Changing Poverty Post-1997

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Centre for Analysis of Social Exclusion

Editorial Note

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Acknowledgements

Abstract

The paper analyses changes in poverty in Britain since 1997. A poverty level of 60 percent of median equivalised income is used. The first part examines the changes that occurred between 1996/7 and 2000/1 as shown by the Family Resources Survey, on which government estimates of Households Below Average Income are based. There was a small reduction in poverty overall and a larger proportionate fall in child poverty. This fall was attributable in part to increased employment and in part to changes in benefits and tax credits which increased for some, particularly for families on low earnings with children, but fell relative to median incomes for many of those without children and not in employment. The second part assesses policy changes implemented or announced for the period 2000/1 to 2003/4 by means of a micro-simulation model, POLIMOD, using a sample from the Family Resources Survey. The impact of policy changes is to reduce poverty compared to its prospects under previous policies. But, relative to a poverty level that rises in real terms in step with median incomes, future reductions in poverty are likely to be small. In order to keep on track towards the goal of halving child poverty by 2010, further policy measures will be required.

Keywords: poverty, welfare policy
JEL number: D31, I32, I38

Introduction

How and why has poverty in Britain changed? How is it likely to change under current government policies? These are the questions with which this report is concerned.

With the election of a new government in 1997 there came to be renewed policy concern with poverty and opportunities for all. In the run-up to the 1997 election, the Labour Party had made growing inequality in Britain a central issue. The Budgets of 1997 and 1998 emphasised fairness. It was not until 1999, however, that the government set a specific objective concerning poverty. The Prime Minister set the goal of ending child poverty in a generation; the more specific target of halving it by 2010 was stated soon after.

Estimates made by HM Treasury (2001) and independent research by Piachaud and Sutherland (2001) both using policy simulation methods suggested that policy changes would reduce the extent of child poverty by about one million by 2002 below what it would otherwise have been. In the event, government estimates of the actual change in child poverty between 1996/7 and 2000/1 only indicated a fall of half a million. Part of the explanation for this apparent discrepancy is that not all the policy changes modelled in the earlier work had actually taken effect by March 2001. However, the discrepancy also serves to highlight the fact that changes in poverty are not only the result of policy changes but also result from other economic and social changes. One of the purposes of this report is to analyse these changes, as well as examining the impact of policy change.

One basic problem in researching policy changes is that evidence on their impact is often only available long after they have taken effect. This is certainly true of evidence on poverty. Even though publication of government poverty estimates (in Households Below Average Income, DWP, 2002) has been speeded up, the latest published estimates relate to 2000/1, before the last election. This report analyses the changes that occurred between 1996/7 and 2000/1 and assesses the potential impact of policy changes coming into effect after March 2001.

Another problem in discussing poverty is that few agree on its meaning or measurement. Here it is generally assumed that poverty should be

measured relative to prevailing income levels. Until recently the most commonly used poverty level was 50 percent of mean disposable income adjusted for household size. More recently European studies have tended to use a standard of 60 percent of the contemporary median income level adjusted for household size and the British government have used it in their reports on Opportunity for All (DWP, 2002). The use of the median rather than mean reduces the impact that changes in the very highest incomes may have on the poverty line. As an indicator of the "middle" income level, the median is clearly preferable. The poverty level of 60 percent of the median is close to the level of 50 percent of the mean and is used in this report.

This report is concerned with poverty as a whole but it is especially focussed on child poverty. In part this is because it is the only type of poverty for which the government has set a specific goal. In part it is a reflection of the mass of evidence that child poverty is important for children's opportunities and thus for future poverty.

Some of this report draws on existing published evidence. Much, however, draws on original analyses of data from the Family Resources Survey (FRS) for 1996/7 and 2000/1 on which the Households Below Average Income (HBAI) estimates are based. Part I examines the changes in poverty between 1996/7 and 2000/1, and analyses explanations of these changes; it also seeks to resolve the apparent discrepancy between early estimates of the impact of policy changes and what actually happened over time. Our analysis uses the same micro-data, methods and assumptions as that in HBAI, and extends it in various ways.

The possible impact of policy changes made or announced after March 2001 is considered in Part II. This is based on a simulation of their impact on a sample of households from the FRS for 1999/2000. Unlike Part I which examines what actually changed, Part II is based on simulations using assumptions about other changes in the economy.

Part I: Poverty 1996/7-2000/1

The Extent of Poverty

Throughout this report poverty is measured on the basis of household disposable income adjusted for household size (or 'equivalised' income). The methods, data and assumptions are described in Appendix 1. In line with the Households Below Average Income (HBAI) studies, two measures are used – 'before housing costs' (BHC) and 'after housing costs' (AHC). For each household its equivalised income level (i.e. adjusted for household size) is calculated. This income level is assigned to all members of the household on the assumption that income is shared equally within the household. (While this is the standard assumption, it must be recognised that it is not a valid assumption for many households). In analysing family and economic circumstances this is done on the basis of 'benefit units' which broadly correspond to nuclear families; while most households only comprise one benefit unit, some comprise two or more units. The benefit units are particularly important since policies affecting family benefits and tax credits mostly operate at the benefit unit level.

The poverty lines for 1996/7 and 2000/1 used here are based on 60% of contemporary median equivalised income. The DWP is currently consulting on the best way of measuring child poverty. Since we do not yet know their conclusions, we make use of the number of people below this poverty line as being the poverty indicator around which there has been most consensus both in the UK and in the European Union (although it is often now referred to as indicating "being at risk of poverty").

The poverty levels for couples without children, expressed in 2000/1 prices are:

	1996/7	2000/1
BHC	£161	£176
AHC	£136	£153

These levels rose in line with median incomes, in real terms by 9.3% (BHC) and 12.8% (AHC) between 1996/7 and 2000/1.

The extent of poverty by family type in 1996/7 and 2000/1 is shown in Table 1. Overall there was a small reduction in poverty based on income before housing costs (-1.4%) and a slightly bigger fall after housing costs

(-2%). This represents an overall fall in the number of individuals in poor households of some 0.8 — 1.1 million.

The highest incidence of poverty was among people in lone parent families, particularly when measured after housing costs. The biggest falls occurred among families with children whether couples or lone parents.

Table 1: Extent of Poverty by Family Type

	Proportion Poor (%)	
	1996/7	**2000/1**
BHC		
Pensioner Couple	19.9	21.9
Single Pensioner	23.1	21.4
Couple with children	19.0	15.7
Couple without children	9.7	10.1
Single with children	37.5	32.3
Single without children	16.1	16.3
All households	18.4	17.0
AHC		
Pensioner Couple	22.3	21.8
Single Pensioner	32.5	28.2
Couple with children	23.0	20.9
Couple without children	11.9	12.2
Single with children	62.0	53.8
Single without children	24.3	21.7
All households	24.6	22.6

Poverty Threshold: 60% of Median Income
Source: own calculations from 1996/7 and 2000/1 FRS micro-data using the same methods and assumptions as HBAI statistics

The extent of child poverty is shown in Table 2. Children in larger two-parent families are twice as likely to be poor as children in smaller families, and those in lone parent families are even more prone to poverty.

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Between 1996/7 and 2000/1 child poverty fell and it did so in all family types and on both measures. The largest falls were in larger and lone parent families. The extent of the fall differs according to the measure used – 4.2 percentage points or one-sixth on the BHC measure, 3.5 percentage points or one-tenth on the AHC measure. This represents reductions of 540,000 and 450,000 respectively in the number of children in poverty.

Table 2: Extent of Child Poverty by Family Composition

	Proportion Poor (%)	
	1996/7	**2000/1**
BHC		
Couple — 1 or 2 children	13.3	12.5
Couple — 3 or more children	36.6	26.6
Lone parent — 1 or more children	40.0	34.1
All Children	25.5	21.3
AHC		
Couple — 1 or 2 children	17.5	17.0
Couple — 3 or more children	40.0	33.8
Lone parent — 1 or more children	63.9	55.3
All Children	34.0	30.5

Source: own calculations from 1996/7 and 2000/1 FRS micro-data using the same methods and assumptions as HBAI statistics

Explaining Changes in Poverty
The purpose of this section is to examine the changes that occurred between 1996/7 and 2000/1 and to assess their possible impact on poverty. Since poverty is not uniform in all groups, the amount of poverty can increase either if a group with a high poverty rate grows in numbers — "compositional" changes – or if the poverty rate for a particular group rises – "incidence" changes. The basis for distinguishing 'compositional' changes and 'incidence' changes is set out in Appendix 2.

A)   POPULATION CHANGES
Changes in the demographic composition of the population between 1996/7 and 2000/1 are shown in Table 3. In general these changes have been quite small. There were half a million fewer in 'couples with

children' and 200,000 more in 'single with children' families. The biggest change was an increase of one million single non-pensioners without children. The effects of the compositional changes on poverty were very small, increasing poverty by 0.1 (BHC) and 0.2 (AHC) by 0.2 percentage points. (The detailed analysis is set out in Appendix Table A1).

Similarly the impact on child poverty attributable to changes in family composition are very small (see Appendix Table A2).

Overall, recent changes in poverty cannot be explained by changes in family type among the population.

Table 3: Distribution of Individuals by Family Status of Benefit Unit, 1996/7 and 2000/01

	Proportion of individuals (%)	
Family Type	**1996/7**	**2000/01**
Pensioner Couple	9.4	9.5
Single Pensioner	7.5	7.4
Couple with children	36.6	35.3
Couple without children	21.8	21.3
Single with children	8.2	8.4
Single without children	16.5	18.3
Total (numbers in millions)	56.3m	56.9m

Source: own calculations from 1996/7 and 2000/1 FRS micro-data using the same methods and assumptions as HBAI statistics

B)   CHANGES IN EMPLOYMENT SITUATION

What was the impact of changes in people's employment situation? The changes that occurred are shown in Tables 4 and 5. There were marked differences between the 1996/7 and 2000/1 samples. Self-employed numbers fell and those in units where all the adult(s) were in a full-time job increased substantially. The number of individuals in units where the head or spouse was unemployed fell by over one million from 5.2 percent to 3.1 percent. The changes in employment situation account for a considerable change in poverty. Using the before housing cost measure, there was a fall in total poverty attributable to the changing employment situation of 1.3 percentage points (Table 4) and a fall in child poverty of 2.3 percentage points (Table 5). Using the after housing

cost measure, the changing employment situation – especially the fall in numbers in unemployed units — accounted for most of the overall fall in poverty both generally and amongst children.

