

Affordability

Dean Garratt, Economist, Council of Mortgage Lenders

- *Recent house price growth has heightened concerns over house price affordability. Although the London house price to income ratio is now above its late 1980s' level, in other parts of the UK, with the exception of Northern Ireland, it remains lower.*
- *In southern England the size of the required deposit to buy a house – whether measured relative to income or the size of the advance – has been increasing steadily. In the rest of the UK entry costs to the market have changed very little.*
- *Low debt-servicing costs have cushioned higher house price to income ratios in the south.*
- *There is no evidence of any systematic relaxation of lenders' credit standards to ease the pressure from high house price to income ratios.*
- *The size of deposit required to buy a house was an effective mechanism in reducing activity levels during 2000.*
- *The recent surge in house prices appears to be a response to cuts in interest rates but by increasing entry costs to the market it is difficult to envisage the recent pace of house price growth continuing for too long.*

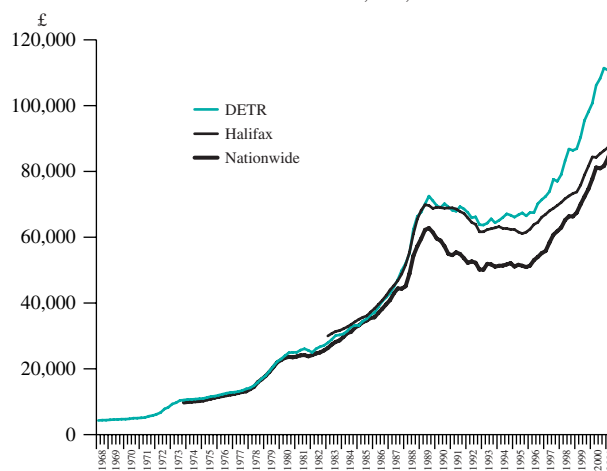
Introduction

This article explores the various measures used to assess the affordability of housing. It looks at the strengths and weaknesses of the various measures and the meaningfulness of the underlying data. It goes on to consider whether the behaviour of buyers and seller can be accorded with trends in any of the affordability data.

Nominal and real house prices

In assessing how the absolute price of housing has changed over time it is useful to distinguish between nominal and real prices. Nominal house prices reflect the prevailing price at transaction. Chart 1 shows the average nominal house price for the UK as reported by the DETR, Halifax and Nationwide. Nominal house prices have typically risen over time, but with a period of decline in the early 1990s.

CHART 1: NOMINAL HOUSE PRICES, UK, 1968-2001

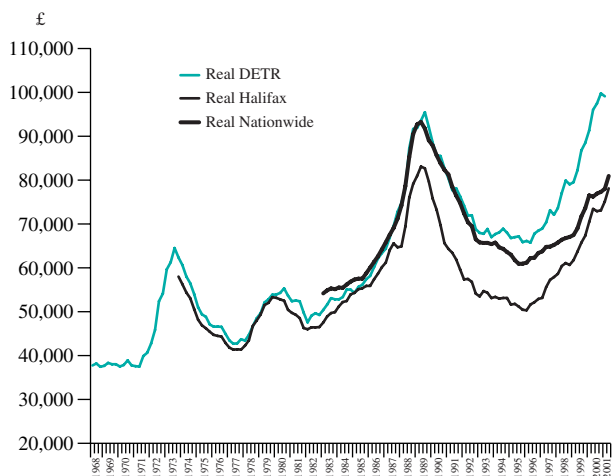


Source: DETR, Halifax plc and Nationwide

A more striking picture is revealed in Chart 2 once inflation is stripped out. In particular, a rise and

subsequent fall in prices is evident not only in the late 1980s/early 1990s, but also in the early 1970s and to some extent in the late 1970s. Although especially strong real house price growth has been followed by falls in real house prices there remains an underlying trend for real house prices to increase over time. More specifically, while real house prices fall back after periods of acutely strong growth they do not fall back as far as the level they accelerated from.

CHART 2: REAL HOUSE PRICES, UK, 1968-2001

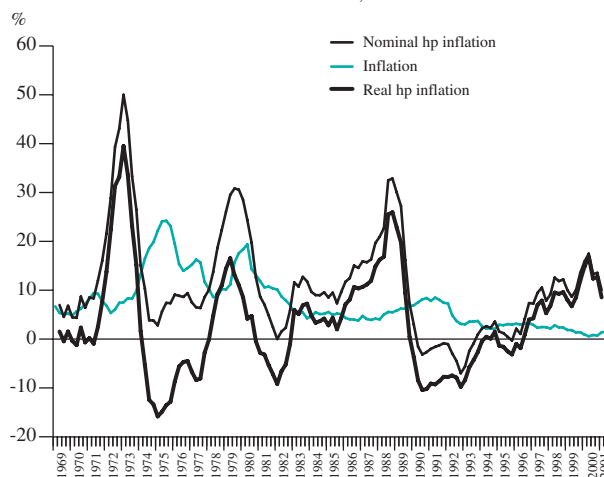


Source: DETR, Halifax plc, Nationwide Building Society and National Statistics
 Note: The inflation measure used is the consumer expenditure deflator

