

Estimating the Cost of Child Poverty in Scotland – Approaches and Evidence





# ESTIMATING THE COST OF CHILD POVERTY IN SCOTLAND – APPROACHES AND EVIDENCE

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#### **SUMMARY**

- i. This paper considers evidence indicating the cost to the public purse of having one in five of Scotland's million children in poverty. Its central aim is to give an idea how much public money would be saved by improving the economic situation of these children. It also considers how much we are spending on supporting children in poverty, how much more it would cost to lift them out of poverty through the benefits and tax credits system and what alternative means may be available to prevent poverty through early intervention or by helping parents into work.
- ii. In most of these areas, it is difficult to pin down definitive evidence of the true cost of child poverty. However, this paper focuses on an area where tangible data can be drawn on, namely the extra cost associated with poverty or area deprivation of a range of public services providing for children. For example, higher crime rates, poorer levels of health, greater housing need and a higher incidence of problems encountered by children at school all lead to higher spending on relevant services in deprived areas. The analysis considers what would happen if the root causes of these extra problems were removed, and if this resulted in spending in such areas being the same as in non-deprived areas. It also looks at further possible savings outside deprived areas as a result of fewer children being in poverty. This is based on ward data covering spending on various mainstream services from selected local authorities in England and Scotland, and also on more detailed breakdowns of spending in small areas across one Scottish local authority: Fife.
- iii. The figures show some services (especially housing and children's social services) where there is a very strong skew of resources to more deprived individuals and areas. Less child poverty seems sure to reduce the need for spending on children's social services; this is less clearly evident for housing. In education, the skew towards deprived areas and children is comparatively less, but since the overall cost of this service is so high, total potential savings are of a similar order to that of social services around £125m for each of these two services based on deprived areas becoming like non-deprived areas, and potentially as much again if individual children in poverty outside deprived areas were helped to a comparable degree. Overall, the extra cost of services associated with child poverty can be estimated very broadly in the range £ $\frac{1}{2}$ - $\frac{3}{4}$  billion.
- iv. Looking at the longer term costs of child poverty, one of the most important effects is via under-achievement at school, and knock-on consequences in early adulthood and beyond. The overall cost of NEETs could add up to roughly a further £1bn a year, although not all of this phenomenon can be attributed to child poverty.
- v. Conversely, to reduce child poverty using income transfers would in the first instance cost roughly £4000 to £5000 per child the equivalent of £1 billion for all Scottish children in poverty. But there are also potentially more cost-effective ways of addressing the problem, involving measures that help parents get jobs and improve children's long-term prospects. Spending on jobs measures are likely to more than pay for themselves. Early intervention to help children may well do so as well, but the financial benefits of this are both more distant and much less certain.

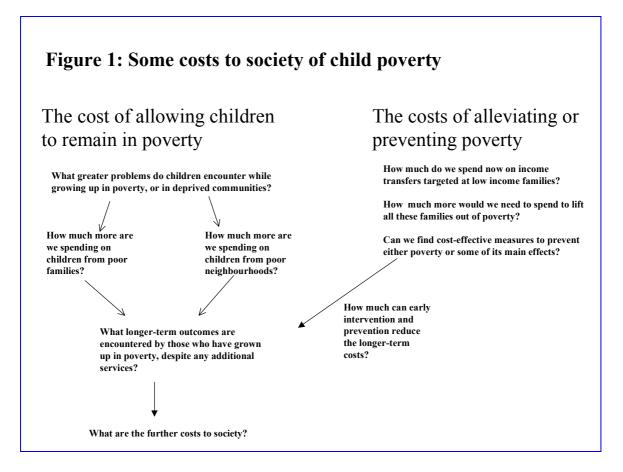
#### INTRODUCTION

- 1. One in five of Scotland's million children live in households with incomes below 60% of the UK median, the preferred measure of poverty used by governments across Europe. While child poverty has started to fall, it remains above the European average, and further progress in reducing its level will be expensive to the public purse. Yet the costs of not ending child poverty, over and above the hardship caused to the individuals affected, are also great.
- 2. Many of the social costs of child poverty are intangible, related to the public's unease and indeed the shame of living in an affluent country that allows a large proportion of children to fall short of an acceptable living standard. But there are also more measurable costs to society, including the cost of spending extra money on public services to counter some of the effects of child poverty, the cost of dealing with social problems exacerbated by the disaffection of young people who grow up in difficult circumstances and the long-term cost of having adults who may not fulfil their potential because they grew up poor.
- 3. This paper considers how great some of these costs may be. Measuring them is a highly imprecise process, mainly because poverty interacts with many other social problems and conditions, so it is impossible to isolate its effects on people's lives. Yet social research leaves us in no doubt that poverty *per se* has a substantial impact on young people's lives and on their futures<sup>1</sup>.
- 4. The present paper is a follow-up to an earlier investigation of the same question at the UK level<sup>2</sup>. Its approach is summarised in Figure 1. The principal costs that it examines, shown on the left of the diagram, are those arising because of the knock-on damage resulting from children living in economic deprivation, both at the family and at the community level. These can be considered both in terms of the greater cost of services for children or communities who are poor or deprived, and in terms of longer-term costs caused by the outcomes of growing up in poverty. In looking at services, the emphasis here is on extra costs in mainstream service spending, rather than specific programmes aimed at helping disadvantaged individuals or areas. Given the very large amount of money spent on services such as education, healthcare and policing, whose costs are sensitive to social need, it is likely that this is where the biggest costs of child poverty will lie.

<sup>&</sup>lt;sup>1</sup> See for example: Paul Gregg, Susan Harkness and Stephen Machin (1999) *Child development and family income* York: Joseph Rowntree Foundation; Blanden, J. and Gibbons, S. (2006) *The persistence of poverty across generations: A view from two British cohorts*, Bristol: The Policy Press.

These reports used cohort studies to show relationships between childhood poverty and poor outcomes in adulthood even after controlling for other factors.

<sup>&</sup>lt;sup>2</sup> Donald Hirsch (2006) *The cost of not ending child poverty- How we can think about it, how it might be measured, and some evidence* York: Joseph Rowntree Foundation - www.jrf.org.uk/bookshop/eBooks/9781859355060.pdf. The present paper draws some ideas from this earlier one, but is not simply attempt to translate the same data and analysis into a Scottish context. Rather, it seeks to refine the approach initiated in the UK study.



- 5. The costs of child poverty need to be set alongside those of preventing or alleviating it, shown on the right of the diagram. In practice, the cost of what we spend on children because they are poor and what we might spend on preventing them from becoming poor or on lifting them out of poverty cannot be fully disentangled.
- 6. This can be illustrated with the case of education. In an effort to provide a level playing field of opportunities, policies aim to devote resources to compensating children from deprived families for their disadvantage. Were such policies fully to succeed, they would help prevent future poverty, by enabling those children to fulfil their economic potential as adults, including in the role of a parent providing for their own children. However, they do not succeed, in the sense that children from deprived families continue to have lower than average educational achievement. Perhaps this is because resources for deprived students need to be greater; perhaps it is because we do not have adequate methods of overcoming disadvantage. Whichever way, education spending on these groups has the dual characteristic of being an ongoing consequence of poverty and part of an attempt to combat it. Similarly, spending on social security benefits could alleviate child poverty if it were high enough, and this could have long-term benefits in terms of improving the ability of non-working families to function in society, rather than merely being seen as "sticking-plaster". Yet benefits spending is undoubtedly also a consequence of child poverty, and in particular of the degree to which families are on low incomes because they lack adequate work opportunities.
- 7. This paper therefore looks in turn at evidence on:
  - How much more is being spent on public services in Scotland as a result of current child poverty;

- To what extent child poverty is causing knock-on effects for future public spending;
- The relationship between child poverty and the cost of financial transfers to families both now and if we raised benefits and tax credits enough to lift children out of poverty;
- What kinds of options there may be to save money over the long term by investing in prevention.
- 8. First, however, it briefly puts these debates in the context of Scotland's efforts to "close the opportunity gap".

