

## BARKER INQUIRY ON HOUSING SUPPLY

### AFFORDABILITY AND THE INTERMEDIATE MARKET

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#### **1. Introduction**

This report draws together some analyses of housing affordability and the potential need/demand for intermediate tenure housing in England to inform the Barker Inquiry on Housing Supply. These analyses draw on work undertaken in support of two other current exercises, the Home Ownership Task Force (HOTF) and the updating of the Indices of Multiple Deprivation (IMD), both of which address related questions using common data and modelling approaches.

The first of these other exercises produced the paper *Potential Need and Demand for Low Cost Home Ownership* for the HOTF in July. This report is currently being revised to accompany the Task Force Report due for publication in early November. Its main focus is upon the potential need/demand for forms of low cost home ownership, set in the context of the overall need for affordable housing. The need arising from newly forming households is analysed using an affordability-based model at district level based mainly on data for 2001. This is complemented by an analysis of potential need/demand from existing renter households who could buy, with or without the assistance of LCHO schemes, including a description of the characteristics of these households, based on an analysis of the Survey of English Housing (SEH).

The second exercise is directed towards producing an initial version of a *Housing Affordability Index* to be included in the next IMD exercise, following on from a Scoping Study carried out by the present author over the summer. This initial index focuses on access to the mainstream owner occupier housing market at local authority level, and consequently overlaps heavily with the HOTF exercise and with the interests of the Barker Inquiry. A paper setting out the key steps, assumptions and results of this index development process has been produced. The general approach links the application of affordability criteria to the target group of younger (under-35) households in a national survey (currently SEH, but intended to be rebased on to FRS) at subregional level, with proxy formulae to carry these results down to LA district level. These results are checked and compared with the results of the Bramley affordability model which also underpins the HOTF study, and with other estimates by Wilcox (2003). Some modifications to the models and to the underlying data on house prices are incorporated in this work.

This paper should ideally be read in conjunction with both of these other papers, and it is not intended to repeat all of the detailed material and argument from these here. Some key results are highlighted and guidance given on interpreting the detailed tables of results supplied separately on spreadsheets to the Inquiry Team.

It should be emphasised that the models used in this work, although of quite long standing, are in a state of continuing evolution and refinement. We are dealing with moving targets, both in terms of the volatile real world housing market and in terms of detailed data sources and assumptions employed. In particular, we must distinguish

1. Earlier versions of the affordability model whose published results are referred to in the context of change over time.
2. The version of the model underpinning the HOTF Paper, which for example focusses on newly forming households and uses slightly less than ideal data inputs in relation to house prices, economic activity and other matters.
3. The linked modelling using SEH and LA-level data with particular assumptions which generates the IMD Index.
4. The latest version of the district-level model which builds on 2. and 3. to create a framework for 'back-casting' the estimates from a 2002 base at intervals back to 1991.

In discussion with members of the Inquiry Team, it became apparent that there was particular interest in measuring changes in the scale and incidence of intermediate market potential, and affordable needs in general, as an indirect form of evidence on the issue of housing supply shortage. This pointed to the need to apply strictly comparable versions of the model to data for different points in time, to trace out the impact of changes in house prices relative to incomes in particular. This was the motivation for version 4. above, and this exercise is discussed at more length in section xx below.

## **2. Main Findings of HOTF Work on LCHO**

The net new need for affordable housing in 2001 was running at 121,000 units per year, which is far in excess of current affordable provision. This figure is much higher than reported for 1997 in an earlier study. This reflects the major rise in house prices since then, which has made housing much less affordable than it was over most of the 1990s

Positive needs are mainly concentrated (89%) in London and the three southern regions. The South East actually shows the highest volume of need, and the South West also shows up quite highly. Midland and northern regions, particularly their urban areas, are characterised by a considerable surplus of social lettings. This picture is similar to that derived from previous versions of this model, back to the late 1980s, but more extreme in its north-south polarisation (see below, s.4).

Less than 40% of new households can afford to buy on average, with a range from 22% in London to around 50% in the East Midlands and the northern regions.

Current LCHO models can help an extra 11% to buy through Homebuy, with a rather lower proportion for CSO @ 40% share 7.5%. CSO potential is more skewed to the south than Homebuy. Southern suburban and Outer London areas show the greatest proportional increment in affordability from LCHO.

The baseline need for LCHO amounts to about 20-22,000 new households per year, ignoring backlogs and potential demand from existing social or private renters. These latter groups could add a further potential demand of the order of 40,000 per year. These figures are far in excess of current LCHO provision, running at around 3,400 shared ownership and 1,100 Homebuy (2003 ADP).

There is much more potential demand in the south than the north. The baseline LCHO potential figures indicate a level of 8,600 new households in the South East, 5,500 in London and 3,300 in the South West. The five northern and midland regions would only warrant provision of 1-2,000 units p.a for new need. Adding potential demand from social renters would add 4,500 in London, 10,000 in the south and 7,500 in the midlands/north. Private renters represent an even larger potential addition, at least in the short term.

In high demand areas, between 10% and 25% of new affordable provision could be LCHO using current models, on the basis of new need alone. This proportion could be increased by more generous models and/or more provision for existing renter households.

Areas of low demand are concentrated in northern and midland cities, industrial and coalfield areas. In these areas, there is some theoretical potential, particularly for Homebuy, but subsidised provision of LCHO is difficult to justify on a needs basis, because of the large surplus of lettings in the social rented sector.

Higher interest rates would raise overall needs but could reduce the relative role of shared ownership. Reintroducing a DIYSO form of shared ownership (accessing cheaper secondhand housing) would greatly increase potential need/demand (by 20,000 units pa). Wider availability of 25% shares in CSO or a 65% Homebuy would increase potential demand from new households by about 13,000. 10% lower house prices or 10% higher relet rates would reduce potential new need by about 1,500 units pa. Recent price increases since 2001 have added about 1,200 to potential new need/demand for LCHO.

Nationally, the proportion of social renters who can buy in the market is quite low, at 7.5%, ranging from 2% in London to 10% in the midlands/north. Private renters are on average better off and have a greater ability to buy, averaging 28% nationally, but still lower (17%) in London.

Social renters who might be able to buy using LCHO add 5.8% overall, ranging from 3.8% in London to 6.3% in the midlands/north. But these figures would be reduced if we discount households living in areas with serious low demand, to 3.6% overall and only 2.3% in the midlands/north. Households who 'might buy' comprise a somewhat greater proportion of private renters, at 12.5%, or 10.0% after discounting for low demand. As in the case of social renting, the greatest proportion in this category is found in the southern regions outside London.

