

# Mortgage lending and the housing market

*This article, which has been prepared mainly by E P Davis and I D Saville of the Bank's Economics Division, argues that:*

- *Now the banks have entered the housing market in a major way, the market for mortgages is more likely to be cleared mainly by interest rate movements rather than by rationing.*
- *The recent sharp rise in mortgage lending reflects the removal of restrictions, allowing persons to increase their capital gearing, and probably does not reflect a significant rise in the demand for housing.*
- *A substantial part of mortgage lending does not ultimately finance new or improved housing, but is available for the acquisition of other assets or other spending.*
- *House prices are somewhat low in real terms, and may recover in the course of the next few years.*

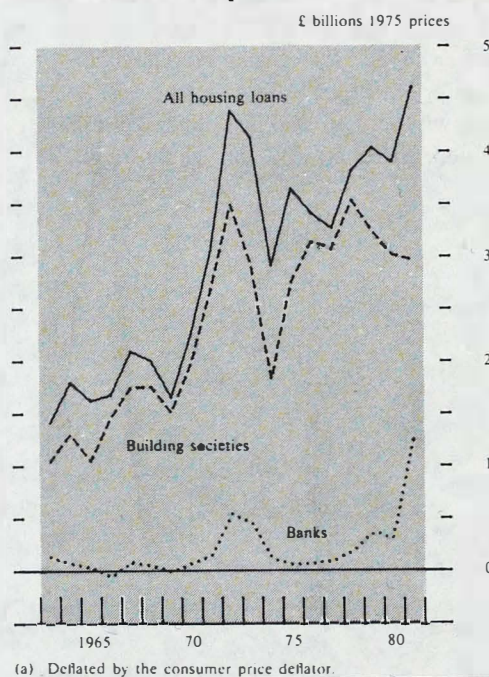
The last two years have seen a sustained, though not unprecedented, rapid growth in the stock of mortgages outstanding—substantially faster than the growth in either the general price level or the price of houses. Banks have once more become substantial lenders, accounting for a third of recent flows. So far, this has had little obvious repercussion either on house prices in real terms or on housebuilding, both of which are little above their lowest levels of recent years. This article examines developments in the mortgage market, and their likely consequences for the housing market.

## Developments in the mortgage market

New mortgage lending has recently been growing rapidly in real terms (Chart 1), and since the summer of 1980 banks have been taking an important and growing share. The 'real' stock of mortgage lending outstanding, deflated by consumer prices, is now at a record level (Chart 2). (The recent rise is even more pronounced when an index of house prices is used to deflate the stock).

The real stock of mortgages fluctuated quite widely during the 1970s, after some years of steady growth. The reasons for this are complex and rooted in the behaviour of building societies. Building society interest rates tended to be more stable than market rates. This was partly because of the administrative costs of changing them, but also to protect borrowers from the full effect of high interest rates. When market rates were rising, building societies could, for a time, partially maintain lending by running down liquid assets; but would later introduce rationing devices such as queuing and giving priority to certain types of loan, leaving some demand for housing finance unsatisfied. When interest rates fell, societies were initially content to accumulate (or rebuild) liquidity from which to satisfy future mortgage demand. But they would eventually drop their rates to

**Chart 1**  
Real flows of house purchase loans<sup>(a)</sup>

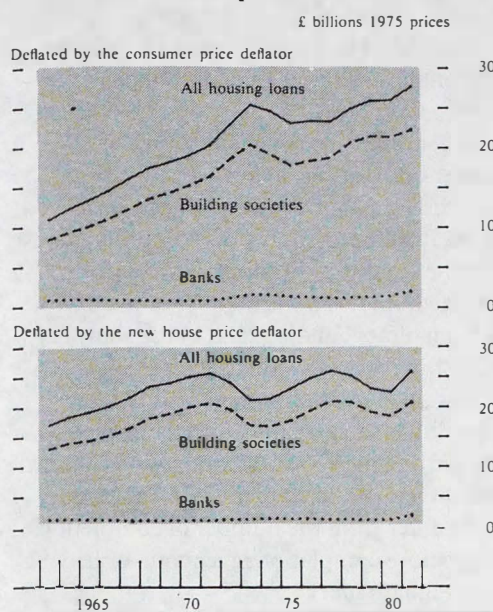


avoid an excess of lower yielding liquid assets, and in response to pressure to reduce the burden on borrowers.

The consequences of this behaviour are demonstrated in Chart 3. Building societies offered very competitive deposit rates in 1971–72 (see, for example, the difference between the gross share rate and the three-month local authority deposit rate), and maintained high liquidity despite a rapidly growing real stock of lending. As interest rates generally rose, their deposit rates became much less competitive in 1973 and 1974, and their liquidity fell away. This was followed by a fall in lending in 1974, which



**Chart 2**  
**Real stocks of house purchase loans**



continued into 1975, as societies raised their rates to attract deposits and rebuild liquidity. In subsequent years up to 1979, growth in real lending resumed, financed partly by a falling liquidity ratio against a background of generally weak competitiveness. (Exceptionally high competitiveness in 1977 had surprisingly little effect on inflows.) More recently, the growth in the real stock of mortgage loans has slowed, and there has been some rebuilding of liquidity. Competition for deposits from national savings and from the banks has been an important factor in recent years.

