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Poverty in the U.K.:
A Comparison with Nineteen Other Countries

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POVERTY IN THE UK: A COMPARISON WITH NINETEEN OTHER
COUNTRIES

by

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INTRODUCTION

This article compares poverty in the UK with 19 other countries. We know from Department of Social Security, Households Below Average Incomes analysis that the proportion of individuals living in families with incomes below half the contemporary average more than doubled in the UK during the 1980s (DSS 1993). We also have evidence that inequalities in Britain increased faster than any other country in the OECD with the exception of New Zealand (JRF 1995). Though there has been plenty of comparative analysis of income undertaken on the second wave (mid 1980s) of the Luxembourg Income Survey (LIS) (Forster 1993) and of consumption by Eurostat for the late 1980s (Hagenaars et al 1994, Zaidi and de Vos 1996), we have not until now had comparable evidence on the prevalence of poverty in the UK and elsewhere in the 1990s. This article attempts to fill this gap.

It is based on the latest "third wave" of LIS. By July 1996 there were 21 countries with data available for circa 1990. However the data set for Austria still has problems of reliability and was excluded. In addition Brandolini (1992) has raised anxieties about the quality of some of the Italian data and we still have anxieties about the German data. Overall 20 countries are included in this comparison. However given this is one of the first analyses of the third LIS sweep the results should be treated as preliminary.

As well as being one of the first analyses to be undertaken on the third wave of LIS, it is particularly interesting in that it includes a number of transitional economies, former Eastern Bloc countries. It also for the first time includes a Pacific Rim country, Taiwan. This article focuses on the results for the UK in comparative perspective.

Table 1 summarises the sources of the data. The results relate to the situation in the countries for the years given - between 1990 and 1992.

Table 1 Data sources for the third wave LIS data sets

Country	Year	Survey Name	Sample Size
Australia	1990	Survey of Income and Housing Costs	16328
Belgium	1992	The Living Conditions of Households	3821
Canada	1991	Survey of Consumer Finances	21647
Czech Republic	1992	Microcensus	16234
Denmark	1992	Income Distribution Survey	12895
Finland	1991	Survey of Income Distribution	11749
Germany	1989	The German Socio-Economic Panel Study	4690
Hungary	1991	Hungarian Income Survey	2019
Israel	1992	Family Expenditure Survey	5212
Italy	1991	The Bank of Italy Income Survey	8188
Netherlands	1991	Socio-Economic Panel	4378
Norway	1991	Income and Property Distribution Survey	8073
Poland	1992	Household Budget Survey	6602
Russia	1992	Russian Longitudinal Monitoring Survey	6361
Slovakia	1992	Slovak Microcensus	15990
Spain	1990	Expenditure and Income Survey	21153
Sweden	1992	Income Distribution Survey	12484
Taiwan, ROC	1991	Survey of Personal Income Distribution	16434
United Kingdom	1991	The Family Expenditure Survey*	7056
United States	1991	The March Current Population Survey	16052

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Previous comparative research on the distribution of income (Mitchell 1991, Buhmann et al 1988, Hagenaars et al 1994, Whiteford and Kennedy 1996) have shown that results are sensitive to the poverty standard, the unit of analysis and the equivalence scale used. As far as is possible with the LIS data, we attempted to restrict the analysis to single unit households. However this is not always possible and some multi-unit households are included in the "other" category for some countries. The

equivalence scale used to adjust household income to differences in needs is almost identical to the "Whiteford average" (1985) and is similar to the modified OECD equivalence scale used in recent comparative work by the EU (Hagenaars et al 1994) (1.00 for the first adult, 0.55 for the second adult and subsequent adults(s) and 0.35 for each child). In fact as Buhmann et al (1988) have shown aggregate household poverty rates are not particularly sensitive to the equivalence scale used, though the composition of the poor may be.

Results are certainly sensitive to the poverty standard employed. The bulk of this analysis uses the conventional standard of below 50 per cent of average (mean not median) equivalent income. However the sensitivity of the results to that threshold is explored towards the end of the paper.