Nationally, 14% of social renters (one-in-seven) who can buy actually do so in a typical recent year. For private renters this take-up rate is higher, around 35%. This indicates a potential annual demand for LCHO of up to 22,000 from the social rented sector and 40,000 from private renting (at least for a short period).

It is debateable how much existing social tenants should be targeted – they release a unit for other households in need, but this will tend to concentrate low income households even more in social rented estates.. In some regions, the existing social sector may be a relatively more important source of demand, where new households are less important. This seems to be the case in the North West, the Midlands and the East of England for example. However, some of these areas may suffer low demand.

Potential demand for LCHO from existing households is concentrated in the middle age range (30-44). Household types vary across the regions, with more singles and couples in London and families elsewhere. The ethnic profile is predominantly White except in London. It is mainly working households, including many 2-worker households, which would buy in London and the south, but in the midlands/north there is more scope for non-working households and the disabled.

‘Push’ factors encouraging existing renters to buy include living in flats, being dissatisfied with current housing or area, and high current housing costs. These tend to be more important in London but some of these factors also affect renters in the midlands/north. Provision of affordable houses in acceptable areas would be the corresponding ‘pull’ factors.

Detailed tables containing these results have been provided in spreadsheet form to the Inquiry team. These include key values listings for all local authorities in England, as well as summaries at the level of regions and types of locality.

### **3. Subregional access modelling**

It was suggested in the HOTF Regional Differences subgroup that it might be appropriate to model access to home ownership, including LCHO, on the basis of prices in surrounding districts, rather than just the district where the household originated, where these prices may be significantly lower. This recognises the reality that households moving into owner occupation often display some geographical mobility, particularly within subregions. This tendency is particularly apparent in London and the South East where there are very high prices in some districts.

This has been modelled (initially for new households using the HOTF district-level model) by constructing a matrix of indicators of contiguity, such that for each district/borough we consider five adjacent districts plus the original district itself, and select the lowest threshold price for this set (threshold prices still being based on the lower quartile). We then re-estimate proportions and numbers able to buy or afford LCHO options on this basis. This makes a significant difference to the results in the majority of districts, the exceptions being those authorities which already have the lowest prices within their contiguous group.

The method seems reasonable in most cases, but it is suggested that it may not be reasonable in the most rural and peripheral areas (a) because distances involved are then quite high and (b) because the effects of borders and coastlines mean that some of the five nearest districts are not really contiguous (e.g. Cornwall, Welsh borders, Cumbria).

The results are summarised in Table 1 as follows.

**Table 1: Impact on affordable need and potential LCHO demand from new households of taking lowest price adjacent district**

REGION	Overall	Need	Shared	Ownership	Homebuy	
GOR2	Difference	% diff	Difference	% diff	Difference	% diff
NORTH EAST	-135	-79.5	-2	-100.0	-30	-86.7
YORKS & HUMBER	-1782	-79.0	-163	-87.5	-395	-81.7
NORTH WEST	-2089	-84.4	-108	-99.1	-469	-90.1
EAST MIDLANDS	-2476	-68.6	-443	-81.5	-606	-74.9
WEST MIDLANDS	-2293	-54.9	-334	-60.5	-499	-55.5
SOUTH WEST	-2886	-16.3	-434	-14.0	-379	-10.9
EAST	-2676	-34.5	-576	-37.7	-545	-33.2
SOUTH EAST	-9773	-21.9	-1564	-18.1	-1190	-13.7
LONDON	-7049	-18.3	-431	-7.9	-319	-5.5
ENGLAND	-31161	-25.7	-4055	-20.1	-4432	-19.8
Collapsed Shaw-Region Classification						
NORTHERN CITIES	-726	-44.7	-71	-37.3	-145	-43.3
NORTHERN INDUSTRIAL	-681	-78.5	-92	-80.6	-149	-79.6
NORTHERN SUBURBAN	-4509	-73.4	-542	-78.7	-1035	-76.4
NORTHERN RURAL	-2859	-70.5	-344	-86.3	-669	-76.9
SOUTHERN URBAN	-1593	-16.4	-173	-10.7	-160	-9.2
SOUTHERN SUBURBAN	-10320	-25.4	-1887	-22.5	-1475	-17.8
SOUTHERN RURAL	-3423	-17.4	-514	-15.8	-480	-12.7
INNER LONDON	-4560	-21.0	-165	-6.6	-176	-6.1
OUTER LONDON	-2489	-14.9	-266	-8.9	-143	-4.9
ENGLAND	-31161	-25.7	-4055	-20.1	-4432	-19.8

It can be seen from Table 1 that this modified assumption about subregional access to lower priced areas has a sizeable impact on the results. The overall affordable need falls by over 25% or 31,161 units per year. This may be seen as too high an estimate insofar as many of these households would require social rented housing and this group tend to be less mobile than potential home owners. The largest absolute impact is in the South East and London, and particularly in southern suburban types of district. There are also moderate impacts across all other regions except the North, including in northern suburban areas, and rural areas.

The impact on LCHO (intermediate market) potential demand is more moderate in scale, at around 20% or 4-4,500 units per year reduction. For both Shared Ownership and Homebuy the reduction is largest in the South East, particularly in suburban districts. The impact on London is relatively smaller. For Homebuy there are also sizeable reductions in the north, particularly in suburban districts. However, in the southern regions, where LCHO demand is concentrated, the proportional reductions are not that great, except perhaps in the East of England where they amount to 33-38%. To this extent, one can say that allowing for subregional access to lower priced opportunities does not substantially undermine the case for LCHO provision, although it does have the effect of shifting the client group somewhat further down the income scale (which may be an aim of policy anyway).

#### 4. Comparisons with Earlier Studies

As a first approach to the question of changes over time, we refer back to the results of earlier studies which used a similar (though not identical) methodology to estimate affordability, need and (in some cases) LCHO potential at local and regional level. These earlier studies were

- Bramley (1998) who used a relatively similar model to estimate the situation in 1997
- Bramley & Smart (1994) study for RDC of *Rural Incomes and Housing Affordability*, which made estimates for 1991, using a model which differs more significantly in detail.
- Bramley (1996) study for CPRE published as *Housing with Hindsight*, which used the same model to estimate the average affordability and need for two periods in the 1980s, 1981-6 and 1986-91.

For these earlier studies we can only draw on published results. It is not technically possible to re-run the models.

Table 2 shows the proportion of new households estimated to be able to buy in the market by region at five points in time. It should be noted that up to 1991 the regions used were the old standard regions.

