Comparing the Costs of Owner Occupation with RSL Rents: A Geographical Analysis

Dataspring Discussion Paper 3

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THE HOUSING CORPORATION

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Executive Summary

Aims and key findings

The costs of owner occupation at the lower end of the housing market provide useful information for registered social landlord (RSL) management and tenants and potential tenants alike. House prices give some indication of the potential for choice, but the most relevant figure is the cost that the purchasing households will face at the time of buying. This research report addresses this question by examining changes in house prices, RSL rents and the comparative costs of low cost home ownership and RSL renting over the decade 1989/90 to 1998/99, the period for which the relevant data are available from the Dataspring dataset. To answer the question requires answers to two technical points about the quality of the data and the method of calculating owner occupier costs. The reliability of the data when disaggregated by property size at the local area level is assessed and the methods for calculating the user costs of owner occupation are clarified and updated.

Thus to answer the question requires four steps:

- assessing the reliability of house price and rents data in the Dataspring dataset when disaggregated by property size down to the local authority area and assessing other possible data sources;
- clarifying and reviewing the calculations for owner occupier (OO) costs used in Dataspring and updating where necessary;
- analysing changes in average and lower quartile (LQ) house prices over the decade 1989/90 to 1998/99; and
- comparing the weekly ongoing costs of low cost home ownership with the cost of renting from RSLs.

The main findings are:

- The most reliable data at district level, in terms of the number of cases available for analysis, are the 2 bed and 3+ bed house categories.
- A future source of house price data may be the Department of the Environment, Transport and the Regions (DETR) who are currently in discussion with the Council of Mortgage Lenders (CML) and the major mortgage providers with a view to obtaining the entire datasets from most of the lenders. This may also be available by bed size. If the DETR obtains all the data, cover at the local district level will improve.
- Owner occupation (OO) costs calculations are updated for 1998/99 by lowering the LTV ratio from 95% to 83%. As a result of this the loss of interest on the deposit is now included as an additional cost. Mortgage Indemnity (MI) has been excluded for 1998/99 as this is not prevalent for 83% loan to value (LTV) ratio loans, but Mortgage Payment Protection Insurance (MPPI) is now included as a cost.
- Much of the national rise in house prices of 30% over the decade occurred in the second half. However there were regional and local variations, variations by property size and variations through time. For much of the country prices fell in the first half of the decade and rose in the second, but in parts of the north prices

rose consistently, if slowly, over the decade. The gap between average and LQ property prices also shows regional variations, widening in the south of the country whilst narrowing in the East Midlands and the North West. Thus the pressure on the lower end of the housing market has eased in the south, it is sustained in the north.

- OO costs fell in all regions in the first half of the decade, but the south experienced significant increases in the latter half. There was little change or, in the case of the north, a slight fall in the second half for the rest of the country.
- While house price increases result in higher OO costs, increases in the mortgage rates have a relatively greater impact. Raising the house price by 10% results in a similar percentage rise in the OO costs whereas raising the mortgage rate by 0.5% increases the OO costs by an average of 5%.
- The gap between OO costs and renting from RSLs narrowed substantially for 2 bed houses in the first half of the decade, but tended to widen again in the second half. In many parts of the north, however, there continues to be little difference between rents and OO costs.
- Low cost owner occupation is now more likely to be a real alternative to renting from RSLs in many parts of the north, especially for smaller properties.

Background and context

The relative proportion of different tenures has changed significantly. Owner occupation now houses the majority of households including many on low incomes. This position has been influenced both by market forces and government policies. The factors affecting a household's choice of tenure include budget constraints, lifestyle characteristics, the quality of accommodation available and the match between the household and the property. The issues affecting the capacity to sustain the increase in low cost owner occupation primarily affect lower income households who are disproportionately hit by changes in the labour market such as flexible working and part-time and short-term jobs. Lacking a coherent safety net, owner occupation tends to require income stability. This raises the question of whether owner occupation is really preferable in all cases when the range of other factors that affect choice of tenure are taken into account.

The changes in tenure balance and in preferences have an impact on RSLs' capacities to set rents. Rents in some areas have already exceeded the costs of low cost home ownership, and this affects RSLs' abilities to fill vacancies. On the other hand, if rents are very low as compared to owner occupation it suggests that tenants will have little capacity to change tenure. It also raises issues for RSLs in terms of whether and how they can bridge the gap.

House price change

House price change is a prime determinant of housing affordability in the owner occupied sector. This is analysed over the decade 1989/90 to 1998/99 at national, regional and local authority district level. At district level the results are mapped to illustrate the spatial dimensions of the changes. Average and lower quartile house price change and percentage change over the decade show a rise over the decade nationally of just over 30% although there are strong regional variations. Prices of larger dwellings have also generally increased more than smaller properties. The

degree of pressure on housing at the lower end of the market is illustrated by the gap between average and LQ prices and their relative changes. Here snapshots are taken from the beginning, middle and end of the decade. These suggest that housing pressures are particularly felt at the lower end of the market although the extent of this pressure varies across the country.

Changes in the weekly costs of low cost home ownership

Changes in the weekly costs of low cost home ownership over the decade, together with variations in the components that make up those costs, show that, on average, OO costs fell as a result of the recession of the late 1980s/early 1990s. They have been rising in most regions since the mid-1990s even though money interest rates have fallen. Again, regional variations point to a north/south divide. Comparisons between the relative effects of change in each component on the level of the OO costs show that the impact is highly sensitive to changes in interest rates.

The differentials between the costs of RSL renting and low cost home ownership

The differentials between the costs of renting and the costs of owner occupation. using snapshots taken from the beginning, middle and end of the decade, also show a clear north/south divide. The difference between OO costs and renting is greatest in the south and least in the north east of the country. Mapping the differentials at district level over time highlights areas of concern to RSLs where OO costs are either lower or very much higher than rents. This has implications first for setting rents to avoid difficult to let properties and second in terms of tenants effective choice between tenures.

Conclusions and recommendations

The national rise in house prices over the decade masks differences between the regions and also between property sizes. The gap between house prices in the north and the south of the country is now wider than a decade ago.

Although house price is a major factor in the costs of home ownership, changes in the mortgage interest rate have a relatively greater effect on OO costs than changes in house prices.

Relatively low house price rises in the north are associated with OO costs that are near or below RSL rent levels in many districts.

Where low cost home ownership represents a cheaper alternative (in terms of weekly outgoings) to renting - or when costs are quite similar - RSLs may be faced with the problem of high vacancies and turnover. Where rents are much higher than OO costs, this may restrict tenants' choice. Using the data available from Dataspring to carry out this type of comparative analysis will enable RSLs to keep track of changes in house prices, rents and OO costs and the interplay between them throughout the country, helping to identify areas of potential concern.

Recent government policies promoting low cost owner occupation has been at the expense of the social rented sector. RSLs have an important role in promoting the

social rented sector through improving the social perception of the tenure. There is scope for the promotion of affordable homes for those with earned incomes able to pay more than traditional social housing tenants but unable to afford market housing. This can help dispel the poor image of residualism. There are positive reasons to promote the benefits of renting instead of buying, especially in areas of economic uncertainty and for household groups without adequate security. Finally, evidence on the size of the gap between the costs of owning and renting will help to clarify where development is viable and appropriate.

Chapter1: Aims and Key Findings

Aims of the Study

The aim of this study is to analyse changes in house prices, RSL rents and the equivalent weekly costs of home ownership to reveal any areas in England where rents are not significantly different from low cost home ownership costs and therefore of potential concern to RSLs. The data are supplied by Dataspring, the dataset created by the Property Research Unit (now the Cambridge Centre for Housing and Property Research, CCHPR) at the Department of Land Economy, University of Cambridge. Initially this was set up in order to allow the analysis of RSL rents within the context of local housing markets and district level economies. Data are available at the local district level and coverage is national, allowing comparisons to be made both between tenures locally and between property types at the national level. In addition to information on the registered social landlord (RSL), local authority (LA) and private sector (PRS) rents, the user cost of low cost owner occupied housing (OO costs) is included. This becomes more relevant as householders are increasingly able to choose between remaining as tenants or entering low cost home ownership.

There are four interrelated objectives to this work. The first two are technical in nature and involve checking the dataset before undertaking the main analysis. The others relate to the core aim of the work, changes across time in house prices and comparing changes in rents and owner occupation costs. The objectives are:

1 to assess the reliability at different levels of aggregation, both spatially and by property size, of the rents and house price data in the Dataspring data base, set up by the Property Research Unit (now CCHPR);
2 to review the calculations for OO costs used in Dataspring and to update these in the light of changes in the provision of mortgage 'safety nets' for home owners and in taxation that affect home owners;
3 to analyse changes in average and LQ house prices over the decade 1989/90 to 1998/99 using the Dataspring database; and
4 to build on work done by researchers in the PRU/ CCHPR on comparative costs between tenures by comparing OO costs with RSL new and relet rents over the period 1989/90 and 1998/99.

Essentially an indicator approach, rather than a modelling approach, is used to examine changes over time, from 1989/90 to 1998/99, in the rents and OO costs at national regional and local authority district level. Many studies have looked at this across time; this study adopts an area-based approach, looking for patterns of change between areas.

1. Data reliability at different spatial aggregations

The house price data held by Dataspring are supplied by the Halifax, one of the leading mortgage suppliers in the country. This originates from the mortgage transactions issued by the Halifax. It covers the whole of England, and data can be disaggregated to the local authority district level. Rents data originate from the

Housing Corporation Regulatory and Statistical Return (RSR) and COntinuous REcordings (CORE) data) for assured new lets and relets. These provide a useful starting point for analysis that includes other local economic variables to try to explain changes in the costs of renting and buying housing in a local district. But we need to know how reliable the data are at this level of disaggregation, and whether other sources can provide better coverage for our purposes.

Key Findings:
On average there are more cases for the house price data than for rents data.

Halifax House Price data
At regional level

- There are very few 3+ bed flats and 4+ bed flats (1989/90 to 1997/98) and 3+ bed flats (1998/99), with many regions having less than 50 cases.
- Numbers are also few (in the hundreds per region) for 1 bed properties and 2 bed flats.
- 2, 3, 3+ and 4+ bed houses tend to be in thousands per region.

At district level

- Only the 2 bed and 3+ bed house categories have the majority of districts with more than 30 cases per annum.
- For 1 bed houses, nearly all districts have less than 30 cases per year and for 1 bed flats and 2 bed flats around 80% of districts have fewer than 30 cases per year.

RSL new let rents data
At regional level

- In general numbers are low for all size categories except 1 bed flats and 3+ bed houses in 1989/90.
- Numbers remain low for 1 bed houses and 3, 3+ and 4+ bed flats throughout the decade, but 2 bed houses and 3+ bed houses are plentiful from 1994/95.

At district level

- In 1989/90 less than 10% of districts had more than 30 cases, for all property size categories.
- The only categories to see any real improvement by 1994/95 are 2 bed houses and 3+ bed houses.

RSL relet rents data
At regional level

- Numbers are especially low for 1 bed houses in 1989/90 with half the regions having less than ten cases.
- Although there are more 1 and 2 bed flats than houses before 1998/99, by then the largest numbers are in 2 bed houses and 1 bed flats.

At district level

- all categories have small numbers in 1989/90. Only 1 bed flats had more than 20% of districts with more than 30 cases.
- 1 bed houses, 3 bed flats and 4+ bed properties still have less than 10% of districts with more than 30 cases in 1998/99.

In the light of these findings analysis for the rest of the study is confined to 2 bed houses and 3+ bed houses since these are the most reliable categories for analysis down to district level.

Alternative data sources
The DETR are currently in discussion with the CML and the major mortgage providers with a view to obtaining the entire datasets from most of the lenders. If the DETR obtains all the data, it will be possible to achieve full coverage at the local district level, although it may not include the breakdown by number of bedrooms.

2. User costs of owner occupation
The lower quartile (LQ) house price data are used in the calculation of the user costs of owner occupation. This seeks to put a figure on the weekly costs of home ownership at the lower end of the market, which can then be compared with the costs of renting in the other tenures (renting from registered social landlords, local authorities and the private sector). There are debates about what should be included and excluded when calculating these cost. These are revisited as part of the process of updating these costs to the latest year, as well as adjusting for changes in provision of mortgage 'safety nets' for home owners and in taxation that affects home owners. Sensitivity analysis is conducted to assess the difference made to the final figure by adjusting the levels and including/excluding some factors.

Key Findings:
Calculating the OO costs for 1998/99

- For 1998/99 the loan to value (LTV) ratio is changed from 95% to 83%, to reflect the changes in average LTV for first time buyers in the lower quartile, as provided by the Council of Mortgage Lenders (CML).
- The average base mortgage rate is varied yearly according to the figures produced by CML.
- Lowering the LTV ratio means a larger deposit has to be found for house purchase, so from 1998/99 the loss of interest on the deposit is included as a cost.
- Mortgage payment protection insurance (MPPI) is included as a cost from 1998/99.
- Buildings insurance figures are imputed from earlier years, as Nationwide no longer supply data on insurance premia based on property size by number of bedrooms.
- Mortgage indemnity (MI) is excluded for 1998/99 as this is not prevalent for 83% LTV ratio loans.
- Depreciation and repair costs are not included. This is because they are likely to vary according to the tastes and skills of the household and are likely to be limited in the initial years of ownership. Moreover, it is difficult to separate repairs from general enhancement to the value of the property.

Sensitivity analysis

- Changing the LTV ratio from 95% to 83%, removing MI, adding the loss of interest on the bigger deposit needed and adding MPPI results in a 6% decrease in the average weekly costs compared to the costs using the original basic formula.

The range is from 6.4% to 4.3%, with higher values relating to larger properties and the lower values to smaller properties.

- Adding into the formula a basic cost across all property sizes of £5 a week (£260 a year) for repairs and maintenance increases the weekly OO cost by a further average of 6.1%.
- Having the LTV ratio set at a constant 95% between 1989/90 and 1997/98 means the OO costs calculated and used in the dataset are likely to be higher than the actual costs between 1989 and 1994 since the average LTV ratio for first time buyers varied between 80% and 83% over that period.

3. Analysis of house price change

The analysis of house price data is intended both to cover the movement of average and lower quartile house prices over the decade and to look for pressure on prices at the lower end of the market.

Key findings:

- The overall rise of 30% in average house prices over the decade masks regional and local variations, variations by property size, and variations between the first and second half of the decade. Prices rose more than 30% in London (38% for the highest group), the South East, the North East and the North West. But in the North East the 32% increase represents an actual average rise of only £12,000, while in the South East a 34% rise translates into an actual average rise of £26,300, over twice as much.
- In the first half of the decade average prices fell in the south (London, East of England, South West and South East), where they had previously risen, particularly in the late 1980s. They rose in the northern regions where they had started relatively low. All regions saw rises in the second half of the decade. Only in the north have average house prices risen consistently, but slowly, over the decade.
- As noted above, although percentage changes have varied between the regions, this sometimes masks quite small changes in actual average prices. For example, a 14% increase in prices in the North East between 1989/90 and 1994/95 amounted to £5,500, while a 7% decrease in the South West amounted to £4,500.
- House prices across regions tended to converge in the middle of the decade but diverged to a greater extent by the end of the decade, so there is now a greater difference between the lowest-priced regions and the highest priced regions than at the start of the period.
- LQ house prices in two regions (East Midlands and East of England) remained virtually stagnant over the decade, while in others the fluctuations over the decade resulted in little overall change by the end of the period.
- The gap between average and LQ prices for all property sizes is generally widening, especially in London and the South East, but is narrowing in the East Midlands and the North West. For 2 bed houses the gap is widening, but whereas it used to be greatest in the north there are now wider gaps in the south. For 3+ bed houses the gap generally has decreased over the decade, but in the East Midlands it has hardly changed. There is a tendency for the gap to be wider in regions where house prices are lower. Thus the gap is greater in the North East, North West and Yorkshire and Humberside.
- There were more pressures on the lower end of the housing market in the middle of the decade, but this has eased more in the south of the country than the north by

the end of the decade. The pressure is sustained for both 2 and 3+ bed houses in the north.

4. The relationship between owner occupation costs and renting

Previous work carried out by the research team on the comparative costs of housing between tenures investigated the relationship between market rents and housing association rents in the context of the changes in residential tenancy legislation brought in by the 1988 Housing Act (Chaplin *et al.* 1995). This revealed some localities where RSL rents were above the levels of private sector rents, suggesting that RSLs need to take into account the local housing market conditions when setting their rents if they are to continue to attract tenants. Other research found that in some areas the costs of owner occupation at the lower end of the housing market were lower than the costs of renting from RSLs (Freeman and Whitehead 1997; Freeman *et al.* 1999). This study builds on this earlier research by updating the analysis of rents in the RSL sector and comparing these with the costs of owner occupation in the lower end of private home ownership.

Key Findings:

Changes in OO costs

- Although OO costs have fallen in all regions over the decade as a whole, the decrease between the beginning and the end of the decade has been less in the south than in the North.
- OO costs for 2 bed and 3+ bed houses fell in the first half of the decade in all regions. For the second half of the decade northern regions experienced little change or slight falls, while there were significant increases in London and the South East.
- There has been a greater rate of decrease in OO costs in the south than in the north, but the average weekly OO costs for a 2 bed house in the North West (£58) is only half of that in the South East (£116) in 1998/99.

The gap between OO costs and RSL rents

- The gap between OO costs and renting from RSLs narrowed substantially for 2 bed houses in the first half of the decade, but tended to widen again in the second half. In many parts of the north of the country there is now little difference between RSL rents and OO costs.
- While there was a similar pattern for 3+ bed house rents and OO costs, these have not converged as much over the decade and are now widening again, especially in the southern half of the country.
- There are now many districts in the north of the country where the cost of renting a 2 bed house is more expensive than the cost of owning a similar sized property. This is more acute for new let properties than relets. This pattern is less pronounced for3+ bed houses, where far fewer districts show average rents higher than OO costs, but again where this does happen the districts tend to be in the north of the country.
- Low cost owner occupation is now more likely to be a real alternative to renting from RSLs in many parts of the north. This is more acute for smaller properties and new let properties.

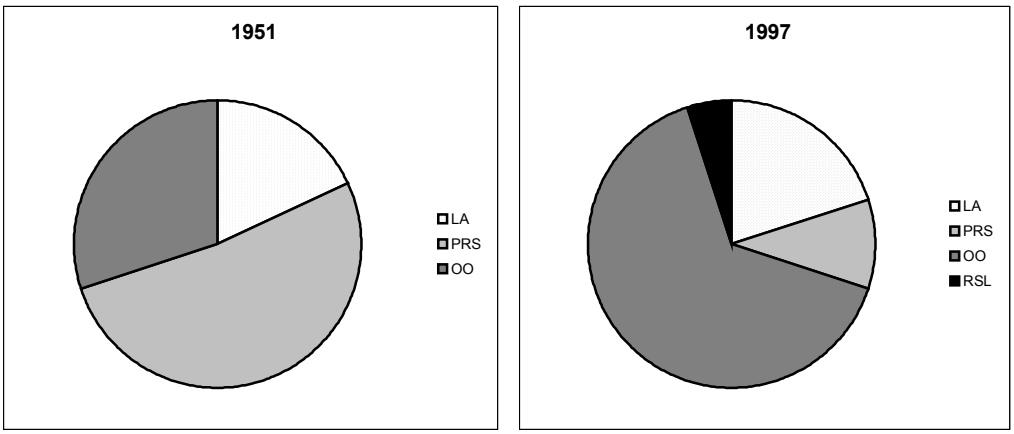
Chapter 2: Background and Context

This chapter begins with a brief overview of the changing proportions over time of the four tenure types (owner occupation (OO), social renting from local authorities (LAs), social renting from not-for-profit registered social landlords (RSLs) and renting from profit-seeking private landlords (PRS)) and the factors influencing these changes. Following this is a discussion on the factors affecting tenure change, the sustainability of the increased levels of owner occupation and whether owner occupation may be the right choice for marginal purchasers. This sets the context for analysing the present levels of rents and OO costs and how these may influence tenure choice. Finally the discussion focuses on the effects of the changes in tenure balance on the rent setting policies of RSLs.

The changing proportions of tenures through time

In the 1950s the OO sector accounted for around 30% of households, the LA sector for about 20% and the PR sector for about 50%. By the last quarter of the century OO accounted for over 50% of housing stock, LA renting accounted for around 30% and PRS and RSL renting for about 10% each. By the late 1990s OO accounted for around 65%, LA and RSL renting together accounted for around 25% and the remainder in PR. Thus the PR sector has now shrunk to about the same proportion as the OO sector held at the beginning of the century. (Balchin 1998; McCrone and Stephens 1995; Ford and Wilcox 1998).

Figure 2.1: Proportions in each tenure, 1951 and 1997



Source: DETR Housing and construction statistics

These changes have been influenced by both the market and government policies. Government intervention has affected all four tenures over time, and no attempt has been made at tenure neutrality (Nevitt 1966; McCrone and Stephens 1995). After World War Two there was an acute housing shortage. Rent control was continued to help ensure affordability, which again discouraged private landlords. The emphasis was mainly on building for general needs and resources were steered towards the public sector. There was a second wave of local authority house building in the early 1960s and between 1964 and 1970 nearly half of all house completions were in the public housing sector. Since then construction of houses for private ownership has been further encouraged while public housing provision has become residualist.

Recent expansion of owner occupied sector is partly the result of 'entry-oriented' initiatives, aimed at turning potential buyers into actual buyers. The introduction of the right to buy (RTB) also resulted in the owner occupied sector becoming more diverse. In the first five years after the RTB legislation was introduced, around half a million sitting council tenants bought their properties in England and Wales. The rate at which this has happened has varied between areas, with area attributes acting as a constraint in some cases. Local private housing market factors have also affected sales levels. Tenants' capacity to enter owner occupation is affected through the availability of affordable alternatives to buying their council homes and through their willingness to buy, which is affected to some extent by the buoyancy of the local property market (Kleinman and Whitehead 1987).

Thus this expansion at the lower end of the owner occupied sector has made it now more comparable to the RSL sector, whereas in the past it was more comparable to the private rented sector.

Factors influencing a change of tenure

Clearly the RTB legislation gave a new choice to tenants to purchase their current homes that did not exist before. There are now more areas of the country where the costs of renting from RSLs are approaching or overtaking the costs of low cost owner occupation. This increases tenants' opportunities to change tenure if they wish. But is this narrowing gap enough to tip the balance in favour of a move to owner occupation? If tenants do switch to owner occupation, what will they gain?

