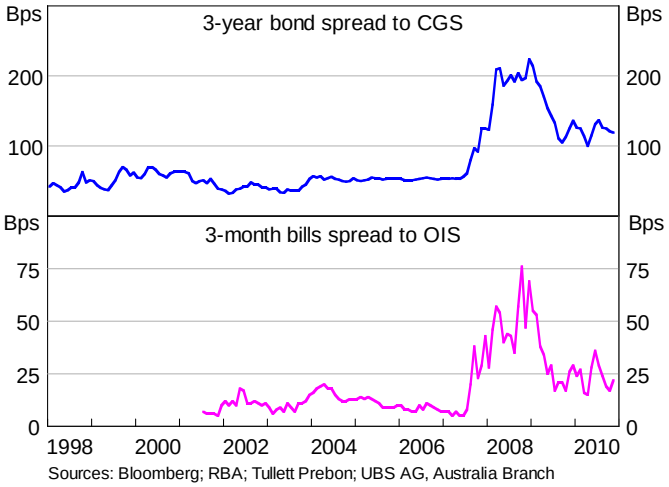
Of late, there have been some indications that conditions are improving in the provision of credit to business. There has been renewed foreign bank activity. The improvement in capital market conditions, which has enabled some companies to tap markets directly at competitive rates, has seen the banking sector compete more aggressively to attract some of that business. These factors, along with increased risk appetite among banks, have seen risk margins begin to decline from their peaks (see below) and some banks have announced plans to increase their focus on business lending by, for example, increasing their business-banking staff.

3. Funding Mix and Cost[6]

Australian banks source their funding from deposits as well as domestic and global capital markets. As a result, their funding costs are affected by a range of financial market factors.

For the decade or so until mid 2007, relatively stable financial market conditions meant that spreads on the banks' various sources of funding changed little (Graph 9). As a result, movements in banks' overall cost of funds tended to follow those in the cash rate.

Graph 9
Major Banks' Wholesale Funding Spreads
A$ debt, monthly averages



Sources: Bloomberg; RBA; Tullett Prebon; UBS AG, Australia Branch

[6] See also Brown, A, M Davies, D Fabbro and T Hanrick, (2010), '[Recent Developments in Banks' Funding Costs and Lending Rates]', *RBA* Bulletin, March.

From the middle of 2007, banks' funding costs rose relative to the cash rate, mainly due to large increases in the cost of deposits and long-term wholesale debt as a result of the global financial crisis. The effect of these changes on banks' overall funding costs has been accentuated by a shift in banks' funding mix towards these more expensive types of funding.

3.1. Composition of Banks' Funding

Banks operating in Australia have diverse funding bases, with most funding sourced from deposits, short-term and long-term wholesale debt. The funding mix differs somewhat across banks, however, with the major banks having slightly larger shares of deposit funding and long-term wholesale debt, but make little use of securitisation, compared with the banking system as a whole. The regional banks generally have a slightly smaller share of deposits than the major banks, but make greater use of securitisation and less use of offshore funding. Foreign-owned banks have fewer deposits and correspondingly source more funding from domestic and offshore capital markets (Table 2).

Table 2

Composition of Banks' Funding in Australia
Per cent of funding liabilities

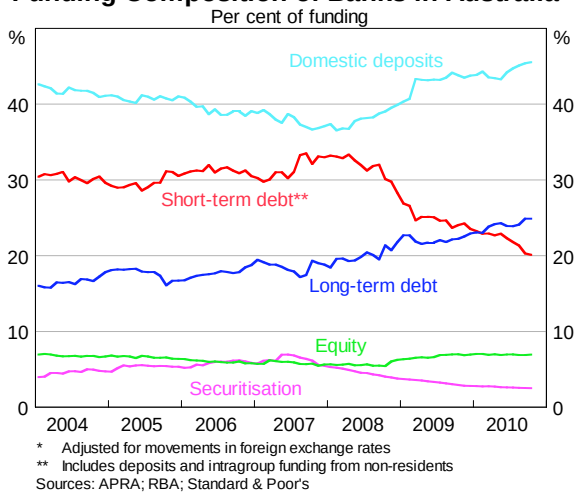
	June 2007	October 2010
Major Banks		
Domestic deposits	44	50
Short-term capital market liabilities	23	15
Long-term capital market liabilities	21	26
Equity	7	7
Securitisation	5	1
Regional Banks		
Domestic deposits	39	48
Short-term capital market liabilities	22	13
Long-term capital market liabilities	10	16
Equity	12	13
Securitisation	17	10
Foreign-owned banks		
Domestic deposits	26	27
Short-term capital market liabilities	60	53
Long-term capital market liabilities	11	17
Equity	2	3
Securitisation	1	0

Note: The classification of individual banks into major, regional and foreign-owned banks is the same in both periods, and is based on their classification in October 2010. Hence the changes in funding composition are unaffected by the recent merger and acquisition activity in the Australian banking sector.

Sources: APRA; RBA

The funding mix of banks in Australia was fairly stable during the few years leading up to the onset of the global financial crisis in mid 2007. As a result of a reassessment of risk, together with regulatory and market pressures, banks in Australia have increased their use of deposits (particularly term deposits) and long-term debt, as these funding sources are perceived to be relatively stable. On the other hand, they have reduced their use of short-term debt and securitisation (Graph 10). Moreover, as the larger banks have replaced the market share of lenders that relied more on securitisation, this has seen the funding of the banking sector as a whole more closely resemble the funding structure of the larger institutions.

Graph 10
Funding Composition of Banks in Australia*



* Adjusted for movements in foreign exchange rates
** Includes deposits and intragroup funding from non-residents
Sources: APRA; RBA; Standard & Poor's

The regional banks have experienced the largest increase in the deposit funding share, while the major banks have also increased their use of deposit funding. In contrast, the foreign-owned banks have experienced little change in the proportion of funding coming from domestic deposits.

The share of funding sourced from long-term wholesale debt (domestic and foreign) for the overall banking system has increased by 7 percentage points since mid 2007 to almost 25 per cent, with all of the main groups of banks increasing their use of this funding source. At the peak of the crisis, during late 2008 and the first half of 2009, the banks mainly issued government-guaranteed bonds, but as market conditions improved throughout 2009, the major banks increasingly issued unguaranteed bonds.[7]

The increase in the share of funding sourced from deposits and long-term debt has facilitated a decline in the share of funding sourced from short-term wholesale debt (domestic and foreign). The share of securitisation has also fallen since the onset of the financial crisis, as the amortisation of the outstanding stock of RMBS generally continues to exceed new issuance.

The major and regional banks have also bolstered their balance sheets by raising equity, through a combination of retained earnings and share placements, mainly in late 2008 and during 2009. For the banking system, the share of equity in total funding liabilities has increased by about 1 percentage point since mid 2007 to about 7 per cent.

3.2. Cost of Funding

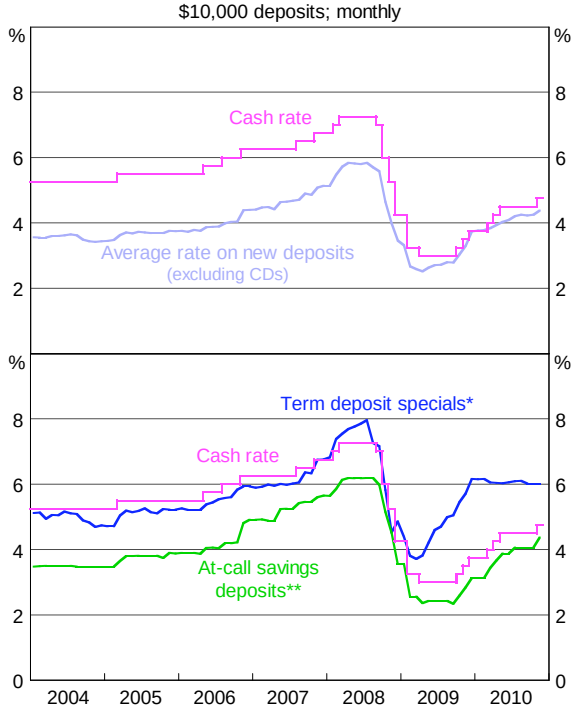
The cash rate remains a major influence on banks' funding costs, providing the anchor point for the yield curve. However the global financial crisis and its ongoing effects have caused the costs of banks' main sources of funding to rise relative to the cash rate. The increases have been particularly large for deposits and long-term wholesale debt.