Table 4: Effect of Changing Composition of Population on Overall Poverty Rate – Employment Situation

	Proportion of Population		Proportion Poor		Compositional Effect	Incidence Effect	Combined Effect
	1996/7	2000/1	1996/7	2000/1			
	p97	p01	P97	P01	x	y	Z
BHC							
self-employed	10.1	9.0	18.6	19.3	-0.01	0.07	0.06
single or couple all in full-time work	22.5	24.9	1.9	2.5	-0.38	0.15	-0.23
couple,one in full-time work, one part-time	14.1	14.5	2.7	2.8	-0.06	0.01	-0.04
couple,one full-time work, one not working	12.2	11.9	15.4	13.5	0.01	-0.23	-0.22
one or more in part-time work	7.4	8.3	25.0	22.3	0.05	-0.21	-0.16
head or spouse aged 60 or over	17.4	17.2	23.6	24.1	-0.01	0.09	0.07
head or spouse unemployed	5.2	3.1	61.7	63.6	-0.94	0.08	-0.86
other	10.9	11.0	42.3	42.1	0.02	-0.02	0.01
All households	100.00	100.00	18.4	17.0	-1.31	-0.06	-1.37
AHC							
self-employed	10.1	9.0	21.9	24.6	0.00	0.26	0.26
single or couple all in full-time work	22.5	24.9	3.1	4	-0.49	0.22	-0.27
couple,one in full-time work, one part-time	14.1	14.5	4.4	5.1	-0.07	0.11	0.03
couple,one full-time work, one not working	12.2	11.9	20.5	19.7	0.01	-0.09	-0.08
one or more in part-time work	7.4	8.3	31.9	29.4	0.06	-0.19	-0.13
head or spouse aged 60 or over	17.4	17.2	29.8	27.6	-0.01	-0.38	-0.39
head or spouse unemployed	5.2	3.1	77.8	77	-1.12	-0.03	-1.15
other	10.9	11.0	63.9	60.8	0.04	-0.34	-0.30
All households	100.00	100.00	24.6	22.6	-1.57	-0.45	-2.02

Source: own calculations from 1996/7 and 2000/1 FRS micro-data using the same methods and assumptions as HBAI statistics

Table 5: Effect of Changing Composition of Population on Child Poverty Rate – Employment Situation

	Proportion of Child Population		Proportion Poor		Compositional Effect	Incidence Effect	Combined Effect
	1996/7	2000/1	1996/7	2000/1			
	p97	p01	P97	P01	x	y	z
B.H.C.							
self-employed	12.9	11.5	24.1	23.6	-0.01	-0.06	-0.06
single or couple all in full-time work	14.2	16.7	2.5	2.1	-0.54	-0.06	-0.60
couple,one in full-time work, one part-time	21.9	23.4	3.6	3.3	-0.30	-0.08	-0.38
couple,one full-time work, one not working	18.2	17.5	21.3	17.9	0.03	-0.60	-0.57
one or more in part-time work	7.8	9.6	38.5	29.9	0.19	-0.74	-0.55
head or spouse aged 60 or over	0.5	0.6	59.0	62.9	0.04	0.02	0.07
head or spouse unemployed	6.6	3.6	73.8	71.5	-1.47	-0.12	-1.58
other	17.9	17.0	51.6	50.0	-0.26	-0.28	-0.54
All households	100.00	100.00	25.5	21.3	-2.31	-1.91	-4.22
A.H.C.							
self-employed	12.9	11.5	28.1	30.8	0.04	0.33	0.37
single or couple all in full-time work	14.2	16.7	3.3	4.5	-0.73	0.18	-0.55
couple,one in full-time work, one part-time	21.9	23.4	5.5	6.2	-0.39	0.14	-0.26
couple,one full-time work, one not working	18.2	17.5	27.1	25.2	0.04	-0.34	-0.29
one or more in part-time work	7.8	9.6	48.7	42.2	0.23	-0.56	-0.33
head or spouse aged 60 or over	0.5	0.6	66.2	61.5	0.04	-0.03	0.01
head or spouse unemployed	6.6	3.6	89.0	90.1	-1.71	0.05	-1.65
other	17.9	17.0	76.8	74.7	-0.41	-0.36	-0.77
All households	100.0	100.0	34.0	30.5	-2.89	-0.58	-3.46

Source: own calculations from 1996/7 and 2000/1 FRS micro-data using the same methods and assumptions as HBAI statistics

These figures must be treated with caution for two reasons. First, the data are based on two discrete surveys and do not follow the same individuals between the two years that are compared. Second, the earnings of those formerly unemployed tend to be lower than average (McKnight, 2000). Nevertheless, changes in the employment situation appear to have contributed to a fall in total poverty of up to one and a half percentage points, resulting overall in about 800,000 fewer people in poverty including some 300,000 fewer poor children. Between 1996/7 and 2000/1 changes in employment therefore acted to reduce poverty.

C)   EARNINGS
Earnings are the single biggest component of income. Lack of earnings has been and remains the major cause of poverty. The level of earnings is crucial to income level. How then have earnings changed?

What matters for poverty is the total earnings received by all members of the income unit. Changes in weekly earnings of full-time workers are shown in Table 6; this compares the changes recorded in the FRS with those in the New Earnings Survey (NES). The picture both surveys give of the change in median earnings and the distribution of earnings – which is crucial for poverty – is almost identical. The average weekly earnings of full-time workers at the lower end, relative to median earnings, changed very little. Whatever the impact of the introduction of the national minimum wage on those with the lowest hourly earnings, it had little apparent impact on reducing inequality of weekly earnings among the full-time working poor (as shown by the figures for the bottom decile and lower quartile compared with the median).

Not all the poor are on low hourly earnings and not all those on low hourly earnings are poor. The distribution of hourly wages in relation to household income level was examined (as shown in Appendix Tables A3 and A4) and has changed very little between 1996/7 and 2000/1.

Table 6: Weekly Earnings Distribution Estimates (full-time workers only)

		1996/7	2000/1	Change 1996/7-2000/1
Median Earnings(at 2000/1 prices)	NES[1]	344	362	+5.2%
	FRS	319	335	+5.0%
Bottom Decile as % of Median	NES[2]	55.7%	55.9%	+0.2%
	FRS	50.0%	51.0%	+1.0%
Lower Quartile as % of Median	NES[2]	72.4%	72.3%	-0.1%
	FRS	69.2%	70.4%	+1.2%

1   Mean of NES at beginning and end of year
2   End year NES
Source:
FRS: own calculation from 1996/7 and 2000/1 FRS micro-data using the same methods and assumptions as HBAI statistics.
NES: Table A30, New Earnings Survey, Office of National Statistics, 2002.

D)   BENEFITS AND TAXES

Most of those on low incomes are dependent in whole or in part on incomes from the state. Indeed social security originated as a mechanism for achieving freedom from want. The social security system has been reformed since 1997, not least in terminology and organisation. The Department of Social Security has been replaced by the Department for Work and Pensions, responsibility for National Insurance contributions and for the main elements of the financial support for children has been transferred to the Inland Revenue, and much of the administration has been devolved to specialised agencies. Because of the complex changes it is all the more important – if more difficult – to assess the impact of these changes in benefits and taxes. In this paper only changes in benefits and direct taxes are considered; changes in indirect taxes are being considered in further work.

The real values of the principal social security benefits are set out in Table 7. This is based on DWP calculations using the average value of the retail price index between upratings. It will be seen that comparing 1996/7 and 2000/1 most of the benefits were worth less in real terms but there were differences in the extent of the fall. (Some small differences

are due to uprating being based on a lagged price adjustment.) Apart from the benefits specifically for children, all of the main benefits fell relative to median incomes (which rose in real terms by 10% (BHC) and 12.5% (AHC)).

Table 7: Values of Social Security Benefits (at April 2001 prices)

	1996-1997	2000-2001	Change(%)
Basic Retirement Pension:			
Single	68.86	68.21	-0.9
Couple	110.07	109.03	-0.9
Jobseekers allowance (contriby):			
Single	54.33	52.75	-2.9
Couple	87.09	82.81	-4.9
Incapacity Benefit (long term single)	68.86	68.21	-0.9
Child Benefit:			
1st child	12.16	15.16	+24.7
2nd + child	9.91	10.11	+2.0
Income Support:			
Single 18-24	41.30	41.75	+1.1
Single Over 25	53.95	52.71	-2.3
Couple, No child	84.70	82.75	-2.3
Couple, 1 child (under 11)	111.36	124.00	+9.2
Couple 2 children (under 11)	129.28	150.86	+16.7
Lone parent, I child (under 11)	87.28	93.76	+7.4

Source: Section 5, Abstract of Statistics: 2001 Edition, DWP

The Department for Work and Pensions also calculates the notional value of all benefits and tax credits for model families at different earning levels. The effect of changes in these between April 1996 and April 2000 on net incomes are shown in Table 8. Net incomes for notional single people and childless couples on low or average earnings rose at broadly the same rate as median incomes. For notional families with children with an adult on low earnings, the combination of changes in earnings, benefits and tax credits resulted in substantial increases in net incomes.

Table 8: Real Increase in Net Income After Housing Costs
(April 1996-April 2000, £ per week)

	Single	Couple 0 child	Couple 1 child	Couple 2 children	Single Parent 1 child
Average earnings	10.8	8.3	8.9	9.2	7.8
2/3 Average earnings	11.5	7.6	13.1	26.6	20.8
½ Average earnings	12.2	6.8	25.2	29.0	13.5

Source: Section 4, Abstract of Statistics: 2001 Edition, DWP
Notes: Net Income is defined as Earnings
                                         less income tax
                                         less National Insurance contributions
                                         less rent and local taxes
                                         plus benefits and housing benefit
   plus Inland Revenue tax credits
Net Incomes are converted to April 2001 price levels.

E)   THE IMPACT OF CHANGES

The combined impact of all the changes may be represented diagramatically as is done with distributions of income in Figure 1 for all individuals and Figure 2 for children. The cumulative frequency distributions for children only are shown in Figure 3. More detailed diagrams for each economic status (AHC only) are in Appendix Figures A1-A7. These show a small overall shift from just below to just above the poverty line. The pattern is similar for all individuals and children but with larger reductions in the case of children.

Few children in inactive and unemployed families have moved over the poverty line, though there is some evidence that unemployed families have moved nearer the poverty line. Also, there is evidence that some more inactive units are worse off than in 1996/7 and that the distribution of incomes within this group is more spread out (Appendix Figures A1 and A2).