The late 1980s/early 1990s housing market cycle was different from earlier cycles because real house price falls unusually involved falling nominal house prices. In the 1970s higher rates of price inflation in the economy disguised the fall in real house prices as nominal prices carried on rising. So while the three earlier housing market cycles were characterised by strong rises and then falls in real house prices only the early 1990s saw negative nominal house price inflation (see Chart 3). This has potentially important implications for the UK housing market under low inflation. With low inflation, falls in real house prices are more likely to be accompanied by falls in nominal house prices (see Cutler, 1995).

A quick judgement about affordability is sometimes sought by comparing the average real house price with its long-term trend. The results are sensitive to the type of trend growth path chosen and to the start and end points. Chart 4 shows the percentage deviation of DETR/CML average house prices from an assumed straight-line growth path since 1968. It shows real house prices currently above their estimated long-term growth path, although by much less than in the late 1980s and early 1970s. But if the pattern of the past is indicative of future real house prices and if this analysis truly states the current

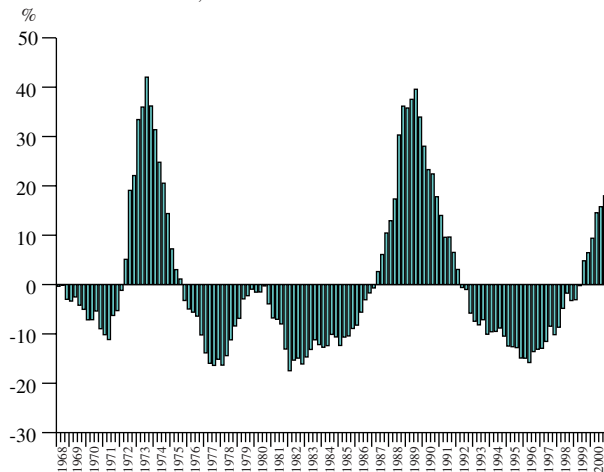
CHART 3: REAL AND NOMINAL HOUSE PRICE INFLATION AND CONSUMER PRICE INFLATION, 1969-2001



Source: DETR/CML and National Statistics

position, then falling real house prices are possible. But as the amplitude of the cycle is now much smaller falls in nominal prices may still be avoided.

CHART 4: DEVIATION OF UK HOUSE PRICES FROM LONG-RUN TREND, 1968-2000



Source: CML calculations

Nominal and real house prices across the UK

So far the analysis of nominal and real house prices has focused on the average UK price. However, when the focus shifts to the four countries of the UK it becomes apparent that it is in England and Wales where real house prices, while trending upwards over time, exhibit the greatest volatility. Real house prices in Wales have constantly been below the English average. Scotland has experienced a much steadier rise in real house prices over time and avoided the real house price falls experienced in England in the early 1990s. Northern Ireland is noteworthy in that real house prices in the mid 1990s were essentially unchanged from those in the mid 1970s. Since then

the economic and political environment has been conducive to a stronger housing market and real house prices increased by nearly 60% between 1994 and 2000. Consequently, housing affordability has become an issue in Northern Ireland (see Garratt and Heywood, 2001).

Table 1 helps to focus on the late 1980s/early 1990s housing market cycle across the UK. All the house prices shown are measured at 1995 prices with general inflation having been stripped out. The largest drop in real house prices across the cycle was in England, closely followed by Wales. The percentage drop was significantly smaller in Scotland and Northern Ireland. The subsequent increase in real house prices from the early/mid 1990s trough through to 2001 has been above 50% in all the home nations with the exception of Scotland. In Scotland the smaller decline in prices has only just been offset by the subsequent recovery.

However, England is not a single housing market but is made up of a number of different ones. Table 1 shows how real house prices have evolved since the late 1980s across the English regions. The size of falls in the 1990s had a clear north-south dimension, although within any region there would undoubtedly be exceptions. The largest falls were in southern England. The increase in real house prices from the 1990s trough is predictably dependent on the size of the earlier falls. However, the recovery in real house prices in London from their trough in the 1990s is remarkably strong with prices having doubled.

