# Helping People or helping Places? New evidence from London on social exclusion and the spatial articulation of the distribution of income

by

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#### **DRAFT**

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#### Abstract

That local job creation within a large urban labour market does not have a significant influence on the unemployment rates of local residents has long been documents (for example in Cheshire, 1979; Gordon and Lamont, 1982). Urban 'regeneration policy' continues to be targeted at small areas within large cities; usually those with high incidence of poverty and unemployment amongst local resident. This has been a continuing element in British urban policy, for example, from the 1970s to the City Challenge and its successor programme, the Single Regeneration Budget, in the 1990s. It appears likely to be an element in the proposed Action Plan for Europe's cities. An explicit aim of urban policy has been to 'regenerate local economies and provide jobs for local people'.

The mechanisms which have been invoked and explored to explain the failure of local job creation (or local job loss) to influence the unemployment rates of local residents have been twofold. The operation of housing markets and social housing systems and the way that these generate social segregation means that the source of unemployment differentials across urban neighbourhoods is primarily that poor neighbourhoods are where those with a higher propensity to be unemployed are concentrated. In addition it has been shown that interaction between local labour markets linked by significant commuting flows (as local labour markets within urbanised regions typically are) means that any differential opportunities that may result from local job creation are quickly diffused throughout the set of interacting labour markets. Commuting flows adapt so that characteristic specific unemployment rates tend to equality throughout the urbanised region.

This paper brings new evidence to bear on the ways in which housing markets operate within a wider urban region to sort and spatially segregate by socio-economic and ethnic characteristics. Using new estimates of the implicit prices of neighbourhood characteristics and amenities together with the associated structure of demand it shows that a price is paid in the housing market for neighbourhoods with a concentration of more skilled and favoured groups. These are 'normal' goods and the rich can outbid the poor to live in better neighbourhoods. A consequence is that increases in the degree of social polarisation in cities largely reflect an increasing inequality in the distribution of income in society at large. Furthermore housing markets work in ways which will re-enforce this exclusion of the poor over the longer term.

There is however an interaction between housing and labour markets and the place of individuals within the distribution of income. The paper examines new evidence relating to an additional mechanism which ensures that locally targeted training and job creation measures do not influence the local incidence of poverty or unemployment: local migration. Data were collected for one area of regeneration in west London, Harlesden. This area was the recipient of a City Challenge grant of £37.5 million between 1993 and 1998. It grew up around a large but declining urban industrial estate developed during the period between the two world wars. It contains large scale social housing projects of the 1960s and poorer 19<sup>th</sup> Century and early 20<sup>th</sup> Century city housing. It has a large concentration of ethnic minorities within the regeneration area and - despite evidence of some success in local job creation - an unemployment rate for local residents which has, during the regeneration period, increased against that for west London as a whole. It appears that while the training programmes associated with the regeneration effort did indeed improve the position of those who participated there was a high propensity for those who improved their position within the labour market to move out as a result. Those who improved their skills and moved out were replaced by people even less successful in the labour market than the outmovers had been before undergoing training.

#### I. Introduction

This paper brings together two apparently disparate pieces of research. Evidence is provided to show that housing markets operate in such a way that they spatially articulate the overall distribution within an urban region of the various socio-economic groups which typically constitute the

<sup>&</sup>lt;sup>1</sup> The work on the Reading housing market was joint with a long term collaborator in this field, Professor S.Sheppard of Oberlin College, Ohio. The study of Harlesden was undertaken jointly with Norman Flynn of the LSE. Grateful acknowledgement must also be made of the researcher on the Harlesden evaluation, Dave Jones.

population of an urban region. A neighbourhood does not exist in isolation but is a part off a wider urban housing market. Housing markets, including social housing, tend to segregate neighbourhoods by skill, income and social group (for evidence see, for example, Cheshire and Sheppard, 1995). Since better local amenities, housing quality or lower crime rates, are characteristics of neighbourhoods that command 'prices' (in the form of house price differentials), and richer households can definitionally afford to purchase more of such amenities, poorer households get relegated to less desirable neighbourhoods. If the distribution of household incomes becomes more unequal (as it did in the UK almost continuously from 1977 to 1995) then both geographical polarisation and the social exclusion of the worse off in worse neighbourhoods, become more intense. This process probably (here there is insufficient evidence to be sure) reinforces the existing disadvantages of the disadvantaged since it becomes even more difficult for worse off household to get access to better schools, training etc. and their experience of the labour market is likely to be eroded, making them even less employable. The problem is that, of course, the poorer households definitionally include those who are at a disadvantage in the labour market, have poorer skills and education, are demotivated or alienated from work. This means that housing markets tend to geographically concentrate the unemployed into disadvantaged neighbourhoods making it even less likely that simple job creation in the local area will reduce local unemployment rates. Thus a large part of the polarisation observed in British and US cities over the past twenty years represents simply the increasing inequality of the distribution of income in society at large (Joseph Rowntree Foundation, 1995).

In addition because access to better schools is a particularly valued neighbourhood amenity the children of the poor are systematically excluded from better schools by the operation of the housing market. Thus social segregation tends to become social exclusion.

Urban policy in Britain – and perhaps soon in Europe too - has increasingly attempted to intervene in small, deprived neighbourhoods. Such neighbourhoods are usually selected on the basis of particularly high rates of unemployment and concentrations of disadvantaged groups. Measures traditionally employed focused on housing improvements and job creation. The visible signs of distress in such neighbourhoods tend to be poor housing, both social and private, and joblessness. Increasingly in Britain, however, the emphasis has tended to move to training and skill upgrading.