3.2.1. Deposits

Competition for deposits in Australia has intensified since around mid 2008, resulting in a significant increase in deposit rates relative to market benchmark rates. Overall, the average cost of the major banks' new deposits has risen noticeably relative to the cash rate; it is estimated to be currently only slightly below the cash rate, whereas prior to the onset of the financial crisis, deposit costs were about 150 basis points below the cash rate (Graph 11).

[7] For more details on banks' bond issuance see Black S, A Brassil and M Hack, (2010), 'Recent Trends in Australian Banks' Bond Issuance', *RBA Bulletin*, March, and for details on the wholesale funding guarantee see Schwartz, C (2010) 'The Australian Government Guarantee Scheme', *RBA Bulletin*, March.

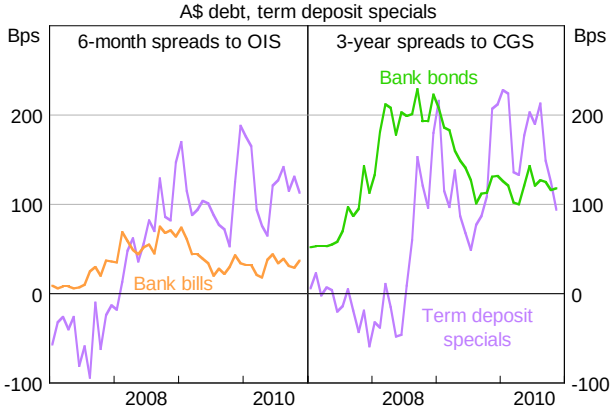
Graph 11
Major Banks' Deposit Rates
$10,000 deposits; monthly



* Average of 1-12, 24, 36 and 60-month terms at the major banks
** Excludes temporary bonus rates
Source: RBA

Within the deposit market, competition has been strongest for term deposits. The average rate on banks' term deposit specials – the most relevant rate for term deposit pricing – is currently more than 70 basis points above market rates for debt of equivalent terms. In the few years prior to the global financial crisis the average rate was generally about 60 basis points below. For the major banks, the rates on their longer maturity term deposits have generally been higher than the yields on their unguaranteed bonds of equivalent maturity over the past year (Graph 12). The regional banks are likely to have seen a slightly larger increase in their average deposit costs than the major banks, reflecting their greater use of term deposits.

Graph 12
Major Banks' Pricing of Term Deposits and Bonds
A$ debt, term deposit specials



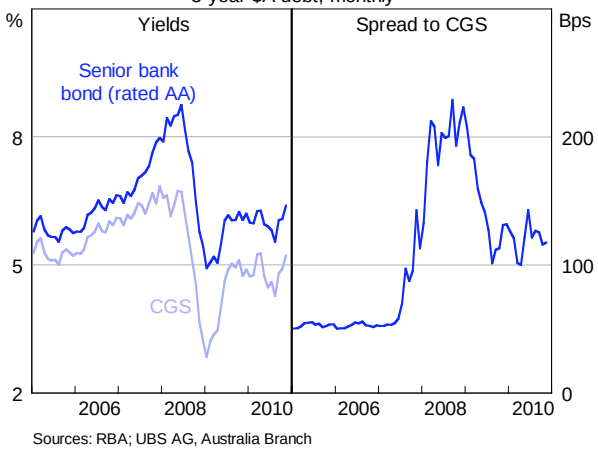
Sources: Bloomberg; RBA; Thomson Reuters; UBS AG, Australia Branch

Rates on at-call savings deposits – including bonus saver, cash management and online savings accounts – have also risen relative to the cash rate (from which these deposits are priced). The average rate on the major banks' at-call deposits, which account for a little under half of their total deposits, is currently estimated to be around 40 basis points below the cash rate, compared with around 100 basis points below in mid 2007.

3.2.2. Wholesale debt

For several years up to mid 2007, the major banks were typically able to issue 3-year bonds in Australia and offshore at an overall spread (including the hedging costs on foreign currency debt) of around 50 basis points over government bond yields (Graph 13). Since then, spreads on banks' bonds have risen significantly, as has the cost of hedging foreign currency debt back into Australian dollars.[8] The overall cost to the major banks of issuing new 3-year bonds peaked in late 2008 at about 220 basis points over government yields for debt issued in Australia and at about 280 basis points for debt issued offshore. The improvement in capital market conditions over the past year has seen the cost of issuing new onshore 3-year debt fall to around 120 basis points above government bond yields in recent months. However, banks have continued to lengthen the maturity of their bond funding by issuing at longer tenors. The average maturity of issuance over this period has been around 4½ years, at an average spread of about 170 basis points including hedging costs.

Graph 13
Major Banks' Bond Pricing
3-year $A debt, monthly



Sources: RBA; UBS AG, Australia Branch

Since mid 2007, the average cost of the major banks' outstanding long-term debt is estimated to have risen by about 100 basis points relative to the market's expectation for the cash rate. But these higher spreads have only affected banks' new bond issuance, not their outstanding stock of debt that was issued prior to the onset of the financial crisis (about 20 per cent of the current stock outstanding). If bond spreads and hedging costs remain around their current levels, then as maturing bonds are rolled over, the average spread on banks' outstanding long-term debt is estimated to increase by a further 15–20 basis points over the next year. Given that long-term debt is around 25 per cent of banks' overall funding, this translates into an increase in total funding costs from this source of around 5 basis points over the next year.

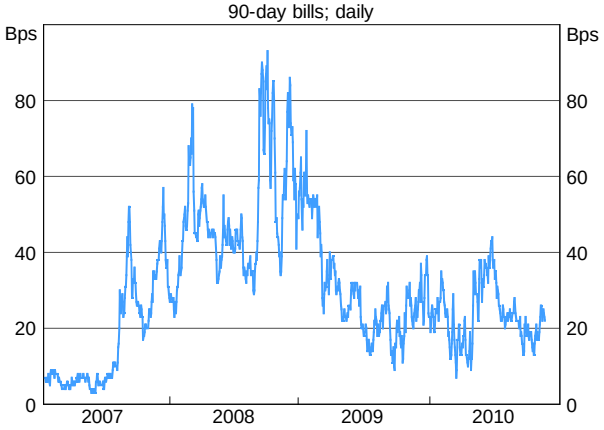
The regional banks, which are smaller and have lower credit ratings than the major banks, have experienced an even larger increase in the cost of long-term wholesale debt, though it is a smaller share of their total funding. Prior to the onset of the financial crisis, regional banks were able to issue 3-year bonds at an estimated overall spread of about 40–50 basis points over bank bill or swap rates, compared to current indicative spreads of about 150–200 basis points.

Short-term wholesale debt accounts for about one-fifth of banks' funding, and is priced mainly off 1-month and 3-month bank bill rates. Prior to mid 2007, bank bill rates closely tracked the market's expectation for the cash rate (the overnight indexed swap or OIS rate) with the spread between 3-month bank bills and 3-month OIS remaining stable at around 10 basis points (Graph 14). While the onset of the global financial crisis saw bank bill rates rise well above OIS rates,

[8] The rates on new bonds are estimated using secondary market yields and cross-currency interest rate swap spreads for the relevant maturity on the day of issuance.

the sizeable risk premium has now largely dissipated. Hence, major banks' short-term capital market debt is currently only about 10–15 basis points more costly relative to the expected cash rate than it was in mid 2007.