**Table 2: Proportion of New Households Able to Buy 1986-2002 by Region**

REGION	1986-91	1991	1997	2001	2002
NORTH	56.3	53.4	54.1	50.6	49.6
YORKS & HUMBER	53.8	55.5	56.1	50.4	44.0
NORTH WEST	58.4	53.1	54.2	50.3	47.6
EAST MIDLANDS	64.6	62.9	63.6	48.1	40.2
WEST MIDLANDS	47.0	55.6	54.0	42.3	35.3
SOUTH WEST	41.5	57.1	52.5	33.2	24.2
EAST ANGLIA	53.2	59.7	55.9	38.6	30.8
SOUTH EAST	42.9	59.9	48.3	31.6	26.8
LONDON	17.6	38.1	22.5	22.4	20.2
Total	45.8	55.0	49.6	38.8	33.6

This shows that at the current juncture (end 2002) affordability in general is at a low level compared with most earlier periods. The first period shown, the late 1980s, included the period of boom in the market and displayed generally restricted affordability, especially in London. However, in other regions like the South East the situation was much less bad than currently, although this does refer to the average for the five year period rather than the situation in the worst year (1989). In 1991, the market was depressed, especially in London and the south, although less so in the north. At this time a majority of new households could afford to buy overall and in all

regions except London, although even in London the figure was relatively high at 38%. Of course, with an economic recession and falling prices, many households may have lacked the confidence to buy at this time. By 1997, the situation had reverted to a somewhat similar position to the late 1980s average, with just under half being able to buy and London falling to 22.5%. In the next four years, up to 2001, affordability fell sharply in the southern and midland regions whilst being static in London and falling modestly in the north (this allows for a relaxation in lending multipliers accompanying low interest rates). Finally, in 2002, affordability fell further in all regions, especially the South West, with least fall in the North and London.

Table 3 shows the associated net positive annual need for affordable housing at five points in time (1991 is not available). Figures for the North, East and South East have been adjusted roughly onto a comparable basis for the newer Government Office Regions.

**Table 3: Net Positive Need For Affordable Housing 1981-2002**

REGION	1981-86	1986-91	1997	2001	2002
GOR					
NORTH	112	583	709	170	180
YORKS & HUMBER	1819	3582	2635	2255	3021
NORTH WEST	3000	5541	4252	2475	3105
EAST MIDLANDS	675	2127	1987	3609	5272
WEST MIDLANDS	4185	9146	4033	4180	5640
SOUTH WEST	7198	19884	12050	17718	21654
EASTERN	10547	16966	13881	7760	9657
SOUTH EAST	23417	35133	26329	44609	49159
LONDON	40054	47016	30803	38423	40150
Total	91006	139979	96680	121199	137836

Table 3 shows the cyclical fluctuations in the need for affordable housing, rising from 91,000 units pa in the early 1980s to 140,000 in the late 1980s, falling back, then recovering to around 97,000 in 1997, 121,000 in 2001 and 138,000 in 2002. The regional differences appear to have been remarkably persistent over this period. Low demand was not a new phenomenon in the 1990s – it was apparent from this analysis right through the 1980s in the north of England. However, it is in two regions, the South West and the South East, that needs can be seen to have increased most strongly over this period, particularly the recent period. The situation in London and the East of England is similar in the most recent period to the early 1980s. The East Midlands has also seen a significant increase.

Although we cannot replicate the LCHO calculations for these earlier periods, LCHO potential can be broadly expected to have moved in step with these affordability-based needs estimates.

Table 4 provides more detail on the changes between 1997 and 2001. Affordability (% able to buy) fell by 10.8% points, with least fall in London and greatest fall in the South West. The incremental percentage able to afford shared ownership fell by 7.7%

points overall, with the greatest fall in London, with related falls in the numbers reflected in the last column.

**Table 4: Changes in Affordability, Supply and Demand numbers between 1997 and 2001 by Region.**

REGION	PCTB97	IPSO97	RELET97	NNEED97	POSNED97	SURP97	SONEED97
NORTH	-3.5	-6.8	5212	-6664	-540	6125	-245
YORKS & HUMBS	-5.7	-6.1	6046	-5474	-380	5094	-435
NORTH WEST	-4.0	-6.3	7448	-9626	-1777	7849	-735
EAST MIDLANDS	-15.5	0.5	6129	-1981	1622	3604	130
WEST MIDLANDS	-11.7	-4.9	4966	-934	146	1081	-939
SOUTH WEST	-19.3	-3.2	764	3792	3837	46	-1299
EASTERN	-17.3	-3.9	-8960	-4627	-4291	336	-3019
SOUTH EAST	-16.7	-8.5	13061	17612	18280	668	-2617
LONDON	-0.1	-23.9	-8682	8805	7620	-1185	-9319
Total	-10.8	-7.7	25984	902	24519	23617	-18478

High and low demand areas polarised somewhat, with surpluses rising in the north and midlands whilst shortages (positive needs) increased strongly in the South East and South West.

The apparent fall in LCHO potential in this comparison deserves some further comment. It certainly reflects technical differences in the way the calculations are done. However, there are real changes at work as well. With lower interest rates we have adjusted lending multipliers for market purchase, reflecting typical lending practice, so that at a given price level market purchase is more affordable. However, we have (conservatively) left shared ownership affordability criteria unchanged (30% ratio of outgoings to net income). This narrows the gap between these options. A further factor is that in the highest price areas (particularly London), the thresholds for these two options are both in a fairly high part of the income distribution where there are not so many new households to be found.

Because some of these changes, particularly relating to LCHO, are somewhat counter-intuitive, and reflective of differences and incompatibilities in the modelling and assumptions, it was decided to pursue the change over time theme further by making a more structured comparison using a common model. This is described in the next section.

## 5. Structured Comparison over the 1990s

A structured comparison involving a stricter like-with-like approach has been undertaken, based on the latest version of the LA-level affordability model. This model incorporates some improvements based on additional data and modified assumptions, and therefore the results for 2002 are not identical to those generated in the HOTF study. Assumptions used are consistent with those adopted in the IMD Housing Affordability Index, which were justified on the basis of reasoning and relevant evidence (for example on mortgage lending patterns).

The target group is now defined as households aged under-35, and local income distributions have been re-estimated for this group (with national calibration against SEH). Predicted economic activity propensities (the proportions of households with no-one working, one or two+ workers) have been recalibrated on the basis of 2001 Census data which have recently become available. Threshold house prices are now based upon the recently-extended Survey of Mortgage Lending (SML) for 2002, using lower quartile prices within size groups, where sample sizes are sufficient. Where this is not the case, Land Registry data on lower quartile prices are used, but with a size adjustment based on new Census data on the size mix of owner occupier dwellings.

