

Household debt in Australia

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Introduction

Over the past two decades, Australian households' debt levels have increased noticeably and are now fairly high by international standards. The increase in household debt is due largely to the sharp rise in housing debt. This paper first outlines the main drivers of the increase in housing debt: lower interest rates, increased availability of housing finance and strong demand for debt from investors. Next, it discusses the impact of the higher debt levels on households' debt servicing ratios and net worth. Third, it describes the impact of the turbulence in global capital markets on the Australian housing finance market. Last, it briefly discusses some of the implications of the increase in household debt for monetary policy and financial stability.

Trends in household debt

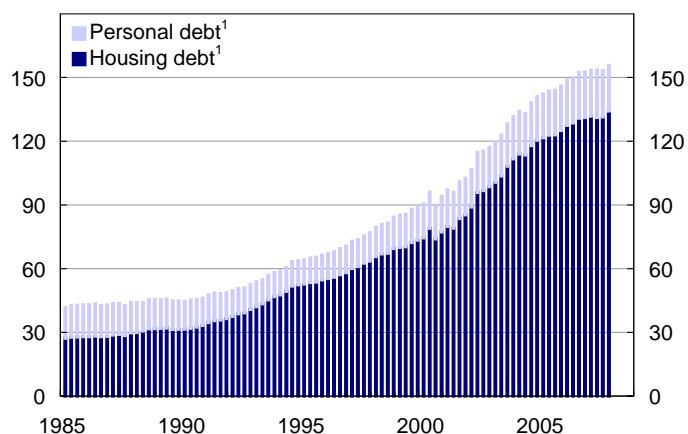
During the 1980s, the ratio of debt to disposable income for Australian households was fairly stable at around 45% (Graph 1). But since 1990, this ratio has risen rapidly, reaching 157% in December 2007. Housing debt accounts for the bulk of the increase, with the ratio of housing debt to disposable income rising from 31% to 134% over the period. By comparison, the ratio of personal debt to disposable income increased from 13% to 22% over the same period. The ratio of debt to assets has also risen sharply over the past two decades, from 8% in December 1989 to 17% in December 2007.

Many advanced economies have witnessed a large rise in household indebtedness over the past two decades. However, the increase in Australia has been particularly pronounced. The ratio of household debt to income in Australia went from being one of the lowest in the advanced economies in the late 1980s to one of the highest in December 2007 (Graph 2).

The ratio of debt to assets in Australia rose from the bottom to the middle of the range for the advanced economies over the same period (Graph 3).

¹ The views expressed in this paper are those of the author, and are not necessarily the views of the Reserve Bank of Australia.

Graph 1
Household debt

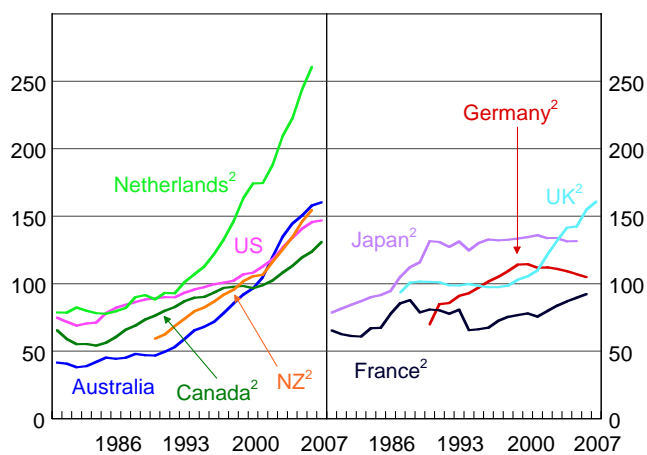


Household sector excludes unincorporated enterprises. Household disposable income is after tax and before the deduction of interest payments.

¹ As a percentage of household disposable income.

Sources: Australian Bureau of Statistics; RBA.