#### Closing the Opportunity Gap and the cost of child poverty

- 9. Under the umbrella slogan of "closing the opportunity gap", the Scottish Executive aims to reduce child poverty by providing both opportunity and support. If this programme succeeds, it will both add to the immediate cost of child poverty by allocating money to targeted assistance and reduce the long-term cost by helping to prevent poverty in the future. Of its six objectives, three are clearly focused on prevention:
  - "Increasing chances for sustained employment" for at-risk groups implies an ambitious transformation of job support, under which helping someone into work improves their long-term prospects rather than being a recurring expense as that person returns to the job-centre after losing an insecure job;
  - "Improving the confidence and skills of disadvantaged children" should have the same effect for tomorrow's adults, so that they do not in turn become disadvantaged parents;
  - "Regenerating neighbourhoods in order for people to take advantage of job opportunities and improving their quality of life" should similarly be self-sustaining, as economic and social improvements in neighbourhoods interact.
- 10. The other three objectives involve giving support to disadvantaged groups, but also talk of opportunity:
  - "Improving access to high quality services" for disadvantaged groups is both a means to raise the standard of life for those on low incomes and explicitly linked to improving opportunities to help them raise their own living standards;
  - "Reducing the vulnerability of families to financial exclusion and multiple debts" should help reduce hardship, but also the burden that prevents families from finding long-term routes out of poverty;
  - "Increasing the rate of improvement of the health status of people living in the most deprived communities" is, similarly, explicitly linked both to quality of life and to employability.
- 11. Thus, government is implicitly accepting that making us all better off in the long term by reducing child poverty will require up-front investment. It would be wrong therefore to regard all extra spending on low income groups purely as a "cost" of poverty, rather than part of the solution. Nevertheless, by looking at examples of where extra money is today being spent, we can get an indication of what the savings over the long term will be if child poverty

is reduced. It therefore makes sense to start by looking at the extent to which we currently skew the spending of public resources towards disadvantaged groups.

#### Extra service spending caused by child poverty

- 12. Growing up in poverty does not automatically make a child unhealthy, a failure at school or a teenage delinquent. The majority of children in low income families are none of these things. Yet the pressures of life on a low income makes it harder for families to function well, in particular because such families have fewer resources to deal with things when they go wrong<sup>3</sup>. This also affects the ways in which young people relate to their environment outside the family.
- 13. It is extremely difficult to trace exactly what damage poverty causes in children's lives in a way that allows us to quantify the amount of public spending needed to address that damage. This requires guesstimates both of the degree to which poverty is responsible for a given child outcome (eg a child is behaving badly in school because her parents are poor) and of the consequences of this outcome on spending (eg the school spends a given amount to compensate for that child's behaviour). A more straightforward approach, used below, is to look at differences in certain outcomes among poor or disadvantaged children, and to look at differences in spending in areas where they live.
- 14. This approach shows how extra spending is associated with the incidence of poverty, without pretending to demonstrate causation. Poor average outcomes for children on low incomes are likely to be caused not only by low income itself but also by other factors associated with low income such as inadequate housing and low parental education, some but not all of which may alter if family income rose. Looking at outcomes and spending in deprived areas, where child poverty is more prevalent, is an indirect measure with considerable value, but whose meaning needs to be interpreted with caution. This issue is discussed in Box 1.

## Box 1: How much does extra spending on children living in poor areas tell us about potential savings from reducing child poverty?

The most useful data linking deprivation and extra spending on services looks at deprived areas rather than individual deprived children. In one sense this does not show as accurate a picture of the skewing of spending to serve children in poverty as would an analysis of spending on these children as individuals. However, in some services consumed in groups like school education or collectively like crime prevention (the latter are "public goods"), it would arguably be less relevant to consider spending by individual "client" characteristics. Others, such as healthcare and social work, often have more identifiable individuals clients, yet there may still be significant area effects. For example, children who live in poor neighbourhoods may acquire some lifestyle habits associated with poverty and with poor health, even if they are not themselves poor; or a child on a low income may display different behaviours depending on whether they live in a tranquil suburb or on a deprived and violent inner city estate.

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<sup>&</sup>lt;sup>3</sup> Commission on Families and the Well-being of Children, 2005, Families and the state – two-way support and responsibilities, Bristol: Policy Press page 60, citing especially Corlyon, J, Hunter, S and Katz, I, The relationship between parenting and poverty, Joseph Rowntree Foundation forthcoming.

Nevertheless, in interpreting calculations made in this paper, it must be borne in mind that making an *area* with a high concentration of poor children similar to other areas would not have the same effect on public spending as ending child poverty for individuals. On the one hand, simply improving the incomes of families with children in a deprived area would not on its own make it similar in all respects to non-deprived areas, and some of the factors causing children to make greater use of services in such areas may remain. For example, raising families' incomes may not in the first instance solve a shortage of suitable accommodation in that area, which contributes to poor health outcomes associated with overcrowding. In this sense looking at how much more is spent in deprived areas may overestimate what savings are available from reducing child poverty.

On the other hand, the costs of child poverty are also seen in non-deprived areas, where a large proportion of children in poverty actually live. For example, of 200,000 children living in families on benefits in Scotland, 60,000 live in wards where child poverty on this measure is below average, and 120,000 live outside the 20% of wards (by population) where child poverty is highest<sup>4</sup>. In this sense, lifting children out of poverty should reduce public spending costs by more than implied just by looking at poor areas, even though area effects are important. The analysis of Fife in this paper gives an illustrative calculation of how this might be the case.

- 15. The following analysis looks at six broad areas of public services on which child poverty appears to impose substantial extra costs:
  - School education
  - Children's social services
  - Health care
  - Housing
  - Youth justice
  - Drug treatment
- 16. Following this general discussion, some more specific calculations that can be made from a particular Scottish local authority, Fife, for a subset of these service areas, is presented and discussed.

#### School education

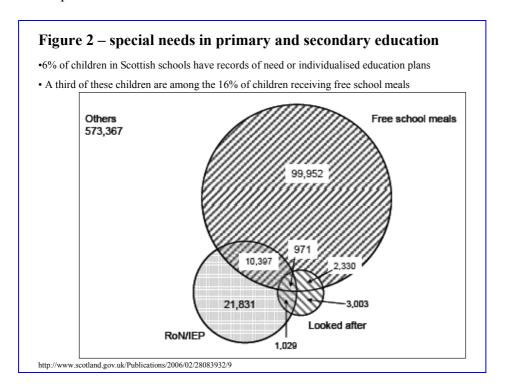
17. Children in low income families have worse than average outcomes in education, and encounter a greater than average amount of difficulty when at school. Schools with deprived intakes also have below-average results and encounter more than their fair share of problems.

18. One simple way of seeing how this is so is to look at the number of children who come to school with special needs, as defined by eligibility for records of need or

<sup>&</sup>lt;sup>4</sup> Author calculations based on data prepared for the Joseph Rowntree Foundation – see <a href="www.jrf.org.uk/child-poverty/documents/Scotland.xls">www.jrf.org.uk/child-poverty/documents/Scotland.xls</a> The calculation is based on the number of children with at least one parent receiving Income Support, Job Seekers Allowance, Incapacity Benefit, Severe Disablement Allowance or Pension Credit. This is not a full measure of poverty as it excludes children with working parents who are nevertheless below the poverty line.

individualised education plans. Less than 10% of such children have purely "physical" impairments – the rest have social, emotional, behavioural, linguistic or learning disabilities which, although they do not always emanate from a child's social background, can be accentuated by the circumstances of the home environment.

19. As shown in Figure 2, children in low income families eligible for free school meals make up a third of all children with records of need or individualised education plans.