TABLE 1: REAL HOUSE PRICES, UK COUNTRIES AND ENGLISH REGIONS, 1995 PRICES

| | Late 1980s peak £ | 1990s trough £ | Peak to trough decline, % | 2001 Q1 £ | Increase from trough % |
|------------------------|----------------------|-------------------|------------------------------|--------------|---------------------------|
| UK nations | | | | | |
| UK | 95,500 | 65,800 | 31 | 99,100 | 51 |
| England | 100,600 | 68,800 | 32 | 104,500 | 52 |
| Scotland | 64,800 | 58,000 | 10 | 68,900 | 19 |
| Wales | 72,000 | 51,400 | 29 | 83,400 | 62 |
| Northern Ireland | 50,300 | 42,300 | 16 | 68,900 | 63 |
| English regions | | | | | |
| East Anglia | 106,400 | 59,600 | 44 | 87,300 | 46 |
| South West | 108,400 | 63,900 | 41 | 101,700 | 59 |
| South East | 134,700 | 79,700 | 41 | 136,000 | 71 |
| London | 139,200 | 84,600 | 39 | 169,200 | 100 |
| East Midlands | 80,600 | 55,000 | 32 | 71,600 | 30 |
| West Midlands | 84,400 | 60,700 | 28 | 82,100 | 35 |
| Yorkshire/Humberside | 69,800 | 53,100 | 24 | 64,100 | 21 |
| North West | 70,700 | 54,600 | 23 | 69,100 | 27 |
| North | 60,300 | 52,700 | 13 | 57,900 | 10 |

Source: DTLR and CML calculations

House prices in London at the start of 2001 were almost three times the level in the Northern statistical region of England where the average house price was lowest. At the height of the late 1980s boom London prices were only 2.3 times those in the North, but 2.8

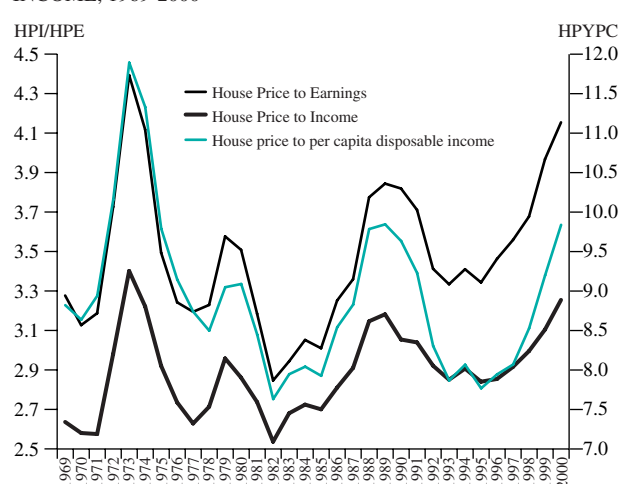
times those in Northern Ireland where prices were then cheapest.

Relative house price measures

A major weakness of simply imposing a long-term trend on the path of house prices to assess affordability is that it ignores the drivers of house prices. In this respect measures of households' financial resources are important. Equally, absolute levels of nominal or real house prices do not straightforwardly indicate how costly housing is. A more meaningful approach is to consider the level of house prices relative to households' financial resources.

There is, however, the issue of how to measure households' financial resources. The most common approaches involve either using figures from lenders on the gross incomes on which a mortgage is based or average earnings or household sector's per capita disposable income numbers from National Statistics. Chart 5 highlights the evolution of house prices relative to these three measures. The three relative house price measures show roughly similar characteristics, although per capita disposable income tends to emphasise the magnitude of each housing market cycle. All three measures were at their highest in the early 1970s. In 2000 house prices relative to income supporting mortgages and per capita disposable income were on a par with the late 1980s, but when viewed in relation to average earnings were actually above their late 1980s' level.

CHART 5: HOUSE PRICES RELATIVE TO EARNINGS, INCOME SUPPORTING MORTGAGE AND PER CAPITAL DISPOSABLE INCOME, 1969-2000

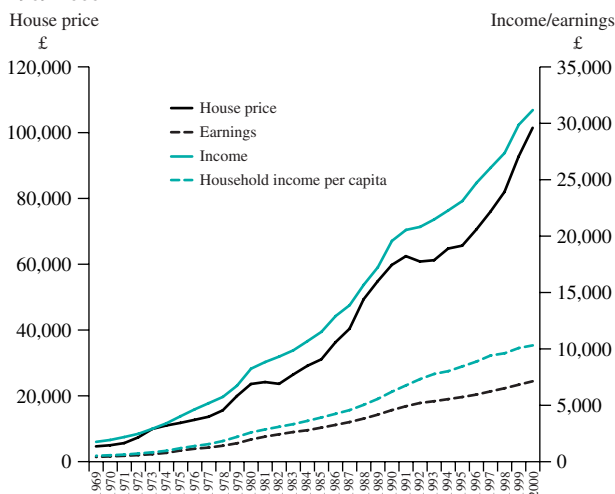


Source: CML/DETR Survey of Mortgage Lenders and National Statistics
Note: House prices are not mix-adjusted

Each of the financial measures can be shown to have a significant long-run relationship with house prices which is not particularly surprising when one looks at

Chart 6. However, some caution is needed when comparing house price to income/earnings ratios over time because once allowance is made for the general price level an increase in income/earnings is associated with a disproportionately large long-run response in house prices. The response in the short-run is even larger. The implication is that over time one would expect as a matter of course house price to income/earnings ratios to rise. It is worth making the point that the characteristics of UK housing demand and supply therefore induce rising entry costs over time, although it is by no means the case that this is irrevocable.