A study using data from the General Household Survey was undertaken to find which factors influence people's to buy or remain as tenants, and the effects of the introduction of Right To Buy (RTB) legislation on these factors (McNabb and Wass 1999). Tenants' choices depend on household budget restraints, lifestyle characteristics, the quality of the accommodation on offer and the match between the household and the property. After the introduction of RTB budget, lifestyle and residence characteristic effects on decision making were the same, but family size and household composition effects were different. Holmans (1993), analysing the housing trailers to the 1998 and 1991 Labour Force Surveys, finds that most of the sitting tenant purchasers were married or cohabiting and over the age of 35. This can partially be explained by the size of discount being dependent on the length of time as a tenant. In addition, three quarters of sitting tenant purchaser households had one or more members working, and many had three or more earners, typically a son or daughter as well as the parents. They also tended to have more stable jobs and non-manual jobs. This suggests that relative financial stability in the household is a factor in RTB purchase.

Clearly the immediate financial situation is only one, albeit a significant, factor in choice of tenure. Owner occupiers usually have greater control over what is done within the home (although tenant choice has been extended in recent years). Private homes are often located in what are seen as 'better' areas; however this is a subjective judgement and the mix of amenities that suits one may not be suitable for another. Home ownership is linked to better mobility, an important factor for those whose careers require locational flexibility. Private homes for sale used to be thought to be in a better state of repair that rented accommodation, although newer RSL properties are

often in good repair and probably built to a higher standard than some older private houses (Merrett 1982). In the long term, owner occupiers have the chance to pass on the asset to others, although if tenancy is a cheaper option in the long run, then money not put into bricks and mortar can be invested elsewhere.

The sustainability of increased owner occupation

The owner occupied sector is now more diverse in terms of income groups as a result of the expansion in the 1980s, when many came from the lowest income decile (Ford and Wilcox 1998). This group has been disproportionately hit by changes in the labour market. The growth in short-term, part-time and low income jobs adds to income instability and increases the risk of losing a home. Around a quarter of the ex-council tenants who became home owners later experienced difficulties with meeting mortgage repayments (Ford and Wilcox 1998; Green *et al.* 1999).

As a result, there is a debate concerning the lack of coherent safety nets for marginal owner occupiers. Often those who chose to change tenures find these less adequate than those for tenants. Safety nets were already inadequate for owner occupiers, and were made worse by policy changes in 1985, despite government encouragement of home ownership earlier in the 1980s. The costs of Housing Benefit prompted DETR to review this at the beginning of the Labour Government, and the Council of Mortgage Lenders (CML) and Association of British Insurers (ABI) are looking into more comprehensive mortgage protection insurance. Because housing support has evolved over many decades it does not provide a coherent safety net. Tenants on low incomes or who are unemployed have cover but there is no form of assistance with mortgage costs that is comparable to Housing Benefit. This leads to a system whereby households only receive state help after repossession, and being (re)housed in the social or private rented sector (Wilcox and Sutherland 1997).

Mortgage payment protection insurance (MPPI) was developed as a complement to Income Support for Mortgage Interest (ISMI). It was brought in as a necessary help to cushion the blow in the event of a recession, and also to place more responsibility on individuals for the costs of uncertainty. But those who need it are usually those who are least well covered because of the costs involved. However a significant proportion of householders can self-insure, and may not need to take out MPPI. There is a need instead to ensure the overall costs of providing MPPI are brought down, in order that the poorer and riskier households might take it up. Overall levels of coverage, therefore, may not be as important as ensuring that the right mix of households are taking out the insurance (Holmans and Whitehead 1999).

Is owner occupation preferable?

Home ownership in the 1980s was regarded by many as a viable and affordable option. Now there may be less willingness to change tenure purely because the short term costs of ownership appears to be cheaper than renting. Hindsight may make people more cautious of moving away from renting, especially after the experiences of those suffering the double insecurities of negative equity and repossession during the housing slump in the early 1990s. These in effect negated the security of tenure and the wealth creation aspects that were held to be benefits of owner occupation, and thus support the idea that, at least for those marginal newcomers, such benefits are instead ‘myths’ of home ownership (Kemeney 1981). Studies comparing the costs of home ownership and renting only look at the relative cost differentials and advantages

and disadvantages of renting and owning, whereas what they are in fact measuring is the 'social structure bias in favour of home ownership' (Kemeney 1981:13).

> No study of public housing can hope to begin to tackle the complexities of housing politics, finance and administration without taking the phenomenon of rent-averaging into account as a fundamental consideration. Without a clear understanding of how rent levels are determined and affected by such things as the policy of selling off stock into owner-occupation and the age structure of the housing stock, any discussion of public housing must be both superficial and inaccurate. Shifting the emphasis away from the question of the composition of public rents to the less important, if more emotive, question of subsidies therefore not only reinforces the inaccurate and conservative 'welfare' image of public housing, but more seriously precludes any real understanding of housing economics, particularly in a comparison of public rental housing with home-ownership' (Kemeny 1981:16).

Another factor that could affect choice of tenure now is increased awareness of and interest in other forms of savings and investments. These may tempt those on the margins of home ownership to invest spare capital in other forms of investment. Paying a commodity cost for housing, as for other essentials such as food and clothing, and utilising any spare income in alternative schemes for possible wealth creation, is often practised in other European countries with higher GPD than the UK, where a greater proportion of the population lives in rented accommodation.

By subtracting the user costs of owner occupation from the imputed rent (a measure of the value of the basic benefits of shelter, warmth, security, etc. as enjoyed by tenants who do not benefit from the capital appreciation of the property) it has been shown that changes in the tax regime, interest rates and falling house prices have had a negative effect on the economic benefits of owner occupation, and in the first half of the 1990s there was a net cost to owner occupation (Earley 1995).

Some of the benefits of home ownership are independent of tenure (Whitehead 1979) and some of these could be provided in other ways. Both owner occupiers and tenants have some restrictions on the choice of property they inhabit; it is only the wealthy owner occupiers who are relatively free to choose. One of the effects of RTB was to increase residualisation, in other words those left in the public sector will have even less choice (Murie 1986). Poorer owner occupiers are also restricted in their flexibility and ability to move. Marginal owner occupiers, therefore, may find themselves with less choice than some tenants. In terms of investment, negative equity has shown that investing in one's own bricks and mortar is not always a road to riches, especially in the short term. Social tenants paying below-market rents may have more income to divert to other forms of investment than owner occupiers investing most of their available income in their homes (Whitehead 1979). Marginal owners may not fully benefit from those aspects tied to ownership, especially security of tenure, if their home is in danger of being repossessed. Security of tenure and inheritance rights can both be assigned to tenants.

The discourse about home ownership has also changed over time. Attitudes towards housing in the middle of the twentieth century stressed the importance of space standards, gardens, the quality of the neighbourhood and independence and did not dwell on tenure. The statement 'It's our own, isn't it? A home of our own' was made, not by an owner occupier but by a tenant (Forest and Murie 1990:85). Tenure preference is also downplayed in the fact that many who purchased their council homes are still in the same homes fifteen to twenty years later, and the purchase. discounted purchase cannot be said to be due always to dissatisfaction with tenancy. Instead it was 'the icing on the cake rather than making the difference between a satisfactory and unsatisfactory housing situation' (Forrest and Murie 1990:102).

So although owner occupation may be within the reach of increasing numbers of tenants, the lessons of the 1980s may well influence some to start their housing careers as tenants, or remain as tenants when they create a new household as a couple. Despite the rise in owner occupation over the last decade, RSLs continue to have a role in providing quality and choice in affordable housing. The recent tarnished image of social housing as a residual tenure for those at the margins of society could change for the better if public sector housing for key workers is seen as the provision of homes for those whose work is an essential part of the local economy and society. If the advantages of owner occupation are marginal for some home owners, an enhancement of the image of the social sector and the return to an emphasis on the overall quality of housing and neighbourhoods rather than tenure preference may encourage some to stay in social housing. Others may also prefer to start their individual housing histories in the rented sector. We may then see a return to the scenario of the 1950s when renting was a popular option for many.

The effects of these changes on RSL rent setting policies

The perceived public benefits of owner occupation have meant also that the rise in the sector has come partly at the expense of social renting. Home ownership upholds the values of social privatism, helps to keep public spending in check, and schemes such as low cost home ownership (LCHO) are seen by some as a better use of public funds than mortgage interest tax relief (MITR). No other European country promotes the transfer of both dwellings and tenants from the public sector into home ownership as much as Britain, and it also has many schemes, like LCHO, that help those who otherwise may not afford to become home owners (Balchin 1998; McCrone and Stephens 1995; Bramley and Morgan 1998).

Rented accommodation, therefore, is now often thought of as second best and it is assumed that tenants will seek to change to owner occupation where this is feasible. The shortage of alternatives to home ownership in some areas and the development of specialist financial intermediaries who can help those at the margins into owner occupation places further pressure on social landlords to set their rents at levels low enough to ensure the tenancies are taken up or retained.

The limits at which RSLs can set their rents are determined at one end by Housing Benefit and at the other by rents in the private sector. The 1988 Housing Act gave RSLs the freedom to set their own rents to cover costs, rather than having rents set externally by the rent officer under the former 'fair rent' system. Since then, fair rent

tenants that transfer internally have remained on a fair rent, but the larger proportion of tenants will now be in assured tenancies, where the rents are set by the associations on the basis of covering costs. The rent policy must therefore be set with these parameters in mind. Rent pooling will help to spread the costs between dwellings, and the ability to do this is determined by the size and diversity of dwellings in the stock profile.

There are some cases where RLS rents may be higher than the prevailing market rents. A rent for an RSL dwelling is likely to be higher than a rent on a private dwelling because most RSL dwellings provide a higher quality of accommodation and service than the private sector. In addition, some private sector rents in some locations may be relatively low because of high supply and low demand. Another alternative for tenants is the Local Authority sector. Although much decreased in size, where demand is high councils have no problem in letting stock, even in unpopular areas (Holmans and Simpson 1999).

Relatively high rents can also be expected from certain types of RSL. The smaller RSLs, those set up post 1988, those offering a relatively narrow mix of accommodation, and those in areas where construction costs are high fall into this group. RSLs that cannot pool their rents may experience long term problems at setting their rents below market levels. Rents for some RSL properties have already reached market levels and some previous research expected average RSL rents to reach market levels by 2000 (Chaplin, et al. 1995). Thus there is increased competition and choice within the rented sector as a whole. Given these pressures and the increased flexibility and choice available to tenants it is useful to compare the costs of renting with the costs of ownership at the lower end of the market. This will add another dimension to the framework in which RSLs have to set their rents.

Chapter 3: House Price Change

The analysis for this and the following chapters is confined to three categories - all property types, 2 bed houses and 3+ bed houses - because the data on these are more reliable at the local authority level. For a fuller discussion of this matter, see Appendix A. District level maps and additional tables and maps for this chapter are located in Appendix C.

Average house prices

Summary

The data shows a rise in average house prices nationally over the decade of just over 30%. This breaks down to reveal different regional patterns. In the northern regions there was a small, steady rise in prices over the decade while in the south, especially in London the South West and the South East, the pattern was one of falling prices in the first half followed by strong gains in the second half. At district level some districts experienced an overall decline in house prices over the decade, and this was more prevalent for the 2 bed houses, especially for districts in the East Midlands, the north of the East of England region and parts the far south west. This pattern was less pronounced for 3+ bed houses, where the greatest falls occurred in districts in the South West and along the south coast and in some districts in Yorkshire and Humberside. In all cases the inter-regional range (the difference between the highest and lowest regional house price) decreases in the middle of the decade, but increases during the second half. Thus house prices are diverging across the country. In the southern regions the ranking of regions by house price does not vary either by house size or across time. In the north of the country there is relative movement between the ranking of Yorkshire and Humberside, the East Midlands and the North West. The North East is consistently the region with the lowest average house price.

National

Average house prices remained stable in the first half of the decade, with only a slight rise of 1-2%. Most of the overall rise of 31% over the decade took place in the second half, but whereas 3+ bed houses rose by 27%, 2 bed houses only rose by 19% (see Table C1 in Appendix C). But these national changes mask important regional differences.

Regional

The rise in average house prices is not consistent over the regions (see Figure 3.1 below and Table C1 in Appendix C). Between 1989 and 1994 prices fell in the regions where average prices had been high (London, the South East, the East of England and the South West) but increased in the remaining regions where house prices were initially lower. The latter half of the decade saw increases in all regions for all three size categories. Over the decade as a whole the price rise for all property sizes is greatest in London, the South East and the East of England. Rises are more modest in the South West and the West and East Midlands, while in the remaining regions in the north of the country (North East, North West and Yorkshire & Humber) the price rise over the decade has been relatively small.

However, relatively small increases in house prices over the decade represent substantial percentage increases for these regions. The North East, despite a rise of only £12,500 in average property price over the decade, has a percentage increase of 32% .The South East, where the average price rose by £26,300, over twice as much, has a similar *percentage* rise of 34% (Table C1).

Only in the North West, North East and Yorkshire and Humberside have house prices risen consistently over the decade; in all other regions, the average price in the middle of the decade fell below that at the beginning before recovering strongly. Figure 3.1 also shows that the strongest recovery took place in London and the South East. The price changes for 2 bed and 3+ bed houses show a similar pattern of change.

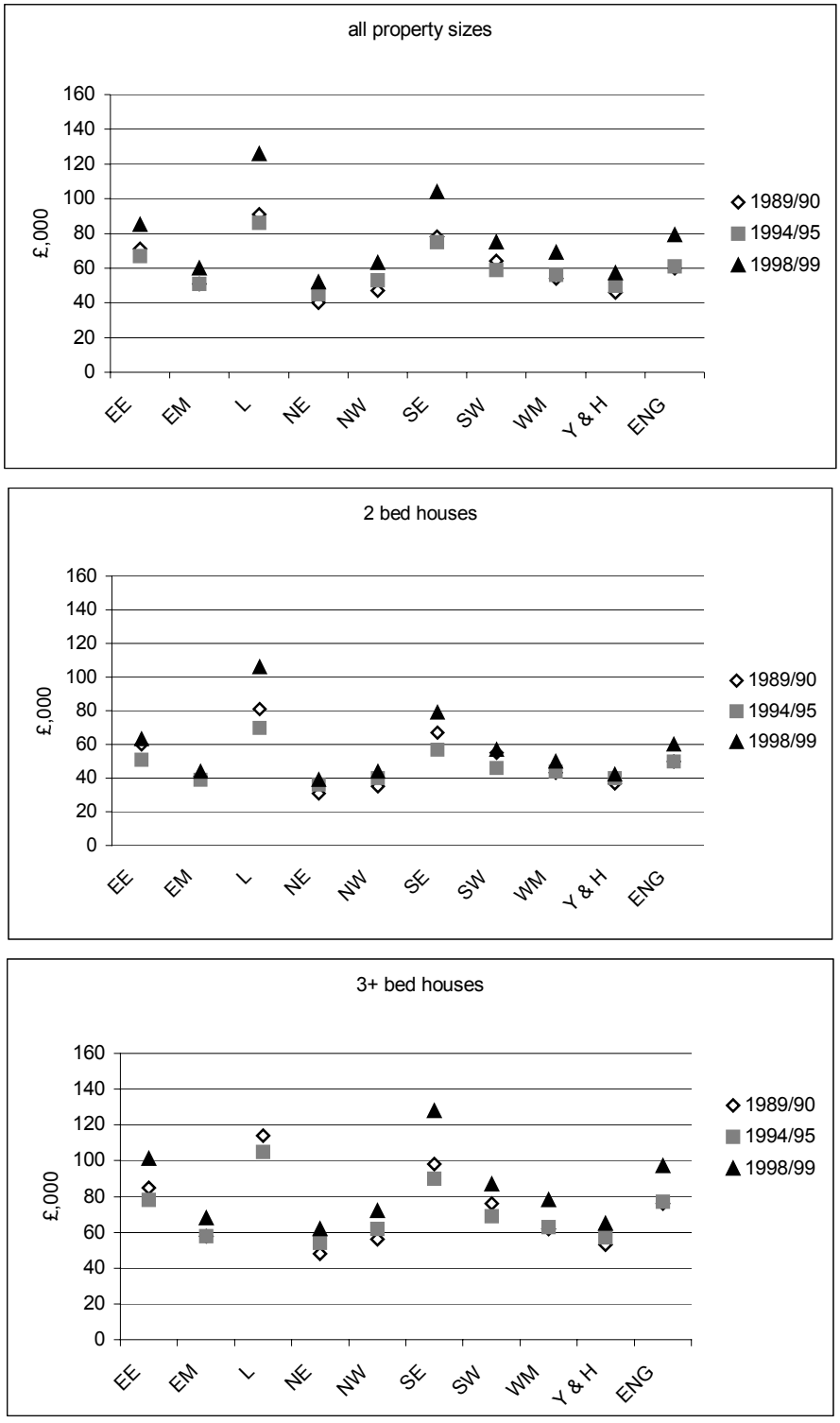
District
At district level the percentage changes in house prices over the decade have been mapped for the three categories. These are illustrated in Maps C1a-c in Appendix C

All property sizes: MapC1a
Overall, the percentage change has varied only slightly over the decade in the more peripheral and rural districts, while the greatest gains have been concentrated around the West of London and in some districts near other metropolitan areas, notably Pendle in Lancashire and Easington in Tyne and Wear. There are five districts showing falls of more than 5% over the decade; Penwith, South Somerset, New Forest, Rutland and Oatby & Wigston.

2 bed houses: MapC1b
For this size of house the districts where house prices fell significantly tend to be in the East of England and the East Midlands and in districts in the far west, especially in Cornwall. Otherwise the districts with the greatest percentage increases are again mainly to the west of London and in the metropolitan areas of the West Midlands, Merseyside and Greater Manchester and around Tyne and Wear.

3+ bed houses: MapC1c
Here there are very few districts that show a fall in average house prices and these, except for Daventry in Northamptonshire, tend to be found in the more peripheral rural areas. The greatest percentage increases are located in districts around Greater London and to the West of London, and in a broad 'sash' through the West Midlands, Greater Manchester and Merseyside. The other significant area is in the far north, in districts in Cumbria, Durham and Northumberland.

Figure 3.1: Changes in average house prices, 1989/90 to 1998/99



Lower Quartile house prices

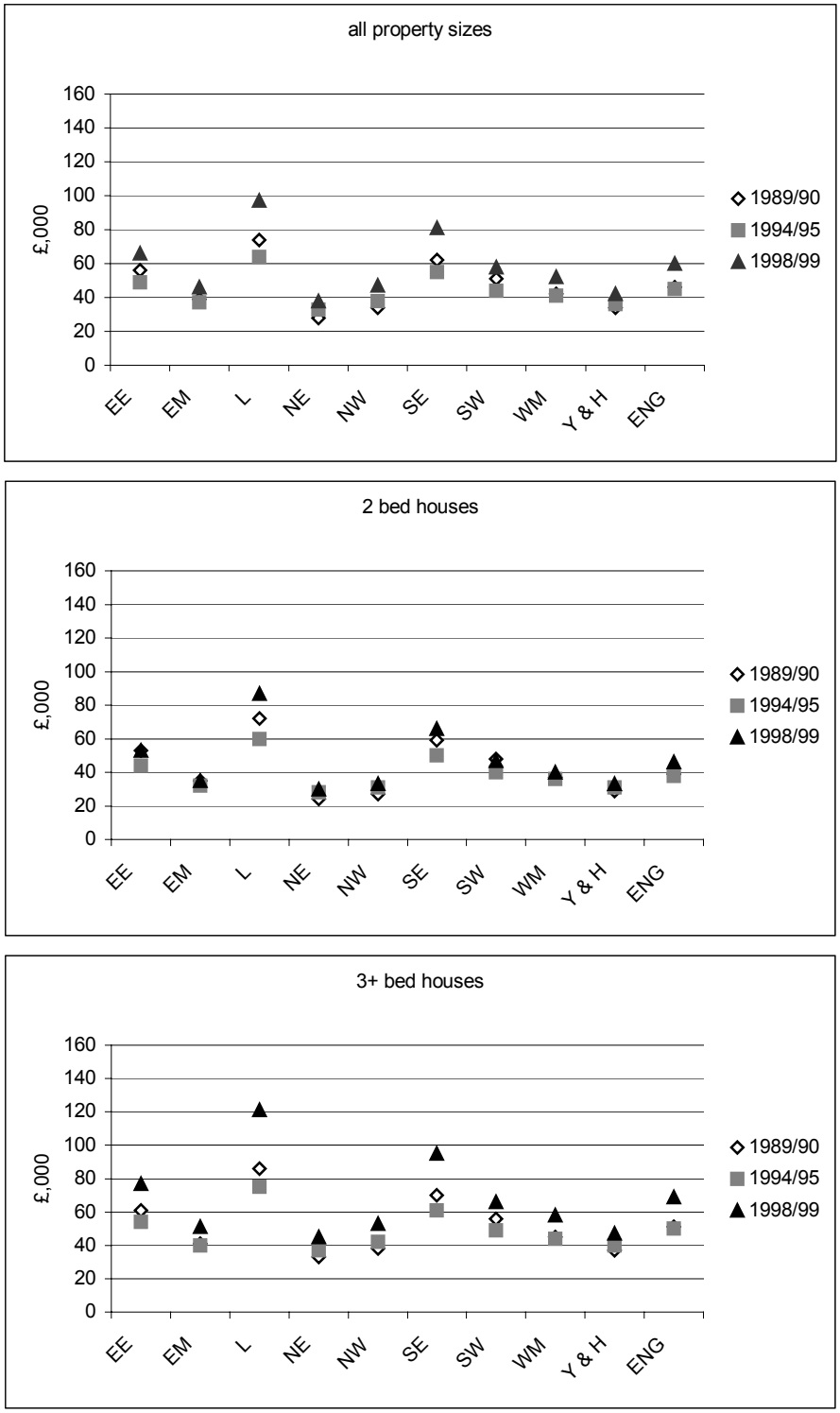
Summary
In spite of the percentage change in LQ house prices nationally being similar to that for average house prices, regional differences are apparent. For 2 bed houses in the East Midlands in particular, prices were virtually stagnant over the decade as a whole. The situation was similar in the East of England, but here they fell in more the first half and then recovered more strongly in the second half. The pattern at district level is very similar to that of average house price change. The pattern of inter-regional convergence in the middle of the decade and greater divergence by the end of the decade is similar to that for average house prices.

National
Here all size categories experienced price falls in the first half of the decade, but again the smaller categories experiencing both the greater percentage falls and the greater price falls. As with average prices there was an increase across the board in the second half of the decade, but overall the smaller size categories did not recover over the decade, and 1 bed flats and houses remain below 1989/90 prices on average.

