THE EFFECTS OF TAXES AND BENEFITS ON HOUSEHOLD INCOME, 1986

The main results are:

- (i) The effect of government expenditure and taxation is to reduce the differences in income among households. In 1986 taxes and benefits (including NI pensions) increased the share of total income of the bottom fifth of households from 0.3 per cent of original income to 6.3 per cent of final income. Cash benefits play the largest part in reducing income differences.
- (ii) The joint impact of taxes and benefits is greatest for retired households and for those non-retired households containing no economically active people.
- (iii) Between 1975 and 1986, the distribution of income before taxes and benefits has become more unequal; though growth in cash benefits helped to offset this trend.
- (iv) Some 90 per cent of original income (ie before taxes and benefits come into play) comes from earnings; investment income accounts for five per cent as does income from occupational pensions and annuities.

Introduction

The aim of this analysis is to examine how the distribution of income amongst households in the UK is modified as a result of Government expenditure and taxation. During 1986 the Government raised and spent £162 billion; most of this revenue was raised, directly or indirectly, from UK households who also benefited, directly or indirectly, from the associated Government expenditure. Although greater equality of incomes is not necessarily a primary aim of this process, it is nevertheless one of its consequences. The article is the latest in an annual series published in *Economic Trends* since the early 1960's. Each year the article covers the same main ground but also has a special topic. New material this year looks at the components of original income te income received by households before Government intervention of any sort.

The contents are as follows:

Part I Detailed description of results for 1986 for all

households, and for retired and non-retired

households separately.

Part II Detailed breakdown of original income.

Appendix 1 Detailed tables with results for different types of

household, and fine breakdown of income

components.

Appendix 2 Methodology and Definitions.

The 1986 results are presented in one article, unlike the two previous years which were published in two parts at different times of the year. This article is somewhat later than originally planned because the main data source, the 1986 Family Expenditure Survey (FES), was revised. The unit of analysis is the household, rather than the individual or the tax unit. The figures in the tables in the main body of the article are rounded to the nearest £10. This analysis gives a snapshot of households at various stages in their

lifecycles: nearly everyone has less income when elderly than at their peak earning age.

The figures in this article are essentially free standing. Because of changes in definitions each year (eg in the income components), great caution is needed when comparing results for different years: the smaller the group of households, the larger the risk involved. However, some summary items like the Gini coefficients in this article are relatively robust and will stand up to comparisons with earlier years.

Summary of methodology and sources

Chart 1 illustrates the stages of redistribution which form the structure of this analysis. Initially, households receive income from various non-governmental sources: from their employment (wages and salaries; self-employment income); from occupational pensions; from their investments; from other households (eg gifts and alimony payments) and from private non-profit-making institutions such as charities. Total income from these sources constitutes original income. The flow chart shows the various ways in which Government then raises revenue from households and distributes benefits to them both in cash and in kind.

It is not possible to allocate the whole of government revenue and expenditure to households (Chart 2). For some items, such as the Government Borrowing Requirement, such an allocation would be inappropriate; for others, the data required to do so are not available, for example expenditure on personal social services. In all, 63 per cent of government financing (including the Borrowing Requirement) and 52 per cent of expenditure are allocated to households in this analysis. Since the total amount of revenue allocated exceeds the total amount of benefits, less significance should be attached to the exact figures of cash 'gains' and 'losses' than to the broad patterns of redistribution, particularly in the middle income ranges.

The main source of data for this analysis is the Family Expenditure Survey (FES) 1986. This is a continuous household survey which collects information on the income, expenditure and direct tax payments of each household member aged 16 years and over, and on household composition and other characteristics such as tenure. In 1986 some 7,200 households participated in the UK - about 1 in every 3000 households. Studies have indicated that the FES suffers from some non-response bias, for example through underrepresentation of the very top of the income distribution, the elderly and the self-employed. However, in general, comparisons of survey results over successive years justify confidence in their general reliability, and examination of the characteristics and expenditure and income patterns of various groups of households shows a high degree of internal consistency. The data presented in this article have not been reweighted to take account of non-response bias.

The whole analysis is done within the framework of the National Accounts. Various consumers' expenditure aggregates are used as a guide when calculating indirect taxes. Many items (eg earnings from employment, child benefit) are lifted directly from the FES, and National Accounts totals are used to check their validity. Tables 1 and 2 in Appendix 1 give government expenditure and its financing from 1986, derived from the National Accounts.

Stages of redistribution

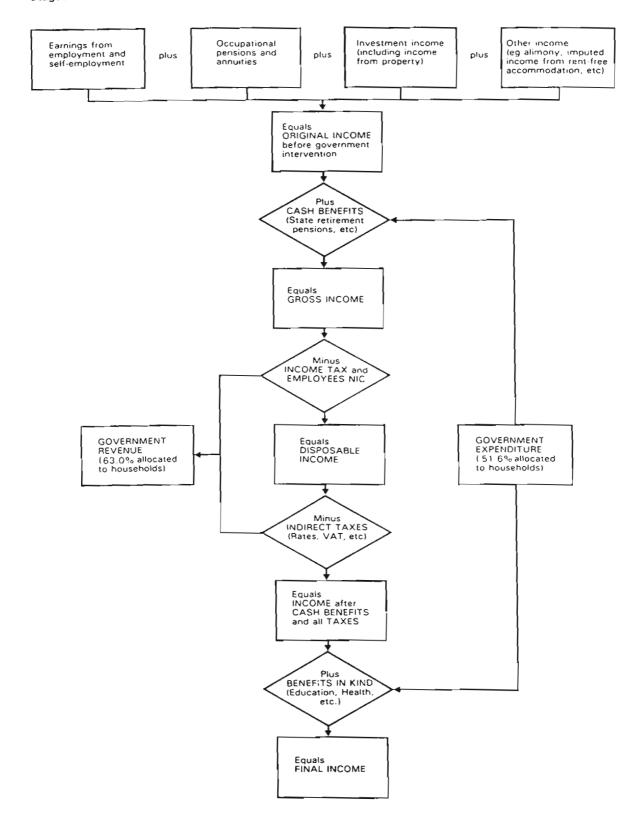
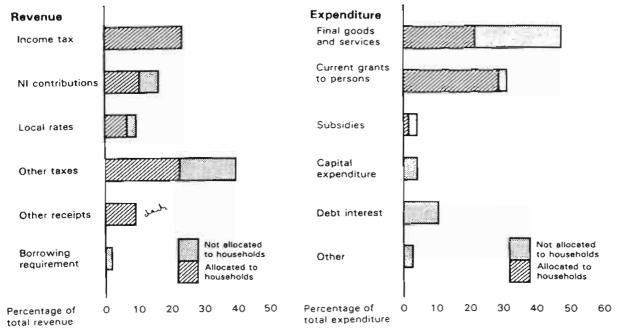




CHART 2 Allocated and unallocated items of government revenue and expenditure, 1986



PART I RESULTS FOR ALL HOUSEHOLDS

The level of original income varies widely between households. Table A shows this and other income measures for quintile groups ranked by original income (the lowest quintile group contains the 20 per cent of households with the lowest original incomes). Only one in thirty of households in the lowest quintile group has one or more economically active people and hence the average original income is almost zero (£130 per annum). In the highest quintile group, there are an average of 2.2 economically active people and average original income is £24,790. In the lowest quintile group. nearly two thirds of households are retired (Table B) - defined as households where at least half the total gross income comes from retired people - and the majority of these have virtually no original income since the state retirement pension (including any graduated or additional pension) is a cash benefit.

Summary of the effects of taxes and benefits, 1986

TABLE A

		Quintile grou	ips of househo	lds ranked by o	riginal income		Average over all
		Bottom	2nd	3rd	4th	Тор	households
verage per household (£ per	year}						
Original income		 130	2 800	8 030	13 180	24 790	9 790
		 3 370	2 730	1 250	870	680	1 780
		 3 500	5 520	9 280	14 060	25 470	11 570
less income tax1 and em		 -10 ²	330	1 490	2 710	5 650	2 030
		 3 510	5 200	7 790	11 350	19 820	9 530
		 880	1 540	2 280	2 900	4 250	2 370
Income after cash benefits		2 620	3 650	5 520	8 450	15 560	7 160
		 1 510	1 500	1 500	1 670	1 700	1 570
Final income		 4 130	5 150	7 020	10 120	17 260	8 740
Percent that are public sector	tenants	 59	37	22	12	5	27
Average per household (numb	er)						
Children (i.e. aged under 10	6)	 0.4	0.4	0.7	8.0	0.7	0.6
		 1.4	1.7	1.9	2.2	2.6	2.0
People in full time educatio		 0.3	0.3	0.5	0.7	0.7	0.5
Economically active people			0.6	1.2	1.8	2 2	1.2
Retired people		 0.8	0.8	0.3	0.1	0.1	0.4

After raw relief at source on mortgage interest and life assurance premiums.
Negative average tax payment results largely from imputed tax relief on life assurance premiums paid by those with nil or negligible tax liabilities.

The composition of each quintile group of households ranked by original income, 1986

TABLE B

	Quintile	group					
	Bottom	2nd	3rd	4th	Тор	Total	
Percentages							
Household type							
Retired	64	46	11	3	2	25	
Non-retired							
1 adult	11	14	17	8	3	11	
2 adults	6	14	26	31	29	21	
1 adult with children	9	6	2	1	-	4	
2 adults with children	10	12	31	35	25	23	
3 or more adults ¹	2	6	12	23	40	17	
Total	100	100	100	100	100	100	

¹ With or without children.

Chart 3 illustrates the declining importance of cash benefits in gross income from the virtual dependence of the lowest quintile group to a minor income source for the top quintile group.