Fig.1: Distribution of Incomes – All individuals
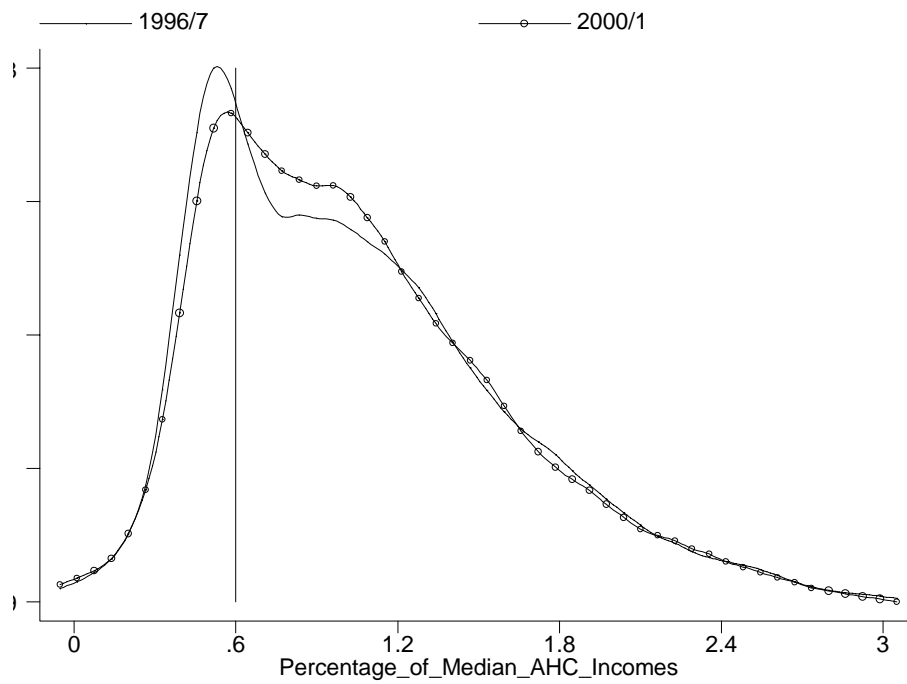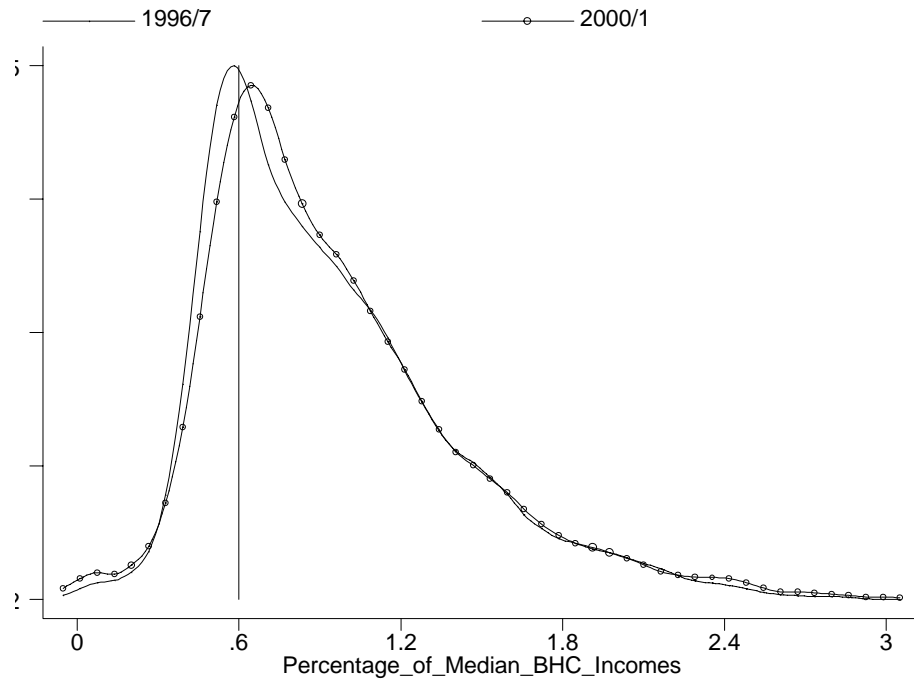
a) BHC
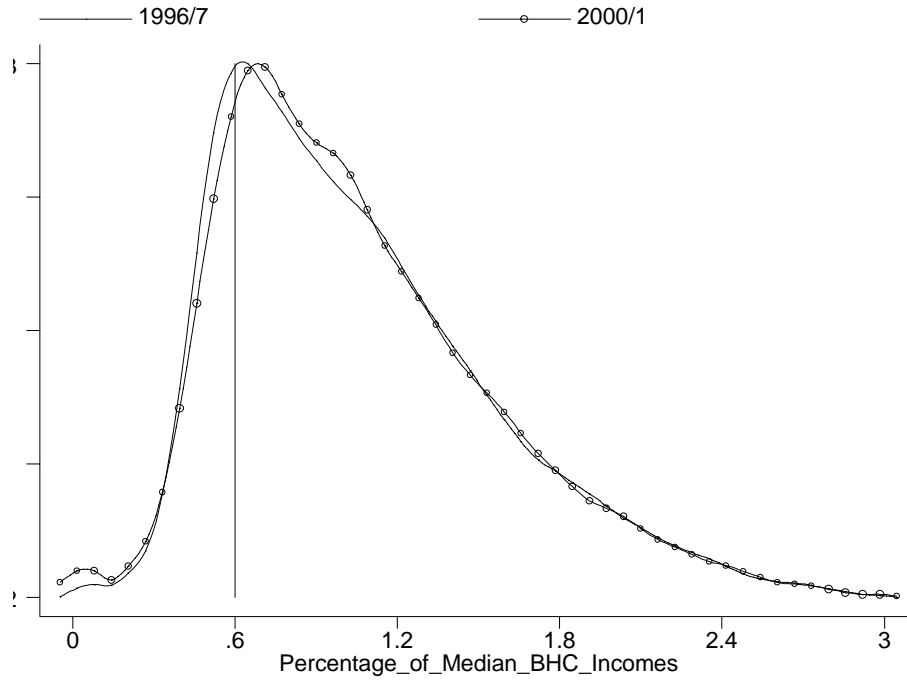
b) AHC

Fig.2: Distribution Incomes – Children

a) BHC
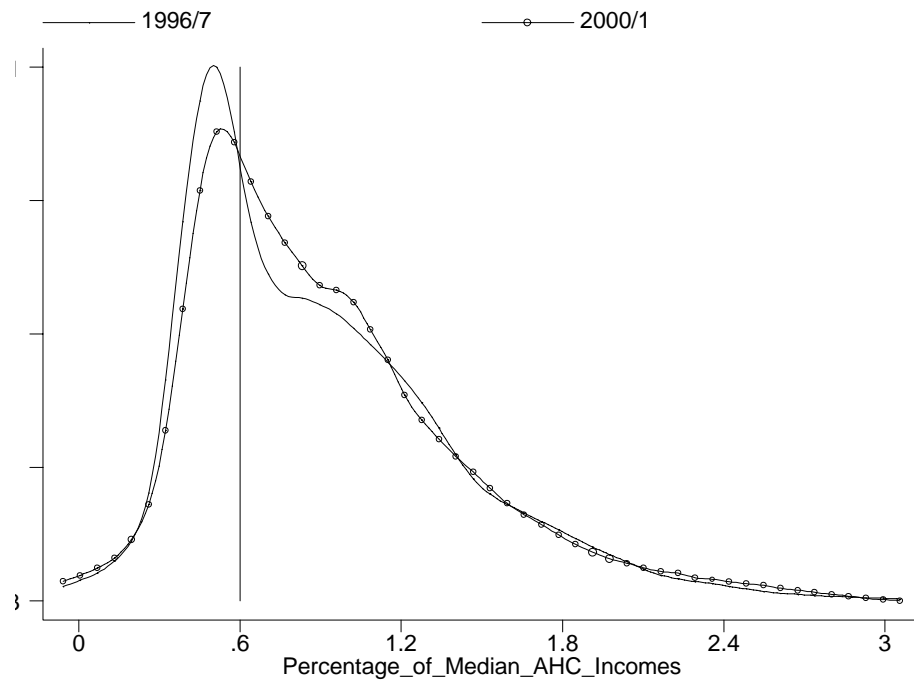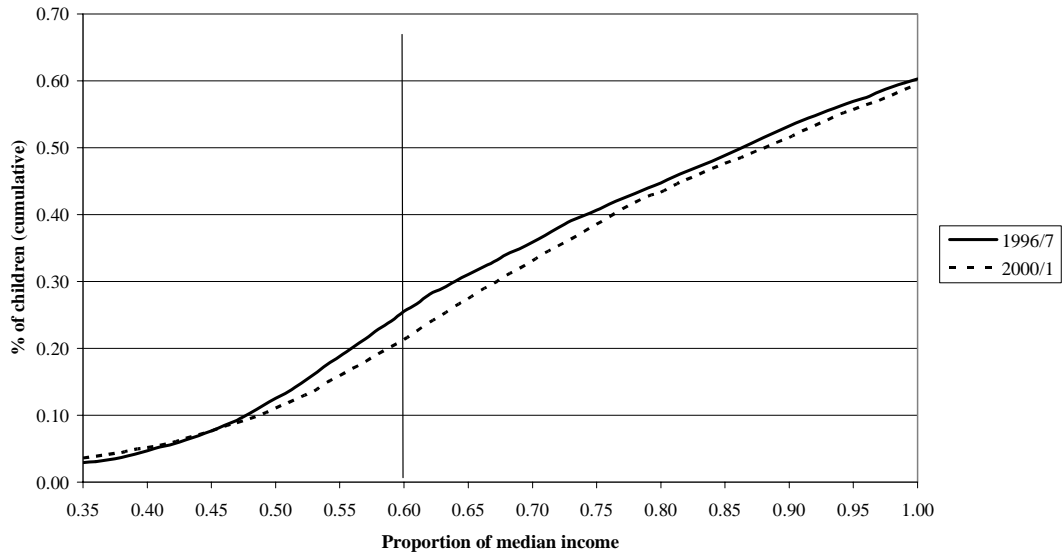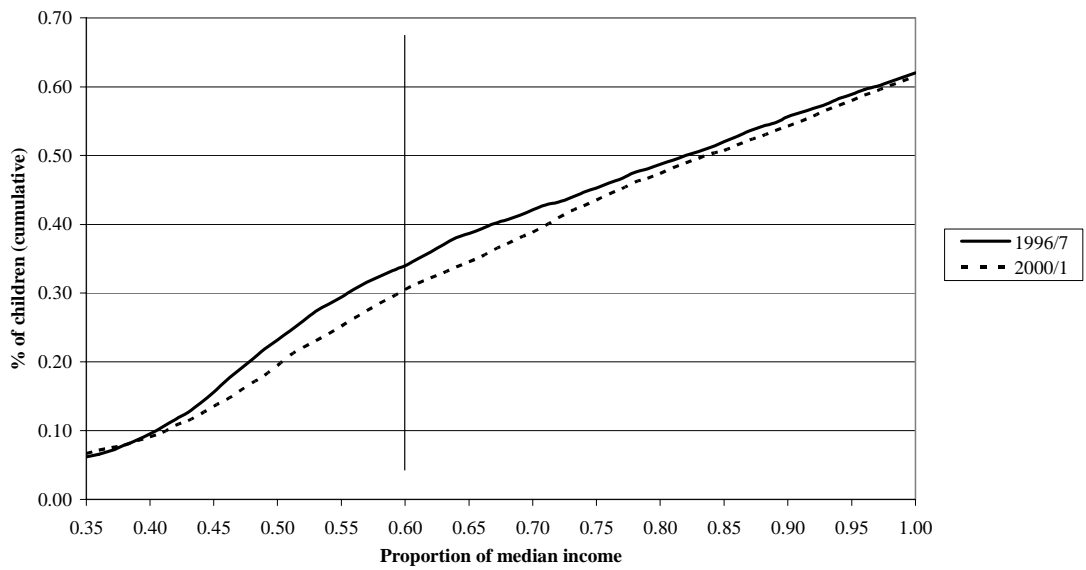

