

Box I

THE US HOUSE PRICE OUTLOOK

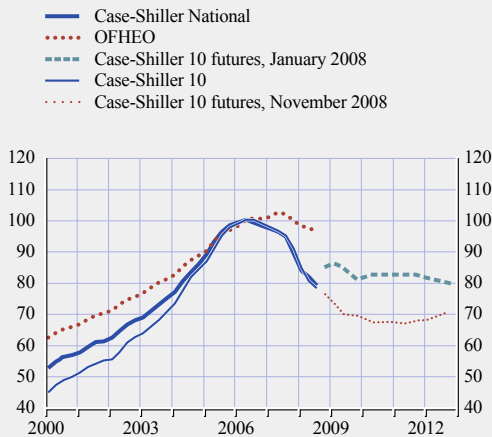
In the United States, house prices peaked in mid-2006 (see Chart A). According to the price indices cited most often, namely the national Case-Shiller index (C-S National) and OFHEO purchases only index (OFHEO), prices in the third quarter of 2008 were 21% and 6.5% respectively below their peaks. Market expectations in late November 2008 – as measured by the Case-Shiller 10 (C-S 10) futures price index for 10 major US cities – indicate that house prices will bottom out in 2010 (see Chart A). This is about six months later than had been expected at the beginning of 2008 and by November prices were expected to fall to more than 15 percentage points below the expectations formed in the early part of the year. In terms of the C-S 10, this implies that house prices will be more than 30% below the peak recorded in mid-2006 before they start to stabilise. If the historical relationships between these indices hold, the C-S National and OFHEO could experience further price declines of around 10% and 5% respectively. It should be noted, however, that these futures price-based projections are surrounded by high uncertainty because the longer-horizon C-S 10 futures markets are highly illiquid.

The developments in average US house prices mask heterogeneity across US states and cities. Recently, the largest year-on-year price declines have been recorded in coastal states, especially in California and Florida, where house prices had increased more than average during the last boom. At the city level, the decline in house prices in the third quarter of 2008 was smallest in Dallas (-2.7%, year on year), while the largest year-on-year drops were in Phoenix (-31.9%), Las Vegas (-31.3) and San Francisco (-29.5). By the third quarter of 2008, the cumulative house price decline from the peaks in these three cities was 38.5%, 37.6% and 33.4% respectively.

To assess the price path implied by the C-S 10 futures, the forecasts of house prices can be compared with rents and the supply-demand situation in the market. Regarding the relative prices,

Chart A US house price outlook

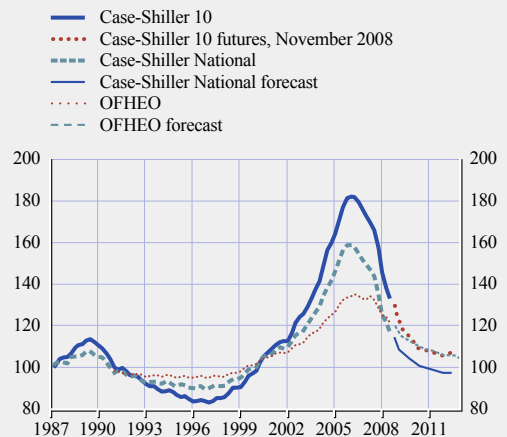
(index: Q2 2006 = 100; nominal prices)



Sources: S&P/Case-Shiller, OFHEO, US Bureau of Labour Statistics and ECB calculations.

Chart B US house price-to-rent ratio and its outlook

(index: 1987 to 2003 average = 100)

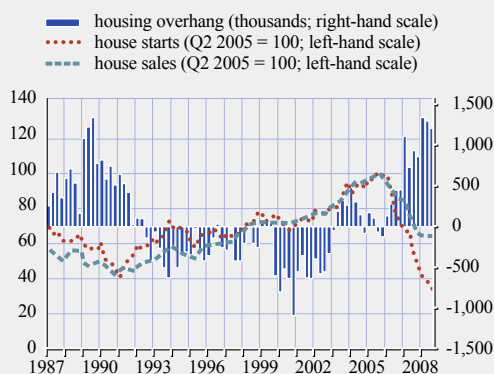


Sources: S&P/Case-Shiller, OFHEO, Census, Bureau of Labour Statistics and ECB calculations.

Note: The forecasts for OFHEO and Case-Shiller National indices are constructed using Case-Shiller 10 futures.

Chart B shows the historical relationship between house prices and rents.<sup>1</sup> In theory, in the absence of any major and lasting shocks, this relationship should revert to some long-run equilibrium, since people should move into rented housing when relative house prices become too high in comparison with rents, and vice versa. According to the house price-to-rent ratio, US house prices may still have been overvalued by as much as 16% to 33% in the third quarter of 2008. If prices decline in the way markets expect, this ratio would revert to around historical averages in 2010. A similar assessment of real price levels can be made based on the price/income ratio. In comparison with median family income, both national house price indices were approximately 20% above the respective longer-term average in the third quarter of 2008.

Chart C Supply and demand in the US housing markets



Sources: Census Bureau, National Association of Realtors and ECB calculations.

The relationship between supply and demand for housing, on the one hand, and house prices, on the other, can be shown with indicators of single-family housing starts, total single-family house sales and a measure of the housing overhang, defined as a residual of a regression of the stock of vacant homes on the population and a constant factor (see Chart C). When housing demand started to decline in the fourth quarter of 2005, firms reacted promptly by sharply cutting housing starts. However, as housing starts represented only about a quarter of total house sales, the inventory of unsold houses started to increase rapidly and had not shown any major signs of stabilisation by October 2008.

As measured by the housing overhang, the excess stock of houses in the third quarter of 2008 amounted to around 1.2 million units. An alternative estimate of the excess housing stock can be derived from the home-owner vacancy rate. This measure was close to its historical peak at 2.8% in the third quarter of 2008, which meant that there were approximately 1 million housing units available on the markets. The speed at which this overhang is reduced in general depends on the trend growth in the number of households (around 1.3 million per year) and on the number of existing homes demolished (around 0.25 million per year). Since the number of housing starts is currently about 0.6 million units below the maintenance rate, it could take up to two years before the excess supply is eliminated.

All in all, it is likely that the US housing markets could reach a bottom only after a protracted period of downward price adjustment. This outlook is, however, highly uncertain since the situation with respect to supply and demand could be affected by several unexpected shocks. Risks relating to demand are linked to both the price and the availability of mortgages, as well as to the weakening of economic and employment growth. As regards the supply side risks, the rising foreclosure rates could contribute to prolonging the excess supply of housing units for sale, thereby prolonging the current supply-demand disequilibrium across the US housing market.

<sup>1</sup> In Chart B, the nominal house price indices are divided by the owner-occupied rent component of the US consumer price index, which measures the price of the service that owner-occupied housing yields. The assumption on its future path is 2.5% growth, year-on-year, which is 0.5 percentage point below its average growth since the beginning of 2000.