With 2002 as the base year, the model is then run for a sequence of earlier years at two-year intervals from 1999 back to 1991. For the 'back-casting' exercise, only certain variables are altered, to focus on the main issue of changing house price-income relationships.

- House prices are scaled back using regional proportional differences from 2002 as recorded in the SML.
- Average incomes are scaled back using data from the Treasury pocket database on Household Personal Disposable Income, as a single national index.
- Economic activity changes are reflected in part by scaling unemployment pro rata national changes in the (ILO) unemployment rate.
- Income Support Applicable Amounts (relevant to the secondary residual income test of affordability) are scaled back pro rata general inflation (GDP deflator), but with a rebasing in 1995.
- Income tax and NI contribution rates and thresholds are adjusted to approximate to actual values in each year.
- Social housing grant rates (relevant to shared ownership costs) are adjusted to be roughly consistent with the pattern of grant rate changes; this is necessary to yield 'sensible' rent levels for this intermediate tenure
- Mortgage interest rates are set at 0.5% points below the published official series for these rates; in the early part of the period, HA rates are adjusted to allow for pooling or deferred interest schedules characteristic of this period of high rates, with this adjustment being progressively removed up to 1995.
- The primary affordability criterion of the lending multiplier is set at 3.0 times single income for years 1991 through to 1997, with a progressive rise to 3.5 times in 2002, with two-income multiplier set at 0.85 times this value; these assumptions are justified by the evidence considered in the IMD study, with the recent rise reflecting a general regime shift to lower interest rates

It is important to be aware of those elements in the model which are left fixed at 2002 values. These include the annual rate of gross household formation and the annual number of social rented sector relets, both very important inputs to the calculation of numerical need. In reality, there have been systematic changes in these variables, for

example a rise in relet rates over the 1990s which has recently been reversed. Other factors which are unchanged include the household type structure and income distribution characteristics of household types.

Table 5 shows the affordability of three home ownership options by region over the period since 1991. The general affordability of owner occupation on average increased gradually up to 1997, then deteriorated. However, for the northern regions what happened was levelling off of affordability at just below the 50% level, while southern regions fell sharply (see also Figure 2).

Figure 1 shows how the options stack up by region in 2002. Only 20% of households have enough income to enter owner occupation in London, compared with 48-49% in the northern regions. The South East is next worst after London, with just under 30%, closely followed by the South West at 32% and then the East of England at 35%. The midland regions are intermediate but on the whole closer to the northern than the southern regions in their affordability characteristics.

Shared ownership of a new home, if available, would widen the options considerably in the southern regions in 2002, helping an additional 12-15% of households to buy. The impact is somewhat lower in London (where prices are still unreachably high) at 8.6%, and rather lower again in the midlands (5-6%). In the northern regions, shared ownership does not extend affordability very much, because (a) cheaper secondhand dwellings are readily available in the open market, and (b) the income thresholds involved are close to the poverty line in some cases.

Homebuy gives a 25% discount across the board and can be applied in the secondhand market. Where available, this option therefore widens affordability more in these lower priced regions, compared with conventional (new build) shared ownership. In general, because the funding model and affordability criteria are so similar to conventional purchase, the incremental affordability is relatively more uniform over time and space. However, it should be noted that the figures are still quite a bit lower in the north, mainly due to the secondary affordability test based on poverty.

It should be noted, as a sort of ready reckoner, that Homebuy's 25% reduction in effective house price level leads to an increment in affordability of 11% points overall ranging from 6% to 13% points between different regions. This ready reckoner may be useful in a wider policy context of assessing the impact of supply measures which succeed in reducing prices. These impacts are more impressive when expressed as elasticities as in Table 7 – in 2002 the average value is -1.15 with a range from -0.5 in the North East to -2.3 in London. In 1997 these values were -0.87, -0.64 and -1.5. While in general these elasticities are higher when prices are higher and baseline affordability lower, and vice versa, it is interesting to note that in the north the values are tending to fall to lower levels, indicating a general 'saturation effect' perhaps with owner occupation here.

**Table 5: Ability of Households under 35 to buy in open market, new shared ownership or secondhand Homebuy by Region, 1991-2002 (percent)**

<i>OPEN MARKET</i>	1991	1993	1995	1997	1999	2002
NORTH	35.6	38.6	43.1	43.3	44.5	48.9
YORKS & HUMBER	36.7	42.3	46.9	47.4	49.2	49.0
NORTH WEST	35.9	42.0	45.3	45.9	47.5	48.2
EAST MIDLANDS	38.2	45.6	48.9	49.3	50.4	45.6
WEST MIDLANDS	34.4	41.2	44.2	45.2	45.6	41.2
SOUTH WEST	33.5	43.3	45.6	45.7	43.6	32.3
EAST	31.2	41.5	43.4	44.8	44.1	34.9
SOUTH EAST	30.5	41.4	42.5	41.5	37.5	29.7
LONDON	22.2	31.3	32.0	30.8	23.4	19.7
ENGLAND	32.4	40.5	42.9	43.1	41.6	37.1
<i>SHARED OWN INCREMENT</i>						
NORTH	0.0	0.5	0.1	0.2	0.2	0.6
YORKS & HUMBER	0.0	0.7	0.1	0.3	0.2	1.0
NORTH WEST	0.0	1.0	0.3	0.5	0.3	1.3
EAST MIDLANDS	0.0	3.8	1.4	2.2	1.7	5.6
WEST MIDLANDS	0.2	4.1	1.4	2.5	2.1	6.3
SOUTH WEST	0.0	8.4	5.5	6.7	6.6	12.3
EAST	0.0	10.1	7.0	8.3	7.8	13.4
SOUTH EAST	0.2	11.7	8.7	10.5	10.5	15.3
LONDON	0.3	10.6	8.0	9.9	9.8	13.1
ENGLAND	0.1	6.4	4.2	5.3	5.1	8.6
<i>HOME BUY INCREMENT</i>						
NORTH	7.3	8.0	7.5	6.9	6.5	6.3
YORKS & HUMBER	8.6	8.4	7.8	7.2	6.6	7.6
NORTH WEST	8.2	8.1	7.9	7.1	6.5	7.4
EAST MIDLANDS	9.5	9.0	8.7	7.6	7.2	10.0
WEST MIDLANDS	9.4	9.1	9.1	8.0	7.8	10.2
SOUTH WEST	11.4	10.7	10.7	9.8	10.4	13.1
EAST	12.4	11.8	11.8	10.9	11.0	13.2
SOUTH EAST	12.8	12.3	12.5	12.2	12.9	13.6
LONDON	11.3	11.5	11.7	11.7	11.7	11.4
ENGLAND	10.4	10.1	10.1	9.4	9.4	10.7

Note: Shared ownership and Homebuy percentages are incremental, i.e. additional households beyond those who can afford open market purchase, and overlap. Affordability assessment based on income only, not savings, but including all income sources, and subject to a secondary poverty-related residual income test.

