Poverty and Social Exclusion in the UK

Poverty and Local Services in the Midst of Austerity:

Final report of 2012 PSE study

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Poverty and Social Exclusion in the UK

Overview

The Poverty and Social Exclusion in the UK Project is funded by the Economic, Science and Research Council (ESRC). The Project is a collaboration between the University of Bristol, University of Glasgow, Heriot Watt University, Open University, Queen's University (Belfast), University of York, the National Centre for Social Research and the Northern Ireland Statistics and Research Agency. The project commenced in April 2010 and will run for three-and-a-half years.

The primary purpose is to advance the 'state of the art' of the theory and practice of poverty and social exclusion measurement. In order to improve current measurement methodologies, the research will develop and repeat the 1999 Poverty and Social Exclusion Survey. This research will produce information of immediate and direct interest to policy makers, academics and the general public. It will provide a rigorous and detailed independent assessment on progress towards the UK Government's target of eradicating child poverty.

Objectives

This research has three main objectives:

- To improve the measurement of poverty, deprivation, social exclusion and standard of living
- To assess changes in poverty and social exclusion in the UK
- To conduct policy-relevant analyses of poverty and social exclusion

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Abstract

Good quality, accessible local services can provide significant benefits ‘in kind’ to households across the income spectrum and may help to compensate the poor for some material ‘lacks’, as well as promoting a spirit and practice of common citizenship. This paper will assess the current state of local public and private services in 2012, based on the UK Poverty and Social Exclusion (PSE) survey, as well as trends in and prospects for service usage and adequacy. This reveals a picture of improvements in some areas (especially for children, and transport), strength in other areas (retail, core health), but retreat in the field of general local public services in leisure, culture and information. It goes on to assess the distributional character of different services, in terms whether usage tends to favour the poor or the rich, and how this has changed. Further modelling analysis looks at the extent to which service constraints (of availability, adequacy or affordability) are experienced more by poorer households and neighbourhoods. The paper looks more closely at some geographical differences between services across UK countries and between rural and urban areas. The conclusions bring together the picture of service usage and adequacy over time, space and the socio-economic spectrum with previously-published evidence on attitudes and emerging evidence on the pattern of cuts resulting from UK austerity programme, and raise questions about the future nature and viability of universalist local public service provision.

Contents

Introduction and Background

Good quality, accessible local services can provide significant benefits 'in kind' to households across the income spectrum and may help to compensate the poor for some material 'lacks', as well as promoting a spirit and practice of common citizenship. Their presence and quality may provide a vital reassurance to people at particular life-stages or with particular needs (schools, health and social care), while they may also play a 'gateway' role in terms of information, advice, mobility and access to wider opportunities (libraries, citizens advice, post offices, transport), as well as significantly advancing quality of life and wellbeing (parks, recreation, museums). Yet local services are under significant challenge from the austerity budgets of Government since 2010, as well as from market changes within the private sector, not to mention technological change. Some of these issues were reflected in our paper on public attitudes to local services (Besemer, K. & Bramley, G. (2012) *Local Services under Siege*, PSE Analytical Working Paper 2, 2012)

This working paper will assess the current state of local public and private services in 2012, based on the PSE mainstage living standards survey, and also trends in usage and adequacy since 1999 as well as prospects for the near future. This will reveal a picture of improvements in some areas (especially for children, and transport), strength in other areas (retail, core health), but retreat in the field of general local public services in leisure, culture and information. It will go on to assess the distributional character of different services, in terms whether usage tends to favour the poor or the rich, and how this has changed. Further modelling analysis looks at the extent to which service constraints in terms of availability, adequacy or affordability are experienced more by poorer households and neighbourhoods. After briefly comparing UK countries, the chapter looks more closely at differences between rural and urban areas, which are particularly pronounced in respect of access to services. The conclusions will bring together the picture of service usage and adequacy over time, space and the socio-economic spectrum with previously-published evidence on attitudes and emerging evidence on the pattern of cuts resulting from UK austerity programme, and will raise questions about the future nature and viability of universalist local public service provision.

Most of the analysis in this working paper focuses on one set of questions within the PSE 2012 Survey Household Questionnaire.

> **[LcSvPr] The next questions are about services which may exist in your local area and which affect your standard of living**
>
> **I am now going to ask you about services which may exist in your local area. Using this SHOWCARD, can you tell me whether you (or a member of your household) have used these services in the last 12 months. For the services you use, please tell me whether you think they are adequate or inadequate. For the services you do not use, please tell me whether you do not use them because 'you don't want to' or because 'they are unavailable or inadequate' or because 'you can't afford to' use them.**

Thus, for each of the services there are five possible responses: (1) Use-Adequate; (2) Use – Inadequate; (3) Don't Use – Unavailable or Inadequate; (4) Don't Use – Don't Want/Not Relevant; (5) Don't Use – Can't Afford.

In the analysis, we combine these into three possible composite 'flag' indicators@

- ***Use*** the service (vs not use it) – responses (1) or (2)
- ***Constraint*** in using the service – responses (2), (3) or (5)
- ***Exclusion*** from use of the service – responses (3) or (5).

These are available at household level for 17 services of general interest to all households, of which 7-11[1] are 'public' services and the remainder private, and also for 6 services relevant to families with children and 5 relevant to elderly or disabled persons in households (again, these are mainly publicly provided or provided by a mixture of public and private bodies). Of these 28 services, 3 were not included in the 1999 survey, but we can look at changes over 13 years for the remaining 25.

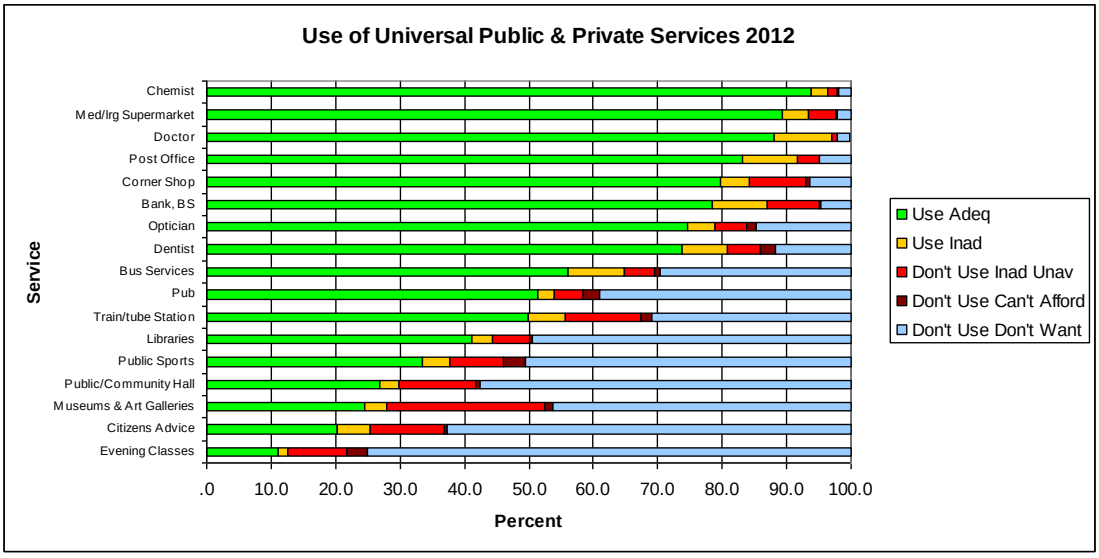
We do not attempt to routinely attach statistical confidence intervals to all the figures reported here, to avoid cluttering the presentation. As a general guide, for all household tables the 5% confidence interval on a proportion would typically be in the range (plus or minus) 2-3% points (more for childrens or elderly/disabled services).

1 The 'marginal' public services are trains and buses ('public' transport with mainly private operators) and opticians and dentists (may provide some 'NHS' services alongside private services).

Trends in Service Usage

We start by looking at the pattern of usage of universal public and private services in the 2012 PSE survey, as summarised in Figure 1. Services here are ranked in descending order on the proportion of households saying that they use the service and that it is adequate (the green bars). The other possible responses are 'Use-Inadequate' (yellow), 'Don't Use – Inadequate or Unavailable' (red), 'Don't Use – Can't Afford' (dark purple), and 'Don't Use – Don't Want to or Not Relevant' (blue). So in this case we can see the whole spectrum, including 'Use' (green+yellow), 'Constraint' (yellow+red+purple), 'Exclusion' (red+purple), but also the group who 'Don't Use- Don't Want/Not Relevant' (blue), which varies widely.

Figure 1



The top services for usage are chemists, supermarkets, doctors and post offices, all used by more than 90% of households and mainly classing the services as adequate. We discuss adequacy constraints further in the next section, but it can be seen that these are slightly more common in this group for doctors and post offices.

The next group of services includes corner shops, banks and building societies, opticians and dentists, which are all used by 80% plus of households, with use and adequate accounting for between 73% and 80%. For some of these services constraints of unavailability are rather more noticeable, and affordability is beginning to feature as a constraint in the case of dentists and opticians.

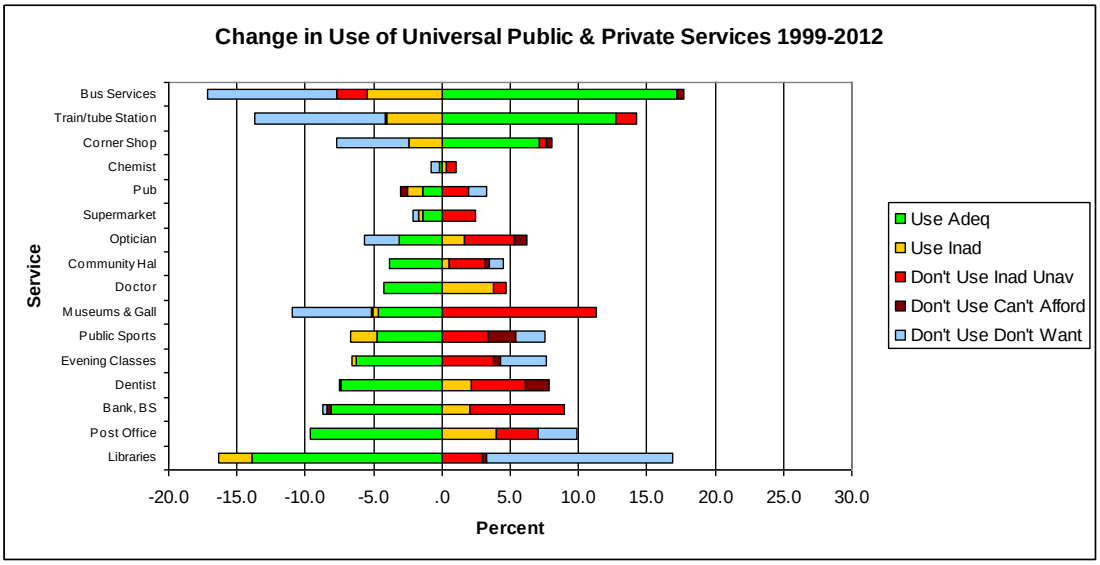
There is then quite a drop to the next group of services, which are used by between 50% and 60% of households; this includes bus services, pubs and train/tube stations. Unsurprisingly, unavailability is more of a constraint in the last case.

The remaining services fall into the general category of information, leisure and cultural services provided mainly by local government and available to the whole population. For all of these, usage falls short of 50% of the overall population, ranging down from libraries (44%), through public sports facilities (38%), public/community halls (30%), museums and galleries (27%), Citizens Advice (25%)

to adult evening classes, which are only used by 12% of households. Within this group, constraints of unavailability are more prominent, although less so for libraries.

Changes in usage of these universal services by households since 1999 are presented in Figure 2. This breaks the changes down between the categories of 'use-adequate' and so forth, in order to help show how the changes are coming about. For example, if usage is increasing, is this because more households want to use the service, or because adequacy and availability constraints have lessened; and vice versa when usage is falling. In this figure services are shown in descending order in terms of the change in 'use-adequate'.