Evaluation of early efforts showed that housing tended quickly to deteriorate after improvement or that the result of housing improvement programmes was that the original poorer inhabitants were replaced by incoming richer ones. Equally job creation and training programmes seem to have little effect on local incidence of poverty and unemployment. The second part of this paper provides new evidence that this, too, is at least in part explained by the way in which urban housing markets articulate social segregation. Neighbourhoods, even distressed ones, do not exist in isolation. They are part of wider and interacting housing and labour markets. Comparing the labour market success of matched samples of people living in the policy-targeted area throughout the five years of the programme, with that of samplesof people moving out and moving in reveals very different labour market success and take up of training. The evidence suggests that the targeted training does indeed assist some of the people living in distressed neighbourhoods but their resulting improvement in the labour market leads a significant proportion of them to move out. They are replaced by inmovers who have even less labour market success than those who remain in the neighbourhood throughout.

These findings would seem to have important implications both for the underlying causes of social exclusion and the increased incidence of distressed neighbourhoods and for the evaluation of the success of policies targeted on the improvement of distressed neighbourhoods.

The structure of the paper is as follows. After a brief discussion of the previous literature on housing markets, local labour markets and social segregation the paper provides detailed evidence from the study of an urban housing market in the South East of England within the influence of London. This

provides estimates both of the implicit prices of a range of neighbourhood characteristics and of the structure of demand. This evidence supports the interpretation that housing markets work in ways which directly relects the overall distribution of income in the socio-economic composition of neighbourhoods.

Evidence is then provided of the characteristics of matched samples of people moving out of, into and staying within a distressed neighbourhood of London which was the target of a major policy initiative from 1993 to 1998.

There is then a concluding section which tries to draw some policy conclusions.

#### II. The impact of local job creation on local unemployment

Successfully creating new jobs in a local area does not necessarily assist local people to find jobs; indeed the two goals of creating jobs and reducing unemployment amongst local residents are almost separate. It may even be most effective to treat them as separate goals with clear, institutionalised lines of communication and co-ordination between the groups responsible for their implementation. The reasons why they are separate goals relate to how housing and labour markets work and to the specific reasons why local residents in a particular area have a comparative lack of success in the labour market.

These conclusions are the logical implications of three decades of research on urban economies and the interaction within them of labour market and housing market adjustment processes. Research has shown that within urban areas labour markets interact strongly. This means that even within areas as large as a typical London Borough, let alone within areas as small as the Harlesden City Challenge (HCC) area, local job creation has no discernible impact on unemployment rates of local residents after about a year.

Gordon and Lamont (1982) found evidence of changes in commuting flows in response to localised job loss or job creation within the London economy which they concluded largely accounted for this finding. Because local labour markets within large cities are open to inward and outward commuting the effects of local changes in employment are quite quickly diffused throughout the urban area leaving the position of local residents relatively unchanged. If new jobs are created, some are immediately taken by non-residents of the area. The greater the mismatch between the skills of local residents and the characteristics of the jobs created, the larger this proportion is likely to be. Regardless of the importance of this initial leakage, relative unemployment rates tend to return to their original levels because of further adjustments that occur. If successful job creation in a small area of London means that it becomes relatively easier to find work there, normal job market turnover and search patterns tend to eliminate this differential. The process of elimination will continue as long as people who come onto the job market find it easier to get work in that area than in surrounding areas. This process of adjustment also ripples outwards from the original location where the additional jobs were located to surrounding areas.

### I. The Housing Market Data samples collected

To estimate the implicit prices paid for housing, land, amenities and neighbourhood characteristics it is first necessary to collect a sample of data. The first step was to obtain samples of individual residential properties for a city<sup>2</sup>. Following a methodology developed and used in previous research

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<sup>&</sup>lt;sup>2</sup> In fact the study from which this paper draws has collected similar samples for three cities, Reading, Darlington and Nottingham but the analysis of the Reading sample is furthest advanced.

(Cheshire and Sheppard, 1995; 1998), samples of houses offered for sale were collected from estate agents. To each of these properties a survey was sent asking the householder to provide information about the occupants of the structure, including total household income, duration of occupancy of the house, the composition of the household, and the location of workplace(s).

In the summer of 1993 a sample of 872 residential properties was identified. In the autumn of that year surveys were sent to the households and 413 of these surveys were ultimately returned, providing a response rate of 47.4%. Attempts were made to locate each of these properties on Ordnance Survey maps to identify the precise location and the amount of land associated with each property. A total of 488 properties were located, which included 375 properties from which surveys had been returned and an additional 113 properties for which complete structure data were available so locations were identified to enlarge the sample for estimation of the hedonic price function. A few observations were missing some information concerning the structure, so that the final estimates of the hedonic price function reported below are based on evaluation of 461 observations.

