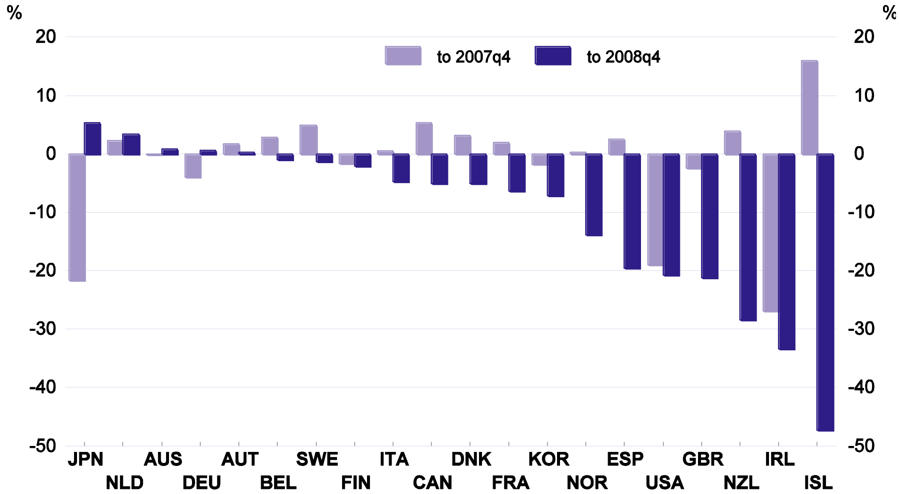
The housing downturn is becoming more widespread

Housing investment is contracting in most OECD countries…

Tighter credit conditions, clearly apparent in mortgage markets in many OECD countries,[15] are reinforcing the synchronised housing downswing that was already underway. Over the past year, housing investment has decelerated in virtually all OECD countries, falling in a majority, and by more than 10% in seven countries (Figure 1.9). Large falls in housing permits suggest that housing investment is likely to decline further in many countries over the near term (Figure 1.10).[16]

Figure 1.9. Real housing investment is falling in most countries

Year-on-year growth rate



Source: OECD Economic Outlook 84 database.

… and this contraction is likely to continue…

The scope for further adjustment in housing investment can be crudely assessed by relating the current position both to the most recent peak and to previous troughs in housing investment as a share of GDP (Figure 1.11). On this basis, most countries may be only in the early stages of the adjustment process. The share of housing investment in GDP could fall by

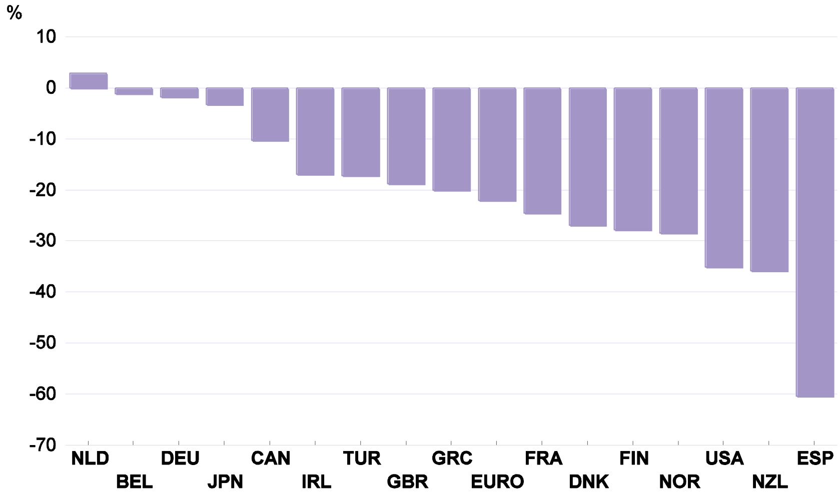
15. The proportion of banks tightening lending standards for house purchase is at very high levels in the United States, the euro area and the United Kingdom.

16. In most countries housing permits are a useful leading indicator for housing investment, although their significance needs to be interpreted with care. In particular, a given percentage change in housing permits usually translates to a smaller percentage change in housing investment, see Box 1.2 in OECD (2008c).

a further 1 to 2 percentage points in many, and by more in a few countries, including Ireland, Spain and Denmark.[17] In the United States, the share of housing investment in GDP is now approaching the lows experienced in the past three housing cycles; however, there is no sign yet in the monthly rate of decline in housing starts or permits to suggest that the fall in housing investment will moderate in coming quarters.