Figure 2



Only three services have increased their usage in terms of the proportion of households who use them and rate them as adequate – bus services, train/tube stations, and corner shops. In these cases there is a real rise in usage and this is mainly due to more people wanting to use the services or perceiving them as relevant, but there is also some fall in inadequacy scores. Bus services have tended to be in decline in previous decades so this change is encouragingly positive. One key factor here may be the great extension of concessionary/free travel for pension age people; in addition bus services have improved in some regions (especially London) and more people may be using them because of congestion on roads and other transport modes. Rail travel has also been on a strongly increasing trend in this period. The increase for corner shops is a little surprising, in view of the debates about the role of supermarkets, but this growth may be partly due to the proliferation of smaller local outlets by the major supermarket chains, and partly due to the decline of traditional high streets.

Chemist shops, which are almost universally used, have hardly changed in this period. Otherwise, all of these services have seen some decline in the proportion of households using the service, although in the case of doctors the decline is in the 'use-adequate' category and the corresponding rise in the 'use-inadequate' category. There is a moderate decline in pub use, which partly reflects choices and partly availability. The current decline in numbers of viable pubs and possible initiatives on

alcohol pricing may accentuate this trend. The small decline in supermarket use may reflect the saturation of provision and the shift towards smaller outlets mentioned above. The decline in use of opticians seems to mainly reflect more unavailability and to a small degree unaffordability. There is a bigger decline for dentists which also reflects these factors, and could be a worrying trend from a public health point of view.

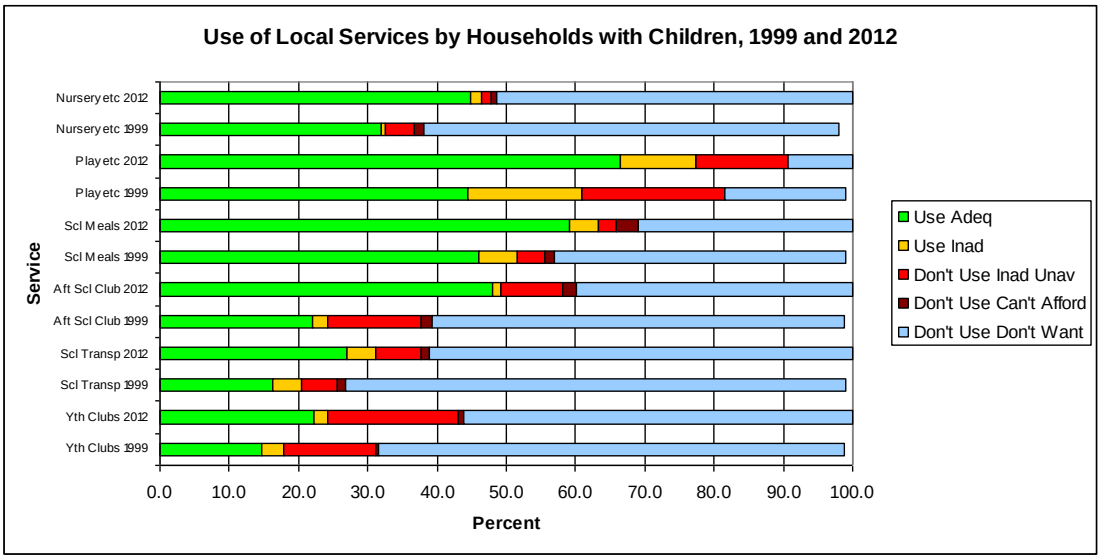
Banks/Building Societies and Post Offices are both services where there has been considerable publicity given to reductions in branch networks. The sizeable reductions in usage-adequacy in both of these cases is therefore noteworthy. In the former case the main factor seems to be much worse availability, whereas for post offices it is a mixture of people still using but finding inadequate and also more people saying they don't want to use the service. Both of these cases are affected by changes in the way that people communicate and make financial transactions, with greater use of telephone and internet modes. Actual usage of bank accounts has increased over this period.

The remaining services are in the category of local authority-provided information, leisure and cultural services (Citizens Advice was not included in the 1999 survey). All of these have seen substantial reductions in usage. The balance of factors varies somewhat, but in all cases the category of not using due to unavailability or inadequacy has increased significantly. Interestingly, more people want to use museums and galleries, which is positive news for the cultural sector which has seen considerable growth in this period, but the negative news is that unavailability/inadequacy has more than offset this. The biggest decline in usage is in the library service, and here choice is clearly the biggest factor. It is suggested that the growing ubiquity of home internet use and associated downloading of information and entertainment, together with on-line acquisition of books and e-reading, is the key factor. Choice is also a factor, to a smaller degree, in the cases of evening classes and public sports (private and club sports facilities providing an alternative here).

We commented on the declining trend in this group of 'universal' services when reporting on the 1999 survey. The 2012 survey appears to suggest that this decline has continued and, in some cases, intensified. This is concerning for those who see such services as a bulwark of universalism, because they have clearly shifted from being used by majorities to minorities of the population. This could reinforce a cycle of lessening support for such services in an extremely challenging budget context for local government. In other research (Hastings et al 2013, 2015)) we have shown that these services are suffering disproportionate expenditure cuts at the present time. They are vulnerable because, often, they go beyond minimum statutory requirements, because they are not in the high profile 'protected' categories like health, social care and schools, and because their distributional profile suggests that they are used more by the better off (as confirmed below).

The next group of services we consider are those used by households with children. Figure 3 summarises the pattern of usage for six relevant services, comparing 2012 and 1999 in the same chart. Generally the services at the top are used by a higher proportion of the eligible population (bearing in mind that nurseries are only relevant to those with under-fives, but in this comparative presentation the denominator is all households with children).

Figure 3



The picture of change in usage and adequacy of these children's services is very much more positive. In all cases there has been a sizeable increase in the proportion reporting use and adequacy, typically increasing by between a third and a half. This suggests that the strategy of government during this period of investing in fuller preschool provision, and other services to support school age children and parents, has had a large impact. The biggest increase was in 'after school clubs', a relatively new form of provision, which may be seen as supporting both learning and labour market participation aims. In this period there was also considerable attention given to improving public open spaces, including play spaces, as part of general strategies for neighbourhood renewal and urban renaissance. School meals received a lot of media attention, including the involvement of celebrity chefs and debates about the quality of the food on offer, so it is gratifying to see increases in usage and adequacy scores here.

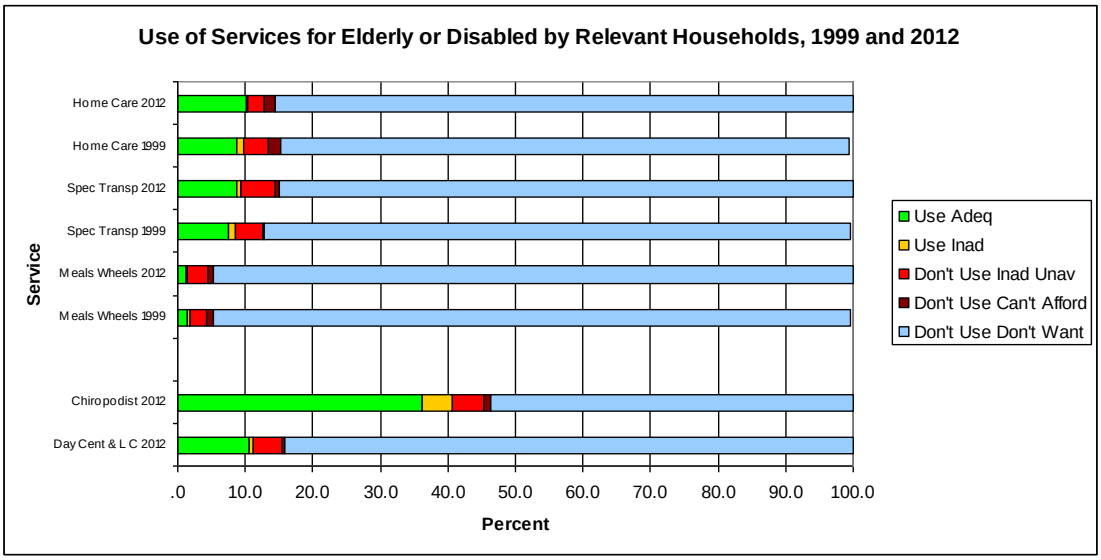
In the 1999 study we found that inadequacy and unavailability constraints were most prominent among services for children. The evidence in Figure 3 suggests that these problems have been tackled to a very considerable degree. Although red and yellow bars are still quite significantly in some cases, in most instances the proportion reporting these constraints has lessened over this period. Youth clubs is one exception, where unavailability has increased, and worryingly this is one area where current local spending cuts may be hitting hard.

In contrast with the position on the 'universal' local government services discussed above, one can see from Figure 3 that a number of these children's services have moved into the position of being used and valued by a majority of families. Thus, one could characterise this as a move towards more universalism within the families/children demographic group.

The third group of services considered are primarily targeted on elderly and disabled adults. With one exception, these may be characterised as needs-based or rationed services targeted closely on individuals with relatively high levels of need or dependency, who are a relatively small proportion of the wider potential client

population. Figure 4 shows the usage responses for three services which were included in both surveys and two which were only included in 2012. For the former three, one can characterise the trends as showing relative stability, with a small increase in use-adequate in two cases, and a slight decline in the smallest service (meals on wheels). The newly included service (Day centres and luncheon clubs) appears to be more widely used and may be the more relevant form of provision now.

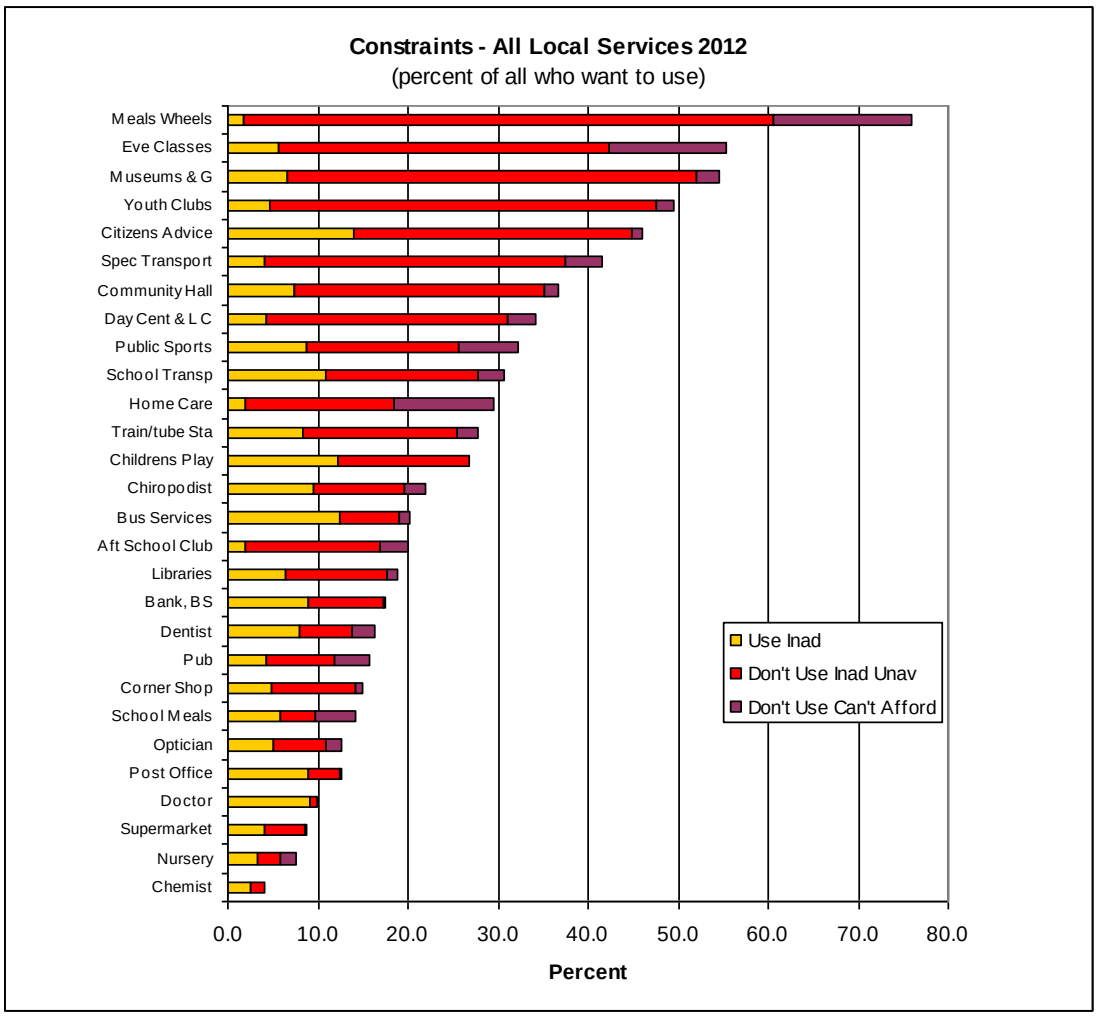
Figure 4



Trends in Adequacy, Availability and Affordability

The initial discussion in this paper has focused mainly on service usage, with only passing comment on issues of adequacy, availability and affordability, which we refer to collectively as 'constraints' on service usage or benefit. Constraints are those features which *either* deter or prevent people from using services which they would otherwise want to use, *or* lead to them getting less benefit from services than they would hope or expect, even though they still use them. The former category are subdivided into issues of adequacy or availability, and issues of affordability. Figures 2 - 4 above provided a picture of these contraints alongside the rates of usage where people rated the services as adequate and showed changes in the prevalence of these responses between the 1999 and 2012 surveys. Before discussing changes in constraints, it is helpful to look at the very wide variation in the prevalence of constraints across different services in 2012, as shown in Figure 5.