Graph 2
Household debt¹

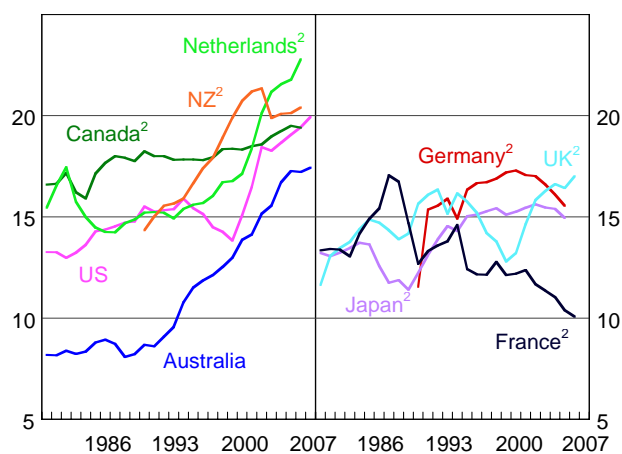


¹ As a percentage of household disposable income.

² Includes unincorporated enterprises.

Sources: National sources.

Graph 3
Household gearing ratio¹



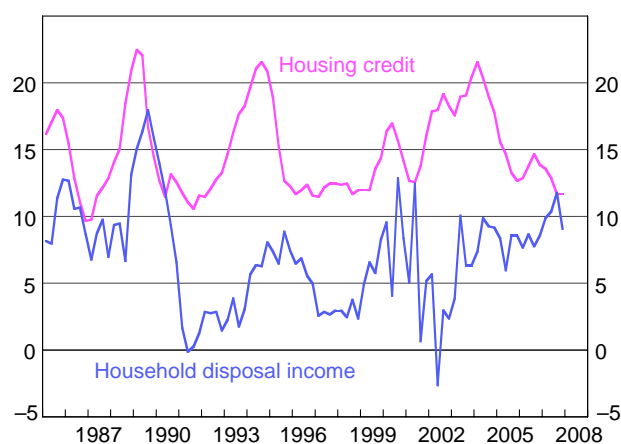
¹ Debt as a percentage of assets. ² Includes unincorporated enterprises.

Sources: National sources.

Housing finance market

Given the dominance of housing debt in households' total debt, this paper focuses on the housing finance market. Since 1990, annual growth in housing debt has averaged 15%, with particularly strong growth in 1988–89, 1994 and 2002–04 (Graph 4). This is appreciably faster than the annual growth in household disposable income, which has averaged only 6% over this period.

Graph 4
Housing credit and household disposable income¹

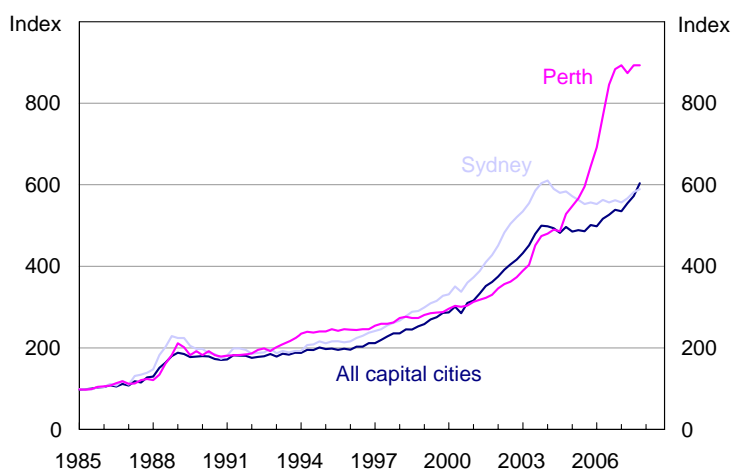


¹ Year-ended percentage change.

Sources: Australian Bureau of Statistics; RBA.

The rapid increase in housing debt has been accompanied by strong growth in house prices. House prices roughly doubled over 1987 and 1988, drifted slowly higher during the first half of the 1990s and more than doubled between 1997 and late 2003 (Graph 5). Since then, house prices (in aggregate) have continued to increase, although there have been markedly different trends across the country – house prices in Sydney have decreased a little, while house prices in Perth have risen strongly, supported by the resource boom.