b) AHC

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Figure 3: Percentages of children in households with incomes below proportions of the median: 1996/7 and 2000/1

a)   BHC

b)   AHC

Children in families with part-time workers seemed to have benefited most over this period with quite a significant shift from below to above the relative poverty line (Appendix Fig A3), although these account for less than one-tenth of all children. For children in families with one full-time worker and one non-worker, there is a very slight reduction in the relative poverty rate (Appendix Fig A4). For children in other economically active units, there is evidence that the peaks in the distributions have shifted to the left (i.e. nearer the relative poverty line), although this has only led to a very slight increase in the relative poverty rate for these groups because most of the movement is taking place above the poverty line (see Appendix Figs A5 and A6). There is little change in the relative poverty rate for children in self-employed families (Appendix Fig A7).

Overall Explanations of Changes in Poverty
The purpose of Part I of this report has been to consider the changes in relative poverty between 1996/7 and 2000/1 and why they occurred.

A note of caution is necessary. We do not know the actual changes in numbers in poverty. All we know are the estimates based on the FRS. While these are the best available estimates, they are subject to error from a number of sources (see Appendix 2 of DWP (2002)). An important source of error which can be quantified is sampling error. Using 95 percent confidence intervals, the possible numbers in poverty (assuming sampling errors in 1996/7 were similar to those in 2000/1) were:

		All poverty	Child poverty
BHC	1996/7	10.0-10.8m	3.2-3.5m
	2000/1	9.3-10.1m	2.6-2.9m
AHC	1996/7	13.5-14.3m	4.3-4.6m
	2000/1	12.5-13.3m	3.8-4.1m

Source: DWP (2002) Appendix Table 2.4

Thus while the central HBAI estimate is that total poverty fell by 700,000 (BHC) and 1.0 million (AHC), the change could lie between a rise of 100,000 and a fall of 1.5 million (BHC) and a fall

of between 200,000 and 1.8 million (AHC). The fall in child poverty could lie between 300,000 and 900,000 (BHC) and between 200,000 and 800,000 (AHC). What does seem certain is that child poverty fell between 1996/7 and 2000/1, but how much cannot be known with certainty.

Much attention has been focussed on the contrast between estimates of the modelled impact effects of policy changes on child poverty and the central estimate of the actual changes that occurred. Why if the former suggested a fall of about one million did child poverty only fall by half a million? The apparent discrepancy seems all the worse since the fall in unemployment tended to reduce child poverty so that the number might have been expected to fall by more than one million.

There are two principal explanations of the apparent discrepancy.

The first, relatively straightforward, explanation is that estimates of the effects of policy changes included measures taking effect in 2001/2 (i.e. after the 2000/1 period on which the latest HBAI results are based). These included, among other things, the introduction of the children's tax credit, an extension of the 10p band of income tax, and increases in means-tested benefits for pensioners. Therefore we would not expect 2000/1 poverty estimates to match simulation results for the following year's policies.

The major explanation for the apparent discrepancy is that Treasury and our own estimates of the effect of policy changes were just that – estimates of the effects of policy changes taken by themselves. They aimed to answer the question "How did the new policy affect the number in poverty compared to the old policy?" Actual changes in poverty depend both on changes in the incomes of those close to the poverty line and, crucially, on the changes in median incomes which determine the change in the level of the poverty line. If the poverty line rises over time in real terms, part of the "impact" effect of policy changes is needed simply for the relative poverty rate to stand still.

This inter-relationship makes understanding actual changes in poverty somewhat difficult.

If all earnings and incomes changed by the same amount, if benefits rose at the same rate, and there were no changes in the way people organise themselves into households, then there would be no change in poverty.

Many changes could reduce poverty. There would be a fall:
- if rich and poor people decided to live together
- if earnings for the low paid increased
- if people moved from relatively low incomes on social security benefits into employment on higher earned incomes
- if benefits and pensions improved relative to median incomes.

In this paper, along with much other analysis (and the Government's own short-term targets), it has been assumed that the poverty line should rise at the same rate as median income levels. Clearly if the poverty level is kept fixed in real terms then the reduction in poverty would be much greater. For instance, instead of a 1.4 (BHC) or 2.0 (AHC) percentage point reduction in the proportion in poverty, using the 1996/7 constant real poverty level there would have been a fall of 5 (BHC) or 8 (AHC) percentage points, or 4.1 or 3.1 million people respectively, by 2000/1.

The overall explanation for the changes in relative poverty that occurred between 1996/7 and 2000/1 is fairly clear. The relative poverty line rose by about one-tenth in real terms. There was little change in family types or in the shape of the distribution of earnings. Two things did change. First, unemployment fell and more households had someone in paid employment. Second, policy on benefits and tax credits clearly disadvantaged some and helped others. Those with benefits falling relative to incomes generally were more likely to be losers. They included those on the basic state pension, jobseeker's allowance and incapacity benefit and those on income support who did not have children (in addition lone parent benefits were abolished). Those more likely to gain were those with children, particularly low earners in employment, and this was a major factor in the reduction by some half a million in the number of children in poverty.

Part II: Progress Between 2000/1 and 2003/4

Part I showed estimates of poverty in 2000/1. But there have been policy changes introduced and announced since then and the new system of tax credits will be introduced in the year 2003/4. Without micro-data for 2003/4, which will not be available until 2005, how can we judge what effect these changes will have on poverty? Using policy simulation methods, we can estimate the direct effect of government policy on a representative sample using FRS data from a single year (in this case 1999/2000 data adjusted to 2000/1 values). These estimates cannot show us the effect of any changes in the distribution of earned incomes or changes in labour force status on poverty. But they do allow us to focus on the effect of the policy changes themselves. Household incomes are re-calculated according to the policies prevailing in 2000/1 and policies announced for 2003/4. More details of the simulation model, POLIMOD are provided in Appendix 3.

The policy changes since 2000/1 that are included in the modelling are set out in Appendix 4. It is worth noting that as well as high-profile policies that benefit children and families, such as the Child Tax Credit (CTC) and the Working Tax Credit (WTC), there are also changes that can reduce their disposable incomes, such as the increase in National Insurance contribution (NIC) rates, due in April 2003.

Table 9 shows the policy simulation results for the 2000/1 and 2003/4 policy years.

Comparing poverty rates based on our simulated incomes under 2000/1 policies with those from FRS for 2000/1 shows that the simulated estimates are one or two percentage points lower than the estimates taken directly from FRS. On a BHC basis the poverty rate for all people using simulation is 16%, compared with 17% from FRS, and for children it is 19% using POLIMOD compared with 21% from FRS. On an AHC basis: the child poverty rate is 29% using policy simulation and 31% in FRS. See Appendix 3 for a discussion of the reasons for the differences between policy simulation estimates and those taken directly from FRS data.

Compared with 2000/1 policies, child poverty rates under 2003/4 policies are lower by 4 percentage points on both a BHC basis and on an AHC basis. The fall is from 29% to 25% on an AHC basis and 19% to 15% on a BHC basis. This assumes that incomes before taxes and benefits are fixed at their 2000/1 levels. In other words, it answers the question "what would the impact of 2003/4 policies have been if they had been introduced all at once in 2000/1?" On an AHC basis 570 thousand children are taken out of poverty (520 thousand on a BHC basis).

Table 10 shows that this reduction in child poverty does not depend greatly on the proportion of median incomes that is used as the poverty cut-off when measured on an AHC basis. The number of children removed from poverty using the 60% cut-off (570 thousand) is a little lower than the number that cross the 55% and 65% lines (650 thousand and 630 thousand respectively) but higher than the much lower (50%) or much higher lines (70%). On a BHC basis, however, the numbers crossing the 60% line are larger than for any of the other thresholds shown, except the 70% threshold. Only 360 thousand cross the 55% threshold. The impact of the policy changes on the BHC and AHC income positions of children in relation to median incomes are shown graphically in Figure 4.

**Table 9: Policy simulation estimates of poverty under policy regimes of 2000/1 and 2003/4
(Using 2000/1 prices and incomes)**

	All		Children		Children in 2 parent families		Children in 1 parent families	
	Number (000)	Rate (%)	Number (000)	Rate (%)	Number (000)	Rate (%)	Number (000)	Rate (%)
BHC 2000/1 regime	9,240	16	2,490	19	1,570	16	910	30
BHC 2003/4 regime	7,860	14	1,960	15	1,320	13	640	21
Poverty reduction	1,370	2	520	4	260	3	270	9
AHC 2000/1 regime	12,450	22	3,720	29	2,120	22	1,600	53
AHC 2003/4 regime	10,550	19	3,150	25	1,830	19	1,320	43
Poverty reduction	1,900	3	570	4	300	3	280	9

Source: POLIMOD based on 1999/2000 Family Resources Survey data
Note: Poverty is measured as the numbers of people living in households with equivalised income below 60% of the within-scenario median. Figures are rounded to the nearest 10,000 persons or percentage point. This does not necessarily mean that estimates are statistically significant to the level shown. Rows or columns may not add due to rounding.