Chart 4 shows how the dispersion of incomes is reduced at each stage of the tax-benefit system, so that the average final income for each quintile group ranges from £4,130 to £17,260, a ratio of about 1:4 compared with the ratio for original incomes of about 1:190.

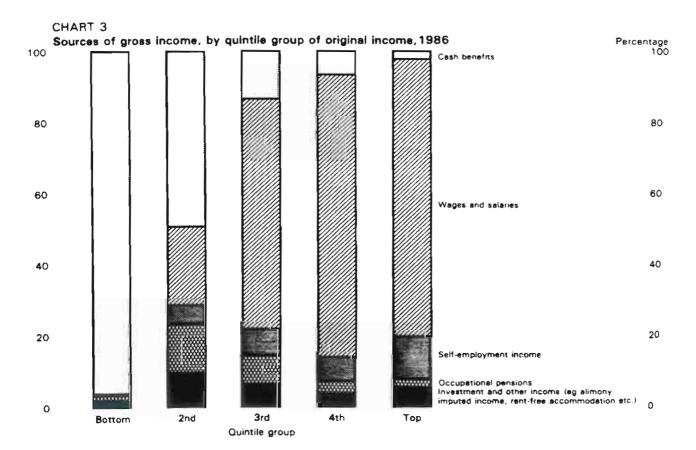
An alternative way to illustrate the extent of income redistribution is to examine how income shares are modified by the tax-benefit system (Table C). For example, households in the highest quintile

group receive 51 per cent of all original income. After taking into account cash benefits, this group's share falls to 44 per cent. At the other end of the scale, the share of the lowest quintile group rises from 0.3 per cent to 5.3 per cent. Further, but comparatively smaller, compressions of the income distribution occur at the stages of disposable and final income.

The Gini coefficient (though not without its drawbacks) is the most widely used summary measure of the inequality of the distribution of income (see paragraph 36 of Appendix 2). It takes values between 0 and 100 per cent - the higher values indicating greater inequality. While it is dangerous to draw detailed conclusions from isolated changes in the Gini coefficient, the reduction from 52 per cent to 40 per cent shown in Table C shows that cash benefits produce the largest reduction in income inequality.

Two tables in Appendix 1 show income shares and Gini coefficients for a span of years, 1975 to 1986. The top quintile group of households increased its share of total original income gradually from 44 per cent in 1975 to 51 per cent in 1986. However, in final income terms the increase is smaller - from 38 to 42 per cent. (Table 10). The Gini coefficient for final income increased steadily from 31 per cent in 1975 to 36 per cent in 1986 (Table 11).

Attention has already been drawn to the preponderance of retired households in the lower ranges of the distribution of original income; nearly two-thirds of the households in the lowest quintile group and almost half of those in the second quintile group are retired (Table B). The income pattern of the retired is very different from that of households whose head is of working age, as is their expenditure pattern (which is reflected in their indirect tax payments). For this reason in the detailed examination of each stage of the tax-benefit system which follows, retired and non-retired households are analysed separately.



The effects of taxes and Average income benefits on quintile groups per household (£ per year) of households 1986 28,000 28,000 Top quintile 24,000 24,000 20.000 20.000 16,000 16,000 4th quintile group 12,000 12,000 3rd quintile group 8,000 8,000 2nd quintile group 4,000 4,000 Bottom quintile group 0 0 Oisposable Income after cash income benefits & all taxes

Households are ranked throughout by their original incomes

Percentage shares of total household income, 1986

TABLE C

	-	Percentage in each quintile group of households re-ranked at each stage										
	Original	Gross income	Disposable income	Post-tax1 income	Final income							
Quintile group												
Bottom .	. 0.3	5.3	6.2	5 1	6 3							
2nd	. 6	10	11	10	11							
3rd	. 16	16	17	16	17							
4th .	. 27	24	24	24	24							
Top	. 51	44	42	45	42							
Total . , ,	100	100	100	100	100							
Decile group												
Bottom .		2.1	2.6	1.6	2.2							
Тор	. 32	28	26	28	26							
Gini coefficient (percent)	. 52	40	36	40	36							

¹ Income after cash benefits and all taxes but before benefits in kind.

RESULTS FOR NON-RETIRED HOUSEHOLDS

Original income

The distribution of original income amongst non-retired households is more equal than amongst all households, ranging from an average of £1,400 per annum in the lowest quintile group to £27,140 in the highest (Table D), a ratio of 1:19 compared to the ratio of 1:191

for the distribution over all households. The relationship between the original income of a household and the number of economically active people it contains is again very strong, and this point is discussed in more detail at the end of this section.

Summary of the effects of taxes and benefits on non-retired households, 1986

TABLE D

		Quintile gro	oups of non-retired households ranked by origina		ed by original inc	come	Averag over al house-
		Bottom	2nd	3rd	4th	Τορ	holds
verage per household (£ per year)							
Original income		1 400	6 820	10 930	15 290	27 140	12 32
plus cash benefits		3 210	1 270	890	720	640	1 34
Gross income		4 610	8 090	11 820	16 020	27 770	13 66
less income tax1 and employees	' NIC	90	1 110	2 160	3 210	6 220	2 56
Disposable income		4 520	6 980	9 660	12 800	21 550	11 10
less indirect taxes		1 330	2 100	2 630	3 180	4 550	2 70
Income after cash benefits and all t	axes	3 190	4 880	7 040	9 620	17 000	8 34
plus benefits in kind		1 900	1 540	1 680	1 640	1 730	1 70
Final income		5 080	6 4 1 0	8 710	11 270	18 730	10 04
ercent that are public sector tenants		58	27	18	9	4	2
verage per household (number)							
Children (i.e. under 16)		0.9	0.7	0.9	0.8	0.7	0
Adults		1.6	1.9	2.1	2.3	2.6	2
People in full-time education .		0.7	0.6	0.7	0 7	0.7	0
Economically active people		0.5	1.3	1.7	2.0	2.3	1
Retired people		. 01	0.2	0.1	0.1	0.1	0

After tax relief at source on mortgage interest and life assurance premiums

Cash benefits

Cash benefits are of two types: contributory, paid from the National Insurance Fund to which individuals and their employers make contributions while working, and non-contributory (Table E). For non-retired households, non-contributory benefits form the most important source of cash benefit income. The major item, child benefit, is spread fairly evenly over the income distribution, in proportion to the number of children per household (Table D). The other non-contributory benefits are mainly means-tested, in particular Supplementary Benefit, and so payments are concentrated in the lowest quintile group, although the presence of some individuals with low incomes in high income households means that some payments are recorded further up the income distribution. Even the contributory benefits, for which contribution records rather than income are the criteria for payment, are highest for the bottom quintile group because payment generally results from curtailment of employment income for one reason or another. On average, cash benefits formed 10 per cent of the gross income of non-retired households: their payment resulted in a significant reduction in income inequality.

Average value of cash benefits for each quintile group of non-retired households ranked by original income, 1986

TABLE E

	Quintile	group		_		
	Bottom	2nd	3rd	4th	Тор	Total
£ per household						
Contributory						
Retirement pension	270	250	160	110	100	180
Sickness/ injury related	360	170	100	70	60	150
Unemployment benefit	140	110	60	50	40	80
Other	150	80	50	30	30	70
Total contributory	920	620	370	260	220	480
Non-contributory						
Supplementary benefit	1150	140	60	60	50	290
Child benefit	380	280	340	310	280	320
Rent rebates/ allowances	490	70	10		10	120
Sickness/ disablement related	150	80	50	30	40	70
Other	130	80	60	60	40	70
Total non-contributory	2290	650	520	470	420	870
Total cash benefits	3210	1270	890	720	640	1340
Cash benefits as a percentage of gross income	70	16	s 8	5	2	10

Although the Housing Benefit scheme, which came into operation between November 1982 and April 1983, combined the former systems of rent rebates/allowances and rate rebates, these two forms of housing assistance continue to be treated differently in the national accounts and thus in this article too. Rent rebates and allowances appear as cash benefits whereas rate rebates are treated as reductions in indirect taxation since domestic rates payments are conventionally treated as indirect taxation.

Income tax and National Insurance contribution:

Both income tax payments and employees' National Insurance contributions are closely related to the size of original income. The payments by households of employees' National Insurance contributions in particular vary with the number of persons in

employment and with their earnings. However, since National Insurance contributions are only calculated on the first £285 of weekly earnings (the ceiling in operation during most of 1986), households in the top quintile group pay rather less in contributions as a percentage of gross income than the middle 60 per cent of households (Table F).

The personal tax allowances are large enough to prevent households in the lowest quintile group from paying much tax, and in fact their tax payments are exceeded by their National Insurance contributions - because whereas tax is not levied on the first slice of income below the tax threshold, NI contributions are calculated on all income (up to the maximum already mentioned) including income below the NI threshold. Due to the progressive nature of the income tax system, the proportion of gross income paid in income tax rises from 0.8 per cent for the lowest quintile group to 17.3 per cent for the highest.

Income tax and employees' NIC as percentages of gross income for each quintile group of non-retired households ranked by original income, 1986

TABLE F

	Quintile	Quintile group									
	Bottom	2nd	3rd	4th	Тор	Total					
Income tax1	0.8	8.4	12.2	13.9	173	13.4					
Employees' NIC	1,1	5.3	6.1	6.2	5.1	5.3					
Total	1.9	13.7	18.2	20 1	22.4	18.7					

¹ After tax relief at source on mortgage interest and life assurance premiums

Indirect taxes

In total, indirect taxes expressed as a proportion of disposable income fall as original income rises (Table G), ranging from 30 per cent in the bottom two quintile groups to 21 per cent in the highest, though the highest quintile pay most in indirect taxes in absolute terms. However, individual taxes have divergent effects.

