

Policies for Mixed Communities: Faith-based Displacement Activity?

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Abstract

The belief that it is fairer if communities are 'mixed' can be traced at least to the late 19th Century and the founders of the Garden City Movement. The idea is now firmly established in OECD and national policies. This paper reviews the evidence and argues that this is essentially a faith-based policy since there is scant real evidence that making communities more mixed makes the life chances of the poor any better. There is overwhelming evidence that the attributes which make neighbourhoods attractive are capitalised into house prices/rents. The result is that poor people cannot afford to buy into nicer neighbourhoods which anyway have amenities of no value to them. Moreover 'specialised neighbourhoods' are an important element in agglomeration economies and seem to be welfare enhancing. Thus policies for mixed neighbourhoods treat the symptoms rather than the causes of poverty. Efforts to improve social equity would be more effectively directed towards people themselves rather than moving people around to mix neighbourhoods.

1. Introduction¹

In this paper I analyse the welfare and equity implications of policies designed to create ‘mixed communities’ in cities compared to the ‘fact’ of social segregation: segregation on the basis of income, ethnicity, age and other characteristics. This analysis and re-assessment of the evidence calls into question current policies designed to produce ‘mixed communities’. Although empirically income mixing, even in very small neighbourhoods, is considerable (see, for example Hardman and Ioannides, 2004) it is still true that poor people tend to be concentrated in poor neighbourhoods and richer people in more affluent ones.

In the face of this residential separation of different groups, we behave and apply policies as if it were a fact that their separation into distinct and relatively homogeneous neighbourhoods generated specific social costs, additional to those generated by inequality itself. But careful examination of the evidence suggests that such policies for neighbourhood mixing are based more firmly on faith than on any real evidence of additional social ills stemming specifically from geographical concentrations of poverty and affluence. Indeed, although the focus of this paper is mainly on income mixing, it is not clear what social gains are derived from forcing neighbourhoods to be more mixed on the basis of any specific characteristic, whether it be income, age, marital status, educational attainments or ethnicity.

I personally, am a social liberal, in favour of greater equality and a progressive tax system. That implies effective policies to improve the life chances of the poor and disadvantaged. The question, however is whether policies to make neighbourhoods more mixed than individuals – given the distribution of income – choose for themselves is an effective way of helping the poor and disadvantaged. This issue is important because a reduction in the intensity of income segregation, by means of active policies to foster ‘mixed communities’, is an explicit aim of government policy in many OECD countries and a favoured outcome of ‘new urbanism’.

The fundamental issue underlying this paper’s argument is one of causation. We know that living in nicer neighbourhoods costs more. As I show below, it costs a great deal more. So there is very clear evidence that poor people are concentrated in poor neighbourhoods as a result of their low incomes: living in cheap neighbourhoods costs less. The issue is whether living in a poor neighbourhood is a separate, significant additional cause of poverty. To make a serious, evidence-based case that mixed communities are effective policies to reduce social inequality, we would need to establish four key propositions:

1. Geographically concentrated poverty was worse in welfare terms than diffused poverty;
2. Creating mixed communities of poor and rich reduced the ‘costs’ of poverty;

¹ I would like to thank Alison Weingarten for research assistance and Stephen Sheppard for our long term research collaboration. This paper draws on ideas we have discussed and developed together over the years. In addition I have benefited from discussions and input from many colleagues. I would like especially to thank Katharine Knox, Doug Krupka, Gwilym Pryce and Bruce Weinberg for helpful and sometimes critical comments. The paper has benefited from these. Although I have disagreed with several of the comments I hope the arguments have been strengthened and improved. The mistakes are entirely my own.

3. The welfare costs of geographically concentrated poverty were greater than the benefits from living in 'specialised' neighbourhoods;
4. Creating mixed communities of poor and rich was a cost effective way of addressing the problem of inequality.

The paper starts with a very brief discussion of the origins of the idea that mixed neighbourhoods offer a socially superior way of living, reducing the hardships and disadvantages of poverty. The next section examines the evidence relating to the first of the above propositions: that living in a worse or more deprived neighbourhood is a separate evil from poverty itself and reduces a person's (child's) chances in life over and beyond the disadvantages engendered by poverty. This is commonly called the 'neighbourhood effect' and is examined in two ways. I first examine the evidence on the impact on welfare if people are moved from deprived neighbourhoods to more affluent ones. This draws mainly on evidence from the Moving to Opportunity (known as the MTO) experiment in the US, a unique, semi-scientific, experiment set up to help some poor households to make such a move and to track the results. The other main source of evidence is derived from cohort studies which attempt to isolate the specific effects of the type of neighbourhood from which a person originates (or has previously lived) on life outcomes. The discussion then moves on to consider the evidence as to how neighbourhoods 'work' and influence both welfare and labour market outcomes.

In section 4 I review the evidence as to why neighbourhoods segregated by income persist. This looks first at the dynamics of neighbourhood segregation – what happens to people in poor neighbourhoods who upgrade their skills. Observations that there is a significant income mixing at the local level have been based on cross sectional data. Cross sectional mixing does not imply that mixed neighbourhoods are equilibrium outcomes. This section goes on to examine the way in which housing markets effectively price the poor out of nice neighbourhoods and how this process interacts with (changes in) the distribution of income.

I conclude by drawing together this evidence and discussing how it relates to the arguments about the relationship between poverty and place and 'neighbourhood effects' and what policies might most effectively address the problems of poverty and income inequality.

2. Why neighbourhoods should be mixed: but are not

The desire for neighbourhoods to be more 'mixed' or 'balanced' is not new. It can be traced back at least as far as the 19th Century designers and visionaries who gave rise to the Garden City Movement and, ultimately, to town and country planning. One of the first developments reflecting these new impulses was Bedford Park, in Chiswick, West London, which began with the construction of the District line of the underground in 1871. It was designed to provide a community within easy reach of London and to attract liberal professionals and artists, with cottages, as well as substantial middle class homes, in order to ensure 'social balance'. The construction of cottages was stopped, however, soon after the first residents arrived and complained that such houses would 'attract the wrong sort of tenants' (Affleck Greeves, 1975). Similarly, Hampstead Garden Suburb, started in 1910 by two disciples of Ebenezer Howard, was intended to be a 'balanced' community but within

a short period had become an affluent professional suburb (Weinreb and Hibbert, 1993).

More recent work, associated notably with Wilson (1987), identified a problem of social exclusion, with significant harmful effects associated with living in neighbourhoods in which poverty was concentrated. This was part of the argument of ODPM (2005):

“People living in deprived neighbourhoods are less likely to work, more likely to be poor and have lower life expectancy, more likely to live in poorer housing in unattractive local environments with high levels of antisocial behaviour and lawlessness and more likely to receive poorer education and health services. Living in a deprived area adversely affects individuals’ life chances over and above what would be predicted by their personal circumstances and characteristics.” (ODPM, 2005, page 6).

The report documented in great detail differences in outcomes for people living in deprived areas (defined as the 10% most deprived wards identified on the Index of Multiple Deprivation) compared to the average for England as a whole. Worklessness rates were some 25% compared to less than 10%; a third more of the adult population of such areas had no qualifications; and life expectancy was two years less. To conclude from this evidence that mixed communities provided a recipe for reducing inequality and tackling social exclusion, however, was either naive or demonstrated sleight of hand. None of the figures supposedly showing the problems of living in deprived areas related to individuals of given or ‘similar’ characteristics to people not living in deprived areas. It was all measures of the average levels of income, health, education or unemployment of the inhabitants of the deprived areas. Crime rates were just that: the rate of crime in deprived neighbourhoods. The problem is that none of this evidence is in dispute. It simply does not address the issue of causation.

Not only is the desire for mixed neighbourhoods not new, it is, one might suspect, suspiciously old. It was originally formulated as a social aspiration without any diagnosis of the root causes of poverty but a firm belief in improving peoples’ lives by improving the built environment. In the context of public health, this was perhaps the single biggest step towards making cities healthier and more habitable ever made. But, as a solution for poverty, it appears only to address an obvious symptom. For a sceptical academic, indeed, there must be a fear that researchers and policy makers have for the past 30 years, been trying to retrofit the analysis and evidence to support the ‘solution’ fixed on by the pioneers of town planning in the 19th Century.

If the policy had no costs – even though it was not effective in improving welfare or reducing income inequality – still it would not be problematic. Attempting to implement it, however, costs significant resources. This can be illustrated in Britain but similar costs arise in all OECD countries which pursue policies for mixed communities. There are direct government expenditures subsidising the provision of lower income housing in higher income developments but in Britain most of the resources devoted to generating mixed communities are provided in kind – not part of measured government expenditure. Because of the extreme scarcity of developable land – the result of 60 years of ‘urban containment’ policies – obtaining ‘planning permission’ (zoning permits to build houses) generates extraordinary increases in land

values. Agricultural land in most of South East England increases in value from less than £10,000 per ha to £3, £4 or even as much as £8 million per ha on the outskirts of Oxford or in the more desirable parts of Buckinghamshire (Valuation Office Agency, 2007). To obtain the essential planning permissions, developers negotiate so-called Section 106 Agreements with the local planning authority obliging them to provide additional development, or supply land, for 'public benefit': that is gift the specified developments or provide them below cost. The most common form these benefits take is an obligation to build 'affordable' housing or 'social' housing within their commercial development. The Greater London Authority, for example, currently tries to force 50 percent of all housing constructed by the private sector to be such 'affordable' housing built within each substantial private development.

