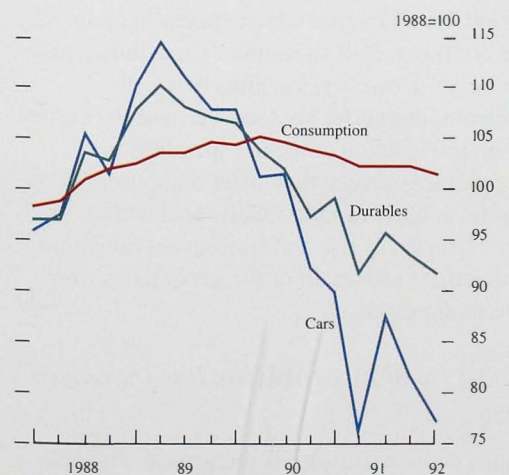


## The domestic economy

- *The post-election recovery in consumer demand has proved fragile with no clear sign as yet that demand is moving above last year's depressed level.*
- *Spending on major purchases has been particularly weak; consumer confidence has fallen back and households are repaying consumer borrowing.*
- *Lower interest rates have eased the debt servicing burdens of many households; but the continuing falls in house prices have served to underline the high levels of debt and, for those whose houses are now worth less than the value of their mortgage, have increased the motivation for saving.*
- *The housing market shows few signs of reviving. Conditions in the commercial property market also remain depressed.*
- *Nevertheless, in spite of a further 1/2% fall in GDP in the first quarter, there are some indications that activity is stabilising: investment expenditure rose in the first quarter and manufacturing output has been higher than at the end of last year. Modest growth in total domestic demand has been accompanied, however, by a faster rise in imports.*
- *Progress with inflation continues to be encouraging. Lower earnings growth and improved productivity are reducing cost pressures within the manufacturing sector. Retail price inflation has now fallen below 4% with clear signs that price rises for services, as well as goods, are moderating.*

**Chart 1**

*Spending on cars and other durables has fallen further than consumption generally*



**Consumer demand has yet to show clear signs of reviving . . .**

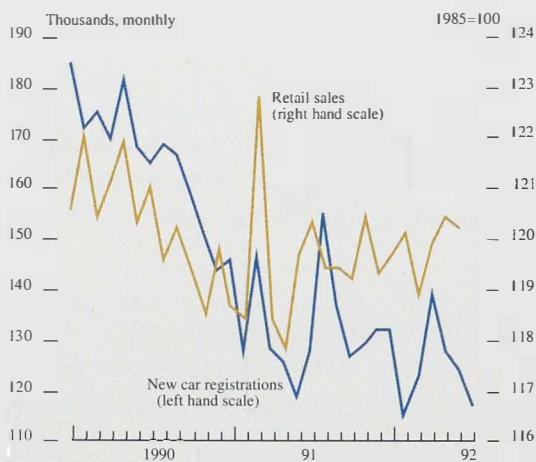
The subdued pattern of consumer expenditure, which characterised the second half of 1991, has persisted into the first half of this year, although a number of temporary factors have meant that the recent path of spending has become more erratic. Consumption fell by 0.7% in the first quarter but has probably risen since then to a level closer to that prevailing through much of last year. Nearly half of the initial fall reflected a sharp drop in energy consumption—the consequence of an unseasonably mild winter—but spending on durable goods also fell significantly, mainly reflecting a fall in car sales in the weeks preceding the Budget in March.

Households have spent far less on motor vehicles throughout the recession. Although such spending represents a relatively small proportion of total consumption—just 4% in 1991—it has fallen by one third from its peak in the first half of 1989 and has accounted for around a third of the 3 1/2% fall in total consumer spending since the spring of 1990. As Chart 1 shows, spending on motor vehicles and other durables turned down much earlier than other categories of expenditure. The discretionary nature of much of this spending made it particularly vulnerable to rising interest rates and the increased pressures on disposable income from servicing existing debt. Nevertheless, as interest rates have fallen there has been no clear sign of such spending having stabilised. While there is

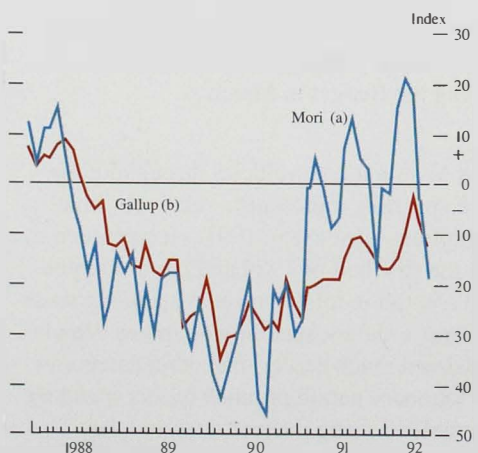
evidence of selective purchasing to take advantage of sales discounts, aggregate spending on durables has continued to fall as a share of total consumption.

In practice, there are a number of reasons for thinking that the most recent fall in Chart 1 may exaggerate the underlying weakness of spending. Anticipation of the Chancellor's decision to reduce car tax from 10 March was a factor depressing car registrations throughout February and early March. Uncertainty about the future structure of personal taxation may have led to the postponement of some major purchases in the final weeks before the general election. And the lateness of the Easter weekend will have caused some purchases to be recorded in April this year rather than March.

**Chart 2**  
Retail sales and car registrations have been broadly flat since early 1991



**Chart 3**  
Consumer confidence has risen significantly since 1990, but has faltered in recent months



- (a) Response to enquiry concerning the general economic situation of the country.  
(b) Based upon five questions concerned with households' finances and their assessment of economic conditions.

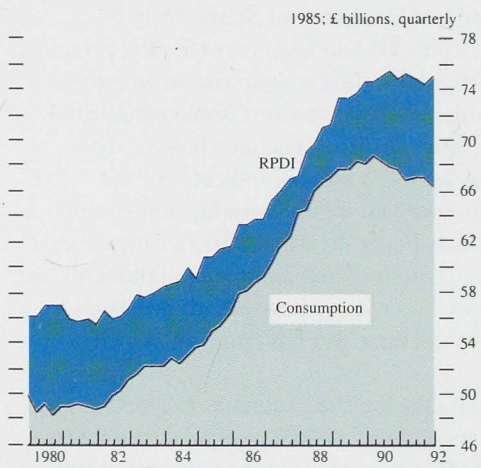
The evidence on consumer spending in the second quarter is consistent with these factors—suggesting somewhat firmer demand than in the first quarter. Nevertheless, as Chart 2 suggests, the post-election recovery in spending has been fairly muted and may represent little more than a return to the subdued level of spending which has prevailed since the spring of last year. Car registrations have fallen back since April, while much of the rise in retail sales in the second quarter is attributable to spending on non-durable goods, notably clothing and footwear. The absence of demand for 'big ticket' consumer durables has been widely noted and probably accounts for the low rate of consumer borrowing which continued into June.