Graph 5
Median house prices¹



¹ Quarterly, 1985 = 100.

Sources: RBA; Real Estate Institute of Australia.

Several factors have contributed to the strong growth in housing debt over recent years,² the principal one being that lower interest rates in Australia allow households to borrow more when they take out their housing loan. This pushes up the average size of new loans and, over time, the average size of loans outstanding. Between 1989 and 1997 the standard variable mortgage rate fell from 17% to around 7–8%, where it has remained (Graph 6). The fall in mortgage rates was due mainly to the decrease in inflation – and hence in nominal interest rates – but also to a narrowing in lenders’ interest margins. The average size of new owner-occupier housing loans has increased from around AUD65,000 (1.6 times annual household income) in 1989 to around \$250,000 (three times annual household income). But even though the average loan size has quadrupled, loan repayments as a share of household disposable income are still a little below their 1990 peak.

The effect of the increase in households’ borrowing capacity has been reinforced by an increase in the availability of housing finance. During the mid-1990s, specialist mortgage originators entered the housing loan market in Australia.³ These new institutions competed aggressively for market share by undercutting existing lenders’ mortgage rates and by

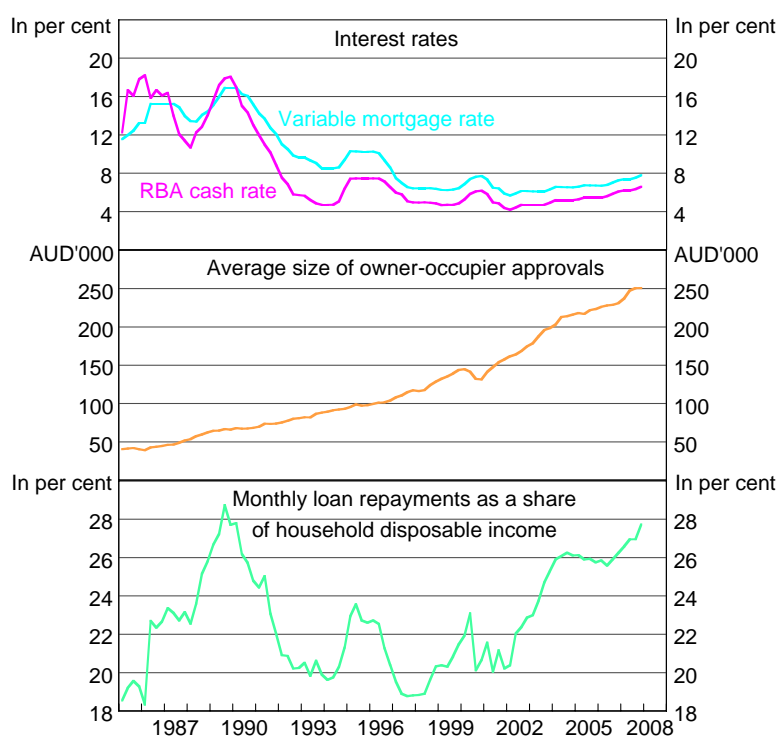
² See L Ellis, S Black and L Dixon Smith, “Housing finance in Australia”, background paper for *CGFS Publications*, no 26, “Housing finance in the global financial market,” Reserve Bank of Australia, 2005, <http://www.bis.org/publ/wgpapers/cgfs26ellis.pdf>; I J MacFarlane, “Do Australian households borrow too much?” *Reserve Bank of Australia Bulletin*, April 2003, pp 7–16; Reserve Bank of Australia, “Household debt: what the data show”, *Reserve Bank of Australia Bulletin*, March 2003, pp 1–11.

³ Mortgage originators are specialist non-bank lenders that cannot accept deposits and therefore rely almost entirely on securitisation to fund their housing lending.

introducing new mortgage products such as home equity loans, interest-only loans and loans requiring little documentation. By the early 2000s, mortgage originators' market share had risen to about 10%.