#### The Hedonic Model and Prices

#### A. Characteristics

The basic hedonic model to be estimated has been introduced in other papers (Cheshire and Sheppard, 1995; 1998). It generally follows the 'linear Box-Cox' structure which is widely used in the analysis of housing markets. The parameters to be estimated and how they are defined are shown in Appendix Table A1. Compared to the models estimated on the 1984 data for Darlington and Reading and reported in Cheshire and Sheppard, 1995, the more significant changes include:

- The dummies for 'superior' secondary school catchment areas have been dropped and replaced by a continuous variable which is the percentage of pupils obtaining 5 or more GCSE passes at C or better for the secondary school in the catchment area of which the house is located.
- 2) The maximum altitude within the kilometre square within which the house is located has been replaced by the difference between the minimum and maximum altitude.
- 3) The age of the structure is now available from the household surveys and has been included.
- 4) The amenity land variables are now weighted averages in the kilometre square within which the property is located and all contiguous kilometre squares.
- 5) In Reading a dummy for Thames frontage has been included and it is probable that a measure for the impact of the coal industry will be included for Nottingham.

As with the previous work considerable effort has gone into unbundling the composite price of land. It has long been recognised that housing (and, for that matter, commercial or industrial buildings) is a composite good. The price that is paid for a house reflects the various characteristics of the house - its floor area, for example, or the facilities it enjoys, its age and design. Housing, however, is not only composed of characteristics relating to the structure itself but also of characteristics determined by location. These latter include the classic element of urban economic models, accessibility to employment. There is another set of location determined characteristics, however, such as the quality of local public goods and of the microenvironment, the characteristics of the immediate neighbourhood, the amenities (and disamenities) which the location provides access to. The most obvious categorisation of the characteristics of a house are, therefore, into those which are structure or dwelling specific and those which are location specific. Since the set of location specific characteristics is tied to the parcel of land on which a house stands (rather than to the structure itself) what this implies is that land, also, is a composite good. Theory explains the price of land as pure-space-with-accessibility, what we might call the 'pure price of land', but the actual price of land observed in markets incorporates the values of all the location specific

characteristics with which the particular parcel of land is endowed. As has been shown (Cheshire and Sheppard, 1997) plots of urban land are seething with these location specific and valuable characteristics to such an extent that their actual price may be dominated by these rather than their value as space-with-accessibility. But theory only tells us about the determination of this latter price and for analytical purposes this may be the price in which we are interested.

#### B. Unbundling the composite price of land

The practical importance of these arguments can be illustrated with the results of a study reported more fully in Cheshire and Sheppard (1995). One unusual feature was the incorporation in this model of a flexible rent function:

$$r(d,\theta) = \beta_1 e^{d \cdot (\beta_2 + \beta_3 \cdot \sin(n \cdot \theta - \beta_4))}$$
(1)

where:

d = distance from city centre

 $\theta$  = angle of deflection from the East

 $\beta_i$  = parameters to be estimated

n = an integer, the value of which is to be determined by investigation.

This rent function was used again on the 1993 data set for Reading. Since theory suggests that the pure price of land is, other things being equal, determined by the cost of transport and this may not be radially symmetric but vary according to the topography and transport infrastructure of a given city, this rent function allows for multiple radial asymmetries in land rents to emerge. These will be determined by the estimated parameters  $\beta_3$  and  $\beta_4$  and the value assigned to n. The form is only 'monocentric' in the limited sense that along any linear path from the city centre land rents will increase or decrease at a constant rate. The location specific characteristics of the houses included as wide a range of neighbourhood amenities and socio-economic characteristics as was possible while avoiding problems of multicolinearity in order as far as possible to arrive at an unbiased estimate of the pure value of land.

Tables 1 and 2 report the results of fitting the hedonic models to the Reading 1993 data set. Provisional results for a similar data set for Darlington, collected in 1997 are given in Appendix Table A2. Table 2 reports the implicit prices associated with these hedonic models for Reading (as Table Appendix A2 does for Darlington).

#### C. Implicit Prices

Using this estimated hedonic price function, we calculate the hedonic price for each individual attribute in the now standard way (see Sheppard, 1999 forthcoming). The 'annualised' prices are actually used in estimating the demand systems reported below. The results of this hedonic model are reported in Table 1. The next table, Table 2, reports the capitalised hedonic prices, indicating the marginal contribution to the purchase price of a house in Reading made by each of the attributes included in the hedonic model. This gives the contribution of each attribute to the purchase price of the structure.

**Table 1: Hedonic Model for Reading 1993** 

Log of Likelihood = -712.5053 Number of Observations = 461

\*\*\*\*\* White Heteroscedasticity adjusted Standard Errors \*\*\*\*\* Coeff Std. Error t-Stat P-Value Var в0 0.437110 0.118691 3.682763 0.000 0.003799 **BGCSE** 0.001739 2.184584 0.029 0.030069 0.015944 1.885924 0.060 **BBEDS** 0.060670 0.014896 4.073000 0.000 **BWC** 0.007586 0.003638 2.084947 0.038 **BSQFT**  $\begin{array}{c} 0.012405 \\ 0.005349 \end{array}$ 0.028 0.027378 2.207081 **BBCOL** 2.026850 **BAFIN** 0.010842 0.043 0.004010 1.984789 0.048 **BINDU** 0.002020 0.003176 0.002377 1.336272 0.182 BAMN1 0.294 0.000789 1.050102 BAMN2 0.000828 0.000446 0.000923 0.483604 0.629 BALT 0.064359 0.023384 2.752322 0.006 BETA1 0.018380 2.909088 **BCENTH** 0.053468 0.004 **BSING** 0.221197 0.046069 4.801434 0.000 0.000 0.118957 0.033517 3.549148 **BSEMI** 0.264 0.027952 0.024976 **BTERR** 1.119186 0.225 0.023574 0.019414 1.214280 BST2 BST3 0.015061 0.080320 0.187513 0.851 0.035007 0.051695 0.677188 0.499 BST4 0.139 **BOSPARK** 0.033691 0.022706 1.483796 0.043190 0.023075 1.871725 0.062 **BSINGAR** 0.081996 0.034766 0.019 2.358534 **BDBLGAR** 0.072291 4.701350 0.000 0.339868 **BTHAMES** 0.007740 0.016987 0.455636 0.649 **BNEWC** 0.027960 0.020910 1.337165 0.182 BYEAR2 0.047694 0.017135 2.783457 0.006 BYEAR5 0.002 BYEAR6 0.110598 0.034768 3.181045 5.931277 0.000 0.119163 0.020091 SIG **GAMM** -0.069532 0.075813 -0.9171540.360 7.909666 0.000 LAM1 0.847489 0.107146 0.127203 LAM3 0.207194 1.628837 0.104 -0.000831 BETA2 0.000358 -2.318827 0.021 -0.000138 0.000122 -1.129250 0.259 BETA3 -3.264549 0.708558 -4.607313 0.000 BETA4