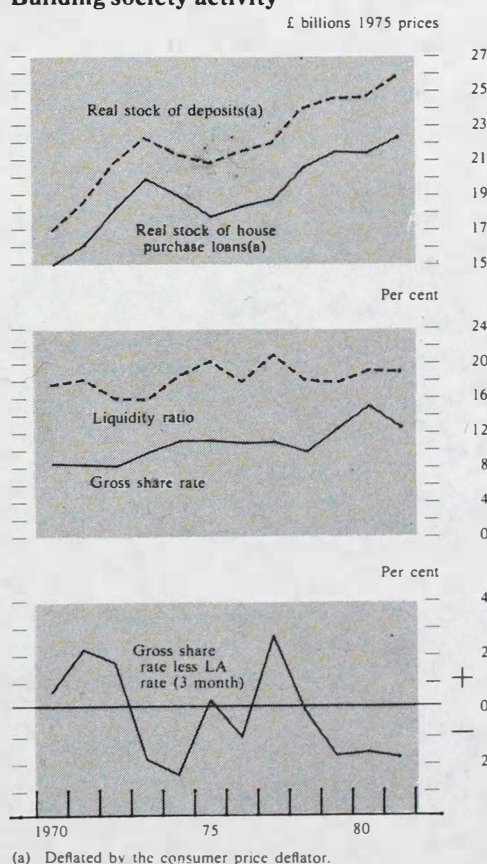
This analysis has placed little emphasis on the demand for loans, since rationing was in force for much of the period. Clearly, however there were periods when queues were short: but these were generally at times when interest rates and other factors combined to produce weak demand. Thus in 1973 and 1974 high rates were coupled with flat or falling real incomes, and this pattern was repeated in 1977. In periods of high and increasing demand, rationing by building societies became important.

Other institutions did not generally fill the vacuum created by rationing. Local authorities and insurance companies have made a comparatively minor contribution, as have banks until rather recently. This is in contrast to experience elsewhere; for example, in the United States, banks account for 17% of outstanding housing loans, and 45% in France, compared with about 7% in the United Kingdom in 1981. The banks in Britain have tended to concentrate more on lending to the corporate sector. This has been partly for historical reasons, and partly because controls imposed on bank lending for monetary policy purposes may at various times have inhibited them from entering this market. Moreover, the building society movement became important at an earlier stage in the United Kingdom than in other countries.

In the period between the introduction of 'competition and credit control' in 1971 and the imposition of the corset<sup>(1)</sup> (and the onset of much higher interest rates) at the end of 1973, the banks took over 10% of mortgage flows (Chart 1). The abolition of the corset in 1980 may have been a factor in stimulating the banks' re-entry to the housing market in the last two years. There are, however, differences between recent activity and 1972-73. In the earlier period, lending for house purchase was not generally distinguished by the banks from other personal lending; interest rates were tied to base rates, and applications processed in the same way as other personal loans. By contrast, the recent resurgence of bank lending has seen separate mortgage schemes vigorously marketed, and, more important, a divorce of rates charged on mortgages from base rates. Bank mortgage rates are now more closely associated with the building societies' recommended rate, making mortgages offered by banks more competitive in general with those from building societies. Building societies have responded to this competition by reducing or eliminating additional charges for large loans.

With the banks willing to expand their lending freely, the effect has been, broadly speaking, to satisfy all demand for mortgage finance, and to make the building societies more responsive to market interest rates and keener to compete for funds. (A separate influence affecting building societies in the same way was a drive to attract more funds to

**Chart 3**  
**Building society activity**



(1) See 'Competition and credit control', June 1971 *Bulletin*, page 189, and 'The supplementary special deposits scheme', March 1982 *Bulletin*, page 74. The corset was not in operation between February 1975 and November 1976 and between August 1977 and June 1978.



national savings.) Although the banks' introduction of special rates for mortgage lending may have increased the stability of interest rates for these borrowers (compared with a situation in which they were charged a rate more closely related to base rate), the effect on borrowers from building societies may prove to be the reverse, with building societies probably under greater pressure than before to follow market interest rates.

The entry of the banks into the mortgage market in a major way in mid-1981 probably eliminated the rationing which had persisted since the house price surge of 1972-73. However, in recent months some banks have begun to limit the growth in their mortgage lending (which, in the second quarter of this year, represented 26% of all their outstanding personal lending, compared with 15% two years ago). Further rises in corporate loan demand might reinforce a tendency for banks to stabilise mortgage lending at some target share of their portfolio. It remains to be seen, therefore, whether the elimination of rationing will prove to be permanent.

### The supply of housing

It would be natural to interpret sharp rises in the real stock of mortgage lending as an increased desire to own dwellings which would be transmitted either into increases in the stock of the owner-occupied housing through new building, or into a rise in the real price of housing. The lending surge of the early seventies was indeed followed by a sharp rise in real house prices; private housing completions recovered somewhat from the depressed level of 1969-70, but only to

levels well below those of the middle sixties, and they fell sharply in 1974 (Chart 4). Sales of dwellings from public ownership were also high in 1972-73, but there were few additions by conversion of existing property or transfers from the private rented sector, net of demolitions.<sup>(1)</sup>

House building is generally the principal source of dwellings for owner occupation. There are several characteristics of the supply of dwellings in this form<sup>(2)</sup> which differentiate it from the supply of most other goods. In the long term, the supply of dwellings is virtually unlimited; in the medium term, the number of plots with planning permission limits building; and in the short term (under a year), the number of dwellings which can be completed is constrained by the number already under construction. Dwellings are very long lived, and even what is by normal standards a high level of completions has little effect on the size of the overall stock. Furthermore, sales of new dwellings can differ from the number of completions, because of selling before completion in a boom, or leaving them unsold in a stagnant market.