Domestic rates, tobacco duty, beer duty and intermediate taxes (see box below) all fall as a percentage of disposable income as income rises, even though domestic rates payments are reduced considerably by rebates particularly for the bottom quintile group. The fall in tobacco duty payments as a percentage of income is particularly marked. This is because low income households spend broadly as much in duty payments on tobacco as high income households. Car ownership however increases with income and therefore so does the related expenditure as a proportion of total expenditure, in the form of car tax, vehicle excise duty and duty on hydrocarbon oils.

INTERMEDIATE TAXES

Some indirect taxes, such as VAT and excise duties on petrol, alcohol, tobacco, etc. have a direct effect on the final price of goods and services. However, the producers of these goods and services also incur costs such as employers' National Insurance contributions, non-domestic rates, and duty on hydrocarbon oils, part of which they may pass on to households in the price of their products. These are called intermediate taxes.

TABLE G

	Quintile gro	oup				
	Bottom	2nd	3rd	4th	Тор	Total
Domestic rates ¹	4.0	5.2	4.3	3.8	2.9	3 7
VAT	7.7	8.4	7.8	7.8	7.3	7 7
Duty on beer	 1.0	1.2	1.1	1.0	8.0	1.0
Outy on wines and spirits	 0.8	0.9	0.9	0.9	1.0	0.9
Duty on tobacco	5.5	3 4	2 6	18	1.1	2 2
uty on hydrocarbon oils	 1.4	1.9	1.8	1.8	1.5	1.7
Car tax and vehicle excise duty	 0.7	1.1	1.1	1.1	0.9	1.0
Other taxes on final goods and services	 2.0	1.7	2.0	1.4	1.0	1.4
ntermediate taxes	 6.3	6.3	5.5	5.2	4.7	5.3
Total	 29.5	30.1	27.2	24.8	21.1	24.9

¹ Net of rate rebates and the rates element of housing benefit supplement, but including water, etc. charges.

Although some indirect taxes are broadly progressive, Table G shows that the impact of virtually all the indirect taxes declines for the top quintile group compared with the fourth quintile group. This is so partly because it is likely that higher income households spend a smaller proportion of their income than households with smaller incomes. If the incidence of indirect taxes were to be expressed in terms of expenditure rather than income, they can be shown to be rather more progressive.

Benefits in kind

Government current expenditure in providing certain goods and services to households either free at the time of use or at subsidised prices is converted by imputation into the equivalent of an income flow to individual households in order to arrive at final income. The largest two items for which such imputations are made are the health and education services, which together accounted for 22.3 per cent of total general government expenditure in 1986. Other items for which imputations are made are school meals and milk, the housing subsidy and travel subsidies, together accounting for a further 2.1 per cent of general government expenditure.

Average value of benefits in kind for each quintile group of non-retired households ranked by original income, 1986

TABLE H

	O intile					
	Quintile	group				
	Bottom	2nd	3rd	4th	Тор	Total
£ per household						
Education	930	710	840	850	870	840
National health service	680	680	730	680	730	700
Housing subsidy	140	60	40	30	10	60
Travel subsidies	30	50	40	60	110	60
School meals and milk	110	30	30	20	20	40
Total	1900	1540	1680	1640	1730	1700
Benefits in kind as a percentage of post-tax*						
income	60	32	24	17	10	20

Income after cash benefits and all taxes.

Education benefit to individual households is imputed by reference to the number of pupils and students in the households (students living away from home are not included as part of their parents' household), and to the type of education they are receiving, though no allowance is made for differing costs between local authorities. The bottom quintile group contains the largest number of student households for whom the costs of education are greatest. The result is that the lowest quintile group is allocated the highest average imputed benefit (Table H). The impact of expenditure on school meals and milk is greatest in the lower income groups since children from these households are more likely to take school meals and to have them provided free of charge.

Data are available on the average cost to the Exchequer of providing the various types of health care - hospital inpatient/outpatient care, GP consultations, dental services etc - and it is possible to estimate the use made of each service on average by individuals of different age and sex. Using this information, an imputed benefit from the health service can be allocated to each individual in the FES sample. These benefits are then aggregated for members of the household to yield figures on a household basis, so that not only the sex and age composition but also the size of the household determines the attribution of health service benefits.

Age and sex are by no means the only possible determinants on which to base the allocation, but age is certainly a very important factor. Data availability also limits the choice of determinants the FES collects little information on health or use of health services. Table H indicates that these benefits show little variation with income, on the assumption that the use made of the national health service depends on age and sex regardless of the level of income.

Housing subsidy is the sum of Exchequer Subsidy and local authority determined rate fund contributions to the housing revenue account. Thus housing subsidy as defined here has been spread between public sector tenants, and since such households tend to be concentrated in the lower half of the income distribution this is where the subsidy is highest. In these articles, tax relief on mortgage interest is treated as an adjustment to income tax, not as part of the housing subsidy analysed in Table H.

Travel subsidies cover the passenger element of the grants made to various public transport operations covering both buses and railways. The use of public transport by non-retired households is partly related to the need to travel to work and thus to the number of economically active people in a household and so the combined effect of these travel subsidies increases over the income distribution. The heavy use of railways by households in the top quintile group, particularly commuters, means that their imputed benefit in nearly twice the average of all households.

Table H shows that taken together the absolute values of these benefits in kind show no clear relationship with household income, given the assumptions made in making the imputations. However as a proportion of post-tax income, benefits decrease from 60 per cent in the lowest quintile group to 10 per cent in the highest quintile group, indicating that this expenditure contributes to the reduction in income inequality.

Percentage shares of total household income for non-retired households, 1986

TABLE J

				quintile group d at each sta		tired	
		Original income	Gross			Final income	
Quintile group							
Bottom		2.3	6.3	7.2	5.7	6.7	
2nd		11	12	13	12	13	
3rd		18	17	18	17	18	
4th		25	24	23	23	23	
Тор		44	41	39	42	39	
Total	, .	100	100	100	100	100	
Decile group							
Bottom		0.1	2.3	2.7	1.7	2 2	
Тор		28	25	24	26	24	
Gini coefficien (percent)	it 	42	35	32	36	33	

Income after cash benefits and all taxes but before benefits in kind

The overall effect of the various stages of the tax-benefit system on non-retired households is summarised in Table J. Households in the highest quintile group receive 44 per cent of all original income, compared with 2 per cent received by the lowest quintile group. However after taxes and benefits are taken into account, the share of the lowest quintile group rises to 7 per cent and that of the highest falls to 39 per cent. Cash benefits are the major factor underlying these changes, causing the Gini coefficient to fall from 42 per cent based on original income to 35 per cent based on gross income. Income tax and employees' National Insurance contributions produced a further reduction in inequality, but payment of indirect taxes increases inequality. Benefits in kind reduce income dispersion.

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As already mentioned, the size of original income is largely determined by the number of economically active people in the household - even though someone may be defined as economically active if they have been out of work for up to a year as long as they are seeking work. This relationship between income and economic activity amongst non-retired households is explored further in Table K, in which households are classified according to the number of economically active people they contain.

Original income ranges from an average of £1,200 per annum in households where there are no economically active people to an average of £21,120 in households where there are three or more. Cash benefits are concentrated in households where no-one is economically active and here they form 75 per cent of gross income; but they remain substantial, at 13 per cent of gross income, for those where one household member is economically active. This latter group will contain a number of households where no-one is currently in work.

Not only does average original income differ widely between these four household groups but they also differ considerably in the degree of variation of income within the groups. As measured by the Gini coefficient, variability in original income is very high amongst households where no-one is economically active but where two or more persons are economically active the variability is considerably less. Equally, the tax-benefit system has the effect

Average incomes, taxes and benefits by the number of economically active people per non-retired household, 1986

TABLE K

		Number of economically active people ¹ per household						
		None	One	Two	Three or more			
Number of households in the sample		639	1 989	2 123	615			
Average per household (£ per year)								
Original income		1 200	9 470	15 780	21 120			
plus cash benefits		3 530	1 370	790	920			
Gross income		4 730	10 840	16 560	22 040			
less income tax and employees' NIC		80	2 000	3 260	4 490			
Disposable income		4 650	8 840	13 300	17 560			
less indirect taxes		1 270	2 290	3 120	4 560			
Income after cash benefits and all taxes		3 380	6 540	10 180	13 000			
plus benefits in kind		2 000	1 550	1 620	2 140			
Final income		5 370	8 090	11 800	15 140			
Gini coefficients (per cent)								
Original income		87	39	28	24			
Gross income		30	32	26	22			
Final income		35	33	26	22			

¹ Economically active people comprise employees, the self employed and others not in employment but who are seeking or intending, when able, to seek work.

of substantially reducing inequality between the different types of households within the economically inactive group. This results largely from the diverse nature of the economically inactive group, which ranges from single parents with young children, single full-time students, the disabled, and households where no member has been able to find work during the 12 months prior to interview, to a small number of households where income from other sources such as investments means that they have no need to work.

RESULTS FOR RETIRED HOUSEHOLDS

Retired households have quite distinct income and expenditure patterns and so the tax-benefit system affects them in a different way to non-retired households (Table L). Few retired households have substantial original income; those who do are concentrated in the top quintile group and are receiving occupational pensions. The majority of retired households are dependent on cash benefits, in the form of state retirement pensions and, particularly in the bottom quintile group, income-related benefits such as rent rebates and allowances and Supplementary Pension.