Figure 5



There really is a remarkable range of variation here, between chemists which score only 4% of potential users mentioning any kind of constraint up to, at the other extreme, 76% of potential customers of meals on wheels. The other better scoring

services (at the bottom of the chart) are nurseries, supermarkets and doctors, with constrained users accounting for no more than 10% of all potential users. Two of these 4 are commercially-provided (albeit in one case, chemists, subject to some public influence) and a third (nurseries) is predominantly privately provided now, while the fourth is the primary care frontline of the NHS. Within this group, only nurseries show up as having any affordability issue.

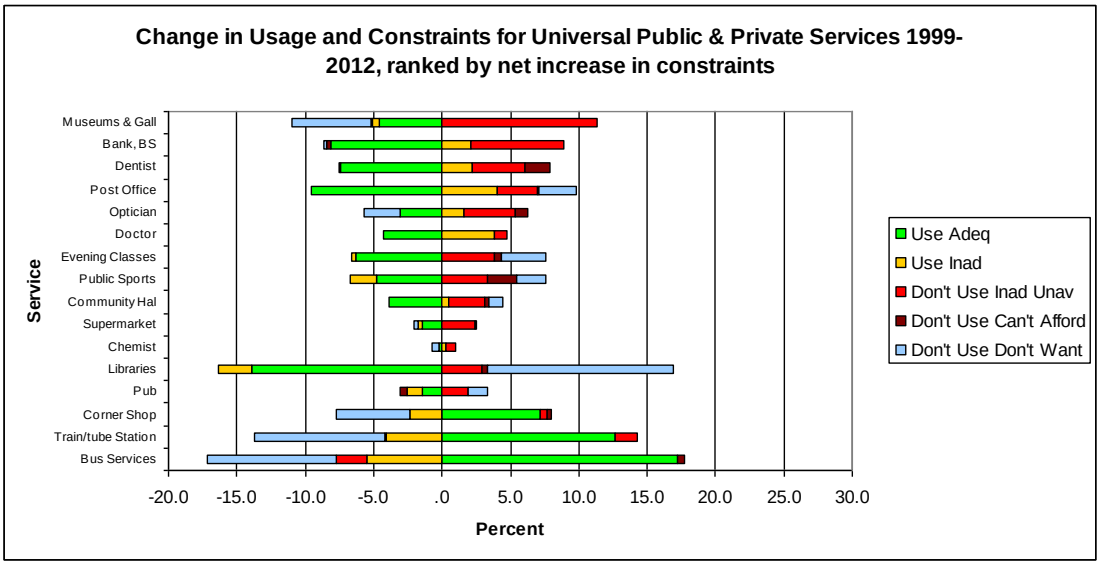
The next group, with between 10 and 20% constrained scores, range from post offices up to bus services, and include local government services (school meals, libraries, after school club), private provision with some public influence (post offices, opticians, dentists), and private commercial services (corner shop, pub, banks and building societies). Affordability constraints show up more commonly here, including for school meals, pubs and dentists (i.e. a mixture of local government, private and NHS-related cases).

Moderately constrained services (between 20% and 40%) range from chiropodists up to community halls, and this group are predominantly local government provided, apart from chiropodists and train/tube stations. Despite local government involvement, affordability issues feature quite strongly in some of these cases, notably home care and public sports.

Finally, at the top of this chart are clustered those services where around half or more of all potential users report constraints, mainly of a kind which deter them from using the service, and predominantly to do with inadequacy or unavailability more than affordability. These services, running from special transport to meals on wheels, are all local government services, other than Citizens' Advice which is substantially 'third sector'. Most of these are services open to the general population, rather than needs-targeted; although meals on wheels comes into the latter category, it appears to be a service which is being run down or displaced by other forms of provision. Several of these are services which we mentioned in the previous section as being at risk or under pressure in the current situation of spending cuts. The evidence here suggests that perhaps the effect of those cuts was already to be seen in 2012.

While Figure 2 did provide an analysis of change since 1999 for universal services, this chart can be reordered, as in Figure 6, to highlight the services with the greatest net increase in constraints (at the top), to be contrasted with services where constraints have fallen significantly since 1999 (at the bottom).

Figure 6



The worst case of increasing constraint, mainly about unavailability, is museums and galleries. This may reflect the onset of local spending cuts, which are having a disproportionate effect on cultural services such as this; or possibly a growing interest in and 'demand' for these facilities combined with the fact that in many localities they are not present.

This is followed by banks and building societies, where there are substantially more people reporting unavailability as well as some more continuing users grumbling about adequacy. In view of the known shrinkage of the branch network together with the reputational damage of the banking crisis and successive mis-selling scandals, one might regard these figures as to be expected and less bad than they might have been.

The next most deteriorated service is dentists, where it can be seen to be a mix of all three categories (inadequacy, unavailability, and affordability) which have all increased. This further underlines the concerns felt in public health circles about what has happened to this 'peripheral' part of the NHS, which is now predominantly private in character. (Strong evidence of increased dissatisfaction linked to the declining availability of NHS dentristry as well as its increasing cost was reported in Analysis Working Paper 2. Opticians are similar case, but interestingly affordability concerns have increased less here (perhaps due competition from cheaper retail outlets). Despite almost universal usage of doctors, there has been some upward movement in the proportion of 'use-inadequate' responses. This may reflect dissatisfaction with the accessibility and hours of GP practices and the decline in home visiting, but is marginal in terms of statistical significance.

Declining usage of evening classes, public sports and community halls seems to reflect in part changed preferences, or the rise of alternative forms of provision, but there clearly are also issues of worsening availability and, especially for sports facilities, worsening affordability.

The changes for supermarkets, and chemists are quite small, although it is slightly surprising to see a net worsening in 'availability' of supermarkets, in contrast with the significant increase in usage of corner shops, commented on in the previous section. There is also a modest decline in the availability of pubs (a trend which may be expected to continue over the coming period).

The three services at the bottom of this chart, showing the greatest reduction in 'constraints' since 1999 are corner shops, trains and bus services. The reasons for the corresponding growth in usage of these services were discussed in the previous section.

In 1999, several children's services stood out for showing very high levels of dissatisfaction with the adequacy and the availability. In general, the large positive movement in usage of these services, as described above, also reflects a decline in inadequacy and unavailability ratings (see Figure 3). While this is true in most cases, youth clubs and school transport are to some extent exceptions, as these showed some increase in 'don't use – inadequate or unavailable'. Also, the 2012 scores for children's play facilities as well as youth clubs, which sit in the top half of Figure 5, and to some extent after school clubs as well, are not grounds for complacency.

Only three services for elderly/disabled are compared directly between 1999 and 2012 surveys (Figure 4). Of these, one (home care) showed some reduction in constraints, while the other two (special transport and meals on wheels) showed an increase.

Questions about who suffers more from these constraints, in terms of socio-economic status, is picked up at the end of the next section while questions about where (geographically) contraints are greater feature in later sections.

The Distributional Profile of Services

In examining the evidence from PSE on usage of local services we are very interested in the 'distributional' pattern of usage (and constraints), that is in the relative usage by different groups on the socio-economic spectrum. In particular, we are most interested in the use made of services by the poor, and how adequate those services are for them. But we are interested also in patterns across the spectrum of income/wealth/socio-economic status. How far does the use and experience of services reinforce or counter general inequalities? What contribution do local services make to the living standards of households in different circumstances?

It is relatively straightforward to tabulate the proportion of households in different groups who use the different services, and to show the direction and extent of differences between those who are 'rich' and those who are 'poor' (or between the poor and those in an average position). There are some limitations which should be noted at this point. Firstly, 'use' of a service is a binary (yes/no) measure; it does not not measure the frequency of use (which can be estimated in some other surveys). Since groups who are more likely to use a service at all are probably also likely to use it more frequently, it is reasonable to argue that our measure will understate the differences between groups. Secondly, there are different ways of classifying socio-economic position or 'richness' vs 'poorness'. As in the previous study we use three aspects: occupational class; income (net equivalent, after housing costs); and material deprivation (lacking more than 4 items); we also add the tenure dimension and area deprivation. While in principle our summary distribution measure is the same – the ratio of the proportion of the 'top' group using the service to the proportion of the 'bottom' group, in practice these groups vary in size and coverage. So with occupational class we use the NS-SEC classification in its 'three-group' summary; with income we use quartiles; and for deprivation we simply compare all households not deprived with those below the deprivation threshold. For tenure we use owner occupiers vs social tenants. There are some differences in these definitions when looking back to the 1999 study, with which we make comparisons.

In Tables 1 and 2 we show both 'raw' and 'standardized' usage ratios between top and bottom groups. Raw uses the simple unadjusted usage rates (use-adequate plus use-inadequate). Standardized means that we first calculate what the usage rate would be for each class/income/deprivation/tenure group if it had the national average usage rate for each household type times the actual proportion of households who are in each household type within each class etc group. We then calculate the ratio of the actual raw usage to the standardized rates based on household type. The rationale here is that, for many services, demographic factors (summarised by household type) account for quite a lot of the variation in service usage. We are trying to strip out this 'horizontal' redistribution which is inherent in much service provision, or control for it, before looking at the distributional pattern by socio-economic category.

A more sophisticated method of controlling for demographic determinants of usage, along with other factors including need characteristics and geographical area types, is to run a multivariate model using some form of regression analysis. This is the subject of the next section. Any conclusions on the distributional character which

might be drawn from Tables 1 and 2 should be tempered by the findings from the next section.

To give a flavour for the data on standardised usage rates, Figures 7 and 8 show the pattern across the four income quartiles (which are by definition equal sized chunks of the overall household population). Figure 7 takes selected universal services, which represent the range of variation (in terms of distributional pattern). So for example public sports facilities are moderately 'pro-rich' in their distribution of usage, with the top quartile using 42% more than the bottom quartile. Train/tube services are also used more by the better off, particularly the top quartile. Libraries and opticians are used rather less by the lowest income group and rather more by the middle groups. Corner shops are used a bit more by the lowest income group, while buses are used more by the lower half of the distribution and particularly the lowest quartile. However, the most strongly pro-poor service is citizens' advice, which almost certainly reflects its strengthening role in providing debt and financial advice to households with debt problems, as well as other related problems such as homelessness.

Figure 8 looks at two of the children's services and two of those for elderly and disabled adults. It may be surprising that nurseries show a slight tendency for usage to rise with income, but it should be remembered that nowadays the majority of provision is private and is geared mainly to working parents, including many two-earner households. School meals are unsurprisingly used more by the poorest group, but it should be noted that there is a dip in the next quartile – this group might be affected by affordability issues, since they unlike the poorest group would generally have to pay, and choose to substitute food at home or from home. Home care is clearly used most by the poorest group and least by the most affluent, but again there is some rise as you go from Q2 to Q3. Chiropodists services seem to be used rather more by the more affluent elderly, but again the poorest group use more than Q2 (perhaps they get it free).