Poor people are concentrated in poor neighbourhoods because housing there is cheaper. If that is the only direction of causation for observed patterns of segregation then, essentially, social segregation is a manifestation of voluntary sorting, conditioned by income. Just as richer households buy more expensive and better clothes and better holidays, health care and educational opportunities for their children, so they 'buy' better neighbourhoods. If this is the direction of causation, the equity problem is not with the places in which people live but with the distribution of incomes. Unless there is clear evidence of reverse causation, the case for mixed communities cannot be evidence based.

It is, of course, possible – superficially even plausible – that geographically concentrated poverty is a greater social evil than dispersed poverty. There is a strong correlation between living in a deprived neighbourhood and being poor: or living in a neighbourhood dominated by immigrants or ethnic minorities and being an immigrant or a member of a minority ethnic group. So it might seem obvious that living in poor and deprived neighbourhoods must impose costs on the inhabitants of those neighbourhoods beyond the disadvantages of low incomes, poor health, migrant status or lack of labour market skills. The families living in such neighbourhoods experience poor services, frequently have a worse environmental quality (atmospheric pollution or noise), suffer greater ill health and are much more likely to be the victims of crime. The schools which serve such neighbourhoods score less well measured by the exam results their pupils achieve or by truancy rates. Children growing up in such neighbourhoods do not have the chances in life that children raised in advantaged neighbourhoods have. That seems obvious and it is what we appear to believe.

The problem with this conclusion is that it ignores a number of difficult facts. The first of these is that in all cities for which there is – or ever has been – evidence, neighbourhoods have been segregated. This was very clearly the case in ancient Rome in which there were neighbourhoods segregated by artisanal trade as well as income. The particular patterns of segregation seem to be remarkably stable over time. Many of the London neighbourhoods amongst the poorest in 1881 were still amongst the poorest in 2001 (Meen *et al*, 2007); there is substantial stability in the pattern of the local authority areas which were most segregated in 1971 and in 2001 (Meen, 2006). Moreover, when policy has deliberately constructed 'mixed' neighbourhoods, over time they have tended to become segregated again.

Perhaps the English village provided the romantic blueprint for the 'mixed community'. But even there, the 'rich man was in his castle and the poor man at his

gate'. Being small communities, however, the rich 'neighbourhood' sometimes consisted only of the 'big house' or the manor. The rural poor often lived in crowded hovels – most of which have not survived. The larger an urban area is, the larger the areas dominated by particular types of household, rich or poor, tend to be (Gordon and Monastiriotis, 2006). As Krupka (2007) points out, using neighbourhoods of roughly constant size (such as Census Tracts or Local Authority areas) the larger the city is, the greater the degree of measured segregation there will appear to be, other things being equal. This is because there are enough households in particular income groups to fill up more completely the chosen spatial definition of 'neighbourhood'. Useful definitions of neighbourhood, therefore, are likely to vary with city size and be largest in the largest cities.

With the ex-urbanisation of British cities, villages – or at least those that have an agricultural origin - typically have become segregated, rich, commuter communities. Functionally such villages have become, in US terminology, high income subdivisions: component neighbourhoods of large city-regions. In the sense used in this paper, they are 'specialised neighbourhoods' of large urban areas². Indeed, it can be argued that specialisation is the central contribution of cities to progress and welfare.

Underlying the longevity and pervasiveness of residential segregation in human settlements is the second difficult fact ignored by advocates of 'mixed neighbourhoods'. Specialisation underlies the agglomeration economies cities generate, both in production and in terms of the additional choices they provide for consumption and lifestyles; and segregated neighbourhoods are simply the flip side of specialised neighbourhoods. A larger number of specialised neighbourhoods provide a wider choice of urban community types and social settings in which to live. But like all other choices about what to consume, such choices are strictly subject to the constraint imposed by one's income.

This is the third difficult fact advocates of mixed neighbourhoods ignore: establishing the direction of causation. If neighbourhood choice is conditioned by income, poor neighbourhoods exist because there are poor people and we live in an unequal society; and, as is explained below, given that degree of inequality, we may be collectively and individually better off, living in neighbourhoods with other similar households, whether we are rich or poor. For any given overall distribution of household incomes that could be an argument for having specialised neighbourhoods; but not for policies promoting specialised neighbourhoods (unless there is some problem of government or market failure that underprovides them). Questioning the case for policies for promoting mixed neighbourhoods is certainly not, however, advocating having greater inequity or poverty within a rich society.

Not only do policies for generating mixed neighbourhoods ignore inconvenient facts, they are also, as Krupka (2008) points out, at odds with three of the best established

² Throughout this paper the term 'specialised neighbourhoods' is used to indicate a residential neighbourhood in which households of a particular character tend to be concentrated. Deprived neighbourhoods would therefore be an example; but so would neighbourhoods predominantly occupied by other groups such as middle-aged, middle-class white commuters, young professionals, young families, Sylheti-speaking Bangladeshi Muslims, Hindi-speaking Hindus or Polish migrant workers.

theoretical models in urban economics. Tiebout (1956) has a model of mobile urban residents voting with their feet to concentrate in communities providing the best mix of taxes and local public goods given their incomes and preferences. Alonso (1964) – still perhaps the most important single theoretical contribution to urban economics – concludes that with centrally located employment, annular rings of exclusive land use will tend to be established as business users and residents trade-off the value to them of accessibility against the costs of space. This has traditionally been interpreted as implying residential segregation by income group, with zones occupied at high densities close to the centre by poor residents and richer households living at lower densities further from the city-centre. Although this particular conclusion has been challenged (by, for example, Brueckner *et al.*, 1999), income segregation does seem the likely outcome of monocentric models. Finally there is the model of Schelling (1969) which on the basis of a simple preference for not being the minority in ones immediate neighbourhood predicts social segregation as the equilibrium outcome.

3. Poverty and place: determining causation

In trying to figure out the direction of causation between poverty and place, there are two major problems. The first is how to be sure when we compare the outcomes for individuals living in different types of areas that we have adjusted for all the relevant characteristics. When studies compare indicators of deprivation of those living in deprived communities with those living in more affluent neighbourhoods there may be important but difficult to measure characteristics influencing people's life chances which are not standardised for because they are not observed. For example, there may be a genetic pre-disposition to suffer from dyslexia which then influences a whole range of other outcomes, including income and so neighbourhood choice; people also vary in their motivation and aspirations, even their luck.

The second issue is that above all people select the neighbourhoods – subject of course to varying constraints – in which they live. As Goering *et al* (2003) point out:

“Since people typically select their neighbourhoods to match their needs and resources, researchers restricted to cross-sectional, nonexperimental evidence must try to separate the impact of personal factors affecting choice of neighbourhood from effects of neighbourhood. But it is difficult if not impossible to measure all those socioeconomic, personal and local characteristics well enough to distinguish their effects.” Goering *et al*, 2003, page 4.

Separating the impact of personal factors affecting choice of neighbourhood from the effects of neighbourhood requires great ingenuity and work on the part of the researcher. The evidence on which ODPM (2005) based their policy recommendations did not even begin to make the essential adjustments for difficult to observe personal characteristics that methodological rigor demands.

Experimental evidence from moving poor people to affluent neighbourhoods

Given how difficult and costly it is in research terms to compile clear evidence on the direction of causation, it is worth reporting on the US Moving to Opportunity (MTO) experiment in some detail. Despite some problems noted below it is probably the most carefully researched evidence available on the issue. The MTO programme was set up

in 1992 to ‘assist very low income families with children who reside in public housing.... to move out of areas with high concentrations of persons living in poverty to areas with low concentrations of such persons...’³ The MTO project was designed both to pilot a policy designed to relieve the perceived problems of concentrated neighbourhood poverty and as a scientific experiment to investigate – some claimed – demonstrate – the benefits of policies to achieve more mixed communities.

The pilot was carried out in five cities: Baltimore, Boston, Chicago, Los Angeles and New York. For the purposes of implementation ‘neighbourhoods’ were defined as census tracts, so on average they contained around 4,400 people. The issue of what constitutes a neighbourhood is obviously an open one (see, for example, Ellen and Turner, 2003; Hardman and Ioannides, 2004; Durlauf, 2004; or Krupka, 2007) but census tracts, which are designed to be relatively homogeneous in terms of population characteristics, are widely used as approximations in empirical research in the US.

To be eligible for the programme a family had to live in public or assisted housing in a ‘poor’ neighbourhood - one in which 40 percent or more of residents were below the poverty line. They also had to have at least one child under 18, not be behind in rental payments, all family members had to be named on their current lease and no member of the family should have a criminal background. Thus, there were already two stages of selection before a family got on to the programme: 1) since only volunteers participated or were tracked, they had to want to move into a more affluent neighbourhood; and 2) they had to pass the eligibility criteria. This selection alone would be likely to have increased the chances of finding positive effects of moving poor families to affluent neighbourhoods. The most problematic families were ineligible and, presumably, only those who thought they had a chance of benefiting from such a move, volunteered⁴. There were also other factors which arguably may have reduced the chances of finding positive effects of the move: for example, a significant proportion of the children involved remained in the same school which had served their deprived neighbourhood.

Once in the programme families were randomly assigned to one of three groups. Group 1 – the experimental group – received a subsidy only spendable if they moved to a relatively affluent neighbourhood. An affluent neighbourhood was defined as one in which 10 percent or less of the residents lived below the poverty line. Such families received expert advice from housing professionals – or ‘counselling’ - to help them find suitable homes. Group 2 received a housing voucher/subsidy spendable in any location and no counselling. Group 3 – the control group - got no extra help but simply continued to live where they were (although of course free to move using their own resources).