The reluctance of consumers to commit future income, by borrowing to finance major purchases, may stem from continuing concern about job security and prospects for household finances but may also indicate a more active desire by some individuals to reduce their overall level of indebtedness. The recent falls in consumer confidence are consistent with the first of these interpretations. As can be seen from Chart 3, however, the main indicators of confidence have been comparatively buoyant for much of the past year, yet this has failed to translate into higher spending. Low inflation, falling nominal interest rates, and a slower rate of increase of unemployment are all factors which appear to assist confidence and account for the overall strength of these indicators since the middle of last year. However, the links between confidence and spending are imprecise, not least because the survey questions seek little or no information on actual spending intentions. The more general guidance they offer on household expectations is prone to be volatile as individuals react to and assess new information. The sharp rise and subsequent downturn in confidence, in the immediate aftermath of the general election, no doubt reflects such a re-appraisal.

*... as the shadow cast by debt problems has increased incentives for saving ...*

Interpretation of the latest data on incomes is made more difficult by the apparent rescheduling of some payments. Some employers brought forward bonus payments from 1992/93 into March, in anticipation of a possible change of government; and receipts of company dividends also rose particularly sharply in the first quarter. This contributed to a 1% rise in real personal disposable income while consumption remained subdued, resulting in a sharp rise in the saving ratio to 11.5%, its highest level since 1982.

**Chart 4**  
Consumption has fallen more sharply than income



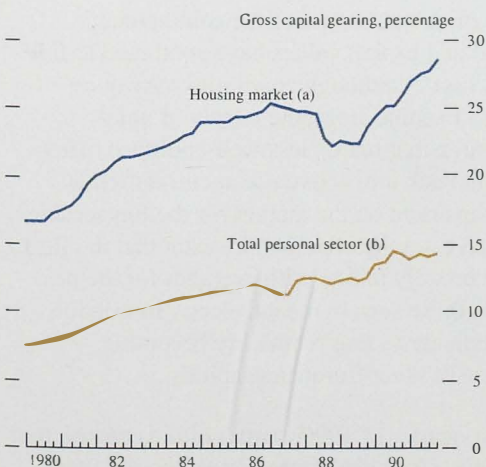
Real personal disposable income (RPDI) has fallen by just 1/2% from its peak in the fourth quarter of 1990, yet households have substantially increased their rate of saving over this period (see Chart 4).

A further cut in interest rates in early May kept the personal sector's gross debt-servicing burden on a downward course. It has probably now returned to the level last seen in 1989, although this still represents an historically high figure. With the personal sector holding net floating-rate liabilities, the fall will have increased disposable income in aggregate but more importantly reduced payments for the most indebted. There is evidence that the easing interest burden has begun to reduce the incidence of new mortgage arrears, but it is likely to take some time before this is translated into a fall in total arrears. The number of borrowers with serious arrears (of more than six months) rose to a new peak of 305,000 at the end of June.

Households' reluctance to respond to lower interest rates by spending more appears to be related to a number of concerns. Some of these were present in previous recessions. Unemployment, while increasing at a markedly slower pace than a year ago—around 30,000 a month so far this year against 75,000 in the first half of 1991—may be continuing to exert an influence on the saving behaviour of the employed.

But additional factors, some of which are less familiar, may also have a bearing in the current downturn. The process of adjustment to a low inflation environment may have altered individuals' expectations about the rate at which debt is likely to be eroded by inflation, and the rate at which wage increases will enable households to outgrow their existing debt. This may have left some individuals with liabilities, incurred when expected future income growth was relatively high, which now look excessive in the light of lower expectations for inflation and activity.

**Chart 5**  
Gross capital gearing ratios are now historically high



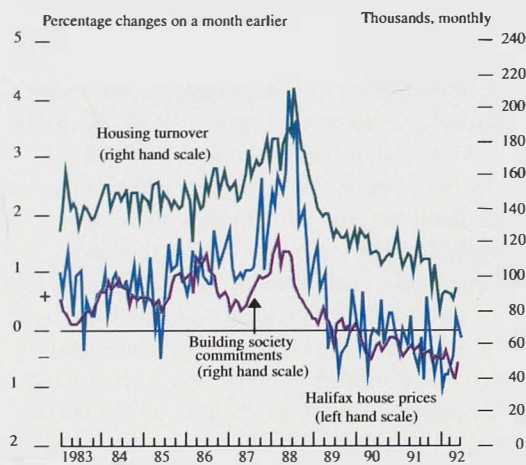
- (a) Mortgage debt as a proportion of the value of the owner-occupier housing stock.  
(b) Borrowing from banks and building societies as a proportion of personal sector financial and physical assets.

For other mortgagors falling house prices may have made balance sheet concerns more important than income gearing. Measures of income gearing suggest that the debt service burden has begun to diminish, but the personal sector's gross capital gearing ratio has risen to nearly 15% in total, and to 29% in the housing market (see Chart 5). Highly-g geared households, which suffered a proportionately greater squeeze on their incomes from high interest rates, are now suffering a proportionately greater decline in wealth as house prices fall. A particularly severe balance sheet constraint is faced by those households that have seen the market value of their property fall below the mortgage debt secured on it. An assessment of the possible scale of this phenomenon—known as negative equity—is made in a note on page 266.

... and the housing market has continued to weaken

The increased incidence of 'negative equity' has probably added to the disruption and lack of movement within the housing market, which intensified in the first half of this year. Current lending arrangements make it difficult for individuals with negative equity to move house, even when the aim is to trade down into a cheaper property, to reduce the outstanding level of debt. Falling house prices may also deter potential buyers because of the risk of sustaining capital losses, possibly leading to negative equity.