Figure 1.10. Residential permits are falling sharply

Latest data, year-on-year growth rate[1]



1. Monthly data mostly ending between March 2008 and July 2008; three-month average over the last year three-month average, seasonally adjusted.

Source: Eurostat; and OECD, Main Economic Indicators database.

… but with some important exceptions

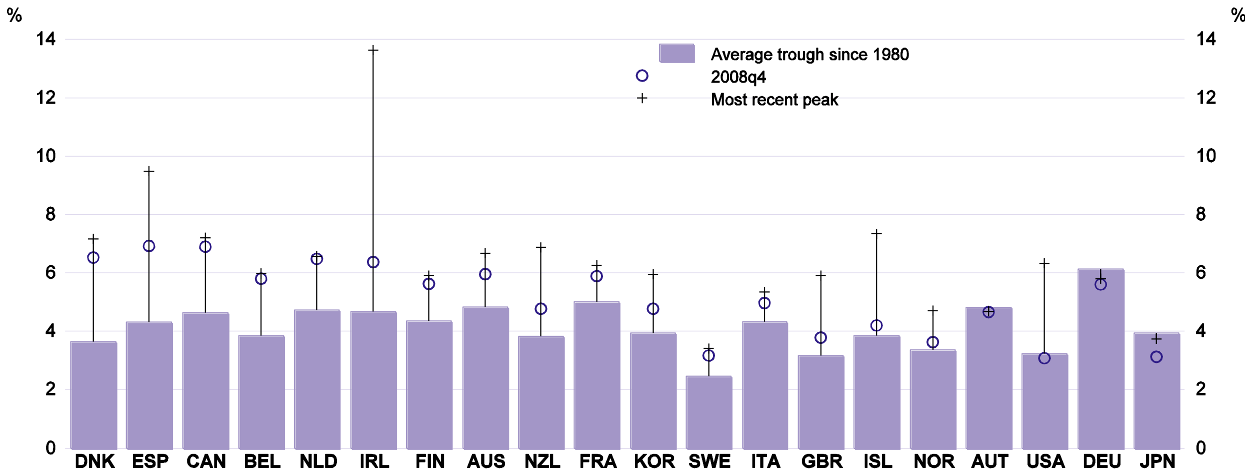
There are, however, some important exceptions to the general tendency for housing investment to act as a drag on future growth. In Japan, following corrections of procedures and regulations,[18] housing investment is likely to recover, while in Germany, which did not experience a housing upturn earlier in this decade, housing investment is historically low in relation to GDP and is unlikely to fall significantly in the near future.

17. However, judging where the trough in housing investment will be based on previous cycles is particularly difficult for some countries, and especially Ireland and Spain. This is because the share of housing investment in GDP in both of these countries has, until the recent peak, been trending up since the mid-1990s, partly reflecting rapid population growth as well as a catch-up effect as the number of dwellings *per capita* is relatively low in comparison with other European countries.

18. In Japan, the poorly prepared introduction of stricter building regulations led to a sharp fall in housing investment during 2007.

Figure 1.11. Housing investment may fall much further

Housing investment as a share of GDP



Note: Countries are ranked according to the difference between their position in 2008Q4 and the average of previous troughs.

Source: OECD Economic Outlook 84 database.

Real house prices are falling in many countries

Softening house prices confirm the picture of a widespread housing downturn; for all but a few of the OECD countries for which data are readily available, real house prices (deflated by the consumer price index) are clearly decelerating, and real house prices are falling year-on-year in about two-thirds (Table 1.5).

There are signs that the US housing downturn may be moderating…

The extent of any further fall in US house prices is of particular importance given their central role in the financial turmoil. House prices have already declined 19% from their peak according to the 20-city Case-Shiller index and 6% according to the Federal Housing Finance Agency (FHFA) purchase-only house price index. In relation to *per capita* incomes both house price indices are approaching their long-run averages.[19] Although the stock of unsold properties is falling and home sales may have stabilised (Figure 1.12), tighter credit conditions and forced sales associated with rising foreclosures suggest that house prices will continue to decline into 2009. The current projections incorporate a drop in nominal house prices (based on the FHFA sales-only index) of 6½ per cent in the year to the end of 2008 and a further drop of 4% to the end of 2009.