POVERTY RISKS

Table 2 compares the risk of poverty before the impact of direct taxes and social security benefits, that is original or factor income including occupational pensions and private transfers. It is not surprising that in almost all countries the elderly have the highest risk of poverty before transfers. The UK has the fifth highest risk of pre transfer poverty overall. There is a comparatively low risk of poverty among aged couples in the UK (possibly due to the fact that occupational pensions are included in pre-transfer income whereas in some other countries generous state pensions are not included in pre-transfer income). The UK also has a relatively low risk of pre-transfer poverty among single people and childless couples but the highest risk of poverty among lone parents of any country. This is probably because of the comparatively low proportion of lone parents in the UK active in the labour market (Bradshaw et al 1996). The UK also has a high risk of poverty among couples with children.

Table 2 Percentage of households with pre transfer equivalent income below 50% average, circa 1990

	Aged (S)	Aged ©	Single (NC)	Couple (NC)	Lone Parent	Couple (CH)	Other	Total
AUS	85.7	70.3	31.0	13.8	69.9	16.4	35.2	33.0
BEL	99.6	88.4	35.5	24.9	36.0	12.2	42.6	38.3
CAN	75.4	57.6	35.3	13.2	63.4	17.3	33.9	31.9
CZE	98.7	88.6	40.6	22.7	23.0	5.0	22.5	33.8
DEN	78.0	62.7	42.4	13.0	43.3	11.0	23.4	36.9
FIN	59.5	38.4	30.1	8.7	30.6	11.9	24.5	24.6
GER	74.8	68.8	22.1	13.2	40.3	11.6	32.9	32.7
HUN	91.9	83.1	49.4	26.3	29.2	15.8	34.3	39.4
ISR	65.8	56.0	27.6	16.9	54.4	26.8	46.9	34.1
ITA	80.2	53.3	25.6	15.9	4.9	10.5	26.8	27.2
NET	74.2	65.8	41.9	15.5	72.7	10.4	28.8	33.0
NOR	81.4	57.8	29.4	6.2	50.2	4.9	21.8	32.4
POL	87.9	87.5	40.2	35.2	7.9	14.7	35.4	33.3
RUS	96.1	85.5	53.9	33.1	38.2	19.3	43.0	41.9
SPA	91.4	74.4	42.7	22.9	30.3	12.5	39.4	33.1
SLO	99.2	84.5	46.8	24.4	25.2	8.1	26.8	33.1
SWE	95.9	81.1	37.9	10.6	32.0	10.4	0.0	41.4
TWN	60.7	47.1	22.1	14.5	25.8	15.0	21.4	18.9
UK	83.9	68.2	36.2	13.2	78.6	19.9	35.8	38.1
USA	77.2	56.1	29.8	12.4	60.9	20.6	46.0	34.1
AVG	82.9	68.8	36.0	17.8	40.8	13.7	31.1	33.6

However more significant is the outcome of redistribution. The analysis in this paper is restricted to the impact of social security benefits and direct taxation including social security contributions. Excluded from consideration here are the impacts of housing benefits and subsidies, indirect taxes

and the value of services in kind. There are strong arguments (Smeeding et al 1993, Whiteford and Kennedy 1996) that these should be taken into account in a thorough comparative analysis of the effectiveness of redistribution. There is also an argument (Whiteford and Kennedy 1996) about whether social security contributions should be treated as a deduction from earnings on the grounds that, at least in part, they are a form of deferred income.

In Table 3 it can be seen that the UK moves from having the fifth highest overall poverty rate to having the third highest after the USA and Russia after the impact of social security benefits and direct taxes. The figure of 23.0 per cent of poor households is nearly double the average for all countries. It is identical to the 21.7 per cent of individuals living in families with incomes before housing costs less than 50 percent of the contemporary average estimated in the HBAI figures for 1990/1991 (DSS 1993). The small difference is a function of our choice of households rather than individuals.

After the impact of taxes and benefits the UK has an above average poverty rate for all household groups. It has the third highest rate of poverty among lone parent families and aged couples and the fourth highest rate for couples with children and aged singles.

Table 3: Percentage of households with equivalent income below 50% average after social security benefits and direct taxation. Circa 1990.