There has also been an increase in the proportion of households with owner-occupier mortgage debt. According to the latest Australian census, 35% of households were paying off an owner-occupier loan in 2006, up from 27% in 1996, with households whose oldest members were between 45 and 64 years old accounting for most of the increase.⁴

Graph 6
Mortgage rates and loan size¹



¹ Quarterly.

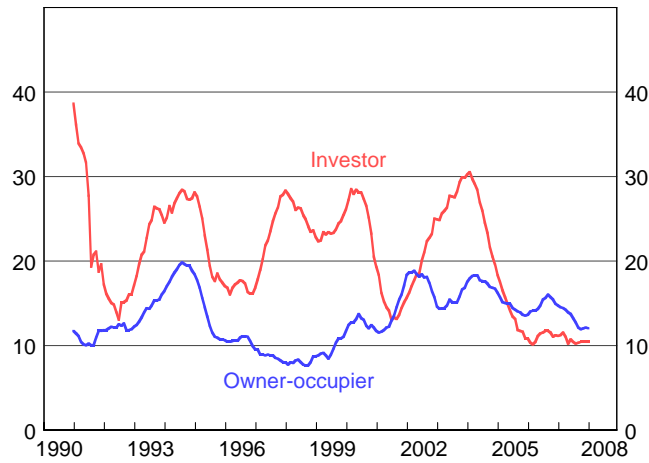
Sources: Australian Bureau of Statistics; RBA.

Strong demand for property from retail investors between 1990 and 2003 also made a substantial contribution to the increase in housing debt. Retail investors were attracted to residential property by the consistently strong growth in house prices, weak returns in alternative asset classes such as equities and innovations in the financing and tax treatment of residential property.⁵ Much of this investment was funded using debt; between 1990 and 2003, lending to investors grew at an average annual rate of 23%, roughly double the rate of growth in lending to owner-occupiers (Graph 7). Over the past few years, investor demand for housing credit has subsided.

⁴ See Reserve Bank of Australia, *Financial Stability Review*, September 2007.

⁵ See Reserve Bank of Australia, "Submission to the Productivity Commission inquiry on first home ownership", *RBA Occasional Paper*, no 16, November 2003.

Graph 7
Housing credit growth¹



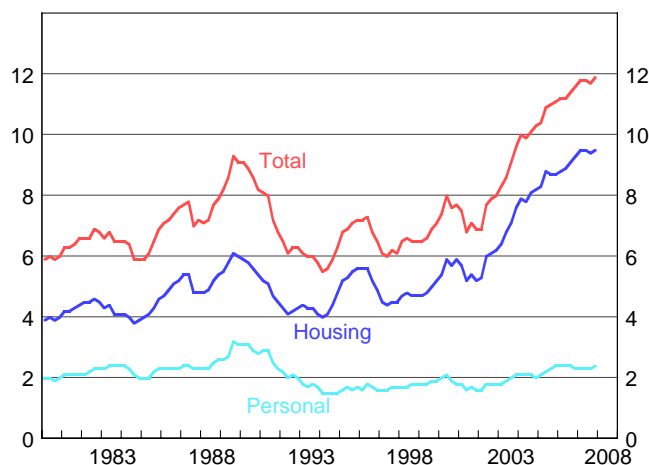
¹ Year-ended percentage change.

Sources: Australian Bureau of Statistics; Australian Prudential Regulation Authority; RBA.

Financial health of households

With the strong growth in housing debt over the past 15 years, household interest payments increased to a historic high of nearly 12% of disposable income in December 2007 (Graph 8). This is well above the previous peak of 9%, which was recorded in late 1989 when mortgage rates reached 18%.