Across the five cities about a quarter of potentially eligible families applied for the programme with about 13 percent of those applying being ruled out because they did not meet the conditions for selection. That still left some 4,600 families – enough for statistical analysis. The early evaluation of the programme, summarised in Goering and Feins (2003), was quite optimistic. Some of the successes reported were more or

³ Housing and Community Development Act 1992.

⁴ It is worth noting that these methodological deficiencies would have disbarred the study had it been a field trial for a new drug or medical procedure.

less definitional - such as the fact that the characteristics of the neighbourhoods in which those in Group 1 (assisted to move to more affluent neighbourhoods) lived at the end of three years were more affluent, with lower crime rates and better schools. There was also some evidence that successful movers had slightly different characteristics both from the residents of the poor neighbourhoods from which they were drawn (younger and poorer and more likely to be a female headed household) but also from those assigned to Group 1 but who failed to move, usually because they could not find a house or flat to move to. Successful movers were more likely to be enrolled in adult education and drive a car: they tended also to have been more dissatisfied with their existing housing and neighbourhood. Wanting to escape from high neighbourhood crime rates was the most common reason for participation in the MTO project.

There were some positive findings, apparently supporting the underlying hypothesis that moving to a better neighbourhood would have a beneficial impact on individuals. There were differences across cities and some teams had earlier results than others but after two years there were indications of improvements in children's behaviour, health and educational achievement, compared to the control group, although similar improvements were observed in Group 2 families who had been helped to move to neighbourhoods of their own choice – not necessarily more affluent ones. There were also differences between girls and boys, with behavioural improvements more marked in boys. There were, however, no differences in economic outcomes. Incomes and other labour market indicators for families moving to affluent neighbourhoods showed no improvement relative to other groups. But the programme was greeted as cautiously supporting the causal link from living in a deprived neighbourhood to negative impacts on an individual's life chances:

“...preliminary research on MTO families has demonstrated that beneficial, statistically significant changes have occurred in families' lives within two to four years of their participation in MTO. These affects appear most noticeably for children.” (Goering and Feins, 2003).

But as they go on to note, the modest initial success of the programme did not mean that it was a policy success. The impacts were quite modest and costs were considerable. Counselling by housing experts alone cost \$3,000 per family that successfully moved. But it did appear that the causal link had been demonstrated.

Longer term follow-up

More recent research (Kling and Liebman, 2004; Kling *et al* 2005; Kling *et al* 2007) on the MTO, tracking families over a longer period, destroys even this cautious optimism on the project: or at least suggests causal processes are considerably more complex and outcomes of moving to an affluent neighbourhood more difficult to anticipate. Kling *et al* (2005) report on a follow up study analysing changes four to seven years after families had moved. They pool all data for the five cities (whereas the earlier results were often based on analysis of data for only one city). For the 15 to 25 year old group they have between 1266 and 1840 individuals in each of the three treatment groups (those helped to move to an affluent neighbourhood, those helped to move to a neighbourhood of their choice and the control group not helped to move). Their study uses sophisticated statistical methods and focuses particularly on differences in crime and behaviour.

The earlier studies had shown no improvement in economic indicators for the group moving to more affluent neighbourhoods. Longer term follow-up confirmed this finding but the researchers looked at a wide range of indicators relating to educational achievement, health and welfare and also behaviour⁵. They focused on the age group – 15 to 25 – in which it was most reasonable to look for signs of improvement. It is this age group which in the general population has the highest incidence of behavioural problems and within which educational progress might be most plausibly concentrated. So if moving to a more affluent neighbourhood produced any behavioural benefits these should be easiest to find in this age group. For none of the indicators, however, did they find any significant overall differences between the groups that moved neighbourhoods compared to the control group that was not helped to move. For the age group as a whole some indicators were better and some were worse but, despite the large sample, none of these differences was statistically significant.

Subdividing into males and females did reveal some significant differences, however. Within the set of behavioural indicators were a number relating to criminality. Kling *et al* (2005) extended the self-reported data set by also tracing administrative arrest records. This allowed a comparison of two independent sources of data. They found that while for violent crime there continued to be non-significant but - if anything - favourable effects for both the groups which moved, for property arrests there were significant differences for girls compared to boys. For both boys and girls in the first two years after moving, property arrests fell, although the reduction was not statistically significant, but for boys it then rose and rose significantly compared to the control group during the third and fourth year after moving. Overall – for both sexes combined over the whole four years - there was no significant reduction in either arrests in total or in property arrests because the differences for boys and girls balanced out. For a small sub sample which it was possible to track over a six year period, the increase in property crime arrests for boys continued at about the same level. Similar, but non-significant, gender differences are reported, in passing, for mental and physical health, education and substance use. Overall, males in the moving group had scores on the behavioural problem index some 20 percent worse and arrest rates for property crime some 30 percent higher than those of the control group of young males who did not move from their poor neighbourhoods.

They then sift the evidence for explanations of the difference in outcomes for boys compared to girls and the apparently initial favourable changes followed by significant negative effects for boys from two years after moving. Explanations might be peer group sorting – boys end up finding similar peer groups in their new neighbourhoods as they had in the previous ones; difference between boys and girls in coping strategies; and a comparative advantage for the boys in property offending. The reduction in girls' arrest rates for property crime suggested the increase in arrests for boys could not be explained by more efficient policing in the affluent

⁵ Kling *et al* 2005 report briefly on such factors as getting into fights, getting along with teachers, perceptions that school discipline was 'fair', having five or more friends and reported feelings of worthlessness, finding no significant differences on any measure. A wide range of educational, mental and physical health and behavioural indicators was examined in Kling and Liebman, 2004. In general they reported some significant beneficial changes for girls but negative and mainly not significant effects for young males.

neighbourhoods. Kling *et al* (2005) judged peer group sorting effects as implausible as an explanation since similar patterns of change were evident for both boys and girls even when they were subdivided into those with a history of criminal or behavioural problems before the move. If peer group sorting was the explanation then one would expect those who had worse behaviour prior to moving would not have improved (if girls) or got worse (if boys) after the move. Differences in coping strategies in relation to the upset caused by moving to a different type of neighbourhood did not seem plausible as an explanation of their findings, they argue, because in the early period following the move both boys and girls showed similar reductions in arrests: it is only after two years, when presumably most young people would have got over the disruptive effects of the move, that boys' arrest rates for property crime rise significantly.

Kling *et al* (2005) come down in favour of what they call a 'comparative advantage in property crime'⁶ explanation partly by elimination but also because of the evidence in relation to educational performance. Although the schools which young people went to after moving to more affluent neighbourhoods were better on academic performance indicators for the children attending them, it turned out that moving did not significantly improve the educational performance of the individual children. Thus, children who did not move ended up doing better in school relative to their peers than children who moved. The children who moved now had academically stronger peers against whom they were measured. Moreover moving boys did worse than girls relative to their new peer groups. They were less academically competitive than girls were within their new schools. Boys were also less subject to parental supervision, had more absences from school and lower educational ambitions than girls. The girls who moved had improved expectations for completing college compared to the control group, greater participation in sports, a reduction in school absences and an increased association with peers who engaged in school activities. None of this was true of the boys who moved. Thus, the authors conclude the most plausible explanation is that as boys adjusted to their more affluent neighbourhoods, they found they had a comparatively worse position in educational terms compared to their new peer group neighbours but an area in which they could succeed in their new neighbourhoods was in property crime.

Kling *et al* 2007 largely confirms these findings. It is methodologically even more rigorous but still finds no economic impacts – favourable or unfavourable – for adults in Group 1 (who benefited from the vouchers to move to an affluent neighbourhood) nor evidence of improvements in physical health. They do find improvements in mental health for both adults and young women that appear to be related to reductions in (fear of) crime in the new neighbourhoods. They also find beneficial effects for young females on educational outcomes, risky behaviour and physical health but again in the change for young females and males together these were offset by significant deteriorations in the same indicators for young males. So there was no net gain for young people overall from moving.

⁶ By this they meant that the boys were doing not only absolutely worse in education and other realms than their new, affluent peer group but relatively worse in such terms than they would have done in their old, deprived neighbourhoods compared to the peers they would have had there; they do not say - but perhaps they also imply - that they also had relatively more opportunities for property crime in their new, affluent neighbourhoods.

One might comment, moreover, that if the improvements on mental health indicators resulted from reductions in the crime experienced by the moving groups it would seem likely to be orders of magnitude more cost-effective to achieve the reductions in crime in deprived neighbourhoods in the first place by substantial increases in police and more effective police methods. The MTO programme, in so far as it had produced the improvements in mental health for the group assisted to move to a more affluent neighbourhood, did so only for a tiny proportion of the original inhabitants who benefited (and if their houses remained they would have been replaced by incomers who now experienced the high crime levels). Measures to effectively reduce crime within deprived, high crime neighbourhoods would benefit all residents not just the small group who were subsidised to move.

The MTO experiment has been summarised at length because, given the manifold difficulties, it is the best source of evidence for identifying the effect moving from a really deprived neighbourhood to a more affluent one has on those who make the move; it is equally the best source of evidence for identifying any beneficial effects of constructing mixed neighbourhoods. Other earlier studies and the initial evaluations of the MTO project are summarised in Durlauf (2004). Durlauf concludes that on the basis of studies then available, the balance of the empirical evidence did suggest there was a significant influence of neighbourhood, although he was acutely aware of the difficulties of identification⁷. This conclusion is overtaken by the longer term follow up studies of the MTO project. From these there seems to be no evidence of any improvement in the economic situation of adults who move and evidence that outcomes for children who move are complex and causation is uncertain, even when there appear to be significant effects⁸. On balance, there seem to be negative outcomes for boys on a range of indicators and positive outcomes for girls. One of the few indicators showing an improvement for both boys and girls is an important one – arrest rates for violent crime – but so far research does not show this to be statistically significant.