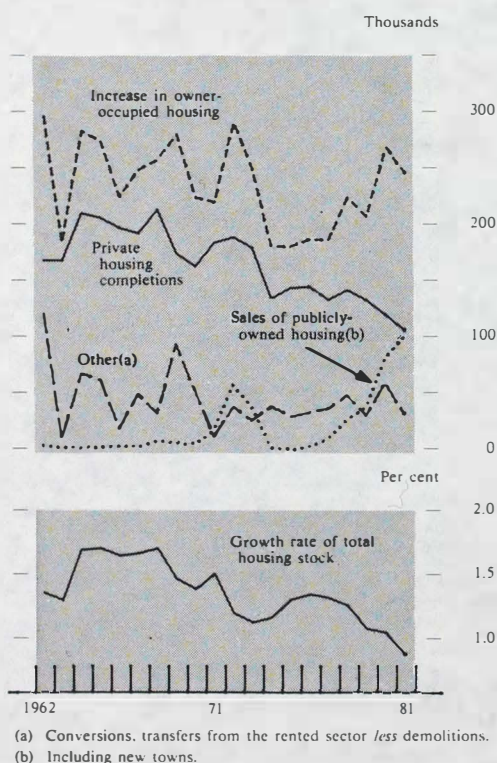
The stock of dwellings is thus little affected in the short run by changes in demand. The degree to which the supply can respond to demand is important in determining how far increased demand is passed on in increased house prices. In recent years, the rate of growth of the national housing stock (including the rented sectors) has been declining (Chart 4). In the mid-1960s, the annual rate of increase was often over 1.5%, whereas, since 1970, it has never exceeded 1.3%. The 1970s have seen two peaks in growth, in 1971 and 1976, but these were followed by declines. Completions, the main influence on the housing stock, have been at a much lower rate in the 1970s than the 1960s, with peaks in 1970-71 and 1975-76. They fell to their lowest level since the war in 1981, though a small recovery in starts has occurred this year.

The determinants of new building are imperfectly understood. Most econometric models of housing emphasise costs (labour, materials and interest rates) and the level of house prices (as an indicator of demand and profits). All of these have moved sharply against builders in recent years, 'explaining' the slump in building. Mortgage lending is not used to determine housebuilding in these models, except in so far as it affects price increases.

### The demand for housing, and house prices

The long-lived nature of the housing stock, and the slowness with which it can change, suggest that any increase in the demand for owner-occupied housing will be reflected, initially at least, principally in higher house prices, and to a lesser extent in net conversions of existing property and transfers from the public and private rented sectors. The underlying demand for all housing (including rented) is likely to depend on the number of actual (and potential) households and on social trends affecting the size and quality of housing wanted. Furthermore, movements in

**Chart 4**  
Changes in the housing stock

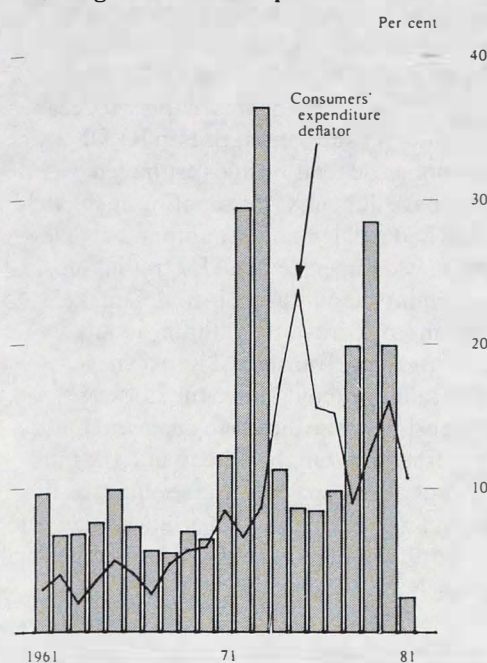


(1) These additions, and council house sales, add to demand as well as supply, but by a lesser amount.

(2) The other sources of supply referred to in the text have not until recently been very important—see Chart 4.



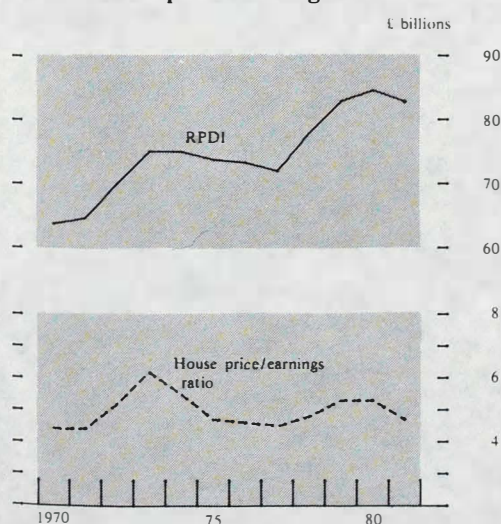
**Chart 5**  
Rate of growth of house prices



real incomes, real house prices and mortgage rates may be influential in producing fluctuations particularly in demand for owner-occupied housing, since prospective buyers can generally advance or postpone their purchase—by continuing to live with parents, for example: incomes are also important because maximum loans are an infrequently-changed multiple of the borrower's income.