Graph 8
Household interest payment ratio

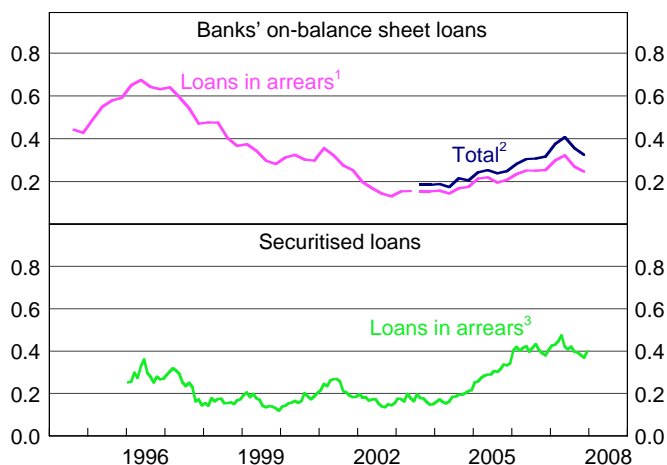


Interest paid as a per cent of household disposable income; excludes unincorporated enterprises.

Sources: Australian Bureau of Statistics; RBA.

However, despite the increase in their indebtedness, very few households are experiencing difficulties meeting their debt repayment obligations. In December 2007, only 0.32% of banks' housing loans (by value) were non-performing (Graph 9). This was down from 0.40% in mid-2007 and not that far above the extremely low level of 0.20% in mid-2003. The 90-day arrears rate on securitised housing loans, about 0.40% in December 2007, has been broadly unchanged since the beginning of 2006, after increasing in 2004 and 2005.

Graph 9
Non-performing housing loans

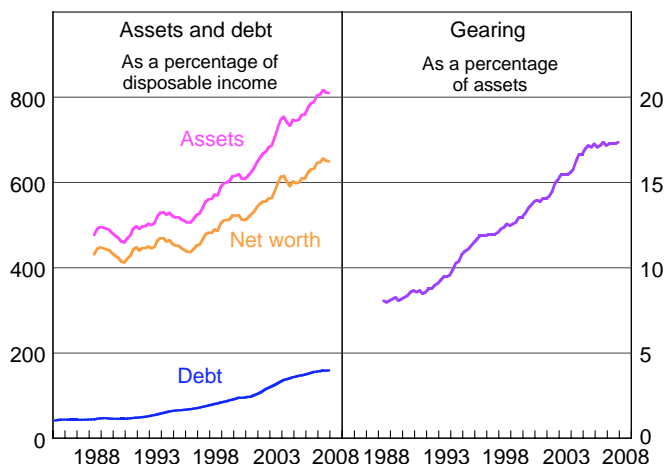


As a percentage of outstanding loans.

¹ Loans that are 90+ days past due but otherwise well secured by collateral. ² Includes impaired loans that are in arrears and not well secured by collateral. ³ Prime loans securitised by all lenders, 90+ days past due.

Sources: RBA; APRA; Perpetual; Standard & Poor's.

Graph 10
Households' assets and debt



Sources: Australian Bureau of Statistics; Australian Prudential Regulation Authority; RBA.

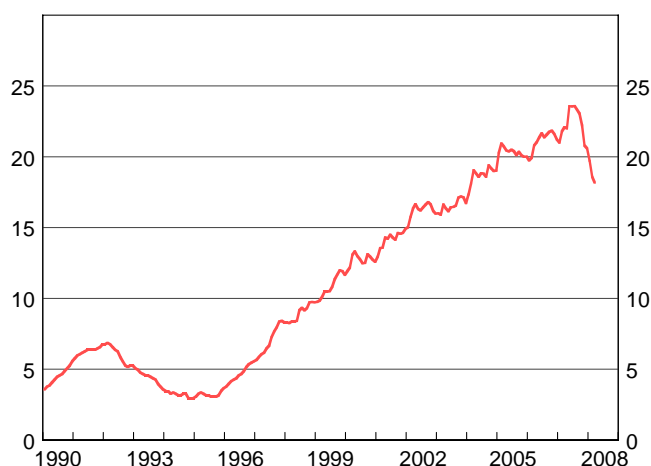
Households' balance sheets also remain in good shape. Since 1990, the value of households' assets has risen from 4.7 times disposable income to 8.3 times disposable income (Graph 10). The substantial rise in the value of households' assets has more than offset the increase in household debt. Households' net worth has risen from 4.3 times disposable income to 6.7 times disposable income over the period. The aggregate gearing of the household sector – the ratio of debt to assets – has increased to 17%, but this is still lower than in many comparable countries.