**Chart 6**  
House prices and turnover have fallen together



Whether as a result of these or other factors, housing turnover in the first half of 1992 was 20% below last year's rate (see Chart 6).

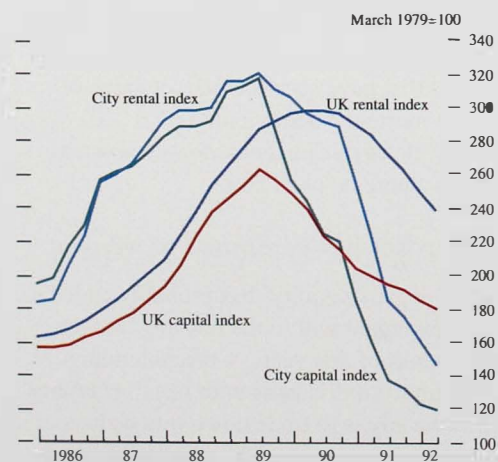
The temporary withdrawal last December of Stamp Duty on transactions valued up to £250,000 had been expected to encourage buyers to return. But, notwithstanding a sharp rise in enquiries early in the year and a further flurry of interest immediately after the general election, completed transactions have fallen. The turnover data are, to some degree, a lagging indicator of the market—the exceptionally low May figure possibly confirming anecdotal reports of contracts being delayed until after the general election—but the building societies' new lending commitments are a leading indicator and, as Chart 6 also shows, these dropped to exceptionally low levels in the three months from April to June.

The measures announced by the building societies to assist borrowers with high arrears have also had a very modest impact. There were more than 35,000 possessions in the first half of this year, down from nearly 39,000 in the second half of 1991, but the incidence of arrears of more than 12 months is continuing to grow. The direct payment of mortgage interest to lenders, for those on income support, took effect in the spring and should help to reduce further the flow of possessions. Possessed properties have, however, continued to come on to the market. Although probably representing only about 7% of turnover, they have encouraged more intensive price cutting and are likely to have captured a significant share of the first-time buyer market.

The fall in house prices, which continued through the first half of this year, has brought property back into the reach of many first-time buyers—the house price to earnings ratio is currently around 3.2 compared with a peak of 4.4 in mid-1989. However, with the overhang of vacant supply, which includes new property as well as possessed and other vacated older property, possibly approaching 1/4 million, it may take some time for these properties to be re-absorbed when demand begins to grow.

*With commercial property also depressed, the construction sector remains deep in recession . . .*

**Chart 7**  
Commercial property values have fallen in the wake of a large oversupply of office space



Source: Richard Ellis capital and rental value indices for all commercial properties.

Oversupply remains the principal feature of the commercial property market. Rental and capital values have continued to fall in many locations (see Chart 7) although conditions vary quite widely between centres. In some areas, the supply of unlet property is sufficiently large that many, less well-equipped offices are unlikely to be brought back into active use at current rental values, remaining as a constraint on the market for the foreseeable future. Lower rentals have, on the other hand, meant that the flow of lettings has remained broadly in line with averages for the past decade—although below those seen in recent years. In London, for example, there are indications that rentals are becoming attractive relative to those of other European capitals.

Since its peak in the first quarter of 1990, output of the construction industry has fallen by 14%. The decline persisted into the first quarter of this year and may be continuing. Total new construction orders fell by 16% in the three months to May, with all major sectors affected: private commercial and industrial orders fell by 9% and 24% respectively, and private residential orders dropped by 11%.

Accordingly, immediate prospects for the sector remain depressed. The Building Employers' Confederation expects output to decline by 4%–5% during 1992 with only a modest pick-up next year. The National Economic Development Office's forecast is even more pessimistic, seeing new work falling by 7.5% this year and not recovering until 1994. Commercial construction, held back by the large overhang of empty offices, is not expected to recover until later still.

*... but more industries are reporting greater stability in their markets ...*

While falling construction activity was closely matched by a further 1/2% fall in total output (GDP) in the first quarter, there have been a number of more positive indications consistent with a slow return to growth. Manufacturing output rose by 1/2% in the first quarter and, despite a setback in May, remained above its fourth quarter level. The latest Chambers of Commerce survey also points to steadier conditions. The balance of companies reporting an increase in domestic orders in the second quarter was positive for both the manufacturing and service sectors, and confidence about future profitability rose.

Business sentiment has nevertheless been particularly volatile this year. The latest CBI survey records manufacturers' short-run output expectations as broadly flat, following three months in which the balance of firms expected an early return to growth. As Chart 8 shows, recent swings in output expectations have been accompanied by some change in the condition of order books, although around levels which remain well below normal. Cautious hand-to-mouth ordering has intensified the uncertainties facing many companies. In addition, recent improvements in output have been concentrated within the consumer goods sector, where the market still appears fragile.

The behaviour of the financial markets is consistent with a slow return to growth. Spreads between yields on financial instruments can offer information on the views taken about the future of the economy. For example, a rise in the spread of corporate over government bond yields (the credit quality spread) may suggest expectations of an increase in default risk, and hence a recession. Conversely, a fall in the credit quality spread, as shown in Chart 9, is consistent with a fall in expected default risk associated with a recovery in economic activity.

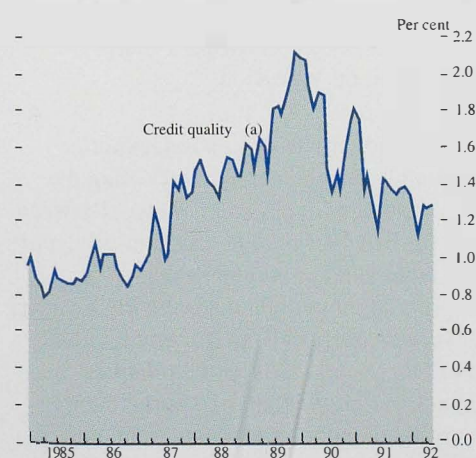
*... following a modest upturn in total domestic demand*

Although GDP fell in the first quarter, total domestic demand rose 1/4%, with stronger corporate spending more than offsetting falls in private and public sector consumption. Fixed investment was 1 1/2% higher, with that undertaken by industrial and commercial companies (ICCs) recording the first quarterly increase since the second quarter of 1990. The growth in investment occurred outside the manufacturing sector, where capital spending continued to fall. The latest CBI survey does not yet foresee a return to higher investment by manufacturers. The DTI's most recent intentions survey, however, implies an early return to higher spending here too. The article on page 298 discusses the adjustments made by ICCs which have led to a significant increase in liquidity, particularly for larger companies.