Thus cash benefits form a very high proportion of gross income for all but the better-off retired households. However, unlike non-retired households, the bulk of these cash benefits are paid from the National Insurance Fund into which the recipients will have made contributions throughout their working lives.

People over pensionable age do not pay National Insurance contributions so the small payments recorded are made by non-retired people living in households defined as retired (see Appendix 2 paragraph 7 for details of definition). All households except those in the highest quintile group of retired households pay very little income tax, because their income is unlikely to exceed their tax allowances unless they have significant income from investments or occupational pensions in addition to their state retirement pension. The largest indirect tax payment made by retired households is VAT; their payments of domestic rates are reduced by rebates particularly in the lower half of the income distribution.

Retired households derive significant benefits from health services and, to a lesser extent, the housing subsidy and travel subsidies, though of course virtually none from the education service. Health benefit is spread fairly evenly within the group of retired households, as a result primarily of the attribution method used, but housing subsidy is substantially higher for low income households since they are more likely to be public sector tenants. The benefits received by retired households from travel subsidies are mainly for bus travel, particularly in the form of concessionary fares, passes, etc, for senior citizens, and since these are not usually means-tested but depend instead on what sort of scheme is being operated by their local authority, there is no particular relationship with income.

Effects of taxes and benefits on retired households, 1986

TABLE L

		Quintile grou	ups of retired hou	useholds ranked t	y original income	•	Average over all
		Bottom	2nd	3rd	4th	Тор	house- holds
Average per household (£ per year	1						
Original income			150	680	2 030	8 600	2 290
plus cash benefits							
Contributory							
Retirement pensions		 2 230	2 380	2 450	2 630	2 500	2 440
Sickness/ injury related		 80	30	70	130	120	80
Unemployment benefit		 •	•	10	10	20	10
Other		10	40	50	40	40	40
Non-contributory							
Supplementary benefit		 180	140	60	20	10	80
Child benefit		 10				10	
Rent rebates/ allowances		 530	400	210	60		240
Sickness/ disablement relate	d .	 130	80	100	120	100	100
Other		 80	60	70	80	80	80
Gross income		 3 260	3 270	3 700	5 110	11 480	5 360
less income tax1		-10	10	50	310	2 030	480
less employees' NIC						20	10
Disposable income		 3 270	3 270	3 650	4 800	9 420	4 880
less indirect taxes							
Domestic rates		 140	160	250	370	540	290
VAT		 160	180	200	310	650	300
Tobacco duty		 80	60	100	110	90	90
Other taxes on final goods an	d services	 130	170	200	280	540	260
Intermediate taxes		 170	190	210	280	530	280
Income after cash benefits and a	Il taxes	 2 590	2 500	2 680	3 460	7 060	3 660
plus benefits in kind							
Education		 20			10	60	20
National health service		 1 000	1 070	1 010	1 070	1 060	1 050
Housing subsidy		 140	100	80	70	20	80
Travel subsidies		 . 60	70	60	80	70	70
Final income		 3 810	3 730	3 840	4 700	8 280	4 870

¹ After tax relief at source on mortgage interest and life assurance premiums

Table M shows the extent to which income inequality amongst retired households is reduced by the tax-benefit system. Cash benefits play by far the largest part in bringing about this reduction and income tax payments make a further, though much smaller, contribution. Payments of indirect taxes and receipts of benefits in kind produce only a marginal reduction in dispersion and so the distribution of final income is little changed from the distribution of disposable income.

A comparison of Table M with Table J shows that although the distribution of original income amongst retired households is much more unequal than that within the non-retired household group, the distribution of final income is more equal amongst the retired than amongst the non-retired. Chart 5 illustrates the different impact which the tax-benefit system has on retired and non-retired households.

CHART 5 The effects of taxes and Average income benefits on retired and per household non-retired households, 1986 (£ per year) 14,000 14,000 12,000 12,000 Non-retired 10,000 10,000 8,000 8.000 6,000 6,000 4,000 4,000 Retired households 2.000 2.000 0 0 Origina after cash benefits

Percentage shares of total household income for retired households, 1986

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TABLE M

			ge in each i Lat each st	quintile group age	of retired	household
		Original income	Gross	Disposable income	Post-tax ¹ income	Final income
Quintile group						
Bottom			9.1	9.9	7.8	9.3
2nd		1	12	13	13	14
3rd		6	15	16	16	17
4th		18	20	21	21	22
Τορ	٠.	75	44	40	42	37
Total		100	100	100	100	100
Decile group						
Bottom			4.1	4.5	2.6	3.5
Тор		54	29	25	27	23
Gini coefficient						
(percent)		73	34	30	33	28

¹ Income after cash benefits and all taxes but before benefits in kind.

PART II

DETAILED BREAKDOWN OF ORIGINAL INCOME

Table N shows that almost 90 per cent of original income comes from earnings, with 5 per cent each from occupational pensions/annuities and investment income. The pattern for retired households is very different with 60 per cent of the total from occupational pensions/annuities and 35 per cent from investments. Among the quintile groups, investment income as a proportion of total original income is highest for the bottom group (40 per cent) then falls to 14 per cent for the second group and 5 per cent for the top group.

A more detailed look at income from earnings and investments is given in Tables O and P. For all households; some 85 per cent of earnings income comes from the main job with 12 per cent coming from self-employment. There is little variation in these proportions between quintile groups (Table O). Half of investment income comes from building society interest, with stocks and shares the next largest category, forming 27 per cent of the total (Table P). There is a big difference between retired and non-retired

Components of original income, 1986

& all taxes

TABLE N

	Quintile gr	aups of hous	eholds ranke	d by original i	ncome		Non-	Average over all
	Bottom	2nd	3rd	4th	Тор	Retired	Retired	household
Average per household (£ per year)								
Earnings	10	1 420	5 980	9 400	16 050	110	8 760	6 570
of highest earner of others	 -	80	710	2 760	6 720	10	2 750	2 050
Total earnings	 10	1 500	6 700	12 160	22 770	110	11 500	8 630
Occupational pensions, annuities	 50	770	720	480	620	1 360	250	530
Investment income	 50	400	480	430	1 180	780	410	510
Other income ¹	 10	130	130	110	220	20	150	120
Total original income	130	2 800	8 030	13 180	24 790	2 290	12 320	9 790
Number of households in the sample	1 435	1 436	1 436	1 435	1 436	1812	5 366	7 178

¹ Trade union benefits, income of children under 16, imputed value of rent free accommodation (when tenure not dependant on job), private scholarships, earnings as 8 mail order agent or baby sitter, regular allowance from non-spouse, allowance from absent spouse

households with the former having almost twice as much investment income as the latter. The proportions of building society interest and stocks and shares vary between quintile groups: the middle three groups have some 60 per cent of their investment income from building society interest whereas the top quintile group has 37 per cent, and 50 per cent for the bottom group. Stocks and shares form 37 per cent of the total for the top quintile group and the proportion declines to 4 per cent for the bottom quintile

Table Q gives a breakdown of original income by household type. For all the non-retired groups, earnings make up at least 90 per cent of the total - except the 1 adult with children group where the figure is 64 per cent. This group also has a large amount of 'other income', (forming some 30 per cent of the total) - this is mainly a regular allowance from a non-spouse ie alimony. Income from investments and occupational pensions/annuities contribute little to original income for the non-retired groups, but both these sources are important for retired households.

Components of earnings, 1986

TABLE O

		Quintile gr	roups of hous	ehoids ranke	d by original	income		A1	Average over all
		Bottom	2nd	3rd	4th	Тор	Retired	Non- Retired	households
Average per household (£ ;	er year)								
Gross earnings from main j	ob	 10	1 170	5 870	10 990	18 970	90	9 870	7 400
Gross earnings from subsid			10	40	60	130		70	50
Occasional payments			10	40	100	540		180	140
Income in kind			20	30	50	70	10	40	40
Self-employment income			290	710	960	3 050	10	1 340	1 000
Income from odd.jobs		 -	-	10		10		•	
Total earnings		 10	1 500	6 700	12 160	22 770	110	11 500	8 630

Components of investment income, 1986

TABLE P

_			Quintile gi	oups of hous	eholds ranke	by original i	ncome		Non	Average over all households
			Bottom	2nd	3rd	4th	Тор	Retired	Non- Retired	
Average per household (£ ;	эөг үеа	r)								
Building Society interest (g	oss)		30	240	290	260	440	390	200	250
Dividends on stocks and sh		ross)		50	100	80	440	230	100	140
Other interest ¹			20	80	60	40	140	130	50	70
				10	30	30	90	30	40	30
Other unearned income				10	-	10	70	20	20	20
Total investment income			50	400	480	430	1 180	800	410	510

¹ National Savings Bank Investment and Ordinary Savings accounts, TSB deposits, British Savings Bonds and War Loan, other savings bank accounts and deposits.

Components of original income by household type¹, 1986

TABLE Q

	Retired #	nouseholds	Non-retu	ed househ	olds						_
	1 adult	2 or more adults	1 adult	2 adults	3 or more adults	1 adult with children	2 adults 1 child	2 adults 2 children	2 adults 3 or more children	3 or more adults with children	Average over all house- holds
£ per household											
Earnings of highest earner of others	20	210	6 020	8 840 3 220	9 740 6 710	1 600	9 580 2 090	10 720	9 1 1 0 9 3 0	11 230 4 780	6 570 2 050
Total earnings Occupational pensions, annuities Investment income Other income ²	20 730 490 20	230 2 110 1 160 30	6 020 170 490 70	12 060 450 540 80	16 450 460 610 110	1 600 80 80 730	11 660 100 170 290	12 340 30 330 90	10 040 10 130 150	16 020 160 340 200	8 630 530 510 120
Total original income	1 260	3 520	6 740	13 130	17 620	2 490	12 230	12 800	10 330	16 710	9 790
Number of households in the sample	986	826	758	1 530	746	266	550	742	325	449	7 178

¹ See appendix 2 for definitions of adults, children and retired households.
2 Trade union benefits, income of children under 16, imputed value of rent free accommodation (when tenure not dependant on job), private scholarships, earnings as a mail order agent or baby sitter, regular allowance from non-spouse, allowance from absent spouse.