Figure 1

Ability to Buy in Market, through Shared Ownership and Homebuy by Region 2002

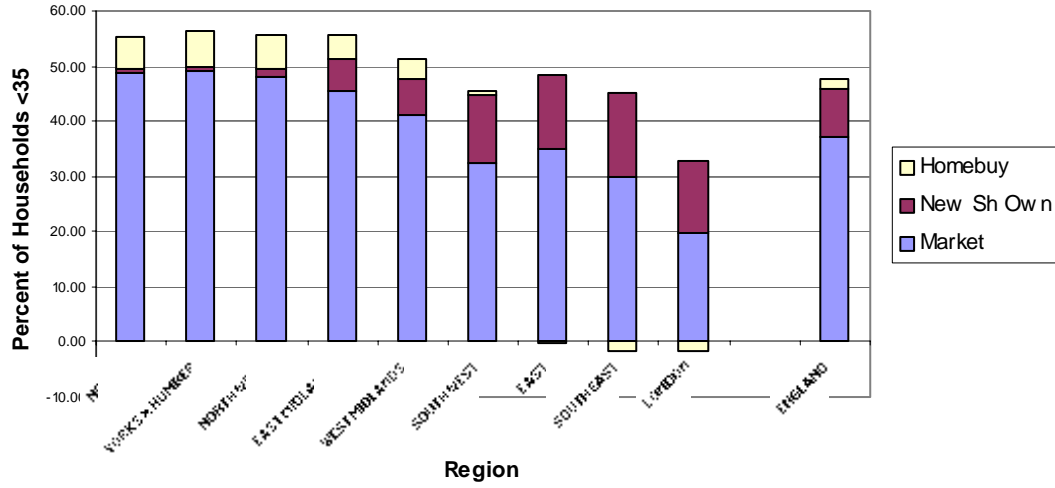


Figure 2

Ability to Buy 1991-2002 by Region

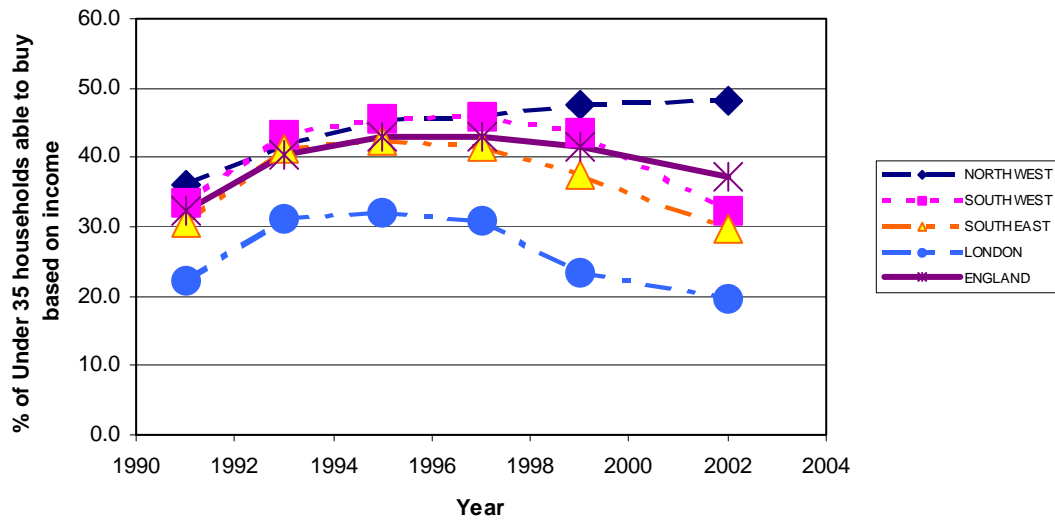


Figure 3

Incremental Affordability of New Shared Ownership and Secondhand Homebuy by Selected Region, 1991-2002

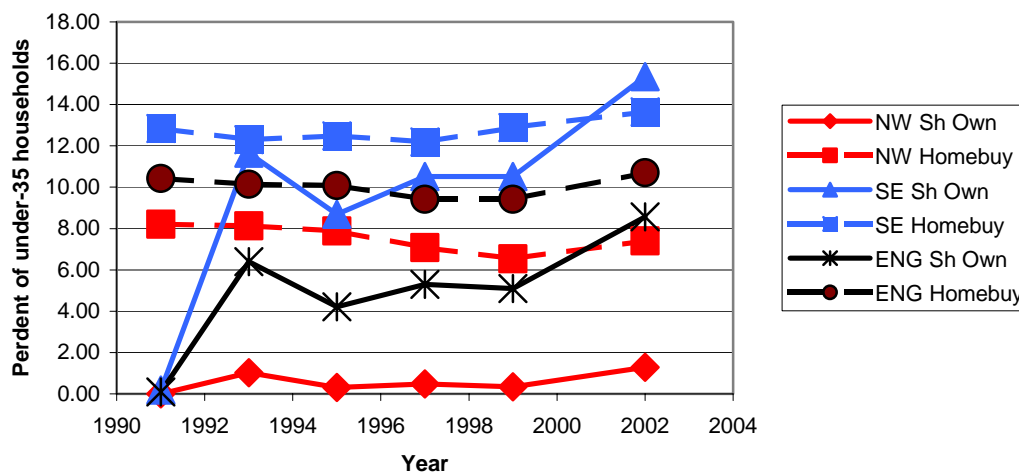


Table 6: Price-Affordability Elasticities by Region, 1991-2002

	1991	1993	1995	1997	1999	2002
NORTH	-0.82	-0.83	-0.70	-0.64	-0.59	-0.52
YORKS & HUMBER	-0.93	-0.79	-0.67	-0.60	-0.54	-0.62
NORTH WEST	-0.91	-0.77	-0.70	-0.62	-0.55	-0.61
EAST MIDLANDS	-1.00	-0.79	-0.71	-0.62	-0.57	-0.88
WEST MIDLANDS	-1.09	-0.88	-0.82	-0.70	-0.69	-0.99
SOUTH WEST	-1.36	-0.99	-0.94	-0.86	-0.95	-1.62
EAST	-1.58	-1.13	-1.09	-0.97	-1.00	-1.52
SOUTH EAST	-1.68	-1.19	-1.18	-1.17	-1.38	-1.84
LONDON	-2.04	-1.47	-1.47	-1.52	-2.01	-2.31

ENGLAND -1.29 -1.00 -0.94 -0.87 -0.90 -1.15

Note: elasticities based on increment to affordability associated with Homebuy treated as a 25% price reduction.

