## Box D: Market Risk in the Household Asset Portfolio

The past two decades have seen a substantial expansion in household balance sheets. In 2007, the value of household assets was equivalent to over eight times annual household disposable income, compared with 4½ times income in 1990 (with assets net of debt – that is, net worth – also having grown strongly). Of these assets, around 40 per cent are financial assets, with the remainder largely accounted for by dwellings. Within financial asset holdings, there has

been a marked shift towards assets that are market-linked, such as superannuation, equities and managed funds, and away from other financial assets, such as currency and deposits (Graph D1). The share of market-linked financial assets in total assets has risen from 17 per cent in 1990 to around 28 per cent in September 2007 (the latest available data).

The increase in holdings of market-linked financial assets reflects a number of factors, including: the introduction of compulsory employer superannuation contributions in the early 1990s; a higher proportion of household savings being invested directly in equities and managed funds; and, relatedly, significant valuation gains from strong asset markets. While valuation gains on households' total assets have been driven by significant capital on dwellings, capital returns returns on financial assets have also made a material contribution, particularly during the four years to September 2007 – a period of strong gains in the Australian share market (Graph D2).





While the increased share of market-linked financial assets might be expected to boost longrun total capital returns, it can also make these returns more variable than in the past with, for example, households now being more exposed to the sort of volatility recently seen in equity markets. Consistent with this, although the volatility – as measured by standard deviations – of capital returns on individual financial asset classes was little changed between the periods 1988–1997 and 1998–2007, the volatility of capital returns on the overall portfolio of financial assets was higher, increasing from 1.9 per cent to 2.3 per cent (Table D1). While this could partly reflect changes in correlations between various capital returns, it appears to be fully explained by changes in asset composition; had there been no change in asset composition, then the volatility of capital returns on total financial assets would have been around the same as in the previous decade, at 1.8 per cent.

Asset type	1988–1997	1998–2007	1998–2007 re-weighted <sup>(b)</sup>
Financial			
Market-linked financial	3.3	3.4	
Of which:			
Equities and units in trusts	7.2	7.2	
Superannuation and life offices	2.4	2.6	
Fixed income	3.0	2.0	
Non-market-linked financial <sup>(c)</sup>	0.7	0.6	
Total financial	1.9	2.3	1.8
Non-financial			
Dwellings	1.9	1.6	
Consumer durables	0.7	0.7	
Total non-financial	1.7	1.4	1.4
Total assets	1.2	1.1	1.0

Table D1: Volatility of Capital Returns on Household Assets

Standard deviation of quarterly average capital returns, per cent<sup>(a)</sup>

(a) The actual periods covered are the September quarter 1988 to the December quarter 1997, and the March quarter 1998 to the September quarter 2007.

(b) Re-weighted with 1988-1997 period weights.

(c) Currency and deposits, unfunded superannuation, loans and 'other' financial assets. Sources: ABS; RBA

Capital returns on the household sector's aggregate asset portfolio have been less volatile than returns on both of its broad components in each of the past two decades, with the standard deviation of quarterly capital returns on the total portfolio being just over 1 per cent. Evidently, investing in these two distinct asset groups has provided households with some diversification benefits.  $\bar{\tau}$