Table 10: Numbers of children in households with equivalised incomes below different proportions of the median: policy regimes of 2000/1 and 2003/4
**(Using 2000/1 prices and incomes)**

	50%		55%		60%		65%		70%	
	Number (000)	**Rate (%)**	**Number (000)**	**Rate (%)**	**Number (000)**	**Rate (%)**	**Number (000)**	**Rate (%)**	**Number (000)**	**Rate (%)**
BHC 2000/1 regime	980	8	1,580	12	2,490	19	3,360	26	4,270	33
BHC 2003/4 regime	760	6	1,220	10	1,960	15	2,920	23	3,730	29
Poverty reduction	220	2	360	3	520	4	440	3	540	4
AHC 2000/1 regime	1,850	14	2,890	23	3,720	29	4,580	36	5,180	40
AHC 2003/4 regime	1,400	11	2,230	17	3,150	25	3,950	31	4,720	37
Poverty reduction	450	4	650	5	570	4	630	5	460	4

Source: POLIMOD based on 1999/2000 Family Resources Survey data
Note: Figures are rounded to the nearest 10,000 persons or percentage point. This does not necessarily mean that estimates are statistically significant to the level shown. Rows or columns may not add due to rounding.

Figure 4: Percentages of children in households with income below proportions of the median, under the policy regimes of 2000/1 and 2003/4 (2000/1 prices and incomes)

(a) BHC
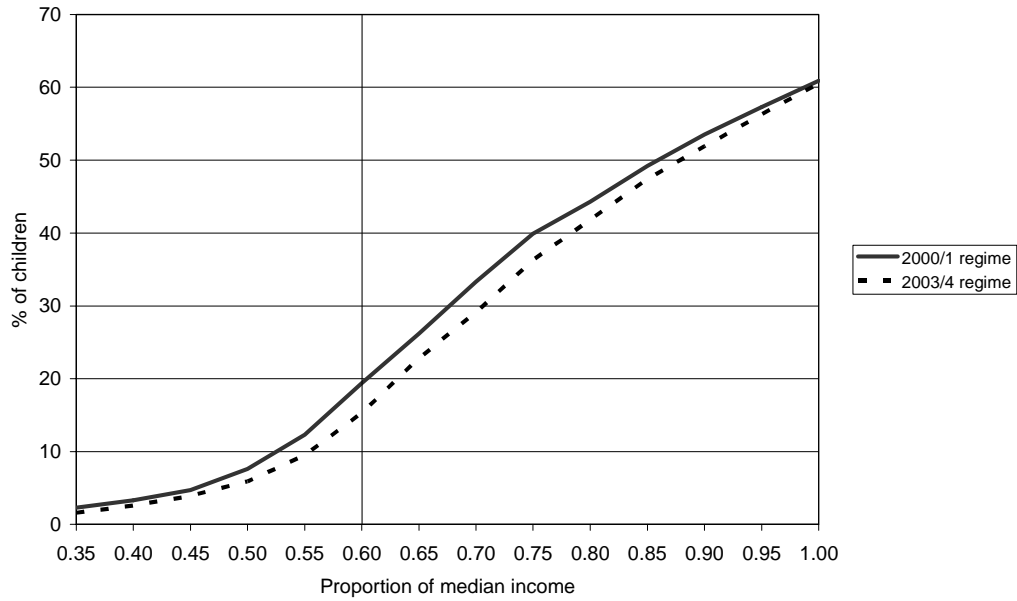
(b) AHC
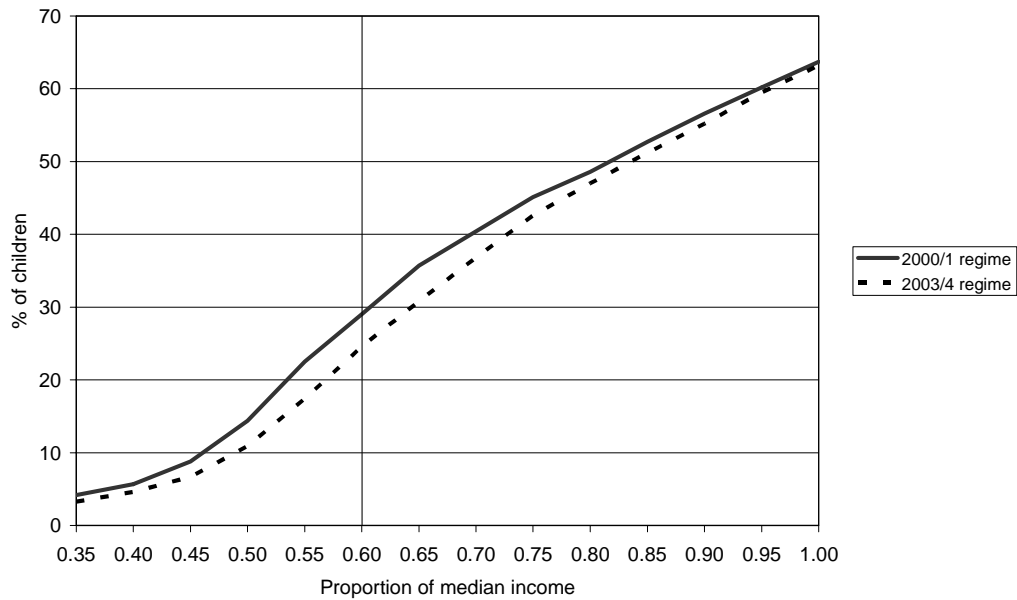
Source: POLIMOD based on 1999⁄2000 Family Resources Survey data

These figures assume that other changes in the economic and social environment (together with choices made by the families themselves) do not affect incomes between 2000/1 and 2003/4. While we cannot yet judge what precise effects there will be, we can estimate the effect of increasing median incomes (and thus an upward shifting poverty line) on poverty rates under the 2003/4 policy regime. We did this assuming that:

➢ taxes and benefits changed in ways already announced (with price indexation as a default where there have been no announcements);
➢ market incomes rose at rates given by available statistics (with projections to 2003/4 assumed to be according to trend);
➢ employment levels remained constant.

This is a projection of what could happen using simple assumptions that most things remain unchanged. What will happen in practice will, of course, be more complex and the sensitivity of simulated poverty estimates to updating assumptions is the subject of further work.

What, then, happens if we compare the 2000/1 policy regime using 2000/1 prices and incomes with the 2003/4 policy regime using (forecast) 2003/4 prices and incomes? This captures both the direct effect of policy changes and the general growth in incomes. The median rises by 11% (BHC) or 16% (AHC) in nominal terms (which correspond to real annual growth rates that are slightly lower than those shown by recent HBAI statistics).

Comparing the 2000/1 policy regime using the 2000/1 median as the basis for the poverty line with the 2003/4 policies at (estimated) 2003/4 income levels, and using the predicted 2003/4 median, shows a reduction in child poverty of 2 percentage points on both BHC and AHC income definitions. The rate falls from 19% to 17% on a BHC basis and from 29% to 27% on an AHC basis. So, assuming no compositional or behavioural changes take place between 2000/1 and 2003/4, relative child poverty rates may only fall by approximately 2 percentage points, or 250,000 children.

Conclusions

The overall conclusion concerning poverty since 1997 is that there has been some considerable progress with regard to children, but very little progress with regard to poverty as a whole. There have been two principal factors causing this. First, there has been an increase in employment, which has tended to reduce poverty in all groups save pensioners and the permanently economically inactive. Second, changes in benefits and tax credits have markedly improved the situation of children, particularly in low earning families, but the relative decline in basic pensions, job seekers' allowance, incapacity benefit and income support for those without children has made them substantially lower relative to median incomes.

If poverty is not to increase, it is necessary both for employment to be maintained and for benefits and tax credits to keep up with median incomes. This necessarily means more expenditure in real terms, although not more as a proportion of national income.

The prospect is that the policy measures taken between 1996/7 and 2003/4 will have resulted in over a million fewer children being in poverty than would otherwise have been the case. This does not mean that actual poverty will have fallen by this amount. With an increasing poverty line, maintained at 60% of median income level, child poverty in 2003/4 may be only slightly less than in 2000/1. So, unless there are significant improvements in other factors, such as employment rates, and unless there are new policies not yet announced it seems that on an AHC basis actual child poverty may fall between 1996/7 and 2003/4 by no more than a total of about 750,000.

The findings of the two parts of this paper tell a similar story. Between 1996/7 and 2000/1 relative poverty fell, largely as a result of improvements in employment rates and in the level of some benefits. But the overall impact was modest when compared to a poverty line which rose with median incomes Looking beyond 2000/1, the tax and benefit changes which have already been announced for 2003/4 do have a major effect – but once again most of this is needed simply to keep up with a moving target. If child poverty is to be a quarter below its 1998/9 level by 2004, in line

with the Government's target, either other factors will have to change in a favourable direction too, or more measures will be needed.

In 1999 a goal was set of halving child poverty by 2010 and a relative definition of poverty was clearly adopted. The analysis presented here suggests that without increased resources it will be hard to stay on track to achieve this goal. Without the improvements which have been made to the tax and benefit system for those with low incomes, things would be much worse, but more measures are needed each year simply to hold the gains which have been made, let alone make progress.

In terms of overall poverty, it remains the case that income support levels are substantially below the government's own poverty level. The failure to increase these levels in line with median incomes has made this situation worse. The government's own goal of 'security for those who cannot work' is a long way from being achieved.

References

Department of Social Security (2000), *Income Related Benefits: Estimates of Take-Up in 1998-99.* London: DSS Analytical Services Division.

Department for Work and Pensions (2002), *Households Below Average Income, 2000/1.* London: TSO.

Department for Work and Pensions (2002a), *Opportunity for All: Fourth Annual Report.* London: TSO.

HM Treasury (2001), *Tackling Child Poverty: giving every child the best possible start in life*, Pre-Budget Report document, December.

McKnight A. (2000), *Trends in Earnings Inequality and Earnings Mobility, 1977-1997: The Impact of Mobility on Long Term Inequality*, Employment Relations Research Report Series 8. London: Department of Trade and Industry

Piachaud D. and H. Sutherland (2001), "Child Poverty in Britain and the New Labour Government", *Journal of Social Policy* 30 (1) 95-118.

