

## Box B: Real Interest Rates

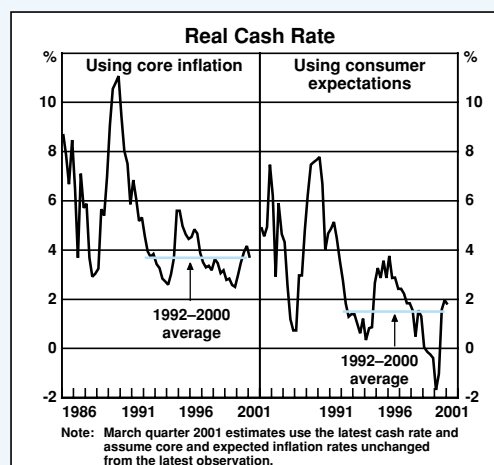
Interest rates are often analysed in real, or net of inflation, terms. This takes account of the fact that part of the nominal interest that borrowers agree to pay to lenders represents compensation for anticipated inflation. The remaining 'real' component better reflects the economic cost of borrowing and the return to lending.

There are a number of measurement issues that arise in calculating real interest rates. There is no unique measure of this concept because interest rates vary depending on such factors as the maturity and risk of the loan or asset. Another important issue is that measures of real interest rates should ideally be constructed from *expected* inflation over the life of the loan or asset. In practice, however, inflation expectations are not readily observable, and they have to be proxied either by survey-based measures or by an appropriate indicator of the current actual inflation rate. For these reasons it is important to look at a range of measures when assessing the overall impact of real interest rates on incentives to borrow and invest.

Graph B1 shows two measures of the real cash rate. The first is calculated using a measure of current inflation (the weighted median inflation rate<sup>1</sup> over the year to the time the cash rate is observed) and the second using a measure of expected inflation (the Melbourne Institute survey of households' inflation expectations). The real cash rate calculated on the second basis is consistently the lower of the two, because the survey measure of consumers' inflation expectations has typically exceeded actual inflation.

The real cash rate measured using current inflation rose by around  $1\frac{3}{4}$  percentage

Graph B1

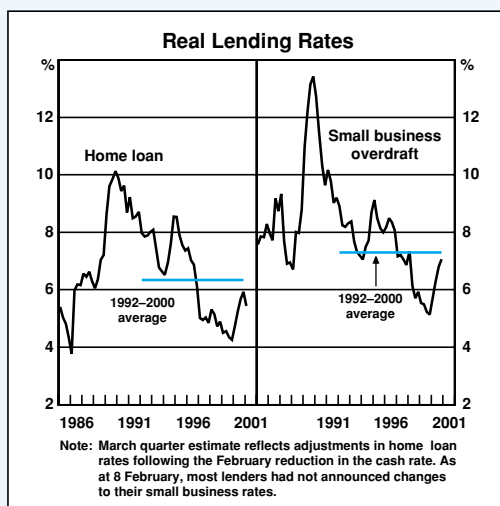


points from the trough at the end of 1999 to the December quarter 2000. This measure implied a real cash rate of just over 4 per cent prior to the February policy easing, only slightly above its average for the low-inflation period since 1992. The second of the two measures has shown a somewhat different pattern over the past year. It declined sharply during 1999 and into the early part of 2000, reflecting the temporary upward spike in consumers' expectations of inflation prior to the introduction of the GST. Subsequently, as inflation expectations have returned to more normal levels, the implied real cash rate has moved back up. Nevertheless, this measure too rose to a level only marginally above its average for the period since 1992. Both these measures of the real cash rate remain well below the levels reached in the mid 1990s tightening phase of monetary policy, which in turn were significantly below the peaks reached in the late 1980s.

Graph B2 shows real interest rates of financial intermediaries for housing and

1. An inflation rate of  $2\frac{1}{4}$  per cent was used for the September quarter 2000 and 2 per cent for the December quarter and the latest estimate.

Graph B2



small business loans, calculated using current inflation rates (corresponding to the first of the two methods described above). While broadly tracking movements in cash rates in

the short term, these indicator rates have undergone a significant downward shift relative to cash rates in the course of the past decade, reflecting the competitive pressures that have compressed intermediaries' net interest margins over that period. Hence, while intermediaries' real indicator rates for these types of loans have increased during the past year in line with the cash rate, they are still relatively low in historical terms. Before the February easing, real housing loan rates were just under 6 per cent, about half a percentage point below the average levels over the low inflation period since 1992, and lower than they were at their cyclical trough in the early 1990s. The compression of margins on business indicator rates has not been quite as pronounced as has been the case for housing loans in that period, but these rates also were slightly below their cyclical average in real terms in December. ↗