**Chart 8**  
Output expectations have weakened recently but still point to current levels being sustained



**Chart 9**  
The spread between corporate and government bond yields has narrowed in the last two years



(a) Defined as the difference between 25-year corporate bond and gilt yields.

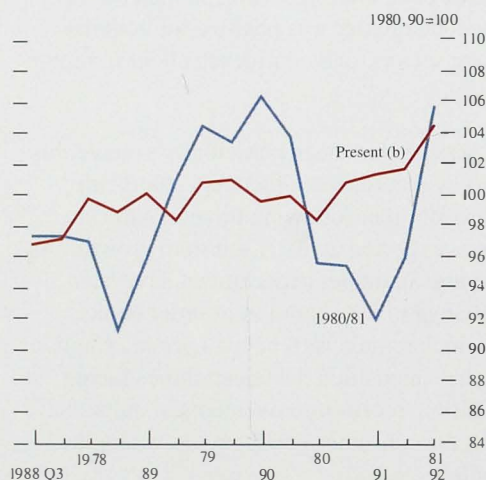
## Contributions to the change in GDP

Percentage points

	Q1 1992/ Q4 1991	Q1 1992/ Q1 1991
Consumption	-0.5	-1.3
Investment	+0.3	-0.5
Public consumption	-0.3	+0.1
Stocks	+0.8	+0.8
Domestic demand	+0.3	-0.9
Net trade	-1.3	-0.8
Factor cost adjustment	+0.5	+0.2
<b>GDP</b>	<b>-0.5</b>	<b>-1.5</b>

### Chart 10

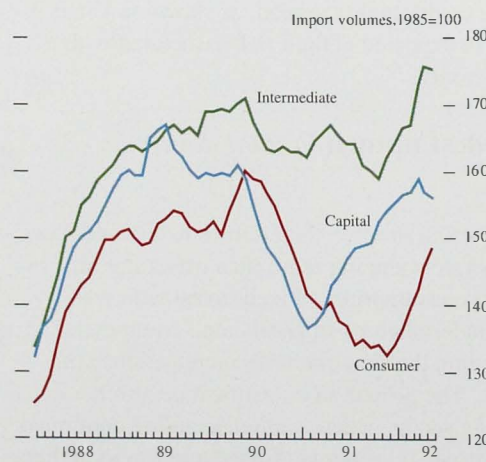
Import penetration (a) has risen through the current recession



(a) Imports as a proportion of domestic demand.  
(b) The first observation is 1988 Q3.

### Chart 11

The rise in import volumes during 1992 has been broadly based



The table shows that, although spending on fixed capital was a significant factor in the recent increase in domestic demand, the ending of destocking in the first quarter was of greater quantitative importance. Total stockbuilding was flat in the first quarter, following £0.7 billion of destocking in the final quarter of 1991. Part of this turnaround occurred within the manufacturing sector and appears to have resulted from a fairly widespread, but small-scale, pattern of re-ordering in anticipation of some further recovery in consumer demand. To some extent, these adjustments are mirrored in the recent path of manufacturing output. However, the stock turnaround has also been associated with higher import growth.

### The trade deficit has widened . . .

Import volumes have been surprisingly resilient given the weakness of domestic demand throughout the recession, but have risen more sharply this year as the overall level of demand has picked up. Imported goods and services accounted for 33½% of domestic demand in the three months to March—up from 31½% a year earlier—but, more strikingly, the rise in imports in the first quarter more than matched the rise in domestic demand. This degree of import penetration may be contrasted with the recession of 1980–81 when the share of imports fell sharply (see Chart 10). The most recent rise was partly associated with slower destocking, discussed above, and may have been in anticipation of an upturn in consumer demand. As the chart shows, the share of imports has been rising since the beginning of last year while the pace of destocking was slowing.

The strength of imports does not just reflect restocking of basic materials, although imports of such goods have been growing. Chart 11 shows that imports of manufactured goods have also been increasing and that capital goods in particular have been growing since early last year, despite a further fall in fixed investment through 1991. The chart also shows that imports of intermediate manufactured goods fell relatively little in the current recession and that recent growth has already taken this category of imports above its pre-recession peak. Finally, the chart records a sizable turnaround in imports of consumer goods following a sharp reduction in such imports earlier in the recession.

In contrast to the recent more rapid growth of imports, export volumes are growing less strongly than a year ago, reflecting the slower growth of demand in our major overseas markets. Between the second half of 1991 and the first half of this year, non-oil export volumes rose by 0.8%—the equivalent growth in imports was 4.9%. Within this total, exports of motor vehicles were 4.7% lower but some other categories, such as chemicals, performed relatively strongly. The destination of UK exports reflects the relative cyclical positions of our major trading partners. Exports to the EC have fallen as a proportion of total exports so far this year, as demand in those markets has slowed. By contrast, notwithstanding the weakness of the dollar, the proportion of total export earnings from US sales increased in the first quarter and has continued to rise. The net effect of slower export growth and the more rapid increase in imports has been a negative contribution to output this year which, in the first quarter at least, more than offset the rise in domestic demand. The visible deficit has also widened, rising in each of the last four quarters.

## The impact of recession on inflation

Whatever the pace of the economic recovery, its early stages will be characterised by an underutilisation of capacity. Under-used production facilities and the pool of workers currently seeking employment will be reabsorbed into economic activity only gradually. While this process continues, the pressures to reduce costs and to hold down price increases will remain, so that progress in reducing inflation should continue for some time. This box discusses some of the mechanisms at work in this process and looks at ways in which the pressures on inflation can be assessed.