Regional
Once again, the national pattern masks regional differences (TableC2 in Appendix C). The pattern for 1989-94 is similar to that for average house prices except that the East Midlands and West Midlands show decrease of 4% and 2% for all sizes and 3+ bed houses, whereas there was a rise of 1% and 3% respectively for average house prices. LQ properties price increases occurred in all regions over the decade. As with the average house prices, the North East and North West have seen percentage gains greater than those in London and the South East, but the actual increases in prices are only half of those in the latter regions. There were rises in most regions in the second half of the decade for the larger and smaller houses. Overall the larger properties fared better than the small, with one region (South West) showing a decrease for 2 bed houses over the decade and two (East of England and the East Midlands) showing no change.

The visual representation in Figure 3.2 shows that at the regional level changes in LQ house prices followed a similar pattern to average house prices, with rises throughout the decade in northern regions. All other regions show price falls in the middle of the decade, followed by rises to above the levels of 1989/90. Whereas the patterns for 2 and 3+ bed houses were similar to that for all sizes for the average house price, in the LQ house prices there is a different pattern of change for the 2 bed houses. In the East Midlands, the East of England and the South West, 2 bed prices did not rise above 1989/90 levels. 2 bed house prices, both average and LQ, have hardly changed over the decade in the East Midlands and the East of England.

Figure 3.2: Changes in lower quartile house prices, 1989/90 to 1998/99



District

All property sizes: (Map C2a)

There are 10 districts where LQ property prices fell more than 5% over the decade. These are Corby (East Midlands), Penwith and Plymouth (South West), Teesdale (North East), Barking and Dagenham (London), Thurrock and Luton (East of England), New Forest and Thanet (South East) and Middlesborough (Cleveland). The greatest percentage gain in LQ house prices occurred in districts to the West of London and in the metropolitan areas around the West Midlands, Merseyside, Greater Manchester, Cleveland and Tyne and Wear. Districts with only modest rises tend to be in more rural and peripheral locations, such as the far west, East Anglia, Lincolnshire and North Yorkshire.

2 bed houses: (Map C2b)

The spatial pattern here is similar to that of the average price of 2 bed houses, with the greatest decreases occurring in districts in the East of England and the East Midlands and in Cornwall. There are more districts, however, where the decrease over the decade has been in the highest category (notably in Northamptonshire; East Northamptonshire, Corby and Wellingborough).

3+ bed houses: (Map C2c)

Essentially the pattern here reflects the changes in average house prices, with only a few, mainly peripheral, districts seeing a fall in prices of more than 5% over the decade (Penwith, Caradon, Isle of Wight, Forest of Dean, New Forest, Middlesborough, Corby and Kingston upon Hull UA. There is also the similar pattern of greatest increases around London and spreading west through the West Midlands, through the metropolitan areas towards Merseyside.

The gap between average and LQ house prices

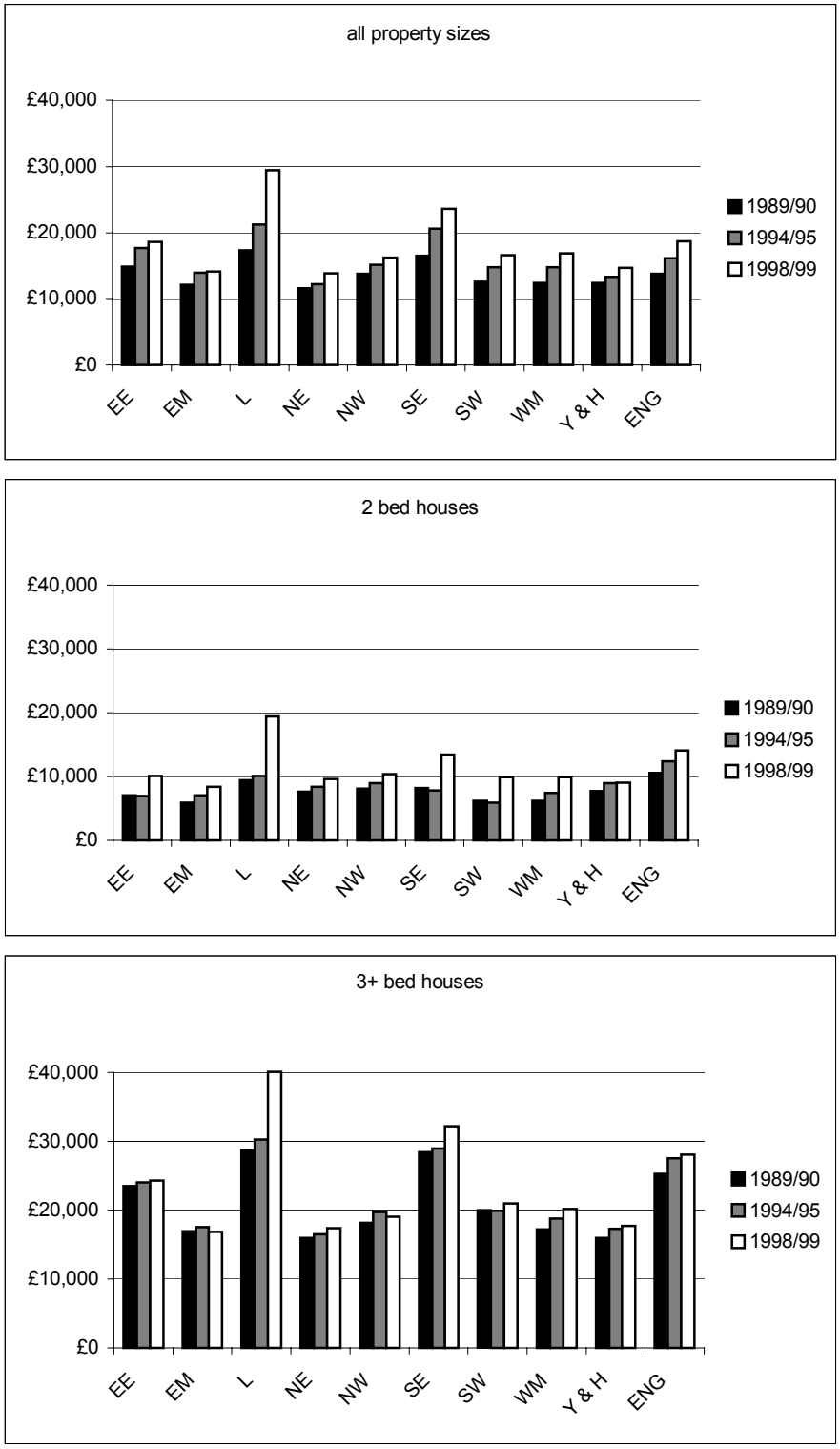
Summary

Nationally there has been a widening of the gap between average and LQ house prices, for all sizes and for 2 bed and 3+ bed houses. At regional level the widest gaps occur in London and the South East, while only the East Midlands and the North West show the gap narrowing over the last half of the decade. There is a tendency for the gap to be greater where regional house prices are lower. Disaggregating by property size at the district level reveals the gap to be decreasing for 3+ bed houses, especially in districts in the east of the country. For 2 bed houses the larger gaps that occurred in districts in the north at the beginning of the decade appear to be more widespread by the end of the decade.

National and regional level

Figure 3.3 and Table C3 in Appendix C show that the gap between LQ and average house prices has increased for all property sizes in all regions over the decade. The gap has increased the most in London and the South East, whereas in the East Midlands the gap has altered little between the middle and the end of the decade. For 3+ bed properties the East Midlands and the North West both show a narrowing of the difference over the last 5 years, while for London the gap has widened considerably. Only 3+ bed houses in the East Midlands and the North West show a narrowing of the difference in the last 5 years.

Figure 3.3: Difference between average and LQ house prices, 1989/90 to 1998/99



District level
At the district level we illustrate the percentage difference between the average and LQ house prices for 2 bed and 3+ bed houses, taking snapshots for 1989/90, 1994/95 and 1998/99.

2 bed houses (Maps C3a-c)
At the beginning of the decade the districts with the greatest differences are mainly located in the north of the country. Following the sequence through the decade shows how the number of districts with larger differences larger gap is creeping southwards, so that by 198/99 the darker areas, where the gap is greater, are more widespread and districts in the South East now appear in the top category.

3+ bed houses (Maps C4a-c)
The contrast with the 2 bed houses is striking here. Over time the gap is *decreasing* all over the country over the decade and is particularly low districts in the East of England and rural districts of the North East, North West and parts of the South West. The gap remains more pronounced in the more built-up districts in the South East, through the Midlands and up into the North West.

The difference between the % change in LQ house prices and the % change in average house prices

The focus here is on whether there is more or less pressure on the Lower Quartile of the housing market, and the direction of that pressure. The figures and tables for this section show the relative difference between the percentage change in average house prices and the percentage change in LQ house prices for the three time periods.

The example below shows the types of relative differential that will be commented on. The colours correspond to the small (light) and large (dark) positive (blue) and negative (red) differentials shown on the district maps C5a-c in Appendix B.

Example of relative differentials:

% DIFF AV PRICE 89/90 TO 98/99	% DIFF LQ PRICE 89/90 TO 98/99	RELATIVE DIFFERENTIAL (LQ - AV)
-30	+10	+40
+30	+10	-20
-30	-10	+20
+30	-10	-40
-10	+30	+40
+10	+30	+20
-10	-30	-20
+10	-30	-40

Thus a positive differential (blue areas on the map) indicates the gap is narrowing between average and LQ prices, indicating LQ house prices are getting nearer to average house prices, and suggesting an increased pressure on LQ prices. A negative differential (red areas on the map) indicates the gap is widening, with LQ house prices falling further behind the average prices and becoming cheaper in relation to average prices, so there is less pressure on LQ prices. It is here that it may be relatively easier to change tenure from renting to low cost home ownership.

For all property sizes the pattern is one of negative or very small positive differentials in the south of the country and larger positive in the north. For 2 bed houses, however, there are negative differentials in all regions but the North East, and the greatest negative differentials occur in the south and east of the country. In contrast, for 3+ bed houses there are positive differentials for all regions, with the greatest positive differentials in the North East and North West. This suggests that low cost home ownership may be relatively more attainable in the south of the country.

Summary
While the pressure on LQ house prices tended to increase in the first half of the decade, this reversed in the second half. In some parts of the north, LQ house prices have been under pressure throughout the decade and there is a smaller gap between average and LQ house prices now than a decade ago. At the district level the pattern is mixed, but overall there is more pressure on 3+ bed houses and less on 2 bed houses compared with a decade ago.

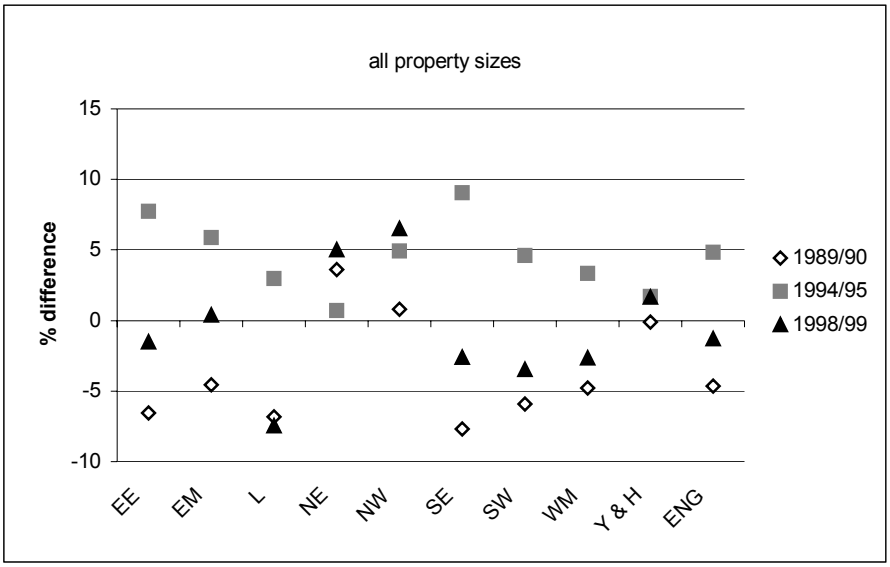
National and regional level
The negative differentials in the first half of the decade for all sizes suggests less pressure on LQ prices as the difference between them and average prices is increasing (see Figure 3.4 and Table C4 in Appendix C). The second half of the decade saw a reversal of this trend, but over the decade as a whole the differential has been negative in five regions. Only in the North East, North West and, to a lesser extent, Yorkshire and Humberside have LQ house prices risen relatively more than average house prices. However, for 3+ bed houses there has been more pressure on LQ house prices to rise relative to average prices over the decade, but this has been greatest in the North East and North West while there has been only a slight differential in London. For 2 bed houses there has been more pressure on LQ prices to fall relative to average prices over the decade, although for the North East and North West the differential has been negligible. London, the West Midlands and he South West have experienced the greatest negative differentials over the decade.

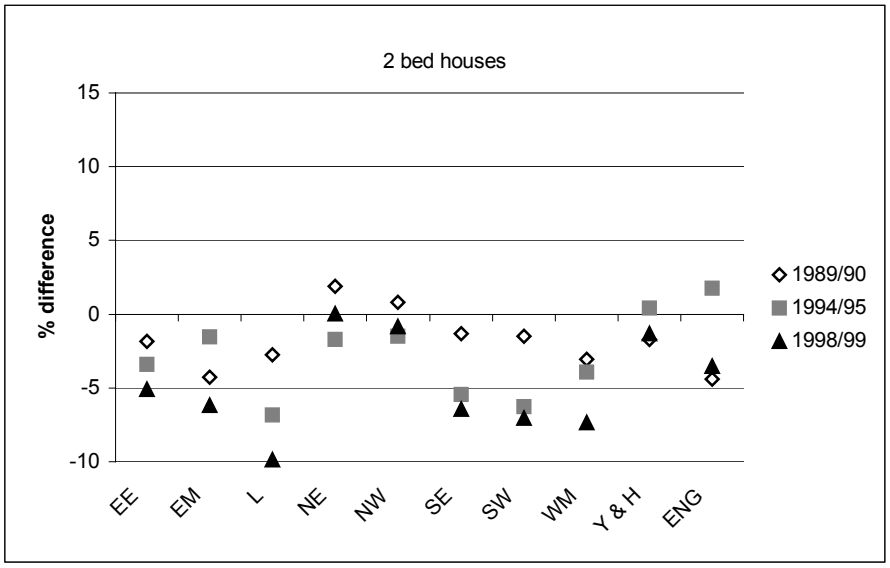
District level (differences over the decade)
All property sizes: (MapC5a)
The picture here is very mixed, with two districts, Chester-le-Street and Greenwich with the greatest negative differentials and seven districts, three around Merseyside, two in the North West, one in South Yorkshire and one in the Midlands, being in the greatest positive differential category.

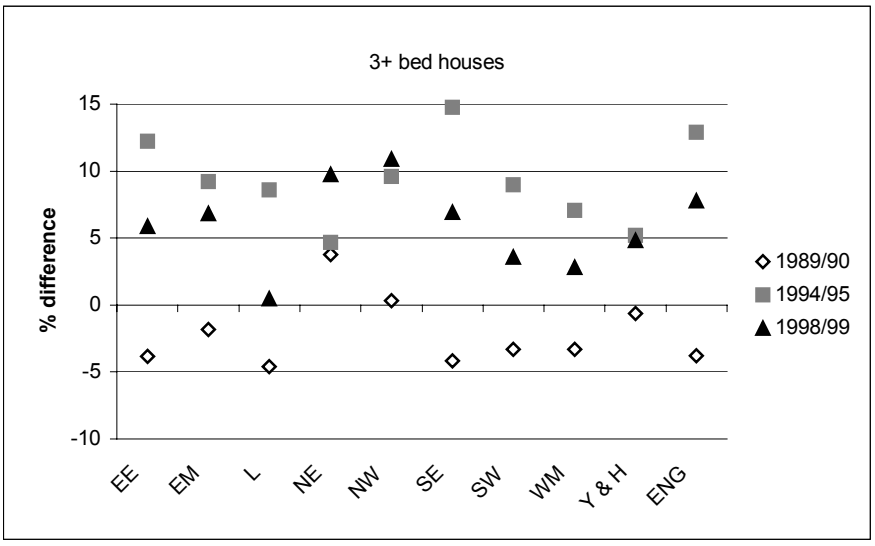
2 bed house: (Map C5b)
Here the majority of districts show negative differentials Of the six districts with the greatest negative differentials, four are in and around London and the South East and the remaining districts are Manchester and Wyre Forest on the edge of the West Midlands. The only district with an acute positive differential is Sefton in Merseyside.

3+ bed house: (Map C5c)
In contrast to the 2 bed houses, most districts here have positive differentials and many of the negative differentials occur in peripheral districts (with the exception of Corby and Greenwich, the two districts with the greatest negative differentials). The acute positive districts again tend to lie in a 'sash' from central South East to North West, but they also occur in the North East and in Lincolnshire.

Figure 3.4: Differences between average and LQ % change in house prices, 1989/90 to 1998/99







Chapter 4: Changes in the User Costs of Owner Occupation

Changes in OO costs

This section examines the changes in OO costs for 2 bed and 3+ bed houses over the decade and changes in the components that make up the costs. The method for calculating OO costs is set out in Appendix B. Maps of the changes at district level are located in Appendix D.

National and regional level

The OO costs for 2 bed houses are now on average lower than a decade ago, but have increased in most regions since the middle of the 1990s. Figure 4.1and Table 4.1 below show that at the regional and national level OO costs fell during the first half of the decade and rose again, but not to the original levels, during the second half. But the rate of change varied across the regions. The rate of decrease in OO costs was much greater in the south of the country than in the North. In the second half of the decade OO costs began rose quickly again in the south, but altered little in the North an the Midlands. As a result, over the decade as a whole, although OO costs have fallen in all regions the rate of decrease has been much greater in the south than in the North.

Figure 4.1: National and regional changes in OO costs, 2 bed houses

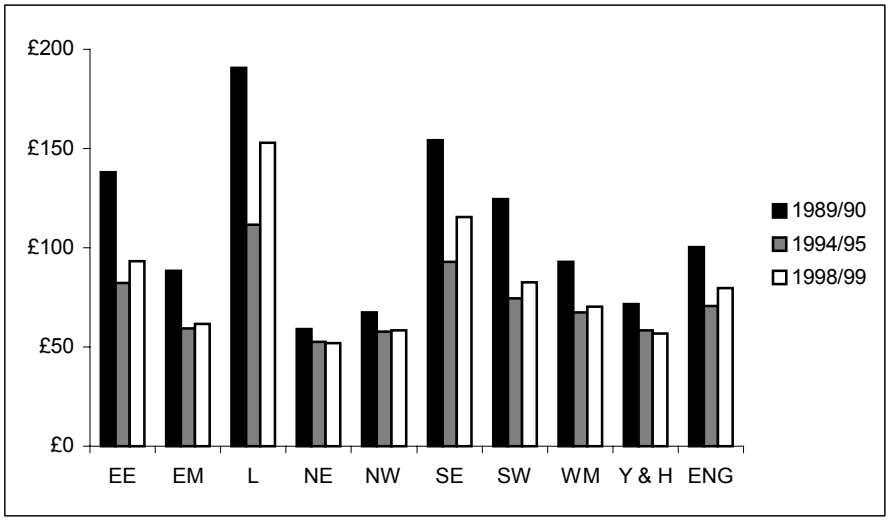


Table 4.1: Change and percentage change in OO costs, 2 bed houses

GOR	OO costs			change	% change	change	% change	change	% change
	1989/90	1994/95	1998/99	89-94		94-98		89-98	
SW	£125	£75	£83	-£50	-40	£8	11	-£42	-34
EE	£138	£82	£93	-£56	-40	£11	13	-£45	-33
EM	£88	£59	£61	-£29	-33	£2	3	-£27	-31
SE	£154	£93	£116	-£61	-40	£23	25	-£39	-25
WM	£93	£68	£70	-£25	-27	£3	4	-£23	-24
Y & H	£72	£58	£57	-£13	-18	-£2	-3	-£15	-21
L	£191	£112	£153	-£79	-41	£41	37	-£38	-20
NW	£67	£58	£58	-£10	-15	£1	1	-£9	-13
NE	£59	£53	£52	-£6	-11	-£1	-1	-£7	-12
ENG	**£100**	**£71**	**£80**	**-£30**	**-30**	**£9**	**13**	**-£21**	**-21**

Again we see with 3+ bed houses the rate of decrease in OO costs was greater in the South than in the North in the first half of the decade (Figure 4.2 and Table 4.2). Similarly, in the second half of the decade, while OO costs were increasing rapidly in the south they were still falling in the North east and Yorkshire & Humberside and barely changing in the North West and the East Midlands. Over the decade as a whole, therefore, OO costs are now around 30% lower in the South West, the East of England and the East Midlands while they have only fallen by just under 20% in the North East and North West. The surprise here is that London has fallen at the same rate as these Northern regions, while for the 2 bed houses London fell 20% over the decade compared to around 12% in the North.

Fig 4.2:National and regional changes in OO costs, 3+ bed houses

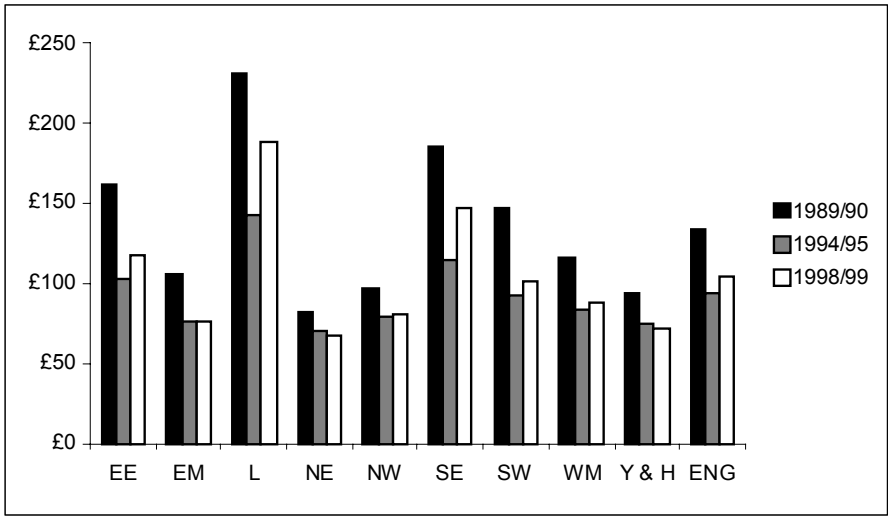


Table 4.2: Change and percentage change in OO costs, 3+ bed houses

	1989/90	1994/95	1998/99	Change 89-94	% change 89-94	change 94-98	% change 94-98	change 98-98	% change 89-98
SW	£147	£92	£101	-£55	-37	£9	10	-£46	-31
EE	£162	£103	£117	-£60	-37	£14	14	-£45	-28
EM	£105	£76	£76	-£29	-28	£0	1	-£29	-28
WM	£116	£83	£87	-£33	-29	£4	5	-£29	-25
Y & H	£94	£74	£71	-£19	-21	-£3	-4	-£22	-24
SE	£186	£115	£147	-£71	-38	£32	28	-£39	-21
L	£231	£142	£188	-£89	-39	£46	33	-£43	-19
NE	£82	£70	£67	-£11	-14	-£3	-4	-£14	-18
NW	£97	£79	£80	-£18	-19	£1	1	-£17	-18
ENG	***£133***	***£94***	***£105***	***-£39***	***-29***	***£11***	***11***	***-£28***	***-21***

District level
Over the decade as a whole (Maps D1a-b), more districts have seen greater percentage falls in 2 bed OO costs than 3+ bed OO costs. Only in a few districts in London, some districts in Merseyside and Blaby in Leicestershire has there been an increase in 2 bed OO costs. For 3+ bed houses some districts to the west of London, through the Midlands and in parts of the north and Lincolnshire have seen rises in OO costs.