The evidence from other studies on neighbourhood effects

Similar experiments have not been tried in other countries. As an alternative methodology long term cohort studies offer the best solution to separately identifying the pure impact of neighbourhood on life chances. Two of the most convincing of these cohort studies, one in Canada and one in Britain, show a similar lack of significant long term effects of neighbourhood on life outcomes or success.

⁷ He compared results of 25 studies published between 1982 and 2003. Outcome measures ranged from marriage rates and teenage pregnancies through school drop out rates to standard labour market measures, such as wages or unemployment. All studies surveyed were econometric in nature and while some found no evidence of neighbourhood effects, the majority did conclude there was an impact of neighbourhood on outcomes for individuals. However, as Durlauf notes, methodological problems are severe and such evidence was unlikely to convince those who were sceptical. He wrote before the methodologically most convincing studies, those of Oreopoulos (2003) and Kling *et al* (2005), were available.

⁸ Apart from the increase in boys' arrests for property crime in the longer term, the cause of some of the improvements in health measures are unclear. For example Katz *et al* (2001) note that the significant improvement in childhood asthma tapered for both families moving to more affluent neighbourhoods and those moving to locations of their own choice, could be due to characteristics of the structures and particularly the absence of rats – a common asthma trigger – in the new homes and locations: not to classic neighbourhood effects. If reduction in exposure to rats were the cause then getting rid of rats would seem to be a very much more cost-effective policy to achieve the health improvement than mixed communities.

Oreopoulos (2003) tracked individuals assigned as children to public housing locations in Toronto over 30 years. He starts with a sample of children born between 1963 and 1970, living in public housing projects with very different neighbourhood characteristics, and matches them by means of a very large administrative data base to their labour market characteristics in 1999. The simple relationship between neighbourhood and earnings appeared to be significant but, of course, families have a big influence on the behaviour and choices of children. Once the earnings of siblings was added as an explanatory variable, the statistical influence of neighbourhood entirely disappeared. The final conclusion was that the characteristics of the neighbourhood in which an individual was born or raised had no statistically significant effect on long term labour market outcomes or on prosperity.

This finding is consistent with the methodologically completely different study of Bolster *et al* (2007). Using a British Household Panel Survey derived cohort dataset, following individuals for ten years, they find no evidence that original place of residence had any statistically significant influence on subsequent labour market success, whether measured as household incomes or as earnings. Their results may be slightly less persuasive than those of Kling *et al* or Oreopoulos since their data track individuals over only ten years and they investigate only economic outcomes. But they explore a range of neighbourhood definitions, concluding that a small unit, of only about 500 people, is the most appropriate measure of neighbourhood, and they use statistically sophisticated techniques. They cannot entirely reject the possibility that the original neighbourhood in which someone lived, influences their future prosperity but they find no statistical evidence that it does. Indeed, although not statistically significant, their result is in fact the unexpected one. After standardising for all the other factors which influence incomes and earnings, coming from a poorer neighbourhood is associated with increased current prosperity! They conclude rather as Cheshire (1979):

[This] “*does not remove [the case for] an area-basis for policy. The high levels of clustering may mean that the most efficient way of targeting individual policies is on an area basis. Nevertheless the results support the idea that the main sources of low incomes are to be found in earnings, employment and demographics, not in neighbourhood characteristics.*” Bolster *et al* (2007) page 34.

Work for countries in continental Europe has not been able to apply such methodologically robust methods. There are no examples of either quasi-experiments, such as the MTO project, or long term cohort studies. Musterd (2006), however, does report work tracking individuals over time in The Netherlands and Sweden and relating changes in their prosperity to their individual characteristics and the characteristics of the neighbourhood in which they originally lived. These are for somewhat shorter periods than even the work of Bolster *et al* (2007) and the controls and statistical methods used are perhaps somewhat more limited. In The Netherlands, Musterd (2006) reports only the weakest and non-significant of neighbourhood effects for the very poorest, although the impact of a ‘bad’ neighbourhood seemed to be slightly stronger for the next group up the ladder. Outcomes were measured as the probability of moving out of benefits and into a paid job between 1989 and 1994. In the Swedish cities there seemed to be more evidence of neighbourhood effects during the 1990s although these were still weak and high immigration rates in the early part of the period may have influenced the results. In the Swedish work, neighbourhood

effects were also measured in terms of probability of people of working age moving into work off benefits, but over a longer period from 1991 to 1999.

Perhaps the strongest evidence yet found for 'neighbourhood effects' comes from France. It relates to a restricted effect in educational achievement at school, however, rather than to long term outcomes for life chances (Goux and Maurin, 2007) but is certainly worth taking into account. Their study exploits a feature of the French Labour Force Survey which samples clusters of neighbours and, using an IV approach, they show that various educational performance indicators are statistically related to those of immediate peers in the neighbourhood rather than the classroom; for example, the probability of a 15-year old being held back a grade is about 8 percentage points higher (+16% of an SD) if other adolescents in their neighbourhood were born at the beginning of the year (which in itself increases the probability of being held back by 15 percentage points).

Specialised neighbourhoods as sources of welfare

As noted above, the tendency for people to sort into segregated or, in some sense specialised, neighbourhoods is a very strong one⁹. Cities which are socially segregated along income lines are a universally established fact. Authors who have recently addressed such issues include Hårsman (2006), Meen (2006) and Musterd (2006). Meen's work for Britain, already briefly summarised, shows beyond argument that not only is social segregation on income and other measures a feature of cities at least since the late 19th Century, but the incidence of such segregation is very persistent over time. Many of the same cities with the sharpest incidence of spatially segregated neighbourhoods measured on 1971 data, reappear in 2001 data. Many of the most deprived (and most affluent) neighbourhoods in London in 1881 appear again in much the same positions in 2001.

Hårsman (2006) documents the stability of patterns of both income and ethnic segregation, particularly in Stockholm. In his detailed study of the long term evolution of patterns of ethnic segregation, he shows how its incidence has tended to intensify over the last 20 years and is only partly explained by income differences. His evidence is at least consistent with people from ethnic minorities mainly choosing to live in ethnically specialised neighbourhoods, despite official Swedish policy pushing for integration.

Musterd (2006) synthesises his work on three related areas: the (lack of) influence of segregation on the overall economic prosperity of the wider urban area; the very distinct neighbourhood choices of skilled workers in different economic sectors in Amsterdam; and comparative work on the effects of neighbourhood mix on individual success in The Netherlands and Sweden summarised above. In particular, he shows

⁹ This is not to deny the fact that cross sectional data shows significant income mixing in even small neighbourhoods. Hardman and Ioannides (2004) report some two thirds of micro neighbourhoods (consisting of 10 households) contain at least one household with an income in the poorest one sixth of all households: and a half of micro neighbourhoods contain a family in the richest 20 percent of the income distribution. Krupka (2008) comments that in most US cities well over half the variance in income came from variations *within* the neighbourhood, as opposed to variation *across* neighbourhoods. But as he also points out this is still consistent with spatial segregation on the basis of income being the equilibrium outcome. Cities as systems are subject to continuous shocks in terms of their size and the distribution of household incomes and adjustment to such shocks may be slow given the costs of moving house.

that highly skilled workers in different service sectors choose different types of neighbourhood. Workers in ICT, financial services and banking choose to concentrate in the suburbs of Amsterdam while skilled workers in the creative industries are selectively concentrated in central neighbourhoods.

Labour market matching

These findings are entirely consistent with those of Bayer *et al* (2005) for Boston. For a sample of 110,000 employed people, they match the precise location of residence and jobs and find a very strong tendency for people who live in the same neighbourhood (defined as a census block) also to work in the same census block. They make an elaborate and convincing effort to eliminate the effects of transport networks and other factors which might explain this finding independently of social interactions with neighbours - excluding non-family members. They find strong evidence showing that such interactions between neighbours strongly influence the job locations of neighbours and that such interactions are more influential if neighbours are of a similar level of education, both parties have children and are of similar age. Their conclusion is that social interactions within neighbourhoods between people similar to each other are a significant factor in how urban labour markets work and people find jobs.

Both sets of findings are consistent with earlier US findings, such as those of Blau and Robins (1992), about the importance in job search of informal networks with friends and relatives. Blau and Robins found that while this was a frequent - but not the most frequent - method of job search, and particularly important for the less skilled, it was the most successful form of job search from the point of view of both workers and employers. It produced the highest rate of job offers per contact and the highest rate of job offer acceptances. In their recent review of the literature, Ioannides and Loury (2004) report that, in addition, such jobs found through personal contacts lasted longer, so that around half of all jobs were held by people who had found them this way. Ioannides and Loury also report a persistent increase in the use of informal contacts as a means of job search over time – despite the rise in the internet – and that it is more prevalent, the larger a city is: in cities of more than 500,000 more than half of unemployed job searchers relied on friends and acquaintances; in cities smaller than 100,000 less than 10 percent did. Friends and acquaintances were a much more important source of jobs for those searching while unemployed than for those looking for new jobs while they were employed.

These last two observations are particularly important in the present context. They show an important source of positive effects of specialised neighbourhoods for lower skilled as well as for more skilled workers - unemployed job seekers are on average less skilled than employed job seekers but use friends and acquaintances more. The fact that the use of friends and acquaintances increases with city size is consistent with the idea that specialised neighbourhoods represent a form of agglomeration economy. An advantage of larger cities is that they can support a greater range of specialised neighbourhoods and such neighbourhoods seem to be a fertile source of effective job matching.