Figure 2 shows the trend in general affordability for selected key regions since 1991. The North West effectively represents the north of the country generally, with affordability increasing and then plateau-ing. London affordability turned down earlier and fell more steeply to 1999, after which the South East and South West fell more sharply. Regional differences were particularly narrow in 1993, and have widened sharply since then (although the latest indications of house price trends in 2003 suggests some slight narrowing).

Figure 3 charts the trends in incremental affordability for the two LCHO options mentioned. While for reasons explained Homebuy is relatively stable, the potential incremental affordability of new build shared ownership is much more variable, over time as well as over regions. The particular conditions experienced in 1991 (very high interest rates) were bad for shared ownership, based on our standard assumptions. Since 1993, there has been a general increase in potential demand for shared ownership, but with most of this increase concentrated in the last 3 years since 1999. The changes for Homebuy are less striking, with a modest decrease in the North West from 1993 to 1999 and a modest increase since, while in the South East there was a level pattern up to 1997 followed by an increase.

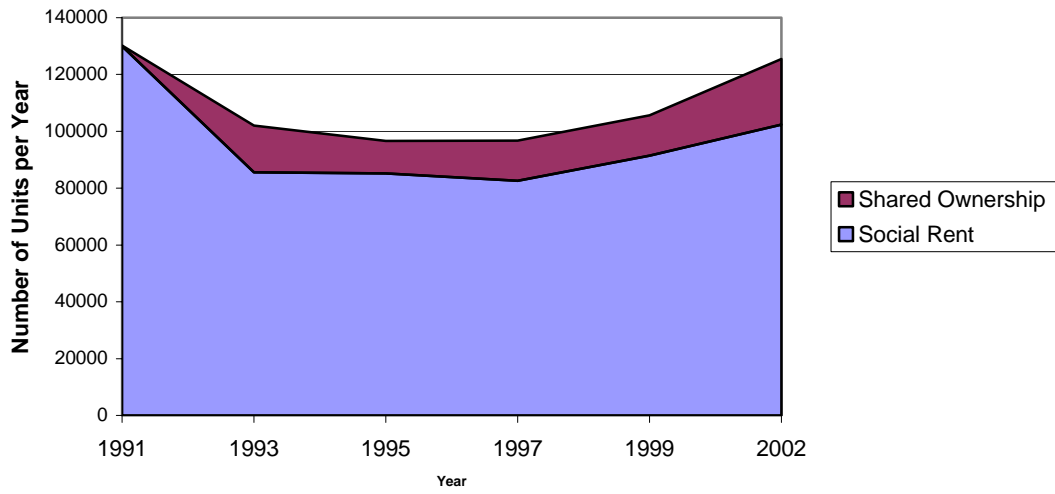
Figure 4 and Table 7 convert these numbers into a 'net need for affordable housing' basis. As a qualification, it should be remembered that the demographic and social sector relets supply components of this calculation are held constant. The 'intermediate market' component represented here by shared ownership is contained within the total need for affordable housing in Table 7. However, in Figure 4 we have split this into two components.

Figure 4 shows that the net need for affordable housing fell during the 1990s, then rose after 1997, with an acceleration after 1999. Shared ownership increased in its potential contribution during this period, so that by 2002 it could cover about a fifth of the net new need. This itself is a considerable understatement, because as explained in section 6 below, LCHO could also be used to provide opportunities for existing social tenants to buy and thereby free up social rented units indirectly for use by households in need and unable to afford to buy in any circumstances. These numbers are of the same order of magnitude (22,000 per year), suggesting that LCHO might meet two-fifths of overall need.

94% of the numerical new need for shared ownership shown in Table 7 for 2002 is concentrated in the southern regions, with 36% in the South East alone. This suggests that new LCHO provision should be a particular priority in the new growth areas proposed in the Sustainable Communities Plan. The comparable figure for Homebuy is a bit lower, at 88% in the south, but still overwhelmingly biased to the south. Part of the reason for this is the discounting of need in areas of housing surplus and low demand.

**Figure 4**

**Net Need for Shared Ownership and Social Renting, England 1991-2002**



**Table 7: Net numerical need for affordable housing and shared ownership by region, 1991-2002** (number per year)

<i>POSITIVE NET NEED AFFORDABLE HOUSING</i>						
	1991	1993	1995	1997	1999	2002
NORTH	295	274	240	235	227	207
YORKS & HUMBER	3535	2996	2528	2363	2116	2333
NORTH WEST	4744	3552	2944	2672	2314	2400
EAST MIDLANDS	5258	3728	3128	3006	2806	3860
WEST MIDLANDS	5180	3834	3310	3078	3020	4041
SOUTH WEST	17579	13438	12488	12415	13331	18119
EAST	18056	13450	12616	11992	12320	16408
SOUTH EAST	36925	29020	28213	28914	31873	37491
LONDON	38633	31687	31155	32016	37665	40581
ENGLAND	130205	101978	96623	96691	105672	125439
<i>POSITIVE NET NEED SHARED OWN</i>						
NORTH	0	2	0	0	0	6
YORKS & HUMBER	0	122	26	59	43	151
NORTH WEST	2	130	37	58	43	134
EAST MIDLANDS	0	384	131	204	153	537
WEST MIDLANDS	19	375	119	227	182	526
SOUTH WEST	8	2048	1296	1585	1584	3269
EAST	3	2449	1642	1928	1847	3431
SOUTH EAST	114	5901	4352	5322	5460	8255
LONDON	123	5028	3758	4711	4898	6723
ENGLAND	268	16439	11361	14094	14208	23032

Note: Net annual need for new households, applying common model, varying prices incomes and financial parameters but holding demographics and social supply constant; affordable housing need is total including shared ownership.

Both the overall needs estimates and the LCHO potential element are far larger than current subsidised provision in England, currently running at about 28,000 {??} for rental and 4,500 for LCHO. Estimated need/demand exceeds these levels by a factor of four times and ten times respectively. A major discrepancy of this order has been apparent throughout the last decade or so, although its level has varied (see Also Holmans et al 1998). How can these figures be reconciled? In part, presumably, need has remained unmet and demand suppressed, for example through lower rates or delayed household formation, more sharing and so forth. In part, the gap was filled by an expansion of the private rented sector, post-deregulation. Finally, some households who on our normative assumptions could not afford to buy have probably been able to do so in practice, either by borrowing more than our assumed limits or by accessing savings/wealth from family or other sources to pay substantial deposits. Evidence on this aspect is considered in section 7 below.