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1 Footnote to Table 4. Some of the household types in this table are based on relatively small sample sizes, and these results are subject to a greater degree of uncertainty. Large fluctuations can occur from year to year and these could mislead anyone attempting to analyse time series. For example, the one adult with children group has 266 households in the 1986 sample. Two households in this group recorded exceptionally large payments on 'structural additions' which together with associated legal expenses, averaged £4,200 per week in the diary record (covering a fortnight). Large values like these greatly affect the averages for this small group (there were no such large values in 1985). If these two items were excluded for these two households, taxes on final goods and services would fall from £1,791 to £1,250 in the top quintile group and from £892 to £784 over all quintile groups (see Table 4 (vi) in this appendix). Intermediate taxes would fall from £680 to £525 in the top quintile group and from £345 to £314 over all quintile groups, with consequential increases in 'income after cash benefits and all taxes' and 'final income'.

These large values occur from time to time because of the way expenditure is recorded in the FES. Whitst income is assessed in terms of a household's estimated 'usual'

These large values occur from time to time because of the way expenditure is recorded in the FES. Whilst income is assessed in terms of a household's estimated 'usual' weekly income over a 12-month period, the assessment of all expenditure items over such a period in the FES is not practical and therefore many items have to be recorded over a two-week period, and are then converted to an annual basis. This can sometimes lead to an apparent imbalance between income and expenditure.

General government expenditure in 1986

TABLE 1

						f	E million	Percentage of total expenditure
Allocated expenditure ¹						_		
Allocated cash benefits								
Social security benefits								
National Insurance (co	ontributory)							
Retirement			 			 	17 700	10.9
Widows and guar	dians						870	0.5
Unemployment			 			 	1 790	1.1
Sickness/ Statuto	ry sick pay		 			 	920	0.6
Invalidity			 			 	2 720	1.7
Maternity			 			 	180	0.1
Disablement			 			 	460	0.3
Other			 			 	90	0.1
Non-contributory								
Child benefit			 				5 000	3.1
Supplementary be	nefit		 			 	8 230	5.1
War pension			 				570	0.4
Other			 			 	1 690	1.0
Student maintenance gra							750	
Rent rebates and rent all			 	٠.		 	3 250	0.5
	owances	* *	 			 	3 250	2.0
Allocated benefits in kind								
Health services			 			 	18 240	112
Education			 			 	17 880	11.0
School meals and milk			 			 	670	0.4
Housing subsidy			 			 	1 430	0.9
Travel subsidies ³			 - •			 	1 330	0.8
						_	83 760	51.6
Unallocated expenditure								
Other current expenditure			 			 	52 370	<i>32 3</i>
Capital expenditure			 			 	6 500	4.0
Debt interest			 			 	17 020	10.5
Non-trading capital consum	ntion						2 540	1.6
Non-trading capital consum	P(1011		 		, .	 	2 340	7.6
Total expenditure			 			 	162 190	100.0

 $^{^{\}rm 1}$ Including benefits to people not living in private households $^{\rm 2}$ Estimated. $^{\rm 3}$ Including concessionary fares expenditure

Source: United Kingdom National Accounts, 1987 edition, Table 9.4

Financing of general government expenditure in 1986

TABLE 2

								£ million	Percentage of total financing
Allocated financing 1									
Income tax 2								37 620	23.2
Employees' and self-employed NI co	ntributio	ons					 	12 810	7.9
Indirect taxes Domestic rates (net of rebates)								7 020	4 3
Taxes on final goods and service	:s								
VAT							 	16 020	9.9
Duty on beer and cider							 	1 920	1.2
Duty on wines and spirits							 	1 960	1.2
Duty on tobacco							 	4 470	2.8
Duty on hydrocarbon oils							 	3 430	2.1
Car tax and vehicle excise d	uty						 	2 180	1.3
Other							 	2 400	1.5
Taxes and NI contributions on in	termedi	ate goo	ds and	servic	es				
Employers' NI contributions							 	4 330	2.7
Commercial and industrial ra	tes						 	3 750	2.3
Duty on hydrocarbon oils							 	1 970	1.2
VAT							 	1 030	0.6
Vehicle excise duty							 	520	0.3
Other							 	690	0.4
								102 120	63.0
Unallocated financing Employers' NI contributions not alloc	ated						 	8 930	5.5
Indirect taxes									
Commercial and industrial rates Other taxes on expenditure not a							 	4 470	2.8
VAT	inocarc.							5 670	3.5
Duty on hydrocarbon oils						٠.	 	1 900	1.2
Other							 	2 870	1.8
Other taxes								12.050	7.4
Corporation tax							 	12 050	7.4
Petroleum revenue tax							 	2 700 2 590	1.7 1.6
Taxes on capital	. ,								
Other receipts 3							 	15 620	9. <i>6</i>
Government borrowing requirement							 	3 270	2.0
Government bonowing requirement									

Source United Kingdom National Accounts, 1987 edition, Table 9.1

<sup>Including taxes paid by people not living in private households.
Net of tax rehef at source on mortgage interest and life assurance premiums.
Receipts of rent, royalties and licence fees on oil and gas production, interest, dividends, trading income and miscellaneous transactions (net).</sup>

		£ per y	ear									
		Decile g	lonb									Averag over all
		1 st	2nd	3rd	4th	5th	6th	7th	8th	91h	10th	groups
(i) Ranked by original income All households												
Decile points (f)		1	3 6	63 2 5	598 5 4	160 80	044 10	517 13	097 16	153 21	163	
Number of households in the sample		718	717	718	718	718	718	718	717	718	718	7178
Original income		1	257	1 507	4 086	6 784	9 274	11 792	14 572	18 382	31 194	9 785
Direct benefits in cash Contributory												
Retirement pension		1 111	1 883	1 835	1 038	612	322	260	158	133	142	749
Sickness/ injury related		195	96	269	242	131	123	90	75	60	70	135
Unemployment benefit		37 72	44 68	61 93	117 107	104 67	62 62	59 42	46 33	37 28	41 21	61 59
Other contributory benefits Non-contributory		12	00	93	107	67	62	42	33	20	21	59
Supplementary benefit		1 083	373	304	253	86	67	66	62	59	50	240
Child benefit		236	86	115	213	230	305	324	312	303	253	238
Rent rebates/ allowances		609	398	222 117	133	53 73	21	9 47	44	3	9	146
Sickness/ disablement related Other non-contributory benefits		160 83	115 95	85	97 150	73 89	63 34	68	52	33 52	29 40	78 75
		3 587	3 4 1 3	4 608	6 437	8 230	10 333	12 756	15 358	19 089	31 848	11 566
Gross income		-21	11	133	518	1 185	1 787	2 356	3 058	3 994	7 312	2 034
income tax' and Employees' NIC		3 608	3 403	4 4 7 5	5 918	7 044	8 545	10 401	12 299	15 095	24 535	9 533
Disposable income		124	176	285	337	387	413	435	486	522	664	383
Domestic rates? Taxes on final goods and services		539	512	756	1 052	1 231	1 576	1 670	2 006	2 355	3 095	1 479
Intermediate taxes		201	212	273	386	436	509	550	654	792	1 081	509
Income after cash benefits and all taxes		2 743	2 502	3 161	4 144	4 990	5 047	7 746	9 154	11 427	19 695	7 161
Benefits in kind												
Education		490	252	331	573	614	683	863	839	860	831	634
National health service		867	947	917	818	723	742	728	696	715	731	789
Housing subsidy		162	100	92	69	53	46	37	26	19	12	62
Travel subsidies		45	56	63	50	53	45	46	50	78	117	60
School meals and milk Final income	, .	66 4 373	29 3 886	34 4 598	51 5 704	29 6 462	21 7 583	25 9 445	22 10 788	19 13 118	14 21 399	31 8 736
(ii) Ranked by disposable income All households												
Decile points (£)		3 (001 4	065 5	124 65	589 7 5	961 9	566 11	347 13	617 17	348	
Number of households in the sample		718	718	717	718	718	718	718	717	718	718	7 178
Original income		349	953	2 039	4 118	6 664	8 822	11 616	14 314	18 227	30 748	9 785
Direct benefits in cash												
Contributory		1 242	1 519	1 385	988	600	604	226	276	245		7.00
Retirement pension Sickness/ injury related		1 342 47	71	162	213	609 217	604 173	336 138	276 147	245 96	191 85	749 135
Unemployment benefit		30	20	51	94	113	70	70	64	48	48	61
Other contributory benefits		57	78	60	113	65	51	51	37	45	34	59
Non-contributory											_	
Supplementary benefit		289	390	536	376	279	165	111	102	67	87	240
Child benefit Rent rebates/ allowances		45 310	81 414	178 328	242 182	284 109	301 55	321 33	311 15	32 t 5		238 146
Sickness/ disablement related		14	38	61	149	102	127	98	65	54		78
Other non-contributory benefits		36	54	98	99	76	74	84	78	80	68	75
Gross income		2 521	3 619	4 898	6 576	8 520	10 441	12 857	15 409	19 188	31 631	11 566
Income tax and Employees' NIC		68	123	319	721	1 255	1 696	2 386	3 001	3 957	6 809	2 034
Disposable income		2 453	3 495	4 579	5 855	7 265			12 408		24 822	9 533
Domestic rates ²		174	205	248	320	370	404	437	474	538	659	383
Taxes on final goods and services		434	509	784	1 042	1 257	1 578	1 672	2 035	2 342		1 479
Intermediate taxes		188	203	284	383	421	508	546	669	799		509
Income after cash benefits and all taxes		1 657	2 578	3 262	4 110	5 218	6 257	7 816	9 229	11 553	19 930	7 161
Benefits in kind												
Education		144	186	339	595	696	707	905	873	911		634
National health service		745	794	883	822	771	833		734	772		789
Housing subsidy		90 47	113 47	113 60	88 53	67 45	49 42		30 6 5	16 81	12 116	62
Travel subsidies School meals and milk		10	24	42	53 59	50	34	30	22	23		60 31
		2 693	3 742	4 699	5 727	6 848	7 922				21 844	8 736
Final income		2 053	3 /42	4 633	5 /2/	0 040	1 322	22/2	10 953	13 35/	2 1 844	6 /36

Net of tax relief at source on mortgage interest and life assurance premiums. See Appendix 1.2 Net of the rate element of housing benefit, but including water, etc. charges.