In the first half of the decade (Maps D2a-b) OO costs for 2 bed houses fell more steeply in districts in the south and east of the country. Falls were less steep in the north, and in a very few districts around Merseyside (Sunderland and Bexley only changed by 1%), OO costs rose during this period. Falls were not so great for 3+ bed houses. Again the main picture is of a steeper decline in costs in the south and again a few districts in the north, mainly around Merseyside but also including Derwentside in the North East, experienced slight gains.

In the second half of the decade (Maps D3a-b), the picture is reversed. 2 bed OO costs fell in almost all districts in the north of the country, and especially in Humberside. OO costs increased for 2 bed houses in districts in and around London and westwards towards Gloucestershire and into the West Midlands. OO costs for 3+ bed houses rose much faster, with many more districts experiencing gains of more than 30%. Again these are concentrated in the south of the country, but for here the spread is far wider into the West and East Midlands, parts of the East of England and some districts in the North West.

Changes in the components of OO costs

The weekly cost of owner occupation is constructed from several variables that vary in value over time. The focus here is on how the major components vary over time and how much the change in each component will affect OO costs.

House price
The LQ house price is used for constructing the OO costs as the focus is on those entering owner occupation as first time buyers at the lower end of the market, in other words those most likely to be choosing between owner occupation and renting. The nominal house price is used, but for comparison changes in the real house price, adjusted for inflation, are also examined here.[1]

[1] The RPI for each year is obtained form the Economic Trends Annual Supplement (Jan 1987 = 100). This gives a monthly breakdown, so the April figure is used for each year as this is the start of the financial year. This is then adjusted to make April 1989 the base year. The real house price is then calculated as **nominal price/RPI (89base)*100.** As a check, an index for the nominal is constructed using 1989 as the base year. Where the RPI index is rising faster than the housing index, then real house prices will be falling, and *vice versa.*

Figure 4.3 : Changes in nominal and real house prices, 2 and 3+ bed houses

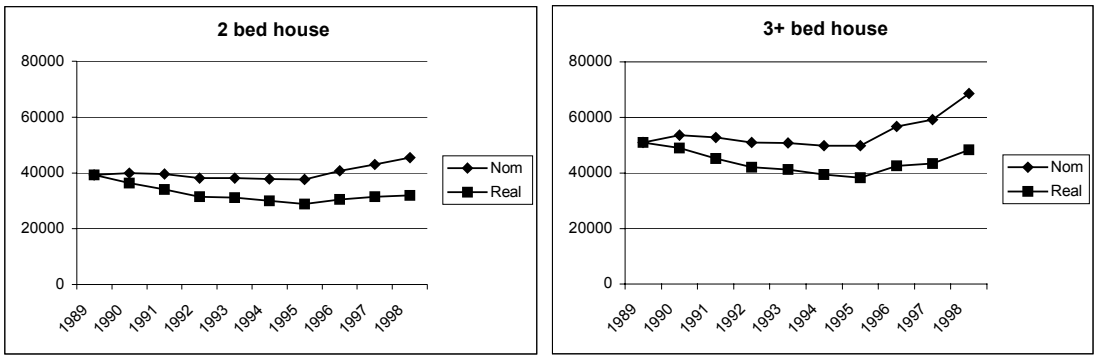


Table 4.3: Average and LQ house price change and percentage change

Av. price		**nom**			**real**	
	2 bed	3+ bed	all sizes	2 bed	3+ bed	all sizes
1989	£49,856	£76,273	£60,201	£49,856	£76,273	£60,201
1998	£59,576	£96,730	£78,819	£41,878	£67,997	£55,406
change	£9,719	£20,457	£18,618	-£7,977	-£8,277	-£4,795
% change	19	27	31	-16	-11	-8
LQ price		**nom**			**real**	
	2 bed	3+ bed	all sizes	2 bed	3+ bed	all sizes
1989	£39,249	£50,995	£46,416	£39,249	£50,995	£46,416
1998	£45,508	£68,652	£48,259	£60,181	£31,990	£42,305
change	£6,259	£17,657	-£2,736	£13,766	-£7,259	-£4,111
% change	16	35	-5	30	-18	-9

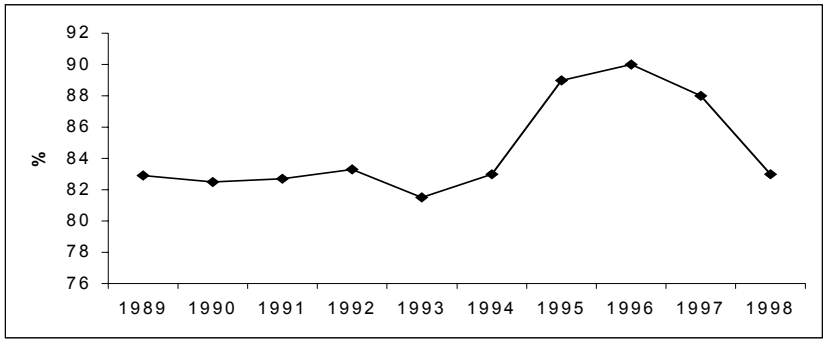
While average house prices have nominally risen over the decade, they have fallen in real terms (Figure 4.3 and Table 4.3). Increasing the price of a property by 10% results in a similar increase in the OO weekly costs.

Loan to value ratio

Once the house price is set, the size of the loan is affected by the LTV ratio. Although the average LTV ratio for first-time buyers has fluctuated over the decade, the CML advised a LTV ratio level of 95% for calculating the OO costs until 1998/99, when this was lowered to 83%.But having the LTV ratio set at a constant 95% between 1989/90 and 1997/98 means the OO costs calculated and used in the dataset are likely to be higher than the actual costs since between 1989 and 1994 the average LTV ratio for first time buyers varied between 80% and 83%.

As the lower LTV ratio would mean buyers having to find a larger deposit, the cost of loss of interest on the deposit is included as a cost at this stage. Figure 4.4 below shows there is relative stability at the beginning of the period, followed by a rapid rise between 1994 and 1996 and a decline, which almost mirrors that rise, from 1996 to 1998. As a result of having the LTV ratio set at a constant 95% between 1989/90 and 1997/98 the OO costs calculated and used in the dataset are likely to be set higher than the actual costs between 1989 and 1994 because the average LTV ratio for first time buyers varied between 80% and 83% at that time.

Figure 4.4 : Changes in LTV ratio, 1989 to 1998

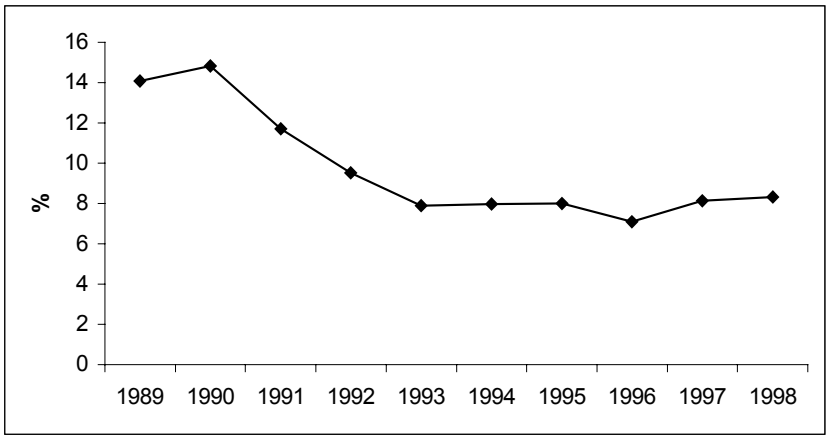


Mortgage Indemnity (MI) is an insurance policy that borrowers are required to take out of the LTV ratio on a property is typically over 90%. It pays the mortgage lender if the borrower is forced to sell the property, but does not protect the borrower from debt. Thus the cost of MI has been included in the calculations for previous years as a cost associated with a LTV ratio as high as 95%. Changing the LTV ratio from 95 to 83% and removing the MI lowers the OO costs by an average of 18%. Changing the LTV ratio to 90% and keeping the MI reduces the weekly cost by 5%.

Mortgage interest rate

After the size of the loan has been fixed the next most influential aspect of OO cost is the mortgage rate, which affects the basic mortgage payment before insurances are added.

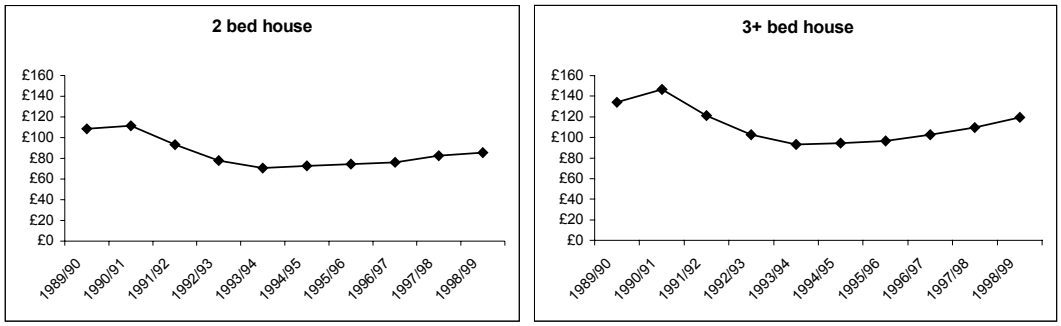
Figure 4.5: Changes in mortgage interest rates, 1989 to 1998



Source: CML

The mortgage rate fell rapidly in the first 3 years of the 1990s and began to rise again after 1996 (Figure 4.5). The mortgage payment makes up around 83% of the weekly OO cost, the rest being the costs of the various types of insurance (see below) and the loss of interest on the deposit. Clearly then any changes in the interest rate will have a significant impact on the OO costs. Raising the interest rate by 0.5% increases the weekly payments by an average of 4.7%, and results in an average increase in monthly payments of around £25. The influence of changes in mortgage costs can be seen from the similar pattern of change between the mortgage interest rate (Fig 4.6) and OO costs (Fig 4.7).

Figure 4.6: Changes in OO costs, 2 bed and 3+ bed houses



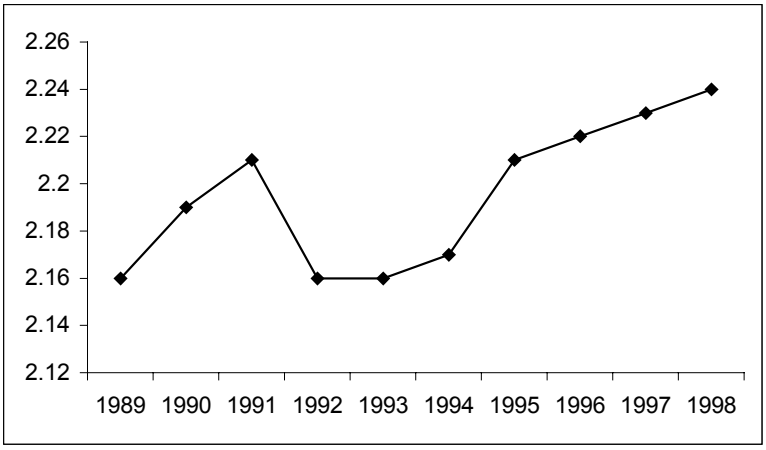
Other insurance

There are three types involved here, the cost of life assurance for the borrower, the cost of insuring the property and the cost of protecting the mortgage payments. Life assurance represents around 3% of the OO costs and buildings insurance is typically 5% of the weekly costs. MPPI is a private mortgage payments protection insurance which is not compulsory but which the Government hopes will increasingly provide a safety net for those not covered by Income Support for Mortgage Interest (ISMI). The main form of cover is the Accident, Sickness and Unemployment (ASU) policy. The cost of ASU cover is around 4% of the weekly OO cost.

Change in loan to income ratio

The loan to income ratio does not enter into the calculations of OO costs but indicate the amount borrowers are prepared to lend against income, and thus affect the level of house price to which a buyer can aspire. This information relates to first time buyers.

Figure 4.7: Change in loan to income ratio, first time buyers, 1989 to 1998



Source: Housing Finance

The loan to income ratio rose steeply between 1989 and 1991, and then there was the sharp drop between 1991 and 1992, falling back to 1989 levels as the recession hit home owners. After 1995 the ratio rose steeply again, reaching the 1989 level by 1995 and continuing a steady rise for the rest of the decade. This means that in the second half of the decade borrowers were prepared to lend larger sums to borrowers for the same level of income, thus potentially increasing the proportion of income spent on housing costs which could in turn affect affordability.

Relating component change to OO cost change

The next stage is to consider how the changes in OO costs as a whole relate to the changes in the individual components (Table 4.4).

Table 4.4:Change in OO costs and components

	2 bed house		3+ bed house	
	Change 89-94	**Change 94-99**	**Change 89-94**	**Change 94-99**
OO cost	-30%	+11%	-29%	+13%
LQ house price	-4%	+21%	-2%	+38%
Mort. int. rate	-6%	+0.5%	-6%	+0.5%
LTV ratio	same (95%)	down 12%	same (95%)	down 12%
Loan/income ratio	same	rise	same	rise

Although LQ house prices fell only slightly in the first half of the decade, the OO costs fell substantially. At the same time, the mortgage rate fell significantly. In the latter half of the decade, house prices rushed ahead, but OO costs did not rise so steeply. This may be in part because the interest rates only increased slightly, but also because people were borrowing a smaller percentage of the market price. As demonstrated above, a rise of only 0.5% in the mortgage rate leads to an increase of nearly ten times that amount in the OO costs, while a fall in the LTV ratio or the house price leads to a similar percentage change in OO costs. Clearly then RSLs looking to compare rents with OO costs need to be aware of changes not just in house prices but also in the mortgage rate, as these are the prime determinants of weekly OO costs.

Chapter 5: The Difference between the Costs of Owning and Renting

This chapter focuses on the comparison between the costs of owner occupation and the costs of renting similar sized properties. Differentials are calculated between OO costs and RSL new let and relet rents, again for all property sizes, 2 bed and 3+ bed houses[2]. In 1989/90 there are many districts where there is either no house price data or no rents data, so changes between 1994/95 and 1998/99 only are calculated at this level. From the analysis in the previous section, we might expect those areas with negative differentials (i.e. where houses at the lower end of the market are becoming relatively cheaper than the average) to be the areas where OO costs are approaching rental costs. District level maps and additional tables are located in Appendix D.

Summary

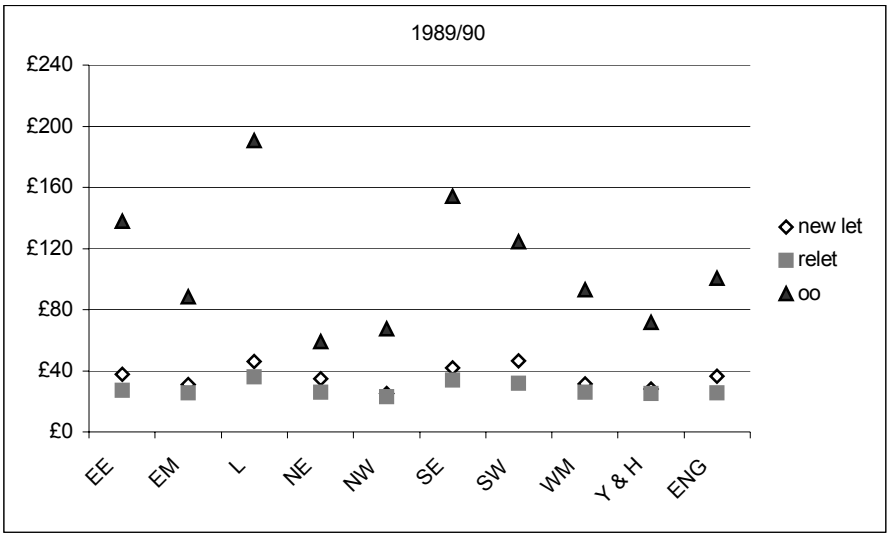
The difference between OO costs and renting is greatest in the south and least in the north east of the country. Owner occupation is still relatively more expensive than renting for the 3+ bed size. But for the 2 bed house category there is a clear North/South divide developing, so that in many districts in the north it may well be cheaper to buy than to rent. While this is good news for tenants in the North in terms of greater choice, it poses problems for RSL landlords who may face an increase in voids or difficult to let properties if tenants choose to change tenures. In the South, however, too great a gap between rents and OO costs can restrict tenant's abilities to choose between renting and owning a property.

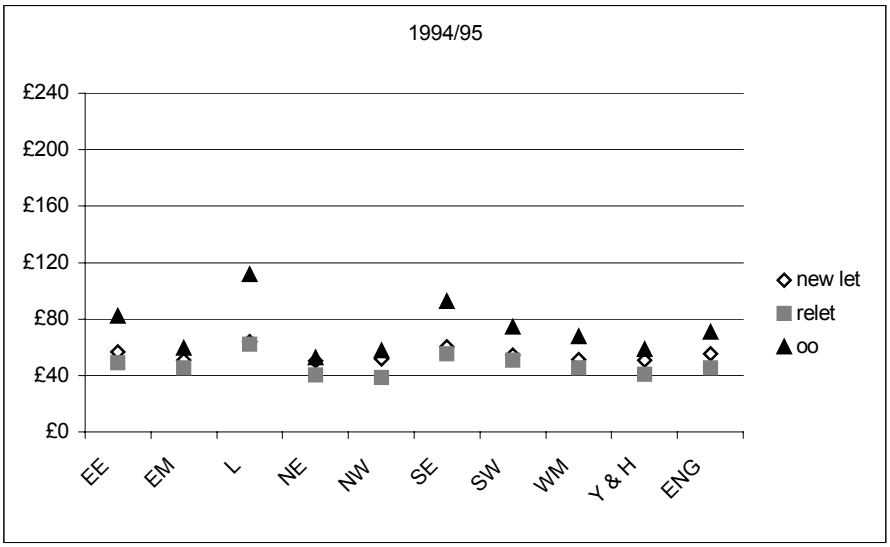
National and regional

Table D1 in Appendix D shows snapshots for the beginning, middle and end of the decade of the percentage difference between new let (HANL) and, relet (HARL) rents and the costs of owner occupation (OO costs). As one would expect, the costs of renting from an RSL is cheaper in most cases than owner occupation (i.e. the difference is negative). However, the difference between the two is narrowing. In all cases the difference is greatest in London and the South East and least in the North East. Figure 5.1 illustrates how the gap between OO costs and rents closed substantially for 2 bed houses in the first half of the decade, but there are signs of the gap widening again by 1998/99, especially in London, the South East and the East of England. The East Midland, Yorkshire and Humberside and the North West stand out as regions where there is now little difference between average rents and OO costs. Figure 5.2 shows a similar pattern for the 3+ bed houses, but the costs have not converged as much. This is borne out by the percentage difference figures in Table D1. Here the percentage difference for 2 bed houses in 1994/95 is only 10% for the North West and 5% for the North East. By 1998/99 there is virtually no difference in the North East, and in Yorkshire and Humberside the costs of renting a new let 2 bed house could be more than the cost of buying a similar property. Relet rents for 2 bed houses are also approaching the costs of owner occupation in the East Midlands and Yorkshire and Humberside.

[2] For calculating the differentials, the rent is subtracted from the OO costs, so a negative differential means renting is cheaper than owning. The percentage differential formula is (rent - OO costs)/OO cost*100.Therefore we would expect areas with negative house price differentials to be the one where positive rent/cost differentials to appear.