Redmond, G., Sutherland, H. and Wilson, M. (1998), *The arithmetic of tax and social security reform: a user's guide to microsimulation methods and analysis.* Cambridge: Cambridge University Press.

Appendix 1: Methods, data and assumptions

Households Below Average Income statistics
Household below Average Income statistics are published annually, based on data from the Family Resources Survey. The main income measures are "Before Housing Costs (BHC)" and "After Housing Costs (AHC)". The BHC income definition includes, for all members of the household

➢ Usual earnings
➢ Self employment income
➢ Social security benefits, pensions and credits (but not social fund loans)
➢ Income from occupational and personal pensions
➢ Investment income
➢ Maintenance payments, educational grants and scholarships (including student loans) and transfers from family members outside the household
➢ Imputed cash value of free school meals, free welfare and school milk
➢ Less

> Income tax, National Insurance contributions, Council tax, contributions to private pensions, maintenance and child support payments and payments to students living outside the household.

The AHC income definition deducts gross rent, water charges, mortgage interest payments, structural insurance premiums and ground rent and service charges.

For more information see the appendices to the HBAI reports (e.g. DWP, 2002).

Household income is "equivalised" to take account of variations in household size and composition. The McClements equivalence scale is used, as shown below. The relativities are slightly different depending on whether it is the AHC or BHC income concept that is used. For comparison the modified OECD scale is also shown. (It has been re-based so that a couple =1, to make comparisons with the McClements scale easier). The modified OECD scale is commonly used in international comparisons of income distribution and has been adopted as standard by Eurostat. The

McClements scale gives a particularly low weight to babies and children aged under 3, relative to the OECD scale.

Equivalence scale relativities

	McClements (BHC)	McClements (AHC)	Modified OECD
First adult	0.61	0.55	0.67
Spouse of first adult	0.39	0.45	0.33
Other second adult	0.46	0.45	0.33
Third adult	0.42	0.45	0.33
Fourth + adults	0.36	0.40	0.33
Child aged 0-1	0.09	0.07	0.20
Child aged 2-4	0.18	0.18	0.20
Child aged 5-7	0.21	0.21	0.20
Child aged 8-10	0.23	0.23	0.20
Child aged 11-12	0.25	0.26	0.20
Child aged 13	0.27	0.28	0.20
Child aged 14-15	0.27	0.28	0.33
Child aged 16-18	0.36	0.38	0.33

Equivalised household income is then allocated to each individual within the household and statistics are calculated across individuals. Another way of expressing this is to say that household incomes are weighted by household size. It is implicitly assumed that all individuals within the household share the same living standard (as measured by equivalised income).

Individuals are classified into **family type** and **economic status** (referred to in the text as employment situation) groups according to the status of the benefit unit in which they live. All individuals in a benefit unit are given the same classification.

For Family Type these are:
➢ Single pensioner: a single adult of state pension age or over.
➢ Pensioner couple: a couple where the man is of state pension age or over.

- ➢ Couple with children: a non-pensioner couple with dependent children.
- ➢ Couple without children: a non-pensioner couple with no dependent children.
- ➢ Single with children: a non-pensioner single adult with dependent children.
- ➢ Single without children: a non-pensioner single adult with no dependent children.

For Economic Status individuals are allocated to the first category which applies in the following order:
- ➢ Self-employed: benefit units where at least one adult usually is self-employed in their main job for 31 or more hours a week.
- ➢ Single or couple, all in full-time work: benefit units where all adults usually work 31 or more hours a week.
- ➢ Couple, one in full-time work, one in part-time work: benefit units where one partner usually work 31 or more hours a week and the other partner usually works fewer than 31 hours a week.
- ➢ Couple, one in full-time work, one not working: couples, where one partner usually works 31 or more hours a week and the other partner does not do paid work.
- ➢ One or more in part-time work: benefit units where at least one adult works, but for fewer than 31 hours a week.
- ➢ Head or spouse unemployed: benefit units where at least one adult is unemployed.
- ➢ Others: benefit units not classified above (this group includes the long-term sick, disabled people and non-working single parents).

Appendix 2: Decomposing poverty changes

If p_i is the proportion of the population in type i and P_i is the proportion of that type who are poor, then overall poverty, P_{total}, is given by

$$P_{total} = \sum_i p_i.P_i$$

If we distinguish time periods t and t' then

$$P_{total,t} = \sum_i p_{i,t}.P_{i,t}$$

and

$$P_{total,t'} = \sum_i p_{i,t'}.P_{i,t'}$$

The change in poverty is then

$$
\begin{aligned}
P_{total,t'} - P_{total,t} \quad &= \quad \sum_i p_{i,t'}.P_{i,t'} - \sum_i p_{i,t}.P_{i,t} \\
&\approx \quad \sum_i \left(p_{i,t'} - p_{i,t} \right)\left(\frac{P_{i,t} - \overline{P}_{i,t} + P_{i,t'} - \overline{P}_{i,t'}}{2} \right) + \sum_i \left(\frac{p_{i,t} + p_{i,t'}}{2} \right)\left(P_{i,t'} - P_{i,t} \right)
\end{aligned}
$$

<div align="center">(1)   (2)</div>

Thus the overall change in poverty may be divided into (1) that due to compositional changes and (2) that due to changes in the incidence of poverty.

Appendix 3: Policy simulation using POLIMOD

POLIMOD is a tax-benefit microsimulation model constructed and maintained by the Microsimulation Unit in the Department of Applied Economics at the University of Cambridge. See Redmond et al. (1998) for more information. The household income variables used here to measure poverty have been deliberately defined to be as similar as possible to that used in the HBAI statistics. There are some minor departures from HBAI methodology due to the fact that we must simulate taxes and benefits (and earnings, where these are affected by the NMW) in order to evaluate changes in the rules that govern them. The 1999/2000 micro-data are updated to 2000/1 levels of prices and incomes in order to evaluate contemporary policy changes, whereas HBAI statistics for a given year use data collected in that year. In addition, there are some differences which arise because some components of income (taxes and benefits) are simulated rather than using values recorded in the survey data.

POLIMOD calculates liabilities (or entitlements) to income tax, National Insurance contributions (NICs), Child Benefit, Working Families Tax Credit (WFTC), Working Tax Credit (WTC), Child Tax Credit (CTC) Income Support (IS) – including income-related Job Seekers Allowance and pensioners' Minimum Income Guarantee, Housing Benefit (HB) and Council Tax Benefit (CTB). We also model the effect of the minimum wage assuming that all with hourly earnings below the relevant minimum are brought up to it and that working hours do not change. Resulting changes in earnings then affect tax and benefits. Otherwise, elements of income are drawn from the recorded values in the FRS dataset. The main effect of simulating the tax and benefit components of income appears to be to narrow the income distribution to some extent.

POLIMOD captures the effects of non-take up of means-tested benefits (FC/WFTC, IS, HB and CTB) by applying the take-up proportions estimated by the Department of Social Security (DSS, 2000). For example we assume that some 20% of lone parents do not receive the FC (or WFTC) to which they are entitled, and 15% of people of working age do not receive the IS to which they are

entitled. In general we assume that take-up behaviour is not affected by changes in the size of benefit entitlements. Little is known about what to expect in relation to take-up of the new tax credits. We assume that take-up of income-tested CTC will be the same as IS (on a case-by case basis); take-up of WTC assumed to be the same as WFTC and to have the same probability for the new groups who are eligible.

The POLIMOD estimates use 2000/1 prices and incomes as the constant basis for the calculations. The FRS data for 1999/2000 are updated for growth in incomes, using appropriate indexes for each source of income. 2003/4 policy parameters (tax thresholds and benefit/credit amounts) are deflated to 2000/1 levels using price indexation.

Appendix 4: Modelled changes in tax and benefit policy 2000/1–2003/4

Reforms that are introduced in phases are generally treated as though they are fully implemented in their first year. Changes that are due for implementation part way through a fiscal year are modelled as though they apply all year.

Amounts are weekly and in current prices and differences are expressed in real terms, unless otherwise specified.

The **Minimum wage** takes the values of £4.20 and £3.60 in October 2002. These are the levels assumed for 2003/4.

Child benefit increased in real terms by 5 pence for all children.

Maternity pay: the flat rate element increased to £75 in 2002/3 and £100 the following year. The £100 level is equivalent to a real increase of £33 per week.

The **Child Tax Credit** and the **Working Tax Credit** replace Working Families Tax Credit and Disabled Persons Tax Credit in 2003/4. The **Child Tax Credit** also subsumes the Children's Tax Credit (see below under income tax) and the child elements of Income Support, Housing benefit and Council Tax Benefit. The maximum value of this Credit involves an increase in rates per child and per family. The credit is tapered away according to the gross income (with a lower taper than in WFTC, which depended on net income) and investment income is included (rather than capital limits and tariff income as in IS and WFTC). Thus there may be losers as well as gainers. The **Working Tax Credit** (WTC) uses similar rules about work conditions as WFTC/DPTC, but extends entitlement to some groups without children or disabilities (working 30+ hours). The Child Care Tax Credit is linked to entitlement to WTC (but is not modelled here).

Income Support: support for children of families on IS is transferred to the Child Tax Credit. Effective levels of support are increased by £6.05 for children under 15 and £5.20 for older children and the family premium increased by £0.85; Premia for disabled children are increased significantly; Disability premia increased. The earnings disregard in Income Support and Job Seekers Allowance for lone parents, disabled and carers increased by £5 to £20 in April 2001.

Housing benefit (HB) and **Council tax benefit** (CTB) changes to rates and premia match those for income support.

Basic state retirement pension (and widows' pension) increased in real terms by £4.50 (Cat. A) or £2.75 (Cat. B).

Minimum Income Guarantee (MIG): Premia increased by £17.35 (single) and £24.20 (couples) for those aged under 75. Premia for older groups increased by somewhat less so that the value is the same for pensioners of all ages.

Capital thresholds in all means-tested benefits reduced in real value. (These have not been uprated since 1988.)

Winter fuel allowance: Increased to £200 per year for households containing a person over state pension age or in receipt of Income Support pensioner premium.

National insurance contributions: Class 1 employee contribution lower earnings limit (LEL) increased by £8; upper earnings limit (UEL) reduced by £30; Class 1 rate increased from 10% to 11% and extra 1% charged on all earnings above the UEL; **Class 4** (self-employed) rate increased from 7% to 8% and extra 1% charged on profits above the upper profits limit; this limit reduced in real terms by £30.