									Augrago
				Quintile group					Average over all quintile
				1 st	2nd	3rd	4th	Sth	groups
i) 1 adult retired									
Quintile points (£)	• •	•			13	30 57	5 15	97	
Number of households in the	sample			39	941	198	197	197	986
Original income					23	342	969	4 940	1 258
Direct benefits in cash									
Contributory						1.004	1 005	1 868	1.05
Retirement pension				1 9	9	1 984 14	1 985 11	34	1 95! 1!
Sickness/ injury related Unemployment benefit							6	8	
Other					16	77	56	96	5.
Total contributory				1 9	93	2 076	2 057	2 006	2 02
Non-contributory							_		
Supplementary benefit				1	27	33	3		5
Child benefit					39	310	160	20	314
Rent rebates/ allowances	hate				55	56	17	24	4
Sickness/ disablement rel: Other	ateu				69	34	67	48	51
Total non-contributory					90	433	247	93	470
Gross income				2 8		2 850	3 273	7 039	3 75
Income tax ² and Employees'					-1	34	111	1 226	27
	1410			2 8		2 816	3 163	5 813	3 48
Disposable income									
Domestic rates ³					30 73	183 310	262 385	446 628	230
Taxes on final goods and se-					46	165	184	292	37- 18
Intermediate taxes							2 332	4 447	
ncome after cash benefits and	all taxes			2 2	57	2 158	2 332	4 44/	2 69
Benefits in kind							7		
Education	• •				89	874	7 826	75 <i>7</i>	0.4
National health service					28	91	87	40	84 9
Housing subsidy				•	51	50	50	62	5
Travel subsidies School meals and milk	•						-		~.
Final income				3 3	25	3 173	3 301	5 306	3 68
(ii) 2 or more adults retired									
Quintile points (£)				152	89	90 23	76 56	72	
Number of households in the				165	165	166	165	165	82
rediffer of flooderings at the									
Original income				30	502	1 527	3 856	11 704	3 52
Direct benefits in cash									
Contributory									
Retirement pension		• •		3 044	3 174	3 120	3 022	2 724	3 01
Sickness/ injury related			, .	186	109 10	221 16	193 28	120 22	16
Unemployment benefit				17	23	18	18	15	1:
Other Total contributory				3 247	3 315	3 376	3 261	2 882	3 21
Non-contributory	• /			-					
Supplementary benefit				312	148	68	38	1	111
Child benefit				19			9	9	
Rent rebates/ allowances		. ,		411	220	89	15	-	14
Sickness/ disablement re		-		246	164	166	202	114	17
Other				104 1 092	56 588	77 400	204 468	52 176	9
Total non-contributory									54
Gross income				4 370	4 405	5 302	7 585	14 763	7 28
Income tax ² and Employees	NIC			-15	29	146	623	2 880	73
Disposable income				4 385	4 376	5 156	6 962	11 883	6 55
Domestic rates ³				190	246	353	450	602	36
Taxes on final goods and se	rvices			644	728	831	1 151	1 558	98
Intermediate taxes				251	290	290	489	612	38
Income after cash benefits and	all taxes			3 299	3 112	3 683	4 872	9 111	4 B1
Benefits in kind									
Education				54		16	35	105	4
National health service				1 381	1 314	1 259	1 323	1 138	1 28
Housing subsidy			• •	119 83	66 84	64 101	60 85	4	6
Travel subsidies				1	. 84	101	.2	68 3	8
School meals and milk									
Final income				4 937	4 576	5 123	6 373	10 428	6 28

More than a fifth of these households had no original income, so the bottom group is undefined After tax relief at source on murigage interest and life assurance premiums. Net of the rate rebate element of housing benefit, but including water, etc. charges

		£ per year					
		Quintile gro	up				Average over all quintile
		151	2nd	3rd	4th	5th	groups
(iii) 1 adult non-retired							
Quintile points (£)		 6.	94 43	62 70	74 105	83	
Number of households in the	sample	 152	151	152	151	152	758
Original income		 64	2 661	5 839	8 748	16 390	6 743
Direct benefits in cash							
Contributory			464	39	73	16	
Retirement pension Sickness/ injury related		 318	126	68	32	10	118 111
Unemployment benefit		 76	85	21	6	9	39
Other		 171	244	133	103	59	142
Total contributory		 565	920	261	215	94	410
Non-contributory				2.2			
Supplementary benefit		 1 004	158 2	33	11	-	242
Child benefit Rent rebates/ allowances		 559	243	21	6	•	166
Sickness/ disablement rela	ated	 197	30		7	33	54
Other	. ,	 121	57		1	13	39
Total non-contributory		 1 881	489	54	25	47	500
Gross income		 2 5 1 0	4 070	6 152	8 988	16 531	7 653
Income tax1 and Employees'	NIC	 -20	310	1 207	2 057	3 690	1 449
Disposable income		 2 530	3 760	4 946	6 931	12 841	6 204
Domestic rates?		 114	268	302	397	432	303
Taxes on final goods and see	vices	 516	642	884	1 197	1 526	953
Intermediate taxes		 159	222	306	391	520	320
Income after cash benefits and	all taxes	 1 740	2 627	3 454	4 946	10 362	4 628
Benefits in kind							1 020
Education		 246	157	61			93
National health service		 262	297	211	213	199	236
Housing subsidy		 135	87	43	38	12	63
Travel subsidies		 21	35	40	38	71	41
School meals and milk		 2		•	•		
Final income		 2 406	3 204	3 807	5 235	10 644	5 062
(iv) 2 adults non-retired							
Quintile points (£)		 5	750 98	13 6	536 18	167	
Number of households in the	sample	 306	306	306	306	306	1 530
Original income		 2 741	7 922	11 732	15 702	27 532	13 126
Direct benefits in cash Contributory							
Retirement pension		 798	407	205	107	114	326
Sickness/ injury related		 586	193	98	57	54	198
Unemployment benefit		 123	87	41	24	25	60
Other Total contributory		 103 1 611	63 750	38 382	7 196	23 215	47
Non-contributory		 1011	750	302	130	213	631
Supplementary benefit		 603	60	29	18	11	144
Child benefit		 10	11	4	4	1	6
Rent rebates/ allowances		 254	62	15	6	2	68
Sickness/ disablement rel	ated	 253	88	32	23	18	83
Other		 139	39	39	26	3	49
Total non-contributory		 1 258	260	118	77	35	350
Gross income		 5 610	8 932	12 232	15 975	27 782	14 106
Income tax1 and Employees	NIC	 297	1 437	2 420	3 448	6 486	2 817
Disposable income		 5 314	7 496	9 812	12 527	21 297	11 289
Domestic rates ² Taxes on final goods and se	rvices	 273 1 016	390 1 401	410 1 720	466 1 898	593 2 503	426 1 708
Intermediate taxes		 	474	507	617	878	563
Income after cash benefits and		 	5 230	7 175	9 547	17 322	8 592
Benefits in kind		 3 00.	2 200	, .	0 0 77	322	0 332
Education		 273	91	87	37		98
National health service		 661	595	498	435	442	526
Housing subsidy			49	36	24	3	43
Travel subsidies			66	38	52	96	62
School meals and milk		 2					
Final income		 4 785	6 031	7 835	10 095	17 862	9 322

¹ After tax relief at source on mortgage interest and life assurance premiums.
² Net of the rate rebate element of housing benefit, but including water, etc. charges