CHART 6: HOUSE PRICES, EARNINGS, INCOME SUPPORTING MORTGAGES AND PER CAPITA DISPOSABLE INCOME, 1969-2000



Source: CML/DETR Survey of Mortgage Lenders and National Statistics
 Note: House prices are not mix-adjusted

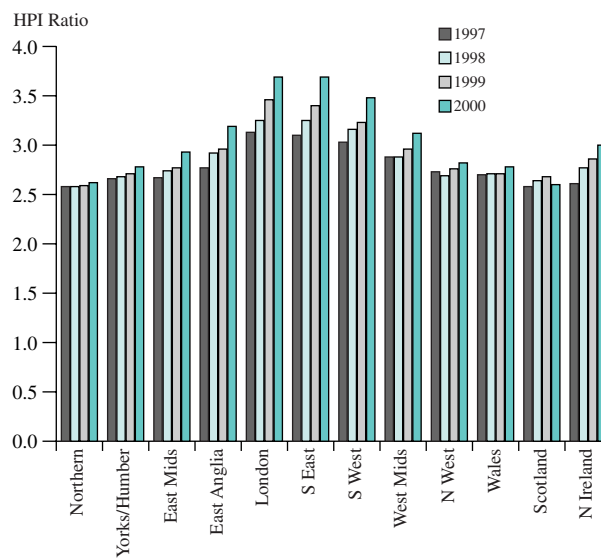
Of the income/earnings measures the most significant relationship with house prices appears to be with income supporting mortgages. This measure has several distinct advantages in that it picks up changes over time in working patterns, demographics and household structure in so far as they affect the income on which a mortgage is based. The majority of households, for instance, have more than one income supporting a mortgage loan. Data is also available on a regional basis. Despite the fact that house prices are driven by changes in income, trends in the ratio might in themselves convey useful information about market conditions. Later, the article considers how recent trends in the house price to income ratio might help to explain levels of housing market activity before attempting to draw some forward-looking conclusions. Attention now switches to regional house price to income ratios.

Regional house price to income ratios

In both the London and South East regions the house price to income ratio in 2000 was 3.69, markedly

higher than most other markets outside of Southern England. In Scotland, for instance, the ratio was 2.60 (see Chart 7). Significantly, in the property markets of southern England where house price to income ratios were already highest they have been rising most sharply.

CHART 7: REGIONAL HOUSE PRICE TO INCOME RATIOS



Source: CML/DETR Survey of Mortgage Lenders

Recent house price growth has increased concerns over house price affordability. Table 2 provides a summary of house price to income ratios for the regions/countries of the UK. It enables some comparison between the ratio in 2000 with the average since 1969 and that in both the up and downturn of the major housing cycles of the early 1970s and the late 1980s. However, as mentioned earlier, some caution should be applied in any comparison because of the inherent tendency for the house price to income ratio to rise over time. Nonetheless, the amount by which the London house price to income ratio is above its late 1980s peak is striking. Other parts of the UK, with the exception of Northern Ireland, remained below their late 1980s peak in 2000.

Composition of house price to income ratios

Because houses are bought using a combination of a deposit and an advance, the house price to income ratio comprises two constituent parts: the deposit to income and advance to income ratios. Both are fundamental in determining the amount house buyers are able to borrow. The larger the deposit required, the more difficult it is to buy and so housing market activity is depressed. Furthermore, first-time buyers are most likely to be sensitive to the size of deposits, typically being younger with fewer savings and