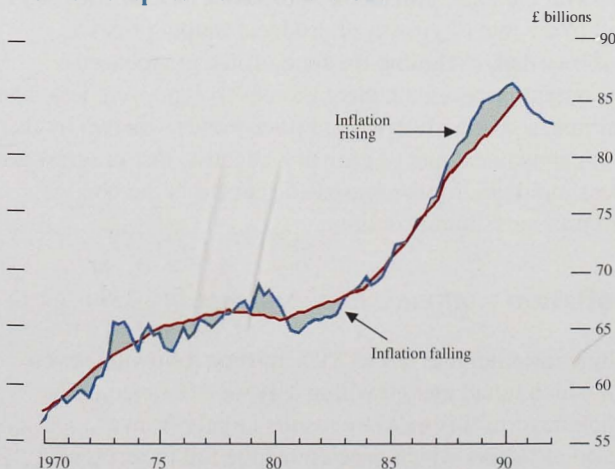
The gap between actual output and the level which might be thought of as 'normal', given available resources, will affect inflation through two direct channels: by influencing profit margins and by an effect on wages. Many companies set their prices as a mark-up over costs although the size of the mark-up will vary—when demand is low producers will often reduce prices to maintain sales volumes. In some statistical studies of aggregate price determination, the pressure on profit margins associated with changes in demand is often represented by deviations from average capacity utilisation.

Pressure on margins can also increase the motivation to reduce costs. The main variable component of total costs is usually the wage bill. However, in the short run, firms may be unable to cut wage rates unilaterally. In the longer run, weak demand can affect wage settlements where job security is threatened by the prospect of redundancies or company failure.

The extent to which output is affected by the pressures from spare plant capacity and from high or rising unemployment has been termed an output gap—the sign and size of which reveals the direction and strength of domestic pressure on inflation. One common way of estimating the output gap uses coincident cyclical indicators to establish benchmarks at which the economy is said to be 'on trend'. These points can be linked to provide a continuous estimate of trend output. Deviations of actual output from this trend are represented as an output gap. An example of such a calculation, for non-oil output, is shown in Chart A. The correlation between the output gap and the rate of inflation is shown in Chart B.

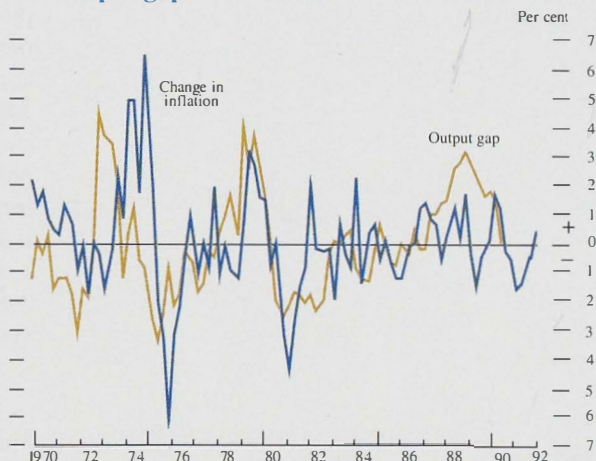
A major problem with this approach is judging the path of the trend—and hence the output gap—beyond the last point at which the economy was recorded as being on trend (currently thought to be around October 1990). An alternative approach is to estimate directly the degree of spare capacity, either by using survey estimates of utilisation such as those in the CBI's

**Chart A**  
Non-oil output: actual and trend (a)



(a) Trend derived from CSO coincident indicators.

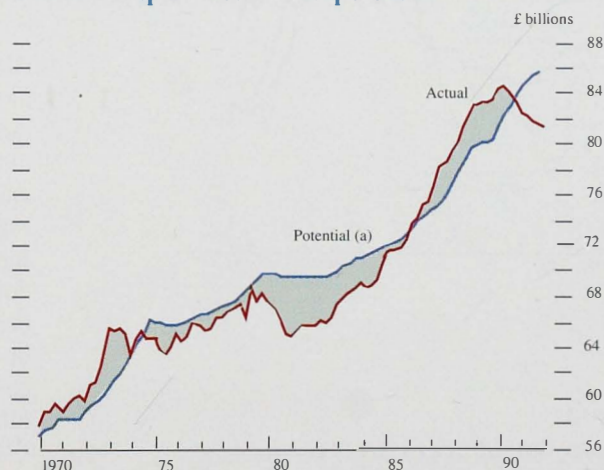
**Chart B**  
The output gap and inflation (a)



(a) Output gap based on Chart A; inflation based on the GDP deflator.

industrial trends survey, or by scaling up estimates of the capital stock using the average capital:output ratio. An estimate of the latter for the non-oil economy is shown in Chart C. This approach suggests that inflationary pressures at the end of the 1980s were somewhat greater than is implied by the trend output gap measure in Chart A.

**Chart C**  
Non-oil output: actual and potential



(a) Potential based on the level of the capital stock. 1991 numbers are provisional.

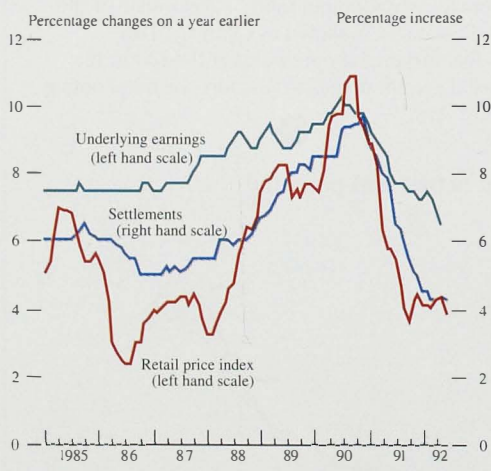
isolating the direct effect of unemployment on wage inflation is more challenging. In particular, so called 'hysteresis' effects suggest that wage inflation is sensitive to the change in unemployment as well as its level. Furthermore, a given level of unemployment could translate into different levels of output depending on underlying labour productivity and the composition of employment. For these reasons, a constant output gap would not necessarily exert constant downward pressure on inflation.

There is little doubt that an output gap currently exists and that it will unwind gradually through the recovery. The pace at which this occurs will depend on the strength of demand and on the response of domestic supply—the latter being dependent on the extent of unused capacity and the rate of growth of potential output. The effects of the recession on potential output cannot be estimated with any confidence but, on all reasonable assumptions, domestic demand pressures will continue to exert a downward influence on inflation for some time to come.

... *but cost restraint is benefiting competitiveness* ...

Compared with a year ago, the competitiveness of the United Kingdom's manufacturing sector is being aided by a rise in productivity and a fall in settlement rates, which have combined to moderate the growth of unit wage costs. Increases in productivity are usual at this stage in the cycle, because companies typically continue to trim their workforces for some time after output has stopped falling. Wage settlements are sensitive to both the pressure of supply in the labour market and to the general rate of inflation. The sharp fall in average settlement rates through 1991 reflects the influence of both of these factors. This year, however, settlements have recorded less downward movement, according to data collected by the CBI and the Industrial Relations Service, with average settlements in the manufacturing and service sectors remaining close to the headline inflation rate in the 4%–4½% range.