				£ per year					
				Quintile grow	- Qt				Average over all quintile
				1 st	2nd	3rd	4th	5th	groups
(v) 3 or more adults, with no c	hildren								
Quintile points (£) .				9 ;	750 14	124 18	511 23	877	
Number of households in the	e sample			149	149	150	149	149	746
Original income				5 653	12 066	16 254	21 175	32 978	17 623
Direct benefits in cash									
Contributory				730	550	300	189	111	220
Retirement pension Sickness/ injury related				538	310	130	145	92	376 243
Unemployment benefit				218	159	70	63	67	115
Other				97	37	24	37	12	41
Total contributory				1 582	1 056	524	435	281	775
Non-contributory									
Supplementary benefit				734	248	126	93	75	255
Child benefit				63	53	64	61	49	58
Rent rebates/ allowances				188	23	3	21	4	48
Sickness/ disablement re	lated			351	87	54	71	27	118
Other				401 1 737	158	162	99	103	184
Total non-contributory					569	408	345	258	663
Gross income			٠.	8 971	13 691	17 187	21 956	33 517	19 062
Income tax ¹ and Employees	, NIC			822	2 210	3 44 1	4 716	8 052	3 848
Disposable income				8 149	11 481	13 746	17 240	25 465	15 214
Domestic rates ²				319	434	471	512	645	476
Taxes on final goods and se				1 765	2 155	2 618	3 175	3 990	2 740
Intermediate taxes				545	650	769	911	1 258	827
Income after cash benefits and	all taxes			5 520	8 241	9 888	12 641	19 572	11 171
	0				0 2	5 500		13 372	, , , , ,
Benefits in kind Education				1 058	603	563	382	895	300
National health service				898	812	774	816	807	700
Housing subsidy				71	73	44	28	16	821 47
Travel subsidies				57	73	92	107	174	101
School meals and milk				10	2	2	2	1	3
Final income				7 614	9 804	11 362	13 975	21 465	12 842
(vi) 1 adult with children									
Quintile points (£)			• •		. 10	00 17	724 45	900	
Number of households in th	e sample				1063	54	53	53	266
Original income					8	849	3 166	8 470	2 494
Direct benefits in cash Contributory									2.101
Retirement pension Sickness/ injury related					89	74	14	10	55
Unemployment benefit						29	18	7	11
Other					153	91	182	118	139
Total contributory					242	194	213	135	205
Non-contributory									
Supplementary benefit				1	882	1 254	313	99	1 086
Child benefit					732	672	810	800	749
Rent rebates/ allowances	5				773	718	466	90	565
Sickness/ disablement re	lated	, .			25		20	20	18
Other					51	158	218	10	98
Total non-contributory				3	463	2 801	1 827	1 018	2 5 1 6
Gross income				3	714	3 844	5 207	9 623	5 215
income tax1 and Employees	' NIC				-34	-45	111	944	187
Disposable income				3	748	3 889	5 095	8 679	5 027
				3	110	153	212		
Taxes on final goods and se					564	726	818	464 1 791 °	209 892°
Intermediate taxes				_	229	271	316	680*	345
Income after cash benefits and	all taxes			2	845	2 739	3 750	5 745*	3 582°
Benefits in kind									
Education				1	003	1 475	1 739	1 608	1 366
National health service			٠.		697	500	549	495	587
Housing subsidy					189	148	133	71	146
Travel subsidies			٠.		12	16	39	43	25
School meals and mill.					201	216	173	58	170
					947	5 095	6 383	8 018*	5 875

After tax relief at source on mortgage interest and life assurance premiums.

Net of the rate rebate element of housing benefit, but including water, etc. charges.

More than a fifth of these households had no original income, so the bottom group is undefined. See footnote 1 on page 100.

			£ per year					
			Quintile gr	oup				Average over all
			1 st	2nd	3rd	4th	5th	quintile groups
vii) 2 adults, 1 child								
Quintîle points (£)			. 5	625 9	177 12	208 16	116	
Number of households in the	sample		110	110	110	110	110	550
Original income			2 329	7 783	10 671	14 067	26 315	12 233
Direct benefits in cash Contributory								
Retirement pension			. 83	18			20	24
Sickness/ injury related			. 257	78	53	53	14	91
Unemployment benefit			. 228	231	155	52	43	142
Other			. 189	111	74	105	66	109
Total contributory			. 757	438	281	210	142	366
Non-contributory								
Supplementary benefit			. 1 224	47	28	31	50	276
Child benefit			. 378	380	366	379	366	374
Rent rebates/ allowances	atad		. 404	17	3	11	20	91
Sickness/ disablement rel			. 60	19 26	72 8	10 4		32
Other Total non-contributory			. 2 169	489	476		5	29
						435	441	802
Gross income			. 5 255	8 710	11 429	14 712	26 899	13 401
Income tax and Employees	NIC		. 143	1 155	1 880	2 937	6 109	2 445
Disposable income			. 5 113	7 555	9 549	11 775	20 790	10 956
Domestic rates ²			. 208	373	401	477	602	412
Taxes on final goods and se	rvices		. 910	1 319	1 473	1 771	2 364	1 568
Intermediate taxes	, .		. 311	460	486	578	858	539
Income after cash benefits and	all taxes		. 3 683	5 403	7 189	8 949	16 965	
Benefits in kind Education	un tonoo		. 783	505	620	630	546	8 438 617
National health service			. 841	918	770	820	803	
Housing subsidy			. 108	49	56	33	9	830 51
Travel subsidies			. 30	30	20	50	67	39
School meals and milk			. 68	28	26	23	14	32
Final income			. 5 513	6 933	8 680	10 506	18 404	10 007
(viii) 2 adults, 2 children								
Quintile points (£)			. 6	724 10	025 13	343 18	094	
Number of households in the	e sample		. 148	149	148	149	148	742
Original income		,	. 3 002	8 645	11 702	15 481	25 178	12 800
Direct benefits in cash Contributory								. 2 000
Retirement pension								
Sickness/ injury related			313	61	30	38	18	92
Unemployment benefit		-	. 236	49	58	39	5	77
Other			. 64	31	22	21	4	28
Total contributory			613	141	110	98	27	197
Non-contributory			1 140	40		_	_	
Supplementary benefit Child benefit			. 1 149	48 733	11 725	6 730	2	242
Rent rebates/ allowances			. 377	14	,725	730	722	728
Sickness/ disablement re			. 70	7	45	7	25	79
Other	bica		. 114	21	10	11	3	31
Total non-contributory			2 441	823	791	759	751	32 1 112
				9 609				
Gross income	NIC.				12 603	16 338	25 956	14 109
Income tax and Employees	NIC		. 274	1 382	2 251	3 222	5 864	2 598
Disposable income			. 5 782	8 227	10 352	13 115	20 092	11 511
Domestic rates?			. 215	389	478	535	685	460
Taxes on final goods and se Intermediate taxes	rvices		. 1 208	1 571 517	1 591 542	1 935 698	2 317 9 58	1 725 621
Income after cash benefits and	all taxes		. 3 971	5 750	7 740	9 947	16 132	8 706
								5 700
Renefits in kind			. 1 407	1 342	1 526	1 539	1 526	1 400
Benefits in kind					(520	. 555	1 270	1 468
Education					848	792	A71	000
Education National health service			. 1 032	983	848 22	792 13	871	905
Education National health service Housing subsidy					22	13	2	43
Education National health service			1 032	983 48				

¹ After tax relief at source on mortgage interest and life assurance premiums.
² Net of the rate rebate element of housing benefit supplement, but including water, etc. charges

				f per year					
				Quintile group					Average over all
				1st	2nd	3rd	4th	5th	groups
(ix) 2 adults, 3 or more children	n								
Quintile points (£)				2 670	80	11	680 15	141	
Number of households in th	e sample			65	65	65	65	65	325
Original income				502	5 532	9 990	13 260	22 365	10 330
Direct benefits in cash									
Contributory									
Retirement pension Sickness/ injury related				325	54	54	27	17	95
Unemployment benefit				272	249	25	93	25	133
Other				51		6		7	13
Total contributory				648	303	84	120	49	241
Non-contributory				2 471	227	76	25	10	562
Supplementary benefit Child benefit				1 305	1 245	1 142	1 151	1 127	1 194
Rent rebates/ allowances	\$			766	239	-			201
Sickness/ disablement re				170	111	89	16	41	85
Other				36	227	89	5	20	75
Total non-contributory	- •		٠.	4 747	2 048	1 395	1 197	1 198	2 117
Gross income				5 897	7 883	11 469	14 577	23 612	12 688
Income tax ¹ and Employees	' NIC			29	631	1 899	2 751	4 654	1 993
Disposable income				5 868	7 251	9 5 7 0	11 826	18 959	10 695
Domestic rates ²				132	283	410	508	690	404
Taxes on final goods and se	ervices			1 216	1 361	1 641	1 873	2 781	1 774
Intermediate taxes				351	419	544	719	1 176	642
Income after cash benefits and	all taxes			4 169	5 188	6 976	8 726	14 311	7 874
Benefits in kind				2.614	2 840	2 318	2 586	2.411	0.554
Education National health service				2 614 1 453	1 322	1 265	1 239	2 411 1 005	2 554 1 257
Housing subsidy				182	116	56	34	13	80
Travel subsidies				10	16	20	54	53	31
School meals and milk				438	352	85	74	75	205
Final income		-		8 866	9 834	10 721	12 713	17 868	12 001
(x) 3 or more adults, with child	dren								
Quintile points (£)				8 668	13	154 16	935 23	622	
Number of households in th	ne sample			90	90	89	90	90	449
Original income				4 457	11 279	15 100	19 569	33 144	16 713
Direct benefits in cash									
Contributory									
Retirement pension				270	229	116	189	60	173
Sickness/ injury related				634 187	147 46	69 33	73 42	31 42	191
Unemployment benefit Other				132	29	48	82	7	70 60
Total contributory				1 223	451	266	386	140	494
Non-contributory									
Supplementary benefit				1 211	248	215	192	96	393
Child benefit				803 304	736 15	677	660 1	622	700
Rent rebates/ allowances Sickness/ disablement re				197	105	62	61	36	64 92
Other				235	203	164	77	59	148
Total non-contributory				2 750	1 307	1 117	992	813	1 397
Gross income				8 430	13 037	16 483	20 947	34 097	18 604
Income tax ¹ and Employees	' NIC			467	2 005	2 819	4 019	7 093	3 282
Disposable income				7 963	11 032	13 664	16 928	27 005	15 322
Domestic rates ²				311	433	475	563	728	502
Taxes on final goods and se				1 671	1 974	2 323	2 767	3 549	2 457
Intermediate taxes				554	692	747	968	1 219	836
Income after cash benefits and	d all taxes	ì		5 427	7 934	10 119	12 630	21 508	11 527
Benefits in kind									
Education				2 907	2 604	2 531	2 462	2 282	2 557
National health service				1 249	1 024	1 036	1 038	949	1 059
Housing subsidy				1 4 3 88	52 71	26 95	18 106	31 130	54 98
Travel subsidies School meals and milk				188	49	54	36	43	98 74
Final income				10 003	11 732	13 862	16 289	24 944	15 369
raidi ilicome				.0 000	,52	. 2 002	, 5 2 5 5	27 377	1000