Figure 7

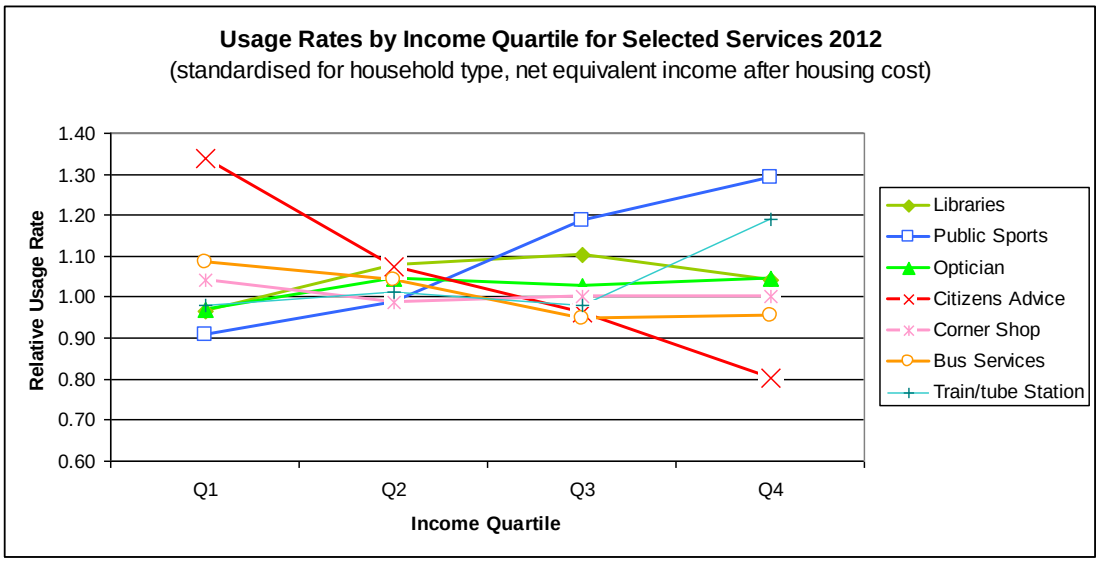


Figure 8

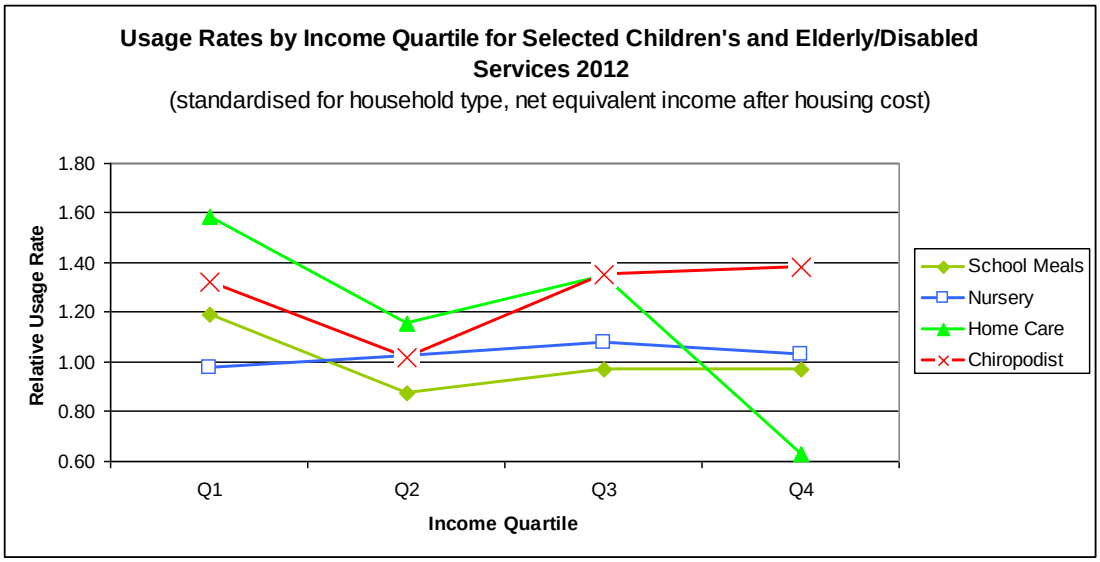


Table 1 shows a full summary of the distribution measures for all of the services included in 2012 and relevant to the whole population. These measures show the ratio of usage by the 'top' group to usage by the 'bottom' group on each of four classifications, by occupational class, equivalent income, material deprivation and tenure. Ratios are shown before and after standardisation for household type mix. Also shown are the standardised ratios for 1999, where available.

The first group of services, provided by local government, all tend to show ratios greater than 1.0, implying that the better off group use these services more than the worst off group. The most pro-rich of these services are museums and galleries and evening classes, which could be fairly characterised as 'pro rich'. This tendency is rather less strong for public sports facilities and community halls, which might be

described as ‘moderately’ pro-rich. Libraries have something closer to an even distribution, but still with a slight tendency for the better off groups to use them a little more.

There is a rather more encouraging finding for this group when we compare with the ratios for 1999. This shows that there appears to have been a general reduction in the ratios, so that usage has become less unequal than it was in 1999. It will be recalled that this is in a context of generally reducing usage. That suggests that the decline in usage will have been greater for the better off groups, who perhaps have better access to alternative substitutes for these services.

The second group of universal services include the health-related services, post offices and citizens advice. These are mainly close to neutral in their distribution of usage, partly because they are mainly used by most households. Citizens advice is exceptional in having a quite pro-poor distribution, with ratios around 0.5-0.6. The changes since 1999 for this group are also small in magnitude, slightly worse for doctors and post offices, and slightly better for opticians.

The third group comprise retail and commercial services and public transport. Shops and banks are pretty neutral, pubs and trains are moderately pro-rich, while buses are moderately pro poor. Four of these services have improved their distribution from the viewpoint of the poor, albeit not by great amounts. While trains have improved slightly, buses have slightly worsened on this criterion. This could be interpreted as suggesting that buses have become slightly more acceptable as a transport mode for the middle classes, but may be significantly influenced by the more generous free travel now available to retirement age people.

Table 2 looks at services for children and older/disabled households. Children’s play and after school clubs appear to be moderately pro rich in their usage distribution. School meals, youth clubs, and school transport appear to be moderately pro poor, on most criteria. Nurseries appear relatively neutral on income and deprivation criteria, but moderately pro-rich on class and tenure. The distribution for children’s play appears to have improved, except in respect of income, while that for school meals improved on class but not on income or deprivation. More generally, the distributional pattern for the remaining children’s services appears to have improved (become less pro-rich or more pro-poor) over this time period. This may be a product of improved targeting, but equally it may be a result of generally better service provision.

With the exception of chiropodists, the services for older/disabled adults appear to be quite pro-poor in their distribution. Home care seems to have become more pro poor since 1999. This may reflect the trend to stronger targeting in this period combined with the operation of means tests. Special transport appears to have become less pro poor on two criteria, while the small numbers of meals on wheels make it difficult to draw any conclusion.

Overall, comparison of 2012 ratios with those for 1999 suggests that there has been a tendency for services to become somewhat less pro-rich, or more pro-poor, over this time period. This may reflect various influences, including improved service provision in some sectors (particularly children’s services), possibly accompanied by a prioritisation of poorer neighbourhoods, more awareness of equality and exclusion

issues by local authorities, and (more recently) attempts to protect provision for the poorest in the context of austerity (as documented in Hastings et al 2013, 2015).

Table 1: Distributional Summary for Universal Services by Class, Income, Deprivation and Tenure
(Ratio of usage by 'top' group to usage by 'bottom' group, before and after standardisation for household type)

Service	Class Raw 2012	Class Std 2012	*Class Std 1999*	Income Raw 2012	Income Std 2012	*Income Std 1999*	Depriv Raw 2012	Depriv Std 2012	*Depriv Std 1999*	Tenure Raw 2012	Tenure Std 2012
Libraries	1.09	1.10	*1.42*	1.03	1.08	*1.11*	0.96	1.03	*1.26*	0.98	1.00
Public Sports	1.12	1.08	*1.33*	1.47	1.42	*1.41*	0.99	1.23	*1.44*	1.21	1.28
Museums & G	1.83	1.81	*2.09*	1.30	1.32	*2.22*	1.42	1.42	*1.98*	1.50	1.47
Eve Classes	1.35	1.33	*2.80*	1.78	1.68	*1.11*	1.36	1.45	*1.76*	1.43	1.42
Commun Hall	1.19	1.20	*1.56*	1.19	1.22	*1.38*	1.34	1.26	*1.46*	1.46	1.37
Doctor	1.00	1.03	*1.00*	1.00	1.01	*0.98*	1.00	0.99	*1.00*	1.00	0.99
Dentist	1.05	1.05	*1.03*	1.05	1.04	*1.10*	1.05	1.07	*1.04*	1.08	1.08
Optician	0.98	0.99	*1.05*	1.09	1.08	*1.07*	1.07	1.00	*1.05*	1.04	1.00
Post Office	1.05	1.05	*1.02*	1.08	1.07	*1.00*	1.00	1.00	*0.99*	1.02	1.01
Citizens Advice	0.60	0.61		0.58	0.60		0.47	0.52		0.55	0.59
Chemist	1.02	1.02	*1.01*	1.01	1.01	*1.03*	0.99	0.99	*1.02*	1.01	1.00
Corner Shop	1.01	1.00	*1.11*	0.98	0.96	*0.98*	0.96	0.99	*0.95*	0.97	0.98
Supermarket	1.02	1.02	*1.06*	1.01	1.00	*1.06*	0.98	1.00	*1.02*	0.99	0.99
Bank, BS	1.01	1.01	*1.10*	1.01	1.01	*1.17*	0.97	0.97	*1.10*	0.99	0.99
Pub	1.10	1.08	*1.07*	1.20	1.15	*1.38*	1.24	1.30	*1.31*	1.28	1.28
Bus Services	0.90	0.91	*0.77*	0.88	0.88	*0.75*	0.96	0.94	*0.84*	0.84	0.83
Train/tube Sta	1.42	1.38	*1.56*	1.27	1.22	*1.38*	1.16	1.21	*1.10*	1.25	1.23

Table 2: Distributional Summary forChildrens' and Elderly-Disabledl Services by Class, Income, Deprivation and Tenure
(Ratio of usage by 'top' group to usage by 'bottom' group, before and after standardisation for household type)

Service	Class Raw 2012	Class Std 2012	*Class Std 1999*	Income Raw 2012	Income Std 2012	*Income Std 1999*	Depriv Raw 2012	Depriv Std 2012	*Depriv Std 1999*	Tenure Raw 2012	Tenure Std 2012
Households with Children											
Childrens Play	1.14	1.13	*1.46*	1.10	1.15	*0.47*	1.11	1.11	*1.56*	1.16	1.14
School Meals	1.07	1.08	*1.24*	0.79	0.82	*0.81*	0.86	0.87	*0.86*	0.83	0.85
Youth Clubs	0.88	0.87	*1.28*	0.94	0.92	*0.41*	0.92	0.90	*1.13*	0.76	0.74
Aft School Club	1.10	1.09	*1.27*	1.14	1.09	*1.54*	1.12	1.09	*1.14*	1.02	1.00
School Transp	0.82	0.83	*1.24*	0.87	0.74	*1.11*	1.02	0.99	*0.91*	0.88	0.86
Nursery	1.22	1.23	*1.36*	1.01	1.05	*1.39*	1.01	1.03	*0.91*	1.15	1.17
Older or Disabled											
Home Care	0.13	0.13	*0.61*	0.40	0.40	*1.37*	1.39	0.97	*1.15*	0.68	0.67
Meals Wheels	0.00	0.00	*0.61*	0.12	0.14	*0.00*	4.33	2.92	*0.73*	0.15	0.16
Spec Transp	1.10	1.04	*0.23*	0.36	0.32	*0.44*	0.85	0.59	*0.33*	0.48	0.44
Day Cent	0.95	0.93		0.21	0.19		1.06	0.73		0.64	0.58
Chiropodist	3.38	3.76		1.14	1.04		0.82	0.54		0.84	0.71