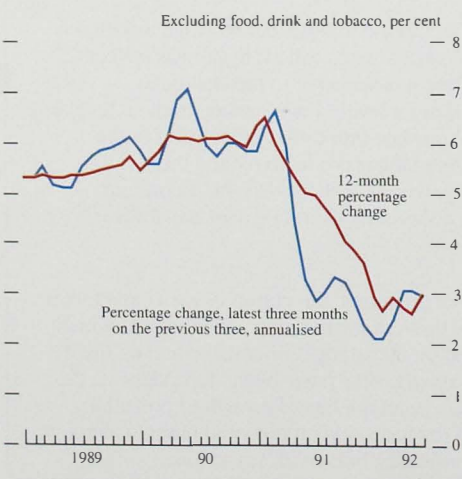
**Chart 12**  
Pay settlements have recently been close to the headline rate of inflation



Such figures are low by the standards of the past two decades. In the mid-1980s, when the rate of inflation was similar to today's, average wage settlements were one to two percentage points more than inflation and, as can be seen in Chart 12, never fell below 5%. Settlements have moved down closely in line with inflation during the past eighteen months. Average settlement figures do, of course, offer a far from complete picture. Many companies are currently reaching wage settlements significantly below the rate of inflation, while others have been obliged to defer settlements pending some improvement in their ability to pay.

Although settlement rates may have been more stable over recent months, they continue to exert a downward influence on the average rate of growth of earnings as more workers become subject to the lower rate of increase in basic rates of pay. Whole economy underlying average earnings grew by 6½% in the twelve months to May, down from 7½% six months earlier. This figure should fall further even if settlements remain at current rates. In practice, the downward pressure on costs which the recession has exerted should persist for some time after output has started to recover. The box on page 263 discusses the impact which the recession has had on costs and prices and the factors which may influence prospects for inflation in both the short and medium term.

**Chart 13**  
Producer output prices have been rising less rapidly but progress may have slowed



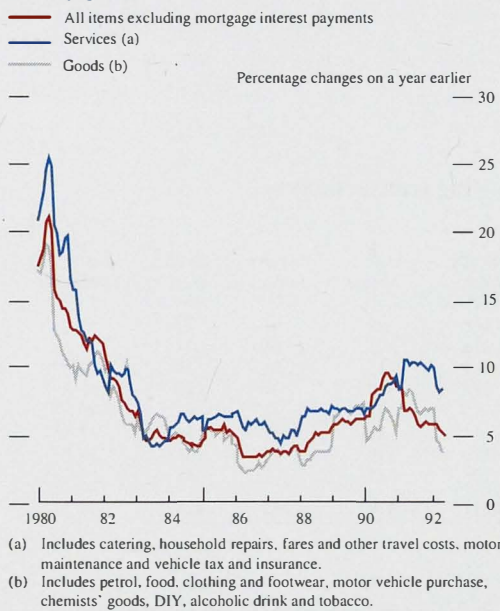
Cost containment in manufacturing and the pressure on margins associated with the underutilisation of capacity have already led to a sizable fall in the rate of growth of producer output prices. Chart 13 shows that, excluding the food, drink and tobacco industries, output prices in the three months to June were less than 3% higher than a year earlier. Recent price trends—shown by the three-month annualised rate of growth—suggests that progress has become less rapid yet, for the reasons discussed in the box, downward pressure should continue.

... *as inflation continues to be squeezed*

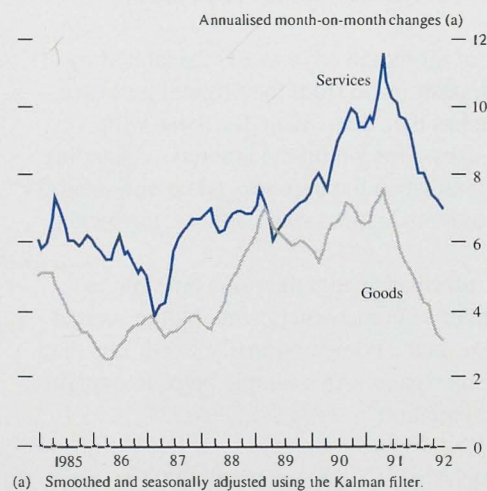
The headline inflation rate fell to 3.9% in June following seven months in which it had moved within a 4%–4½% range. The recent 'stickiness' of this measure results largely from a combination of factors which accelerated the fall in recorded inflation throughout much of last year and which are only now beginning to disappear from the 12-month growth rate. The largest



**Chart 14**  
**Inflation in the service sector remains above that of goods . . .**



**Chart 15**  
 . . . but services have also responded to demand pressures



of these effects results from the inclusion of mortgage interest payments in the headline inflation measure. The cuts in mortgage interest rates during 1991 of around three percentage points removed about 1½ percentage points from recorded inflation during the year, even though the rate at which the majority of shop prices were rising was unaffected by these changes. As mortgage rates have fallen less rapidly this year, the beneficial effect on the headline inflation rate has been partly reversed and would have led to recorded inflation rising had not the rate of growth of most other prices fallen over the intervening period. The Chancellor of the Exchequer has asked the Advisory Committee on the composition of the retail prices index to consider alternative ways in which housing costs might be treated.

Although the headline inflation rate has shown little movement since last autumn, the rate of growth of most prices in the index has moderated. Excluding mortgage interest payments, inflation fell to 4.8% in June—down from 5.7% in the final three months of last year—with clear signs that further reductions are in prospect.

Within this broad aggregate, inflationary performance has varied widely: price rises for most goods have averaged 3%–4%, while increases for a wide range of services have been closer to 8%. Chart 14 shows the 12-month growth rates of goods and services prices through the current and the previous recession. It suggests that the prices of goods normally respond more quickly to changes in economic activity than those within the service sector and that goods prices typically rise less rapidly than those of services. The strength of service sector inflation, and its apparent lack of response to falling demand, was a notable feature in the latter part of last year. Part of the explanation lay, of course, in the VAT changes affecting many prices from April 1991 which, as the chart shows, led to an offsetting fall in recorded inflation from April this year. A better indication of recent progress may therefore be given by Chart 15 in which seasonally adjusted monthly changes are annualised. This shows a clear fall in inflation for both goods and services since the Spring of 1991 which should soon be reflected in further reductions in the main inflation measures.