	Aged (S)	Aged ©	Single (NC)	Couple (NC)	Lone Parent	Couple (CH)	Other	Total
AUS	50.2	22.2	24.8	7.2	57.1	10.9	13.2	19.7
BEL	12.4	11.4	9.2	5.1	9.4	4.7	6.2	7.1
CAN	8.9	4.4	27.1	7.5	48.6	10.8	15.2	15.1
CZE	4.0	0.8	4.5	0.7	9.9	1.1	3.0	2.1
DEN	8.8	2.8	17.7	2.7	6.5	3.1	4.7	8.2
FIN	23.1	3.0	18.5	3.6	6.3	2.8	5.4	9.6
GER	21.7	12.9	21.7	16.3	34.2	12.1	16.9	17.5
HUN	22.2	10.5	21.3	6.9	6.9	7.2	17.4	11.4
ISR	35.6	22.1	20.1	9.0	34.4	19.5	18.7	20.0
ITA	9.0	4.1	7.4	7.8	4.9	14.6	11.6	9.6
NET	3.8	7.6	18.1	5.6	27.4	8.0	5.4	9.3
NOR	16.5	1.5	15.3	0.6	12.9	2.1	1.3	8.2
POL	18.6	12.4	10.1	7.6	6.7	15.4	14.7	13.1
RUS	83.1	37.9	52.0	25.2	37.4	19.5	33.3	34.3
SPA	16.3	20.8	23.5	12.2	27.7	15.0	17.1	16.0
SLO	1.8	0.5	5.7	1.5	7.9	1.7	2.2	2.2
SWE	9.6	0.7	18.3	2.0	2.6	2.9	0.0	9.1
TWN	49.0	42.5	19.2	13.4	25.0	14.6	19.1	17.5
UK	46.5	30.4	23.5	8.9	51.8	17.5	17.8	23.0
USA	40.5	17.0	26.2	9.2	53.9	18.4	33.8	23.5
AVG	24.1	13.3	19.2	7.6	23.6	10.1	12.9	13.8

POVERTY REDUCTION

Chart 1 compares the performance of different countries in reducing poverty. Of the 20 countries the Czech Republic and Slovakia, are most successful (but not necessarily most efficient), reducing over 90 per cent of their pre-transfer poverty. Taiwan is the least successful reducing just over 7 per cent of their pre-transfer poverty. The UK is fourth least successful after Taiwan, Russia and the USA, reducing just 40 per cent of its pre-transfer poverty. The chart also shows that in the UK the respective contribution to poverty reduction made by social security benefits and direct taxes is fairly even. In most other countries most of the reduction in poverty occurs as a result of social security benefits.

Chart 1: The impact of social security benefits and direct taxes on poverty rates

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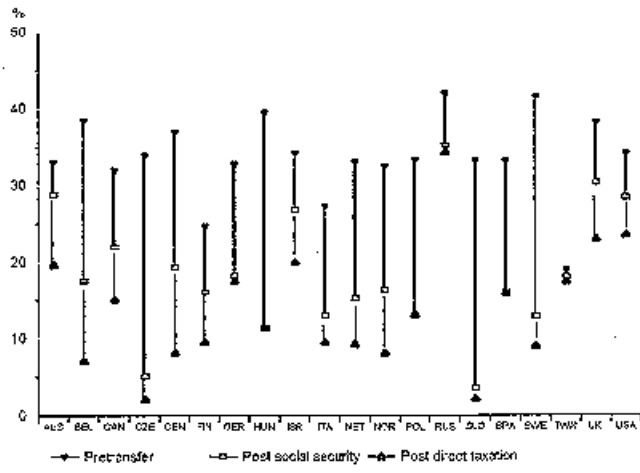


Table 4 compares the poverty reduction achieved for the different household types. There are some interesting variations between countries in the effectiveness of their transfers for different groups. Thus for example the Nordic countries achieve very high reduction rates for all groups except the single childless. In Germany, Italy, Spain and Russia the tax/benefit system leaves more couples with children poor. The same is true for childless couples in Germany. This is because direct tax exceeds social security benefits overall. The UK is relatively unsuccessful in reducing pre-transfer poverty for all groups but in particular for couples with children.