## 6. LCHO and Existing Tenants

LCHO has always been partially targeted at existing social rented sector tenants. This was partly motivated by the general policy of promoting home-ownership, including among HA tenants by providing an alternative to the restricted RTB scheme; and partly by a recognition that helping a social tenant to buy releases a social rented sector vacancy which may be allocated to a homeless household or other household in priority need. One of the questions posed by the HOTF was how large was the scale of potential demand from this source – how many existing social tenants could afford to buy, either in the open market or with some subsidy?

As noted in section 2, it was found that overall about 7.5% of existing social renters could buy in the market (ranging from 2% in London to 10% in the midlands/north). LCHO could increase these figures by 3.6% points. This figure looks rather low, but is affected by the assumption that LCHO subsidy would not be justified in areas of low demand, which is where the greater proportions of marginally affordable social tenants live. Assuming a 14% annual conversion rate from ability to buy to actual purchase (based on past rates of moves to owner occupation by former social tenants), widening affordability through offering LCHO to this group could stimulate a potential demand of the order of 22,000 per year (and release the same number of units for reletting to households in need). As noted above, this would double the numbers compared with those estimated above for meeting the requirements of new households.

The HOTF is also looking at measures in the field of information and advice which might expand home ownership among the ‘tenants who could buy anyway’ group, without involving significant subsidy. In all of this, the promotion of home ownership needs to be balanced against the promotion of ‘mixed and balanced communities’ – simply winking the existing working households out of social rented estates does not seem very productive from this point of view.

The HOTF report also showed that the potential demand from marginal buyers currently within the private rented sector could be very large, about 10% of the sector, yielding nearly 40,000 extra LCHO purchasers per year in theory. However, this group could be seen as a sort of ‘backlog’ or recent new households unable to enter the market so far. Therefore, a programme to meet their need/demand might only be maintained over a relatively short period, given the high turnover characteristic of the tenure, if new household needs were being met simultaneously. Alternatively, the programme might target a progressive reduction in this backlog over a longer period.

The Barker Inquiry Team requested a breakdown of these numbers by LA district. Since they were originally derived from an analysis of SEH data, it is not possible to read off district results directly owing to sample size restrictions. Instead, an indirect procedure was adopted, whereby rates of incidence of marginal buyers by tenure group were estimated for each of nine categories of LA district. These categories are based on a combination of a collapsed set of categories derived from the 1981-based ‘Shaw’ classification (e.g. Cities, industrial areas, suburbs, rural/coastal areas, etc) and broad regions (midlands/north, south, London). The incidence rates by LA category are then applied to the 2001 numbers of households in each tenure in each LA, yielding overall estimates of potential demand for each district. These are

summarised in Tables 8-9 and listed at district level in the Spreadsheet LAOutput3.xls.

The rate of incidence of marginal buyers among social renters ranges from 7.2% in Northern/Midland Cities to 10.8% in Southern Rural/Coastal areas. However, as already noted, when converting to numerical estimates of potential demand we discount numbers in those districts characterised by serious low demand (in both public and private sectors).

Table 8 shows the resulting calculations summarised by district, alongside the need estimates relating to new households. The most striking finding is the concentration of all of these needs in the south of England. 90% of affordable new need, 94% of new shared ownership need, 88% of new Homebuy, 86% of marginal social renters and 87% of marginal private renters are located in the four southern regions. There are some differences in the pattern between particular regions, however. New shared ownership or homebuy need is greater in the South East than in London, whereas potential demand from existing social and private renters is much bigger in London than in the South East.

Table 9 combines the elements of new LCHO need (represented by shared ownership), need/demand associated with marginal social renters, and a small quota of the marginal private renters, to form a notional composite LCHO 'programme'. Such a programme would be at the upper end of what might be justified on the basis of the evidence in this study. This notional programme amounts to 48,000 units per year across the whole country, with again an overwhelming focus (90%) on the southern regions. The largest chunks would be in London (17,600, of which 11,100 would be for Inner London), the South East (12,800) with the East and South West getting 6-7,000 each. Programmes of only 1-2000 would be indicated for each of the midland/northern regions, except the North East where the number would be even smaller (3-400).

Table 9 also shows this programme as a percentage of the overall indicated affordable housing need (net and positive). This shows that LCHO could account for approaching 40% of net affordable need on average, but with some variation by region (35% in South West, 43% in London) and type of district (35% Southern Rural, 48% Inner London, all in Northern Industrial where applicable). These shares of LCHO in an overall affordable housing programme are typically higher than figures sought by many local authorities in their local housing strategies and local plan policies. In some cases some of what we are labelling here LCHO might take the form of intermediate rented housing, e.g. for key workers, and this might account for some of the district. However, there is also a tendency of LAs to underestimate the potential of LCHO within local needs studies and local strategies, as recognised in the ODPM research (Bramley et al 2002) and in the HOTF report (forthcoming). There are strong value for money arguments for a greater emphasis on LCHO, but these go beyond the scope of this report.

**Table 8: Components of Need/Potential Demand for LCHO by Region, 2002**  
(number of household units per year)

GOR2	Positive Affordable Need	Net Affordable Need	Sh Own New Need	Homebuy New Need	Marginal Social Renters	Marginal Private Renters
NORTH	207	-16765	6	38	299	311
YORKS & HUMBER	2333	-15113	151	468	552	1082
NORTH WEST	2400	-20358	134	470	901	1418
EAST MIDLANDS	3860	-4337	537	820	613	1076
WEST MIDLANDS	4041	-6598	526	839	731	1027
SOUTH WEST	18119	18112	3269	3492	2284	5846
EAST	16408	15008	3431	3337	2888	4547
SOUTH EAST	37491	37417	8255	7260	3772	8023
LONDON	40581	40527	6723	5820	9361	15286
Total	125439	47894	23032	22545	21402	38615
<i>% in South</i>	<i>90</i>	<i>232</i>	<i>94</i>	<i>88</i>	<i>86</i>	<i>87</i>

Note: col 1 counts only LA districts with positive net new need for additional affordable housing; col.2 shows balance of positive and negative needs (negative=surplus lettings); col's 3 and 4. overlap and refer to needs among new households; cols 5-6 are marginal potential buyers among existing tenants times annual purchase rates, discounted in areas of serious low demand. ' % in South ' is share of total in SW, EE, SE and GL regions.