## Negative equity in the housing market

One of the most distinctive features of the current downturn in the housing market is that prices have fallen in both real and nominal terms. In some regions, most notably the South East, nominal house prices have been falling for nearly four years. This situation has left many households with a home worth less than the value of their mortgage, a phenomenon that has been termed 'negative equity'.

Negative equity is most prevalent among first-time buyers who bought in the South in the late 1980s on high loan-to-value ratios, and have since seen the value of their properties fall substantially. For such homeowners, the presence of negative equity represents a considerable constraint on their ability to move.

### Estimating the extent of negative equity

From information on the size of cash deposits, the number of transactions and regional movements in house prices, it is possible to estimate the number of homeowners who currently face negative equity.

Table 1 shows the percentage change in house prices up to the second quarter of this year for those regions which have experienced price falls of more than 10%. These figures are based on the Halifax mix-adjusted house price series and relate to prices paid by first-time buyers. Similar series have been used to estimate the figures relating to former owner-occupiers.

**Table 1**  
Regional house price falls (a)

Percentage change between 1992 Q2 and		South East	East Anglia	Greater London	South West	East Midlands
1988	Q2	-16	-20	-14	-9	26
	Q3	-22	-27	-21	-19	10
	Q4	-25	-27	-22	-22	-1
1989	Q1	-24	-27	-22	-19	-4
	Q2	-22	-23	-21	-20	-12
	Q3	-20	-19	-20	-19	-13
	Q4	-18	-17	-18	-16	-11
1990	Q1	-14	-13	-15	-14	-8
	Q2	-14	-12	-14	-11	-10
	Q3	-11	-6	-11	-9	-6
	Q4	-10	-7	-10	-7	-3
1991	Q1	-7	-5	-9	-7	-4
	Q2	-7	-6	-9	-8	-5
	Q3	-5	-5	-6	-7	-4
	Q4	-5	-4	-7	-5	-3
1992	Q1	-2	3	-2	-1	1

Source: Halifax house price index—first-time buyers.

(a) Excluding council house sales.

Table 2 gives an estimate of the number of housing transactions involving a mortgage. Again for illustrative purposes, only five regions are shown. Council house sales have been excluded since such transactions normally include

**Table 2**  
Mortgaged housing transactions (a)

Date of purchase		South East	East Anglia	Greater London	South West	East Midlands
1988	H1	168	27	61	77	61
	H2	178	25	68	74	55
1989	H1	91	15	34	38	37
	H2	112	20	39	43	40
1990	H1	110	22	41	47	39
	H2	114	21	37	50	37
1991	H1	110	19	40	46	34
	H2	128	21	42	46	37
<b>Total</b>		<b>1,011</b>	<b>170</b>	<b>362</b>	<b>421</b>	<b>340</b>

Overall total 2,304

Source: *Housing Finance* and partly estimated.

(a) Excluding council house sales.

a price discount sufficient to make it unlikely that these households will now be holding negative equity. Council house sales are also excluded from the price data.

The average size of mortgage advances is calculated by subtracting any deposit made from the original purchase price. Allowance has then been made for those with repayment mortgages—for whom the amount outstanding will now be less than when the loan was taken out—and for those who may have made lump sum capital repayments.

Bringing all this information together, it is possible to calculate the number of homeowners who, by the second quarter of this year, had a home notionally worth less than the value of their mortgage. An example helps to explain the basis of the calculation.

According to these estimates there were 59,000 first-time buyers in the South East in the second half of 1988. Since that time, house prices are reported to have fallen by more than 20%. In 1988, 82 per cent of first-time buyers made a deposit of less than 20% of the original purchase price. Hence, around 48,400 (59,000 x 0.82) of those who bought during that period now face negative equity. A similar calculation is performed for previous owner-occupiers.

Such estimates suggest that by the second quarter of this year around 876,000 households faced a situation in which the value of their home had fallen below the value of their mortgage. Table 3 provides a regional breakdown of this figure. For three of the most severely affected regions—the South East, Greater London and East Anglia—around two thirds of all first-time buyers who have entered the market since 1988 are now likely to have some negative equity.

### Qualifications

These estimates are subject to a number of important qualifications. First, and most importantly, they are

**Table 3**  
Estimated number of homeowners with negative equity

Thousands	South East	East Anglia	Greater London	South West	Other regions
First-time buyers	260	46	99	87	106
Previous owner-occupiers	121	22	43	49	43
<b>Total</b>	<b>381</b>	<b>68</b>	<b>142</b>	<b>136</b>	<b>149</b>
Overall total	876				

extremely sensitive to the measured movement in house prices. The smaller price falls in the South recorded in the Department of the Environment data—for example a fall of just 12½% fall in the South East for first-time buyers since the fourth quarter of 1988—lead to a total estimate which is 375,000 lower than that presented here. Second, because they are based on averages, it is assumed that all those who bought within a given region in a given quarter face the same percentage house price fall, depending on whether they are first-time buyers or former owner-occupiers.

Additionally, some qualifications have a direct bearing on the estimate of negative equity shown in Table 3. Some of the households included in these estimates may have moved before experiencing negative equity, and no allowance has been made for possessions. Both of these factors would reduce the incidence of negative equity. Since the beginning of 1988, over 180,000 properties have been taken into possession by lenders.