Another less obvious example of the ways in which specialised neighbourhoods may increase productivity is provided by work on ethnic neighbourhoods. There are obvious consumption benefits involved, as is briefly summarised below, but they may

also yield income by helping people get information relevant to their jobs or finding jobs. There have been numerous studies of the role ethnic neighbourhoods play in mediating access to jobs but a recent example in a European context is provided by the work of Coniglio (2004). He has a model in which minority non-local language speakers access labour markets via neighbourhood bilinguals who intermediate information within the wider labour market. Thus, for those who cannot speak the locally dominant language, living in ethnically segregated neighbourhoods does not just provide consumption benefits in terms of access to culturally familiar goods and services but it generates higher productivity and incomes. He shows that such a model is consistent with the formation and stability of ethnic neighbourhoods in Norwegian cities.

Consumption and welfare benefits

There seems to be quite persuasive evidence that specialised neighbourhoods have labour market advantages, even for the poor; indeed particularly for the less skilled who rely on personal contacts to a greater extent to find jobs. Even if there are some possible negative neighbourhood effects for poorer groups – and the more meticulously studies have been able to offset for other factors influencing personal outcomes – the less have they found any such effects – still the question also has to be asked: are there also consumption benefits from living in specialised, and so segregated, neighbourhoods? People systematically tend to choose such neighbourhoods. That, itself, suggests there are benefits.

Choice of neighbourhood is constrained by income, as are most economic choices, because houses in nicer neighbourhoods cost more (as is discussed in detail below) but people choose neighbourhoods on the basis of what a neighbourhood offers them which will either yield welfare directly or increase their expected incomes. And specialised neighbourhoods are better able to do both. There is also the issue addressed below that peoples' welfare does not only depend on the level of their own income but on the level of their income relative to others living near them and with whom they associate. The strong findings on this, reported in Luttmer (2005), point to that being a very powerful reason for choosing to live in neighbourhoods segregated by income. This suggests the very reverse of a policy of 'mixed neighbourhoods'.

Specialised neighbourhoods provide direct consumption benefits both because they increase the range of choice for people with respect to the types of neighbourhood in which to live; and people and families of similar incomes, tastes or points in the life cycle tend to consume similar goods and services and require similar amenities. Living in a neighbourhood with a local wholefood supermarket, Montessori school, gastropub or microbrewery commands a premium: neighbourhoods with pawnbrokers, a local Aldi or discount store and a takeaway are cheaper. If you are a recent immigrant and want to be able to continue to speak your original language, engage in your native culture or religion, and buy food or other items you have developed a taste for, then there are great advantages in living in neighbourhoods with concentrations of people of similar origin. This is one obvious source of the ethnic neighbourhoods of large American and European cities. A recent study of children in primary schools found 300 different languages communities in London (Baker and Eversley, 2000) living in linguistically and culturally specialised neighbourhoods.

But such agglomeration economies in consumption are not confined to ethnic groups. Families with young children will find benefits of networks and facilities, and mutual support as well as information, if they live in neighbourhoods with substantial numbers of families at the same stage in life. Young singles who eat out and have a taste for urban entertainment and culture will similarly find agglomeration economies in consumption if they find neighbourhoods in which large numbers of like minded people are concentrated. More educated people, and people working in the liberal arts, may prefer to live in neighbourhoods with concentrations of similar types, sharing leisure and cultural pursuits and seeking similar local shops; business people may equally gain consumption benefits from concentrating in neighbourhoods in which other business people live.

Ideas and insights about the contribution of specialised neighbourhoods to productivity go back a long way – for example to Marshall’s (Marshall, 1890) famous account of the ways in which Industrial Districts increase productivity and growth, because ‘knowledge is in the air’. Luttmer’s (2005) central idea that people’s welfare depends not just on their income but decreases as their own income falls relative to other people also has distant roots. He cites Adam Smith and quotes John Stuart Mill:

...men do not desire merely to be rich, but richer than other men”

In attempting to test for the significance of this proposition and quantify its effects, there are a number of methodological problems - particularly the possibility that welfare is itself a relative concept. However, Luttmer (2005) goes to considerable lengths to eliminate possible biases from his estimates, including testing against absolute measures related to welfare, such as marital conflicts, as well as against reported personal welfare itself. He analyses a sample of about 10,000 individuals from two phases¹⁰ of the National Survey of Families and Households living in a sample of 965 neighbourhoods - or 555 neighbourhoods for the sub sample of neighbourhoods with respondents living in them at both time periods. His findings are striking. Roughly speaking losing £1,000 of income seems to make people feel about as much worse off as their neighbour gaining £1,000! The estimated impact of a positive change of household income on reported welfare is quantitatively almost the same as a similar, negative, change in neighbourhood mean incomes.

He subdivides the sample into households of single adults, couples living together at both sampling dates (stable couples) and adults living with different partners in the second time period. The strong negative impact of neighbours being richer on peoples’ sense of wellbeing estimated for the three groups together turns out to be explained mainly by the (large) sub sample of stable couples in the data set. Single people do not seem to experience a loss of a sense of wellbeing from neighbours’ extra income. Moreover, the effects are stronger for individuals who socialise with neighbours and the effect of neighbours’ incomes is stronger if the neighbour is more similar to you (only tested for those with and without a college education). If disaggregated measures of reported welfare are analysed then the main effects were in terms of time with family and hours worked. That is, it appears that people living in communities where neighbours have higher mean levels of income relative to their own, compensate by working longer hours and spending less time with their families

¹⁰ 1987-88 and 1992-94

and in leisure. This causes them to feel themselves to be worse off and have lower reported welfare. The evidence points to a real impact of relative as well as own income on welfare.

Moreover, there is no significant effect of overall neighbourhood inequality. That implies it is not living in a less equal neighbourhood that lowers an individual's welfare but specifically having an income lower than the neighbourhood average. Perhaps the main problem with what is a very careful study is the definition of 'neighbourhood'. For reasons of data availability these are the Public Use Microdata Areas which, in the 1990 Census, had a mean population of 144,000 people. They are certainly considerably larger, therefore, than the usual concept of a neighbourhood. On the other hand, given that the findings capture a real effect of relative neighbourhood income which, on the basis of the accumulation of evidence Luttmer (2005) provides, seems plausible, then having data for smaller areas, corresponding more closely to conventional ideas of neighbourhoods, would seem likely to make the impact more significant still. The study finds strong evidence that social interaction with neighbours is a causal factor and presumably social interactions per neighbour are considerably greater with your nearest 500 neighbours than with those living far away and not sharing the same schools, shops or parks. In a neighbourhood of 144,000 there will be few such opportunities to interact with most 'neighbours'; in a smaller neighbourhood of 500 the chance of such interactions increases greatly. So the incomes of nearer neighbours seem more likely to affect one's sense of wellbeing than those of more distant ones.

Luttmer's results seem to imply that society as a whole would get considerably more welfare from a given total income if households with lower incomes did not have the higher incomes of neighbours confronting them on a permanent basis. This seems to apply to both poorer and richer groups. The poor would feel their absolute poverty less if they were not surrounded by richer households. If Luttmer's results apply generally, therefore, welfare of all would be improved if we had neighbourhoods more segregated on the basis of income rather than less segregated.

4. The dynamics of neighbourhood segregation

There is little argument about the fact that people and households select themselves into neighbourhoods and that neighbourhoods tend to have a degree of homogeneity with respect to the characteristics of the people and families who live within them. Equally, the fact that cities have neighbourhoods segregated on the basis of income is uncontested although the extent of neighbourhood income heterogeneity at any point in time is significant. The issue is why rich and poor neighbourhoods emerge and, specifically, does living in a poor neighbourhood make poor people or their children even worse off than they would otherwise have been? Associated with that question is whether, if living in a poor neighbourhood does make people even worse off than they would otherwise have been, is the impact sufficient that policy should specifically address it?

It is perfectly possible that any neighbourhood effect - if it exists - is comparatively small and that the cost of policies to address it effectively is so great compared to the costs of other policies to improve the welfare of poor people that attempting to achieve 'mixed neighbourhoods' is simply not cost effective. It has already been

noted that for the MTO project the average cost per head of just providing the expert personal advice needed to help poor people successfully find accommodation in an affluent neighbourhood was \$3,000. Something the studies did not examine at all was what happened to the houses vacated by the participants who moved out of the poor neighbourhoods. Assuming they were in turn filled by other poor people, then the total number of households still living in poor neighbourhoods was unchanged by the project: so presumably, therefore, were any costs associated with concentrations of poverty in neighbourhoods.

This brings one to the issue of neighbourhood dynamics. Too frequently, the assumption implicit in arguments for neighbourhood-based policies is that the inhabitants – the ‘local community’ – are a stable set of families. But this is not the case. Neighbourhoods are more like buses with a constantly changing set of people in them: people/families are always moving in and others moving out. This process is not random and may be significantly influenced by neighbourhood-based policies themselves. The overall pattern of neighbourhoods is also related to the overall distribution of income within the urban housing market concerned: a case can be made, indeed, that neighbourhood segregation by income – remembering that many personal characteristics such as health, membership of disadvantaged groups, education and skills as well as criminality – are strongly correlated with income – is effectively just the spatial articulation of the overall income distribution.

If society’s income becomes more unequally distributed – the rich become richer relative to the poor – then residential segregation should be expected to become more sharply demarcated; ‘society’ again being composed of the set of households who occupy a given housing market area.¹¹ The mechanism which produces this association between inequality and spatial segregation is the interactive sorting role of housing and labour markets. Both housing and labour markets are intrinsically ‘spatial’. Houses and jobs are located precisely in space and the occupation of a particular house simultaneously determines a person’s access to their current job and other jobs and confers the ability to ‘consume’ a wide range of amenities, neighbourhood characteristics and local public goods.