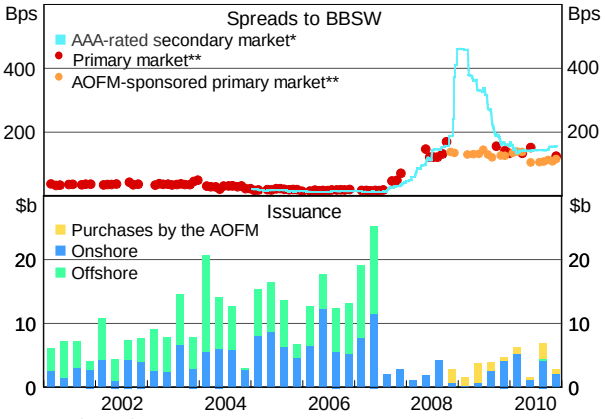
Graph 14
Bank Bill Spread to OIS
90-day bills; daily



Sources: AFMA; RBA; Tullet Prebon (Australia) Pty Ltd

RMBS account for a negligible share of the major banks' funding, but are reasonably important for the smaller financial institutions. The cost of new securitisation funding has risen significantly since the onset of the global financial crisis (Graph 15). Spreads on RMBS are similar for the different types of banks (and also for non-banks). This means that securitisation is relatively more cost effective for the smaller banks, given that spreads on their on-balance sheet wholesale debt (particularly long-term debt) are much higher than for the major banks.

Graph 15
Australian RMBS



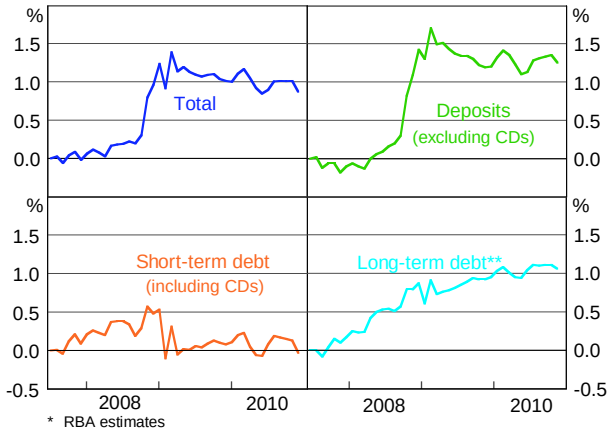
* 5-day moving-average
** Primary RMBS spreads are face value weighted monthly averages of AAA-rated RMBS with conservative average LVRs.
Sources: RBA; Royal Bank of Scotland

The major and regional banks also issued a significant amount of new equity and hybrid securities during late 2008 and 2009 to further strengthen their balance sheets and support lending growth. This additional capital was expensive for the banks, as their share prices were relatively low through much of this period, and spreads on hybrid securities have increased markedly since mid 2007. While this has had only a modest impact on overall funding costs given their small shares in total funding, it has contributed to the recent decline in their return on equity.

3.3. Overall funding costs

Taking into account the costs of individual funding sources noted above, and weighting them by their share of total bank funding, allows an estimate of the overall change in banks' funding costs. Since mid 2007, the higher cost of deposits has made the largest contribution to the overall increase in funding costs, reflecting their large weight in total funding and the 125 basis point rise in deposit rates relative to the cash rate. Long-term wholesale debt has also made a substantial contribution to the increase in the major banks' overall funding costs, while the cost of short-term wholesale debt initially rose relative to the cash rate but is now much closer to pre-crisis levels. In aggregate, it is estimated that the average cost of the major banks' funding, at the time of writing, is about 90 to 100 basis points higher relative to the cash rate, than it was in mid 2007 (Graph 16).

Graph 16
Major Banks' Average Funding Costs*
Cumulative change in spreads to the cash rate since June 2007



* RBA estimates
** Weighted-average spread to cash rate and CGS for long-term variable-rate and fixed-rate debt, respectively. Includes hedging costs.
Sources: Bloomberg; RBA; UBS AG, Australia Branch

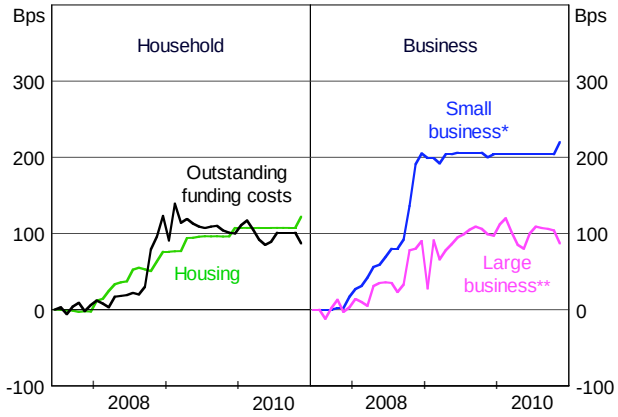
Most of the increase in the major banks' funding costs occurred during 2008 and early 2009, at the peak of the dislocation in markets. Since mid 2009, the major banks' overall funding costs are estimated to have moved broadly in line with the cash rate, reflecting offsetting factors. The continued upward pressure on longer term funding, as bonds issued pre-crisis are rolled over at higher spreads, together with a small increase in the cost of term deposits, has been broadly offset by a decline in the relative costs of short-term wholesale and fixed-rate funding.

The available evidence suggests that the overall 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 mainly reflects the larger rises in the cost of the regional banks' deposits and wholesale debt funding, and the large switch in their funding mix from securitisation to deposits (which are currently a relatively expensive source of funding).

4. Lending rates

Banks' interest rates on all of their loan products have risen relative to the cash rate since mid 2007 (Graph 17). The sizes of the increases have varied considerably across the different loan types, reflecting factors such as changes in the banks' perceptions of the riskiness of the borrower as well as the speed and magnitude by which loans can be repriced. In particular, there has been a marked increase in the risk assigned by banks to lending to particular segments, at least partially arising from the increase in non-performing assets in some sectors.

Graph 17
Variable Lending Rates
Cumulative change in spreads to the cash rate since June 2007

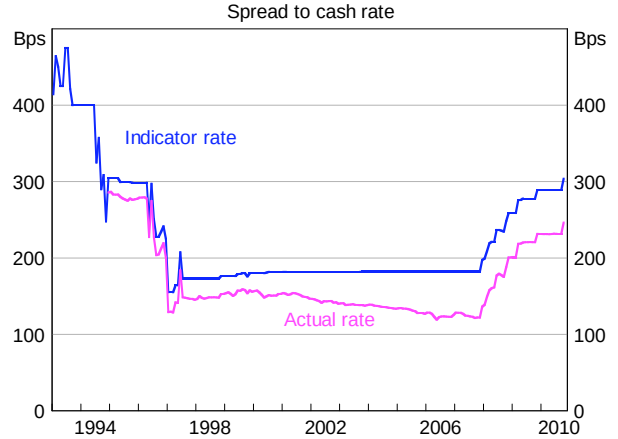


* Indicator rate on residentially-secured term loans
** Loans greater than $2 million. Includes bill lending.
Sources: ABS; APRA; Perpetual; RBA

4.1. Housing lending rates and spreads

As mentioned in Section 2, the competitive pressures in the Australian mortgage market over the past two decades or so have seen interest spreads on mortgages decline. Between 1993 and 1998 the spread between the major banks' housing loan indicator rates and the cash rate fell from about 430 basis points to less than 180 basis points (Graph 18). This spread was steady from 1998 to 2007, as banks' overall funding costs followed the cash rate reasonably closely. Nevertheless, continued competitive pressures meant that it become commonplace for lenders to offer most borrowers a discount, which gradually increased to around 60 to 70 basis points on the indicator rate. The discounts were used by the banks to compete for new business while minimising the forgone interest of lower effective interest rates on their existing housing loan portfolios. As a result of discounting, the spread between the average variable interest rate paid by borrowers and the cash rate fell from 150 basis points in 2000 to 125 basis points in 2007. Since 2007, reflecting the rise in funding costs, the average full-doc housing indicator rate at the major banks has increased by about 120 basis points relative to the cash rate.