- 20. One way of looking at this over-representation is to say that children eligible for free school meals have a 10% chance of having a special need, compared to a 4% chance for those not eligible. If those on lower incomes had their chances reduced to 4%, about 7,000 fewer children would have special needs.
- 21. This could potentially save about a fifth of the special needs budget in schools. This would not however be a large saving in relation to the total schools budget. A wider perspective is to consider how overall spending on schools is weighted to provide more for children in poverty or in poor areas. Even a relatively minor weighting in this direction has large cost implications, given that a total of £1.5 billion is spent on primary education and £1.7 billion on secondary education in Scotland $^5$ .
- 22. Professor Glen Bramley from Heriot-Watt University has carried out work throughout the UK and across services to look at how much six local authority areas in England and Scotland spent in mainstream services in different areas according to their level of deprivation<sup>6</sup>. Table 1 summarises some of the differences between different kinds of area:

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<sup>&</sup>lt;sup>5</sup> 2004-5 figures

<sup>&</sup>lt;sup>6</sup> Mainstream public services and their impact on neighbourhood deprivation, ODPM, 2005.

Table 1: education spending by deprivation band on national index

Spending per child (2000/1)								
	Most deprived	Next 15%	Next 25%	Local	Ratio of	Ratio of	Ratio of	
	10% of wards	(10-25)	(25-50)	authority	bottom	bottom	bottom	
	nationally			average	10% to	10% to 25-	10% to la	
					next 15%	50	average	
Primary educa	tion							
Bradford	2064	1973	1889	1965	1.05	1.09	1.05	
Brent	3943	3047	2569	2963	1.29	1.53	1.33	
East Kent	2670	2490	2386	2425	1.07	1.12	1.10	
Liverpool	2808	2592	2430	2725	1.08	1.16	1.03	
Nottingham	2771	2419	2091	2526	1.15	1.33	1.10	
Edinburgh	2693	2472	2223	1802	1.09	1.21	1.49	
Secondary Edu	ıcation							
Bradford	2085	2058	2244	2052	1.01	0.93	1.02	
Brent	2799	2663	2638	2656	1.05	1.06	1.05	
East Kent	2447	2618	2953	2777	0.93	0.83	0.88	
Liverpool	2931	2849	3605	3017	1.03	0.81	0.97	
Nottingham	2115	1891	1326	1906	1.12	1.60	1.11	
Edinburgh	3826	2898	1997	2201	1.32	1.92	1.74	

Adapted from ODPM, Mainstream public services and their impact on neighbourhood deprivation (2005), pp 48-49.

- 23. The ratios shown on the right hand side of this table compare spending in the poorest wards to those just above them, to a middling group just below the median and to the average for the local authority. The last column shows the extent to which local authorities skew resources for schools by deprivation, and seems to confirm that some Scottish authorities use their relative freedom over funding formulae to skew resources to more deprived areas to a greater extent than English authorities<sup>7</sup>. However, the final distribution of resources to each ward is also influenced by the overall deprivation of the local authority. An authority like Liverpool has no wards in low deprivation bands, and so its internal skew is low relative to Edinburgh, which has affluent wards. On the other hand, the amount spent per child in a nationally poor ward relative to middling wards in national terms is similar (for primary education) in Liverpool as in Edinburgh<sup>8</sup>.
- 24. Using this indicator (shown in bold), we can see that in primary education there is considerable variety, but that somewhat more is spent on children in deprived areas, ranging from about a tenth more to about a half more than in areas just below the middle in terms of deprivation. (These areas just below the median, referred to here as "slightly deprived", cover the 25<sup>th</sup> to the 50<sup>th</sup> percentile in terms of deprivation. The rationale for using this as a comparator is that conditions in such wards seem a reasonable objective for a very deprived ward to rise to; rising to say the least deprived quintile would be unrealistic.)

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<sup>&</sup>lt;sup>7</sup> This is confirmed when looking at the per *pupil* ratios – ie excluding private school children (see below), for primary education, where the extra spent in deprived areas is below 3% for four of the English authorities, and 17% for Brent but 27% for Edinburgh.

<sup>&</sup>lt;sup>8</sup> Data given here for Edinburgh should be interpreted with caution because Edinburgh has a relatively high population of affluent families and of children attending private schools compared with the rest of Scotland. However, the kind of inequalities in spending noted in Edinburgh nevertheless have some indicative value for the rest of Scotland. Note that the comparisons focus on the gap between most deprived and middling areas, which takes the wealthiest neighbourhoods out of the equation. Moreover, as explained in the previous footnote, it is possible to make comparisons among those pupils who attend state schools rather than all children in a neighbourhood, to confirm that the incidence of private education is not distorting the observed effect.

- 25. In secondary education the picture is complicated by the fact that the measure compares public spending on education per child of the relevant age, and this includes zero spending on children not enrolled in state education. On the one hand this includes children enrolled in private education, who are more numerous in less deprived wards, increasing the ratio between deprived and average, but probably having little effect on the highlighted ratio between most-deprived and medium-deprived wards. On the other, it reduces the ratio to the extent that many children in deprived wards have left school, explaining why in some cases more is spent per resident child in lower-middling than in the most deprived wards. This is an important factor when considering the consequence to public spending of reducing child poverty. It shows that in secondary education at least, the reduction in spending that could follow from less deprived children becoming less expensive to educate to a particular level could be partly or wholly offset by higher staying-on rates. In this sense, it is not so much that poverty makes the service cost more, but that it causes money to be spent on compensatory measures rather than on expanding opportunities through wider participation.
- 26. Nevertheless, these figures and the ones shown later in this paper for Fife (looking at deprivation in smaller geographical, but wider in the sense of covering the most deprived 20% rather than 10%) show clearly that poverty and deprivation are associated with higher spending on education overall. The overall size of this skew is hard to determine, and its desirable size harder still.
- Some possible estimates based on Fife, discussed below, suggest that child poverty 27. may be costing of the order of £125-£250m in extra education spending in Scotland (the lower figure based on an area effect in deprived areas, the latter on individual effects across all areas). Looked at another way, we can work out how much extra spending would be implied for a particular skew in education spending towards the one in five Scottish children in poverty (or, alternatively, of the 20% living in the most deprived areas). If this group receives 10% more funding per child, on average, than non-deprived children, an amount just under 2% of all school spending would be saved; if they receive 20% more, the saving is 3.85%, if 50% more, it is 9.1% (see appendix A for calculations). These would equate to savings of about £60m, £120m and £290m respectively. It seems plausible from the evidence presented above and from the evidence shown later in Fife that Scottish local authorities are already spending of the order 20% more in schools on children in deprived areas. This seems to confirm that child poverty is costing at least about £120m in extra school spending based on spending in deprived areas, and more if poor children in non-deprived areas are taken into account.
- 28. In addition to these costs, the cost of providing free school meals to Scottish children on low incomes has been estimated at about £31m, rising to £45m were all of those entitled to take this up.<sup>9</sup>

#### Children's social services

29. In contrast to education, a service used by all children to a similar degree between age 5 and 16, children's social services are focused on those children and their families who encounter difficulties as they are growing up. Those who encounter such difficulties are

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<sup>&</sup>lt;sup>9</sup> Information provided by Scottish Executive

disproportionately from deprived backgrounds. As a result, spending on children's social services is heavily skewed to serve children in poverty and children living in deprived areas.

30. The extent to which this is so can be seen by looking at comparable ratios in spending to those shown for school education in selected local authority areas. These are shown in Table 2. In this case there are two Scottish authorities – Edinburgh and North Lanarkshire:

Table 2: children's social service spending by deprivation band on national index

social services							
	Most deprived 10%	Next 15%	Next 25%	Local	Ratio of	Ratio of	Ratio of
	of wards nationally	(10-25)	(25-50)	authority	bottom	bottom	bottom
				average	10% to	10% to 25-	10% to la
					next 15%	50	average
Bradford	361	344	331	306	1.05	1.09	1.18
East Kent	613	375	235	296	1.63	2.61	2.07
Liverpool	645	257	142	523	2.51	4.54	1.23
Nottingham	728	552	454	617	1.32	1.60	1.18
Edinburgh	1540	658	653	486	2.34	2.36	3.17
North Lanarks	278	160	73	136	1.74	3.81	2.04

Adapted from ODPM, Mainstream public services and their impact on neighbourhood deprivation (2005), p82.