Mobility – does getting on mean getting out?

First, let us look at some of the evidence of the determinants of mobility between neighbourhoods and why we should not expect policy interventions to be non-random in their impact on the composition of a neighbourhood. An evaluation of a City Challenge programme of urban regeneration in Harlesden, in West London, a seriously deprived community of about 10,000 people, suggested that training programmes had been well designed (after a false start) and well delivered¹². There had also been improvements in a range of neighbourhood qualities such as fear of crime. The City Challenge programme had lasted for 5 years and had injected substantial funds - £37.5 million. Despite the apparently successful training provided and the focus of the funding, unemployment among people living in the City Challenge neighbourhood at the end of the programme was higher relative to both West London as a whole and to comparable disadvantaged neighbourhoods than it had been before the programme.

¹¹ We can adapt DiPasquale and Wheaton’s (1996) definition of a geographical real estate market: a geographic /spatial housing market is the area which ‘encompasses all housing units that are influenced by the same economic conditions...’

¹² This section draws on Cheshire *et al.*, 1998.

An obvious potential explanation was that people who had improved their labour market position as a result of the programme had differentially moved out of the neighbourhood. People had moved into the vacant housing to replace those moving out but those moving in had even more unfavourable labour market characteristics than the average for the community as a whole; and worse than those they replaced. To the extent the training programmes succeeded, they induced more churn. Paradoxically, therefore, the very success of the programme – if it had induced selective mobility – could have led to the deterioration in the unemployment rate of current residents noted at the end of the period.

To test this three samples were constructed of people of working age by comparing electoral registers for the start and end of the period: one sample was of people moving out of the neighbourhood during the period of the programme (the ‘Outmovers’); one of people resident within the neighbourhood throughout (the ‘Stayers’); and a third of people moving into the neighbourhood over the five years of the programme (the ‘Inmovers’). All Outmovers who could be identified and tracked, were surveyed. Samples of the other two groups were drawn randomly from the electoral register. Tracking Stayers and Inmovers was not difficult but tracking and interviewing Outmovers presented more problems. They were tracked by personally calling at their former addresses and asking for their current whereabouts and also by using electoral registers for the end period for all London Boroughs and from those identifying electors who had previously been resident in the Harlesden City Challenge area. Former residents moving out of London altogether were not traced. This allowed us to track and interview a sample of 50 Outmovers but there was probably some selection bias with respect to those who were located and interviewed since successful returns from Outmovers not on the electoral register in their new destinations were particularly difficult. Two thirds of the interviewed Outmovers were traced by comparing electoral registers.

The usefulness of the training schemes provided by the City Challenge programme was rated highly and this rating did not vary between groups. Attendance on the training schemes among the currently employed, however, had varied considerably across groups. The Stayers and the Inmovers displayed very low levels of participation (Stayers 13%; Inmovers 6%) whereas 37% of the Outmovers had attended such courses. Perhaps reflecting this, the Outmovers, as Table 1 shows, had substantially improved their position in the labour market compared to five years previously on all dimensions and this improvement was statistically significant compared to either of the other groups.

Table 1: Mean rating of current job compared to job held 5 years previously *

	Sample size (total number)	Skill Level of Job	Pay	Conditions	Satisfaction
Stayers	270	0.45	0.63	0.53	0.54
Inmovers	63	0.77	1.23	1.23	0.92
Outmovers	48	1.4	1.47	1.6	1.2

Respondents rated the four attributes of their current jobs relative to the job they had held 5 years previously on a five point scale ranging from -2 (much worse) to +2 (much better): so the larger the number the greater the improvement.

Table 2: Labour Market Position at Time of Survey

	Sample size (total number)	Inactive (%)	Currently Unemployed (%)	Employed (%)
Stayers	270	42	15	41
Inmovers	63	31	21	48
Outmovers	48	39	9	51

The Outmovers were less likely to be unemployed than either other group (Table 2) – although this was only statistically significant when compared to the Inmovers. Not only that but if employed, Outmovers were significantly more likely than either other group to have a full time job. Of the currently employed in the Stayers group, 23% had a part-time and 77% a full-time job, whereas amongst the Inmovers only 13% had a full time job. Amongst employed Outmovers, in contrast, 97% were working full time. Thus, this evidence on the relationship between mobility and labour market position, points very strongly to the conclusion that if a person living in a deprived neighbourhood improves their employability and gets a job, they have a much increased probability of moving out to a better neighbourhood. It also, of course, demonstrates the irrelevance of judging the success of programmes designed to improve the employability and life chances of the residents of deprived neighbourhoods by the unemployment rate of the residents of that neighbourhood at the end of the programme. The more successful the programme, the more mobility it is likely to induce regardless of where jobs are located since those who upgrade their skills and get (better) jobs – even if they get a job close to where they used to live – are more likely to move to a less deprived neighbourhood. Since Inmovers have much higher unemployment rates than other groups, the measured unemployment rate of current residents will rise. Compared to the MTO programme, which had no impact on the labour market position of adults moving to affluent neighbourhoods, it should, however, be noted that providing well designed training for Harlesden City Challenge residents did improve their labour market positions: but those who benefited disproportionately moved out.

Nicer neighbourhoods cost more

As Table 1 shows, improving one's labour market position usually implies becoming richer. The Outmovers not only had relatively more skilled and more interesting jobs but their relative pay had increased compared to the other groups. As we learn more about how housing markets work, so we can understand better how they may interact with labour markets to sort households and individuals into more and less desirable neighbourhoods on the basis of their incomes. Cheshire and Sheppard (2004) take the case of good schools. Better schools (when access to a school is determined by geographical catchment areas) are an example of a whole class of 'goods' one might call truly 'positional'. That is goods which can only be consumed by living in the appropriate place where they are available; and for which the ability to buy houses giving access to them is chiefly determined not by absolute income but income relative to others who are competing for the same 'goods'. The most important and obvious of these in Britain is access to the best State schools. To the extent that a family's address controls access to these, educational policy in Britain has created a situation in which it is not the most gifted or the most deserving who benefit from the best, supposedly free, State schools but those whose parents can afford to buy access to them through the housing market.

There is now a wealth of evidence showing that housing is a complex good, composed of many attributes or characteristics, each of which commands a price. Since Rosen (1974) 'hedonic' analysis has become the standard framework within which these prices are analysed and estimated. The price of any given house is the sum of the prices being paid for all its individual and particular attributes. Although the idea is simple, it has proved fruitful as a way of analysing housing markets. Hedonic studies of housing markets have mushroomed and it seems to be an area in which genuine progress of a scientific kind has been made. Studies have incrementally improved the methodology and refined the estimation process.

Evidence that people buy local public goods through their choices in the housing market goes back at least to Oates (1968) and estimates of the price paid for school quality have improved over time. Recent studies in the US have included Haurin and Brasington (1996) and Black (1999). One of the first studies in the UK was Cheshire and Sheppard (1995) but more recent estimates by the same authors (Cheshire and Sheppard, 2004) reveal much more about the process. Indeed, it has become increasingly clear how complicated housing markets are and how sophisticated are the ways in which housing attributes – and so ultimately housing itself – are priced.

What people appear to buy as they engage in house hunting is not the current set of attributes but something corresponding to the expected long run set of attributes. Cheshire and Sheppard (2004) found that it was not just the current quality of primary schools (measured by their students' performance on standardised tests), which determined the price paid for access to 'primary school quality'. The price paid also incorporated a discount for current school quality if there was more variation in the performance of the school over the past five years and if the house was located in an area in which new construction was concentrated. More consistent performance measurably increased a house buyer's confidence that a similar quality would be maintained in the future. Interestingly the effect of more new construction in the local area in depressing house prices was specifically related to school quality. There was no evidence of just a general negative 'area of new construction' effect. It was only when local new construction was expressed as a discounting factor on local school quality that a statistically significant effect on house prices was found. More local construction increased the likelihood that an address could be re-assigned to another school as the Local Education Authority implemented its explicit policy of filling its available school capacity. It may also have increased uncertainty about the composition of the intake to the local school in the future as new households moved into the neighbourhood. So both more variation in performance in the past and more local new construction reduced the price buyers would pay for the current performance of the school a house gave access to.

Moreover, studies are finding increasingly complex interactions with other variables. For example, the price paid through the housing market for access to parks or open space of a given character appears to vary with the density of the neighbourhood, household incomes and local crime levels (Anderson and West, 2006); the price paid for proximity to open countryside varies with the likelihood of its remaining undeveloped (Irwin, 2002). In the context of school quality, Cheshire and Sheppard (2004) found that the price paid for a given quality of local school varied with the suitability of the house to accommodate children. These are not surprising findings

but data and estimation methods make it increasingly possible to estimate them and make those estimates increasingly accurate.

What hedonic studies of housing markets show is that access to higher amenity open space, natural amenities like views or proximity to water, greater security from crime or better quality state provided education, costs a substantial amount. The value of all such amenities and local public goods is capitalised into house prices. As an example, moving an otherwise average house from the catchment area of the worst to that of the best primary school in Reading in 1999/2000 was associated with an increase of one third in its price¹³.

Thus, the ability to benefit from or consume such localised goods is dependent on the ability of a household to buy a house in those particular neighbourhoods which give access to them. Since the supply of such goods is relatively inelastic and varies significantly from neighbourhood to neighbourhood and demand increases more than proportionately as incomes rise, the price rises sharply with increasing quality and rising income. But their more or less fixed supply also means that the ability to buy such goods is more determined by how rich a household is relative to other households competing for the same local amenities than it is by the household's absolute income: that is, by where a household is in the distribution of incomes in the housing market area concerned.