TABLE 2: ANNUAL HOUSE PRICE TO INCOME RATIOS, SUMMARY STATISTICS

| Region/Country | 1969-2000 | | | Early 1970s cycle | | Late 1980s/early 1990s cycle | | | 2000 | |
|----------------|-----------|------|---------|-------------------|---------|------------------------------|------|---------|------|---------|
| | max | min | average | max | 1972-74 | 1975-77 | max | 1987-91 | | 1992-96 |
| Northern | 2.98 | 2.09 | 2.49 | 2.98 | 2.79 | 2.45 | 2.74 | 2.55 | 2.63 | 2.62 |
| Yorks/Humber | 2.96 | 2.19 | 2.57 | 2.89 | 2.71 | 2.41 | 2.96 | 2.76 | 2.79 | 2.78 |
| East Mids | 3.15 | 2.34 | 2.70 | 3.14 | 2.96 | 2.58 | 3.15 | 2.97 | 2.80 | 2.93 |
| East Anglia | 3.70 | 2.48 | 2.92 | 3.46 | 3.22 | 2.78 | 3.70 | 3.32 | 2.85 | 3.19 |
| London | 3.69 | 2.69 | 3.08 | 3.57 | 3.38 | 2.86 | 3.36 | 3.25 | 2.97 | 3.69 |
| S East | 3.84 | 2.83 | 3.21 | 3.84 | 3.61 | 3.03 | 3.76 | 3.53 | 3.08 | 3.69 |
| S West | 3.86 | 2.65 | 3.12 | 3.86 | 3.52 | 2.93 | 3.80 | 3.46 | 3.03 | 3.48 |
| West Mids | 3.33 | 2.46 | 2.82 | 3.33 | 3.12 | 2.74 | 3.18 | 3.01 | 2.90 | 3.12 |
| N West | 3.00 | 2.32 | 2.63 | 3.00 | 2.81 | 2.52 | 2.94 | 2.72 | 2.80 | 2.82 |
| Wales | 3.05 | 2.29 | 2.64 | 3.05 | 2.89 | 2.59 | 2.92 | 2.75 | 2.74 | 2.78 |
| Scotland | 3.00 | 2.27 | 2.54 | 3.00 | 2.85 | 2.64 | 2.63 | 2.39 | 2.55 | 2.60 |
| N Ireland | 3.04 | 2.10 | 2.46 | 2.68 | 2.47 | 2.59 | 2.51 | 2.21 | 2.33 | 3.00 |
| UK | 3.40 | 2.54 | 2.89 | 3.40 | 3.20 | 2.76 | 3.18 | 3.07 | 2.89 | 3.25 |

Source: CML/DETR Survey of Mortgage Lenders

without housing equity, and this may prevent them from entering home-ownership when they want to.

Table 3 shows the deposit and advance to income ratio by region and type of buyer for 2000. As expected, the average deposit to income ratio was highest in southern England. For first-time buyers the largest deposit relative to income was required in the South West while for former owner-occupiers London required the largest deposit. House purchasers in Scotland saw the smallest deposits in relation to income across both first-time buyers and movers. Indeed, for movers purchasing in Scotland the average deposit was 73% of income, less than half the 155% required in London.

TABLE 3: DEPOSIT AND ADVANCE TO INCOME RATIOS, ALL BUYERS, 2000

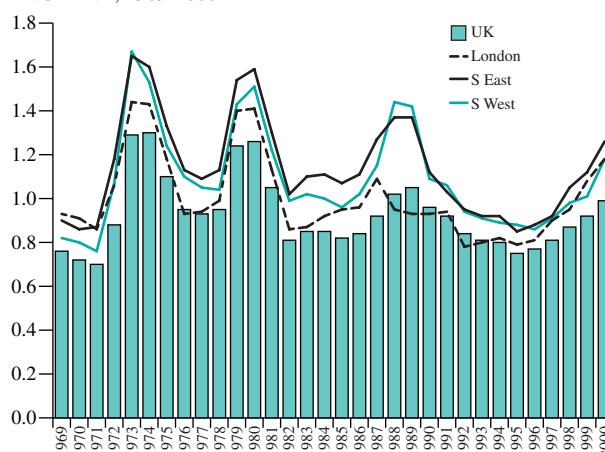
| Region | All buyers | | First-time buyers | | Former owner-occupiers | |
|--------------|------------|---------|-------------------|---------|------------------------|---------|
| | Deposit | Advance | Deposit | Advance | Deposit | Advance |
| Scotland | 0.61 | 1.99 | 0.43 | 1.99 | 0.73 | 1.97 |
| North | 0.67 | 1.95 | 0.46 | 2.00 | 0.83 | 1.90 |
| Wales | 0.71 | 2.06 | 0.44 | 2.10 | 0.88 | 2.04 |
| Yorks/Humber | 0.71 | 2.07 | 0.44 | 2.13 | 0.89 | 2.01 |
| N West | 0.71 | 2.10 | 0.42 | 2.13 | 0.89 | 2.07 |
| E Mids | 0.80 | 2.14 | 0.46 | 2.12 | 0.99 | 2.13 |
| N Ireland | 0.88 | 2.11 | 0.54 | 2.19 | 1.26 | 2.03 |
| W Mids | 0.91 | 2.21 | 0.52 | 2.22 | 1.14 | 2.20 |
| E Anglia | 0.99 | 2.20 | 0.60 | 2.27 | 1.25 | 2.14 |
| UK | 0.99 | 2.26 | 0.59 | 2.30 | 1.24 | 2.23 |
| S West | 1.18 | 2.30 | 0.75 | 2.36 | 1.38 | 2.27 |
| London | 1.18 | 2.52 | 0.73 | 2.59 | 1.55 | 2.46 |
| S East | 1.26 | 2.43 | 0.71 | 2.49 | 1.53 | 2.39 |

Source: CML/DETR Survey of Mortgage Lenders

The average deposit to income ratio in the UK has risen since the mid-1990s, but this is largely attributable to increases in southern England. Other parts of the UK, with the exception of Northern Ireland, have seen little or no movement in the ratio. Therefore, despite the impression sometimes given, in large parts of the UK the effective entry costs into the housing market have changed very little in recent times. Chart 8 shows that London, the South East and the South West have consistently had deposit to income ratios above the UK average. London is particularly interesting because the deposit to income

ratio is now above that in the late 1980s, and moving steadily towards highs seen in the 1970s.