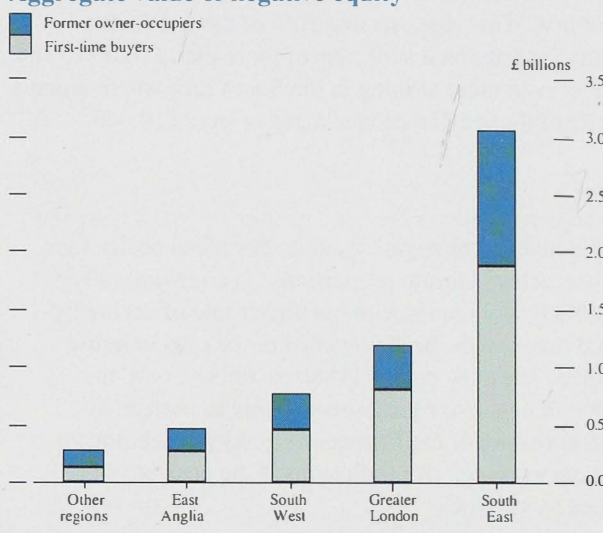
There are, however, factors which weigh in the opposite direction. For example, these estimates make no allowance for households who have become more deeply indebted, either because their mortgage payments have fallen into arrears or because they have undertaken additional borrowing with the property as security. According to the Council of Mortgage Lenders, 305,000 borrowers were more than six months in arrears at the end of June with 115,000 more than twelve months behind, while in the period 1988–90 over 1.7 million further advances, averaging more than £7,000, were made by building societies alone.

These qualifications partially offset each other, but the largest effect probably comes from the build-up of mortgage arrears and from new advances so that the net effect could easily add a further 100,000 to the base estimate, taking the total closer to 1 million. This represents 1 in 10 homeowners with a mortgage, but is somewhat lower than recent estimates of around 1½ million produced by Phillips & Drew and Morgan Grenfell.

**The value of negative equity**

Of perhaps more significance than the number of affected households is the value of negative equity. This is the shortfall which must be financed if affected households are to move home. Once again, an example helps to explain the basic calculation.

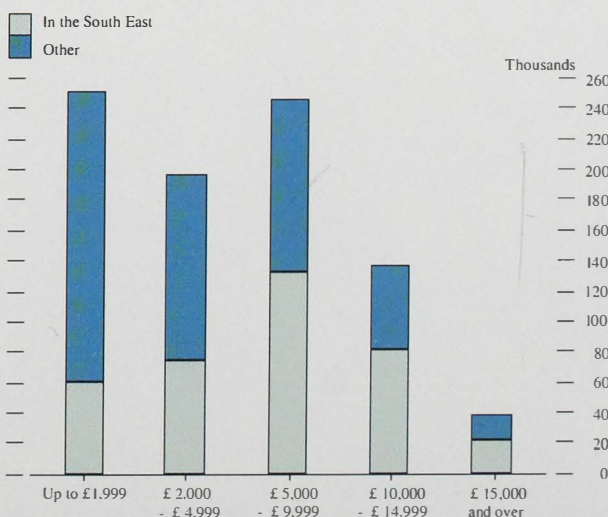
**Chart A**  
Aggregate value of negative equity



A first-time buyer in the South East who took out a 100% endowment mortgage on a house costing £80,000 in the fourth quarter of 1988 has since seen the price drop to £60,000 while the value of the mortgage has remained at £80,000. Hence, this household faces a shortfall of £20,000.

Applying this calculation as before leads to aggregate national shortfalls of around £3.6 billion for first-time buyers and £2.3 billion for former owner-occupiers, a total of around £6 billion, and an average of £6,000 per affected household. The total is equivalent to around 14% of total personal sector saving in 1991. As Chart A shows, the shortfall is heavily concentrated in the South East due to the size of this region, but of proportionately similar magnitude in Greater London, East Anglia and the South West. The national value estimate may, however, be conservative because it assumes a uniform fall in house prices in each region. Since the true fall will have varied around this average, some households will have more negative equity, offset by others who will still have positive equity. This will increase any measure of the gross value of negative equity.

**Chart B**  
Distribution of negative equity by value of shortfall



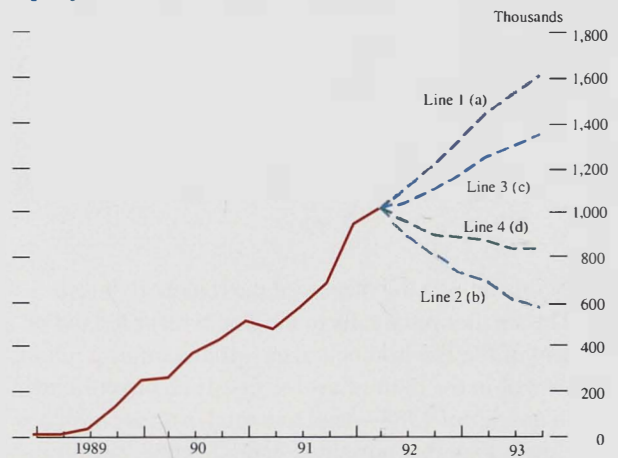
Charts A and B show the distribution of this shortfall across the five most heavily affected regions and according to the amount lost. This suggests that 20% of those affected currently face notional shortfalls of more than £10,000. The picture is even more striking in the South East where around a quarter of those affected face a gap of over £10,000.

### Outlook

The phenomenon of negative equity has taken nearly four years to reach its current proportions. To unwind fully, these effects will require either a higher rate of saving by affected households, or the reversal of the falls in house prices seen since the end of 1988. In either event, the presence of negative equity seems likely to remain an important feature of the finances of many households for some time to come. An indication of the possible scale is provided by Chart C.

The chart shows the evolution of negative equity since 1988, together with four illustrative projections based on a range of scenarios for the future course of house prices. On the most pessimistic scenario, if prices were to fall by a further 1% per quarter in all regions, the value of negative equity held by existing borrowers would be approximately £10½ billion by the end of 1993 with more than 1.6 million households affected. If, on the other hand, prices were to rise by 1% per quarter the value of negative equity would fall to around £2½ billion by the end of next year although around 600,000 families would still face a shortfall. The

**Chart C**  
The evolution and possible development of negative equity



- (a) One per cent per quarter fall in prices in all regions to the fourth quarter of 1993.
- (b) One per cent per quarter rise in prices in all regions to the fourth quarter of 1993.
- (c) One per cent per quarter fall in the South, similar rise in the rest of the country.
- (d) One per cent per quarter rise in the South, similar fall in the rest of the country.

remaining two scenarios illustrate the effect of divergent price movements between the South<sup>(1)</sup> and the rest of the country.

For families in the South, the problems raised by negative equity seem unlikely to be short-lived. Looking beyond the time horizon of Chart C, it would require house price inflation of 10% per annum from early next year to lift all of the affected households out of negative equity by the end of 1995.

(1) The South defined as Greater London, South East, East Anglia, South West, East and West Midlands.