Table 3: Constraints by High and Low Socio-Economic Status by Service, 2012

Service	Class		Income		Deprivation		Tenure	
	High	Low	High	Low	Not	Deprived	Own	Soc Rent
Libraries	8.7%	7.9%	10.0%	10.1%	9.2%	10.7%	9.2%	10.1%
Public Sports	15.4%	21.1%	17.9%	15.0%	13.7%	24.6%	13.3%	21.5%
Museums & G	30.4%	33.4%	30.0%	24.4%	28.5%	32.3%	29.1%	31.2%
Eve Classes	11.9%	15.6%	14.3%	12.4%	11.3%	23.3%	11.7%	18.1%
Community Hall	13.5%	12.6%	16.0%	15.3%	14.2%	20.9%	14.8%	18.2%
Doctor	6.7%	12.6%	9.6%	11.0%	8.5%	14.4%	9.7%	9.8%
Dentist	21.6%	25.4%	23.3%	25.4%	22.8%	28.1%	22.3%	25.9%
Optician	9.0%	11.3%	11.3%	11.4%	9.3%	16.2%	9.8%	14.0%
Post Office	11.0%	7.4%	12.1%	12.5%	12.1%	11.3%	13.0%	9.4%
Citizens Advice	14.3%	18.4%	17.0%	12.6%	14.9%	25.8%	15.4%	21.1%
Chemist	2.8%	6.3%	4.6%	3.8%	3.9%	4.7%	3.7%	4.6%
Corner Shop	11.0%	12.2%	14.6%	14.0%	14.3%	12.8%	15.6%	11.2%
Supermarket	5.6%	7.4%	8.4%	6.3%	8.3%	9.0%	7.9%	8.9%
Bank, BS	13.6%	17.8%	17.7%	22.4%	16.4%	17.4%	16.9%	16.0%
Pub	8.1%	9.8%	11.3%	12.9%	7.6%	17.4%	8.7%	12.1%
Bus Services	13.3%	14.3%	15.0%	14.2%	13.2%	18.2%	14.1%	13.9%
Train/tube Sta	17.0%	23.3%	20.6%	20.9%	18.2%	22.6%	18.7%	18.7%
Households with Children								
Childrens Play	15.0%	36.3%	23.6%	20.8%	17.9%	38.4%	18.2%	40.9%
School Meals	7.0%	9.4%	9.5%	6.1%	7.6%	14.1%	10.2%	11.0%
Youth Clubs	19.5%	26.0%	22.5%	12.3%	19.4%	26.5%	20.5%	26.6%
Aft School Club	6.4%	5.4%	8.0%	9.6%	6.1%	10.7%	6.0%	11.3%
School Transp	12.9%	7.8%	9.4%	6.2%	11.0%	14.0%	12.4%	10.4%

Nursery	6.0%	3.8%	8.7%	5.6%	2.7%	12.3%	5.2%	7.4%
Older or Disabled								
Home Care	3.6%	3.5%	3.9%	3.2%	4.2%	4.2%	3.6%	6.0%
Meals Wheels	3.6%	3.5%	2.8%	4.6%	3.9%	4.8%	3.6%	5.4%
Spec Transp	5.3%	4.2%	5.9%	9.5%	5.7%	5.0%	5.8%	8.3%
Day Cent	5.2%	4.7%	5.6%	8.0%	5.7%	2.5%	4.6%	8.0%
Chiropodist	5.2%	4.2%	10.8%	15.9%	10.1%	11.3%	9.7%	9.9%

Note on significance levels: most but not all of red-shaded cells are statistically significantly different. For example, taking 'deprived', all general services shaded pink, apart from trains and buses, are significantly more constrained for deprived households, allowing for complex sample design; this is true for four of the six childrens services (not school meals or school buses).

Table 3 compares the extent of *constraints* on usage reported by the high and low groups in terms of socio-economic status in 2012. Cells marked in pink are cases where the poorer group experiences greater constraint, whilst cells shaded green are cases where the poorer group report less constraints. It can be seen that overall pink cells are more prevalent, especially in the analysis by class and material deprivation, but least so in terms of equivalent income quartiles.

Services which come out more favourably from this analysis, through having several green cells indicating that the poor experience less constraints, include post offices, corner shops, school transport and nurseries. However, rather more services have three pink cells, including three universal local government services (sports, museums, evening classes), opticians, citizens advice, children's play, and youth clubs. One service, dentists, has four out of four pink cells. Particularly adverse cases for greater constraints facing materially deprived households include children's play, nurseries, public sports, and evening classes. The very high scores for children's play affecting deprived households and social renters may reflect concerns about safety and the condition of play spaces in these neighbourhoods (although as noted below these adverse scores have been significantly reduced since 1999). Constraints affecting services for older or disabled people are noticeably greater for the lowest income group and social renters.

We can compare these patterns with 1999 in some cases. Cases where constraints facing the poor have got worse include sports facilities, museums, evening classes, doctors, dentists, opticians and banks. Cases where constraints facing the poor have been reduced include bus services, childcare/nurseries, and play facilities, all cases where service provision and usage have increased considerably.

Modelling Service Constraint

As explained at the outset, constraint is defined as using a service regarded as inadequate, or not being able to access or afford a service. In this way, each service constraint can be treated as a binary variable, which means it is suitable for the standard technique of logistic regression. As an initial step, we tested variables which had a reasonable claim for inclusion, on the basis of known relationships between socio-demographic characteristics and service use. We then proceeded to test the effects of neighbourhood deprivation, poverty and material deprivation.

The first model presented here in Table 4 shows constraints on universal public services. Cells shaded red show characteristics that imply a much greater likelihood of constraint on that service (odds ratios well above 1.0), cells shaded green imply a lower chance that a household with this characteristic faces constraint (odds ratios well below 1.0). Values indicating little or no effect are shown on a white background.

A few patterns immediately jump out. Households containing sick or disabled people generally have good access to services, but with some notable exceptions including doctors, corner shops and bus services. Also, households with low qualifications are much more likely to report constraints in accessing GP services. Female headed households are somewhat more likely to report constraints on quite a lot of services. There is a more pronounced degree of greater constraint affecting younger (under-25) households, particularly for healthcare related services. Elderly households are more likely to report constraints in four cases of services which they are perhaps more likely to want to use: post offices, chemists, corner shops and supermarkets.

Wales and Scotland appear to be associated with lower service constraint than England, whereas Northern Ireland shows higher levels of constraint for many services.

Unsurprisingly, rural areas are associated with service constraints in nearly all services, and particularly in their use of public transport, shops, chemists and opticians. The patterns in rural areas are discussed further below.

We are most interested in the experience of poorer households. Households on relatively low equivalised income after housing costs are generally more likely to report constraints across most services, except doctors, libraries and corner shops. People in the worst 10% of most deprived neighbourhoods, and to some extent in the next 10%, are more likely to report constraints in using a number of services, such as libraries, opticians and pubs; but they are less likely to report constraints in quite a few cases, including museums, post offices, doctors, chemists, corner shops, supermarkets and bus services. Overall this seems a more positive finding than might have been expected.

Table 4: Household-level Determinants of Local Service Usage Constraint - exponentiated B values

	Libraries	Public sports facilities	Museums and galleries	Evening classes	Public or community village hall	Doctor	Dentist	Optician	Post office	CAB / advice services	Chemists	Corner shop	Medium / large supermarkets	Banks / building societies	A pub	Bus services	Train or tube station
Female	1.183	.891	.992	1.250	1.055	1.018	1.121	1.530	*1.000*	.952	1.484	1.308	1.219	1.174	.808	1.115	1.095
married	1.171	.770	1.109	1.272	.917	.776	.888	.752	.963	1.083	1.100	.921	.755	1.034	1.081	1.247	1.108
Age u 25	.823	.987	1.196	2.445	.420	2.031	1.363	1.872	1.239	1.254	2.598	1.696	.995	.860	.990	.756	1.124
elderly hh	1.166	.698	.792	.812	1.095	1.083	.779	.795	1.472	.968	1.380	2.030	1.526	.965	.580	1.194	.783
hh 4 people	1.168	1.228	.856	.960	.971	.571	.892	.558	.709	1.009	.655	1.266	1.016	1.069	.892	1.714	1.342
withkids	.746	1.092	1.273	.875	1.045	1.502	.761	.634	.788	1.097	1.034	.805	.763	.671	.839	.814	.687
lonep	.786	.824	.824	.985	1.063	.717	.657	.966	1.064	.871	.977	1.224	.646	1.096	.953	.982	1.479
nonwhite	1.555	1.075	1.338	1.282	1.200	1.070	.874	1.163	.791	1.190	1.301	1.200	1.273	.804	.784	1.476	.853
psickdishh	.463	.125	2.027	.175	.945	3.602	.784	.189	.408	.436	.025	6.532	.215	.991	.450	3.349	.649
noqual	1.065	1.389	1.333	1.545	1.119	2.525	.878	.850	.816	1.081	1.123	.590	.895	1.096	.562	.579	.727
hiqual	1.224	1.178	.869	1.273	.945	.894	.902	1.016	1.292	.829	1.528	.937	.961	.890	.896	.911	.680
socrent	.893	1.139	1.110	1.258	1.015	.728	.948	1.066	.697	1.192	1.429	.720	1.218	1.004	.864	1.014	.970
privrent	1.106	1.041	.811	1.153	.977	.680	1.197	.777	.708	1.068	1.314	.829	1.546	.808	.931	.989	1.047
Wales	1.122	.446	.881	.469	1.027	.445	.697	.659	.802	.804	.669	.956	.794	.660	.827	*1.000*	1.104
Scotland	1.154	.919	*.999*	.948	.951	.804	.757	.955	.823	1.186	.631	.750	1.109	.656	1.052	1.092	1.277
NIreland	2.092	1.470	1.104	1.587	1.329	.915	.634	1.497	.696	1.364	1.186	.778	1.899	1.092	2.176	1.806	3.361
ruralx	1.619	1.463	1.312	1.624	.836	1.269	1.942	3.109	1.043	1.447	4.900	1.941	4.819	2.259	1.416	2.715	2.654
low60ahcpse	.902	1.177	.996	1.096	1.389	.725	.983	.942	1.147	1.198	1.006	.933	1.073	1.187	1.223	1.316	1.117
worst10	1.904	1.036	.716	1.162	1.025	.848	.949	1.565	.862	.966	.446	.781	.769	1.019	1.830	.818	.869

Table 5: Logistic regression model for households reporting constraints in access to a number of services for children - exponentiated B values

	Play Centre	School meal	Youth clubs	After school clubs	public trans to school	Nurseries / playgroups
female	.941	1.366	1.300	1.497	1.000	2.268
married	1.023	1.244	1.195	.936	.808	1.159
ageu25	.439	.315	1.201	.636	.685	.182
hh4p	.915	.817	1.046	.986	.978	1.229
nonwhite	.960	1.694	1.075	1.014	1.041	1.773
psickdishh	.351	.118	.962	.826	.031	.000
hiqual	.699	.808	.822	1.014	1.733	1.140
Wales	1.304	1.757	.763	1.433	1.959	2.969
Scotland	1.577	1.325	1.483	1.855	1.074	2.214
NIreland	1.905	.960	1.098	1.317	2.034	1.886
ruralx	1.229	.789	1.166	.844	1.099	.636
low60ahcpse	1.243	.600	1.583	1.974	1.034	1.313
depgrp3	1.555	2.240	.996	1.399	1.321	3.576
worst10	3.195	.790	1.322	.631	.872	.287
next20	2.018	1.031	1.555	1.278	.877	2.154
next20	.942	1.044	.778	1.176	1.097	1.136	.841	1.036	1.118	1.069	1.200	.934	1.174	1.149	1.469	.743	1.170
depgrp3	1.694	1.654	1.345	1.828	1.402	2.079	2.092	1.665	1.464	1.449	1.275	1.173	1.278	1.153	1.722	1.495	1.120

More negative, however, is the picture of experience for individually poor households, based on suffering multiple material deprivations. This group are overwhelmingly more likely to report constraints in using nearly all services.

Table 5 reports modelling of constraints in service use by families with children in relation to the set of services intended for this group. Things seem a bit more negative for female headed households and ethnic minorities.

Households in Scotland, Wales and Northern Ireland appear more likely to be affected by constraints in accessing services for children, unlike adult services, which seem to be more accessible in Wales and Scotland. Quite positively, households with a high proportion of disabled people are generally associated with less service constraint for children. The effect of rural location seems less significant for these services, except to some extent for play.

However, the story relating aspects of poverty to children's service constraints is generally negative. Households with lower income experience more constraints in relation to four services, particularly youth and after-school clubs. The most materially deprived households experience more constraints in using five out of the six services, particularly in the case of school meals (interestingly, since these should be free) and nurseries. Low income households report difficulty accessing adequate play centres, youth clubs and after school clubs as well as nurseries. Households which are poor by consensual measures face constraints in every Children's service except Youth clubs.