Graph 18
Variable Housing Lending Rates
Spread to cash rate

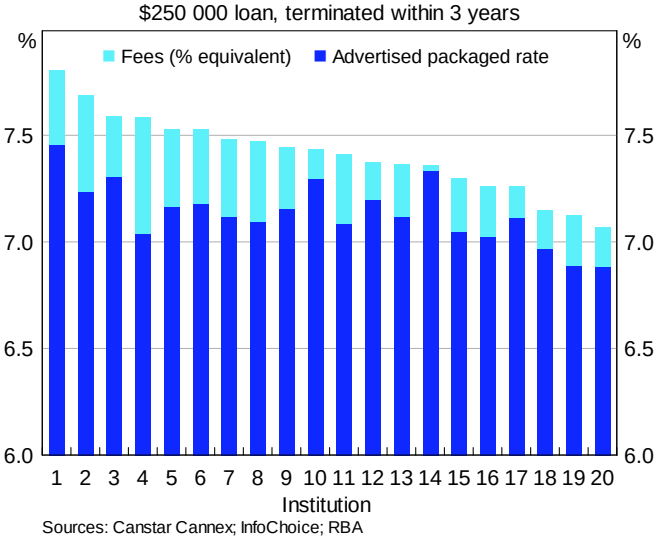


Sources: ABS; APRA; Perpetual; RBA

The range of interest rates that lenders charge on variable housing rates varies considerably. While the advertised packaged rate on variable rate loans for the major banks averages 7.1 per cent, the range between the highest and lowest advertised rates is 35 basis points. Likewise, the advertised interest rates charged by a wider range of institutions varies between 6.9 per cent to 7.5 per cent. As well as interest charges, most institutions levy fees on these loans, including setup, servicing and exit fees. On a $250 000 mortgage held for up to three years, for instance, these fees are estimated to add, on average, about 30 basis points a year. By individual lender,

however, the fees range from a few to over 50 basis points, making comparisons of effective interest rates difficult (Graph 19).

Graph 19
Effective Variable Mortgage Rates
$250 000 loan, terminated within 3 years

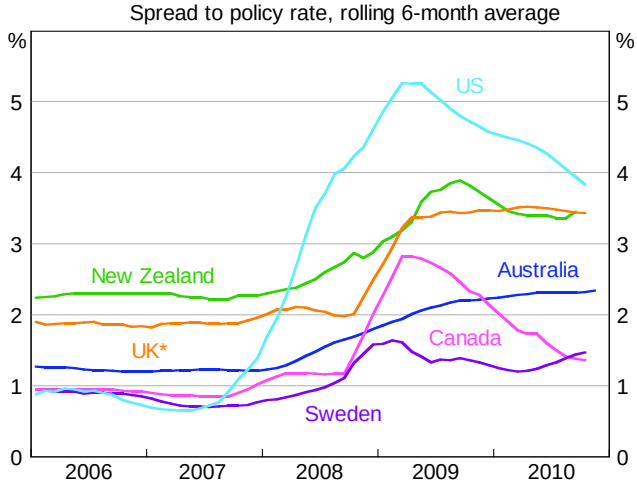


Sources: Canstar Cannex; InfoChoice; RBA

International comparisons of interest margins on housing loans are difficult, as the nature of the standard mortgage product differs substantially across countries and there is often discounting of posted rates which are difficult to track. In some countries, including Australia and the United Kingdom, variable-rate loans predominate, whereas in New Zealand and Canada, fixed-rate loans of between two and five years are more common; in the United States and some European countries long-term fixed-rate mortgages predominate. The features offered on housing loans also differ significantly across countries; for example, loans with redraw facilities and flexible repayment structures are relatively uncommon in many continental European countries.

Notwithstanding the difficulties in making comparisons, the available evidence suggests that spreads to policy rates on variable full-doc housing loans in Australia are around the middle of the range of those in most other advanced countries (Graph 20). These spreads are particularly high in the United States at present, although variable-rate loans make up a small share of the US mortgage market. Likewise, there has been a sizeable increase in housing loan spreads in the United Kingdom, where bank funding pressures have been particularly severe. Spreads on fixed-rate mortgages in Australia are also broadly in line with those in other advanced countries.

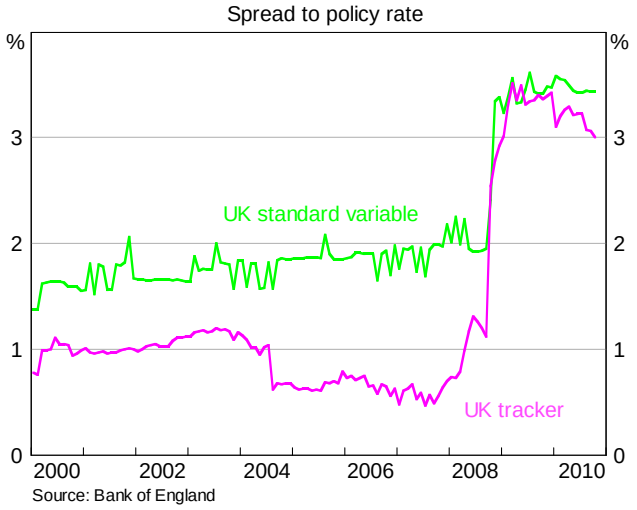
Graph 20
Interest Margins on Variable-rate Mortgages
Spread to policy rate, rolling 6-month average



* Indicator rate.
Sources: ABS; APRA; Bloomberg; Central bank websites; HSH; Perpetual; RBA

In some countries, products are available where interest rates are, at least initially, benchmarked to market or policy rates. The mortgage rate generally tracks the benchmark subject to certain clauses, such as a floor on the mortgage rate if the benchmark falls below a certain level. While 'tracker' or benchmarked products can provide informational benefits for borrowers and potentially provide lenders with a smoother margin on their mortgage book, these products are not without limitations. In the United Kingdom, for example, the spread between new tracker rates and the policy rate has increased sharply, rising by more than the UK standard variable rate (Graph 21).

Graph 21
Interest Margins on Variable-rate Mortgages



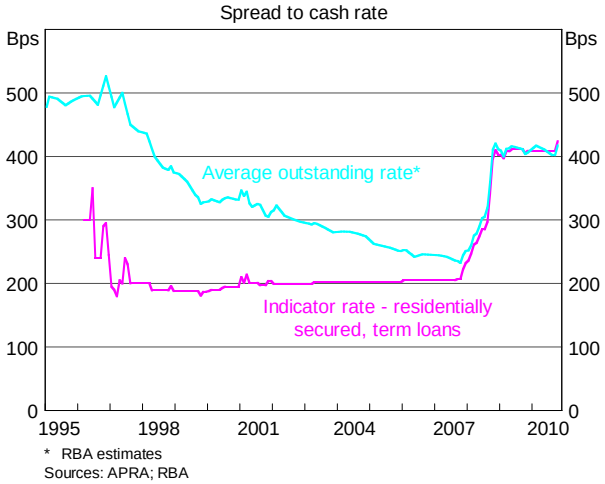
The Australian housing loan market is characterised by relatively limited use of fixed-rate loans by international standards. Historically, more than three-quarters of housing loans have been written with a variable interest rate, and most of the remaining share have rates that are fixed for less than five years. While Australian households will, as a result of this behaviour, generally bear more interest rate risk on their mortgage debt compared to households in other countries, this is partly offset by providing households with greater flexibility. In particular, when interest rates fall to low levels, many households tend to take the opportunity to make additional principal repayments. In contrast to variable-rate loans, fixed rate loans almost always have restrictions on prepayments. The greater prevalence of variable-rate loans in Australia is, in part, likely to be influenced by the fact that these loans provide borrowers with greater flexibility in making prepayments, with Australian borrowers valuing this feature, given that owner-occupier interest payments are not tax deductible as they are in a number of other countries.

