Box A: Developments in the US Sub-prime Mortgage Market

Recently, there has been a marked increase in problem loans in the sub-prime segment of the mortgage market in the United States. While there is no precise definition of sub-prime loans, in the United States they are typically loans made to borrowers with impaired credit histories, which might include one or more payment defaults, a previous loan foreclosure, or bankruptcy. Because of their higher risk of default, sub-prime borrowers are charged higher interest rates than prime borrowers.

There has been rapid growth in US sub-prime lending since 2003, with these loans accounting for around one fifth of mortgage originations in 2006 and an estimated 15 per cent of all outstanding mortgages. In addition, between one half and two thirds of sub-prime loans are adjustable-rate mortgages (ARMs), compared to less than one quarter of prime loans. Most sub-prime ARMs have an initial two-year period in which the interest rate is fixed at a relatively low level before being adjusted at fixed intervals thereafter in line with changes in floating market rates.

As well as the expansion in sub-prime lending, there has also been strong growth in the so-called Alt-A segment of the US mortgage market over recent years, with these loans currently estimated to account for up to an additional 15 per cent of all outstanding mortgages. Compared with sub-prime borrowers, Alt-A borrowers have stronger credit histories but their loans incorporate other non-standard features, such as low documentation or high loan-to-valuation ratios, which make them riskier than prime loans. While the problems that are currently affecting the sub-prime market are not as pronounced in the Alt-A market, this segment could be vulnerable to a more widespread deterioration in conditions, given the elevated risk characteristics of Alt-A borrowers.

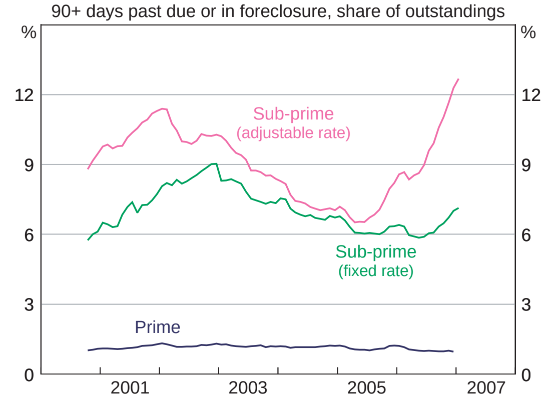
The rapid growth in sub-prime and Alt-A lending over recent years partly reflects a loosening of credit standards in response to strong competition among financial institutions. Lenders have been able to finance much of this lending through the securitisation market. Around three quarters of sub-prime loans made since 2003 were repackaged into residential mortgage-backed securities (RMBS) and sold to investors attracted by the higher returns on offer.

Recently, a combination of slower growth in house prices, rising mortgage rates, lax underwriting standards, and the expiration of introductory discount rates on loans originated in the past few years has resulted in a sharp increase in delinquencies among sub-prime ARMs in the United States. According to First American LoanPerformance, the proportion of these loans that are 90 or more days in arrears or in foreclosure has increased from around 6½ per cent in mid 2005 to nearly 13 per cent in January (Graph A1). By comparison, the delinquency rate for fixed-rate sub-prime loans has increased relatively little over the same period, whereas that for prime loans has not increased at all. The current level of delinquencies on sub-prime ARMs

Graph A1

US Mortgage Delinquency Rates

90+ days past due or in foreclosure, share of outstandings

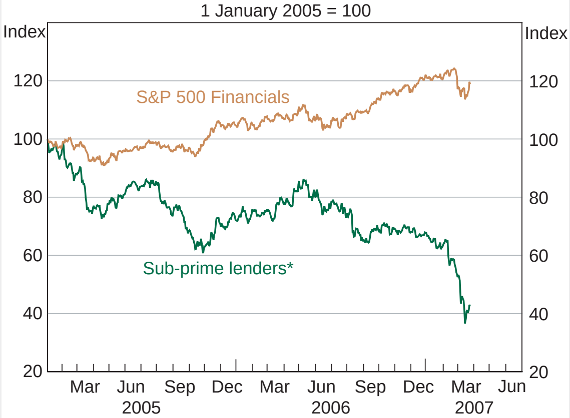


Source: First American LoanPerformance

Graph A2

US Share Price Indices

1 January 2005 = 100



* Simple average of a sample of nine currently listed sub-prime lenders

Sources: Bloomberg; RBA

is above its previous peak in early 2002, and many commentators expect that it will continue to rise as the introductory discount rates on loans made in 2005 and 2006 expire, resulting in significant 'payment shock' for some borrowers as their repayments are increased. It has not been uncommon recently for the repayments of some sub-prime borrowers to rise by 50 per cent or more following the expiration of the introductory interest rate period.