Table 2: Estimated hedonic prices for Reading, in 1993 £'s.

	Mean	Std Dev	Min	Max
Land Rent per 100 m <sup>2</sup>	372.75	168.58	53.13	1468.05
Bedrooms	2800.55	1604.00	1047.07	13917.82
WC	6228.88	3426.33	2348.24	29054.01
Sqft	424.70	227.07	183.03	1946.99
Blue Collar	2274.84	1376.66	781.80	11623.50
Ethnic	831.73	498.46	316.27	4244.88
Industrial	224.38	138.74	81.55	1175.37
Acc Open Space	226.70	141.81	78.44	1192.70
Inacc Open Space	59.89	34.59	21.22	264.93
Elevation	32.97	19.69	10.56	156.29
GCSE	243.89	147.67	85.50	1245.42
Street2	2644.06	1645.37	912.43	13947.17
Street3	1689.24	1051.19	582.94	8910.59
Street4	3926.38	2443.34	1354.95	20711.32
Detached House	24809.45	15438.62	8561.45	130867.59
Terrace	3135.10	1950.93	1081.88	16537.34
Semi-Detached	13342.21	8302.70	4604.24	70378.97
Central Heat	5996.97	3731.84	2069.48	31633.47
Off-Street Parking	3778.78	2351.49	1304.01	19932.73
Single Garage	4844.19	3014.48	1671.67	25552.66
Double Garage	9196.67	5722.97	3173.66	48511.59
1915-1945	3135.99	1951.49	1082.19	16542.08
1976-1990	5349.36	3328.84	1846.00	28217.38
After 1990	12404.67	7719.27	4280.71	65433.50
New Construction	868.12	540.22	299.58	4579.24
Thames	38119.59	23721.35	13154.62	201077.35
Distance to CBD	406.88	191.99	55.97	964.35
After Tax Income	28609.58	23887.00	4749.72	74560.20
Structure Price	94989.91	54174.01	35445.12	453783.67

The differences in the implicit prices between Reading and Darlington are interesting and illuminating in themselves. Note that the value of land per square metre in Reading is almost 3.5 times that of land in Darlington (Table A2) and if adjustments were made for the change in prices from 1993 to 1997 the difference would be even more striking. The value per square foot of housing space in Reading is almost twice that in Darlington. Both of these differences are likely to reflect the greater pressure of housing demand in the south of England combined with the comparatively more restrictive planning regime which prevails in Reading. Support for this interpretation is provided by comparing the prices of attributes that are 'reproducible' so that their cost should reflect labour costs. For example the price of bedrooms and central heating is almost the same in the two housing markets.

Other differences in estimated prices reflect specific features of the two cities. For example Reading is relatively hilly and sites in neighbourhoods with greater differences in elevation within them command a relatively small premium compared to Darlington which is much flatter. There a significantly larger price is paid for houses in neighbourhoods with more variation in elevation.

The points of particular interest here are, however, the prices paid for the socio-economic and ethnic composition of neighbourhoods. A one percent reduction in the proportion of the metro area's blue collar population located in a ward added £2,275 to the value of a house other things being equal. A reduction in the proportion of the area's population of Afro Caribbean ethnic origin a neighbourhood

also had significant and positive impact on house prices. Perhaps an even more significant point is the impact which being in the catchment area of a secondary school achieving better exam results has on house prices. Reading it is true has sharply demarcated school catchment areas and transfer between secondary schools is difficult. Darlington, in contrast, allows much more choice of secondary school to parents regardless of location. Prices for better performing secondary schools are very much higher in Reading. Moving an identical 'mean' house from the worst to the best achieving secondary school catchment area in Reading would be associated with an increase in its price of about £13,500. Since the mean house price was just over £91,000 that is a substantial increase.

#### **Land Value Surface**

It is also of interest to examine the spatial structure of the estimated land values. These are shown in

Figs 1 and 2. Fig. 1 shows the estimated land value surface in Reading, viewed from the northwest.