The gap between post-tax mortgage rates and the rate of increase of house prices indicates the financial gain to be made from borrowing to buy housing; but when interest rates are high, the proportion of income devoted to debt service may be so high as to choke off demand for mortgages to buy housing, even if rates are still negative

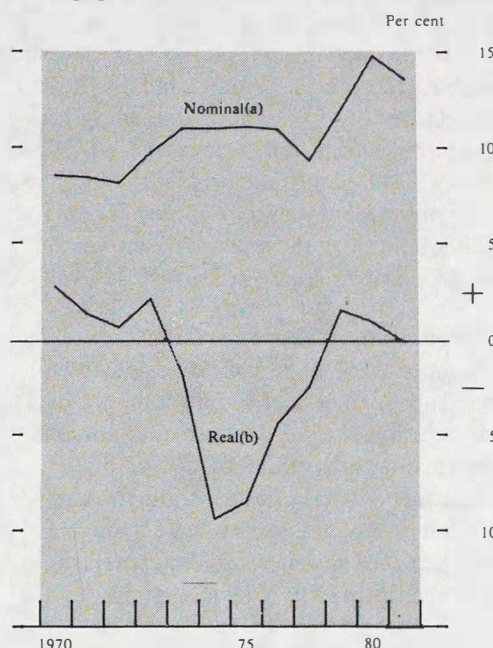
**Chart 6**  
Real personal disposable income (RPDI)  
and the house price/earnings ratio<sup>(a)</sup>



(a) The average price of new dwellings on which building society mortgages were approved divided by average earnings.

in real terms. When mortgages are freely available at a market-clearing price, house prices will be determined by the interplay of a demand, determined by all these factors, and a supply of housing that is largely—in the short term—fixed. The amount of mortgage lending was an important additional explanatory factor during the period of rationing, since demand was only effective to the extent that funds were available to those wishing to buy for the first time, or to trade-up.

**Chart 7**  
Mortgage interest rates



(a) The building societies recommended rate.

(b) The nominal rate minus the average rate of consumer price inflation over the previous two years.

### Experience of the seventies

The experience of the seventies illustrates some of these influences. In 1970, house prices were at their lowest level in relation to average earnings since 1963. However, in the same year, real personal disposable income (RPDI) began to grow steeply following several years of stagnation (Chart 6). It continued to rise until 1973, increasing the demand for house ownership, and hence for mortgages, especially since it was accompanied by a large increase in potential first-time buyers resulting from the post-war 'baby boom' (Chart 8). The value of the stock of mortgages rose by 32% more than consumer prices over this period, and was largely financed by an increase in building society inflows. Initially, the stock of new houses for sale was large and house prices rose only slightly (Chart 5). But, by the end of 1971, the annual rate of increase of house prices had risen to 16%, as the stock of unsold new houses ran down; and an announcement of increased local authority rents raised demand further. Moreover, the cut in the mortgage rate to 8% early in 1972 stimulated demand further, and real rates fell fast from 1973 (Chart 7). Large rises in RPDI during 1972 and 1973 (15% in all) also helped to encourage demand (Chart 6). The increase in housing loans peaked in the second quarter of 1972, and fell until 1974, as interest



rates rose; but the slowdown in lending had little early effect in restraining house prices. These accelerated to an annual rate of growth of 48% early in 1973 in a market largely determined by speculative purchases.

In the second phase, 1974–77, mortgage rates were high in nominal terms and RPDI was stagnant. This produced only slow rises in house prices, of around 7% per annum, far below the general rate of inflation.

In 1977, a further turning point was reached. RPDI again started to increase, and the number of building society commitments rose to almost 800,000; this was possible because of the sharp increase in real inflows into the building societies of the previous two years. Over the year, the market was able to absorb the demand, but, by the end, house prices began to look low in relation to earnings. At the same time, the interest rate, fell in stages from 12½% to 8½% by January 1978. The continuing rise of RPDI in 1978 and 1979, and the rundown of the stock of unsold new and secondhand houses built up in the previous three years, combined to produce a rise in house prices of 28% in 1979.

New building society lending was reduced in 1978, following a government request, but effective demand for housing continued at a high level. The rate of price increase slowed with the recession of 1980–81, with both nominal and real<sup>(1)</sup> mortgage rates high, and RPDI flat. This stagnation has continued to date, despite the growth in lending and slump in completions discussed above. However, in both previous episodes, rapid increases in house prices followed the growth of lending with a lag.