Finally, the worst 10% and the next 20 % poorest neighbourhoods, according to the Indices of Multiple Deprivation, show an interesting pattern. In many cases, children's services seem to be less adequate or accessible in the neighbourhoods in the next 20% than the absolute worst neighbourhoods. It could be hypothesised that this may be reflective of the targeting by local authorities generating a threshold effect. In other words, the absolute worst neighbourhoods are given special priority in terms of service delivery, but neighbourhoods which are only slightly better are left out. This is particularly the case with after school clubs and nurseries and playgroups. The worst 10% of neighbourhoods have particular problems with play, which is probably a safety issue re low level disorder, and youth clubs (perhaps for similar reasons), but the next worst 10% of neighbourhoods also have problems with nurseries and after-school clubs.

Table 6: Logistic regression model for households reporting constraints in access to a number of services for disabled and / or elderly people - exponentiated B values

	Home help	Meal wheel	Day centre / social	Chiropodist	Special transport
female	.938	.589	1.508	1.001	.855
married	.435	.626	.976	.833	.785
age75ov	1.216	1.712	.981	1.210	1.491
hh4p	2.619	.627	.467	.820	.787
nonwhite	.647	1.548	1.661	2.216	.811
hiqual	.974	1.048	.948	.973	1.813
Wales	1.977	1.966	1.622	1.219	2.472
Scotland	1.065	2.003	1.362	.950	.772
NIreland	4.254	5.178	4.057	2.178	2.590
ruralx	.972	1.550	2.532	1.239	1.278
low60ahcpse	1.917	1.834	1.309	.968	.907
depgrp3	.956	1.145	.640	1.001	.684
worst10	2.526	1.079	2.505	1.356	2.066
next20	1.595	1.177	2.287	1.604	1.393

Table 6 presents similar model findings for services targeted at elderly and disabled persons, with households included only where an elderly or disabled person was present.

For services specific to elderly and disabled people, the poor performance of Northern Ireland is striking. For all services listed, people in Northern Ireland report far greater constraints on access to services. Wales also shows a rather greater level of service constraint, while Scotland performs better with regard to access to chiropodists and special transport, but worse with regards to meals on wheels.

Low income is associated with more constraints on home help/care, meals and day centres. Poverty (material deprivation) appears to be associated with less constraints for some services (day centres and special transport), perhaps due to some degree of targeting in provision. However, for all services except meals, poorer neighbourhoods tend to be associated with greater levels of constraint.

School Problems

Local school education is one of the most important local services, and obviously most critical for families with children. It makes less sense to look at usage of schools, as schooling in some form is compulsory and most families other than the very well-off use the state system. However, PSE surveys in 1999 and 2012 asked questions about problems relating to lack of resources or quality of facilities in schools, as perceived by the responsible adults in the households with children of school age.

Table 7 shows in descending order the types of problems with schools most frequently mentioned, contrasting the different UK countries[2]. The most common problem in 2012 was large class sizes, closely followed by poor teaching. These are continuing problems within parts of the state education system in UK, with for example overcrowding affecting primary schools in some areas like London with rapidly growing population. The limited ability of schools to deal with issues of teacher performance, perhaps compounded by difficulties of recruitment in some subjects, may also be relevant here. That teacher shortage is also mentioned as the third most common factor, and more often in England, rather supports this. Problems with school buildings and facilities, including disrepair, are the next group of problems, mentioned by moderate numbers of parents, but rather more often in the 'other UK Countries' than in England – this would be consistent with the impact of very large school replacement and upgrading investment programme carried out in England in 2000s. Problems with access to key learning resources, like computers and books, which featured more strongly in the past, were less often mentioned in 2012.

Table 7: Problems with schools reported by parents in 2012 PSE by Country

School Problem	England	Wales	Scotland	N Ireland	UK
Large class sizes (>30)	9%	12%	11%	7%	10%
Poor teaching	9%	11%	8%	5%	9%
Missed classes - teacher shortage	6%	3%	4%	3%	6%
Other problems school facilities	5%	0%	6%	3%	5%
School buildings bad repair	4%	15%	11%	6%	5%
Inadequate school facilities	3%	0%	5%	4%	3%
Not enough computers	2%	1%	4%	3%	2%
Problems obtaining school books	1%	0%	1%	1%	1%
Any School problem	19%	23%	23%	16%	19%

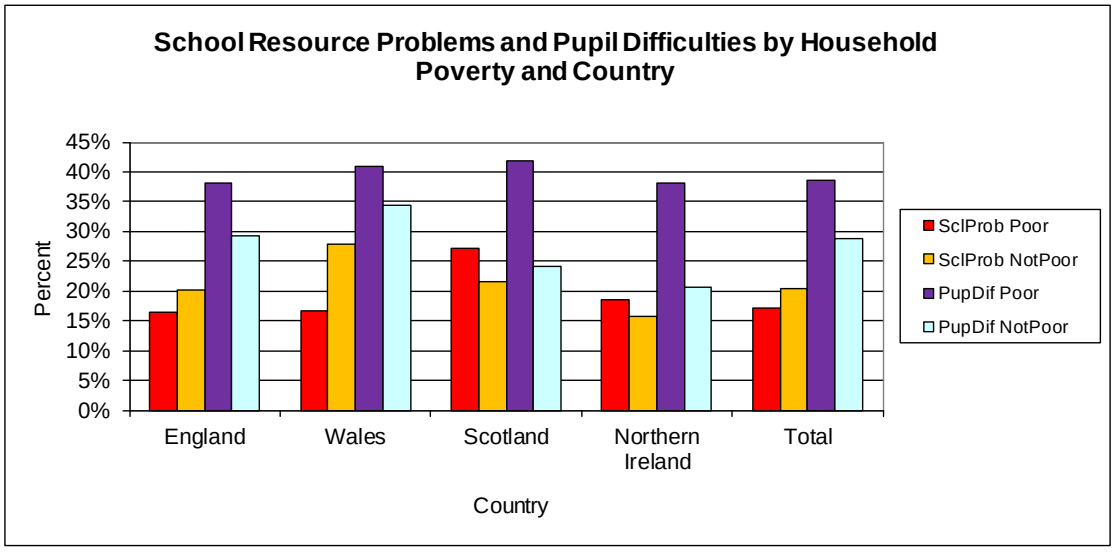
2 Particular caution is needed about the small sample size for households with school-age children in Wales – this may account for the three 'zero' entries in this table.

Comparison of responses to the same question asked in 1999, for England and Scotland, shows an increase (in both countries) in teacher shortage, but substantial reductions in both countries in most of the other resource problems, particularly large class sizes, computers, books, and building disrepair. This correlates with large increases in real public spending resources going into school education during this period.

The surveys also asked about three types of problem which pupils might experience – bullying, special educational needs, and exclusion from school (typically related to behaviour). Proportions reporting these were relatively stable, with around 27% reporting bullying in both countries, 13% reporting special needs (but only 7% in Scotland, where the classification is different), and 6-7% reporting exclusion. These proportions appear to be relatively static.

It is clear that these 'pupil difficulties' are much more related to family poverty than are the more general resource problems of schools. This is illustrated by Figure 9, which summarises the incidence of (any) school problems and (any) pupil difficulty by country and household poverty status in 2012. Poor households are somewhat less likely to report school resource problems, except in Scotland (and possibly Northern Ireland), but they are much more likely to report pupil difficulties, especially in Scotland and Northern Ireland.

Figure 9



It can be argued that the pupil difficulties are particularly significant and concerning for the medium and longer term. A range of studies show how these can impact adversely on child well-being, on educational attainment and future job prospects (Bramley & Karley 2006, Bramley et al 2011, Hilton 2006). In a recent study (Bramley et al 2015 *Hard Edges*) it was shown how these factors were some of the strongest predictors of later experience of severe and multiple disadvantage in adulthood.

Comparing Countries

We can compare the key indicators of usage and constraints for different local services across the constituent countries of the UK, as in Table 8[3] Where percentages are highlighted in bold this indicates a statistically significant[4] lower level of usage or a greater degree of constraint in that country compared with England. Bold italic highlights cases which are better than England, in terms of more usage or less constraints. There are limitations posed to the significance of results from some of these comparisons, owing to the relatively small sample in Wales, and the fact that some service questions are only asked of sub-sets of households.

Within the first group of universal local government services, Scotland shows a more positive picture in terms of usage of public sports facilities and community halls, although the differences are not large. Wales appears to show a better picture on usage of community halls, and less contraints on sports and evening classes, although neither of these differences are quite significant at the 5% level.

In the next group, Wales shows significantly less constraint on use of doctors while Scotland shows somewhat less constraint on use of post offices. However, actual usage of opticians and citizens advice services is lower in Scotland, with the latter difference being significant at the 5% level.

[3] Northern Ireland is excluded from this analysis owing to technical issues with the complex sample significance tests.

[4] Statistical significance here takes account of complex sample design effects

Table 8: Service Usage and Constraints by Country

Service	***Use***			***Constrained***		
	England	*Wales*	*Scotland*	*England*	*Wales*	*Scotland*
Libraries	47%	42%	46%	10%	12%	10%
Public Sports	41%	44%	***44%***	17%	10%	16%
Museums & G	28%	23%	***34%***	30%	30%	30%
Evening Classes	12%	17%	12%	15%	9%	14%
Community Hall	30%	38%	34%	15%	17%	14%
Doctor	97%	97%	97%	10%	***5%***	9%
Dentist	81%	84%	80%	15%	12%	13%
Optician	79%	83%	76%	10%	9%	12%
Post Office	92%	91%	92%	11%	12%	9%
Citizens Advice	25%	29%	**21%**	17%	16%	19%
Chemist	96%	98%	96%	4%	4%	4%
Corner Shop	84%	84%	83%	14%	16%	12%
Supermarket	94%	92%	92%	8%	10%	11%
Bank, BS	87%	86%	89%	17%	15%	14%
Pub	55%	58%	**47%**	10%	9%	11%
Bus Services	64%	57%	66%	14%	18%	16%
Train/tube Station	57%	48%	**53%**	19%	25%	**25%**
Hhds with Children						
Childrens Play	79%	65%	72%	24%	30%	30%
School Meals	63%	65%	67%	9%	14%	11%
Youth Clubs	24%	22%	*32%*	21%	19%	27%
After Scl Clubs	51%	35%	**37%**	11%	16%	17%
Scl Transport	31%	42%	30%	12%	20%	12%
Nursery	75%	75%	78%	6%	9%	8%
Older or Disabled						
Home Help/Care	10%	13%	12%	4%	6%	4%
Meals on Wheels	1%	1%	2%	4%	6%	7%
Special Transport	9%	12%	12%	6%	**12%**	5%
Day Centres & L C	11%	14%	13%	5%	9%	8%
Chiropodist	40%	45%	46%	10%	10%	10%

Pubs are used significantly less in Scotland (surprisingly? Or do we drink at home?). Constraints on bus services and trains are greater in Scotland, with the latter difference being significant Usage of trains is also less in both Wales and Scotland, probably reflecting lack of availability, with the Scottish difference being statistically significant. Wales may have similar problems but the sample size is not enough to make these differences significant.

Four children's services appear worse in Scotland, in terms of the level of constraints, with only school meals and school transport in line with England. However, these differences are not quite statistically significant, with play and after school clubs on the margins. Usage of after school clubs is significantly lower in Scotland, while play facilities also appear to have lower usage in

Scotland and also in Wales. However, youth clubs show somewhat higher usage in Scotland, despite the higher constraints. The pattern of provision may vary between the countries in relation to these services.

Looking at services for elderly and disabled, Scotland and Wales has apparently higher usage in general but these differences are not statistically significant. especially of special transport and chiropodists. However, reported contraints are significantly higher for special transport in Wales.

Services and Rural Areas

There is strong interest in the way in which rural areas fare in terms of access to services, with a general presumption that access tends to be worse in rural areas, and especially in the most remote and sparse rural areas. Table 9 addresses this in a similar fashion, showing the usage and constraint incidence against a four-way classification of urban to rural area types. It should be cautioned that the classifications used in Scotland and England & Wales are somewhat different, so that this four-way classification is only approximately comparable. It should be noted that the 'remote and sparse' category is mainly found in Scotland, where it benefits from the rural boost to the sample. The 'accessible rural' category is much more prevalent in England (& Wales). All larger urban areas are lumped together in this presentation.