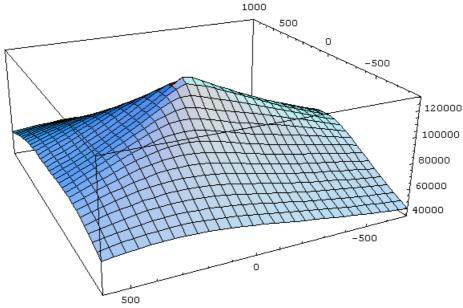


Figure 1: Land value surface in Reading viewed form Northwest

Note that Reading is estimated to have a land rent surface with three ridges. These correspond generally to the observed pattern of roads and transport infrastructure and are seen clearly in Fig. 2.

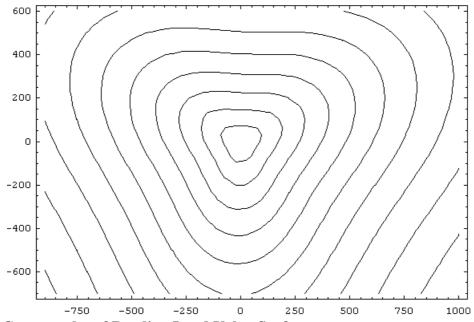


Figure 2: Contour plot of Reading Land Value Surface

#### **IV.** Demand Systems

Using a demand system based on the Almost Ideal Demand System introduced by Deaton and Muelbauer, we used the hedonic functions presented above to generate hedonic prices for house, neighbourhood characteristics, and environmental and planning amenities. Since data on household incomes was available from the household surveys it was then possible to estimate the structure of demand for land, housing and neighbourhood characteristics which were continuous. Estimates of the demand functions for the continuously variable characteristics in Reading are shown in the Table 3 below.

These demand systems can be compared with those estimated for the same cities from the 1984 data (Cheshire and Sheppard, 1998) although it should be noted that the new estimates do not make use of the instruments described in that paper. It is anticipated, however, that the final demand systems using such instruments will not be very different.

Overall, the demand system performs very well, providing a relatively good fit to the data, with elasticities that are plausible. The elasticities for the non-land attributes are somewhat larger than are typically estimated for housing demand or than those estimated for the 1984 data. The demand for land, however, exhibits both price and income elasticities which are very similar to those was estimated for the earlier period. Since these estimates relate to highly disaggregated housing and neighbourhood characteristics it is of course to be expected that price elasticities would be relatively large. The same would be true if estimating the demand for apples and pears separately rather than for the composite good 'food'.

For present purposes the most significant finding is that all the relevant characteristics – the socio-economic and ethnic composition of neighbourhoods and the exam performance of the local secondary school - are normal goods.

This evidence strongly supports the proposition advanced above, therefore, that housing markets operate in such a way as to articulate spatial segregation responding to the income distribution in the wider urban region. If the incomes of richer groups were to rise relative to those of the poor (and allowing for the hazards associated with the projection of cross sectional results) then the rich would buy relatively more of the desirable amenities. These would include higher performing local schools and better access to amenities but it would also include the socio-economic composition of the neighbourhood itself. Since these are locationally fixed such additional consumption could only be obtained by buying out poorer households from the more amenity-rich neighbourhoods, thus increasing social polarisation. This is perfectly consistent with what has been observed in cities in the UK and in the US as the distribution of income has become more unequal over the past 20 to 25 years.