**Table 9: Notional LCHO Programme Relative to Overall Affordable Housing Needs by Region and Type of District 2002**

	<i>Notional LCHO Programme Need</i>	<i>% of Net Need</i>	<i>% of Positive Need</i>
<i>G O Region</i>			
NORTH	368		177.8
YORKS & HUMBER	1129		48.4
NORTH WEST	1513		63.1
EAST MIDLANDS	1541		39.9
WEST MIDLANDS	1672		41.4
SOUTH WEST	6361	35.1	35.1
EAST	6774	45.1	41.3
SOUTH EAST	12830	34.3	34.2
LONDON	17613	43.5	43.4
Total	48296	100.8	38.5
<i>% in South</i>	<i>90</i>		
<i>Collapsed Shaw-Region Classification</i>			
NORTHERN CITIES	751		44.7
NORTHERN INDUSTRIAL	1294		112.5
NORTHERN SUBURBAN	2472	96.9	42.2
NORTHERN RURAL	1707	53.1	41.2
SOUTHERN URBAN	3719	38.0	36.3
SOUTHERN SUBURBAN	15041	37.2	36.3
SOUTHERN RURAL	7044	34.6	34.6
INNER LONDON	11108	48.5	48.3
OUTER LONDON	6505	36.9	36.9
Total	48296	100.8	38.5

## **7. Deposit Requirements**

In looking at affordability-based measures of housing need, it is necessary to make assumptions about what percentage of house price would be the normal loan limit for first-time purchasers. If this is significantly less than 100%, then the question arises as to whether access to cash for deposits, as opposed to income, is a binding constraint on access for many households. There is also a related question, of whether any such measure should recognise that a significant (and varying) proportion of first time buyers have access to sufficient capital to make a substantial deposit. The discussion in this section overlaps that presented in the paper on a *Housing Affordability Index*.

It is currently widely assumed that income is the main constraint on house purchase, because 100% or high Loan to Value (LTV) ratio lending is widely available. This view may be challenged, and may not pertain in the future, but it is plausible as an

account of current market conditions. The argument for making this assumption is partly one of simplicity, and partly that we are focussing on limits or boundaries of affordability. Possible arguments against might be that LTV's above 95% may incur cost penalties (e.g. MIG premia, less good mortgage deals) and that valuations may in practice tend to fall slightly short of sale prices. So one could equally argue for a 95% norm, but applied uniformly across the system this would not make any substantive difference to the picture of local relativities revealed by the measure

What would make more difference would be trying to measure or model the availability of capital to pay for deposits, whether of 5% or of larger amounts. It is argued here that this task would be fraught with difficulty. Data on savings and investments are not very good in most surveys. Furthermore, a large and growing element of capital for deposits is clearly derived from such sources as gifts, informal loans and inheritance from other family members (evidence for this can be found in SEH). Since these are often different households, it becomes very difficult to model the potential availability (ex ante) of such sources of wealth for potential first time buyers. One can look (ex poste) at the use of such sources by those who succeeded in buying, but we do not know what would have applied for households who have not yet bought. Averages do not tell us how far the households helped are at the margins of ability to buy or those who could afford to buy anyway.

SEH evidence is summarised in Table 10. This shows that in England over the last few years, only 7.4% of first time buyers used a 100% mortgage. 65% mainly used savings to pay their deposit. 15.6% listed 'Gifts, family loans, inheritance of windfall' as their first-mentioned source of money for deposit, while a further 11.6% listed these items as sources 2-4 mentioned in the interview. The proportion of 100% mortgages was highest in the Midlands/North (9%) and lowest in London (3.3%). The proportion using gifts, family sources etc., in whole or in part, rises from 23% in the Midlands/North to 36% in London. Data for the most recent period (2001) showed a 5% lower level of deposits and a 5% higher reliance on gifts, family etc. in London and the South.

**Table 10: Sources of Deposit for Recent First Time Buyers by Broad Region 1995-2001 ( % )**

	London	South	Mids/North	England
Savings or other	61.0	63.9	67.9	65.3
No deposit 100% mortgage	3.3	6.9	9.3	7.4
Primarily Gifts, family loans, inheritance, windfall	17.1	16.4	14.5	15.6
Includes Gifts, family loans, inheritance, windfall	18.6	12.8	8.2	11.6
Total	100.0	100.0	100.0	100.0

Source: Survey of English Housing pooled data for 1998-2001, grouped sources for first time buyers in previous three years.

What do the available data from the Survey of Mortgage Lending (SML) tell us about LTV ratios? Table 11 looks at the key ranges of LTV ratios for first time buyers at three points in time. With regard to high ratios (over 100%), it shows a curious picture of a very high share of such loans in 1991, dropping to a low level in 1996 and an even lower level in 2002. Why it was so common in 1991 is not clear – was this the tail end of reckless lending post-deregulation? Lenders were said to have tightened their criteria after the experience of the slump. In the recent period, it may be that house prices are running so far ahead of incomes that people simply cannot afford to borrow up to the prices being demanded and, by implication, households with no access to savings or wealth are being excluded from the market.

**Table 11: Loan to Value Ratios for First Time Buyers 1991-2002**

LTVR	1991	1996	2002
<80%	21.2	12.7	41.4
80-94.9%	34.4	42.6	33.8
95-99.9%	26.9	42.5	23.7
100%+	17.6	2.2	1.1

Source: SML.

The figures in the first row of Table 2 provide an index of the extent to which FTBs are using significant amounts of wealth (their own, or from family sources) to help to buy. In 1991 around a fifth had access to such wealth (consistent with evidence from the JRF Housing Finance research at that time). This fell to a lower level in 1996 (why?), but by 2002 it had jumped to an extraordinarily high figure of 41.4%. This suggests that in current conditions access to wealth has become much more important in determining access to the market, with households without such access increasingly squeezed out (the total number of first time buyers is now relatively low).

Where is this wealth coming from? While sources such as savings and investments and inheritance may have grown through the economic upswing, one is inevitably drawn towards the hypothesis that an increasing part of this is coming from remortgaging and equity withdrawal by parents – certainly the macro evidence shows a big growth in these phenomena, but how much of it is used to help new younger buyers is unclear.

Are there significant geographical variations in access to wealth? In 1996, this indicator ranged from 10% in the North West to 15% in the South West. In 2002 the range was from 32% in NW and NE to 49% in SE and SW. So as the absolute level rises, the regional gap widens a bit. This shows some consistency with the SEH data quoted above, which show a higher and growing reliance on gifts, family etc in the south.

Data on age is patchy in SML, but for households known to be under 35 the ratios are somewhat lower. Use of wealth (LTV < 80%) displays a shallow U-shaped relationship with income (highest for lowest and highest income borrowers) and also with LTI ratios (as would be expected).