CHART 8: DEPOSIT TO INCOME RATIO, UK AND SOUTHERN ENGLAND, 1969-2000



Source: CML/DETR Survey of Mortgage Lenders

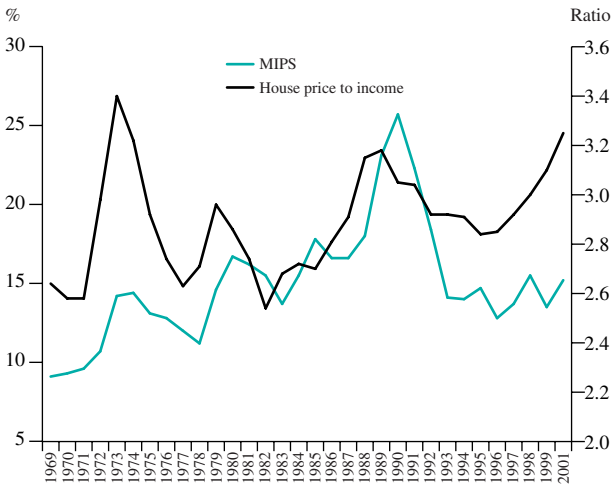
Debt-servicing cost

Entry barriers associated with a widening gap between house prices and incomes can either be cushioned or exposed by the debt-servicing costs associated with a mortgage advance. A low interest rate, other things being equal, enables borrowers to afford to repay larger loans and so higher house price to income ratios. Therefore, it is important when discussing affordability that house prices to income ratios are considered in conjunction with debt servicing costs as in Chart 9.

In 2000 initial mortgage interest payments in the UK were on average 15.2% of income supporting mortgages while the house price to income ratio was 3.25. At the height of the late 1980s' boom house prices were 3.18 times income while initial mortgage interest payments were 23.1% of income.

A further affordability consideration is the future profile for interest rates. As Chart 10 shows short-

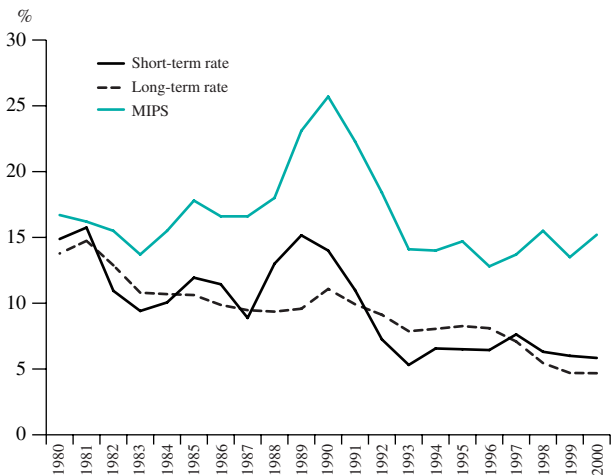
CHART 9: HOUSE PRICE TO INCOME RATIO AND INITIAL MORTGAGE INTEREST PAYMENTS TO INCOME, 1969-2001



Source: CML

term interest rates are about half the levels seen in the late 1980s/early 1990s. Moreover, long-term rates have fallen progressively through the late 1990s and are now levelling off at historically low levels. This indicates how inflationary expectations have fallen over this period. The granting to the Bank of England of operational independence to set interest rates in 1997 was an important step in ensuring the credibility of economic policy and cementing low inflation expectations. This reform helps interest rates to remain low and any variation in interest rates to be within a narrow band. Therefore, even in London where the house price to income ratio is at an historic high, households' mortgage repayment obligations remain affordable because of low debt-servicing costs. Furthermore, the expectation is that interest rates will remain close to current levels.