The experience of the early 1970s when a sharp rise in house prices was followed by a sharp rise in inflation might suggest a link, with house prices being a leading indicator of more general inflation. Thus, higher house prices might increase perceived wealth and lead to excess demand for goods; at high levels of activity this might lead to 'demand-pull' inflation. Alternatively, rising house prices and a buoyant labour market might raise wage claims and produce 'cost-push' inflation. If so, it is relevant to consider whether the recent rise in mortgage lending may have implications for house prices and inflation.

### Prospects for house prices

Econometric models attempting to explain house prices with parameters based on the experience of the seventies, assign an important role to the real stock of mortgages. This is used as an indicator of whether underlying demand is allowed to become effective, as well as giving some weight to the more fundamental factors discussed above. If these models, were used to forecast house prices now, they would suggest large rises, stemming principally from the recent substantial rise in the real mortgage stock. The failure of house prices to show much movement in recent months, despite high lending, may be consistent with the experience of the seventies; a substantial backlog of houses remaining unsold during the period of falling real house prices may yet have to be cleared.

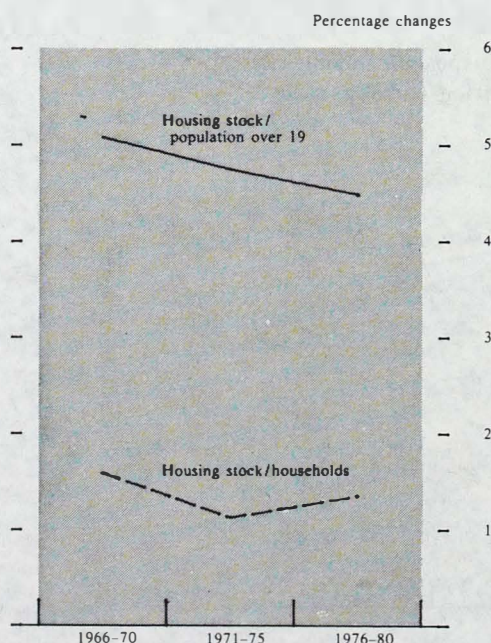
Although recent experience does not yet give cause clearly to reject the relationships which predict substantial rises in house prices, a number of modifying factors need to be considered. One is that most forecasts for the United Kingdom suggest that no sustained rise in RPDI is in prospect. Both of the house price booms of the last decade were accompanied by very substantial rises in RPDI (Chart 6). The econometric relationships estimated over the seventies may thus have difficulty in separating adequately the effects of RPDI and real lending. Continuing high levels of unemployment may dampen demand for trading-up, and by increasing uncertainty about future incomes, make people more reluctant to borrow. In addition, about 100,000 council houses were transferred into owner-occupation in 1981, adding about 1% to the stock of owner-occupied housing, while increasing demand for houses to own by rather less. On the other hand, the total housing stock has not grown so fast in the seventies as the sixties (Chart 4), and its rate of growth has fallen relative to the growth of the adult population, and to a lesser extent, the number of households (Chart 8).

### Attractions of mortgage finance

Tax relief on mortgage interest offers a significant incentive to individuals to use mortgage finance when buying a dwelling. In particular, interest on housing loans up to £25,000 is subject to income tax relief, and the treatment of houses for capital gains tax has been particularly generous. However, the limit for tax relief on interest has not been indexed, and has fallen in real value significantly over the years. The introduction this year of indexation of capital gains tax on all assets means that housing is no longer a uniquely advantaged asset.

These changes may reduce the relative attractiveness of housing as an asset. (But in practice, most house-owners,

**Chart 8**  
**Indicators of demand for housing**



(1) Allowing for current consumer price inflation. See Chart 7.



including first time buyers, have home loans of less than £25,000. The average loan by building societies in the first quarter of 1982 was £15,385, or 1.68 times borrowers' average income, so most interest on housing loans is still fully tax-deductible.)

Another attraction of housing as an investment good has been its value as a hedge against inflation. The increase in house prices between 1970 and 1981 was 440%, compared with a 280% rise in consumer prices. However, recently, house prices have risen more slowly than consumer prices (Chart 5); this trend, if continued, should reduce such demand for housing. And falling inflation and high interest rates now being experienced have provided positive real returns on other assets, including most recently some liquid assets. Furthermore, the indexation of some gilt-edged stocks and national savings instruments provides some investments with a guaranteed real return.

### The use of mortgage funds

The most important recent development has probably been the removal of rationing, which may have allowed borrowers to restore their gearing (ratio of debt to assets) towards desired levels, without necessarily raising demand for housing. The rise in mortgage lending may therefore reflect principally a demand for assets other than houses, or to maintain consumption.