Table 4 Poverty reduction by family type

	Aged (S)	Aged (C)	Single (NC)	Couple (NC)	Lone Parent	Couple (CH)	Other	Total
AUS	41.4	68.4	20.0	47.8	18.3	33.5	62.5	40.3
BEL	87.6	87.1	74.1	79.5	73.9	61.5	85.4	81.5
CAN	88.2	92.4	23.2	43.2	23.3	37.6	55.2	52.7
CZE	95.9	99.1	88.9	96.9	57.0	78.0	86.7	93.8
DEN	88.7	95.5	58.3	79.2	85.0	71.8	79.9	77.8
FIN	61.2	92.2	38.5	58.6	79.4	76.5	78.0	61.0
GER	71.0	81.3	1.8	-23.5	15.1	-4.3	48.6	46.5
HUN	75.8	87.4	56.9	73.8	76.4	54.4	49.3	71.1
ISR	45.9	60.5	27.2	46.7	36.8	27.2	60.1	41.3
ITA	88.8	92.3	71.1	50.9	0.0	-39.0	56.7	64.7
NET	94.9	88.4	56.8	63.9	62.3	23.1	81.3	71.8
NOR	79.7	97.4	48.0	90.3	74.3	57.1	94.0	74.7
POL	78.8	85.8	74.9	78.4	15.2	-4.8	58.5	60.7
RUS	13.5	55.7	3.5	23.9	2.1	-1.0	22.6	18.1
SPA	82.2	72.0	45.0	46.7	8.6	-20.0	56.6	51.7
SLO	98.2	99.4	87.8	93.9	68.7	79.0	91.8	93.4
SWE	90.0	99.1	51.7	81.1	91.9	72.1	0.0	78.0
TWN	19.3	9.8	13.1	7.6	3.1	2.7	10.7	7.4
UK	44.6	55.4	35.1	32.6	34.1	12.1	50.3	39.6
USA	47.5	69.7	12.1	25.8	11.5	10.7	26.5	31.1
AVG	69.7	79.4	44.4	54.9	41.8	31.4	57.7	57.9

COMPOSITION OF THE POOR

Table 5 explores the composition of the poor after the impact of taxes and benefits and shows that there are considerable variations between countries. In the UK the aged are a comparatively high proportion and there are also relatively high proportions of lone parents among the poor in the UK. In all the Nordic countries by far the largest group of the poor are single (young) people.

Table 6 compares the gender of the head of poor households. Taiwan has the highest proportion of poor households headed by a male and Norway and Finland the highest proportion headed by a female. The UK has lower than average proportion of males and higher than average proportion of females who are poor. Poland and Taiwan have the highest proportion of poor households containing a child and the UK has the highest proportion of poor households containing an aged person. Other countries where elderly person households represent a high proportion of the poor include Taiwan, Russia, Belgium and Hungary.

Table 5 Composition of poor households. Equivalent income less than 50% of the average after social security benefit and direct taxation. Circa 1990.

	Aged (S)	Aged ©	Single (NC)	Couple (NC)	Lone Parent	Couple (CH)	Other	Total
AUS	21.7	10.0	26.0	8.0	14.1	17.0	3.2	100
BEL	18.0	18.6	14.0	20.2	4.3	20.5	4.5	100
CAN	5.0	2.4	41.5	10.8	14.1	20.1	6.1	100
CZE	21.9	3.8	22.4	7.8	16.0	19.2	8.9	100
DEN	16.2	3.0	61.7	6.9	3.5	7.4	1.2	100
FIN	29.6	2.1	46.9	8.2	2.5	7.6	3.1	100
GER	21.0	8.1	25.7	22.4	4.3	14.5	3.9	100
HUN	19.0	11.3	16.5	13.0	2.2	20.3	17.7	100
ISR	14.8	12.6	9.2	6.5	4.6	45.9	6.3	100
ITA	9.0	5.8	5.0	26.5	0.4	42.1	11.2	100
NET	4.9	7.7	37.2	16.2	9.1	23.3	1.6	100
NOR	30.2	2.0	50.7	1.1	9.6	5.8	0.6	100
POL	10.7	6.4	7.2	11.0	1.4	52.4	10.9	100
RUS	23.8	7.8	16.7	14.2	5.8	20.1	11.6	100
SPA	6.5	19.7	5.3	15.9	1.7	40.1	10.7	100
SLO	7.7	2.3	27.2	12.6	10.9	31.2	8.0	100
SWE	16.1	0.8	72.6	3.4	1.4	5.8	0.0	100
TWN	5.9	12.5	4.1	11.8	3.5	48.5	13.8	100
UK	26.7	14.7	14.1	9.8	10.4	18.9	5.4	100
USA	16.6	6.8	23.0	7.7	12.5	20.9	12.4	100
AVG	16.3	7.9	26.4	11.7	6.6	24.1	7.1	100