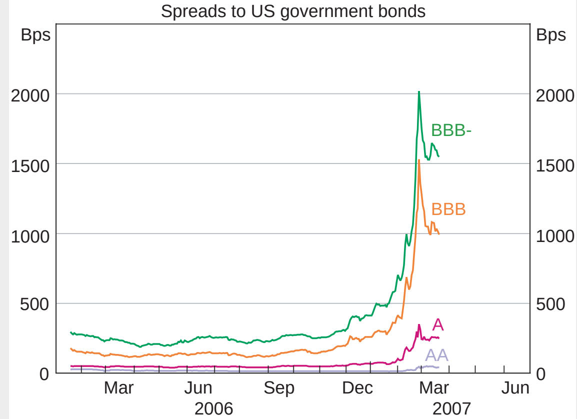
The increase in delinquencies on sub-prime loans is causing significant difficulties for many sub-prime lenders. A number have been forced to repurchase bad loans that they had earlier sold because of conditions attached to early default. Some are also facing funding pressures and are having difficulties renewing their credit lines. Reflecting this, more than 20 sub-prime lenders have shut down and, on average, the share prices of the largest sub-prime lenders in the United States have fallen by nearly 40 per cent since the start of the year (Graph A2). The problems in the sub-prime market have also weighed on other financial stocks, most notably investment banks that have an exposure to this market either through the lines of credit they have extended to sub-prime lenders, their own sub-prime lending operations or through their role as aggregators, in which they acquire sub-prime loans from originators for eventual resale as RMBS.

Investors in the securities backed by sub-prime mortgages are also facing valuation losses as a result of the increase in sub-prime delinquencies. Credit spreads on some lower-rated RMBS tranches backed by sub-prime loans have widened sharply and rating agencies have downgraded some of these securities. There has also been a rise in the cost of insuring against the default risk on sub-prime RMBS using credit default swaps. For baskets of the riskiest tranches of sub-prime RMBS (rated BBB and BBB–), the cost of this insurance has more than tripled since the beginning of the year (Graph A3).

Graph A3

Insurance on Sub-prime RMBS*

Spreads to US government bonds



* Based on baskets of credit default swaps that reference tranches of sub-prime mortgage-backed securities. New series are calculated every six months to incorporate newly issued securities.

Sources: JPMorgan; RBA

Aside from these immediate impacts on sub-prime lenders and RMBS investors, there are concerns that the problems in the sub-prime market could be the catalyst for a generalised tightening of mortgage credit standards, with adverse implications for housing activity. Although there is some evidence that lenders are beginning to tighten their credit standards beyond sub-prime loans, it is too early to tell how far this will go. Moreover, as noted above, credit quality in the prime mortgage market remains very strong, with the delinquency rate on these loans showing no increase over the past few years.

The closest equivalent to sub-prime loans in Australia are non-conforming housing loans, which are provided by a few specialist non-deposit taking lenders and account for an estimated 1 per cent of all outstanding mortgages, well below the 15 per cent sub-prime share in the United States.[1] While the 90-day arrears rate on securitised non-conforming housing loans in Australia has increased over the past few years and is higher than for other housing loans, at 5¼ per cent, it is about half the equivalent arrears rate on sub-prime loans in the United States. One relevant factor here is that non-conforming loans in Australia usually do not feature low introductory interest rate periods or high-risk repayment options such as negative amortisation periods.

1 *See Reserve Bank of Australia (2005), 'Box C: Non-conforming Housing Loans',* Financial Stability Review, *March.*