Not all of mortgage lending is used to finance additions or improvements to the housing stock. If all 10,000 or so houses completed monthly for sale to the private sector were purchased at the average house price on a 100% mortgage, only about £300 million of new lending would be

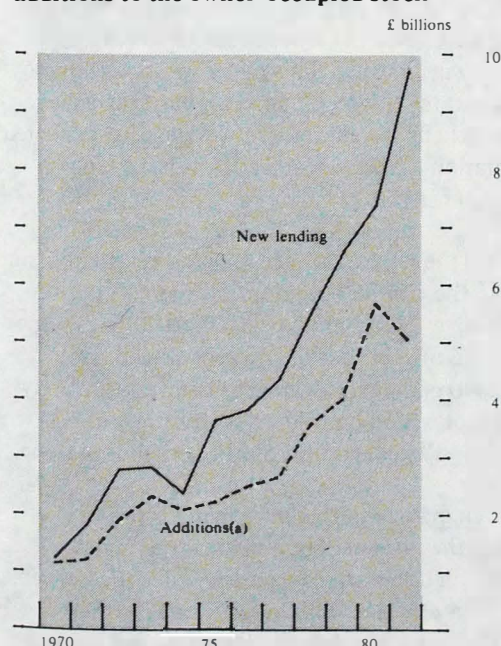
required. Since most completions are thought to be at the cheaper end of the market, little more than a third of total net lending can be for new houses. Council house sales also need to be financed, and more have been financed through banks and building societies than might have been expected. (The lower-than-expected lending by councils is one reason for the public sector borrowing requirement undershoot in 1981/82.) But this, and some small transfer of formerly rented property, could account for only another 10%–15% of new lending. Home improvements could account for a further substantial element. Nevertheless it seems certain that a sizable amount of new lending has gone indirectly to finance spending on goods or other real or financial assets, rather than additions or improvements to the owner-occupied housing stock (Chart 9 shows an estimate of this flow, including borrowing to finance improvements).

In fact this is inevitable; every chain in the secondhand housing market has an end: the final house comes onto the market because its owner-occupier has died, or ceased to own his house for other reasons, or because it is put on the market by its landlord after the tenant has left. The final seller will end up with cash equivalent to all the increases in mortgage lending granted to members of the chain, *plus* any equity they have injected, *minus* professional fees and taxes caused by purchases in the chain, and *less* any equity that members of the chain have converted into cash. The rapid growth in owner-occupation of a generation ago may suggest that more people are now ceasing to be house-owners—from death or other causes—than in the past. But the number of households continues to grow, perhaps partly because elderly people are now less likely to move to live with their children than in the past, although the net effect is small.

Apart from these withdrawals of equity it is possible that unemployment has persuaded some to trade down and use the cash realised to support their living standards in other ways. Cash will also add to consumption, if mortgages are used to finance estate agents' and solicitors' fees, repairs and maintenance to houses purchased, and new fixtures and fittings purchased at the time of moving. There may have been some increase in the number of formerly rented houses sold over the period and the proceeds invested in other assets or used for consumption. And schemes aimed to help the elderly to purchase annuities with the equity in their house may also have absorbed a small part of higher mortgage lending. It must be presumed that a substantial part of net mortgage lending has gone to sustain spending, repay other debt, or increase holdings of financial assets through these routes.

The destination of these mortgage flows cannot be measured at all precisely because most of the information collected about house purchase transactions, for example, through the Building Society Mortgage Survey, is about purchasers and not sellers. But the Department of the Environment's estimates of the sources from which second-hand houses come onto the market<sup>(1)</sup> suggest

**Chart 9**  
New lending and the estimated value of additions to the owner-occupied stock

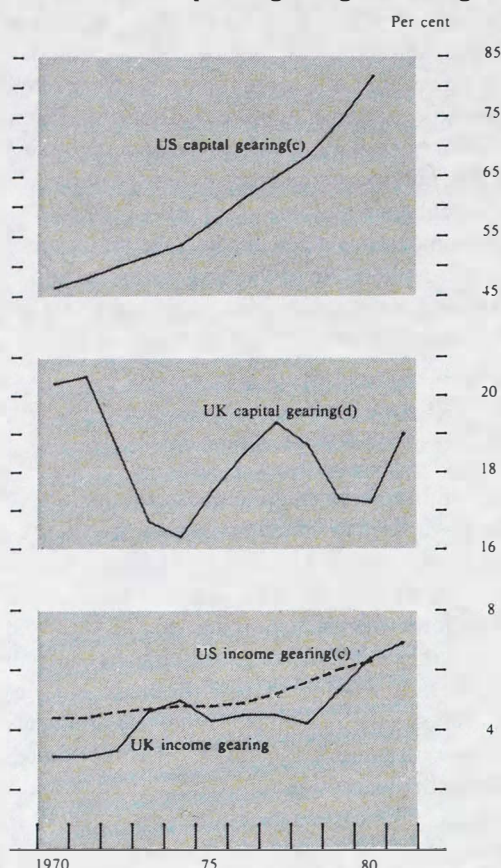


(a) Calculated by multiplying the number of houses entering the owner-occupied stock (as in Chart 4) by average house prices.

(1) Published in the *Housing Policy Technical Volume*, Chapter 3, Table III 10.