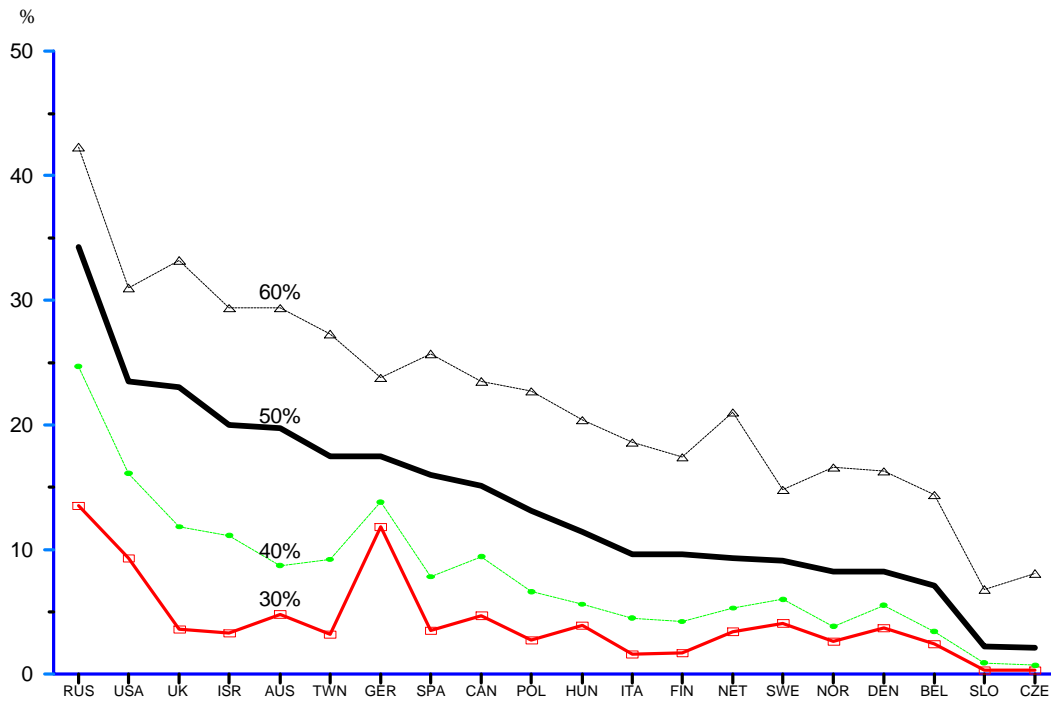
Table 6 Characteristics of the poor households

	Sex Head		Households	Households
	Male	Female	with a child	with an aged person
AUS	52.0	48.0	32.6	33.2
BEL	71.0	29.0	25.3	39.4
CAN	57.4	42.6	36.6	9.7
CZE	47.2	52.8	39.0	28.3
DEN	56.3	43.7	11.2	19.3
FIN	43.3	56.7	10.3	34.1
GER	60.3	39.7	19.4	32.5
HUN	58.0	40.7	27.3	39.4
ISR	71.1	28.9	54.4	33.2
ITA	78.2	21.8	44.8	18.7
NET	66.8	33.2	33.0	13.0
NOR	39.4	60.6	15.4	32.3
POL	75.8	24.2	59.6	26.5
RUS	49.3	50.7	31.4	40.5
SPA	78.2	21.8	46.5	35.8
SLO	62.8	37.2	44.4	12.9
SWE	52.7	47.3	7.2	17.0
TWN	86.8	13.2	58.3	38.8
UK	57.9	42.1	31.2	44.1
USA	51.8	48.2	41.0	27.6
AVG	60.9	39.1	33.4	28.8