19. The house price indices produced by the Federal Housing Finance Agency (FHFA), formerly the Office for Federal Housing Enterprise Oversight (OFHEO), are more representative of house prices in different regions of the country, whereas the Case-Shiller house price index is more representative of houses purchased under different types of mortgage (including non-conventional ones) but less representative of houses purchased in rural areas. The Case-Shiller indices show both a more pronounced run-up in house prices during the boom as well as a more pronounced fall than the FHFA indices.

Table 1.5. **Real house prices are falling in most countries**

	Per cent annual rate of change				*Level relative to long-term average* [1]		
	2000-2005	**2006**	**2007** [2]	**Latest quarter** [3]	**Price-to-rent ratio**	**Price-to-income ratio**	**Lastest available quarter**
United States	5.6	4.5	-0.3	-5.7	123	102	Q2 2008
Japan	-4.6	-3.3	-1.1	-1.6	69	66	Q1 2008
Germany	-3.1	-1.8	-2.2	-3.0	71	64	Q4 2007
France	9.4	10.0	4.9	-0.8	159	138	Q2 2008
Italy	6.5	4.1	3.1	1.0	127	114	Q1 2008
United Kingdom	9.8	3.8	8.4	-8.1	151	141	Q3 2008
Canada	6.2	9.1	8.4	-0.2	182	127	Q2 2008
Australia	7.8	4.1	8.8	-2.1	168	143	Q3 2008
Denmark	5.7	19.4	2.9	-5.0	162	143	Q1 2008
Finland	4.0	8.4	5.5	-4.0	146	105	Q3 2008
Ireland	7.9	10.5	-1.8	-10.9	167	133	Q2 2008
Netherlands	2.9	2.9	2.6	-0.1	156	158	Q3 2008
Norway	4.5	10.7	11.5	-6.8	158	121	Q3 2008
New Zealand	9.7	6.9	8.3	-8.2	150	146	Q2 2008
Spain	12.2	6.3	2.6	-5.0	187	147	Q3 2008
Sweden	6.0	10.6	8.6	0.8	160	120	Q2 2008
Switzerland	1.7	1.4	1.3	0.8	86	75	Q3 2008
Euro area[4,5]	4.6	4.0	1.7	-1.8	127	111	
Total of above countries[5]	4.2	3.6	1.5	-3.8	122	104	

Note: House prices deflated by the Consumer Price Index.
1. Long-term average = 100, latest quarter available.
2. Average of available quarters where full year is not yet complete.
3. Increase over a year earlier to the latest available quarter.
4. Germany, France, Italy, Spain. Finland, Ireland and the Netherlands.
5. Using 2000 GDP weights.

Source: Girouard *et al.* (2006).

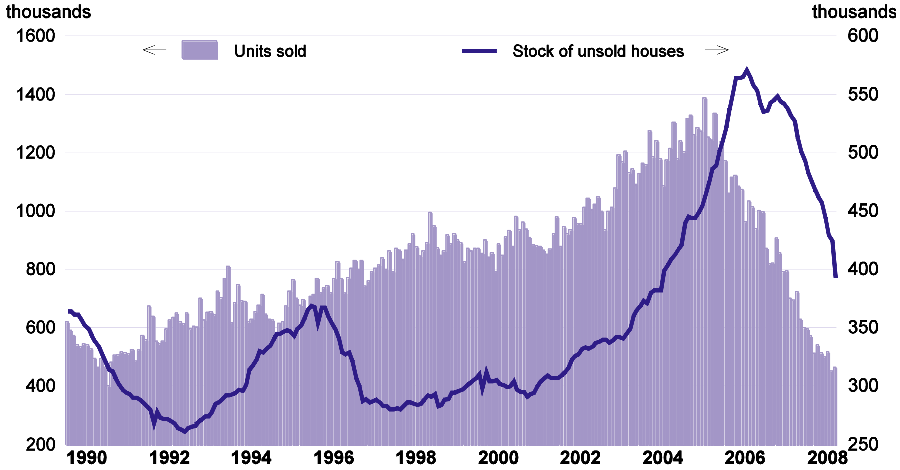
… although there are downside risks

While the current projections imply a somewhat more severe and prolonged housing correction compared with previous US housing cycles,[20] there is still a downside risk given the financial crisis and the fact that typical business cycle effects have yet to kick in. Foreclosures are rising on all categories of mortgages (Figure 1.13), but appear so far to have been mainly driven by falling house prices rather than more general weakness in the real economy.[21] There is a risk going forward that the deterioration in the labour market combines with worsening conditions in financial and housing markets to produce a spiral of foreclosures, falling house prices,