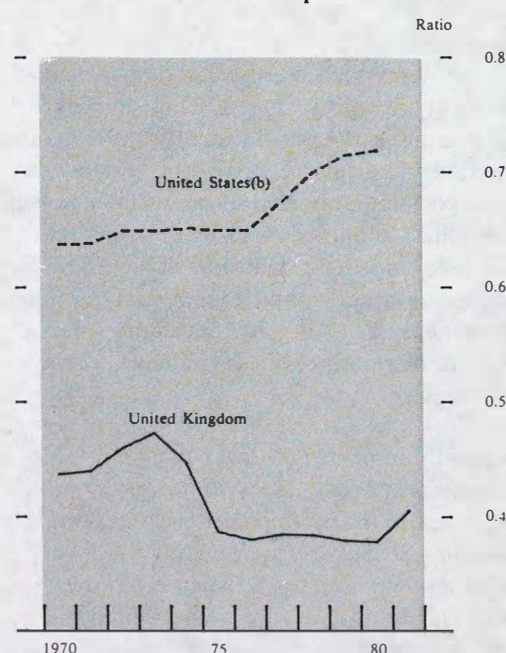


**Chart 10**  
Income<sup>(a)</sup> and capital<sup>(b)</sup> gearing in housing



- (a) Interest payments divided by personal income.  
 (b) Outstanding mortgage loans divided by the value of the housing stock.  
 (c) Household sector. Data unavailable for 1981.  
 (d) Bank estimate for 1981.

**Chart 11**  
Debt income ratios for the personal sector<sup>(a)</sup>



- (a) Total liabilities divided by gross personal income.  
 (b) Household sector. Data for 1981 not available.

strongly that sales by the estates of deceased owner-occupiers, and by owner-occupiers moving to other tenures or ceasing to be householders, accounted for the largest part of the money leaving the housing market. Lending on houses for purposes other than house purchase (mainly home improvement) has risen considerably.

### Gearing in the housing market

The readier availability of funds in the mortgage market has relaxed a frequently binding constraint on personal financial behaviour. There is no obvious reason why individuals should not respond by increasing their capital gearing in housing (raising mortgage lending as a proportion of house values); particularly as tax concessions still provide an incentive for most home owners to do more borrowing in this way. Trading-up, financed entirely by an increased mortgage, will achieve this: but as noted above, some indirect drain of mortgage funds from the housing market inevitably occurs in this process particularly if trading up is matched by others trading down. Concern about the possibility of direct withdrawal of equity from housing by borrowers obtaining more finance than required for house purchase, and its possible implications for credit and monetary aggregates, prompted a request to mortgage lenders by the Bank of England and the Treasury in January 1982 to limit this possibility.

The capital gearing associated with housing—mortgage loans outstanding divided by the value of the owner-occupied housing stock—fell from almost 22% in 1969 to 20% in 1970, and to around 17% in 1980 (Chart 10). Most of the fall occurred during the early seventies, with the sharp rise in the real price of houses. In 1981 gearing recovered to 19%, but there would seem to be scope for further rises on this account. Estimates for the United States are also shown on Chart 10: during the seventies capital gearing there rose very sharply as borrowers took advantage of their houses to secure their borrowing, in a much freer mortgage market. This may owe something to the fixed interest rates at which many US mortgages have been advanced, when interest rates may have been expected to rise with inflation. (Also anti-usury laws have set a ceiling on interest rates.)

It is possible that the US experience represents a switch, not yet paralleled in the United Kingdom, from unsecured borrowing to borrowing on mortgage. Chart 11 goes some way to confirming this, in that the ratio of all personal sector liabilities to personal income has risen less strongly for the United States, and has fallen less for the United Kingdom up to 1980 than capital gearing on houses alone.

One factor which may constrain borrowing is the level of income gearing (the ratio of debt interest to personal income). Although inflation may act to reduce the burden of repayment in later years, high interest rates with a conventional mortgage impose a heavy front-end burden on borrowers. A summary measure of income gearing for the personal sector is shown in Chart 10, and has risen during the last decade. But this measure includes other interest



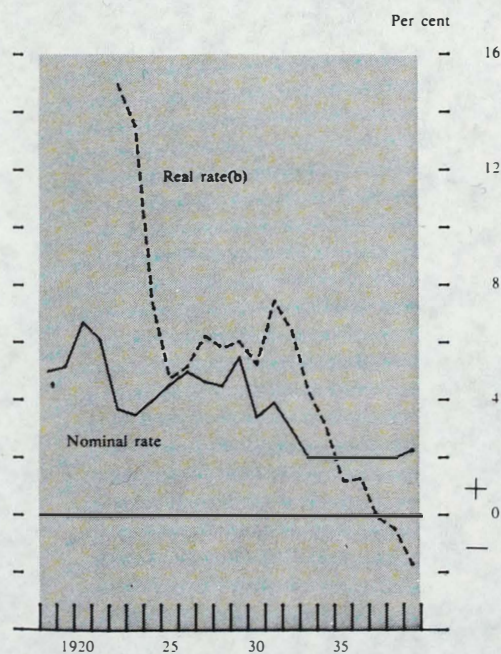
payments besides those on mortgages, and adds together borrowers with new and old mortgages; it thus understates the deterrent effects of the large share (20%) of average income pre-empted to service an average new mortgage in the first year of the contract. A relaxation of the income gearing constraint could come from the wider availability and greater take-up of low-start mortgages.

### The consequences of innovation

It has been argued that the banks' substantial and probably permanent move into the housing market represents a considerable financial innovation. A rather similar change took place in Britain in the early 1930s, when building societies became much less restrictive in the proportion of the purchase price and the period over which they would lend: and, more important, in their attitude to lending to those with low incomes. Previously, low income borrowers had been unable to accumulate a sufficiently large deposit, or finance borrowing over the short terms available.