- 31. Although the ratios again vary greatly by local authority, they are generally far higher than for education. Outside school, the state spends far more money on deprived children compared to non-deprived children than it does inside school. In the two Scottish authorities shown, between two and four times as much is being spent per child in deprived than in non-deprived areas. Again, these figures are backed by the later analysis of Fife, where the ratio is 3.4.
- 32. If, say, three times were spent on the most deprived 20% of children or areas, this would imply a potential saving on social services spending of about 30% if deprived areas could be made more like other areas (for calculation see Appendix A). Since the children's social services budget is much smaller than the education budget, this does not imply a much higher saving overall. About £540m<sup>10</sup> is spent by local authorities on families and children, implying a potential saving in the order of £150m based on area effects, a similar order of magnitude to the education savings. Again, this is confirmed by the Fife analysis below.

#### Health care

33. Scotland has well-publicised health inequalities, with people in poorer areas facing greater penalties than elsewhere in the UK in terms of reduced life expectancy and greater susceptibility to certain diseases like heart disease. The biggest impact of this appears to fall on people in later life. However, the incidence of some conditions in childhood can be shown to have a larger effect on deprived families. For example, dividing the Scottish population into quintiles of deprivation, we can look at incidence of various negative features of child health and find the following ratios of the most deprived to the least deprived quintile<sup>11</sup>:

Report of Inequalities in Health Working Group, 2003, Annex C

<sup>&</sup>lt;sup>10</sup> http://www.scotland.gov.uk/Publications/2006/01/10142605/9

- Smoking during pregnancy least affluent quintile 2.6 times as likely as least affluent (2002);
- Not breastfeeding at 6-8 weeks 1.7 times (2002)
- Five year olds with dental caries 1.8 times (1999)
- Low birthweight babies 2.3 times (2001)
- Admission to hospital age 0-9 1.7 times (boys); 1.6 times (girls) (2001)
- Infant mortality 1.8 times (boys), 1.6 times (girls) (2000)
- 34. Not all of these have significant effects on health care spending, yet the consistency of differences in those health outcomes that can be measured makes it seem likely that more is spent on healthcare for children from deprived families. One offsetting factor is that usage of health services, relative to health need, has tended to be lower for less affluent groups. In some cases, such as neglect of dental care, this may postpone some of the extra treatment that one might expect in response to lower levels of health, but in the long term lack of early treatment is unlikely to save money and could end up being more costly. This is illustrated in a discussion in the earlier paper on the cost of child poverty across the UK.<sup>12</sup>
- 35. It is difficult to measure directly the extra cost of primary care because much of the data attributable to individual children relate to GP caseloads and do not distinguish frequency of treatment. However, analysis of the Scottish Household Survey<sup>13</sup> shows that families with children in the most deprived 10% of wards visit the doctor on average 4.1 times a year compared to 3.4 times on average – that is, 20% more frequently. Families in the bottom 10% of areas use the services about 11% less than those in "slightly deprived" areas (25-40% on the deprivation scale). Using the calculations shown in Annex A, this implies that about 2% of all primary health spending on families with children could be saved if families in the most deprived areas were to visit the doctor with the same frequency as children in modestly deprived areas. About £1.9 billion is spent on primary health care in Scotland, including costs such as subsidising prescriptions but it is difficult to estimate how much of this is attributable to children. The cost per head for children is likely to be higher than working-age but lower than for pensioners. If it is about the same or slightly above the average per head of population, then applying the 2% figure suggested above, the extra cost of health spending on children in deprived areas would be of the order of £10m.
- 36. For acute healthcare, spending figures show more discernible differences. In the case of wards in Edinburgh and North Lanarkshire, as discussed above, per capita spending on all in-patient care (not distinguishing by age) is 23% and 12% higher respectively in the most deprived 10% than in the slightly deprived category. A comparable spending premium of 20% was calculated specifically for children's acute care for Fife (but on a different basis) in the analysis below. If hospitals were to save 20% for children in the most deprived fifth of areas, the overall amount spent by hospitals on caring for children would fall by nearly 4%.
- 37. It is difficult to estimate globally how much of the health budget in Scotland is allocated to caring for children. However, it is only a small part of the overall NHS budget, which is heavily weighted towards caring for older people. Perhaps the most costly extra intervention required as a result of deprivation would be hospital care for under-weight babies. Overall, though, the savings are likely to be small relative to other services referred to here: in the Fife example below, potential acute healthcare savings are estimated at less than a

<sup>&</sup>lt;sup>12</sup> Hirsch, op cit, pp 13-14

<sup>&</sup>lt;sup>13</sup> Spreadsheet analysis supplied by Professor Glen Bramley to author, using 1999 and 2000 surveys combined.

tenth as large as either school education or children's social services: the equivalent saving on acute healthcare for Scotland is around £10-£20m.

38. This does not mean that health is unimportant as a cost of childhood poverty. However, it seems probable that the largest costs of growing up poor will be on subsequent outcomes in terms of ill health during adulthood, including the development of conditions such as heart disease in later life. This is especially likely in a country like Scotland where health inequalities are high. At present, longitudinal data are inadequate to trace these effects. However, there may be potential for research to probe them further, for example by looking more closely at the new English Longitudinal Survey of Ageing, in which individuals over 50 were asked among other things about their own health and about the main occupation of their carer when they were aged 14.

#### Housing

- 39. Social housing, like social services, is a public service targeted at only a section of the population rather than being universally used. Whereas social services tends to be more heavily consumed by families on low incomes because they happen to encounter the problems being addressed by the service, social housing is directly targeted at the economically deprived, both to the extent that it is intended to provide an affordable option to those unable to pay for adequate housing without subsidy, and to the extent that priority access is given to deprived groups.
- 40. At the extreme end of need is spending on homeless families. Of 32,000 households accepted as homeless in 2005-6, 10,000 had children, 80% of them headed by lone parents. Three quarters of these were found permanent accommodation.<sup>14</sup>
- 41. More generally, spending in selected local authority areas analysed by ward-level deprivation, referred to above, is particularly weighted to deprived wards in terms of housing capital spend. On average in seven case study areas in England and Scotland, over three times as much is spent on capital for RSLs in the 10% most deprived wards than in the slightly deprived category. In the two Scottish authorities analysed, there is an even greater concentration of provision in the most deprived areas, and the equivalent ratios are five times for Edinburgh and 11 times for North Lanarkshire. These figures do not distinguish spending on children.
- 42. In the case of spending on social housing, therefore, a very large proportion of public spending possible half or more is allocated to the most deprived 10% of areas. About £800 million a year is spent on housing in Scotland<sup>16</sup>. What is highly uncertain is how much of this could be saved if families were lifted out of poverty. Some at least would be able to afford a wider range of housing options without necessarily requiring social housing. This however would be subject to a number of factors including the effect of rising incomes on house prices at the lower end, choices about tenure and (particularly in the case where people continue to rent) the interaction between housing benefit withdrawal and the affordability of private options. Moreover, in many areas a current shortage of social housing relative to its

<sup>&</sup>lt;sup>14</sup> http://www.scotland.gov.uk/Resource/Doc/149558/0039817.pdf page 38

ODPM op cit p100

<sup>16</sup> http://www.scotland.gov.uk/Resource/Doc/46997/0024932.pdf page 182

availability would mean that even if some groups improved their access to alternatives, there would still be sufficient demand/need to justify present levels of expenditure on social housing. Thus, while housing is the large-scale public service with the greatest skew towards providing for disadvantaged families, it is perhaps the one where it is hardest to attribute current spending levels to current poverty levels.