Also, the greater prevalence of variable rate loans increases the effectiveness of monetary policy, as the bulk of households is affected quickly by changes in interest rates. This means that, other things equal, the Reserve Bank needs to move the cash rate less than might otherwise be the case.

4.2. Business Lending Rates and Spreads

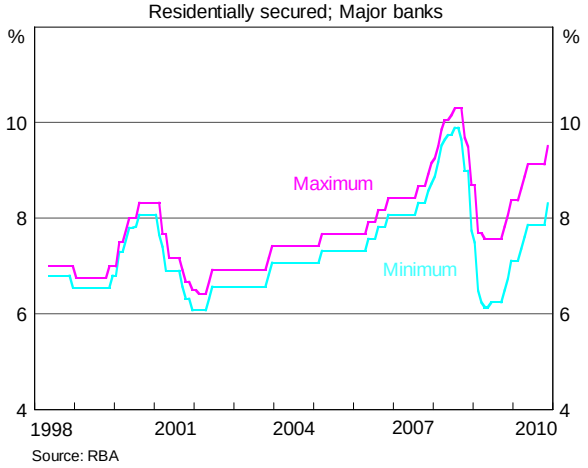
Similar to the behaviour of banks' housing indicator rates, banks' small business indicator rates roughly tracked movements in the cash rate between 1998 and 2007 (Graph 22). However, the spread between the actual rate paid by small businesses and the cash rate narrowed over this time. Partly this was because small businesses increasingly obtained credit by borrowing secured against residential property, rather than obtaining an unsecured loan, thereby paying a lower interest rate. It also partly resulted from a decrease in risk margins charged by lenders.

Graph 22
Small Business Variable Interest Rates



Since the onset of the global financial crisis, banks' business lending rates have risen relative to the cash rate, reflecting a combination of higher funding costs and a reassessment of risk margins. The sizes of the increases have varied considerably across the different loan types, however, reflecting factors such as changes in the banks' perceptions of the riskiness of the borrower, the speed at which loans can be repriced, and the sensitivity of the borrower to changes in lending rates. Furthermore, even for similar products, there has been a marked increase in the range of interest rates offered by banks. In November 2010, the range between the highest and lowest rate offered by the major banks on a residentially secured small business loan was around 120 basis points, compared to 35 basis points in June 2007 (Graph 23).

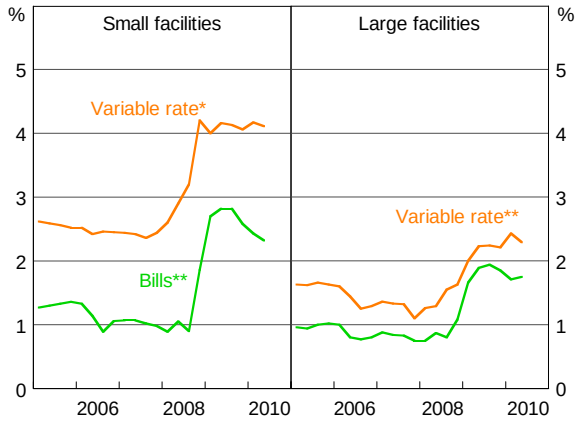
Graph 23
Indicator Rates on Small Business Variable-rate Loans



The major banks' variable indicator rates on small business lending have risen by around 220 basis points relative to the cash rate since mid 2007, and some individual borrowers may also have faced additional increases in risk margins. The higher indicator rates have flowed through immediately to new and existing variable-rate loans. For fixed-rate loans to small businesses, which account for about one-third of outstanding lending, spreads over swap rates on new loans have generally risen by 140–155 basis points. Overall, interest rates on outstanding (fixed- and variable-rate) small business loans have increased by about 170 basis points relative to the cash rate since mid 2007.

There can be considerable variation in interest rates across large businesses, as banks base their pricing on the characteristics of the individual borrower. Banks increased their spreads (over bank bill rates) on new loans from mid-2007, due to their higher funding costs and a pick-up in arrears and losses on business lending. The available evidence suggests that the average spreads on new term loans to large businesses increased by about 200 basis points, from around 50–100 basis points in mid 2007 to a peak of around 250–300 basis points in mid 2009. Since then, spreads on new loans have declined a little, although the average margin on outstanding loans has continued to rise slowly as margins on new loans are still above those on existing loans (Graph 24). For bill facilities, which have a shorter average maturity of around one to two years, the recent reduction in margins on new loans is already flowing through to lower average margins. Overall, the average interest rate on outstanding (fixed- and variable-rate) large business loans is estimated to have risen by about 100 basis points relative to the cash rate since mid 2007.

Graph 24
Spreads on Outstanding Business Loans

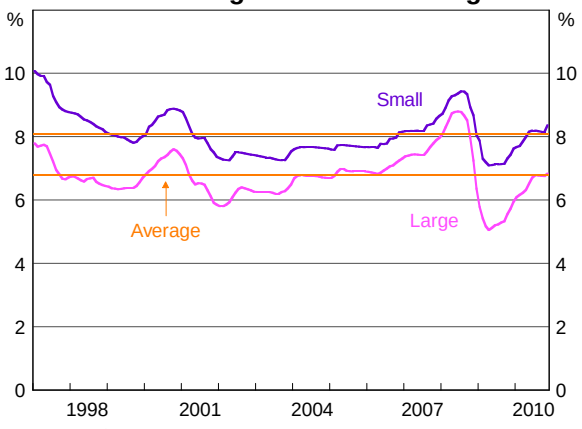


* Spread to the end-quarter cash rate
** Spread to the 3-month trailing average of the 90-day bank bill rate
Sources: APRA; RBA

4.3. Summary

The above changes have resulted in an increase in the spread between lending rates and the cash rate. All else equal, this means that a given level of the cash rate is more restrictive than has been the case over the previous decade. While the cash rate is well below its average since end 1996, rates for both small and large businesses are a little above their averages (Graph 25). The Reserve Bank Board has taken this into account in its monetary policy decisions.

Graph 25
Average Interest Rates on Outstanding Business Lending*

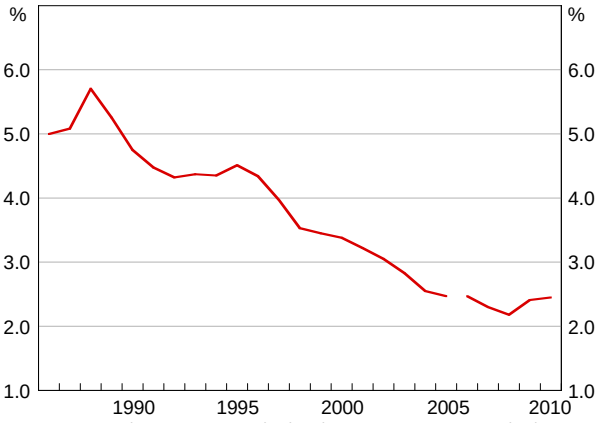


* RBA estimates
Sources: APRA; RBA

5. Net Interest Margins and Spreads

As discussed in the previous two sections, the effects of competition and global financial market developments have had a substantial effect on the behaviour of banks' lending rates and funding costs over the past couple of decades. In addition, housing lending has increased as a share of banks' assets, and this earns a lower interest margin than business lending. In aggregate, these forces have resulted in the major banks' margins contracting from around 5 per cent in the mid 1980s to a low of about 2¼ per cent in 2008 (Graph 26). Over the past few years, margins have fluctuated within a relatively narrow range between 2¼ and 2½ per cent. Banks' margins fell to the lower end of this range early in the financial crisis as funding costs rose ahead of lending rates, but margins have since returned to around the top end of the range. There has, however, been some variation across the major banks.