Income tax: Age-related personal allowances increased by more than inflation; increase in width of 10p tax band by £300 per year in real terms in 2001; personal allowance not indexed in 2003/4.

Introduction of a **Children's tax credit** took place in 2001/2. This is for taxpayer families with children aged under 16. If either parent is a higher-rate (40%) taxpayer, the value of the annual credit is tapered at a rate of £1 for every £15 of income per year above the 40% threshold. The credit was introduced at the level of £10.00 per week per eligible taxpaying family (£520 per year). An additional **baby tax credit** for families with a child born within the year was introduced in 2002/3. This was tapered along with the children's tax credit and took the same maximum value. In 2003/4 these credits become part of the Child Tax Credit (see above).

Among the changes that are not modelled are:
➢   - child care tax credit
➢   - child support changes
➢   - effect of lengthening maternity leave and introduction of paternity leave
➢   - pensioner tax credit

Appendix Figures

Fig.A1: Distribution of AHC Incomes – Children in benefit units in "other"economic status category, including economically inactive parents
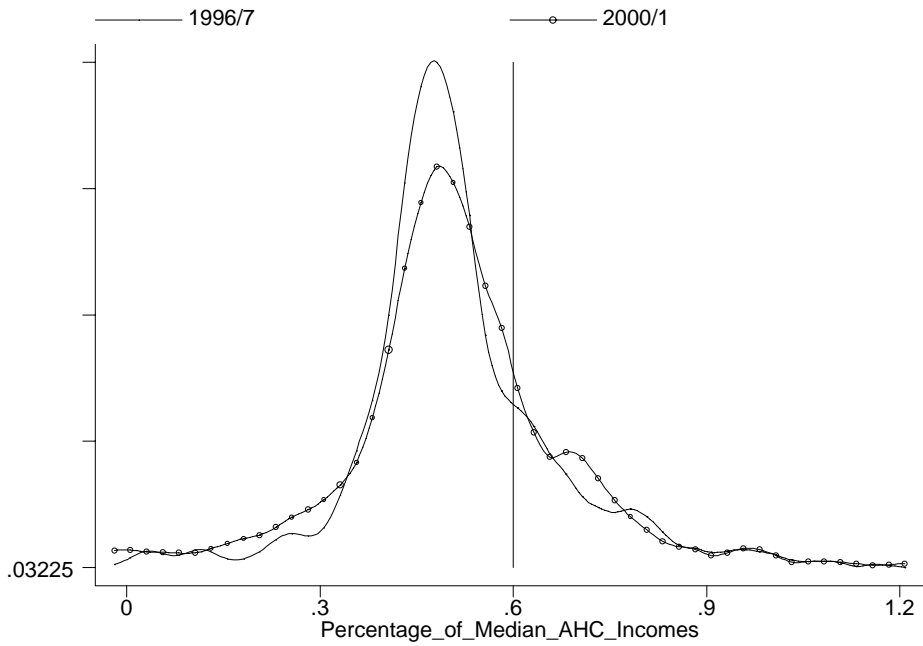

Fig.A2: Distribution of AHC Incomes – Children in benefit units with unemployed parents
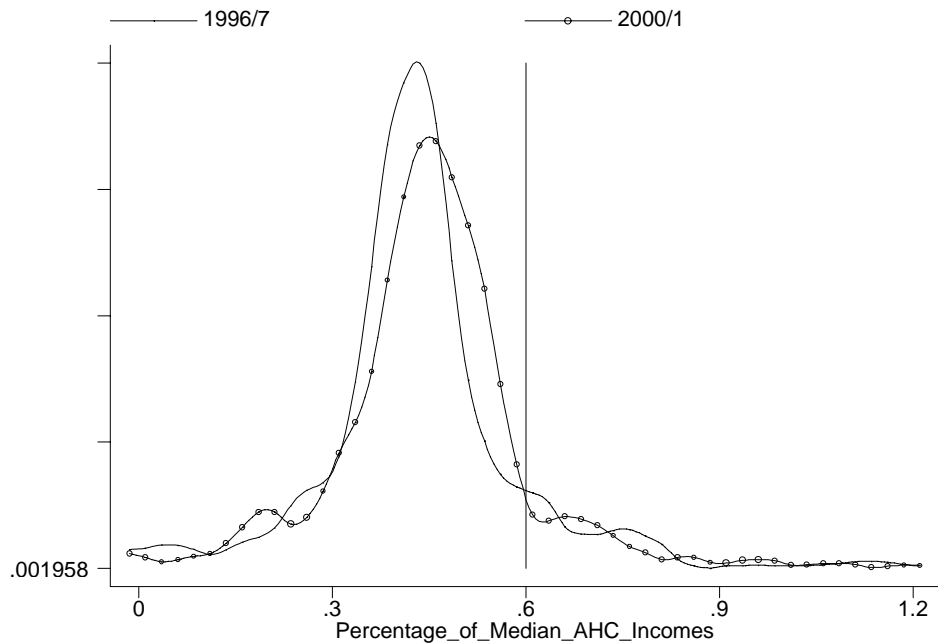
Fig.A3: Distribution of AHC Incomes – Children in benefit units with one or more person in part-time work
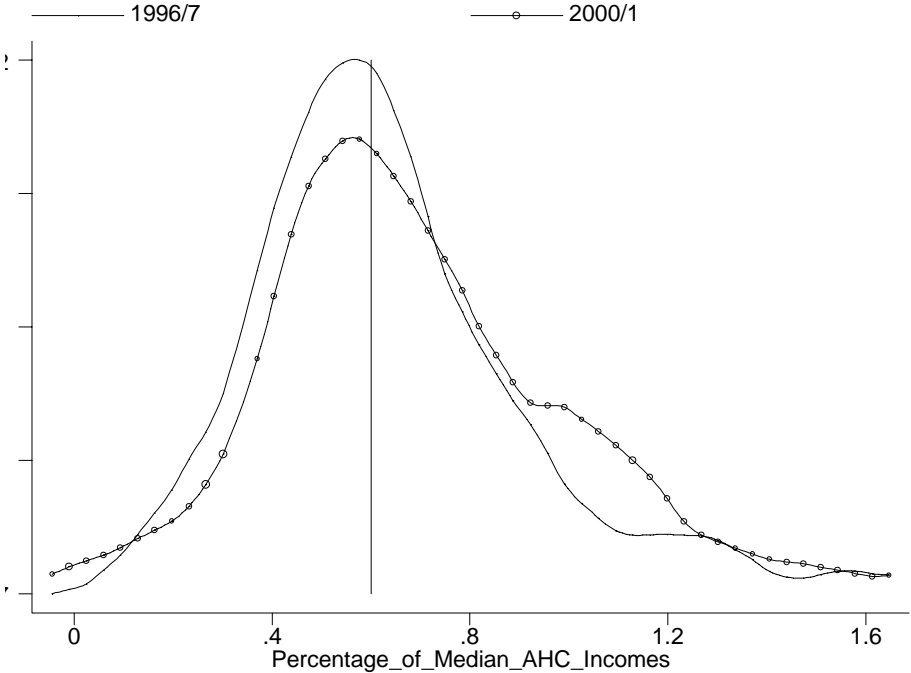

1996/7   2000/1

Percentage_of_Median_AHC_Incomes

Fig.A4: Distribution of AHC Incomes – Children in benefit units with one person in full-time work and one not working

1996/7   2000/1

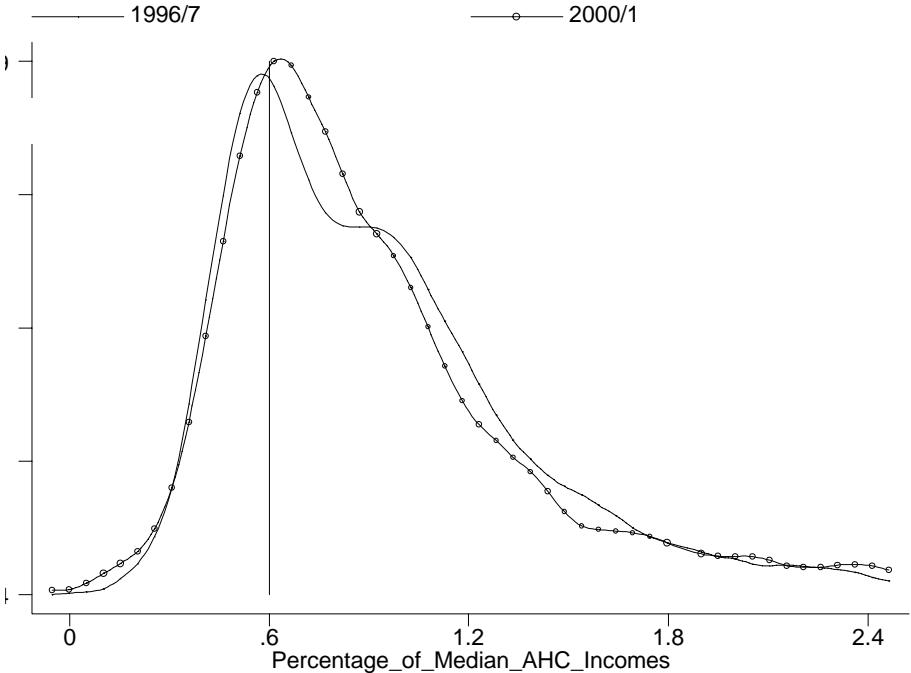Percentage_of_Median_AHC_Incomes

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Fig.A5: Distribution of AHC Incomes – Children in benefit units with one person in full-time work and one part-time
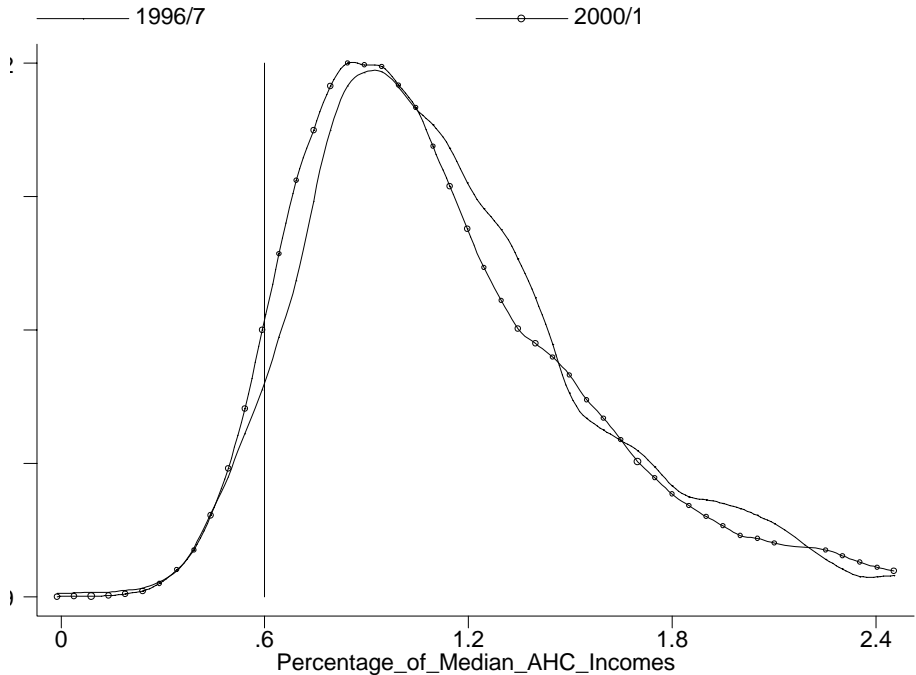