#### Youth justice, crime and anti-social behaviour

- 43. Young people in deprived areas, and those who have grown up in disadvantaged families, are much more likely to get in trouble with the law. This imposes a range of costs, from intangible costs to individuals and communities resulting from anti-social behaviour to amenities improvement (eg cleaning up graffiti) and protection (extra security) to the costs of the youth justice system itself.
- 44. Bramley's analysis of spending on mainstream services considers ward level spending on policing. This uses data in most case studies extrapolated from crime rates rather than based directly on policing activity, and this shows spending at 1½ to three times as high in the most deprived compared to slightly-deprived areas. In Edinburgh, a more accurate measure that incorporates information about police activity as well as crime rates shows a smaller ratio, of 1.13 (although in this case the highest spending per head occurs in the second-most deprived category of ward, between the 10<sup>th</sup> and the 25<sup>th</sup> percentile, where it is 1.44 times as high as in the next, "slightly deprived" category). Data from Fife show crime rates 54% above average in the most deprived 20% of small areas.
- 45. These data suggest that there is a definite skew in police spending to more deprived communities, but it is hard to say how large this is overall. Modelling of the relationship between higher crime rates and higher local police spending in a particular area of Fife<sup>17</sup> suggest that fixed and central costs could mean that the extra cost of spending in deprived areas compared to average would be only about a quarter as much, proportionately, as the extra incidence of crime in these areas. On this basis, if crime is about 50% higher than average in the most deprived 20% of areas, as they are in Fife, policing costs in those areas would be about 10-15% higher, adding about 2-3% onto the total policing bill. Since about £1.2 billion is spent on policing in Scotland, this suggests that higher crime in deprived areas is costing of the order of £25-35 million a year although given that these estimates are not based on actual activity rates, it could well be more.
- 46. While the above figures on crime rates do not distinguish factors associated with children and young people from others, Household Survey data seem to show that people's attitudes to safety and disorder in their neighbourhoods are particularly skewed by deprivation status in the case of factors associated with youth misdemeanours. For example, more than twice as many people in the most deprived wards mention vandalism as a problem in their neighbourhood<sup>18</sup>.

<sup>&</sup>lt;sup>17</sup> "Community Budgeting Pilot - Spend on Children and Young People in Tanshall, Glenrothes", report to Fife Council by Herriott Watt University, October 2004

<sup>&</sup>lt;sup>18</sup> Scottish Household Survey analysis supplied to author by Prof Glen Bramley

- 47. Another interesting finding from Edinburgh comes from Professor David Smith's recent cohort analysis of youth crime trends<sup>19</sup>. This shows that whereas across social groups, crime and delinquency rates decline quite sharply after the age of about 14, in deprived or disorderly areas desistance from crime in later adolescence is less pronounced. This suggests that deprivation has a particularly strong impact at the area level, and is particularly influential in relation to persistent crime compared to early but short-lived delinquency.
- 48. It is uncertain how much of the £700m spent directly on prisons, courts and other areas of justice spent directly by the Scottish Executive, or the £400m that it gives to local authorities for their justice activities, could be saved if this extra burden on deprived areas were alleviated. It seems likely to be at least as high a proportion as for the similar amount spent on policing, referred to above, and thus we may guess that at least £50-70m extra in all is being spent on justice including police in deprived areas, a large proportion of it related to youth. The data certainly indicate that being "tough on the causes of crime" would do well to lay heavy emphasis on improving conditions in deprived areas.

#### **Drugs services**

- 49. Many disaffected young people from deprived communities appear to get involved with illegal drugs. This then necessitates expensive interventions. If these young people had better prospects, such outcomes may be averted.
- 50. In fact, the evidence is highly ambiguous about whether and to what extent young people in deprived areas use illegal drugs more than better-off groups<sup>20</sup>. To some extent, it may be the degree to which drug use in deprived communities is "problematised" that makes them stand out as the area where most public money is spent. The extra costs of such services may be more reflective of those strategies than of the incidence of illegal drugs use. Nevertheless, it is notable that in Fife, there are about 12 drugs related admissions to hospital per thousand people in the most deprived areas compared to only 4 on average.
- 51. It is hard to get a global figure of spending on drug treatment in Scotland. But it seems reasonable to state that even though the cost per person treated is high, the total spending on this service is low relative to the other services discussed in this paper. For example, a residential drug treatment programme costs about £300-£400 a week; in 2004, there were 329 beds in facilities offering such treatment in Scotland<sup>21</sup>. If all these were filled continuously, about £5 million would be spent, a tiny amount compared to the billions spent on items such as education and health care. What is likely to be much greater than the cost of treatment is the knock-on costs associated with drug use for example in terms of higher risk of criminality, unemployment and deprivation in the future.

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<sup>&</sup>lt;sup>19</sup> David J Smith, *Social Inclusion and Early Desistance from Crime*, Centre for Law and Society, University of Edinburgh, 2006

<sup>&</sup>lt;sup>20</sup> This is the emerging picture from a literature review currently being carried out by the Scottish Povety Information Unit for the Drug Action Teams Association for Scotland.

<sup>&</sup>lt;sup>21</sup> Scottish Executive Effective Interventions Unit, 2004 Residential Detoxification And Rehabilitation Services For Drug Users: A Review

### Using data to estimate how much child poverty adds to service spending – an illustration from Fife

- 52. A growing wealth of data on small local areas is making it possible to analyse not just deprivation in terms of outcomes but also the cost of service usage. In using this data to estimate the cost of child poverty, it is important to bear in mind that they show area effects rather than individual effects, as discussed in Box 1 above.
- 53. A model developed by Professor Glen Bramley of Heriot-Watt University is being used by Fife Council<sup>22</sup> to provide such data in a way that makes it possible to see for the first time approximately how much more is being spent on certain mainstream public services in very local areas that are relatively deprived, compared to those that are not deprived.
- 54. It highlights in particular four key services where more is being spent on children in deprived areas than elsewhere: acute healthcare, children's social services, primary education and secondary education. The data also look at primary healthcare, but there are no significant differences by deprivation level, which can be attributed to difficulties in recording and measuring such differences, rather than providing evidence that they do not exist<sup>23</sup>. Note that the services described below are selected because they have the most specific data on spending levels. As suggested earlier in this paper, there are other spending areas such as criminal justice where there is certainly a skew of activity towards deprived areas, which could involve just as high extra spending associated with child poverty, but the dataset under consideration does not quantify this.
- 55. Specifically for those services where spending is quanitifed, it is possible to compare expenditure in small areas in Fife that are among the 20% most deprived in Scotland with spending in other areas. (These areas, "data zones", are very small the average population of the areas across Scotland is fewer than 800.) About one in six of Fife's 80,000 children live in these deprived areas. Their characteristics contrast strongly with the rest of Fife children. Nearly half (48%) are eligible for free school meals, compared to only one in six (17%) in the rest of Fife. The proportion of households in council housing in these areas is similar 52% compared to 18% elsewhere.
- 56. Since children on free school meals are generally those with the lowest incomes, the figures show the extent to which the concentration of child poverty is much greater in the deprived areas of Fife: a third of children eligible for free school meals are concentrated in areas containing one in six children. However, note also that two-thirds of children qualifying for free school meals in Fife live outside these areas.
- 57. Calculations made for this paper using the Fife Social Justice Analysis System database are shown in Tables 3 and 4.

The Fife Social Justice Analysis System. For details see <a href="http://www.fifedirect.org.uk/atoz/index.cfm?fuseaction=advice.display&adviceid=A9CCD1CC-E7FE-C7EA-08E97E5538D4A02F">http://www.fifedirect.org.uk/atoz/index.cfm?fuseaction=advice.display&adviceid=A9CCD1CC-E7FE-C7EA-08E97E5538D4A02F</a>

<sup>&</sup>lt;sup>23</sup> Specifically, the data on primary healthcare costs are based on the number of children registered with GPs, rather than the number of GP consultations. In practice, funding arrangements for GPs are becoming more dependent on treatment rates and prevalence of conditions rather than just on registrations, and high sickness rates will also lead to substantial extra cost to the public purse in filling prescripitions.