20. Case (2008) presents evidence that “the macro indicators are at exactly the levels where the bottom has been reached in the last three housing cycles, and the state level relationship between house prices and income are not far off their traditional bottoms”.

21. For evidence of the link between falling house prices and foreclosures see Case (2008), Demyanyk and van Hemert (2008), Gerardi *et al.* (2007), Greenlaw *et al.* (2008).

Figure 1.12. The stock of unsold US houses is falling



Source: Datastream.

tighter credit conditions and further weakness in the real economy, which would cause house prices to substantially undershoot any level consistent with fundamentals.[22]

Other countries are also vulnerable to falling house prices

Many other countries also appear vulnerable to a fall in house prices, which in relation to either *per capita* incomes or rents are still well above long-run averages, and even previous cyclical peaks (Table 1.5 above).[23] A number of factors have driven up the fundamental level of house prices, particularly low nominal and real interest rates and the liberalisation of mortgage finance. In addition, rapidly growing house prices, by fostering expectations of continuing capital gains, may have led to some over-shooting of fundamentals. In previous housing cycles, the phase of contracting house prices typically lasted around five years with an average fall in real house prices of the order of 25%.[24]

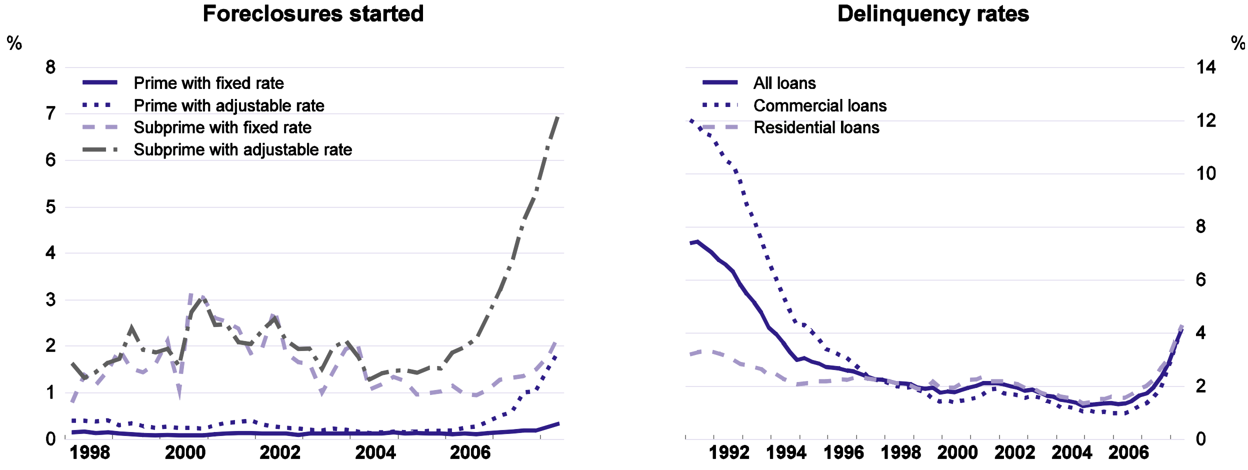
22. Hatzius (2008) estimates that an additional 10% home price decline from mid-2008 levels would be consistent with total eventual residential mortgage credit losses of $636 billion, with the associated reduction in credit supply lowering real GDP growth in 2008 and 2009 by 1.8 percentage points *per annum*. If house prices were instead to fall by 20% from mid-2008 levels, losses would rise to $868 billion, with a correspondingly larger hit to GDP.

23. Indeed, it is noteworthy that, relative to these benchmarks, the rise in house prices in the United States does not appear at all exceptional in international comparison.

24. The main characteristics of real house price cycles from 1970 to the mid-90s can be summarized as follows: the average cycle lasted about ten years; during the expansion phase of about six years, real house prices increased on average by close to 40%; and in the subsequent contraction phase, which lasted around five years, the average fall in prices has been on the order of 25% (Girouard *et al.*, 2006).