Impact of the turbulence in global capital markets

The turbulence in global capital markets has had a significant impact on the housing finance market in Australia. This is because deposits account for only about half of Australian financial institutions' total funding, with the balance sourced from domestic and foreign capital markets. While the overall supply of housing finance does not appear to have been restricted, there has been a significant change in lenders' market shares, and mortgage rates have risen.

The financial market turbulence has pushed up the cost of most forms of capital market funding and reduced the availability of some, but its impact has been felt the most in securitisation markets. Over the past decade or so, securitisation has developed into an important source of funding for housing loans. In mid-2007, 23% of outstanding housing loans had been securitised, up from 5% in the mid-1990s (Graph 11). Mortgage originators were securitising almost all of their loans, and regional banks, credit unions and building societies had increased their use of securitisation noticeably as it was a cost-effective source of wholesale funding.

Graph 11
Securitised housing loans¹



¹ As a percentage of total outstanding housing loans.

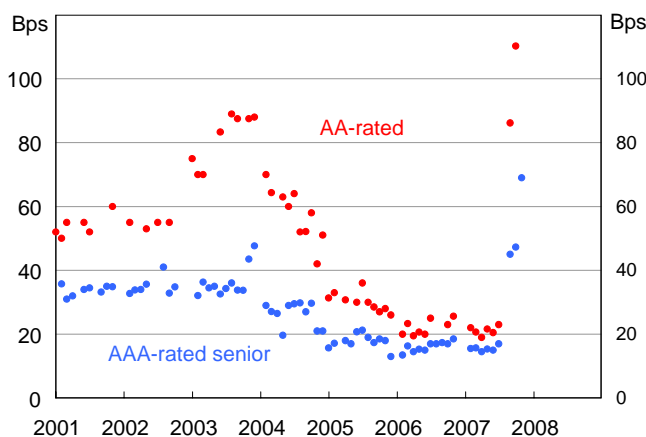
Sources: Australian Prudential Regulation Authority; RBA; Standard & Poor's.

But the securitisation market has been largely closed since the onset of the capital market turbulence in July 2007. For prime residential mortgage-backed securities (RMBS), which account for the majority of Australian asset-backed securities (ABS) issuance, spreads on AAA-rated senior tranches rose from about 15 basis points in mid-2007 to 75 basis points in December 2007 (Graph 12). Spreads on the subordinated AA-rated tranches increased from

about 20 basis points to around 110 basis points. The sharp increase in spreads has occurred even though the Australian housing market remains healthy and investors have never suffered a loss on rated Australian RMBS.⁶ This is basically a “lemons” problem – all securitised products are being sold at a discount because investors have become concerned about the product itself.⁷ Several structured investment vehicles (SIVs) have also sold RMBS, which has created excess supply in the secondary market.

Graph 12

Spreads on domestically issued prime RMBS

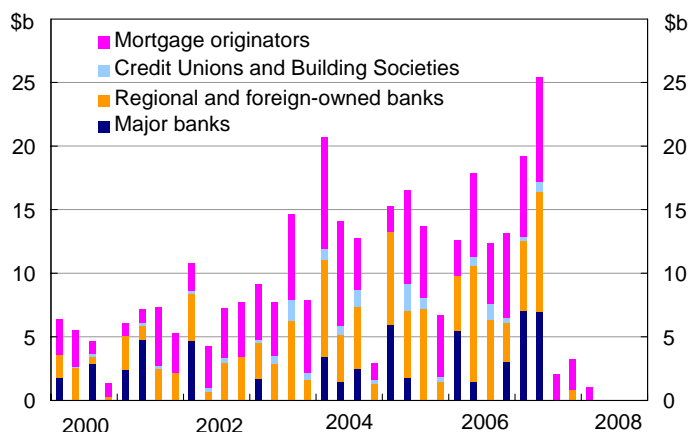


Spread over the bank bill rate; monthly average.