More fundamental aspects of how people live and how real welfare is distributed appear to follow from this observation. As was discussed in Brueckner *et al.* (1999), cities have a natural geographically and topographically determined endowment of some amenities – where the best views are to be had, where the natural amenities such as river frontage are available or where, as determined by prevailing winds, air quality is better. In the context of most Old World cities, of course, there was also a fixed neighbourhood within which a particularly valuable local public good – security – was available: within the city walls. These locationally fixed amenities or public goods generated clustering of those households who had a taste for and could afford them. In turn, this generated higher local incomes, supporting better local cultural and commercial amenities and classier neighbourhoods with better schools and lower crime rates. This further re-enforced the attractions of the more attractive neighbourhoods.

While it is common to think of the prices of composite goods, such as housing, being the sum of a set of prices for the individual attributes of which they are made up, it is less common to consider a market for each relevant attribute with its own demand and supply characteristics. Yet, that is clearly important and the supply characteristics of individual housing attributes will vary significantly. Some, such as central heating or

¹³ In the models discussed here all prices are estimated to vary not just as the quantity of the attribute in question changes (for example the first bathroom is worth a lot more than the fifth) but as the quantity of other attributes varies (for example, the price paid for more space inside a house of given size also varies with the size of the garden, or the value paid for primary school quality varies with the suitability of the house to accommodate children). As a result, this calculation of the impact on price of moving a house from the worst to best primary school catchment area can only be done by assuming some particular levels for all other attributes. Here it is assumed that all other attribute levels are equal to the sample mean, the sample being a random sample of houses sold in the local housing market in 1999/2000 was used to estimate the model.

the number of rooms in a given space, can easily be reproduced industrially and so will be elastic in supply. Others would, in the absence of regulation, normally be elastic in supply. More urban space in aggregate (except in exceptional places such as Singapore) can always be made available by the construction of additional transport infrastructure. But in Britain, and increasingly in other countries, the supply of urban space is constrained by land use regulations such as density controls, urban containment, local zoning or protective designation. Other attributes, such as access to particular natural amenities, open spaces or the ‘best’ local, state funded school, may be intrinsically in very inelastic supply. As noted above, the demand for most characteristics - including housing space, classier neighbourhoods and local amenities is ‘income elastic’. Estimates in Cheshire and Sheppard (1998) were that for many attributes of this type, an increase in household income of 10 percent was associated with an increase of 15 to 20 percent in the amount spent on them.

It would appear to follow from this that competition for access to better quality, locationally fixed ‘goods’, will price poorer households out of access to – or at least force them to consume lower quality – local public goods and amenities – and so generate systematic patterns of residential segregation between richer and poorer neighbourhoods. Given that poverty is correlated with other characteristics such as lower educational attainment, poorer health, higher unemployment and membership of disadvantaged groups, it would seem plausible that residential segregation is largely the spatial articulation of income inequality in society (though of course there may be residential segregation between households of similar mean incomes but different tastes or characteristics). Residential segregation is associated with lower welfare for poorer groups since households derive significant welfare from access to the better quality local public goods, including better security, and amenities. But really this is just another manifestation of the price mechanism interacting with the distribution of income to allocate goods according to ability to pay and preferences. Indeed, it may be an important part of the explanation why access to public services provided out of taxation is closely correlated with the distribution of income (Goodin and Le Grand, 1987). Although they appear to be distributed according to need, in many cases you have to ‘buy’ access to them through the housing market.

A further implication is that if the distribution of household incomes changes, this will be reflected in a changing intensity of residential segregation. If, for example, incomes become more unequally distributed – as happened in the UK, the US and several other OECD countries from the mid 1970s to the mid 1990s – under certain circumstances described below, there should, other things being equal, be an intensification of residential segregation with the richest and poorest households becoming relatively more concentrated in richer and poorer neighbourhoods¹⁴. An increase in residential segregation has certainly been documented in the US context as discussed by Massey and Fischer (2003). They show that inequality across regions has decreased while at the same time between neighbourhoods in US urban areas it has increased.

This pattern is to be expected if the supply of at least some of these localised goods is inelastic (the ‘best’ local state school or a house overlooking Hampstead Heath or the

¹⁴ And, of course, if property owners already living in more/less desirable neighbourhoods, experiencing rising/falling relative asset values too – see below.

Thames, for example) while the demand is income elastic. If these conditions hold then their relative price should be expected to increase if the rich get richer relative to the poor. More expensive houses in more expensive neighbourhoods will become relatively more expensive still, pricing the poor out to less desirable neighbourhoods even more completely. For example if only 0.05 percent of houses in London can overlook a feature as attractive as Hampstead Heath then your the ability to ‘buy’ that feature does not depend so much on your absolute income as on your income relative to the incomes of other households who have a taste for overlooking Hampstead Heath.

Analysis of the structure of house prices as the quantities of attributes increase produces results that are consistent with this perspective. Returning to the findings of Cheshire and Sheppard (2004) with respect to the price paid for school quality they report a highly non-linear price function with very little change in price if the local school goes from being the worst to middling. The price change associated with moving from the 75th percentile point in the quality distribution to the best of all – the 100th percentile point – however, was very large indeed. Say there were 100 primary schools in the Reading area and using the values estimated in Cheshire and Sheppard (2004) then moving an otherwise average house from the catchment area of the worst to that of the tenth worst made no discernable difference to its price; moving it from that of the tenth worst to the tenth best increased the price by 10.4 percent; but moving it from the catchment area of the tenth best primary school to that of the best of all would have been associated with an additional 16.9 percent in its price.

Apart from access to the Thames, where all the price increase was associated with having frontage to the river itself, other attributes for which the premium paid for the ‘best’ observed was particularly large, were closeness to the town centre, and space – both inside houses and for garden space. Equally, there were some attributes for which the estimates showed most – or a substantial proportion – of the price variation was associated with going from having the very ‘worst’ observed to something just a little better: neighbourhood deprivation was such an attribute. Again if there were 100 wards going from the most deprived to the tenth most deprived increased the price proportionately more than going from the tenth most affluent to the most affluent. Elaborate precautions were taken in the study to standardise for all significant factors affecting local house prices including, of course, the social and economic composition of the neighbourhood.

These results are likely to reflect the pattern of preferences but they are also consistent with the interpretation offered above. Attributes of houses, or amenities to which particular houses give privileged access, which are in fixed or limited supply take on the status of truly “positional goods” that are auctioned off via the market for houses to the highest bidders. The ability to buy is determined not by absolute income but by income relative to other households competing for the same goods. That school quality and private land and space consumption should exhibit this behaviour is consistent with the argument presented above. Local governments act to constrain the supply of land for housing and – no doubt unintentionally - the availability of the

highest quality public goods¹⁵. An additional source of supply limitation may arise from “peer group effects” and the preference of households to live in areas in which they find their neighbours desirable or compatible. If richer and better educated neighbours, who spend more on their childrens’ education, are perceived as desirable, then the neighbourhoods in which they are concentrated are by definition limited in supply and hence local neighbourhood quality becomes a positional good. In this way many of the “non-market” interactions that are an essential component of cities (as persuasively argued by Glaeser, 2001) are actually brought into a form of market allocation via the housing market.

The house and neighbourhood characteristics allocated in the housing market include not only the public goods themselves, but also risk and uncertainty concerning their levels. As noted above, the measure of the past variation in the quality of a local school was also reflected in the price paid for a given current level of measured quality. Gibbons (2004) showed that neighbourhood crime – an indicator of real risk – was similarly reflected in house prices in London.

The actual price paid for any attribute will depend on the characteristics of the local housing market¹⁶ and economy since both these influence the supply and demand characteristics of individual attributes. For a given measure of income inequality the best local school will cost substantially less in housing markets where average incomes are low than they will in high income housing markets because demand is income elastic. In the higher income housing market people will be spending a higher proportion of their incomes trying to buy educational quality. If incomes become more unequal over time (or in housing markets in which incomes are more unequally distributed) then the price of attributes in fixed supply will rise and we should expect an even stricter sorting of households between nicer and more disadvantaged neighbourhoods. The best State schools become even more strictly reserved for the richest local households (ignoring private education, access to which is explicitly determined by income not place of residence).

Thus, house prices are about much more fundamental economic and social issues than dinner party conversations or estate agents’ talk would credit. The way in which the housing market works explains an important part of the underlying differences in real welfare in society both vertically between households and across space; that is the patterns of spatial segregation one observes in all cities. Many local public goods, funded from taxation and which we think of as naturally being provided on an equal basis to all households, are really much better thought of as being allocated through

¹⁵ That is not because they usually want there to be worse schools or public parks but because there can only be one ‘best’ school or park. This is not the case with land supply which is intentionally restricted in order to implement urban containment policies.

¹⁶ Including, of course, local policy. If access to schools is not determined by place of residence but by some other mechanism, for example, by lot, or by selective examination, then there would be no price paid via the housing market. Consistent with this and demand for school quality being income elastic is the estimated hedonic price of school quality in the Reading compared to the Darlington housing markets in 1993 and 1997 respectively. Again looking at the ‘average’ house, the price per GCSE point improvement in Reading, where mean sampled incomes were £28,610 pa, was £243.9 while in 1997, in Darlington, where mean incomes were £23,422, it was £30.8. However, since not only were incomes lower in Darlington but allocation to schools was less tightly tied to home address, we cannot be sure what the contribution of each factor separately was to the difference in the price of ‘school quality’ for the mean home.

the housing market. Consumption of them is thus conditioned on household income in just the same way as consumption of foreign holidays, private education or personal security services is conditioned on income. But because the supply of many of them is more or less fixed within a particular urban area or housing market, income relative to others competing for access to the same goods is the real determinant rather than the absolute level of income itself.