SENSITIVITY OF THE POVERTY THRESHOLD

In the analysis so far, the below 50 per cent of average equivalent income threshold has been used as the poverty standard. However if alternative thresholds had been employed there would have been some variation in the poverty rates found in different countries (this may be due to a benefit such as Income Support in the UK falling just above or just below a threshold). The chart below compares the percentage of households with incomes below four different proportions of the mean. The countries are ranked according to the 50 per cent threshold. It can be seen that if the 60 per cent threshold had been used, the Netherlands would have moved up four positions (with comparatively higher poverty rates) and Sweden and Germany would have moved four positions down (with comparatively lower poverty rates). The UK would have overtaken the USA and had poverty rates second only to Russia. Apart from these countries the rankings would have been similar to the 50 per cent threshold. If the 40 per cent threshold had been used Denmark, Sweden and Canada and Germany would have had relatively higher poverty rates than with the 50 per cent threshold. In fact Germany would have overtaken the UK and come third in the poverty rate league table. (However we are still anxious about the LIS data for Germany as there appears to be a large number of households without any income). Below the 30 percent threshold, the prevalence of poverty becomes much lower and more volatile with for example Israel, Italy, Finland and the UK having relatively lower rates of poverty than at the 50 per cent threshold. We can conclude from this analysis that the 50 per cent threshold is for most countries, including the UK, a fairly robust representation of relative overall poverty except at the very lowest threshold. However the composition of the poor and the risks of poverty for different groups, may still be sensitive to the threshold employed.

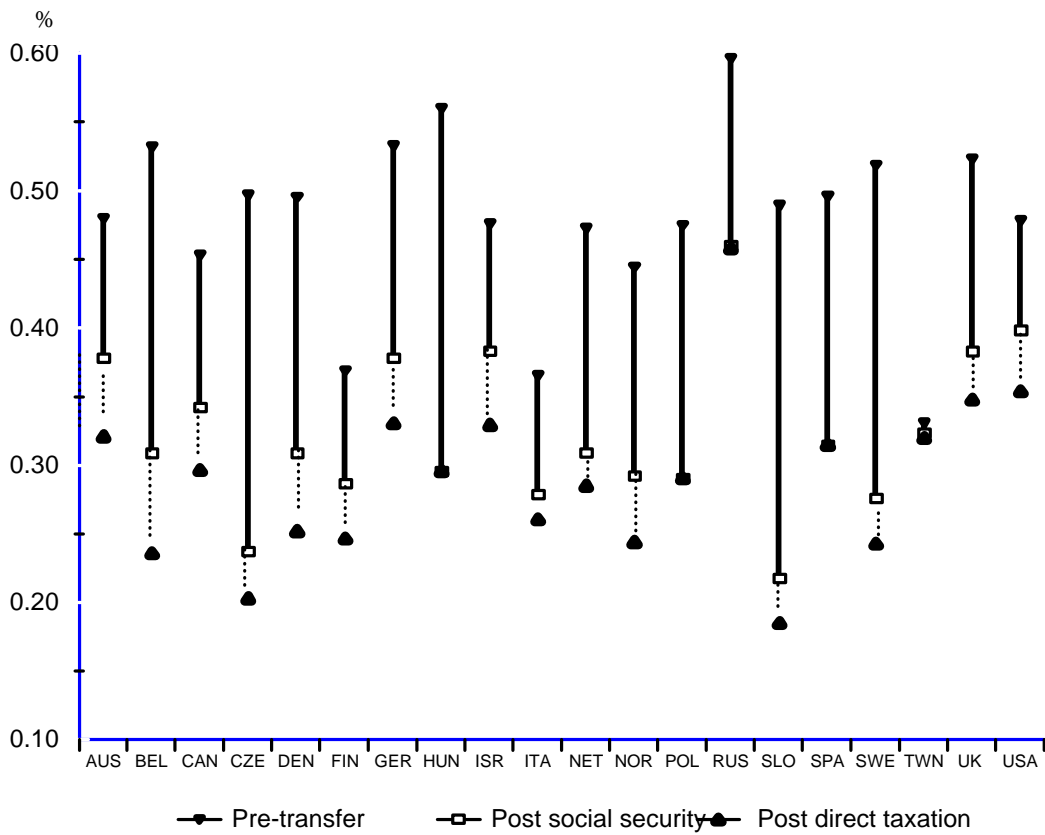
Chart 2 Percentage of households with equivalent income after social security benefits and direct taxation below various proportions of mean income. Circa 1990.