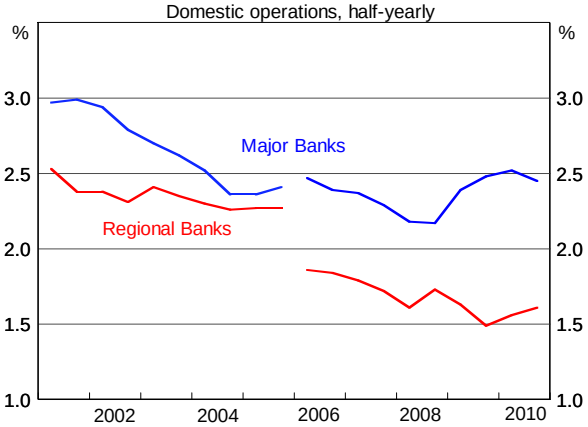
Graph 26
Major Banks' Net Interest Margin*
Domestic operations, yearly



* From 2006 data are on an IFRS basis; prior years are on an AGAAP basis
Sources: Banks' financial reports; RBA

The net interest margins of the regional banks have declined since the onset of the crisis, mainly reflecting the larger increase in their funding costs they have experienced, but have risen a little for some of these banks over the past year. Overall, since mid 2007, the regional banks' net interest margins have fallen by between 20–45 basis points (Graph 27).

Graph 27
Banks' Net Interest Margin*
Domestic operations, half-yearly



* From 2006 data are on an IFRS basis; prior years are on an AGAAP basis
Sources: Banks' financial reports; RBA

The reported increase in the average of the major banks' net interest margins is a little less than the estimated increase in the spread between their lending rates and their funding costs (Graph 28). This is because changes in interest margins are affected by a number of factors in addition to the effects of movements in banks' lending rates and funding costs discussed in the previous two sections:

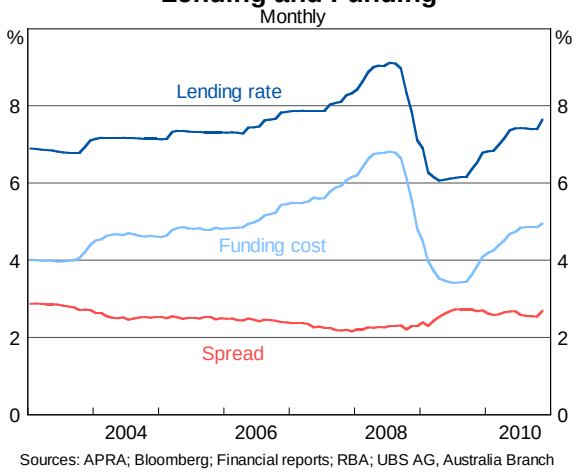
- In addition to its loans, a bank's asset portfolio also includes liquid assets and other debt securities, which tend to earn a lower average return than loans. The banks' net interest margins have been compressed by the fall in interest rates on liquid assets relative to average loan rates since mid 2007, and the increased share of liquid assets in total assets, partly in response to anticipated regulatory changes.

- Increased loan impairments have reduced net interest margins through the loss of interest on non-accrual items. This effect has been offset somewhat by higher risk margins on lending, particularly on business loans, which have had higher rates of impairment compared to housing loans.

- Banks use derivatives to hedge the interest rate risk on their asset and liabilities. The effect of interest rate derivatives on margins can vary substantially over a short period of time, although over an entire interest rate cycle, the effect of interest rate derivatives tend to balance out.

- Working in the other direction, the increase in banks' equity funding would have boosted their margins.

Graph 28
Average Rates on Major Banks' Outstanding Lending and Funding



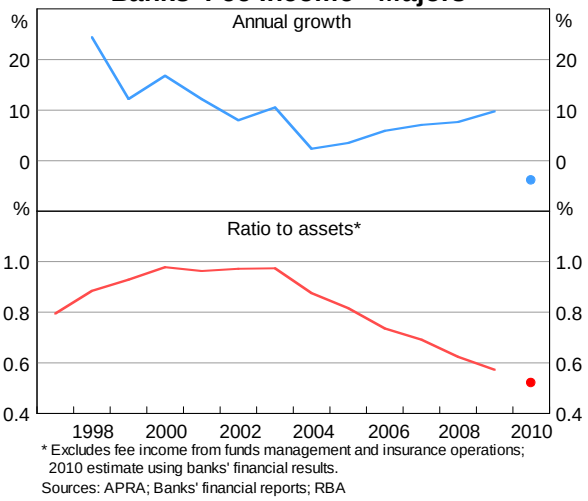
Sources: APRA; Bloomberg; Financial reports; RBA; UBS AG, Australia Branch

6. Fee income

Since 1997, the RBA has conducted an annual survey of banks' fee income, the results of which are published in the RBA Bulletin. The most recent survey was conducted earlier this year and published in the June Bulletin.[9] The results show that while banks' income from domestic banking fees has grown at an average rate of just over 10 per cent since 1997, growth in fees has been significantly less than the growth in balance sheet assets since 2002. This has led to a decline in the ratio of fee income to assets from a peak of close to 1 per cent to 0.6 per cent in 2009 (Graph 29).

[9] See Reserve Bank of Australia, (2010), 'Banking Fees in Australia', *RBA Bulletin*, June.

Graph 29
Banks' Fee Income - Majors*



* Excludes fee income from funds management and insurance operations; 2010 estimate using banks' financial results.
Sources: APRA; Banks' financial reports; RBA

One of the forces influencing the structure of bank fees was the increased competition from mortgage originators in the mid 1990s. As interest margins came under downward pressure, banks began to unwind the cross-subsidies that had existed between mortgage and deposit accounts. One specific outcome of this was that banks introduced periodic mortgage and account-servicing fees. While, in aggregate, consumers of banking services benefited from this process, the consumers of the financial services that had previously been heavily subsidised were worse off.

Pressure on net interest margins also encouraged banks to diversify their income through a greater emphasis on wealth management operations. Income from wealth-management operations now accounts for about 10 per cent of the five largest banks' total income.

More recently, the financial crisis has had two opposing effects on bank fee income. First, more aggressive competition for deposit funding saw banks reduce and remove exception fees on deposit and transaction accounts for both business and personal customers. Second, there was a repricing of credit and liquidity risks on loans and bank bill facilities, which led to increased fees, particularly on undrawn loan facilities held by businesses. In particular, the total banking fee income reported by the major banks in their 2010 financial results indicated a 4 per cent decline in fee income. Further details on the effects of these changes will be available from the RBA's next survey of bank fees which will be published in mid 2011.

More broadly, recent developments in bank fees – including ATM and mortgage exit fees – have been an area where competitive forces have been particularly apparent.

6.1. ATM fees

ATM fee reforms came into effect in March 2009. The reforms changed the way that ATM owners receive payment for transactions made by the customers of other financial institutions ('foreign transactions') and the way that these costs are revealed to consumers. The RBA estimates that changes in customer behaviour as a result of the increased transparency of ATM fees resulted in an overall reduction in the ATM fees paid by consumers of around $120 million in the first year following the reforms.[10]

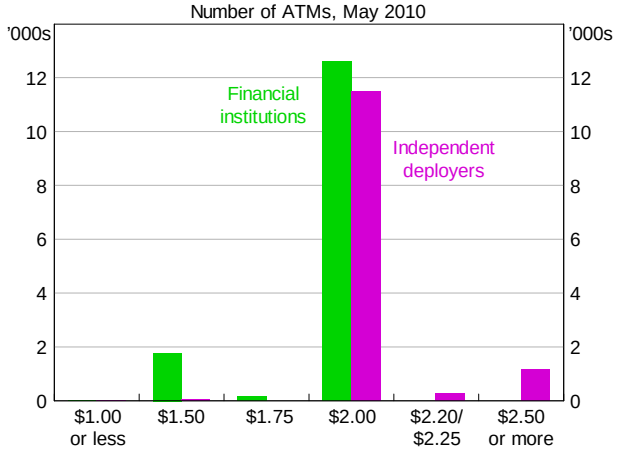
Prior to the reforms, the customer's financial institution paid an 'interchange fee' of around $1 to the ATM owner to cover the costs of providing ATM services. This fee was typically recouped from the customer in the form of a 'foreign fee' that would appear on their monthly bank statement. Foreign fees were around $2 on average. The reforms abolished interchange fees and

[10] See Filipovski B and D Flood, (2010), 'Reform of the ATM System – One Year On', *RBA Bulletin*, June.

allowed ATM owners to charge customers directly for the use of an ATM at the time of the transaction ('direct charging'). As a consequence, financial institutions have removed foreign fees. In sum, all fees associated with making an ATM cash withdrawal are now revealed at the time of the transaction and the consumer has the option of cancelling the transaction without charge if they do not wish to pay the fee.