Figure 1.13. US foreclosure and delinquency rates are rising

Share of loans



Source: Datastream.

Falling house prices have been driving US foreclosures so far

The linkage between falling house prices and foreclosures may be stronger in the United States than in other countries, given that the easing in US lending standards over the period 2004-06 meant that an unusually large fraction of homeowners ended up with little or negative equity in their properties once house prices started falling. The "no recourse" nature of some US mortgage loans may encourage borrowers to default once they have negative equity in their properties, although the situation differs across states and between different types of mortgages (OECD, 2008a). However, even where recourse is the statutory norm, loans may be *de facto* non-recourse because most states have a non-judicial foreclosure process, which is usually cheaper and quicker than systems where court action is required.

House price effects depend on mortgage markets

The macroeconomic effects of any house price correction are likely to be larger among those countries where mortgage markets are more complete, which in turn facilitates equity withdrawal.[25] In addition to the United States, such countries include the United Kingdom, Canada, Australia and Netherlands and some in the Nordic area. These also tend to be the countries where consumption is most strongly correlated with house prices (Catte *et al.*, 2004). However, among the group of countries with more complete mortgage markets, falling house prices are only expected in the United States, United Kingdom and to a much lesser extent in Australia

25. Muellbauer (2007 and 2008) emphasises the transmission of housing wealth effects *via* changes in collateral for both the United States and United Kingdom and argues more generally that the link between housing wealth and consumption is likely to be dependent on the institutional set up of mortgage markets. He finds that for both Italy and Japan, two countries with relatively illiberal mortgage markets, that higher house prices reduce consumption as the young are forced to save more to be able to afford a house.

and Denmark. In both the United States and United Kingdom weaker house prices and tightening lending standards have already led to substantial falls in housing equity withdrawal, which is likely to contribute to weaker consumption going forward (as "back-of-the-envelope" calculations referred to earlier illustrate for the United States).[26]

A commercial property slump could exacerbate financial stress

Falling property prices could further exacerbate financial stress to the extent that they lead to a downturn in the commercial property sector particularly given that commercial property market booms and busts have often been associated with banking crises. In the United States, commercial property prices have already fallen sharply[27] and the (30-day plus) delinquency rate on commercial loans has almost caught up with that on residential loans. This raises the spectre of a commercial property slump similar to that in the early 1990s, when delinquency rates eventually far exceeded those on residential property, leading to further serious financial problems for many banks. Moreover, the exposure of banks to commercial real estate lending (as a share of bank assets) appears as large as in the early 1990s and could be exacerbated if problems in securitised residential mortgages spill over into securitised commercial mortgages (Garner, 2008).

Commodity prices have fallen

Oil prices have been falling…

Oil prices have followed a rollercoaster path. In July 2008, the crude oil price peaked at $144 a barrel (Brent), having risen some 60% in less than six months, to reach an historic high in both nominal and real terms. Since then, it has fallen to around $50 a barrel, some $20 below the 2007 average (Figure 1.14, upper panel).[28] A major factor behind the recent oil price declines has been falling oil demand, as current and prospective global economic activity weakens. However, given that fundamental macroeconomic factors, which can account for much of the oil price rise from 1999 to 2007 (Box 1.1), have more difficulty explaining the levels attained in mid-2008, recent price falls may also represent a correction following earlier overshooting.

26. In the United States, estimates of the "active" component of housing equity withdrawal (which is composed of cash-out re-financing and home equity borrowing that are discretionary actions to extract home equity and so are more likely to be causally-related to spending) have fallen from an average of 5¼ per cent of personal income over the period 2003-06 to only 1% in the second quarter of 2008. For the United Kingdom, Bank of England estimates suggest that housing equity withdrawal has fallen from an average of 6% of post-tax income over the period 2003-06 to -1% in the second quarter of 2008.

27. US commercial property prices were down 9% in the year to third quarter of 2008 according to an index produced by the MIT Centre for Real Estate which includes the prices of industrial, retail, office and large apartment buildings.

28. The swing in the price of oil has been less extreme measured in euros (and many other currencies) as the dollar has tended to depreciate while oil prices were rising and has appreciated as they fell.