Fig 5.1: Snapshots of national and regional differentials between rents and OO costs, 1989/90, 1994/95 and 1998/99: 2 bed houses





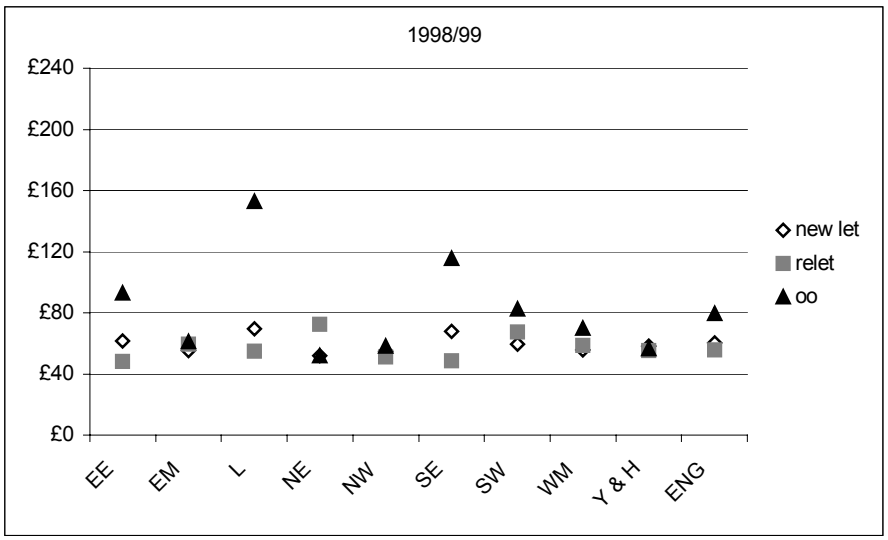
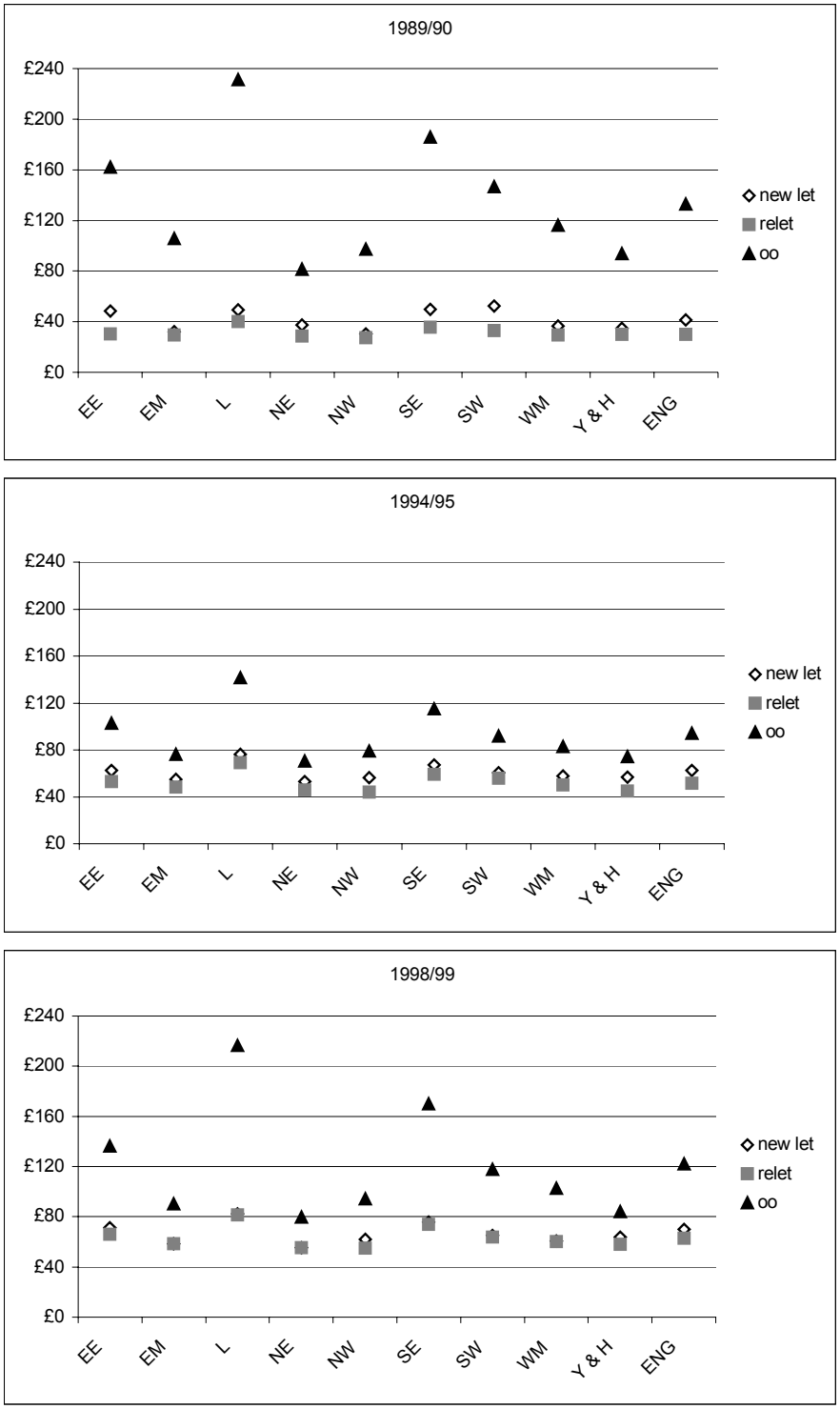


Fig 5.2: Snapshots of national and regional differentials between rents and OO costs, 1989/90, 1994/95 and 1998/99: 3+ bed houses



District

Two bed houses, new let to OO costs (Maps D4 a-b)

In 1994/95 there are districts, mainly in Yorkshire and Humberside and the North East and the North West where the difference between OO costs and the cost of renting is less than 10%. By 1998/99 there is a spread of these areas throughout much of the north of the country and down into parts of East Anglia. A similar situation exists in parts of Kent and in a few districts in the South West.

Two bed houses, relet to OO costs (Maps D5 a-b)

The pattern is very similar for the relet rent to OO costs, but there are fewer districts where rents are substantially above OO costs. These two sets of maps suggest a clear North/South divide has become established over the past few years for these smaller properties.

Three bed houses, new let rents to OO costs (MapsD6a-b)

In 1994/95 there are two district, Bolsover in the East Midlands and Wansbeck in the North East, where the data suggest it could be more than 10% cheaper per week to buy a three bed house than to rent one. There are several districts in a band across from North Lincolnshire to Oldham and up through to Pendle where there is little difference (less than 10%) between the two tenures. Other districts where there is also little difference are Copeland in the North West, Hartlepool, Easington and Derwentside in the North East and Tendring on the coast of south Essex.

While there is a small increase in the number of districts where renting is relatively more expensive than owner occupation, the main difference between 1994/95 and 1998/99 is the greater number of districts where OO costs are substantially higher than the cost of renting (Map D6b). Along with this increase in numbers there is a gathering together of these districts around London and the South East and through the West Midlands and the western side of the East of England.

Three bed houses, relet rents to OO costs (Maps D7 a-b)

The pattern is very similar here to the new let situation, with a slight increase over time in the few districts where OO costs are cheaper than renting, but this time the band across from North Lincolnshire to Lancashire does not appear until 1998/99. The pattern for the districts where OO costs are substantially higher than rental costs are very similar, again with an overall increase and clustering of districts as before, but with some districts in the North remaining in the highest category.

Chapter 6: Conclusions and recommendations

This study uses data available in the Dataspring dataset to examine changes in house prices, RSL rents and the user costs of low cost owner occupation over the decade 1989/90 to 1998/99. The aim is to analyse the spatial variations over time; to assess whether there are particular pressures on the lower end of the housing market; and to identify areas where RSL rents are either very close to or very much lower than OO costs. Rents that are too high relative to OO costs can lead to problems for RSLs with vacant stock and low demand, while rents that are considerably lower than OO costs means tenants, both actual and potential, face restricted opportunities to change tenure.

There was a 30% rise in house prices over the decade as a whole. However, most of this increase took place in the latter half of the decade after considerable falls in the first half. Analysis at the regional level reveals much greater increases in the south of the country while in the North East and Yorkshire and Humberside the rise was particularly modest. Further disaggregation by property size shows 3+ bed house prices making a stronger recovery than 2 bed houses. Overall, there is now a greater difference between regions with the lowest prices and those with the highest prices.

Another point of relevance is the gap between average and LQ house prices. Again there are regional variations and variations between property sizes. The gap is widening in the south, especially around London and the South East, but narrowing in other regions, typically for 3+ bed houses the East Midlands and the North West. This implies that pressures are prevalent across the whole market in the south, while demand tends to be more concentrated in the lower end of the market.

Owner occupation costs have moved rather differently from house prices. OO costs, were, generally, lower by the end of the decade, mostly because of falling inflation rates leading to cheaper mortgage costs. The lower average LTV also decreases the weekly costs, but this means borrowers are having to put more equity into their houses and this adds an extra cost factor arising from the lost interest on the bigger deposit. In regions where house prices were initially low and have not been rising rapidly, declining costs may lead to the situation where it is cheaper in some cases to buy rather than rent a house. Even so, choice is constrained by economic uncertainty and lack of a safety net. Some potential buyers may also be reluctant to change tenure as a result of negative equity and bad debt and the property price slump in the late 1980s and early 1990s.

Where low cost home ownership represents a cheaper alternative (in terms of weekly outgoings) to renting from RSLs, there may be a problem with high vacancies and turnover in the social sector. Where rents are much higher than OO costs, there is concern about how those on lower incomes can obtain adequate affordable housing. Using the data available from Dataspring to carry out this type of comparative analysis will enable RSLs to keep track of changes in house prices, rents and OO costs and the interplay between the different tenures throughout the country. This in turn will help them to identify areas of potential concern. It will also help address questions of relativities between properties of different types. Higher RSL rents for smaller properties may cause particular difficulties.

In areas where low cost home ownership costs are close to RSL rents it does not automatically mean that low cost owner occupation is always a passport to financial gain. These areas are often ones where both rents and prices are relatively low and where the market can be particularly fragile. RSLs can help to stabilise such areas by careful management of allocations, stock and neighbourhood. RSLs can benefit from promoting the social rented sector as a sustainable and desirable tenure. This requires improving the social image (perhaps through the promotion of affordable homes for key workers and those in employment, to help dispel the poor image of residualism) and publicising the benefits of renting rather than buying, especially in areas faced with economic uncertainty. They can also help to provide mixed tenure areas through shared ownership schemes that reduce the risks to individuals. If RSL properties can offer parity in respect of dwelling characteristics, location, neighbourhood characteristics, they may be better able to compete successfully with low cost private ownership. Thus participation in neighbourhood renewal schemes and key worker housing initiatives may help RSLs to play a central role in maintaining communities. In high cost areas RSLs have an equally direct role to play in meeting the demand from those who can afford more than traditional social housing. Finally, evidence on the gap between the costs of owner occupation and social renting helps to clarify when development is likely to be viable and appropriate.

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Appendix A

1. Area definitions

For this study 'region' refers to the Government Office regions. A list of the counties included in each region is given below

Table A1: Government Office Regions and their constituent counties

Government Office Region	County
North East	Cleveland, Durham, Northumberland, Tyne & Wear
North West	Cheshire, Cumbria, Greater Manchester, Lancashire, Merseyside
Yorkshire & the Humber	North, South and West Yorkshire, Humberside
East Midlands	Derbyshire, Leicestershire, Lincolnshire, Northamptonshire, Nottinghamshire
West Midlands	Hereford & Worcester, Shropshire, Staffordshire, Warwickshire, West Midlands
East of England	Bedfordshire, Cambridgeshire, Essex, Hertfordshire, Norfolk, Suffolk
London	Greater London
South East	Berkshire, Buckinghamshire, East Sussex, Hampshire, Isle of Wight, Kent, Oxfordshire, Surrey, West Sussex
South West	Avon, Cornwall, Devon, Dorset, Gloucestershire, Somerset, Wiltshire

2. General description of methods used

An indicator approach, rather than a modelling approach, is used to examine changes over time, between 1989/90 and 1998/99, in house prices, RSL rents and OO costs at national regional and local authority district level. Many studies have looked at this across time; this study adopts an area-based approach, looking for patterns of change between areas.

The boundary changes that took place between 1995 and 1998 as part of local government reorganisation have been taken into account by Dataspring to ensure that variables from different sources are compatible at the local authority level. The data can then be further aggregated to county, regional and national level.

Data for rents and house prices are available by property type (flats and houses/bungalows) and size (measured by the number of bedrooms). Because of the way the Halifax House Price data has been collected in the past, data for the largest size category was set as 3 bedrooms and above until 1998/99, when data was available for 3 bed houses, and 4 bedrooms and above. In order to compare like with like the data for 3 and 4+ bedroom properties have been amalgamated, using weighted averages, to create a 3+ category, in line with previous years.

3. Descriptive analysis of the rent and house price sample sizes held by Dataspring

The purpose here is to examine sample sizes in the Halifax house price data and the RSL rents data held by Dataspring. The tables for the regions show the actual numbers in the sample, while at district level the percentage of districts with less than 30 cases per cell is reported.

3.1 Halifax House Price data

Regional level (See Table A5 below)

Except for London and the South East (and the North East in 1989/90), all regions have less than 100 cases for 3 and 3+ flats. Around 50% of the regions have less than 50 cases for 3+ flats in 1989/90 and 1994/95, although this decreases to 20% by 1998/99. All regions have less than 50 cases for 4+ flats in 1998/99, the highest sample being 34 in London. 1 bed flat and house and 2 bed flat numbers tend to be in the hundreds, while 2 bed houses, 3 and 3+ bed houses and 4+ bed flats are in the thousands.

District level

Table A2: The percentage of districts with less than 30 cases, Halifax house price data

	1 flat	1 hse	2 flat	2 hse	3 flat	3 hse	3+flat	3+hse	4+flat	4+hse
89/90	70	95	79	20			94	3		
94/95	82	99	79	10			96	2		
98/99	82	99	76	9	97	3			100	19

For 1 bed houses, nearly all districts have less than 30 cases per year and for 1 bed flats and 2 bed flats around 80% of districts have fewer than 30 cases per year. Only the 2 bed and 3+ bed house categories have the majority of districts with more than 30 cases. This suggests that the most reliable average prices are in the 2 bed house and 3 and 3+ bed house categories.

Rents data

Overall there are fewer cases for rents data than for house price data.

3.2. New let rents data

Regional level (See Table A6 below)

Although there is a general rise in numbers over the decade, numbers remain particularly low for 1 bed houses and 3, 3+ and 4+ bed flats . While 3+ houses are in the thousands per region by 1994/95, 2 bed houses remain in the hundreds, and even in 1998/99 only half the regions have 2 bed house numbers in the thousands.

District level

Table A3 : The percentage of districts with less than 30 cases, HA new let rent data

	1 flat	1 hse	2 flat	2 hse	3 flat	3 hse	3+flat	3+hse	4+flat	4+hse
89/90	90	100	97	99			100	95		
94/95	78	97	86	58			95	53		
98/99	84	99	88	71	97	62			95	96

In 1989/90 all property sizes have fewer than 10% of district with more than 30 cases. The only categories to see any real increase in numbers by 1994/95 are 2 bed houses and 3+ bed houses, but these fall back slightly in 1998/99.

3.3 Re let rents data

Regional level (See TableA7 below)

The smallest numbers again occur in the 1 bed house and 3+ bed flat categories, although in 1994/95 the numbers for both increased. In 1989/90 they are very few, especially for 1 bed houses where half the regions have samples of less than ten. The other category with very few numbers is 4+ flats. Although there are more1and 2 bed flats than houses before 1998/99, by then the largest numbers are in 2 bed houses and 1 bed flats

District level

Table A4: The percentage of districts with less than 30 cases, HA relet rent data

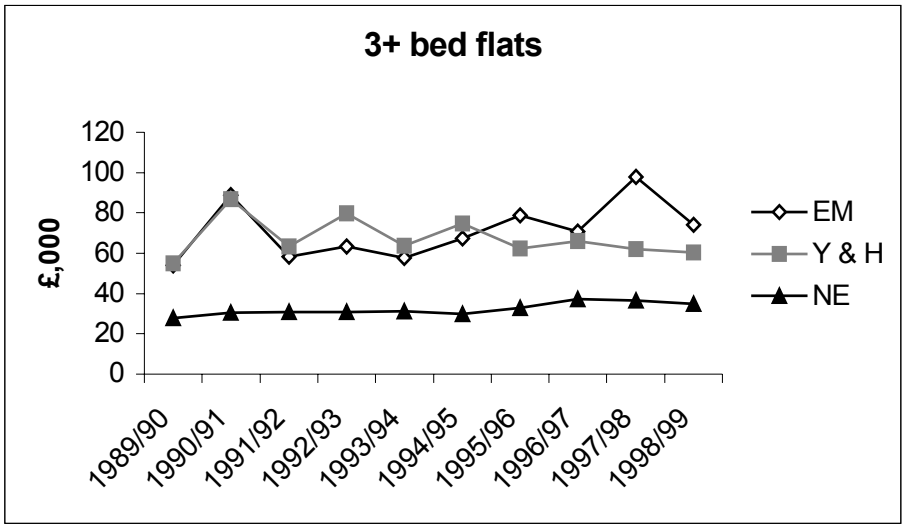
	1 flat	1 hse	2 flat	2 hse	3 flat	3 hse	3+flat	3+hse	4+flat	4+hse
89/90	82	100	91	90			98	95		
94/95	62	98	67	74			91	74		
98/99	42	94	56	51	92	59			100	98

Overall the smaller flat sizes fare better here, but all categories have small numbers in 1989/90. Only 1 bed flats had more than 20% of districts with more than 30 cases. Things improve over the decade, but 1 bed houses, 3 bed flats and 4+ bed properties still have less than 10% of districts with more than 30 cases in 1998/99.

3.4 The effect of small sample size on average house prices through time

As well as the possibility of a small sample size giving an average that differs from that of the population as a whole, the average from a small sample can also be increasingly affected by very high or low values. In addition, the sample varies over time, leading to erratic changes in average values through time. This is illustrated in Figure 3.1 below, using changes in average house prices for 3+ bed flats in three regions. The East Midlands and Yorkshire & Humberside both have low numbers of cases (averaging 9 and 18 cases respectively over the decade), while the North East has more (averaging 70). While the first two regions show erratic changes in house price over time, while the pattern for the North East is more consistent.

Figure A1: The effect of small sample numbers on average house prices.



The analysis therefore suggests that breakdown by property size at the district level, and in some cases at the regional level, could give unreliable indications of what is happening to the population as a whole. This has to be borne in mind for the following analyses. One way to deal with these low numbers might be to combine data for flats and houses for each bed size, but we have no way of knowing whether flat dwellers represent a different sub group from house dwellers in terms of their tenure choice.

Sources of data on house prices

There has been controversy over the difference in estimates of house prices and price rises emanating from both the Halifax and the Nationwide. Despite the Bank of England brining the two parties together to discuss this, no real light has been shed on the problem. At the time the dataset was initiated the Halifax had both greater numbers of cases and a better spread of cases across the country. The Halifax also then had the highest market share in the mortgage market, although this is no longer the case.

The Land Registry provides information on residential property prices. Data are available nationally, by county and Unitary Authority and down to local authority district level. Sales refer to 'the transfer of ownership for value of freehold and long leasehold residential properties, whether or not the purchase was supported by a mortgage.' (Land Registry). Before January 2000 all sales below £10,000 and over £1m are excluded, but from this date they will be included. Also excluded are transfers, conveyance assignments or leases at a premium with a nominal rent which are RTB or subject to an existing mortgage. Separate data are available for flats and houses, but at present cannot be supplied by bed size. Information is available on the numbers of cases involved. At present the records are not available electronically as far back as 1989/90, but work is in progress to make this available eventually. The price data are actual unadjusted averages, drawn from the great majority of all residential sales in England and Wales.

One of the first concerns is the size of sample for the categories by property size, at the regional and especially at the local authority district level. Small sample sizes can result in average values that do not accurately reflect the situation for the population

as a whole. It can be demonstrated that if all possible samples are taken from a population, the sample means would form a normal distribution with the same mean as the parent population, providing the size of each sample is more than 30. This holds true, whatever the distribution of the population (McCullagh 1974:66). In addition, the sample size needed for analysis depends to some extent on how the data are to be analysed. To produce a multivariate table with a certain number of cells in the table, one should aim to have at least 20 cases in each cell, and over 100 for any major control variable (Bernard 1995:479).

One possible resource may be available in the future which will help to overcome this problem. The DETR are currently in discussion with the CML and the major mortgage providers with a view to obtaining the entire datasets from most of the lenders. At present the CML has data from a 5% sample of mortgage providers. This small sample size limits its usefulness to the regional level and in addition the breakdown is by the number of habitable rooms rather than the number of bedrooms. In future, if the DETR obtains all the data, it will be possible to get good cover at the local district level, and possibly also the breakdown by bed size.

Table A5: Numbers of cases for Halifax house price data by region, 1989/90, 1994/95, 1998/99

GOR	1 bed flat	1 bed hse	2 bed flat	2 bed hse	3 bed flat	3 bed hse	3+ bed flat	3+ bed hse	4+ bed flat	4+ bed hse
1989/90										
EE	1271	521	820	3132			66	6131		
EM	192	189	183	3346			11	5342		
L	3894	213	3820	1946			656	6163		
NE	235	122	644	2378			124	4027		
NW	412	350	371	7700			27	11847		
SE	2630	798	1478	3878			100	7860		
SW	1118	445	780	3133			94	5389		
WM	453	243	433	3116			44	6109		
Y & H	305	652	247	5802			21	10165		
1994/95										
EE	699	369	722	3139			34	8710		
EM	116	181	134	3094			12	7242		
L	2375	128	3257	1918			698	7371		
NE	179	118	624	2284			77	4130		
NW	305	201	362	6191			32	11953		
SE	1429	483	1413	4474			116	12712		
SW	619	332	597	2982			60	7423		
WM	292	187	362	2752			29	7490		
Y & H	232	521	256	5160			16	9826		
1998/99										
EE	713	439	875	3443	55	6774			3	2661
EM	97	166	160	3250	14	6410				1972
L	2780	135	3737	1788	683	4972			34	1678
NE	137	76	580	1962	86	3204			11	801
NW	280	149	430	4987	26	9879			3	2909
SE	1626	512	1631	4652	142	9268			13	3710
SW	581	284	651	3305	63	5927			1	2069
WM	251	167	379	2769	28	6557				1794
Y & H	208	331	293	4657	24	8158			3	2228

Table A6: Numbers of cases for new let rents data by region, 1989/90, 1194/95, 1998/99

1989/90

GOR	1 bed flat	1 bed hse	2 bed flat	2 bed hse	3 bed flat	3 bed hse	3+ bed flat	3+ bed hse	4+ bed flat	4+ bed hse
EE	270	30	57	59			6	48		
EM	156	5	59	31			3	76		
L	384	31	317	134			44	253		
NE	182		81	57			4	87		
NW	386		160	117			7	106		
SE	105	8	59	68			1	79		
SW	135	2	60	45			8	67		
WM	270	1	54	74			5	102		
Y & H	317	6	102	43			3	181		
1994/95										
EE	641	113	13	270			33	1,443		
EM	468	97	23	156			4	1,254		
L	1,364	14	2	384			297	2,116		
NE	281	15	26	182			10	450		
NW	959	76	14	386			13	1,801		
SE	641	132	14	105			109	2,437		
SW	536	23	14	135			31	1,529		
WM	838	29	7	270			45	1,356		
Y & H	716	161	21	317			15	1,371		
1998/99										
EE	616	101	240	1,103	29	1,330			2	204
EM	405	50	77	919	5	753			1	69
L	972	37	1,092	744	257	1,628			53	489
NE	149	12	61	229		190				11
NW	727	72	354	1,025	19	1,005				132
SE	752	81	603	1,424	44	2,273			5	251
SW	502	89	303	932	19	1,271			1	110
WM	570	79	242	1,033	42	1,174			1	188
Y & H	333	83	155	560	9	686				126

Table A7: Numbers of cases for re let rents data by region, 1989/90, 1194/95, 1998/99

GOR	1 bed flat	1 bed hse	2 bed flat	2 bed hse	3 bed flat	3 bed hse	3+ bed flat	3+ bed hse	4+ bed flat	4+ bed hse
1989/90										
EE	283	2	117	44			11	51		
EM	486	5	177	194			32	209		
L	1,202	4	656	55			137	58		
NE	520	10	335	278			88	238		
NW	750	13	380	599			25	236		
SE	213	8	118	36			16	89		
SW	303		151	28			23	35		
WM	649	8	235	339			27	151		
Y & H	459	30	160	228			12	190		
1994/95										
EE	1503	264	1088	969			125	1126		
EM	1318	89	638	982			29	897		
L	3714	76	2615	445			690	651		
NE	1437	124	774	937			149	731		
NW	3203	164	1620	2803			90	1675		
SE	2158	327	1759	1152			204	1530		
SW	1124	81	855	696			69	593		
WM	2012	113	837	1244			70	946		
Y & H	1940	170	796	907			42	1014		
1998/99										
EE	2284	320	1456	1750	149	1576			4	119
EM	2171	155	775	1951	36	1512			1	80
L	4197	122	2707	651	604	771			45	155
NE	1313	72	622	977	62	818			2	42
NW	4773	315	2143	4160	99	2941			5	260
SE	3201	529	2829	2173	419	2430			5	123
SW	1599	187	1445	1516	89	1222			5	67
WM	3791	260	2066	2477	168	1779			7	168
Y & H	3149	320	1108	1790	60	1661			3	236

Appendix B

Calculating the user costs of owner occupation

The *user costs of home ownership* refers to the ongoing weekly running costs of home ownership. The focus for calculating these costs is to find the amount that a homeowner has to find from weekly income to pay for the home. There are several determinants of user costs. Not all have been included in our calculations, and the purpose of this section is to clarify the aspects and assumptions about the factors that have been included and excluded and to note changes in the formula used for the 1998/99 calculation.