It should also be emphasized that the analysis in this table is a relatively simple descriptive two-way tabulation. It describes the outcomes for the populations living in the different types of area, but does not control for all of the differences in the socio-demographic profile of these populations. Thus, it should probably be read in conjunction with the modelling results reported in Tables 4-6 above.

Overall, looking at the table we can say that there are rather more significant differences highlighted, but that these are not all in the direction of prior expectations, which would be for a monotonic trend from left to right of higher to lower usage and lower to higher constraint. There are generally more statistically significant differences in the middle blocks, dealing with health, private market and children's services, and less in the universal local government services and social care services.

Within the first block, usage is lower for libraries in accessible rural (mainly England) and for museums in small town and fringe. Constraints are less for public sports in small town and fringe, but greater for evening classes in accessible rural. Community Halls are used much more in rural types of area, especially the more remote ones. This suggests that this type of facility is more significant, and widely available, within rural areas. Perhaps surprisingly, there are no services in this group where usage is significantly lower or constraints significantly higher in remote and sparse rural areas. The results reported in Table 4 above indicated that, when controlling for a range of other socio-demographic factors, constraints were actually greater in rural areas in all cases except community halls.

Table 9: Local Service Usage and Constraints by Urban-Rural Typology

	Use				***Constrained***			
Service	*Larger Urban*	*Sm Town & Fringe*	*Access'l Rural*	*Remote & Sparse*	*Larger Urban*	*Sm Town & Fringe*	*Access'l Rural*	*Remote & Sparse*
Libraries	45%	46%	**38%**	41%	9%	10%	13%	11%
Public Sports	38%	38%	33%	35%	16%	***12%***	20%	16%
Museums & G	28%	22%	29%	35%	28%	33%	31%	39%
Evening Classes	12%	16%	15%	11%	13%	13%	**21%**	15%
Community Hal	24%	***46%***	***54%***	***58%***	16%	***9%***	15%	19%
Doctor	97%	96%	95%	***99%***	10%	9%	13%	***6%***
Dentist	82%	79%	78%	**69%**	13%	15%	**23%**	**25%**
Optician	80%	76%	76%	70%	9%	17%	**18%**	**21%**
Post Office	92%	***97%***	**85%**	***95%***	12%	***4%***	**24%**	***6%***
Citizens Advice	27%	21%	**20%**	21%	17%	18%	18%	**29%**
Chemist	98%	96%	**87%**	**91%**	3%	5%	**14%**	**12%**
Corner Shop	86%	85%	**69%**	87%	12%	7%	**34%**	16%
Supermarket	96%	87%	**82%**	**78%**	6%	16%	**21%**	**24%**
Bank, BS	89%	82%	**79%**	88%	15%	25%	**23%**	23%
Pub	51%	63%	***65%***	55%	10%	8%	11%	11%
Bus Services	68%	58%	**48%**	**42%**	11%	17%	**32%**	**32%**
Train/tube Station	60%	39%	**44%**	**29%**	16%	32%	**31%**	**39%**
Hhds with Children								
Childrens Play	77%	76%	78%	80%	25%	22%	18%	24%
School Meals	64%	55%	60%	***87%***	10%	8%	8%	***5%***
Youth Clubs	24%	26%	21%	***40%***	22%	15%	23%	***45%***
After Scl Clubs	49%	51%	49%	**32%**	13%	4%	13%	**23%**
Scl Transport	29%	34%	***40%***	***61%***	12%	5%	**20%**	10%
Nursery	75%	77%	73%	***92%***	6%	***1%***	5%	***2%***
Older or Disabled								
Home Help/Care	10%	12%	9%	10%	4%	***1%***	5%	7%
Meals on Wheels	1%	1%	2%	1%	3%	2%	6%	**18%**
Special Transport	10%	**7%**	**10%**	14%	6%	7%	7%	10%
Day Centres & L C	11%	**11%**	**7%**	***25%***	4%	3%	**11%**	**24%**

For health-related services there are quite a lot of significantly adverse scores for remote and sparse rural areas, including dentists, opticians and chemists. Constraints are also significantly higher for these services in accessible rural areas. Doctors, however, show higher usage and lower constraints in the most sparse and remote areas. Post offices are an interesting case, as there has been much publicity and comment on the loss of these services in rural areas. However, usage is higher and constraints are lower in two of the three categories – small towns/fringe areas and remote and sparse area. However, usage is markedly lower and constraints much higher in 'accessible rural' category, which mainly refers to England. Citizens advice services are used less in the rural areas and more constrained in the most rural category. In general, these patterns are consistent with the multivariate constraints model reported in Table 4.

We would certainly expect a negative story for commercial services and public transport, and this is borne out to a considerable degree, but mainly in the 'accessible rural' category (mainly England) rather than in the 'remote and sparse' category (mainly Scotland). Public transport services are as expected used significantly less and subject to significantly greater constraints in the two most rural categories. The multivariate model results in Table 4 confirm the negative picture of greater constraints in rural areas for all of these services.

Children's services appear to reveal a more positive story for rural areas, except in the case of after school clubs where there is low usage and high constraints in the most rural category. Again, these descriptive findings are consistent with the multivariate model of constraints reported in Table 5, which did not show strong adverse effects from rurality. School meals, youth clubs, school meals and nurseries all show higher usage in the most rural category, and for meals and nurseries constraints are significantly less (while still being higher for youth clubs). These results probably reflect the differential relevance and usability of these services. So for example it makes more sense to use school meals in remote rural areas because the alternatives of going home or using local facilities may not be feasible. Conversely, after school clubs (and youth clubs) may be less feasible in this case (but the former also appear to have been developed less in Scotland). A significant part of school transport provision is explicitly geared to rural situations.

Social care services for elderly and disabled show a mixed picture, with many differences not statistically significant. Usage of home care is fairly uniform across the categories, whilst constraints are significantly less in small town/fringe areas; although constraints look a bit higher in remote rural, this difference is not statistically significant. For meals on wheels, the only significant difference is higher constraints in remote and sparse areas. There are stronger differences for day centres and luncheon clubs, with higher usage in the two most rural categories but also higher constraints. The multivariate model in Table 6 showed generally greater constraints in rural locations, and more strongly for day centres and meals.

Services in Poor Neighbourhoods

While we have hitherto in this paper referred to the influence of poverty on service usage, constraint or exclusion, this has mainly been focussed on individual household level poverty. But how significant is the poverty status of the neighbourhood in affecting people's experience of services? In this section, we explore further whether service constraints are related to individual poverty, controlling for socio-demographics, and then whether neighbourhood social mix has any additional effect.

The classic literature on equity in urban services focuses mainly on geographical accessibility and on income/class divides (Davies 1968; Harvey 1973; Smith 1977; Troy 1982; Pinch 1985; Curtis 1989). One strand in this literature argues that the middle classes and middle class areas have diverse ways of influencing service provision in their favour (Le Grand 1982; Goodin & Le Grand 1987). Policy initiatives focussed on regenerating deprived areas have also tended to argue that poor local services are part of the problem to be addressed, including problems with 'private' services like retailing and finance as well as public services (Robson 1988, Social Exclusion Unit 1998, 2001). Despite these concerns with spatial equity, public services are, at least in the UK and Europe, predominantly a mechanism for redistribution from general taxation to the general population as a whole and to lower income groups specifically (Sefton 1997), and this is reflected in the picture of spatial distribution of public spending (Bramley & Evans 2000).

The conventional expectation from this literature is that quality of services may be expected to be particularly low in poverty neighbourhoods, for example because of the lack the middle class social capital or leadership to support or improve local service organisations (Wilson 1987, Small et al 2008) or as part of a wider process of 'territorial stigmatization' (Wacquant 2008, Wacquant et al 2014). However, this US-oriented literature may be misleading for the UK, and also ignore that institutions providing services to poor neighbourhoods may be better resourced or better connected, or are simply providing more relevant services for poor households, than those available (or not) in more affluent areas (Pinkster 2007, Small et al 2008, Curley 2010). These factors may lie behind some of the empirical results reported below.

We test the impact of 'living in a poor area' on service constraint using logistic regression models, including dummy variables for being in the 10% most deprived neighbourhoods or being in the next 20% of deprived neighbourhoods, using the low income deprivation deciles attached to PSE data; comparisons in each case are with the least deprived 70 per cent. These regressions include a set of control variables to capture main demographic features of households, including age, marital status, household size, children, non-white ethnicity, unemployment, disability, qualifications, country, low income (after housing costs or AHC), and deprivation (having 3 or more deprivations). Tenure is omitted from this set as this may be confounded with neighbourhood deprivation.

Table 10 presents the results of these models. The values show the estimated effect on the odds ratio (exp(B)) for the two neighbourhood deprivation dummies; statistically significant effects (at 5% level) are shown in bold. On the left are 17

general services and, on the right hand side, six services targeted at children and five services targeted at elderly or disabled households.

The results indicate that neighbourhood deprivation only affects a minority of general services, and not all of these impacts are in the direction of increasing constraints (worsening quality or access problems) in more deprived neighbourhoods. This only applies to libraries, opticians and pubs, in this set. For museums, corner shops and buses, it appears that constraints are *less* in deprived areas, underlining the point made about urban structure and density in the earlier review.

Table 10: Effects of neighbourhood deprivation on local service usage constraints

Service	Most deprived 10 per cent exp(B)	Next most deprived 20 per cent exp(B)		Most deprived 10 per cent exp(B)	Next most deprived 20 per cent exp(B)
General Services			*Children's Services*		
Libraries	**1.78**	0.93	Children's play	**3.18**	**1.94**
Public sports	1.06	1.03	School meals	0.77	1.07
Museums & galleries	**0.75**	**0.79**	Youth clubs	1.28	**1.58**
Evening classes	1.20	1.19	After school club	0.57	1.21
Community hall	1.04	1.12	School transport	0.82	0.87
			Nursery	0.35	**2.33**
Doctor	0.79	1.09	*Older or Disabled People's Services*		
Dentist	0.91	0.82	Home care	**2.51**	1.60
Optician	**1.62**	1.04	Meals on Wheels	1.09	1.19
Post Office	0.77	1.06	Special transport	**2.05**	1.38
Citizens Advice	1.02	1.07	Day centres	**2.53**	**2.31**
Chemist	0.53	1.30	Chiropodist	1.37	**1.62**
Corner shop	**0.71**	0.93			
Supermarket	0.80	1.20			
Bank, building society	1.02	1.17			
Pub	**1.73**	**1.42**			
Bus services	0.84	**0.79**			
Train/tube service	0.88	1.14			

Notes: Table shows the impact on the odds of facing service constraints (exponent of the regression coefficient, B) from logistic regression models with 15 other controls. Bold indicates effects significant at 5% level; values >1.00 indicate greater constraints/inadequacies in more deprived neighbourhoods compared with the least deprived 70 per cent. Control variables include demographics, country, urban-rural location, individual income and deprivation.

For three of the children's services, there is a significant positive effect of neighbourhood deprivation on constraints, but only in one of these (children's play) does this apply to both the worst 10% of areas and the next 20%. For youth clubs, the effect for the worst 10% is positive but not statistically significant. For nurseries,

the worst 20% have more constraints but the worst 10% have fewer constraints, though not at the level of statistical significance.

In the case of services for elderly and disabled households, there are significant positive effects (more constraints in deprived neighbourhoods) in four cases, although all the values are greater than 1.0. For home care, special transport and day centres, constraints are significantly greater in the worst 10%, and in the case of day centres this extends to the next 20%. For chiropodists the positive effect is only significant for the next 20%.

So, across the public services, the results are quite mixed. The argument that services are worse in poor areas is not borne out for the majority of general services, even those which are market-driven. However, there are some cases where this does apply and very few where access is better in deprived locations. There is rather more support for the hypothesis in the more targeted services, for children and older/disabled people. This is a cause for concern, since these services are supposed to be more redistributive and needs-based, yet they appear to be more subject to negative quality effects in poorer areas.

Overall, as argued in Bailey et al (2015), our evidence tends to support the arguments of those who are concerned about the potentially damaging effects of concentrated poverty. This is some evidence of greater service constraint in neighbourhoods with higher percentages of ‘income deprived’ households and there is little evidence that such neighbourhoods provide significantly greater access to resources through mutual exchange or reciprocity.