Table 3Reading Demand System1993 Data Set

variable	land	beds	WC	sqft	bluecollar	ethnic	industrial	amen 1	amon 2
C	206.6101	61.2628	56.8696	271.1703	12.3254	2.2206	16.3592	6.9656	amen 2 -18.8827
	45.2795	26.9951	39.7338	137.5612	49.2877	28.3497	62.6975	13.3932	7.3892
σ LESTPRIC	-28.6636	-8.058	-5.234	-46.2678	-1.1878	-2.4631	-10.23	-2.7681	2.0566
$\sigma$	5.7819	3.5178	5.1778	17.7026	6.3299	3.6682	8.0903	1.7162	0.9916
LPXRAT	2.1544	1.9662	2.3286	7.8843	3.69	2.3395	4.8827	1.0634	0.3106
$\sigma$	0.1168	0.0759	0.1258	0.3394	0.1016	0.0739	0.1402	0.0347	0.0296
LESTRENT	-0.3162	-0.0193	-0.1321	-0.1661	-0.1317	-0.1628	-0.1504	-0.0595	-0.0446
$\sigma$	0.119	0.0777	0.1279	0.3976	0.1436	0.0963	0.1841	0.0413	0.0264
LPBEDS	1.9548	-8.5724	0.8512	11.8818	-0.6331	0.4773	0.0707	0.0823	0.0138
$\sigma$	1.5866	1.0395	1.3979	5.4129	2.2025	1.4735	3.136	0.6745	0.2662
LPWC	2.0081	0.1718	-14.7679	2.5992	0.6443	0.143	0.9433	0.1047	-0.2149
$\sigma$	0.9073	0.6385	0.9785	2.825	1.1122	0.7188	1.468	0.3435	0.1993
LPSQFT	4.0082	3.3381	4.9999	-31.7155	5.8773	3.196	8.018	2.0314	0.2608
$\sigma$	2.1845	1.3183	1.9479	7.421	2.8188	1.7543	3.8448	0.8591	0.3607
LPBCOL	0.0116	3.0947	3.9752	14.3131	-19.683	0.6511	5.5276	1.48	-1.5376
$\sigma$	2.0946	1.5143	2.2813	7.2621	2.5564	1.602	3.247	0.7493	0.496
LPAFIN	4.6585	1.6921	2.6298	8.743	3.4387	-6.8284	3.0201	0.8554	0.5356
$\sigma$	1.4313	1.0432	1.1721	4.4882	1.7541	1.0132	2.5311	0.5169	0.2093
LPINDU	10.0615	5.7525	3.0725	27.5189	8.1599	2.9125	-12.2915	3.0624	-0.9596
σ	3.8697	2.1587	3.2011	10.6661	3.7518	2.0876	5.0644	1.0369	0.5801
LPAMEN1	-1.108	0.1669	1.7135	1.451	-0.2689	-0.0574	-1.0888	-6.1046	1.0014
$\sigma$	1.2968	0.7326	1.1287	3.3815	1.5455	0.9701	2.0537	0.5841	0.3172
LPAMEN2	0.6609	-0.0567 <i>0.2418</i>	-0.0705 <i>0.3469</i>	-0.0649 <i>1.0982</i>	-0.3626	-0.2463	-0.0745	-0.0672	-1.3648
$\sigma$ LPALT	0.3127				0.4227	0.276	<i>0.5767</i> 0.0138	0.126	0.0922
	-0.2183 <i>0.3011</i>	-0.0556 <i>0.2202</i>	0.3081 <i>0.3148</i>	0.1382 <i>1.0028</i>	0.0204 <i>0.3829</i>	0.2079 <i>0.2563</i>	0.0136	-0.0267 <i>0.128</i>	0.0399 <i>0.0609</i>
$\sigma$ LPGCSE	3.926	0.2806	0.173	3.0039	-0.0188	-0.6689	0.4241	0.0973	-0.0876
σ	1.0058	0.2000	1.0756	2.9437	1.292	0.7411	1.7822	0.03775	0.1693
R-square	0.7238	0.843	0.8358	0.8391	0.8259	0.8505	0.8148	0.8286	0.7763
Mean HedPrice	0.0026	0.0192	0.0427	0.0029	0.0255	0.0057	0.0015	0.0016	0.0004
Ave Share	0.0272	0.0240	0.0283	0.0999	0.0429	0.0270	0.0576	0.0122	0.0035
Price Elasticity	-1.223946		-6.251859			-3.557135			-4.893003
Income Elasticity	1.791012	1.818193	1.821956	1.78918	1.86034	1.865552	1.847456	1.870213	1.886669

#### V. Helping people or helping places: what is the local 'community'?

Now let us consider the impact of an individual changing their position within the distribution of income. We do this in the context of a specific neighbourhood – Harlesden in west London – which has been the object of a significant urban regeneration effort. From 1993 to 1998 Harlesden was in receipt of some £37.5 million of City challenge funding.

Although in the past it has been assumed that the main mechanism of local labour market adjustment within the wider urban area was changes in commuting patterns, the research undertaken for the HCC evaluation found evidence of another important mechanism: local migration. An element of the evaluation – informed by the evidence already to hand on the operation of housing markets and local labour markets – consisted of a study of three groups of people. These were a group who had moved out of the HCC area during the course of the City Challenge effort - the 'outmovers'. A group who had lived within the area throughout the period of the regeneration effort – the 'stayers'. And finally a group who had moved into the Harlesden City Challenge area during the course of the regeneration effort - the 'inmovers'.

#### A. The data

The basic sources were the electoral registers for three years: 1993, 1994 and 1997. By definition people on the electoral register are of working age and only those of working age were interviewed. The registers were obtained in electronic form and compared to find people present for all three years (the stayers); people present in 1993 or 1994 but not in 1997 (the outmovers). And people not present in 1993, the first year of HCC, but present in 1994 and 1997, or in 1997 only (the inmovers). It proved relatively easy to assemble and interview a sample of 200 of the stayers and the inmovers. It was possible to trace and interview only 63 people of working age who had moved out of the HCC area between 1994 and 1996. Tracing was done in two ways. The first was a systematic household survey of the addresses in which previously present households had lived to try to find the address to which they had moved. The second was by matching the electoral registers of the surrounding boroughs against the personal details of the possible outmover. This was by far the most productive source of tracing outmoving households but means that there is some bias in the sample towards people who had moved relatively locally.

Although 400 households were identified who might have moved (compared to some 11, 000 households in the HCC area), the work involved in tracing them showed that a significant proportion of such households had failed to register rather than moved; and some had died. Thus it is not possible to be precise in terms of the volume of outward movement relative to the adult population of the area. Outward movement cannot be less than about 2.5% of adults a year, however. This itself raises the question: what is a local community? And implied in that question, when policies are formulated to assist local residents into work or better jobs, is the need to recognise that the legitimate - indeed, only - rational aim of such policies is to assist those **currently** resident into work or into more satisfactory jobs. It is not possible to know what the precise needs of future residents will be; at best it is only possible to assess the needs of those who presently live in the area.

#### B. Results

Some of the salient findings of the 'outmovers' study are summarised below. This is an entirely new source of evidence since, as far as is known to the present author, no such study has been conducted before.

Table 4: Labour Market Position at Time of Survey, %

	Inactive	Currently	Employed
		Unemployed	
Stayers	42	15	41
Inmovers	31	21	48
Outmovers	39	9	51

A substantial proportion of those moving out were inactive but this did not vary significantly between the three groups. The lower proportion of inactive amongst those moving in was entirely accounted for by more of this group being unemployed. The unemployment rate of those who had moved out was significantly lower than that of either of the other groups - especially compared to inmovers. There were some differences between the groups in terms of their reasons for non-participation in the labour market: the inmovers were more likely to be sick or disabled, and less likely to be retired, than was the case for either of the other groups.