CHART 10: SHORT- AND LONG-TERM INTEREST RATES AND MORTGAGE INTEREST PAYMENTS TO INCOME, 1980-2000

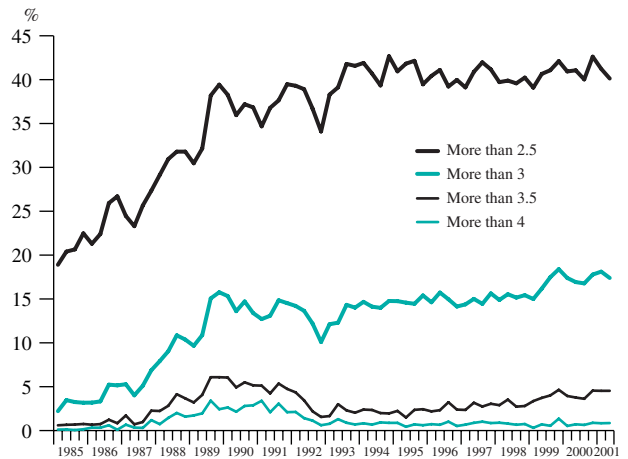


Source: Bank of England and CML

Credit standards

While low debt-servicing costs provide a mechanism by which borrowers can buy more expensive houses, the higher house price to income ratio has, however, been interpreted as a negative thing based on the view that a relaxation by lenders in the quality of their credit appraisal offers a potentially more risky means of achieving this. While rates have increased in London and the South East, away from here, where house price growth has generally been more subdued, there has been much less pressure on income multiples. Chart 11 details the proportion of house purchase loans that involve income multiples of 2.5 or more, 3 or more, 3.5 or more and 4 or more for first-time buyers outside of London and the South East. Each class may be thought of as representing a particular level of income stretch for borrowers. The Chart shows how the share of house purchase loans involving the higher income multiple bands of 3.5 and 4 or more rose to 6% and 3.5% respectively in the late 1980s' housing market boom. In 2000 Q2 these proportions were well down at 4.5% and 0.85% with no sign of any discernible upward creep.

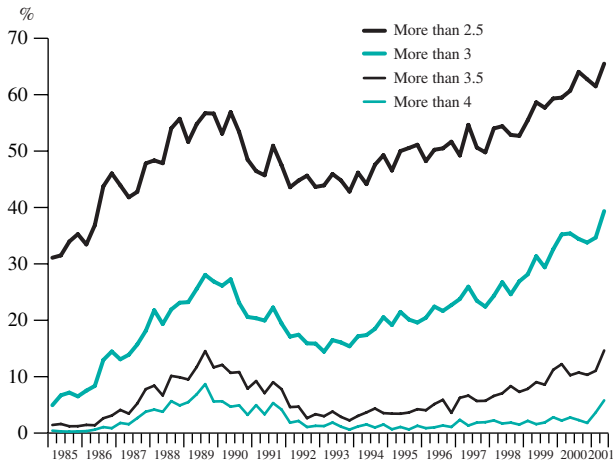
CHART 11: PERCENTAGE OF HOUSE PURCHASE LOANS IN INCOME MULTIPLE BAND, FIRST-TIME BUYERS, UK, EXCLUDING LONDON AND THE SOUTH EAST, 1985-2001



Source: CML/DETR Survey of Mortgage Lenders
Note: Excludes Right-to-Buy

Chart 12 focuses the analysis on London and the South East where house price growth has had the greatest pressure on income multiples. The recent surge in house prices in London and South East does appear to have caused a ratcheting up of income multiples. However, the evidence does not point to the same proportions of especially high income multiple loans – those borrowing 4 or more times income – as in the late 1980s.

CHART 12: PERCENTAGE OF HOUSE PURCHASE LOANS IN INCOME MULTIPLE BAND, FIRST-TIME BUYERS, LONDON AND THE SOUTH EAST, 1985-2001



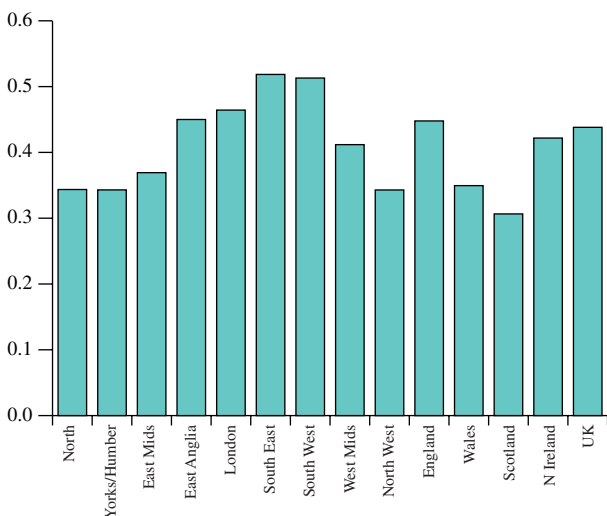
Source: CML/DETR Survey of Mortgage Lenders

Higher income multiples in themselves are not indicative of falling credit standards. As noted earlier they have to be viewed in conjunction with debt-servicing costs. Moreover, lenders' credit appraisal techniques have become increasingly sophisticated. In judging the riskiness of lending it is also important to consider the value of a loan relative to the value of the property upon which the loan is secured. This is considered in the next section.