Costs that are included:

1. House price
In comparing the costs of owner occupation with the costs of other tenures for those eligible for social housing, the first assumption is that the potential buyer will be looking at properties in the lower quartile of house prices. These data are provided by Halifax plc, and are broken down by property type (flats and houses) and size (measured by number of bedrooms)

2. Size of loan
The second assumption is that the loan to value (LTV) ratio will be the average for first time buyers in the lower quartile, which for 1998/99 is 83% (source: CML)

3. Type of mortgage
In the calculations for previous years the cost of a repayment mortgage, spread over 25 years has been used. There are three reasons for using this, rather than an interest-only mortgage, in which repayment levels would be nearer to the costs of renting. First, the 25 year principal and interest repayment mortgage was the most common type. Secondly, a potential owner has to consider how the principal will be paid off, and the more traditional way is the repayment mortgage. Finally, a principal and interest mortgage is virtually 100% interest in the first year, so the cost is likely to be similar to an interest-only mortgage. Although there are now a greater variety of mortgage packages available, the repayment mortgage will be used again.

The formula used is as follows:

=IF(A>30000,((PPMT(7.48%,1,25,30000)+IPMT(7.48%,1,25,30000,,0))
+(PPMT (8.31%,1,25,A-30000)+IPMT(8.31%,1,25,A 30000,,0)))/52,
((PPMT(7.48%,1,25,A)+IPMT(7.48%,1,25,A,,0)))/52)

Where A is the amount of the loan to purchase a property, 7.48% is the basic mortgage rate net of MIRAS, and 8.31% is the average building society interest rate.

4. Mortgage rate
The average base mortgage rate for the year is used, taken from the building society and bank basic mortgage rate, in Table 3, column 7 of CML Marketing Brief.

5. Loss of interest on equity/deposit
The opportunity costs of the loss of interest paid on funds used as a deposit on a house have not be included in calculations for the previous years. In principle this should be included at the building society savings rate net of tax, currently around 5%, and spread over the year. The amount will be greater the bigger the deposit, but one of the assumptions at the outset is that the owner will borrow at a high loan to value ratio, so the ratio of the lost interest to the cost of the loan overall will be very small. While this was the case when the LTV was 95%, it is more significant when the LTV is lower.

However it would be wrong to continue to omit the foregone interest on the deposit, especially if we now assume an LTV of 83%. A 17% deposit on a house costing £60k would have earned interest of around£10 per week at current rates. The effect of the loss as a percentage of the weekly payment is shown in the example below.

Example A

Average loss of interest on 17% deposit (£ p.w.)	% of weekly payment	Average loss of interest on 5% deposit (£ p.w.)	% of weekly payment
9.80	8.9	2.88	2.6

Using a savings interest rate of 5%, the interest for a deposit of 5% on a property valued at £60,000 would give a loss of £2.88per week to the household. Thus in calculations for previous years, this loss would have represented under 3% of the weekly costs of owner occupation. For a 17% deposit the loss is £9.80 per week. So by setting the LTV at 83%, the loss has increased to nearly 9% of the weekly costs of owner occupation, and is therefore significant enough to be included.

6. Life assurance
Decreasing term life assurance is included. The costs (used in connection with repayment mortgages) are given for a couple, male and female aged 22 and non-smokers, over 25 years. Decreasing term assurance currently costs £ 3.28 per month per £10,000 borrowed and £4.56 for £20,000. (Source: Nationwide)

7. Protection of earnings
With increasing uncertainty in the employment market and the recent changes in Government safety nets for homeowners, it is now more usual for insurance to be considered to cover the costs of the mortgage in the event of loss of earnings. The market for these products is constantly being updated and for the current 1998-99 year, figures for the costs of mortgage payment protection insurance (MPPI) are considered. There are a range of options, and therefore prices, offered (see table below). The rates are for monthly premiums, for each £100 of monthly benefit chosen by the borrower. The example of current rates is given below.

Example B

Max claim benefit period	Accident, sickness and unemployment	Unemployment only	Accident and sickness only
24 months benefit	£5.99	£4.20	£3.31
12 months benefit	£4.99	£3.39	£2.58

Source: Nationwide

Clearly here the final choice will depend in part on the buyer's attitude to risk, but gaps in employment are becoming more likely, especially amongst low-paid workers. To achieve a reasonable safety net to cover the mortgage costs in the event of loss of earnings, we assume a homebuyer has cover for accident, sickness and unemployment for the minimum of one year (£4.99 per £100 monthly benefit). This is then linked to the amount of income needed to secure the loan to give a final figure for the cost of MPPI.

8. Costs of buildings insurance.

Our aim was to get updated figures for the cost of buildings insurance for the range of properties by bed size. The Nationwide, who supplied data for previous years, is now reluctant to give figures for premia based on property size by numbers of bedrooms as the actual size of properties varies over time and rebuilding costs are based primarily on the floor area. Also, although premia are based initially on the cost of rebuilding, other factors, such as the age of the building, the post code and even the age of the home owner, lead to a wide range in the final level of premia.

The last year for which we had data for the full range of property types was 1996/97, but this was for buildings and contents insurance combined. For 1997/98 we have data for buildings insurance only, but data was for houses only and not flats. Comparing these figures with the 1996/97 data suggests that buildings-only premia are approximately a third of the combined price. Therefore, to get a figure for flats for 1997/98 we have taken a third of the 1996/7 figure and added 3% to this for the annual rate of inflation. From this a further 3% is added to the 1997/8 data to give imputed figures for 1998/99. See the example below.

Table B1: Costs of buildings insurance (£ per week); imputed figures in bold type

Property type	1996/7 buildings and contents	1997/8 buildings	1998/9 buildings
1 bed flat	3.86	**1.27**	**1.31**
2 bed flat	3.96	**1.31**	**1.35**
3 bed flat	4.05	**1.33**	**1.37**
1 bed house	5.59	**1.73**	**1.78**
2 bed house	5.88	1.92	**1.97**
3 bed house	6.66	2.60	**2.68**
All	6.10	2.21	**2.27**

For comparison;

Average cost of buildings insurance for all house types given by FES is £3.04 per week; average cost given by FRS is £3.65 per week. These are not broken down by house type

An estimate obtained from a building society for a new 2-bed terraced house in Cambridge is £1.54 per week; and for a pre-1920 2 bed house is £3 per week. An estimate for a pre-1920 3 bed house in Cambridge is £3.46 per week.

There are other property sizes in the database, e.g. 3+ bed flats and houses, for which the insurance values are estimated from the figures above. Flat size costs are increased by 2p per week and house size costs by 50p per week for the larger sizes. The full range of property insurance figures in the Database for 1998/99 is given below.

Table B2: Costs of buildings insurance (£ per week) for 1998/99 estimated figures in bold type

Property type	1998/9 buildings insurance figure
Bedsit	-
1 bed flat	1.31
2 bed flat	1.35
3 bed flat	1.37
3+ bed flat	**1.39**
4 and 4+ bed flat	**1.41**
1 bed house/bungalow	1.78
2 bed house/bungalow	1.97
3 bed house/bungalow	2.68
3+ bed house/bungalow	**3.18**
4 &4+ bed house/bungalow	**3.68**
All types	2.27

Costs that are not included

1. Contents insurance

While insuring the building is required by the mortgage lender, deciding whether or not to insure contents, and the level at which to insure, is at the discretion of the home owner. It is expected that a homeowner will keep the level of home contents insurance the same, whether renting or buying, or will adjust this to suit circumstances. Thus decisions regarding contents insurance are unlikely to vary with choice of tenure, and can be disregarded when comparing the costs of owning and renting.

2. Costs of depreciation

Depreciation is a factor affecting the homeowner but not the renter. This is not a problem in times of rising house prices, but can become a real cost if prices are falling. This aspect will not be included here because, as stated, we are interested in the costs that have to be met from the weekly income.

3. Repairs and renovations

Similarly, the level of spending on repairs and decorating is usually a matter for the individual homeowner. The average weekly expenditure, all households, for repairs, maintenance and decorations, for 1998/99, is £7.40 (source: Family Expenditure Survey). This is not available by property type or size, and is based on a sample survey of approximately 6600 households. Providing the property was in a satisfactory state of repair to warrant a mortgage being granted in the first place, the amount put by for repairs and maintenance may vary with the household's tastes, preferences and skills. In addition, repairs and maintenance beyond a certain basic level may add to the value of the property and thus be potentially recouped by the owner. Therefore, although it is recognised a something for which the owner has responsibility, this cost will not be included in the calculations.

4. Mortgage Indemnity Guarantee

The Mortgage Indemnity Guarantee has been included in the calculations for previous years as a cost that is almost certain to be borne by those seeking a LTV as high as 95%. The current MIG for 90-95% loans is 1.8% (source: Nationwide). Payment of MIG is not so prevalent for loans at 83%, and the Nationwide itself makes no charge for loans at this level. Changing the LTV from 95 to 83% and removing the MIG lowers the OO costs by an average of 18%

In addition, the cost of MIG can take the form of a single payment at the beginning of house purchase, or can be added to the value of the mortgage. Therefore it will not be included as part of the weekly costs for 1998/99.

Clearly there is some scope for looking at the effect of including and excluding some factors, as well as altering the levels of others such as the LTV. Sensitivity analysis is undertaken and reported below.

Results of sensitivity analysis

Starting with the basic model used in previous years with a 95% LTV ratio and including life assurance, property insurance and MIG, the percentage difference from this basic cost then is calculated for the variations below.

Table B3: Results of changes to the basic OO costs formula

	Variation	% change to base weekly cost
A	Change LTV from 95% to 83% and remove MIG	-17.27%
B	Include loss of interest to above	-9.9%
C	Include MPPI @ £4.99 per £100 to above	-5.95%

Thus changing the LTV from 95% to 83%, removing MIG, adding the loss if interest on the bigger deposit needed and adding MPPI results in a 6% decrease in the average weekly costs compared to the costs using the basic formula.. The range is from 6.4% to 4.3%, with higher values relating to larger properties and the lower values to smaller properties.

As mentioned above, the average weekly expenditure for all property types on repairs and renovations is £7.40. We may assume that first-time buyers on a limited budget will spend less than this. Adding in a basic cost across all property sizes of £5 a week (£260 a year) for repairs and maintenance increases the weekly OO cost arrived at in Option C by an average of 6.09%

Appendix C

Table C1 National and regional average house price change, 1989/90 to 1998/99

All sizes GOR	1989/90	1994/95	1998/99	%change 89-94	%change 94-98	%change 89-98
EE	£71,000	£67,000	£85,000	-6	27	19
EM	£51,000	£51,000	£60,000	1	17	18
L	£91,000	£86,000	£126,000	-6	47	38
NE	£40,000	£45,000	£52,000	14	16	32
NW	£47,000	£53,000	£63,000	12	19	34
SE	£78,000	£75,000	£104,000	-3	39	34
SW	£64,000	£59,000	£75,000	-7	27	18
WM	£54,000	£56,000	£69,000	3	24	28
Y & H	£46,000	£50,000	£57,000	7	15	23
ENG	£60,000	£61,000	£79,000	2	29	31
Range	**£52,000**	**£41,000**	**£74,218**			

2 bed house GOR	1989/90	1994/95	1998/99	%change 89-94	%change 94-98	%change 89-98
EE	£60,000	£51,000	£63,000	-15	24	5
EM	£41,000	£39,000	£44,000	-6	12	6
L	£81,000	£70,000	£106,000	-14	52	30
NE	£31,000	£36,000	£39,000	17	8	26
NW	£35,000	£40,000	£44,000	13	10	25
SE	£67,000	£57,000	£79,000	-14	38	18
SW	£55,000	£46,000	£57,000	-16	25	5
WM	£43,000	£44,000	£50,000	1	15	16
Y & H	£37,000	£40,000	£42,000	10	3	13
ENG	£50,000	£50,000	£60,000	1	19	19
Range	**£50,000**	**£33,000**	**£67,000**			

3+bed house GOR	1989/90	1994/95	1998/99	%change 89-94	%change 94-98	%change 89-98
EE	£85,000	£78,000	£101,000	-8	29	19
EM	£58,000	£58,000	£68,000	-1	17	16
L	£114,000	£105,000	£162,000	-8	54	41
NE	£48,000	£54,000	£62,000	11	16	29
NW	£56,000	£62,000	£72,000	9	17	28
SE	£98,000	£90,000	£128,000	-9	42	30
SW	£76,000	£69,000	£87,000	-10	27	15
WM	£62,000	£63,000	£78,000	1	24	25
Y & H	£53,000	£57,000	£65,000	7	15	22
ENG	£76,000	£77,000	£97,000	1	25	27
Range	**£66,000**	**£51,000**	**£99,000**			

Maps C1a-c: Percentage change in Average house price, 1989/90 to 1998/99

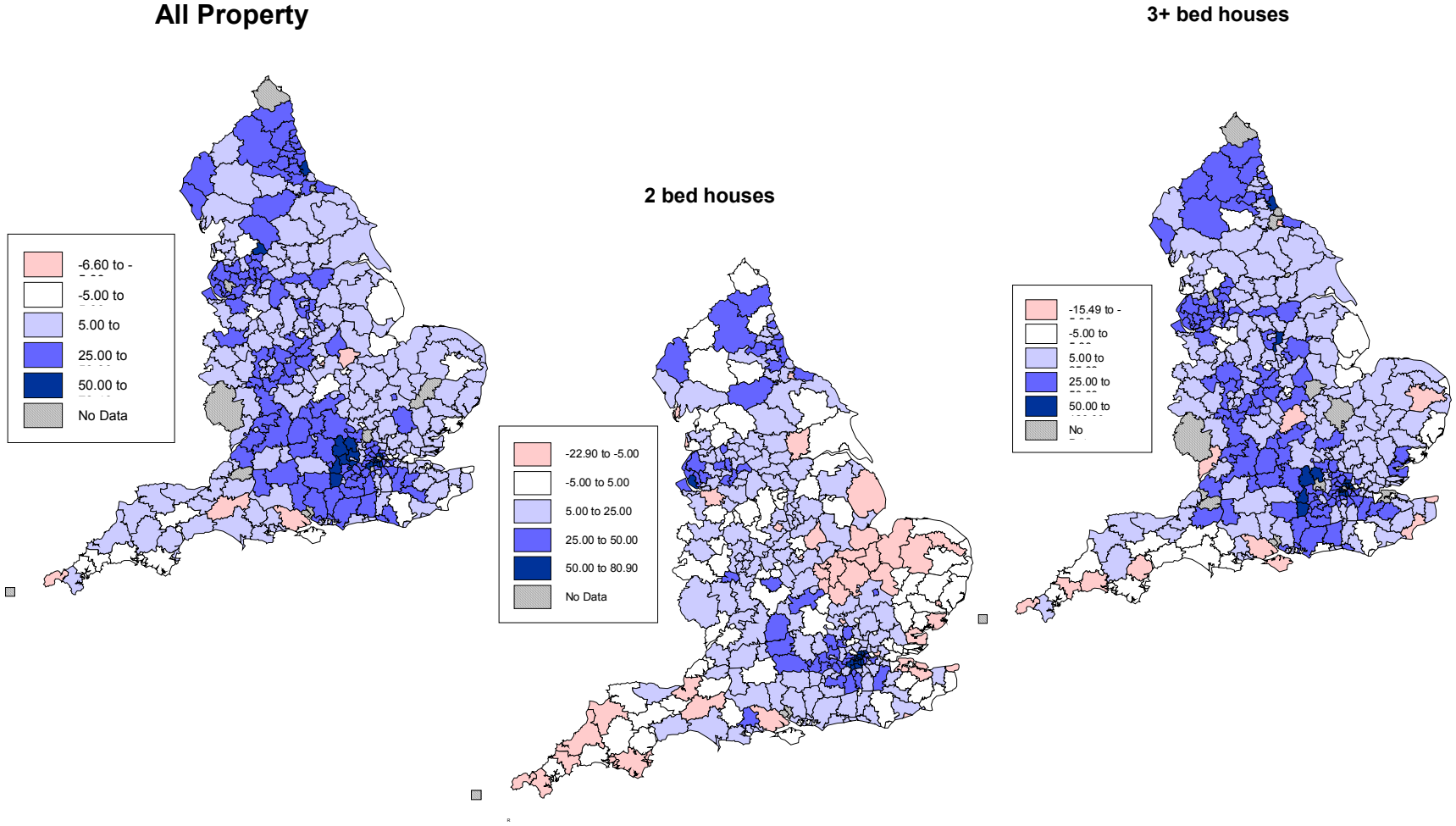


Table C2 National and regional LQ house price change, 1989/90 to 1998/99

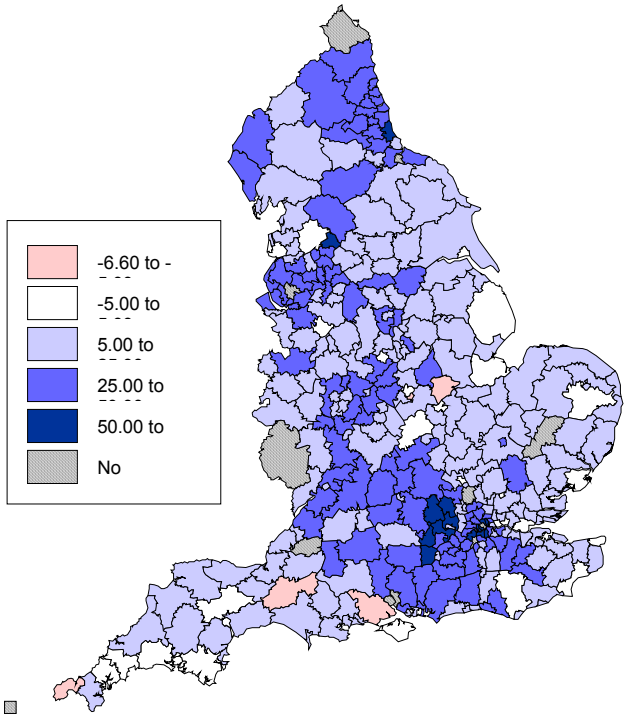
All sizes GOR	1989/90	1994/95	1998/99	%change 89-94	%change 94-98	%change 89-98
EE	£56,000	£49,000	£66,000	-12	34	18
EM	£39,000	£37,000	£46,000	-4	23	18
L	£74,000	£64,000	£97,000	-13	50	31
NE	£28,000	£33,000	£38,000	17	17	37
NW	£34,000	£38,000	£47,000	13	24	40
SE	£62,000	£55,000	£81,000	-11	48	31
SW	£51,000	£44,000	£58,000	-13	31	14
WM	£42,000	£41,000	£52,000	-2	27	25
Y & H	£34,000	£36,000	£42,000	7	16	25
ENG	£46,000	£45,000	£60,000	-3	34	30
Range	**£46,000**	**£32,000**	**£59,000**			

2 bed house GOR	1989/90	1994/95	1998/99	%change 89-94	%change 94-98	%change 89-98
EE	£53,000	£44,000	£53,000	-17	21	0
EM	£35,000	£32,000	£35,000	-10	11	0
L	£72,000	£60,000	£87,000	-17	46	21
NE	£24,000	£28,000	£30,000	19	6	26
NW	£27,000	£31,000	£33,000	14	9	24
SE	£59,000	£50,000	£66,000	-16	33	12
SW	£48,000	£40,000	£47,000	-17	18	-2
WM	£37,000	£36,000	£40,000	-2	11	9
Y & H	£29,000	£31,000	£33,000	8	4	12
ENG	£39,000	£38,000	£46,000	-4	21	16
Range	**£48,000**	**£32,000**	**£57,000**			

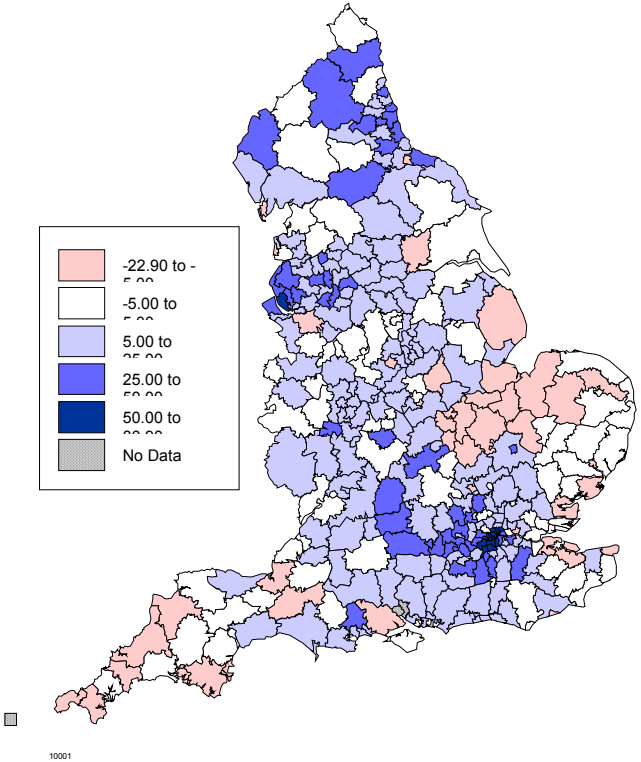
3+ bed house GOR	1989/90	1994/95	1998/99	%change 89-94	%change 94-98	%change 89-98
EE	£61,000	£54,000	£77,000	-11	41	25
EM	£41,000	£40,000	£51,000	-2	26	23
L	£86,000	£75,000	£121,000	-13	62	42
NE	£33,000	£37,000	£45,000	15	21	38
NW	£38,000	£42,000	£53,000	10	27	39
SE	£70,000	£61,000	£95,000	-13	57	37
SW	£56,000	£49,000	£66,000	-13	36	19
WM	£45,000	£44,000	£58,000	-3	31	28
Y & H	£37,000	£40,000	£47,000	6	20	27
ENG	£51,000	£50,000	£69,000	-2	38	35
Range	**£53,000**	**£38,000**	**£76,000**			