INEQUALITY

Chart 3 compares inequality in the distribution of income pre-transfer and post direct tax and benefit using the gini coefficient as the indicator of inequality. The UK starts with a gini coefficient of .52, equal to Sweden, fourth from highest behind Russia, Hungary, Germany, Belgium. However after the impact of direct taxes and benefits, although the gini coefficient for the UK falls to 0.35, the UK is the second most unequal country, along with the USA, behind Russia. Once again we see that it is the middle European countries particularly the Czech republic and Slovakia who are most successful in reducing their pre-transfer inequalities. It can also be seen that in most countries social security benefits contribute most to reducing inequalities and this is also true for the UK. However the proportion of redistribution in the UK contributed by both social security and direct taxation is lower than average.

Chart 3: Impact of social security benefits and direct tax on Gini coefficients, circa 1990



TRENDS OVER TIME

At the time of writing there are ten countries in the LIS data set with data for all three sweeps - circa 1979, 1985 and 1990. For these countries it is possible to compare trends in poverty and inequality over time. Chart 4a summarises trends in poverty for these ten countries over the decade. There has been an increase in poverty rates in all countries except Israel and Canada over this period but by far the sharpest increase in poverty has occurred in the UK where between 1979 and 1991 the poverty rate more than doubled. Only Germany experienced anything near this level of increase. Chart 4b compares trends in inequality using gini coefficients. Again the UK and Germany experienced the sharpest increase in inequality during the period. Canada, Israel, the Netherlands, Norway and Taiwan either had little increase or a reduction in inequality over this period.

Chart 4b: Gini coefficient after social security benefits and direct taxes

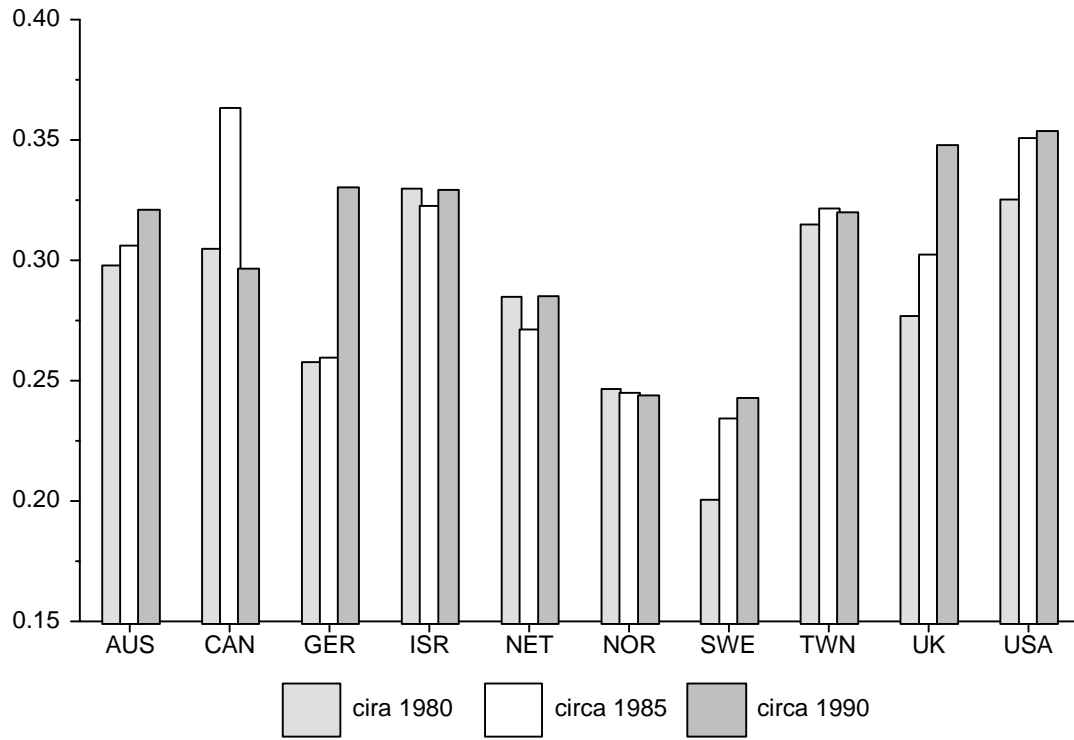
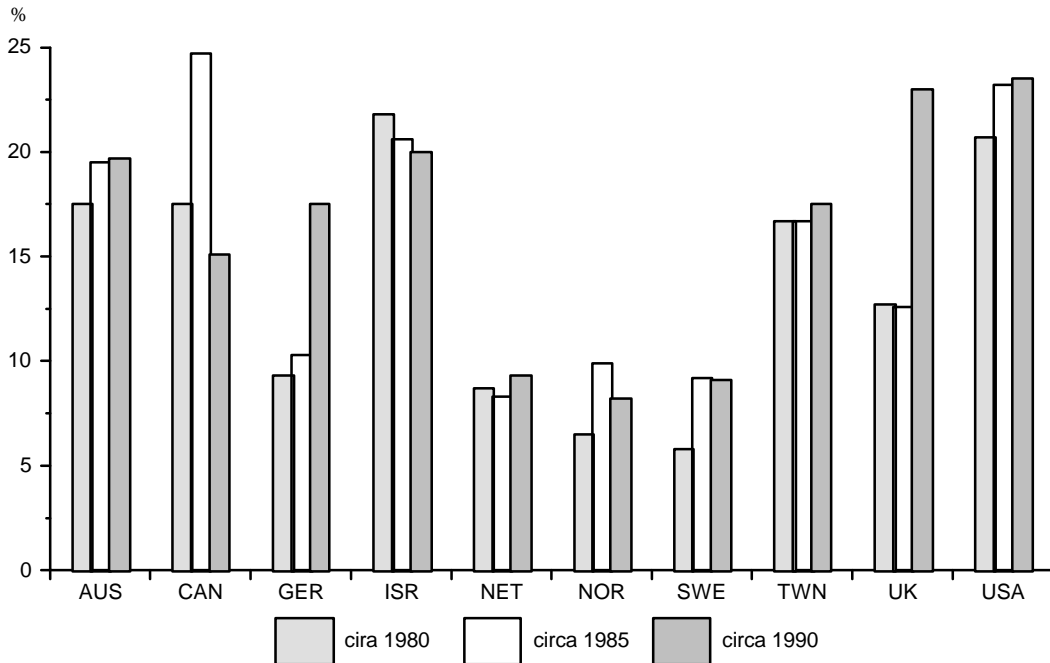