Services and Wider Social Exclusion

In the final section of this paper we consider the relationship between local services and the wider spectrum of social exclusion and disadvantage which the PSE survey is designed to measure. The conceptual framework for this aspect of the study was derived from a review by Levitas et al (2007) which proposed a typology referred to as the 'Bristol Social Exclusion Matrix' (BSEM). This proposed a three-way distinction at the top level between 'Resources', 'Participation' and 'Quality of Life', with sub-domains under each of these, as shown in Figure 10.

Figure 10: Bristol Social Exclusion Matrix (BSEM)

In this section we report on an interim attempt at implementing this scheme in terms of simple categorical indicators of exclusion, one for each domain. This deviates slightly from Figure 10, by splitting 'Living Environment' into 'Housing' and 'Area' deprivations, and by combining 'Education' and 'Cultural Participation' (neither of which are particularly well-measured in PSE).

Exclusion on the 'Services' domain is measured by taking households who are 'excluded' (as defined above) in 3 or more services out of 25. This includes child and elderly/disabled services where relevant, and those general services consensually (>50%) agreed to be essential (this omits museums, evening classes. This affects 15.3% of adults.

The main interest here focuses on the overlap (intersection) between service exclusion and the other ten domains of exclusion. Table 11 looks at this in terms of bilateral overlaps. The BSEM-based domains are listed down the left hand column. The second and third columns show the degree of overlap between two particular

domains, 'economic resources' and 'services', where overlap is defined as the number of households experiencing *both* deprivations divided by the number experiencing *either*. Economic deprivation is shown alongside services because it provides a contrast. It is closely related to our primary measures of income poverty, and as such we would expect it to be quite closely related to quite a lot of other domains of exclusion, as is in fact the case. So, for example, economic deprivation has quite strong overlaps with housing, with social activities[5] (both well above 30% overlap), and moderately strong overlaps with employment, health and area (all more than 20%). Economic deprivation is less strongly related to services, social activities/resources, or civic participation.

Table 11: Overlap between Social Exclusion, Economic Deprivation and other Domains of Deprivation (percent of households experiencing both of each pair of deprivations, as proportion of households experiencing either)

Deprivation Domain	*Economic*	*Services*
Economic	**0.0%**	**15.0%**
Services	**15.0%**	**0.0%**
Social	**16.1%**	**9.5%**
Activities	**33.3%**	**13.2%**
Empl't	**25.3%**	**11.4%**
Civic	**16.8%**	**12.2%**
Educ	**17.9%**	**12.9%**
Health	**23.4%**	**12.2%**
Area	**21.0%**	**13.5%**
Housing	**36.8%**	**14.4%**
Crime	**19.1%**	**10.1%**

Services offers rather a strong contrast with this. Service exclusion shows limited overlap with any of the other domains, the highest in fact being economic and housing at around 15%. Of all the domains compared, service exclusion actually shows the lowest overlap. For example, it is the only domain for which all overlaps are below 20%.

Another way of illustrating this rather striking finding is to look at the overlap between being deprived on a particular domain and experiencing multiple deprivation, in the sense of being deprived on a number of domains (3 and 5 in this case).

5 Deprivation on the social activities domain as defined here is relatively highly related to economic deprivation, in part because the questions used to identify non-participation in these activities explicitly have a clause about not being able to afford to participate.

Table 12: Overlap between specific domain indicators and having multiple disadvantage at two levels.

BSEM	Domain	3 or more deprivs	5 or more deprivs
5	Social Activities	69.6%	87.7%
9	Housing	65.1%	82.3%
1	Economic	46.8%	78.3%
10	Crime-Victim	50.3%	61.6%
8	Health	43.2%	61.5%
4	Employment	34.9%	55.2%
3	Social Resources	34.5%	48.0%
9	Area	34.6%	47.3%
6	Education	30.3%	32.7%
2	Services	24.9%	30.1%
7	Civic partic	18.5%	25.4%

Note: percentage of adults with 3+ or 5+ deprivations who have the particular deprivation type.

The domains in this table are listed in descending order of overlap with multiple deprivation. In this case, service exclusion is the second least overlapping, after civic participation. Only 25% of households who are 'service excluded' are multiply deprived at the 3-domain level, and only 30% at the 5 domain level. By way of contrast, 70% of those deprived on the social activities domain, or 65% of those on the housing domain, are multiply deprived at the 3-domain level (88% and 82% at the 5-domain level).

Why is it that service exclusion is so little related to other domains of deprivation/exclusion, in the UK in 2012, and what does this finding imply for policy? Broadly speaking, this finding suggests that public services have broadly succeeded in meeting their implicit goal of ensuring equal access across the socio-economic spectrum. Indeed, they have in some cases actively countered phenomena referred to variously as the 'inverse care law', 'middle class capture', or 'territorial stigmatization.' They are indeed often offering an exception to the 'normal' expectation that's poorer people will have worse access to valued resources, activities or environments. Perhaps this is what we should expect from a mature post-industrial, fully urbanized, welfare state, and clearly this situation would contrast strongly with what would be found in most developing countries. The favourable picture in relation to public services may be expected after a decade or so of substantial increases in spending on such services (up to 2010). However, many of the services reviewed, particularly in the 'general' category, are privately provided by commercial enterprises, albeit subject to varying degrees of state regulation. Here, the findings perhaps reflect the relative sophistication and efficiency of the UK retail sector, for example.

Conclusions

The most 'universal' services in contemporary Britain are primary healthcare and convenience retail and financial services, underlining the mixture of public and private provision involved. These services have generally maintained their position in terms of high levels of usage and low levels of constraint or exclusion, although there has been a falloff in adequacy/availability and/or affordability for some of these (dentists, opticians, banks). Widely-used services include public transport, which has dramatically increased usage, and pubs which are in decline.

Local authority-provided information, leisure and cultural services, although nominally 'universal', have seen falls in usage and are typically now used by only minorities of households. Taken together with the vulnerability of these services to local government spending cuts, and notwithstanding generally strong support for these services as 'essential' (documented in AWP 2), there is a real risk of these services going into a spiral of decline, and thereby contributing to a significant retreat from universalism in local public services. While the benefits of additional investment in children's services and schools in the 2000s are apparent, these may not all be sustained under 'austerity'.

There is remarkable variation in the extent to which people who want to use different services experience constraints in doing so, ranging from 4% in the case of chemists up to 76% in the case of meals on wheels. Some of the services with high levels of constraint are already experiencing major cuts in resources and may expect further major, perhaps terminal cuts in public funding – evening classes, museums & culture, youth clubs, citizens advice, special transport.

Services can be characterised by their general distributional character – the extent to which usage is more 'pro rich' or 'pro poor'. So far as public services are concerned, we can detect a net shift towards a more pro-poor distribution. Two factors are contributing to this: (a) a tendency for given services to become somewhat less pro-rich, or more pro-poor, over the time period 1999-2012; (b) a reduction in provision of certain more pro-rich services as part of austerity. Partly contributing to this, particularly (a), is greater awareness within public authorities of equalities issues, and overt programmes to tackle these (notably in health and education).

However, it remains true that, when you look at constraints on usage, a majority of 'general' services still have significantly higher proportion of poor households reporting constraints. Thus, there is still further to go in countering the combination of factors which make it more difficult for poor people to use services. Cases where constraints facing the poor have been reduced since 1999 include bus services, childcare/nurseries, and play facilities, all cases where service provision and usage have increased considerably. It is also clear that most school resource problems have reduced markedly over this period, except 'teacher shortage'. Remaining school resource problems are not more common for poor households, but individual pupil difficulties are strongly related to poverty (and carry high risks for future life chances).

There are more similarities than differences between the UK countries in terms of service constraints. However, rural areas face significantly greater constraints in use

or availability of a majority of general services, as well as some services for elderly/disabled clients (e.g. day centres and meals).

It is *not* the case, generally in the UK at the moment, that most services are worse in poor areas, although there are some cases where this is true, particularly services more targeted on need for children or elderly/disabled. However, we found no cases of significantly better services in poor areas, so this does not provide any evidence to comfort those who oppose mixed communities.

Service exclusion is, remarkably, little correlated or overlapping with other dimensions of social exclusion. We take this as broadly positive evidence for the success of policies for public provision or regulation which aim to give equal access regardless of who you are or where you are. How sustainable this will be in the future, post-austerity, is less clear.

References

Bailey, N., Besemer, K., Bramley, G. & Livingston, M. (2015) 'How neighbourhood social mix shapes household resources throught social networks and services', *Housing Studies*

Bashir, N., Batty, E., Cole, I., Crisp, R., Flint, J., Green, S., Hickman, P. & Robinson, D. (2011) *Living Through Change in Challenging Neighbourhoods, Thematic Analysis.* JRF Programme Paper: Poverty and Place. York: Joseph Rowntree Foundation.

Bramley, G. & Besemer, K. (forthcoming 2014) *Poverty and Local Services*. PSE Working Paper.

Bramley, G. & Evans, M. (2000) 'Getting the smaller picture: small-area analysis of public expenditure incidence and deprivation in three English cities', *Fiscal Studies*, 21:2, 231-268.

Bramley, G. (1990) *Equalization Grants and Local Expenditure Needs: the price of equality*. Aldershot: Avebury.

Bramley, G. (1996) 'Who Uses Local Public Services? Need, demand and rationing in action*'* in G. Pola, G. France & R. Levaggi (eds) *Developments in Local Government Finance: theory and policy*. Cheltenham: Edward Elgar.

Bramley, G., (1997) 'Poverty and Local Public Services', in Gordon, D. & Pantazis, C. (eds) *Breadline Britain in the 1990s.* Aldershot: Ashgate.

Bramley, G., Watkins, D. & Karley, N.K. (2011) 'An outcome-based resource allocation model for local education services in Wales', *Environment & Planning C*

Curley, A. (2010) 'Relocating the poor: social capital and neighbourhood resources', *Journal of Urban Affairs*, 32:1, 79-103.

Davies, B. *Social Needs and Resources in Local Services*. London: Michael Joseph.

Duffy, B. (2000) *Satisfaction and Expectations: attitudes to public services in deprived areas*. CASEpaper 45. Centre for the Analysis of Social Exclusion, London School of Economics.

Forrest, R. and Kearns, A. (1999) *Joined-up places: social cohesion and neighbourhood regeneration.* York: York Publishing Services.

Goodin, R. and J. Le Grand (1987). *Not Only the Poor: the Middle Classes and the Welfare State*. London, Allen & Unwin.

Harvey, D. (1973) *Social Justice and the City*. London: Edward Arnold.

Hastings, A., Bailey, N., Besemer, K., Bramley, G., Gannon, M. & Watkins, D. (2013) *Coping with the Cuts? Local Government and Poorer Communities*. JRF Programme Paper, November 2013. ISBN 978 1 90958 608 6. York: Joseph Rowntree Foundation.

Hastings, A., Bailey, N., Bramley, G., Gannon, M. & Watkins, D. (2015) *The Cost of the Cuts: The Impact on Local Government and Poorer Communities.* York: Joseph Rowntree Foundation.

LeGrand, J. (1982) *The Strategy of Equality: redistribution and the social services.* London: George Allen & Unwin.

Levitas, R., Pantazis, C., Fahmy, E., Gordon, D., Lloyd, E., and Patsios, D. (2007) *The multi-dimensional analysis of social exclusion.* Bristol: University of Bristol.

Pinch, S. (1985) *Cities and Services*. London: Routledge & Kegan Paul.

Sefton, T. (1997) *The Changing Distribution of the Social Wage*, London, STICERD, LSE.

Smith, D. (1977) *Human Geography: A Welfare Approach*. London: Edward Arnold.

Social Exclusion Unit (2001) *A New Commitment to Neighbourhood Renewal: National Strategy Action Plan*, London: Social Exclusion Unit

Social Exclusion Unit (SEU) (1998*) Bringing Britain Together: A National Strategy for Neighbourhood Renewal*. London: SEU.

Troy, P. (1982) *Equity in the City*. Harper Collins.

Wacquant, L. (2008) 'Relocating gentrification: the working class, science and the state in recent urban research', *International Journal of Urban and Regional Research*, 32:1, 198-205.

Wacquant, L., Slater, T. & Pereira, V., (2014) 'Territorial stigmatization in action', *Environment & Planning A*, 46, 1270-1280.

Wilson, W.J. (1987) *The Truly Disadvantaged*, Chicago: University of Chicago Press.