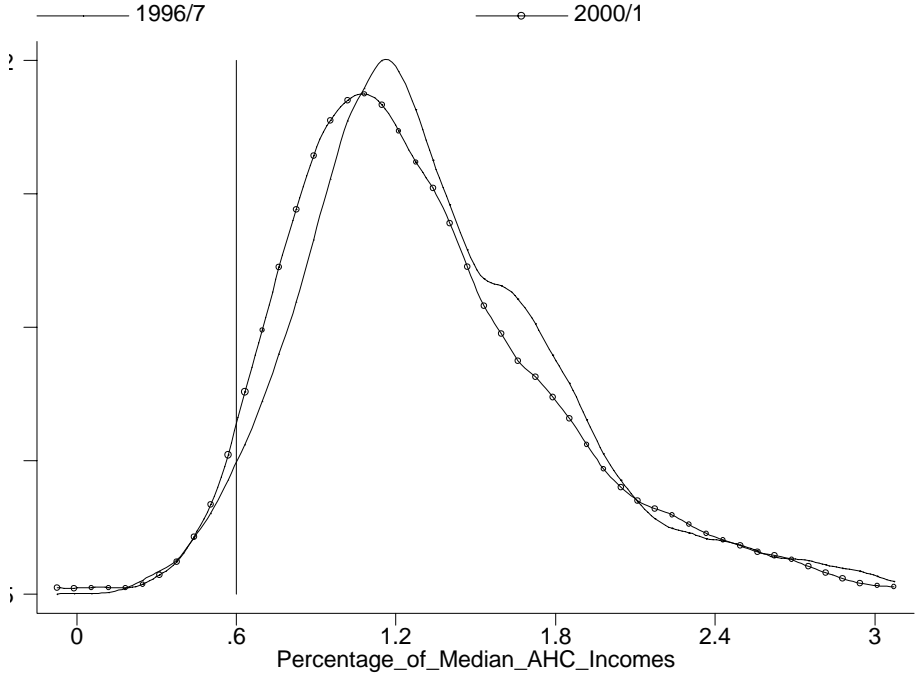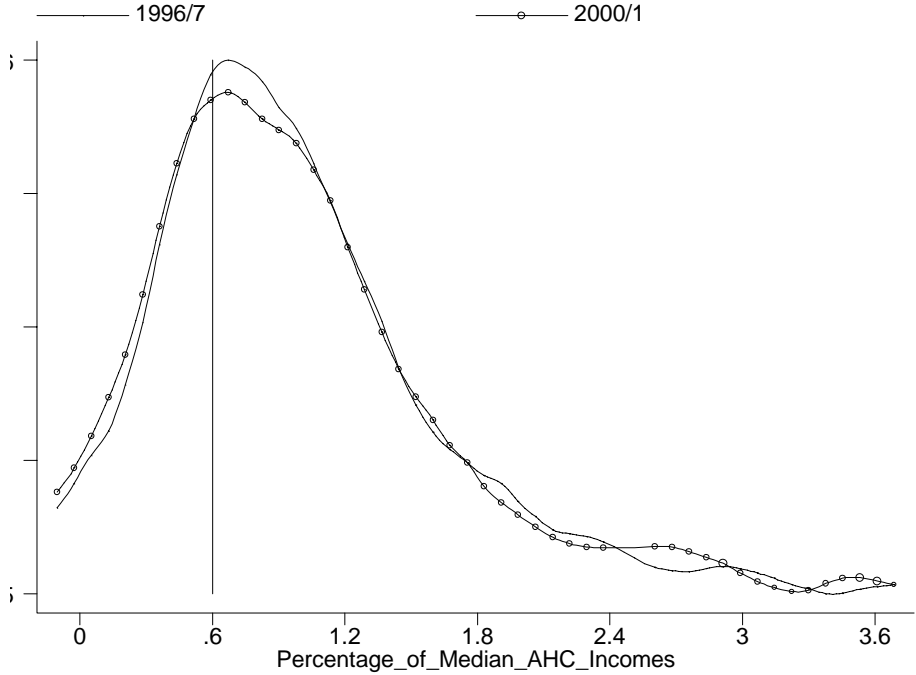**Fig.A6: Distribution of AHC Incomes – Children in benefit units with one or two parents all in full-time work**

Fig.A7: Distribution of AHC Incomes – Children in benefit units with self-employed persons

Percentage_of_Median_AHC_Incomes

Appendix Tables

Table A1: Effect of Changing Composition of Population on Overall Poverty Rate — Family type

	Proportion of Population		Proportion Poor		Compositional Effect	Incidence Effect	Combined Effect
	1997	2001	1997	2001			
	p97	p01	P97	P01	x	y	z
BHC							
Pensioner Couple	9.4	9.4	19.9	21.9	0.00	0.19	0.19
Single Pensioner	7.4	7.4	23.1	21.4	0.00	-0.12	-0.13
Couple with children	36.6	35.2	19.0	15.7	0.00	-1.19	-1.18
Couple without children	21.9	21.3	9.7	10.1	0.05	0.10	0.15
Single with children	8.2	8.5	37.5	32.3	0.04	-0.44	-0.39
Single without children	16.5	18.2	16.1	16.3	-0.03	0.03	0.00
All households	100.0	100.0	18.4	17.0	0.07	-1.43	-1.36
AHC							
Pensioner Couple	9.4	9.4	22.3	21.8	0.00	-0.05	-0.05
Single Pensioner	7.4	7.4	32.5	28.2	0.00	-0.32	-0.32
Couple with children	36.6	35.2	23.0	20.9	0.02	-0.75	-0.73
Couple without children	21.9	21.3	11.9	12.2	0.07	0.06	0.13
Single with children	8.2	8.5	62.0	53.8	0.09	-0.68	-0.59
Single without children	16.5	18.2	24.3	21.7	-0.01	-0.45	-0.46
All households	100.0	100.0	24.6	22.6	0.17	-2.19	-2.02

Source: own calculations from 1996/7 and 2000/1 FRS micro-data using the same methods and assumptions as HBAI statistics.

Table A2: Effect of Changing Composition of Population — Family Composition

	Proportion of Population		Proportion Poor		Compositional Effect	Incidence Effect	Combined Effect
	1997	2001	1997	2001			
	p97	p01	P97	P01	x	y	z
BHC							
Couple — 1 or 2 children	50.9	50.2	13.3	12.5	0.07	-0.43	-0.36
Couple — 3 or more children	26.3	25.6	36.6	26.6	-0.06	-2.60	-2.66
Lone parent — 1 or more children	22.8	24.1	40.0	34.1	0.17	-1.38	-1.20
All children	100.0	100.0	25.5	21.3	0.19	-4.40	-4.22
AHC							
Couple — 1 or 2 children	50.9	50.2	17.5	17.0	-0.12	-0.25	-0.37
Couple — 3 or more children	26.3	25.6	40.0	33.8	-0.26	-1.60	-1.86
Lone parent — 1 or more children	22.8	24.1	63.9	55.3	0.77	-2.02	-1.26
All children	100.0	100.0	34.0	30.5	0.39	-3.88	-3.49

Source: own calculations from 1996/7 and 2000/1 FRS micro-data using the same methods and assumptions as HBAI statistics.

Table A3: Hourly Wages 1996/7

Distribution of hourly wage	Distribution of Income BHC, equivalised as % of median					
	<60%	60-79%	80-99%	100-149%	>150%	Total
< 60% median	15.8	20.6	20.4	32.0	11.3	100.0
	52.3	37.8	25.5	14.4	4.8	16.1
60-79% median	7.2	14.2	20.0	42.7	16.0	100.0
	25.3	27.9	26.7	20.5	7.3	17.2
80-99% median	4.1	10.0	14.9	45.5	25.5	100.0
	12.9	17.1	17.5	19.2	10.1	15.1
100-149% median	1.3	5.1	11.1	39.9	42.5	100.0
	6.8	14.5	21.4	27.6	27.8	24.7
>150% of median	0.5	0.9	4.2	24.3	70.1	100.0
	2.8	2.7	8.9	18.3	50.0	27.0
Total	4.9	8.8	12.8	35.7	37.8	100.0
	100.0	100.0	100.0	100.0	100.0	0.0

Source: own calculations from 1996/7 and 2000/1 FRS micro-data using the same methods and assumptions as HBAI statistics.

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Table A4: Hourly Wages 2000/1

Distribution of hourly wage	Distribution of Income BHC, equivalised as % of median					
	<60%	60-79%	80-99%	100-149%	>150%	Total
< 60% median	16.0	21.5	21.2	29.9	11.4	100.0
	50.2	32.8	22.4	13.0	4.8	15.2
60 -79% median	7.6	16.6	21.7	38.3	15.8	100.0
	26.9	28.6	25.8	18.9	7.5	17.1
80-99% median	4.0	10.7	19.4	43.1	22.7	100.0
	13.6	17.6	22.0	20.2	10.3	16.3
100-149% median	1.4	6.3	11.8	39.8	40.7	100.0
	7.9	17.1	22.2	31.1	30.6	27.1
>150% of median	0.3	1.6	4.5	24.0	69.6	100.0
	1.4	3.9	7.6	16.8	46.9	24.3
Total	4.8	10.0	14.4	34.8	36.1	100.0
	100.0	100.0	100.0	100.0	100.0	100.0

Source: own calculations from 1996/7 and 2000/1 FRS micro-data using the same methods and assumptions as HBAI statistics.