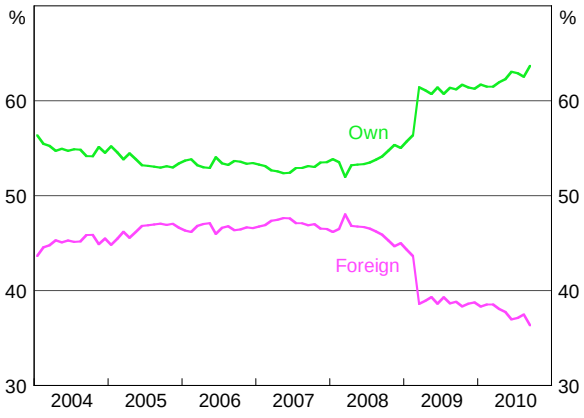
A typical foreign withdrawal now costs the same as before the reforms (around $2, see Graph 30). However, the greater transparency of ATM prices under the new regime has resulted in customers changing their behaviour in order to reduce the fees that they pay. In the first year of the new regime, the number of foreign withdrawals fell by 18 per cent, as customers made greater use of their own institutions' ATMs, increased the average size of ATM withdrawals and made increased use of EFTPOS cash-outs, for which they typically are not charged. Around 38 per cent of ATM withdrawals are now made at foreign ATMs, compared with 47 per cent in 2007/08 (Graph 31).

Graph 30
Direct Charges for Withdrawals
Number of ATMs, May 2010



Source: RBA

Graph 31
Composition of ATM Withdrawals
Seasonally adjusted, per cent of domestic withdrawals



Source: RBA

The increased flexibility in ATM pricing has also meant that charges can better reflect the cost of installing and operating an ATM. For instance, owners can charge more where maintenance costs are high because of a remote location or to cover the cost of temporary installations at special events. As a result, ATM owners are able to place ATMs in locations where they were not previously financially viable. ATM numbers have increased by about 1 500, or about 6 per cent, under the new regime, and there has been an increase in ATMs in regional and remote areas.

6.2. Lenders' exit fees

Recently there has been consideration of lenders' exit fees, including early termination fees. For the major banks, these fees are equivalent to about 10-15 basis points per year on a loan, although early termination fees are not payable if the borrower stays with the institution for at least a few years. Furthermore, early termination fees are generally designed to recoup loan origination costs not defrayed by entry fees.

ASIC research from 2008 suggests that non-ADI lenders (such as mortgage originators) charged the highest average exit fees on a standard sized variable-rate mortgage refinanced within three years after origination. This was followed by the major banks, other banks and then credit unions and building societies. This order does not seem to have changed until recently, with a reduction in the average size of exit fees at the major banks, including the elimination of early termination fees by two of the major banks (Table 3).

Table 3

Average Fees on Variable Housing Loan Products
$250 000 owner-occupier loan, terminated within 3 years

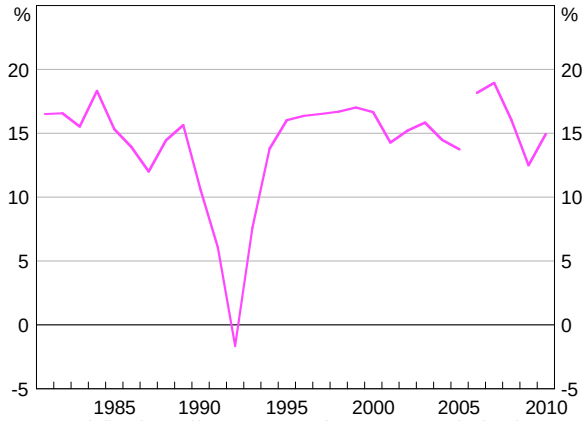
	Setup Fee	Service Fee	Discharge Fee	Exit Fee	Total
	$	$	$	$	$
Current					
Credit unions and building societies	595	122	106	364	1,187
Major banks	431	513	229	462	1,635
Other banks	459	468	271	676	1,874
Non-ADI	584	254	363	2,066	3,266
Change since 2008					
Credit unions and building societies	13	10	14	-37	0
Major banks	-23	203	115	-620	-324
Other banks	36	113	43	-28	165
Non-ADI	-149	38	133	121	143

Sources: ASIC; Canstar Cannex; InfoChoice; RBA

7. Profitability

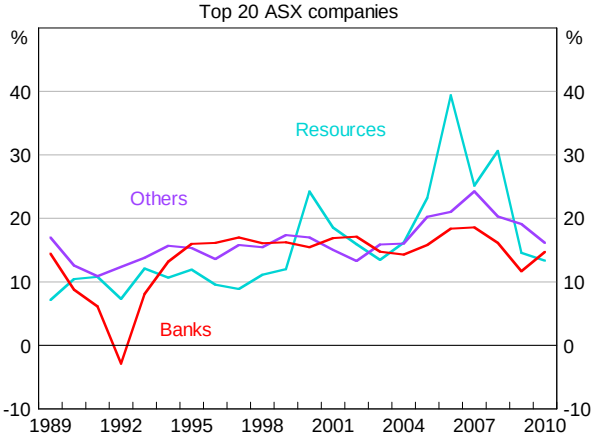
The uninterrupted period of economic growth since the early 1990s has enabled the Australian banking system to grow steadily and maintain a healthy profit stream. The major banks' return on assets has averaged around 0.9 per cent and the post-tax return on equity has averaged about 15 per cent since 1992 (Graph 32). These returns are similar to those of other major companies in Australia as well as those of banks in other countries prior to the global financial crisis (Graph 33 and Graph 34).

Graph 32
Australian Major Banks' Return on Equity*
Yearly



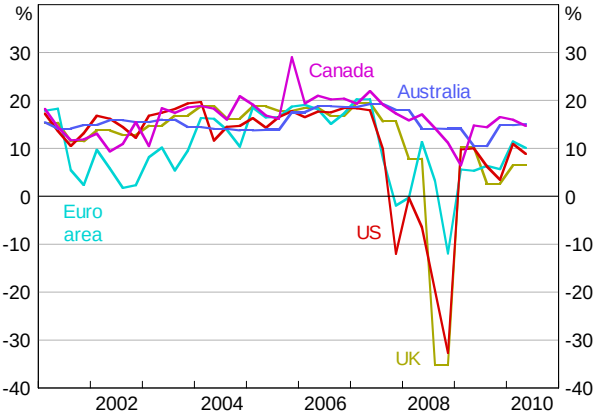
* Excluding abnormal items. From 2006 data are on an IFRS basis; prior years are on an AGAAP basis.
Sources: Banks' financial reports; RBA

Graph 33
Return on Equity
Top 20 ASX companies



Sources:Morningstar; RBA

Graph 34
Return on Equity
Largest banks

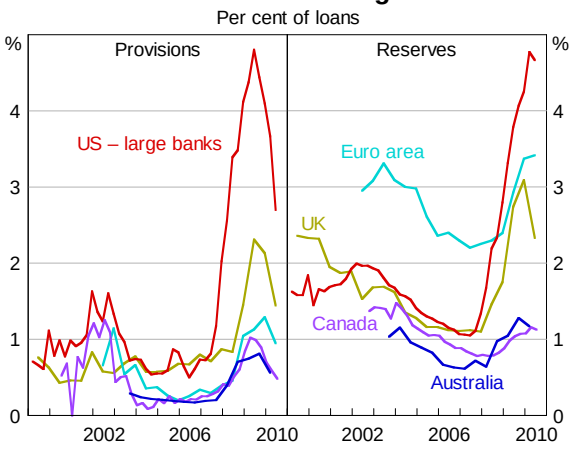


* Six largest US banks, ten largest euro area banks (including Switzerland), five largest UK banks, four largest Australian banks and four largest Canadian banks.
Sources: Bloomberg; Banks' financial reports; RBA

The main factor which contributes to large swings in banks' profitability is losses on their asset portfolios. This has been particularly evident in the profitability of banks in other countries, where large losses on loans and securities holdings have seen banks in the United States, United Kingdom and Europe incur sizeable losses. In Australia too, in the past three years movements in banks' charges for bad and doubtful debts have resulted in large swings in their reported profits.