Table 3: How much could be saved if extra spending in deprived areas became unnecessary?							
	Children's social services spend per child 0-18	Acute health care spend per child 0-18	Primary education spend per pupil	Secondary education spend per pupil			
Spending per child by area							
Fife overall	£248	£185	£3,480	£4,743			
Deprived area	£609	£215	£3,890	£5,573			
Non-deprived area	£179	£179	£3,400	£4,595			
Ratio deprived to non-deprived	3.40	1.20	1.14	1.21			
Extra per child	£430	£36	£490	£978			
Potential savings if falling poverty meant	spending could	be the same in to	day's deprived a	s in non-deprived			
areas		I					
Fife	£5,638,667	£468,587	£2,288,562	£3,423,635			
All of Scotland, if similar amounts saved per child living in a deprived area	£123,287,657	£10,245,512	£50,038,669	£74,856,681			

Total potential saving: Fife £12m, Scotland £258m

- 58. Table 3 starts by showing how much is spent on children on mainstream public services in deprived areas compared to other areas in Fife, in four service categories.
- 59. The most striking result of this initial comparison is that while somewhat more is spent on children in deprived areas in health and education, the skewing of spending is by far the greatest in the case of children's social services, where over three times as much is spent in deprived than in non-deprived areas. This confirms the picture described in the earlier part of this paper. It is plainly a result of the fact that whereas health and education services serve all children, only some children use social services, and less advantaged children are far more likely to be clients. This is confirmed by a sharp decline in spend in progressively less deprived areas. In areas in Fife that are among the 20% of Scottish areas with the *lowest* deprivation rates, an average of only £40 is spent per child on social services, only a fifteenth the level in the *most* deprived areas.
- 60. However, a second noticeable result is that despite the *relatively* large amount spent in deprived areas on social services compared to other services, the *absolute* difference in spend per child is slightly higher in primary education and about twice as great in secondary. On the other hand, the social services per-child calculation covers a wider range of children (all 0-18s rather than just school age). So the total "excess" spending in deprived areas of Fife, which would in principle be saved if they became exactly like non-deprived areas, is similar for education and for social services £5.7 million and £5.6 million respectively.
- 61. Can this saving be translated into an estimate for all of Scotland? Of course, Fife cannot be said to be representative of the rest of the country, and certainly does not experience the most severe problems of areas like inner Glasgow. However, given that it is a mixed area, without the extremes of very rural Scotland or its densest inner cities, an extrapolation is of some use in indicating the order of magnitude of potential savings Scotland-wide. The final line of Table 3 makes such an extrapolation by considering how much would be saved if for each child presently living in a deprived area, spending were

reduced by the additional amount spent per child in deprived areas of Fife. This shows that the savings could be of the order of a quarter of a billion pounds just for the services shown.

- 62. As discussed above in Box 1, this area-based approach does not look at the effect of extra spending allocated to poor individuals as opposed to poor areas, and nor does it do anything to measure benefits of reducing poverty in non-deprived areas. Table 4 shows how a different estimate of potential savings can be derived if we assume that spending more on a service in a deprived area is primarily a reflection of the fact that more children are in poverty in that area. If that is the case, we can express the extra spending in terms of the amount per extra child in poverty, and take that as the cost of a child being poor. However, it would not just be these "extra" children who would need fewer services were child poverty to be ended: the potential savings would extend to every child in poverty in Fife, and indeed in Scotland, whether or not they lived in a deprived area.
- 63. Table 4 shows that, potentially, the savings in Fife could be about three times the earlier estimate based on spending on areas rather than on individuals, and in Scotland it could be about twice as high. The reason for there being more effect on the Fife figure is that poverty is comparatively less concentrated in deprived areas in Fife than in Scotland as a whole, so adding in poverty outside these areas makes more of a difference.

Table 4. How much could be saved if we assume all the extra spending on deprived areas is associated with child poverty, and could be avoided for all children currently in poverty?

(Free school meals used as proxy for poverty)							
	Children's social services spend per child 0-18	Acute health care spend per child 0-18	Primary education spend per pupil	Secondary education spend per pupil			
Extra spent per child in deprived areas	£430	£36	£490	£978			
Extra spent in deprived areas per extra child in poverty, based on estimates using free school meal eligibility*.		£119	£1,531	£3,493			
Potential savings if service cost reduced by this amount for every child in Fife estimated poor		£2,144,483	£10,507,108	£16,006,160			
Potential savings if service cost reduced by this amount for every child in Scotland estimated poor		£23,216,118	£113,752,724	£155,207,013			

Total potential saving: Fife £54m, Scotland £572m

64. On this second calculation, the potential savings in Scotland, principally from education and social services, are of the order of half a billion pounds. It is important to note the word "potential". This calculation assumes first that reducing child poverty in deprived areas to the level in non-deprived areas would in itself remove the need for extra spending in the former, and second that further equivalent reductions in spending would be achieved by improving the incomes of the one in six children remaining in poverty in both deprived and

<sup>\*</sup>Poverty rate for all children age 0-18 assumed as free school meal eligibility of all school age children; poverty rate for primary and secondary school age children based on actual fsm eligibility at these school ages. In each case, the poverty rate in non-deprived areas is subtracted from the poverty rate in deprived areas to calculate "extra" children in poverty.

non-deprived areas. It is widely accepted that "area effects" make the impact of a given individual's economic situation more serious in deprived areas than elsewhere, so the effect is unlikely to be as great as that shown. Thus, Table 4 uses stylised assumptions to show the extra spending that could be associated with child poverty, rather than predicting exactly what would happen if family incomes were raised. But in conjunction with other policies affecting deprived families, much of these savings could be achieved.

65. The data used here somewhat underestimates the level of child poverty on the conventional income measure of 60% median (UK) income. The income measure shows 25% of Scottish children in poverty when measured after housing costs, and 21% on a before housing cost measure<sup>24</sup>. The measure used here covers the 18% of Scottish children eligible for free school meals. This is not a bad proxy for hardship, since it covers children whose benefit and tax credit status indicates that their families would find it difficult to pay for an adequate school lunch. However, if it had been possible<sup>25</sup> to perform the same calculation based on the 60% median threshold, the savings from ending child poverty could be expected to be even greater.

#### **Evidence on services: roundup**

66. The above evidence suggests that the most sizeable costs of child poverty and deprivation in terms of extra spending on services are likely to be of the order shown in Table 5. The table also comments briefly on each of these calculations.

<sup>&</sup>lt;sup>24</sup> Note – even though people's incomes are obviously higher before deducting housing costs, the poverty rate is lower because incomes are in each case compared to the equivalent for the median household. Lower income families tend to use a greater percentage of their gross income (which is often supported by housing benefit) to pay for their housing, so their relative poverty is greater when looking at their residual income – what is left to spend after paying the rent/mortgage.

<sup>25</sup> The possibilities for poverty measurement involved to the description of the description of

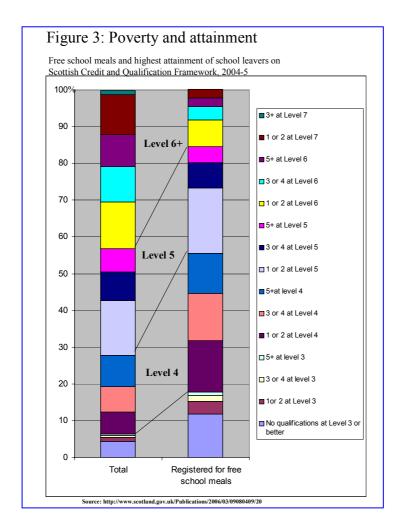
<sup>&</sup>lt;sup>25</sup> The possibilities for poverty measurement involving local areas are constrained by the fact that the UK-wide survey of family income used to measure family income (the Family Resources Survey) does not permit breakdowns below regional level. More local breakdowns depend on administrative data, which show whole populations rather than samples.