Chart 4a: Households below 50% average income after social security benefits and direct taxes



SUMMARY AND CONCLUSION

The overall pre-transfer poverty rate for the UK is fifth highest out of the 20 countries studied and is relatively high for lone parents and couples with children. The result of direct taxes and social security benefits is to reduce the poverty rate but leaves the UK with the third highest, next only to the USA and Russia. The UK has comparatively high poverty rates among the elderly, lone parents and families with children. These results do not appear to be particularly sensitive to the poverty threshold employed. Poverty rates have increased more in the UK during the 1990s than other countries for which we have data.

If account had been taken of housing costs, services in kind and indirect taxes there is some evidence from previous comparative analyses that the position of the UK might be less bad. (Saunders 1992, Smeeding 1993, Whiteford and Kennedy 1995). Also Ramprakash (1994) and Zaidi and de Vos (1996) found that if household expenditure was used instead of income then the UK had comparatively lower poverty rates. This paper has compared only poverty rates, the composition of the poor and inequality. Again if other elements of poverty had been included - poverty gaps, or some kind of aggregate measure of poverty, as developed by Sen (1979), again there is previous evidence that the UK would not appear to do so badly (Forster 1993, Mitchell 1991).

Nevertheless the comparative position of the UK appears to have deteriorated from that in the circa 1980 and circa 1985 LIS sweeps. This confirms previous work (Mitchell 1991, Bradshaw 1993, Atkinson et al 1995). Also the relative position of the UK is rather worse in 1991 than the European Commission found in the late 1980s (Ramprakash 1994, Hagenaars et al 1994).

The fact that in the UK poverty and inequality are relatively worse after the impact of direct taxes and social security benefits indicates that its position is not just determined by market forces, international competition or other external factors which affect the primary distribution but also by the comparative failure of our social and fiscal policies to protect the poor against the impact of those forces.

The analysis reinforces the Joseph Rowntree Foundation Inquiry conclusion that the UK has

become more unequal than other countries during the 1980s. The fact that the proportion of households in the UK who are relatively poor is close to the USA and only less than that in Russia is reason for dismay.

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