Source: RBA.

Graph 13

RMBS issuance by Australian entities¹



¹ Quarterly.

Source: RBA.

⁶ See Reserve Bank of Australia, “The performance of Australian RMBS”, *Financial Stability Review*, March 2006, pp 63–68.

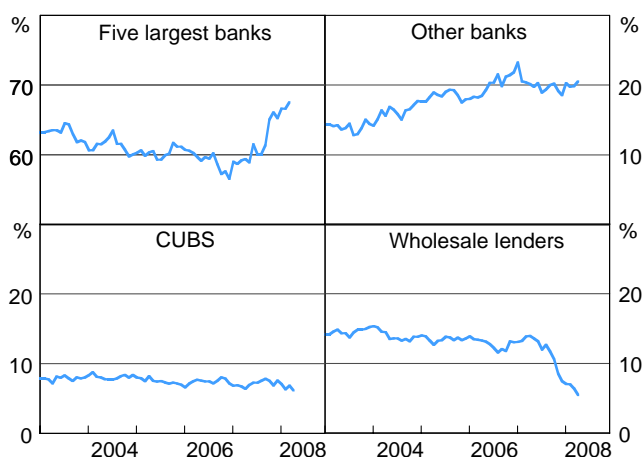
⁷ See G Debelle, “Open market operations and domestic securities”, address to the Australian Securitisation Forum, Sydney, 29 November 2007.

RMBS issuance has fallen noticeably since the onset of the market turbulence. There was about \$2.5 billion of issuance in each of the last two quarters of 2007, compared with about \$20 billion a quarter during the first half of 2007 (Graph 13). And in 2008 to date, there has only been one transaction – a \$750 million private placement by a mortgage originator.

The inability to issue RMBS at a reasonable price (if at all) has made it much harder for mortgage originators to raise funding, thereby curtailing their ability to compete in the housing finance market. As a result, their share of new housing loan approvals has roughly been cut in half since July 2007, to just 7% (Graph 14). Banks – particularly the five largest – have increased their lending, with their market share rising by 6 percentage points to 86%. The larger banks have been able to increase their lending because they have solid deposit bases, and their strong credit ratings have allowed them to continue to raise short-term and long-term debt in their own names. Credit unions' and building societies' market share has remained at about 7%. The overall volume of new housing loan approvals was little changed over the second half of 2007, but has fallen noticeably over the first few months of 2008.

Graph 14

Share of owner-occupier loan approvals

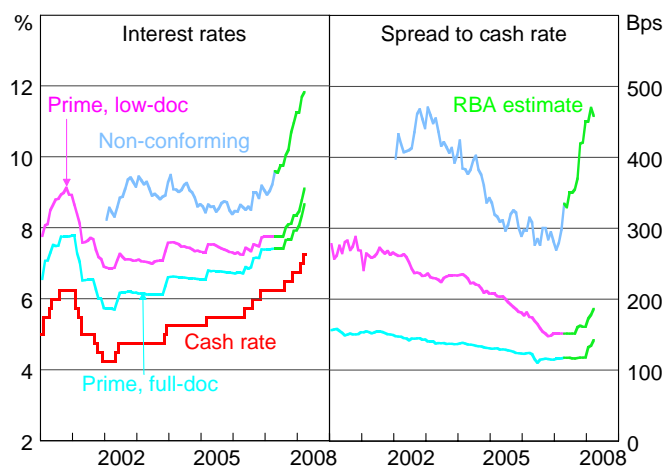


By lender, seasonally adjusted.