Pricing the poor out of better neighbourhoods

This brings one on to a final issue. If the preceding account is correct and income inequality is an important driver of residential segregation, then changes in the distribution of income should lead to matching changes in the distribution of house prices. If the rich become richer relative to the poor and so are more effectively able to outbid the poor to gain access to valued localised amenities and public goods, the supply of which is inelastic, then expensive houses should become relatively more expensive compared to cheap ones.

Data against which to test this is difficult to obtain. It ideally requires a series of samples of house prices for a given housing market over time and matching data on incomes for households within that same housing market. Such data – at least for UK housing markets – are not easily obtained but work done on the Reading housing market (reported in Cheshire and Sheppard various and Cheshire *et al*, 1999) does provide such data for two different dates at least – 1984 and 1993¹⁷. The discussion below relates strictly to these two survey-based data sets except where noted.

There was a significant widening of income differentials in England and Wales as a whole between 1984 and 1994. For example, the New Earnings Survey (NES) shows the ratio of the gross earnings of a person at the 90th percentile point in the distribution, relative to the mean as 1.54 in 1984 compared to 1.61 in 1994. The same source shows earnings becoming significantly more unequal in Berkshire, with the same ratio widening from 1.55 to 1.70. The NES, however, is not really a satisfactory source for investigating the overall distribution of household incomes since very high earners are excluded from the survey and it relates just to the earnings of individuals. The sample data for the Reading area has the great advantage of being precisely related to houses and the prices of those houses but it also has some disadvantages. It relates to the joint gross incomes of households but only to those owner occupiers in the sample from whom a survey was returned. Given that the survey was of occupiers of sampled houses for sale or recently sold, a significant proportion of which were vacant at the time of survey, the overall response rate of around 47 percent for each survey round was respectable. Thus, it differs from the NES in that it excludes incomes of renters who have lower incomes on average than owner occupiers but for couples both incomes from all sources will be included in the reported household gross income, as will the incomes of the highest earners. Thus, we should expect the survey distribution to be substantially more unequal, however equality is represented, than would be the case of the NES¹⁸.

¹⁷ The data set for 1999/2000 did not contain household income.

¹⁸ The NES excludes all the highest earners but they are included in the survey. Renters have lower incomes on average than owner occupiers but the variance of incomes in the lower tail of the overall distribution is less than in the upper tail. While the survey undersamples low income households because it omits renters, it still includes some low income households, such as owner occupied pensioner households.

Since incomes were reported by quite large bands (over 20 percent of respondents in both surveys were in the highest income band) representing the degree of equality or inequality by the ratio of the 90th percentile point to the mean is rather crude but for direct comparison with the NES this ratio moved from 1.61 to 1.97 between 1984 and 1993 – a substantially greater measured increase in income inequality. The Gini coefficient may be a more subtle measure of the equality or inequality of a distribution. If incomes for each household are interpolated using a standard procedure¹⁹ then one can estimate a Gini co-efficient for the distribution at each date. The value of that was 0.35 in 1984 but 0.53 in 1993: an indication of a very substantial increase in income inequality.

Turning to the distribution of house prices, there is a parallel but smaller increase in distributional inequality measured by the Gini co-efficient; this moved from 0.22 to 0.28 between the two survey dates. Examining the (in)equality of the distribution of house prices (by comparing the ratio of the 90th percentile point to the mean) also shows an increase in house price inequality, with the more expensive houses becoming relatively even more expensive between the two periods. The ratio increased from 1.46 to 1.66 between 1984 and 1993.

This is far from conclusive evidence in support of the argument above since it is just two observations. Nothing of statistical significance can, therefore, be read into it. Moreover, conceptually one could argue that changes in the post tax distribution of incomes would be more relevant than gross incomes. Arguably, some measure of the quality of houses should also be included and this may have changed between 1984 and 1993. Nevertheless, what evidence is available is consistent with the hypothesis that an increase in income inequality leads to a parallel increase in house price inequality as the relatively richer compete more successfully for access to the limited supply of the ‘best’ houses in the ‘best’ neighbourhoods.

5. Conclusions

This paper does not argue that ‘neighbourhood effects’ do not exist. While the evidence is overwhelming that poor people are priced into deprived neighbourhoods because they are poor, living in the most deprived neighbourhoods is almost by definition not a life enhancing experience. Because of peer group and role model effects, coupled simply with increased threats to health – even life²⁰ – from accidents and crime, the experience may impair the life chances of those who live in them and especially those of children raised in them. Before engaging in significant efforts and spending substantial resources to use policy to force neighbourhoods to be mixed, however, it seems essential to have a clear idea - if such neighbourhood effects exist - of how large they are and what benefits specialised, homogeneous neighbourhoods may confer on both richer and poorer households.

¹⁹ Each income band in the survey is represented by a point interpolated applying a Pareto distribution to the overall data and each household in each income band is assigned the income at that point.

²⁰ Studies estimating neighbourhood effects by tracking cohorts of individuals over time, such as Oreopoulos (2003) or Bolster *et al* (2007), since they only track survivors, may underestimate neighbourhood effects if being raised in the most deprived neighbourhoods increases death rates for young people.

The evidence presented here suggests that the benefits of specialised neighbourhoods are significant both in terms of finding suitable jobs and increasing the range of choices available to people and the welfare they derive from living in cities. Despite major research efforts and expenditure – for example the US experiment of the Moving to Opportunity programme – evidence of any significant additional negative effects of living in deprived neighbourhoods (compared to the fact of poverty and the factors which tend to make someone poor in the first place) is very elusive. Evidence of positive externalities improving the welfare and lives of the poor as a result of having affluent neighbours is difficult to find. Since (always subject to their income constraint) people choose the neighbourhoods in which they live, unless there are such externalities how can we justify policy interventions to force people to move from where they have chosen to live?

While there may be benefits from mixing communities, there are almost certainly costs too, and to judge the policy, it is the net gains, including the costs, that should be decisive. The costs are likely to reflect the processes which underlie the persistence of neighbourhoods segregated along income lines because these would have to be reflected in the scale of resources needed to achieve neighbourhoods that are more mixed as a lasting element in our cities. The evidence suggests it is not just a one off cost that would need to be met but a continuing cost to prevent neighbourhoods policy succeeded in mixing, unmixing again.

The evidence reviewed here, particularly the most recent findings from cohort studies and the MTO project, does not support the conclusion that neighbourhood effects are quantitatively all that important nor that moving the poor to affluent neighbourhoods on balance improves their welfare. However, we do know that the rich can always outbid the poor for nicer neighbourhoods because the desirable attributes of these neighbourhoods are fully reflected in the prices of houses within them. To the extent that this is true, social segregation in cities must largely reflect economic inequality rather than causing it. Forcing neighbourhoods to be mixed in social and economic terms is, therefore, mainly treating the symptoms of inequality not the causes. It may make decent people feel better but it does not address the problem.

At the same time there seem to be direct welfare benefits from living in specialised neighbourhoods with other complementary and similar households and probably output benefits, too, because of better labour market networking and matching. These seem to apply to poorer less skilled people as much as – even more than – the rich and educated. To the extent that these are significant, mixed neighbourhood policies directly destroy a potential source of welfare and a portion of the consumption and productivity benefits cities are capable of delivering. In addition, if Luttmer's (2005) findings generally apply and welfare falls as a person's income falls relative to their neighbours', then that is an additional reason why mixed neighbourhoods may reduce welfare. All these possible losses need to be balanced against any benefits of reduced negative 'neighbourhood effects'.

Amongst the many things poor people buy less of is the amenities available from living in affluent neighbourhoods. Their poverty constrains them to consume less of everything. Food stamps may be paternalistic but at least we know that poor people benefit from eating better (and having some extra income left over to spend on other things). The problem is that there is scant evidence that the poor get any net benefits

from being forced to live in more affluent neighbourhoods. They will have better local amenities than they could otherwise afford but if they have any choice in where they currently live, the evidence of their location shows they valued other things more. They lose the support of other families like themselves and local services tailored to the needs of poorer people rather than the rich. Having a sympathetic small shop within walking distance which, though it may have high prices, stocks what you want and may give a bit of credit when you are most hard pressed, is a lot more useful to a struggling single parent than being a short drive from a wholefood supermarket catering for affluent professionals. The results from the MTO project show that while the academic quality of the schools to which the children of poor families moving to affluent areas was on average better, the academic performance of the children from poor families who moved in aggregate did not improve.

That the disadvantaged are concentrated in poor neighbourhoods does not demonstrate that poor neighbourhoods are a cause of disadvantage. If that is the case, the conclusion for policy is to reduce income inequality in society not build 'mixed neighbourhoods' or improve the built environment in such neighbourhoods. Mixed neighbourhood policies may divert attention from the need for effective income redistribution. Policies should help people and people who are effectively helped have an increased probability of moving away from the poor neighbourhoods in which they currently live. This, in turn, is likely to make the indicators for those poor neighbourhoods worse rather than better: but that does not mean that the policy was not a success.

The obverse of this is that if policies do not effectively address the underlying causes of poverty, improving the physical environment and amenities of deprived neighbourhoods may simply displace poorer people to even less attractive neighbourhoods, so the poorest have to bear disruption costs as well as poverty while continuing to live in a low quality built environment. These arguments do not, of course, imply that it is never useful to deliver policies aimed at reducing societal inequality in poor neighbourhoods (e.g. programmes to improve labour force skills or reduce crime). It is in the poorest neighbourhoods that those who most need the help of people-targeted policies tend to be concentrated.

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