The reduced propensity to be unemployed amongst outmovers (see Table 5) was almost entirely accounted for by the better experience in the labour market of Black outmovers compared to Black stayers (who had an unemployment rate of 52%) or inmovers.

Table 5: Unemployment and Ethnicity, %

	White British	White Other	Black	Asian
Stayers	26	11	52	2
Inmovers	40	20	30	10
Outmovers	50	33	17	0

Most marked of all was the way in which outmovers had improved the quality of their participation in the labour market compared to either of the other groups. This was true across the board; with respect to job satisfaction, working conditions, skill levels and pay.

Characteristics of present job with respect to previous

2
1.6
1.2
0.8
0.4

Movers out

conditions'

0

skill

pay

Figure 3: Differences in Job Characteristics: Stayers, Inmovers and Outmovers

data shown in Figure 3. **Employed** respondents were asked to rate their current jobs on these four factors on a scale from -2 to +2 relative tojobs they held 5 years previously. t-test for statistically significant differences shows that all differences

between groups were significant except for skill levels for stayers and inmovers and for pay for outmovers and inmovers. On all measures outmovers had improved their position in the job market relative to either of the other two groups and in all case but one this was a highly statistically significant improvement.

satisfaction

We also find that outmovers are much more likely to have full time jobs and that inmovers are the least likely to. Of the currently employed, 23% of stayers had part time jobs and 87% of inmovers were in part time jobs but only 3% of outmovers who worked, worked part time.

It seems very likely that a significant part of the improvement in job characteristics of the outmovers was the result of their participation in training. Although all three groups who had participated in training rated the usefulness of the training they had received more or less the same, participation rates themselves varied very significantly. Of the currently employed, 37% of outmovers had attended a training scheme within the past 5 years compared to only 13% of stayers and a mere 6% of inmovers.

This study demonstrated that not only was migration a significant phenomenon, but that it was highly selective. These findings have important implications. They provide yet further evidence supporting the existing analysis of how housing and labour markets interact. Improvements in a person's position in the labour market and in their income increased their probability of moving out of the HCC area to improve their position in the housing market and improve the neighbourhood in which they lived. In addition these findings condition the evaluation of the impact of urban regeneration efforts on the lives of local residents. It has been noted that unemployment rates of current residents in the HCC area did not fallen over the lifetime of the programme. It has now been shown, however, that a significant part of the explanation of why this did not happen is that much of the investment in people's skills and training leaks out of the area. Those who benefit tend to leave. That does not make the policy less successful, however, if the 'community' which is the target of the policy is defined (as rationally it must be) as those resident in the area when the policy is first implemented. Thus if the

favourable impacts on jobs for those people who move out is ignored (as has always previously been the case) the payoff from the regeneration process is significantly underestimated.

#### VI. Conclusions

The first of these is that urban regeneration efforts aimed at distressed neighbourhoods not only should be aimed at people rather than 'areas' (in the sense of the community which happens to live in a particular neighbourhood at a particular time) but that that is all they can hope to do. In as far as they succeed then those who benefit most are likely to move away because the local housing market is only a part of a much larger housing market in the urban region as a whole. The outmovers will be likely to be replaced by people with mean labour market characteristics less favourable than the mean of the current residents. Thus unemployment of current residents will be unlikely to fall even though the unemployment rate of residents present at the start of the regeneration effort may well fall.

There are comparable lessons for evaluation. Area-based initiatives have been implemented for thirty years in the UK. The planning and evaluation of such initiatives has seldom taken sufficient account of the extent to which conditions within a small area of a larger city are determined by the context in which it is set and the functional specialisation it represents. Lessons would include:

- i). in any locality, systems operate at different scales (journey to work, schools, shopping, physical environment etc.) and the most appropriate scale of policy intervention for each aspect will be different. Apart from the interactions between the systems focused on a particular area, each system (labour market, housing market, etc.) interacts with those around it. In addition the smaller the area to be 'treated' the more arbitrary the boundary will be for many aspects of the work. This was particularly the case in Harlesden City Challenge area whose boundary was chosen to include part of the industrial estate and a relatively small area of housing. Trying to target benefits, especially of education and training but also in the development of community facilities, on the residents of the very restricted area is very difficult in practice; but then theory suggests it is impossible. One solution is to target categories of people rather than areas. In any case, serious questions of equity and eligibility arise if people are excluded from an opportunity because they live on the wrong side of an arbitrary, administratively drawn boundary. In any case they cannot be excluded from improvements in local employment opportunities.
- ii). an emphasis on improving an area may not produce improvements for the people of the area. Urban Development Corporations, for example, were mainly concerned with land development rather than the welfare of their original residents. This does not mean to say that improvements to the physical infrastructure, to buildings or to the general appearance of an area are a waste of time and resources. They should, however, be assessed largely on their own merits not thought of as effective ways of improving the economic conditions of local residents.
- iii). there is probably a need to pursue local job generation as a goal all but independent of placing local residents into jobs. The reasons why the two goals may be more effectively pursued with a degree of independence is that there probably exists some trade off between the number of jobs it is possible to generate and the extent to which local people obtain work in the particular jobs that are created. In terms of revitalising a local economy it may be more effective to concentrate on generating jobs which only a small proportion of local residents are equipped to take. In terms of assisting local residents into work it may be more effective to focus efforts on the specific barriers to employment they face and their potentials for acquiring labour market experience and skills.