Map C2a-c Percentage change in LQ house price, 1989/90 to 1998/99

All Property



2 bed houses



3+ bed houses

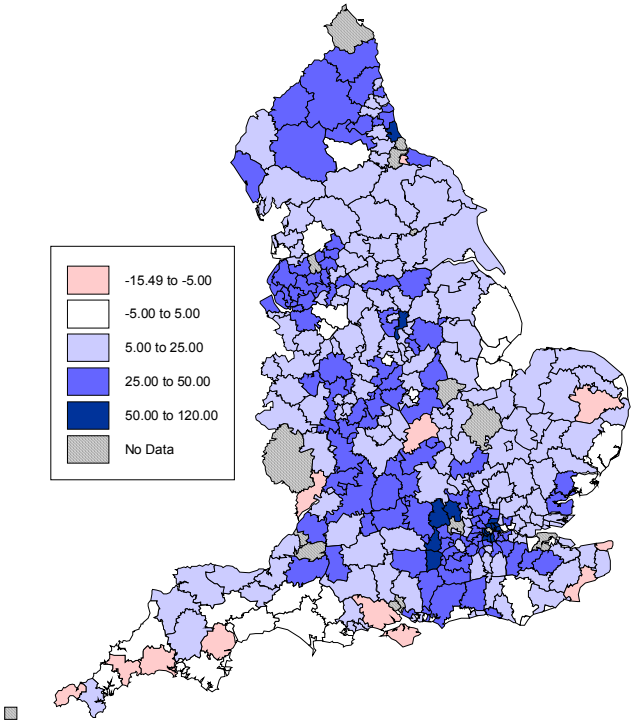


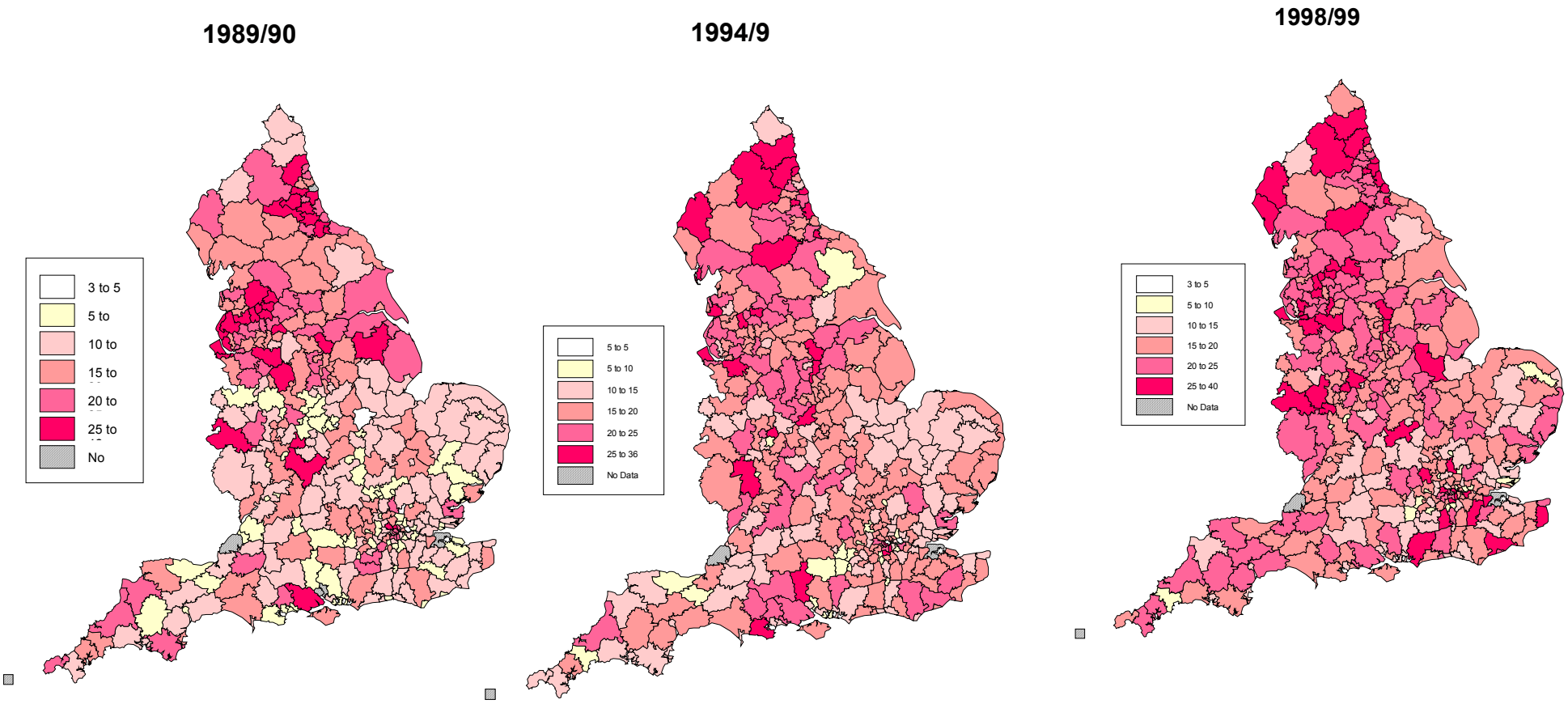
Table C3: Difference and % difference between average and LQ house prices

	diff			% diff		
All sizes	**1989/90**	**1994/95**	**1998/99**	**1989/90**	**1994/95**	**1998/99**
EE	£15,000	£18,000	£19,000	21	26	22
EM	£12,000	£14,000	£14,000	24	27	23
L	£17,000	£21,000	£29,000	19	25	23
NE	£12,000	£12,000	£14,000	29	27	27
NW	£14,000	£15,000	£16,000	29	29	26
SE	£16,000	£21,000	£24,000	21	27	23
SW	£13,000	£15,000	£17,000	20	25	22
WM	£12,000	£15,000	£17,000	23	26	24
Y & H	£12,000	£13,000	£15,000	27	27	26
ENG	**£14,000**	**£16,000**	**£19,000**	**23**	**26**	**24**

	diff			% diff		
2 bed hse	**1989/90**	**1994/95**	**1998/99**	**1989/90**	**1994/95**	**1998/99**
EE	£7,000	£7,000	£10,000	12	14	16
EM	£6,000	£7,000	£8,000	14	18	19
L	£9,000	£10,000	£19,000	12	14	18
NE	£8,000	£8,000	£10,000	24	23	24
NW	£8,000	£9,000	£10,000	23	23	24
SE	£8,000	£8,000	£13,000	12	14	17
SW	£6,000	£6,000	£10,000	11	13	17
WM	£6,000	£7,000	£10,000	14	17	20
Y & H	£8,000	£9,000	£9,000	21	22	22
ENG	**£11,000**	**£12,000**	**£14,000**	**21**	**25**	**24**

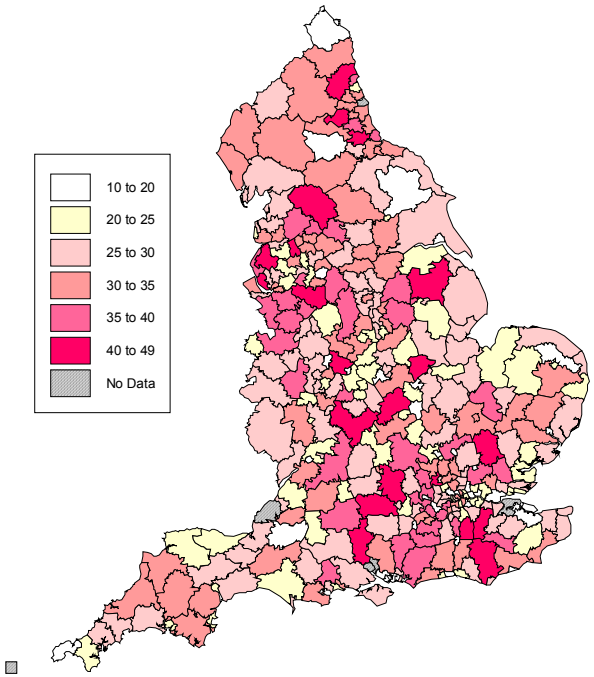
	diff			% diff		
3+ bed hse	**1989/90**	**1994/95**	**1998/99**	**1989/90**	**1994/95**	**1998/99**
EE	£23,000	£24,000	£24,000	28	31	24
EM	£17,000	£18,000	£17,000	29	30	25
L	£29,000	£30,000	£40,000	25	29	25
NE	£16,000	£16,000	£17,000	33	31	28
NW	£18,000	£20,000	£19,000	32	32	26
SE	£28,000	£29,000	£32,000	29	32	25
SW	£20,000	£20,000	£21,000	26	29	24
WM	£17,000	£19,000	£20,000	28	30	26
Y & H	£16,000	£17,000	£18,000	30	30	27
ENG	**£25,000**	**£28,000**	**£28,000**	**33**	**36**	**29**

Maps C3a-c: Percentage difference between average and lower quartile house prices, 2 bed houses

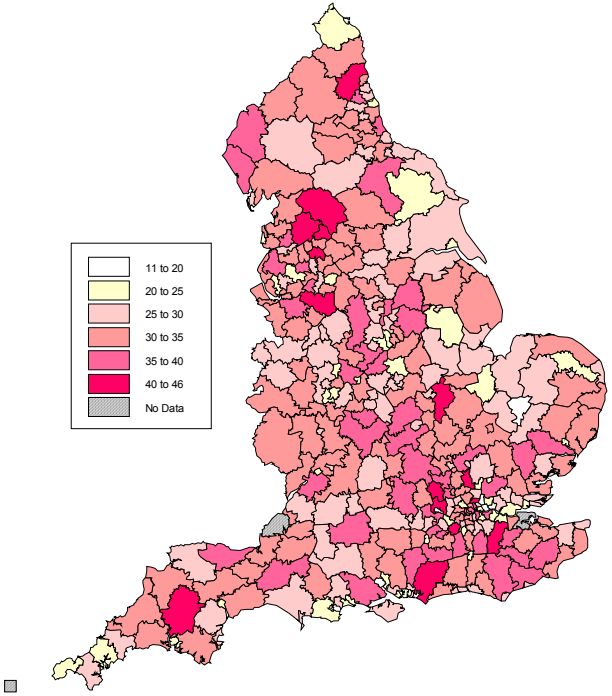


Maps C4a-c: Percentage difference between average and lower quartile house prices, 3+ bed houses

1989/90



1994/9



1998/9

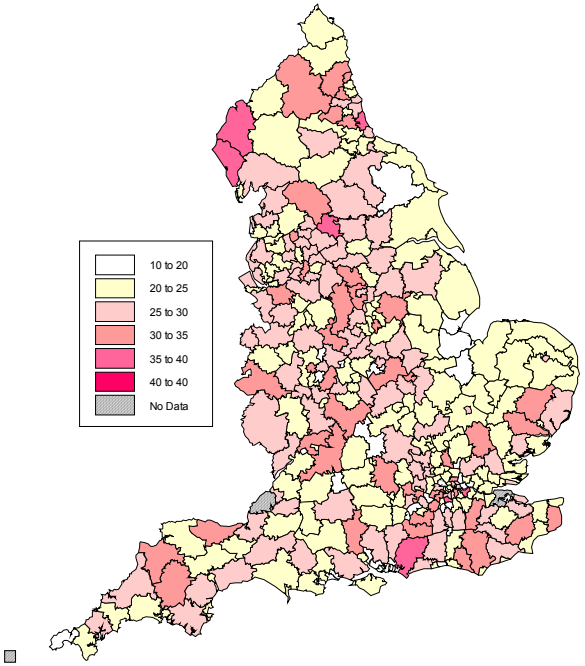
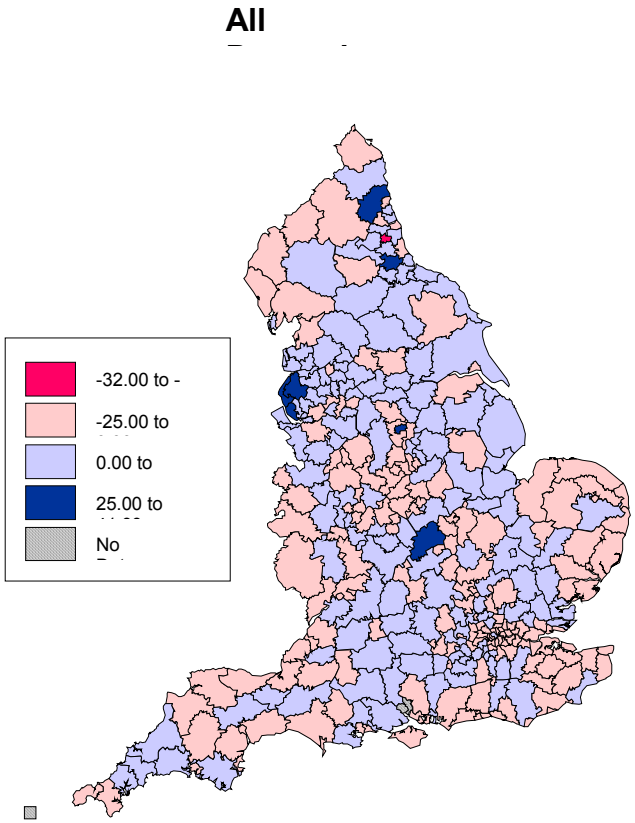
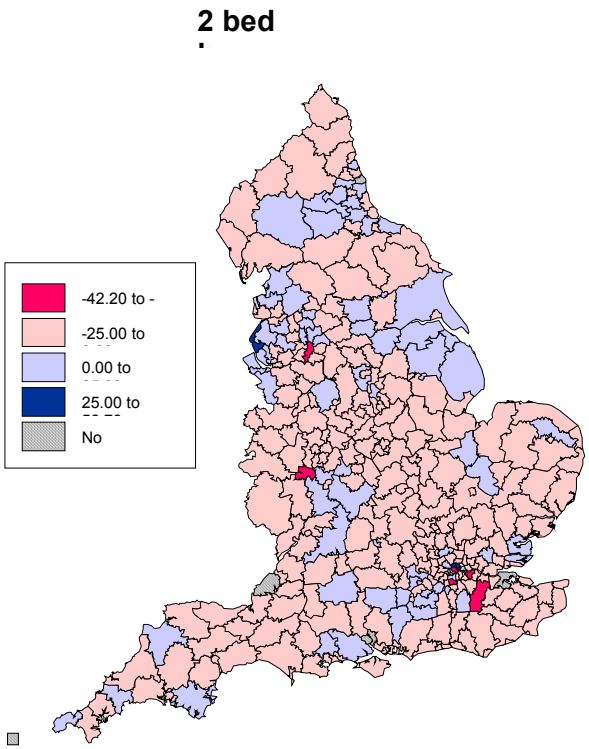


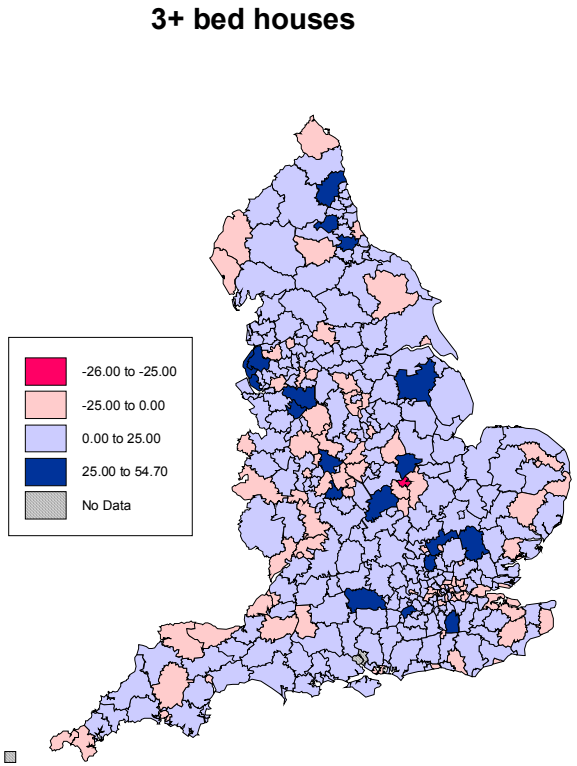
Table C4: National and regional differences between average and LQ % change in house prices, 89/90 to 94/95, 94/95 to 98/99, 89/90 to 98/99

All sizes	diff. 89 to94	diff. 94 to98	diff. 89 to98
EE	-6.56	7.76	-1.51
EM	-4.54	5.89	0.37
L	-6.83	3.00	-7.45
NE	3.61	0.73	5.04
NW	0.78	4.94	6.50
SE	-7.68	9.06	-2.59
SW	-5.90	4.61	-3.47
WM	-4.79	3.32	-2.64
Y & H	-0.12	1.69	1.67
ENG	**-4.63**	**4.84**	**-1.27**
2 bed house			
EE	-1.84	-3.42	-5.12
EM	-4.27	-1.54	-6.19
L	-2.74	-6.85	-9.85
NE	1.88	-1.70	0.01
NW	0.81	-1.51	-0.83
SE	-1.34	-5.45	-6.44
SW	-1.50	-6.28	-7.05
WM	-3.05	-3.93	-7.35
Y & H	-1.69	0.41	-1.30
ENG	**-4.40**	**1.75**	**-3.55**
3+ bed house			
EE	-3.83	12.21	5.87
EM	-1.84	9.22	6.85
L	-4.59	8.58	0.45
NE	3.76	4.70	9.74
NW	0.34	9.58	10.89
SE	-4.19	14.77	6.92
SW	-3.33	8.99	3.59
WM	-3.29	7.08	2.82
Y & H	-0.62	5.19	4.81
ENG	**-3.81**	**12.87**	**7.80**

Maps C5a-c: Difference between the percentage change in average house prices and LQ house prices, 1989/90 to 1998/99