Loans, deposits and house prices

It has already been noted that the entry costs to the property market in southern England are higher because deposit to income ratios are highest. It is also the case that in these markets the size of the average deposit is highest relative to the mortgage advance (see Chart 13). In the South East region in 2000 the

CHART 13: DEPOSIT TO ADVANCE, UK, REGIONS AND COUNTRIES, 2000



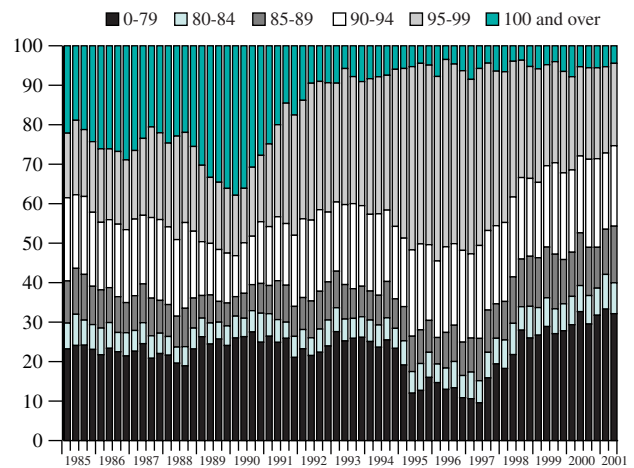
Source: CML/DETR Survey of Mortgage Lenders

average deposit was 52% of the advance. By contrast in Scotland the average deposit was 31% of the advance.

What is also apparent is that in those regions where house price growth has been strongest in recent years the size of the deposit is becoming increasingly large relative to the advance. In London the average deposit in 2000 was 46% of the advance compared with 37% five years earlier and 40%-42% in the boom period from 1988-1991. The significant point is that households are having to bring larger and larger absolute sums of money to house purchases. It also indicates that lenders are not systematically reducing credit standards and explains why, compared with the late 1980s, the proportion of very high loan to value ratios is very much lower.

Chart 14 shows the proportion of house purchase loans in pre-defined bands for first-time buyers in London and the South East. In the late 1980s/early 1990s the proportion of LTVs of 100% or more rose to 38%. This proportion declined steadily in the first half of the 1990s and has been fairly constant since at between 4% and 5%. The proportion of the loans in the next risky class of 95% to 100% has been declining in recent times, falling to one-fifth of loans in 2001 Q2.

CHART 14: LOAN TO VALUE BANDS, FIRST-TIME BUYERS, LONDON AND SOUTH EAST, % OF TOTAL, 1985-2001



Source: CML/DETR Survey of Mortgage Lenders

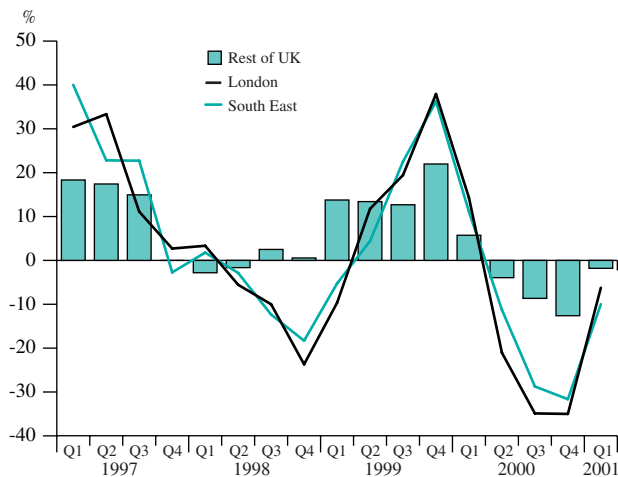
Housing market activity

The increasing size of entry costs in the property markets of southern England, and London in particular, appears to explain why activity levels fell away during 2000. The size of deposits, whether measured relative to income or the actual advance, had steadily grown in the south. In London and the South East the number of loans in the final quarter of

2000 was 35% and 32% respectively lower than in the same quarter of 1999. The fall in the rest of the UK, where entry costs were lower, was 13% (see Chart 15).

The required size of deposit is an important mechanism through which housing market activity

CHART 15: ANNUAL CHANGE IN HOUSE PURCHASE LOANS, LONDON, SOUTH EAST AND REST OF UK, 1997-2001



Source: CML/DETR Survey of Mortgage Lenders

and house price growth are affected. In the first part of 2001 reductions in interest rates appear to have helped induce a surprisingly large surge in house price growth, particularly in southern England where entry costs had previously been most apparent. Lower interest rates do provide a cushion from high house price to income ratios. But while lower interest rates reduce debt-servicing costs, enabling borrowers to acquire larger advances and reach higher house price to income ratios, the resurgence in prices contrasts with our forecast of moderate house price growth in 2001. However, unless high house price to income ratios are mitigated by a relaxation of lenders' credit standards it is difficult to envisage the pace with which house prices have been growing continuing for too long.

References

Cutler, J. (1995), "The housing market and the economy", Bank of England Quarterly Bulletin, August.

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