Table 5: Summary of possible cost of child poverty in extra spending on public services in Scotland

Service	Estimated cost	Basis
	due to child	
	poverty	
School education	£125-£250m	A relatively small ratio of extra spending on lower income students has large cost implications, given the large amount – over £3 billion – spent on this service
Children's social services	£125-250m	This spending area is far more heavily skewed towards deprived children than schooling, so the extra cost due to poverty are similar even though much less is spent overall.
Housing	A large but indeterminate percentage of £800m invested annually in social housing	Social housing investment goes mainly to deprived areas and serves people on low incomes. Families with children have high priority access to these resources.
Police and youth justice	At least about £50 million	Better information is needed on actual deployment of police efforts to deprived areas where youth crime concentrated. Court and punishment costs skewed towards young offenders from disadvantaged backgrounds.
Free school meals	£30m	A direct cost of poverty: eligibility based on benefits and tax credits targeted at poor families.
Acute healthcare	£10-20m	Separating out cost of treating children on low incomes is difficult.  Knock-on effects of poor health in childhood likely to be much greater
Primary healthcare	£10m	than measurable cost of extra childhood healthcare episodes.
Total	About £350-£600m not including	This total indicates an order of magnitude. The cost to services could be of the order of $\pounds^{1/2}$ - $\frac{3}{4}$ billion including housing.
	housing	

#### Longer-term outcomes and their knock-on effect on spending

- 67. Those who experience poverty in childhood have, on average, worse outcomes in adulthood, in ways that affect the public purse. They are, for example, less likely to gain educational qualifications, more likely to be offenders, more likely to become lone parents and less likely to work. Moreover as mentioned earlier, the effects on childhood of difficulties linked to poverty such as poor health and perhaps risk of drug addiction may be felt as much in terms of their continuing consequences in adulthood as in their direct effect during youth.
- 68. While the public spending effects of these outcomes are not possible to quantify with any reasonable level of precision, it is worth looking specifically at the numbers concerning educational failure and its knock-on effects. Much of the transmission of disadvantage between childhood and adulthood is linked to educational under-achievement.
- 69. Figure 3 shows the extent of linkages between poverty and qualifications gained in the latter part of secondary school, through a breakdown of the highest qualification gained on the Scottish Credit and Qualification Framework. Being in a family poor enough to qualify for free school meals halves a young person's chances of getting to Level 5, and makes it nearly three times as likely he or she will leave school with very low qualifications, below Level 4.



70. People with low qualifications will on average cause greater public spending through benefits and pay less in taxes in the course of their working lives. This does not mean that one can look at earnings differentials by educational qualification and plausibly attribute them to child poverty – there are many other influences on relative earnings, although there is a general correlation between countries with educational inequalities and earnings inequalities that implies that the two interact. A more specific phenomenon that is likely to be closely linked to childhood disadvantage is the minority of young people who "drop out" of the system, leaving school early without entering stable employment and having a high likelihood in the ensuing years of finding themselves outside the labour market.

71. It is hard to know with accuracy how many people are in this category, but a recent estimate put the number of NEETs in Scotland aged 16-19 at 35,000<sup>26</sup>. The most ambitious attempt so far to measure the current and knock-on costs of NEETs was carried out in England by Christine Godfrey and colleagues at the Universities of York and Hull (see discussion in Hirsch 2006 *op cit*). This study used a figure of 157,000 NEETs aged 16-18 in England, but suggested that this might be rather low. The Scottish figure is about twice as high as would be implied by the English figure, pro rata of population, but includes 19-year-olds. The recent Scottish strategy to address this issue<sup>27</sup> suggested that many of those

<sup>26</sup> http://www.scotland.gov.uk/Resource/Doc/138232/0034411.pdf

<sup>27</sup> Scottish Executive 2006: More choices more chances: a strategy to reduce the proportion of young people not in education or training in Scotland

20

classified as NEET are on their way to positive outcomes, and the number truly at risk is around 20,000. However, the following calculations use the 35,000 figure as the closest available in definition to the one used in the England calculation: the calculations there were based on relative risk of unemployment and low pay applied to all those outside education, employment and training, not just those judged most at risk. Nevertheless, the following calculations for Scotland might best be viewed as an upper estimate, given the high estimate of NEETs compared to the estimate in England.

Table 6: Public finance costs of a single generation of NEETs not in education,

employment or training

employment of tru	Current cost		Future on the first factor of the first factor	Total Annual	
	England (16-18s)	Scotland pro rata (16-19s)	England (16-18s)	Scotland pro rata (16-19s)	cost * (Scotland)
Educational underachievement leads to lower earnings and thus taxes/contributions	£48m	£11m	£3.9 billion	£869m	£228m
Greater risk of unemployment and inactivity reduces tax take and increases benefits bill	£802m	£179m	£10.1 billion	£2,252m	£742m

<sup>\*</sup> This is the sum of:

- a) The figure shown under "current cost" covering today's 16-19s who are "NEET" –ie the direct cost among four year-groups.
- b) The current knock-on cost for people who have been NEET in the past ten years. These are young adults aged 20-29, and at any one time there will be 2.5 four-year "generations" of former NEETs. Each generation's cost in a single year will be a tenth the total cost for that generation. Therefore the annual knock-on cost will be 0.25 times the "future cost for a single generation".

72. These figures indicate that, on an annual basis, the public spending implications following on from severe educational underachievement and disaffection could potentially be of the order of £1 billion. This is greater than the costs estimated for the immediate impact of child poverty on spending on services discussed in the previous section. It suggests that knock-on costs could well be higher then these earlier impacts on service spending. However, ending child poverty would not automatically end the phenomenon of "NEETS", and the desired impact would depend on combining anti-poverty policies with educational initiatives that engaged students from less advantaged backgrounds.

#### The cost of income transfers

73. Billions of pounds are spent each year on means-tested benefits and tax credits for low income families, and billions more would be needed to lift them above the poverty line.

- 74. The most clear-cut spending on maintaining incomes of families in poverty is out-of-work payments of income support. From the DWP benefits tabulation tool, which still appears to include child elements even though these are now paid through tax credits, it can be calculated that £470m is paid in Income Support to Scottish families with children (Feb 2006). In addition to this, means-tested tax credits go to working families on low incomes, many of whom are in poverty, but it would be hard to apportion this spending to those below the poverty line.
- 75. Perhaps the most important question about benefit and tax credit expenditure is how much more would need to be spent to get children out of poverty. The Joseph Rowntree Foundation has estimated the cost of halving child poverty by 2010 and ending it by 2020, but for the purpose of the present exercise the former is more relevant than the latter. The JRF estimate is that it would cost of the order of £4-5000 per child taken out of poverty to halve child poverty by 2010, but over £20,000 per child taken out to get the next half of children out of poverty by 2020. This is only partly because the final stage implies helping people who fall deeper into poverty than those helped earlier; it is at least as much to do with the cost of altering the present policy of pegging many benefits and tax credits only to rises in prices rather than earnings. Over a long period, reversing this policy would be very expensive using redistribution alone.
- 76. For this reason, the more immediate 2010 calculation is the more helpful, indicating roughly the cost of lifting a child out of poverty through an income transfer. Translated into Scottish terms it implies spending about £300m to get 70,000 children, about a third of the current total, out of poverty. Thus, about a third of the problem could be removed with a third of a billion pounds. If this also had about a third of the effect estimated in the previous two sections, in terms of saving public money, this could be done at zero net cost if the overall cost of continuing to have present levels of child poverty were about £1 billion. In fact, the estimates above show that it may cost at least £½ billion a year in service spending to have Scotland's present level of child poverty, and up to £1 billion a year in the long-term consequences of young people becoming "NEET" after leaving school. This by no means demonstrates that redistributing money to low income families would bring a net public saving, but it does show the potential for much of the cost to be offset in the savings described.