In particular, the profit growth of Australian banks was adversely affected by sizeable increases in bad and doubtful debt charges in 2008 and 2009, although these rises in debt expenses were well below those experienced in many other countries (Graph 35). In 2010, bad and doubtful debt charges of Australian banks have declined, leading to a commensurate gain in profits. These differences in experiences with bad debt expenses largely explain why Australian banks' return on equity has remained higher than rates achieved by overseas banks since the onset of the global financial crisis.

Graph 35
Banks' Loan Loss Provisioning and Reserves*



* Annualised values of quarterly or semi-annual provisions; not seasonally adjusted. Four largest Australian banks, six largest US banks, five largest UK banks, six largest Canadian banks and six largest euro area banks (including Switzerland) for which data are available; adjusted for significant mergers and acquisitions. Euro area June 2010 figure is estimated.
Sources: Bloomberg; banks' annual and interim reports

8. Regulation

8.1. Financial Crisis Responses

Financial Claims Scheme guarantee for deposits up to $1 million

The Australian Government's guarantee arrangements for deposits and wholesale borrowing were introduced in response to extraordinary developments in the global financial system in the second half of 2008. They were designed to support confidence of depositors in ADIs and to help ensure that these institutions had continued access to capital markets, at a time when governments in many countries were announcing similar measures.[11]

Under the Financial Claims Scheme (FCS) – one of the two key aspects of the Australian guarantee arrangements – all deposits under $1 million with locally-incorporated ADIs are automatically guaranteed by the Government, with no fee payable.[12] Deposits at foreign-bank branches are not eligible. The FCS will remain in place in this form until October 2011, though the longer-term structure of depositor protection arrangements is currently under review.

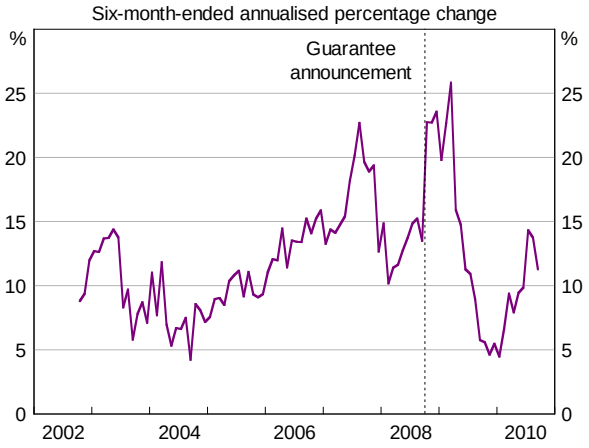
The announcement of the FCS, and the arrangements for large deposits and wholesale borrowing, helped to maintain public confidence in the Australian banking sector. In many ways, however, it only served to reinforce existing trends. Deposit growth had been increasing over 2008 as risk aversion increased, but following the announcement deposit growth picked up further (Graph 36).

[11] For further details, see Schwartz C (2010), 'The Australian Government Guarantee Scheme', *RBA Bulletin*, March. See also Australian Prudential Regulation Authority and Reserve Bank of Australia, (2009), 'Inquiry by the Senate Economics References Committee Into Bank Funding Guarantees', Submission, July.

[12] In the event of failure, the Government would provide initial funds to depositors and then recover funds through the wind up process, with the option of an industry levy if there is a shortfall.

While deposit growth was boosted by the flows of funds from the less regulated sector, including deposit-like products at mortgage trusts, the trend of outflows from the less regulated sector was evident from early in that year – a large mortgage trust had suspended redemptions as early as March.

Graph 36
ADI Deposits*



* Seasonally adjusted and adjusted for changes in reporting; excludes foreign currency and intra-group deposits and certificates of deposit
Sources: APRA; RBA

Wholesale Funding

(i) Guarantee Scheme for Large Deposits and Wholesale Funding

Under the Guarantee Scheme (GS) for Large Deposits and Wholesale Funding, the Government provides a guarantee, for a fee, on deposits greater than $1 million, and wholesale funding with maturity out to five years. Unlike the FCS, the GS also guarantees, with some restrictions, issuance by foreign-bank branches. The GS closed to new issuance in March 2010, though debt previously issued under the Scheme continues to be covered until it matures.

The fees of the GS are risk-based and, as the major banks have higher credit ratings than most other domestic ADIs, they pay lower guarantee fees (Table 4). In setting the premiums on the guarantee the Government considered a range of factors, including international settings and the need to ensure that the arrangements did not continue indefinitely. The fees were set at a level between the then current risk spreads – the product of very stressed conditions – and spreads that were considered likely to prevail in more normal market conditions. This was designed to act as a natural exit mechanism, so that when pricing of risk improved, the yield spread between unguaranteed and guaranteed debt would narrow to below the guarantee fee and it would become cost-effective for issuers to return to unguaranteed issuance.

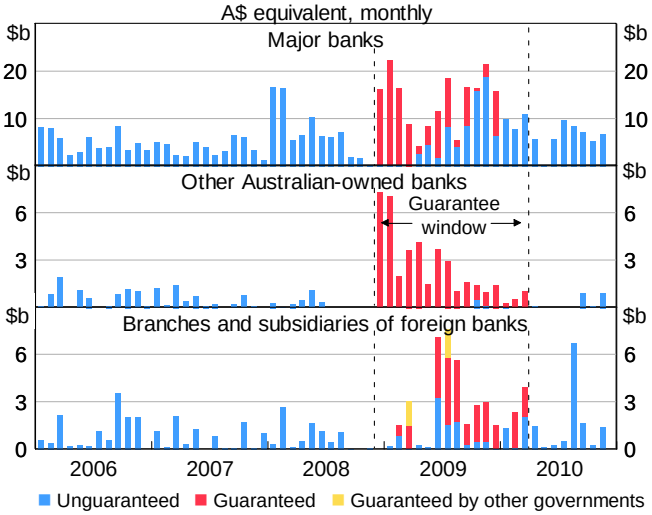
Table 4
Guarantee Scheme Pricing

Credit Rating	Fee per annum basis points
AAA to AA-	70
A+ to A-	100
BBB+ and below and unrated	150

Sources: Australian Government Guarantee Scheme Administrator

Smaller and lower rated institutions were the largest issuers of bonds under the GS relative to their previous limited bond issuance history (Graph 37). When the GS closed to new issuance in March 2010, the non-major Australian banks' guaranteed liabilities accounted for 19 per cent of their eligible debt, compared to roughly 6 per cent at the major banks. The foreign banks were also significant users of the guarantee. Over the course of the GS it became economic for larger banks to issue unguaranteed and avoid paying the guarantee fee, but for smaller ADIs it remained cost-effective to issue through the GS.

Graph 37
Bond Issuance
A$ equivalent, monthly



8.2. Prudential Framework

The Basel Committee is in the process of finalising its package of reforms for the global banking system, 'Basel III'. The reforms focus on the appropriate level of capital, liquidity and leverage and are described in detail in the submission by APRA. The reforms will have the effect of making intermediation more expensive than would otherwise be the case, but their primary purpose is to ensure that the global banking system is more stable in the future. Given the extended transition period for implementation of the reforms, the effects on the cost of intermediation are likely to occur only gradually.

Reserve Bank of Australia
SYDNEY

30 November 2010