Sources: Australian Bureau of Statistics; Australian Prudential Regulation Authority.

Higher wholesale funding costs – both the larger spread between bank bills and overnight index swaps (OIS), and the increase in the spreads over bank bill rates on their new issues of bonds and RMBS – have squeezed lenders' interest margins. Lenders have responded by increasing their mortgage rates by more than the change in the official cash rate. Rates on prime full-documentation housing loans – the highest-quality loans – which account for about 90% of all housing loans in Australia, have risen by about 125 basis points since July 2007, 25 basis points more than the change in the cash rate of the Reserve Bank of Australia (Graph 15). This is unusual; abstracting from discounts, the standard variable indicator rate has moved in lockstep with the cash rate since 2000. Rates on prime low-documentation loans and non-conforming loans, which are the riskier housing loans, have risen by 135 basis points and 210 basis points, respectively.

Graph 15
Variable mortgage rates



Average actual rates paid on new loans.

Estimates are based on movements in advertised rates.

Sources: Perpetual; RBA.

Implications for financial stability and monetary policy

Deregulation and financial innovation have greatly increased the household sector's access to credit. And the strong ongoing performance of the economy has made households more comfortable in taking on debt. Household debt has risen significantly but, overall, household balance sheets remain in good shape, with a substantial rise in the value of assets offsetting the increase in debt.⁸ Moreover, most of the increase in debt is held by households that are well placed to service it. Macroeconomic conditions are also favourable: the economy continues to grow at a strong pace, unemployment is low and house prices are rising in most parts of the country. Consistent with this, the share of households experiencing difficulties meeting their debt obligations, while having risen in recent years, remains low relative to history and by international standards.⁹

Also, housing lending has traditionally not been a source of significant risk for the Australian financial system. And a considerable amount of analysis by the Reserve Bank of Australia and other Australian regulators over the past five years suggests that developments to date do not pose a significant risk to Australian financial institutions. This conclusion is based on a series of surveys, stress tests and research projects that shed light on the potential for banks and other financial institutions to suffer significant losses from their housing lending activities.¹⁰

⁸ See R Battellino, "Some observations on financial trends", address to Finsia-Melbourne Centre for Financial Studies, 12th Banking and Finance Conference, Melbourne, 25 September 2007.

⁹ See Reserve Bank of Australia, *Financial Stability Review*, March 2008.

¹⁰ See Reserve Bank of Australia and Australian Prudential Regulation Authority, "Joint RBA-APRA submission to the inquiry into home lending practices and processes", submission to House of Representatives Standing Committee on Economics, Finance and Public Administration, August 2007.

The structure of the Australian housing finance market is such that changes in the Reserve Bank of Australia's cash rate have always flowed directly through to mortgage rates. About 85% of outstanding Australian housing loans are at variable rates. According to the Committee on the Global Financial System (CGFS), this share is quite high by international standards.¹¹ In countries where variable rates dominate, changes in the policy rate tend to flow quickly through to mortgage rates. In countries where fixed rates are more common, the pass-through to mortgage rates is less clear as the interest rates affecting most borrowers or lenders may be only loosely tied to the policy rate. Also, in Australia variable mortgage rates generally move only when there is a change in the policy rate, rather than being tied to short-term market rates (such as the one-year treasury bond rate and the one-year or six-month Libor) as in the United States. The increase in household debt has, however, made household debt payments more sensitive to changes in interest rates.

The capital market turbulence has increased the influence of non-monetary policy factors on the tightness of financial conditions. As the spread on bank bills over OIS has risen, banks have progressively passed on their higher funding costs to borrowers by increasing their lending rates by more than the increases in the cash rate. Because these higher spreads have been volatile, and the timing and degree of pass-through of these higher spreads to borrowing rates have been uncertain, there has been greater uncertainty about how tight financial conditions will be in the near term.

¹¹ See Committee on the Global Financial System, "Housing finance in the global financial market", *CGFS Publications*, no 26, Bank for International Settlements, Basel, 17 January 2006.