#### Costs and benefits of preventative and job-help measures

- 77. Relieving child poverty through benefits and tax credits transfers is unlikely to be the most cost-effective way of ending child poverty. For some families not in a position to work, providing sufficient income to avoid undue hardship will continue to be important. But programmes that help families into work like the New Deal or Working for Families, and those that help disadvantaged children grow up with better prospects, like Sure Start, can provide longer-term solutions. At best, these programmes represent one-off investments in improving family opportunities whose benefits extend well into the future rather than just to the immediate enhancement of current income.
- 78. A recent UK-wide evaluation of the New Deal for Lone Parents has found that the programme makes a substantial difference to the chances of a family coming off benefits by

about 20 percentage points<sup>28</sup>. This broadly confirms the findings of an earlier evaluation of its success rate (showing a 24 percentage point success rate), which also did a cost benefit analysis comparing the cost of this programme to the direct savings to the Exchequer in taxes and benefits<sup>29</sup>. This found a gross saving of £4,400 and a net saving of £1,600 per job created. The report noted a programme that succeeds in getting people into jobs and off benefit provides value for money because of the low cost of the assistance compared to the Exchequer cost savings.

- 79. A somewhat more specific indication of costs and benefits can be obtained by considering the ambitions of Scotland's Working for Families programme, aiming to use extra help with childcare as a lever to lift barriers to work. The objective of this programme up to 2008 is to increase by 15,000 the number of parents from disadvantaged areas entering or moving towards employment. The cost of the programme is £50 million over the period of that target. If it succeeds, it will have cost about £3000 per child lifted out of poverty. This would seem good value relative to the benefits cost of doing so, particularly if the effects on individuals outlast the support given. However, note that this may depend on parents using the programme as a stepping stone to improved employment, rather than continuing to receive the initial level of childcare support for an indefinite period.
- 80. Not all people who are helped by such a programme start off in poverty and not all of those end up above the poverty line. However, a reasonable assumption if the programme worked well is that half of parents helped would use this as a critical stepping stone in moving out of poverty, and that these parents would have an average of two children<sup>30</sup>, so the number of children escaping poverty as a result of the scheme would be the same as the number of parents it helps -15,000.
- 81. Sure Start offers the prospect of even bigger long-term effects. About 15,000 children and 10,000 parents across Scotland are being helped at a cost of £57 million in the present financial year. This could bring medium term benefits that (a) reduce the extra cost for services of child poverty by improving outcomes for children in low income families and (b) enable families to function better in ways that improve their incomes, through work. But the really large, long-term effects potentially come from ensuring that disadvantaged children do not grow up to be disadvantaged adults helping to break the cycle of poverty.
- 82. Much has been claimed for the value of "early intervention", but there is in fact a lack of really hard evidence quantifying these effects: research tends to have been specific to very particular schemes run in particular contexts (mainly in the US), which are not an exact parallel to Sure Start. Rather, they show at a general level that high quality early programmes can reduce poor outcomes for disadvantaged groups. The most famous, the High Scope/Perry Preschool study showed for example that high school drop-out among a group of low income African-Americans fell from 55% to 35% as a result of such programmes. Another frequently

<sup>30</sup> On average, parents on low incomes have slightly more than two children. Those most likely to participate in back to work programmes are likely to have slightly fewer than average.

23

<sup>&</sup>lt;sup>28</sup> Genevieve Knight, Stefan Speckesser, Jeff Smith, Peter Dolton and João Pedro Azevedo (2006), *Lone parents Work Focused Interviews/New Deal for Lone Parents: combined evaluation and further net impact.* DWP Research Report No 368.

<sup>&</sup>lt;sup>29</sup> Martin Evans, Jill Eyre, Jane Millar and Sophie Sarre (2003), *New Deal for Lone Parents: Second Synthesis and Evaluation*, DWP

cited programme from the UK, EPPE, demonstrates that preschool children do better in school up to the age 7, but is so far unable to show longer-term gains.<sup>31</sup>

83. While it would be unrealistic to estimate the long-term impact of Sure Start given the evidence available, it is possible at least to give illustrations of what kind of outcomes would result in cost savings. For example, if as a result of taking part in the programme a young person avoided spending time outside employment and education in their late teens, this would save about £5000 a year during the time that they would have been "NEET" and £85,000 in the next ten years, based on Table 5 above. If (as in the Perry Preschool research) about one in five participants in Sure Start avoided that result, the saving per participant would be £1000 when they would have been NEET and £17,000 in the decade thereafter. Spending on Sure Start amounts to about £4,000 per year per child. This means that depending on discount rates and on how many years one needs to spend in the programme for it to have this impact, it is possible that Sure Start could pay for itself through this particular long term effect alone – leaving aside the other medium and long term effects. The problem is that much better evidence would be needed to demonstrate that this "early intervention" effect is really bringing such benefits.

#### **Conclusion**

- 84. This paper has been unable to make precise calculations, but has shown that the savings from ending child poverty are potentially of a similar order of magnitude as the expenditure required to do so. This conclusion depends on using a combination of direct support to alleviate poverty and measures that improve opportunity for parents a combination reflected in the structure of "Closing the opportunity gap".
- 85. The most tangible savings are in the cost of services. Tackling family poverty should reduce spending resulting from the strains that low income puts on families. On the other hand, there may well be other areas where the state ends up spending more because these families are better placed to take up opportunities especially in further and higher education. A full cost-benefit analysis would however take account of the social gains that this would bring. A key outcome for public spending resulting from a tackling of the worst social disadvantage may be not a reduction but a reallocation from spending that attempts to remediate social damage to spending that helps people achieve their potential.
- 86. One way in which this paper has underestimated the benefits is that it has looked only at the effect on those who experience poverty, and not on future generations. By breaking the cycle that passes the damage of poverty from one generation to the next, incalculable long-term benefits could be achieved.

<sup>&</sup>lt;sup>31</sup> Institute of Education 2004 "The Effective Provision Of Pre-School Education (Eppe) Project: Findings From The Early Primary Years"

#### **APPENDIX A**

Illustrative calculations of how much more it costs to run a service overall if a "premium" is paid for a given service if there is a given "premium" of extra spending on deprived compared with non-deprived children or areas.

#### This asks for example:

- if 10% more is spent per child in the 20% of most-deprived areas than in the other 80% of areas, how much more will be spent per child on average across the entire service? The answer is a bit less than 20% times 10%.
- if 200% more is spent per child in the 20% of most-deprived areas than in the other 80% of areas, how much more will be spent per child across the entire service? The answer is a lot less than 20% times 200%.

10% premium					
			Spending		
			relative to		
	Spending		non-		
	relative to		deprived	Saving if	Saving as
	non-		child times	all children	percentage
	deprived	Percent of	% of	were non-	of present
	child	children	children	deprived	spending
Deprived child	1.1	20%	22%	2%	9.09%
Non-deprived child	1	80%	80%	0%	0.00%
Total		100%	102%	2%	1.96%

20% premium					
	Spending relative to non-deprived child	Percent of children		Saving if all children were non- deprived	Saving as percentage of present spending
Deprived child	1.2	20%	24%	4%	16.67%
Non-deprived child	1	80%	80%	0%	0.00%
Total		100%	104%	4%	3.85%

50% premium					
			Spending		
			relative to		
	Spending		non-		
	relative to		deprived	Saving if	Saving as
	non-		child times	all children	percentage
	deprived	Percent of	% of	were non-	of present
	child	children	children	deprived	spending
Deprived child	1.5	20%	30%	10%	33.33%
Non-deprived child	1	80%	80%	0%	0.00%
Total		100%	110%	10%	9.09%

200% premium					
			Spending		
			relative to		
	Spending		non-		
	relative to		deprived	Saving if	Saving as
	non-		child times	all children	percentage
	deprived	Percent of	% of	were non-	of present
	child	children	children	deprived	spending
Deprived child	3	20%	60%	40%	66.67%
Non-deprived child	1	80%	80%	0%	0.00%
Total		100%	140%	40%	28.57%

ISSN 0950 2254 ISBN 978 0 7559 6976 0 (Web only publication)

www.scotland.gov.uk/socialresearch

ISBN 978-0-7559-6976-0 9 780755 969760