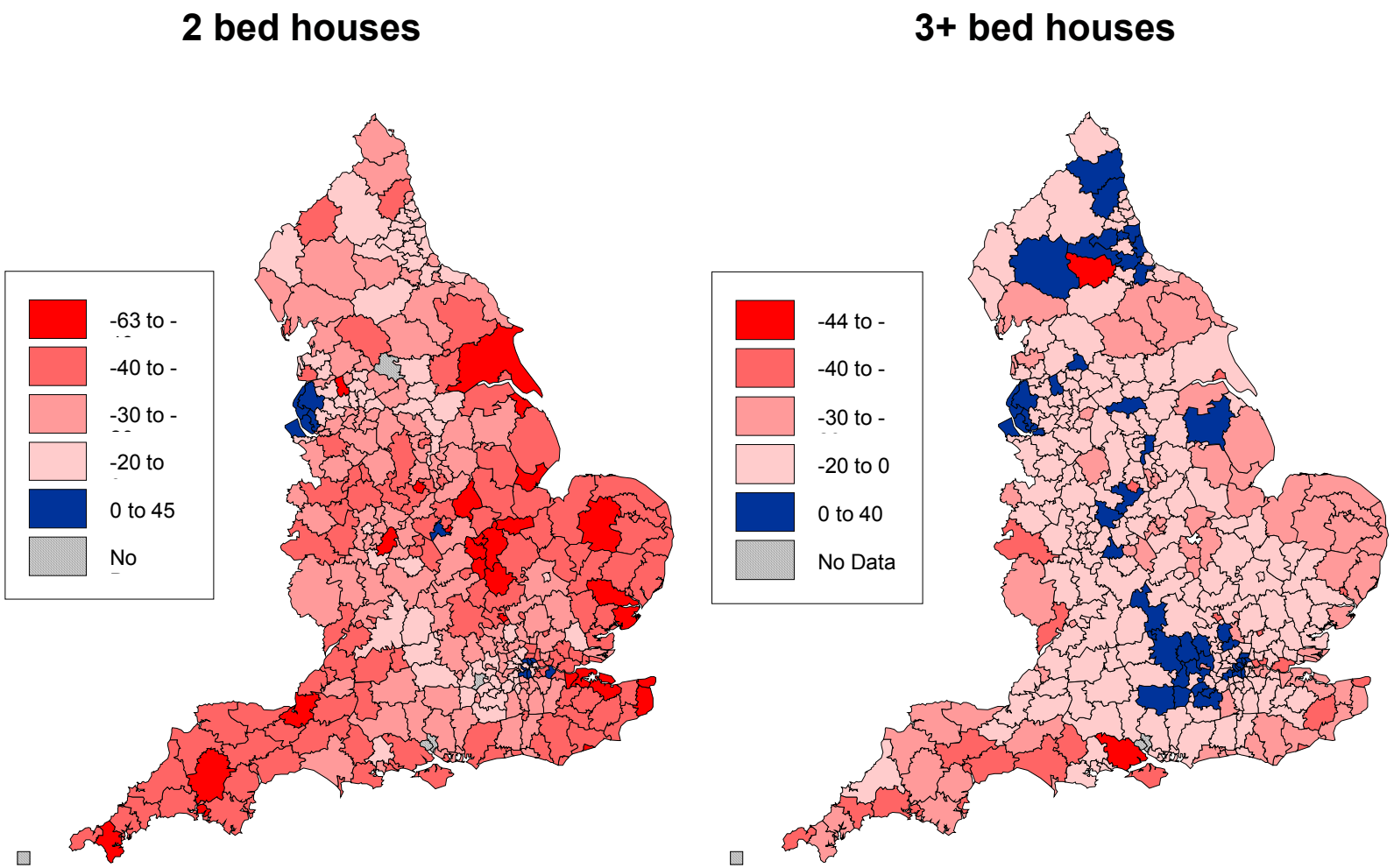




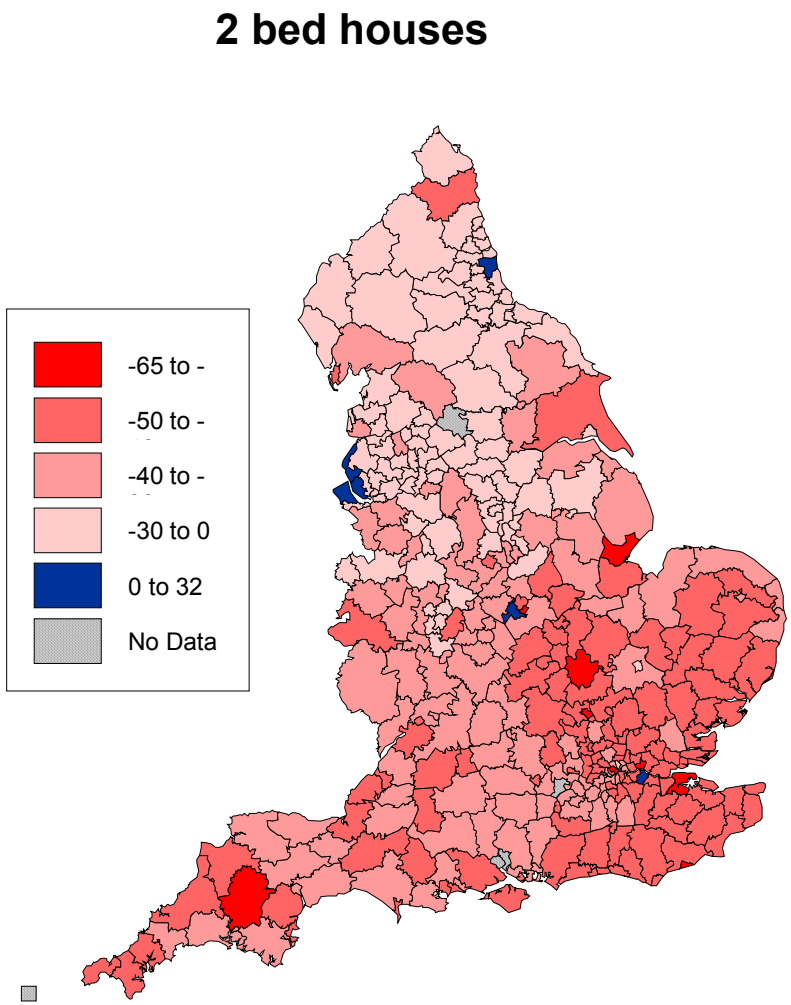


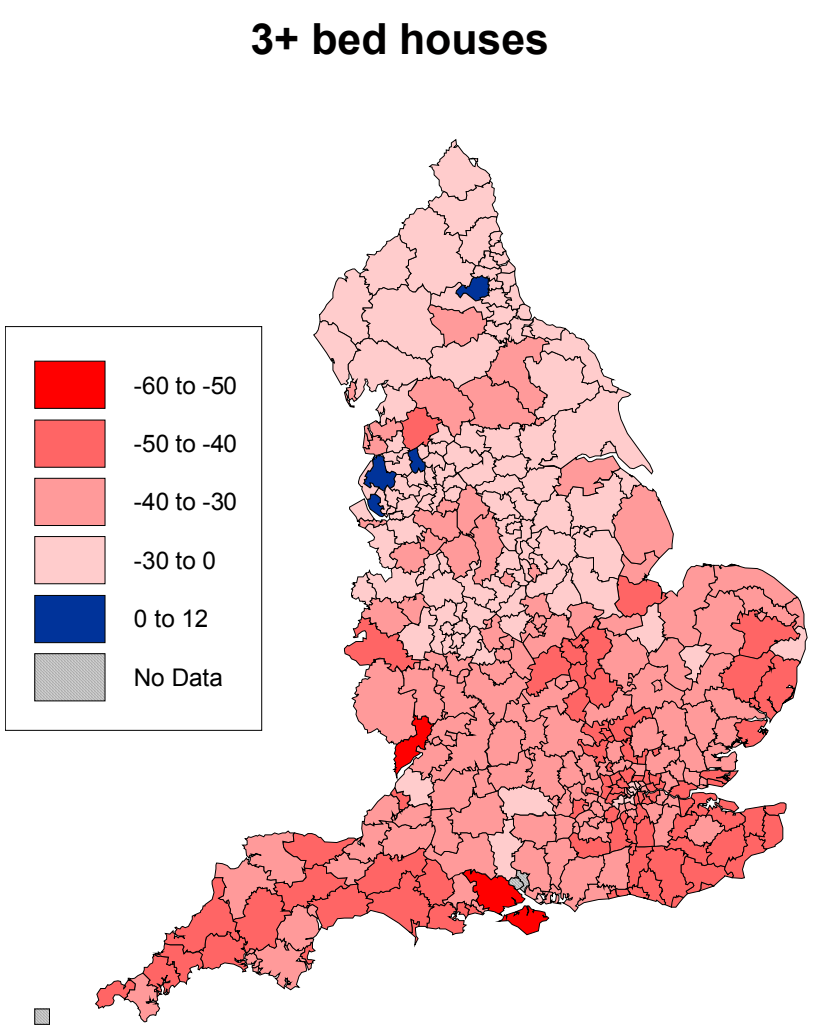
Appendix D

Maps D1a-b: Percentage change in OO costs 1989/90 to 1998/99



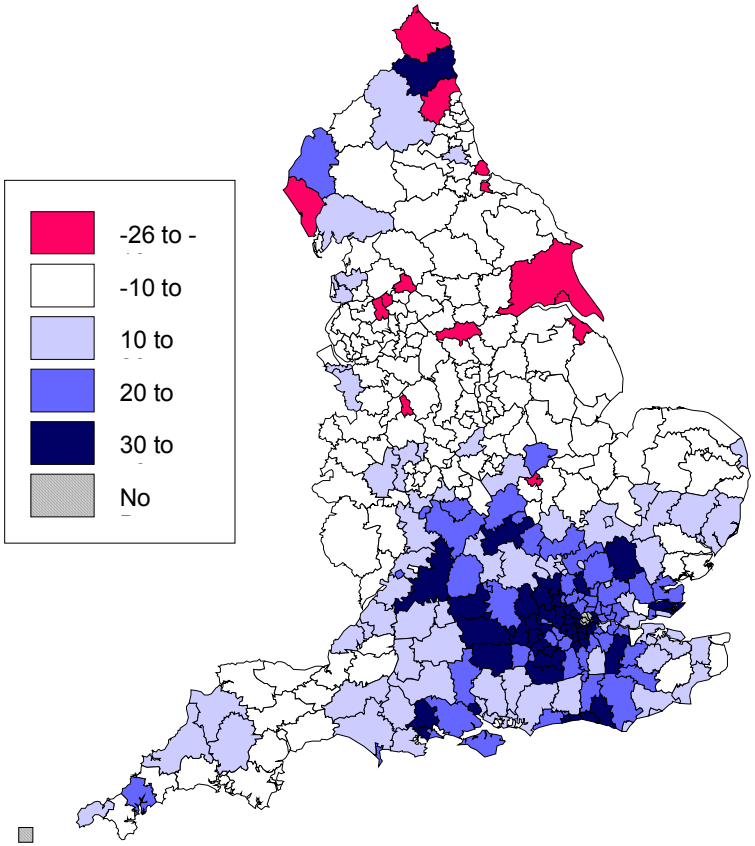
Maps D2a-b: Percentage Change in OO costs, 1989-94





Maps D3a-b: Percentage Change in OO costs, 1994-98

2 bed houses



3+ bed houses

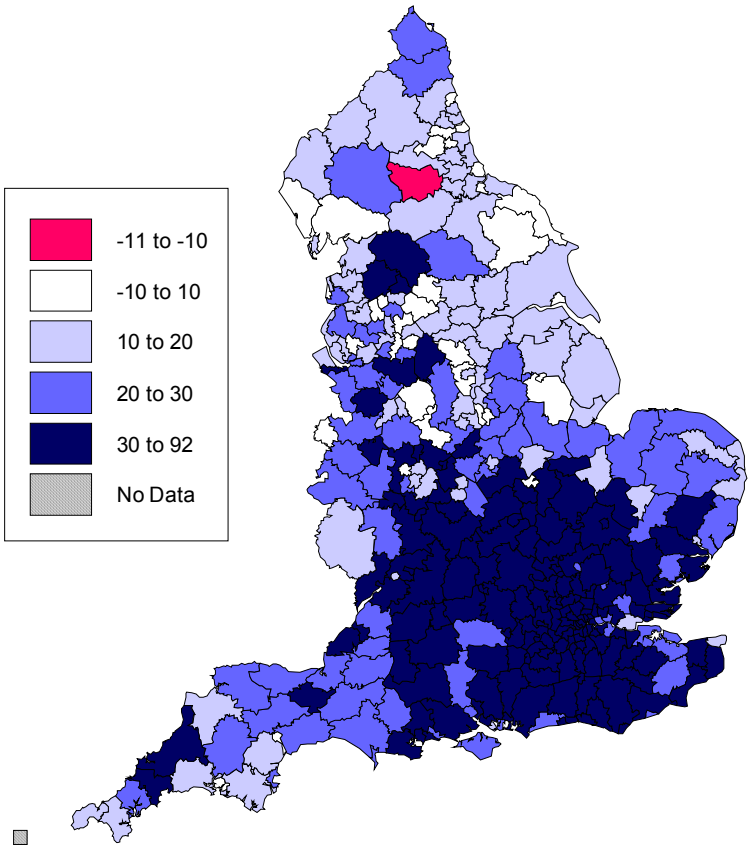


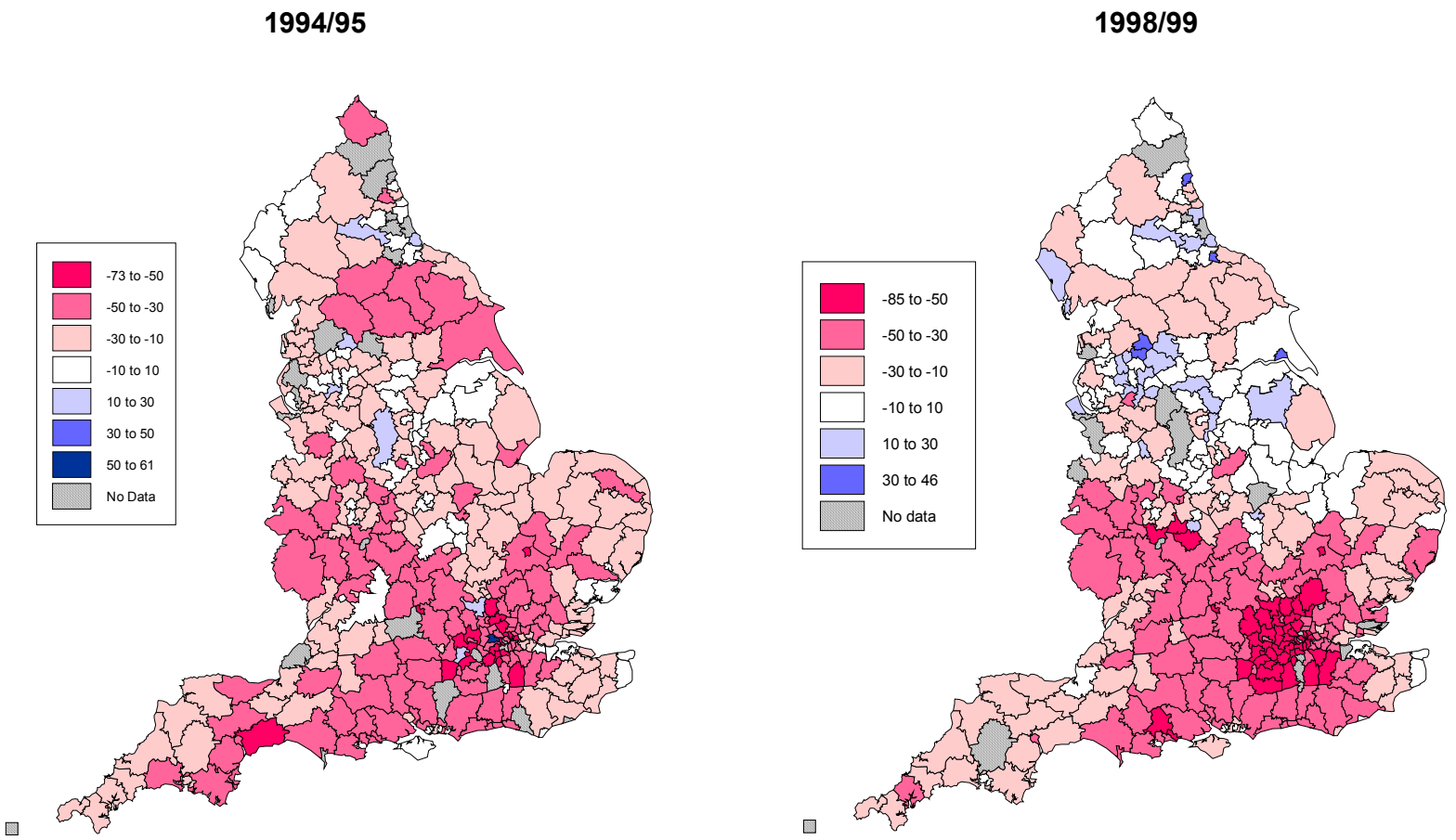
Table D1: Snapshots of percentage differentials between HANL and HARL rents and OO costs, 1989/90, 1994/95 and 1998/99 for 2 bed houses and 3+ bed houses

1989/90	% diff NL/OO	% diff RL/OO	% diff NL/OO	% diff RL/OO
GOR	**2 bed house**	**2 bed house**	**3+ bed house**	**3+ bed house**
EE	-73	-80	-70	-81
EM	-65	-71	-70	-72
L	-76	-81	-79	-83
NE	-41	-56	-54	-65
NW	-63	-66	-69	-72
SE	-73	-78	-73	-81
SW	-63	-74	-64	-77
WM	-66	-72	-69	-75
Y & H	-61	-65	-63	-68
ENG	**-64**	**-75**	**-69**	**-77**

1994/95	% diff NL/OO	% diff RL/OO	% diff NL/OO	% diff RL/OO
GOR	**2 bed house**	**2 bed house**	**3+ bed house**	**3+ bed house**
EE	-31	-41	-39	-48
EM	-15	-24	-27	-36
L	-43	-44	-46	-51
NE	-5	-23	-25	-35
NW	-10	-33	-28	-45
SE	-35	-40	-42	-48
SW	-27	-32	-34	-39
WM	-24	-33	-30	-40
Y & H	-13	-30	-23	-39
ENG	**-21**	**-36**	**-34**	**-45**

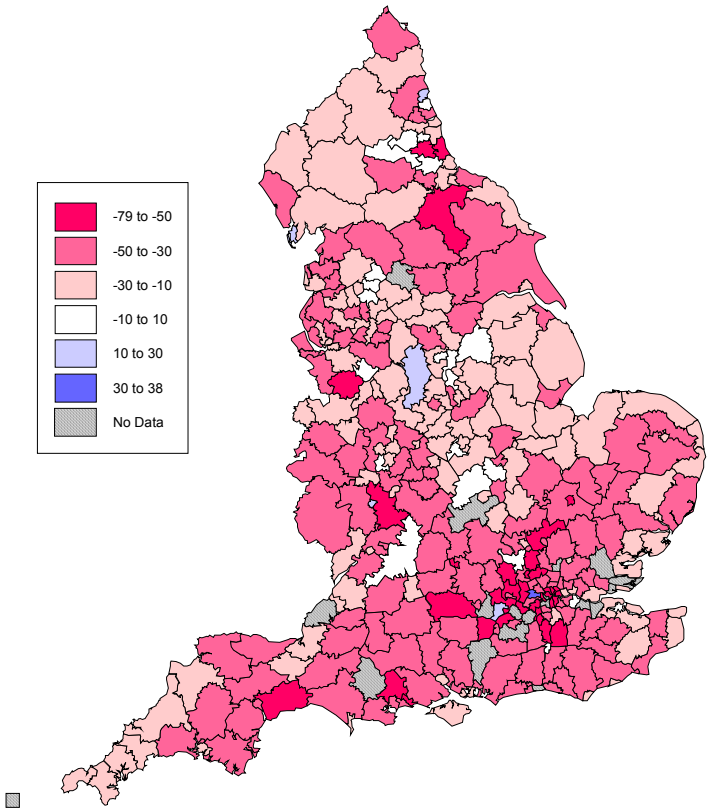
1998/99	% diff NL/OO	% diff RL/OO	% diff NL/OO	% diff RL/OO
GOR	**2 bed house**	**2 bed house**	**3+ bed house**	**3+ bed house**
EE	-34	-48	-39	-44
EM	-10	-3	-24	-24
L	-54	-64	-56	-57
NE	0	39	-17	-17
NW	-6	-13	-22	-31
SE	-41	-58	-48	-50
SW	-28	-19	-36	-37
WM	-21	-17	-30	-31
Y & H	3	-3	-10	-19
ENG	**-24**	**-30**	**-33**	**-40**

Maps D4a-b: Percentage difference between new let rents and OO costs, 2 bed houses

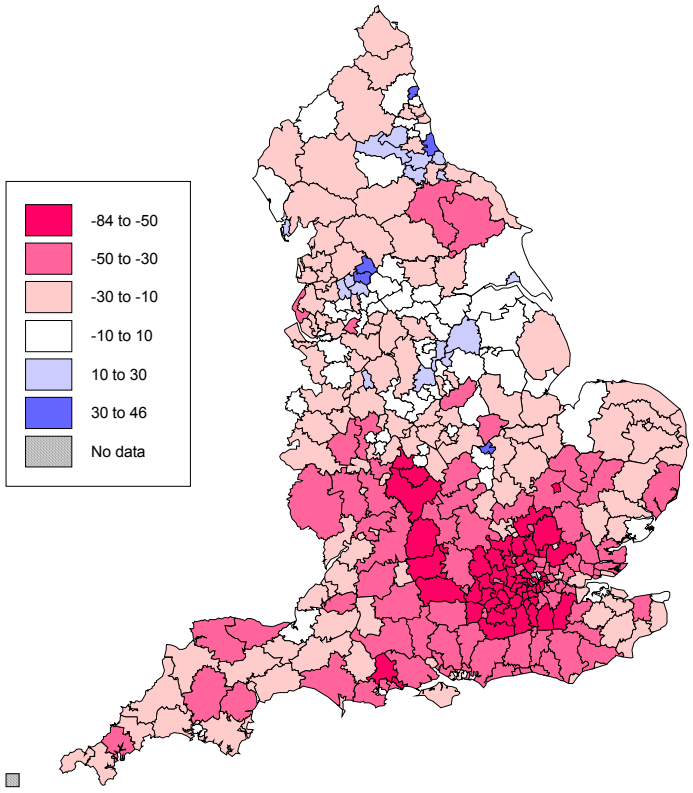


Maps D5 a-b: Difference between relet rents and OO costs, 2 bed houses

1994/95

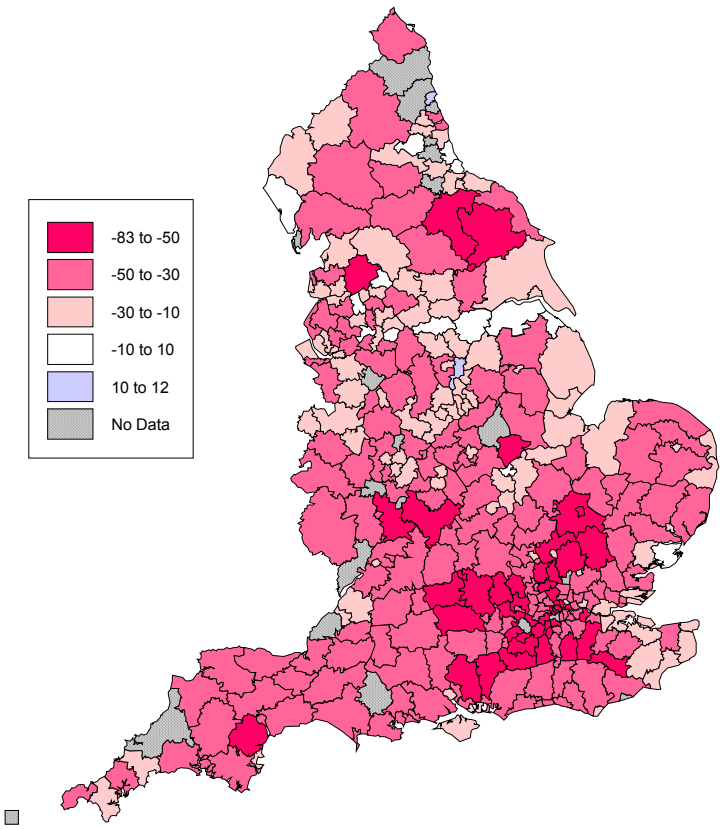


1998/99

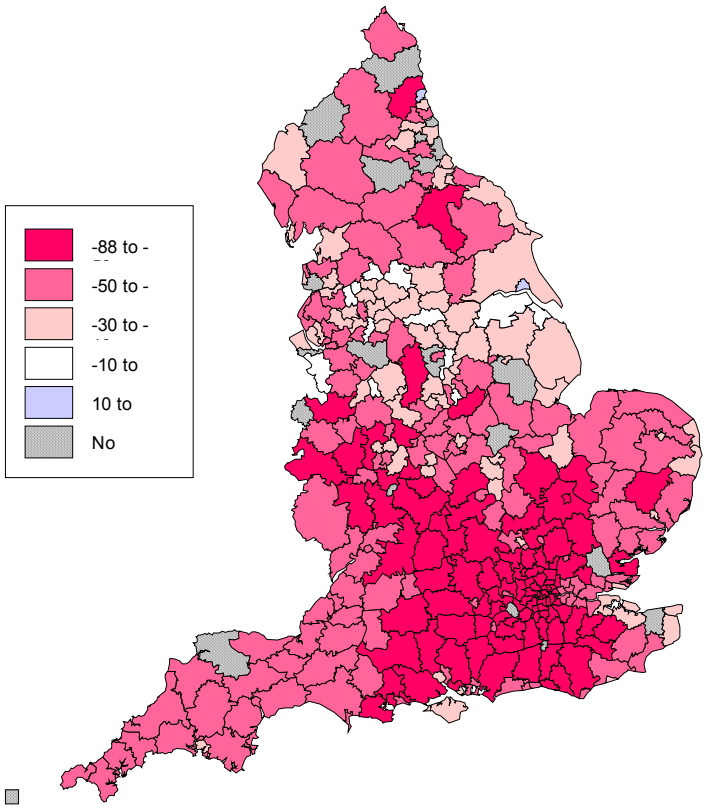


Maps D6 a-b: Percentage Difference between new let rents and OO costs, 3+ bed houses

1994/95



1998/99



Maps D7 a-b: Percentage difference between relet rents and OO costs, 3+ bed houses