These changes in building societies' practices owed much to the availability of deposits from investors discouraged by profitability prospects for real capital; and to a reduction in the uncertainty which the sharp contraction of activity and price falls of 1930–32, had brought about. They relaxed an effective constraint for many potential home-owners. As Matthews<sup>(1)</sup> puts it, this amounted to 'an additional factor—a financial innovation—separate from the purely monetary fall in interest rates'.

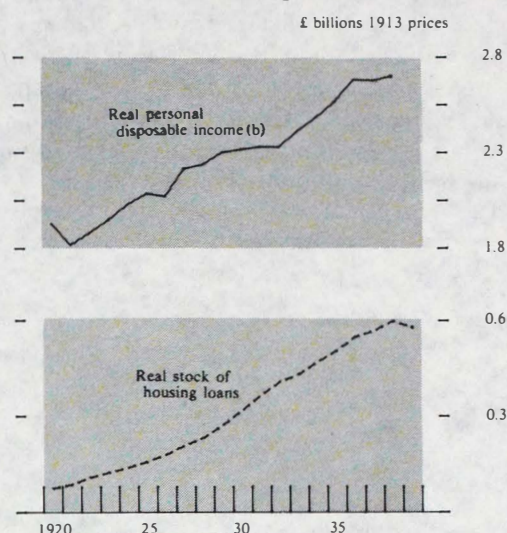
**Chart 12**  
**Bank rate<sup>(a)</sup>**



(a) See footnote (4).

(b) Bank of England Bank rate minus the average rate of consumer price inflation over the previous two years.

**Chart 13**  
**Real incomes and housing loans<sup>(a)</sup>**



(a) See footnote (4).

(b) Data for 1939 not available.

The fall in nominal interest rates from 1931, followed by falls in real rates as prices started to rise again in later years, was substantial, and also influential (Chart 12). It enhanced borrowers' ability to fund mortgages, and directly reduced speculative builders' costs. In addition, several other factors favoured a rise in house building. Demand for houses had built up since, and as a consequence of low levels of building during the war; the number of families increased;<sup>(2)</sup> migration occurred from the more depressed areas to the South and Midlands; and local authorities took a larger share of house completions during the twenties. From 1932, RPDI grew sharply, after stagnating since 1928 (Chart 13).

The result was a sharp rise in private completions from 1932 (Chart 14)<sup>(3)</sup> financed largely by mortgage borrowing. Although little evidence is available, house prices did not appear to rise during the building boom. Improved transport and absence of planning controls in the thirties meant that land for building was in very elastic supply: and building costs actually fell, under the influence of higher productivity, until early in 1935. The outcome was a house building boom which was an important—though far from the only—element in the recovery of the middle thirties, accounting directly for an extra 300,000 jobs between 1932 and 1937.

Although there are some similarities between financial innovation in the thirties and today it seems unlikely that a revival in housebuilding on the scale that took place then will recur. Several of the features of the thirties are lacking today. Interest rates have fallen in nominal terms, but remain high in real terms by the standards of the seventies. Real incomes are not rising strongly, and building land is in rather inelastic supply. The housing stock is high in

(1) R C O Matthews, 'The Trade Cycle' (1959) Page 111. *The Cambridge Economic Handbooks*.

(2) This had grown by 30% in the ten years from 1921 in London and the South East, for example.

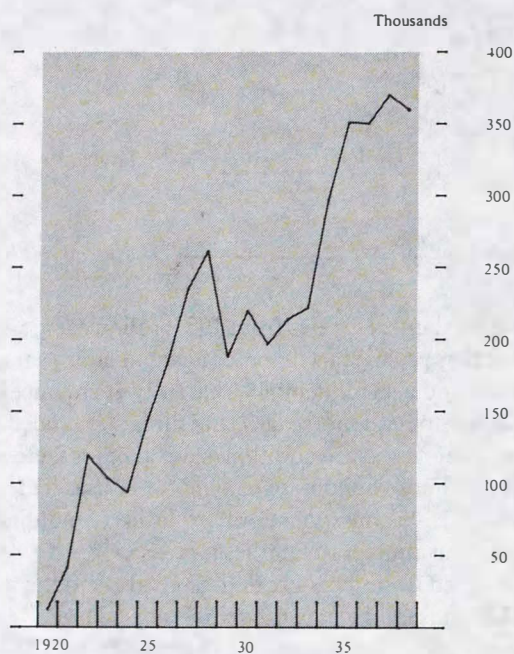
(3) Chart 14 shows all completions, since private completions can only be estimated rather imprecisely.

(4) Data sources for Charts 12 and 13: see D K Sheppard, *The growth and role of UK financial institutions 1880–1962* Methuen & Co Ltd 1971, and C H Feinstein, *Statistical tables of national income expenditure and output of the UK 1855–1965*, Cambridge University Press, 1976.



comparison to the population over nineteen<sup>(1)</sup> by recent standards, after some years of rapid growth in the sixties; and migration of population within the United Kingdom is not occurring on the scale of the thirties. Recent demographic trends which imply more rapid growth of the adult population in the next decade, and the slowdown in building, may presage a degree of pent-up demand in future years, but do not seem to be influential as yet.

**Chart 14**  
**Total housing completions**



(1) Other indicators of pressure on housing are either themselves influenced by economic conditions, or unreliable for other reasons.