In either case the fact that neighbourhoods are but parts of wider interacting housing and labour markets will always condition the results.

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### **Appendix Tables**

**Table A1: Parameters and definitions** 

Parameter	Description	
В0	Constant term	
BGCSE	Parameter for GCSE performance in local state-sector secondary schools	
BBEDS	Parameter for number of bedrooms	
BWC	Parameter for number of WC's	
BSQFT	Parameter for number of Square Feet in structure	
BWIDE	Parameter for width of plot on which house is located	
BBCOL	Parameter for 'blue collar' – measured by % of total blue collar workers in local ward	
BAF(S)IN	Parameter for 'ethnic' – measured by % of total African-descent (Asian-descent)	
	population in local ward	
BINDU	Parameter for industrial land use	
BAMN1	Parameter for local availability of publicly accessible open space	
BAMN2	Parameter for local availability of inaccessible open space	
BALT	Parameter for variance in elevation in local area	
BCENTH	Parameter for presence of central heating	
BSING	Parameter for being a detached single family residence	
BSEMI	Parameter for being a semi-detached residence	
BST2	Parameter for being located on a through street wider than 4.5 metres	
BST3	Parameter for being located on a 'B' road	
BST4	Parameter for being located on an 'A' road	
BOSPARK	Parameter for having access to off-street parking	
BSINGAR	Parameter for having a single car garage	
BDBLGAR	Parameter for having a multi-car garage	
BYEAR2	Parameter for being constructed in 1915-1945	
BYEAR5	Parameter for being constructed in 1976-1994	
BYEAR6	Parameter for being constructed after 1994	
BYEAR56	Parameter for being constructed after 1976 (used in Reading)	
BNEWC	Parameter for being in an area with large amounts of newly constructed houses	
BTHAMES	Parameter for being a property with frontage on the Thames	
BETA1	Parameter for the rent function	
BETA2	Parameter for the rent function	
BETA3	Parameter for the rent function	
BETA4	Parameter for the rent function	
LAM1	Non-linearity parameter for non-land, non-dichotomous variables	
LAM3	Non-linearity parameter for land	
GAMM	Non-linearity parameter for the dependent variable, structure price	
SIG	Standard error	

Table A2: Estimated hedonic prices for Darlington, in 1997 £'s.

lean	Std Dev	Min	Max
108.54	165.02	0.00	930.25
2739.87	1021.28	1440.32	6980.62
3521.22	1339.88	1251.43	9785.66
239.34	72.40	105.16	436.13
1366.43	630.98	562.20	3287.76
522.03	457.12	162.28	3642.01
73.53	36.02	33.23	221.28
62.18	58.06	17.57	455.26
1166.11	1047.34	62.19	6413.06
308.86	164.88	125.60	1299.90
30.83	13.93	8.43	88.93
5985.09	3158.74	2623.41	19000.04
6087.09	8490.26	7051.37	51069.47
3952.16	2085.83	1732.33	12546.38
4796.53	7809.14	6485.69	46972.51
6807.28	3592.67	2983.80	21610.13
4893.77	2582.78	2145.06	15535.59
4761.72	2513.08	2087.18	15116.37
7124.01	3759.83	3122.63	22615.60
4844.28	7834.34	6506.61	47124.06
2220.67	1172.00	973.38	7049.67
9867.65	5207.84	4325.24	31325.47
2278.45	1202.49	998.70	7233.07
21// 22	137 33	11 55	962.42
			104125.00
2740.85		23421.87	235995.30
	108.54 2739.87 3521.22 239.34 1366.43 522.03 73.53 62.18 1166.11 308.86 30.83 5985.09 6087.09 3952.16 4796.53 6807.28 4893.77 4761.72 7124.01 4844.28 2220.67 9867.65 2278.45 214.32 3421.48	108.54     165.02       2739.87     1021.28       3521.22     1339.88       239.34     72.40       1366.43     630.98       522.03     457.12       73.53     36.02       62.18     58.06       1166.11     1047.34       308.86     164.88       30.83     13.93       5985.09     3158.74       6087.09     8490.26       3952.16     2085.83       4796.53     7809.14       6807.28     3592.67       4893.77     2582.78       4761.72     2513.08       7124.01     3759.83       4844.28     7834.34       2220.67     1172.00       9867.65     5207.84       2278.45     1202.49       214.32     137.33       3421.48     22493.12	108.54       165.02       0.00         2739.87       1021.28       1440.32         3521.22       1339.88       1251.43         239.34       72.40       105.16         1366.43       630.98       562.20         522.03       457.12       162.28         73.53       36.02       33.23         62.18       58.06       17.57         1166.11       1047.34       62.19         308.86       164.88       125.60         30.83       13.93       8.43         5985.09       3158.74       2623.41         6087.09       8490.26       7051.37         3952.16       2085.83       1732.33         4796.53       7809.14       6485.69         6807.28       3592.67       2983.80         4893.77       2582.78       2145.06         4761.72       2513.08       2087.18         7124.01       3759.83       3122.63         4844.28       7834.34       6506.61         2220.67       1172.00       973.38         9867.65       5207.84       4325.24         2278.45       1202.49       998.70          214.32