³ After tax relief at source or mortgage interest and life assurance premiums ² Net of the rate rebate element of housing benefit, but including water, etc. charges

Average incomes, taxes and benefits, 1986

By decile groups of households ranked by original income TABLE $\ensuremath{\mathsf{5}}$

	£ per ye	981									
	Decile g	graup									Average over all
	1st	<u>2nd</u>	<u>3rd</u>	4th	5th	6th	7th	8th	9th	10th	decile groups
Decile points (£)	. 718	3 66 717	53 2 718	598 5 718	460 8 718	044 10 718	517 13 718	097 16 717	<i>153 21</i> 718	163 718	7 178
Original income Earnings of main earner Other earnings Occupational pensions, annuities Investment income Other income Total	i .	22 109 104 22 257	468 7 637 298 96 1 507	2 380 145 895 500 166 4 086	4 869 395 807 530 184 6 784	7 099 1 034 624 436 81 9 274	8 542 2 188 533 438 91 11 792	10 265 3 325 429 418 136 14 572	12 320 4 979 385 536 163 18 382	19 780 8 469 853 1 826 267 31 194	6 575 2 054 527 509 121 9 785
Christmas bonus for pensioners, etc	. 37 166 . 20 . 9	1 883 44 80 1 12 3 53 3	1 835 61 215 4 33 16 79 3	1 038 117 196 23 4 19 95 5	612 104 82 22 16 11 52 10	322 62 74 36 4 9 45	260 59 40 33 9 7 29 11	158 46 31 35 1 7 22 10	133 37 15 37 3 5 19 8	142 41 24 36 1 8 15 5	749 61 92 23 10 10 47 7
Non-contributory Supplementary benefit Child benefit Rent rebates and allowances Attendance allowance Mobility allowance War pensions Severe disablement allowance Student maintenance awards TOPS/YTS, etc., awards Family income supplement Other non-contributory benefits	. 236 . 609 . 57 . 35 . 24 . 43 . 34 . 10	373 86 398 43 20 15 37 38 1 4	304 115 222 42 29 16 30 7 12 12 54	253 213 133 27 34 11 25 19 14 46	86 230 53 20 18 9 26 37 14 7	67 305 21 19 20 3 22 15 14 3	66 324 9 15 15 6 11 34 29	62 312 4 9 11 7 17 6 34	59 303 3 14 11 4 4 27 24	50 253 9 10 2 5 12 17 19	240 238 146 25 19 10 23 23 17 7
Total	. 3 586	3 156	3 101	2 351	1 446	1 059	964	785	707	654	1 781
Gross income	. 3 587	3 413	4 608	6 437	8 230	10 333	12 756	15 358	19 089	31 848	11 566
Income tax and Employees' NIC Income tax Employees' national insurance contribution less: Tax relief at source' Total Disposable income	. 22	22 2 13 11 3 403	141 17 25 133 4 475	453 147 81 518 5 918	960 373 148 1 185 7 044	1 447 560 219 1 787 8 545	1 906 743 294 2 356 10 401	2 494 941 377 3 058 12 299	3 307 1 128 442 3 994 15 095	6 345 1 508 541 7 312 24 535	1 708 542 216 2 034 9 533
Indirect taxes			205	202							
Domestic rates ² Taxes on final goods and services	. 124	176	285	337	387	413	435	486	522	664	383
VAT Duty on tobacco Duty on beer and cider Duty on wines Duty on spirits Duty on hydrocarbon oils Car tax Vehicle excise duty Television licences Stamp duty on house purchase Customs' duties Betting taxes Other Intermediate taxes	. 176 26 . 4 . 20 . 20 . 1 . 9 . 33 . 1 . 12 . 13	216 98 23 6 29 35 2 21 41 2 11 17	312 172 37 8 33 59 5 34 45 15 21	474 186 55 16 52 98 11 52 46 51 20 15	556 206 79 18 123 18 59 48 24 25 16	716 233 88 22 57 163 26 76 52 12 29 85	765 247 118 26 70 178 25 85 52 16 33 37 19	995 233 124 386 218 33 97 54 23 39 44 23	1 207 237 138 46 97 276 54 113 54 28 46 34 26	1 670 230 178 94 148 336 74 139 61 39 61	712 202 86 28 64 151 25 68 48 14 29 34
Commercial and industrial rates Employers' NI contributions Duty on hydrocarbon oils Vehicle excise duty Other Total indirect taxes	. 68 . 34 . 8	67 73 34 8 30 900	86 94 43 10 39	118 133 65 17 53	135 151 70 18 62 2 055	159 178 80 20 72 2 499	173 193 85 22 78 2 655	206 230 99 25 94 3 145	247 279 123 32 112 3 669	340 384 164 43 150	159 178 80 20 72
Income after cash benefits and all taxes	0.340	2 502	3 161	4 144	4 990	6 047	7 746	9 154	11 427	4 840 19 695	2 372 7 161
Benefits in kind Education National health service Housing subsidy Rail travel subsidy Bus travel subsidy School meals and milk Total Final income	. 867 . 162 . 11 . 34 . 66 . 1 630	252 947 100 7 49 29 1 384 3 886	331 917 92 11 52 34 1 437 4 598	573 818 69 16 34 51 1 561 5 704	614 723 53 26 27 29 1 472 6 462	683 742 46 25 20 21 1 537 7 583	863 728 37 27 19 25 1 699 9 445	839 696 26 34 16 22 1 634 10 788	860 715 19 59 19 19	831 731 12 94 23 14 1 704	634 789 62 31 29 31 1 575 8 736

 $^{^1\,\}text{On}$ mortgage interest and life assurance premiums $^2\,\text{Net}$ of the rate rebate element of housing benefit, but including water, etc. charges

Average incomes, taxes and benefits, 1986

By decile groups of households ranked by gross income

TABLE 6

		£ per year											
		Decile (group									Averag	
		1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	decile groups	
Decile points (£)		3 (184 5 5				553 14	054 17	034 21	931		
Number of households in the sample		718	718	717	718	718	718	718	717	718	718	7 178	
Original income		245	752	1 688	4 017	6 575	9 008	11 721	14 431	18 299	31 115	9 785	
Direct benefits in cash													
Contributory		1 357	1 564	1 454	920	671	542	321	279	193	194	749	
Retirement pension		26	32	59	109	100	73	71	52	41	46	61	
Sickness/ injury related		51	109	186	224	238	143	125	112	87	76	135	
Other contributory benefits		56	78	78	89	78	56	51	36	40	31	59	
Total contributory benefits		1 491	1 783	1 777	1 341	1 087	815	568	478	360	346	1 004	
Non-contributory													
Supplementary benefit		311	444	584	420	227	127	57	92	69	73	240	
Child benefit	٠.	42 341	104 415	211 34 9	244 182	271 84	298 43	311 23	309 9	320	268	238	
Rent rebates/ allowances Sickness/ disablement related		15	37	102	161	129	102	69	52	59	9 52	146 78	
Other non-contributory benefits		39	56	115	116	72	83	75	64	72	52 56	76 75	
Total non-contributory benefits		748	1 057	1 360	1 122	783	653	534	527	523	458	776	
		2 238	2 839	3 137	2 463	1 869	1 468	1 102	1 006	883	B04	1 781	
Total cash benefits		2 483	3 591	4 825	6 480	8 444			15 437				
Bross income		2 463	3 551	4 625	0 480	0 444	10 4//	12 823	15 437	19 102	31 919	11 566	
ncome tax and Employees' NIC		20	81	171	462	905	1 410	1 907	2 494	3 316	6 310	1 700	
Income tax National insurance contributions		7	16	53	190	370	529	736	906	1 122	1 491	1 708 542	
less: Tax relief at source		20	14	45	90	163	208	292	357	437	535	216	
Total		7	83	179	562	1 112	1 731	2 351	3 043	4 001	7 266	2 034	
Disposable income		2 477	3 509	4 646	5 9 1 7	7 333	8 746	10 472	12 394	15 181	24 652	9 533	
ndirect taxes													
Domestic rates ²		162	205	242	319	379	409	443	483	521	665	383	
Taxes on final goods and services		174	222	326	456	588	690	792	983	1 199	1 694	712	
VAT		80	123	177	218	238	230	252	221	242	237	202	
Duty on tobacco		19	23	39	60	80	90	110	127	139	178	86	
Duty on wines		5	7	8	13	18	20	29	37	48	93	28	
Duty on spirits		21	27	30	45	66	52	64	90	96	152	64	
Duty on hydrocarbon oils		22	33	61	89	129	163	177	219	275	338	151	
Car tax		2	2	5	13	17	22	28	32	53	75	25	
Vehicle excise duty		13	20	36	46	61	75	84	98	114	139	68	
Television licences		35	38 2	44	46	49	51	52	54	54	55	48	
Stamp duty on house purchase		2 9	12	3 16	5 21	8 25	11 28	17 34	22 38	27 46	38 61	14 29	
Customs duties		11	16	20	22	26	83	37	45	36	38	34	
Betting taxes		9	11	12	14	18	18	20	23	25	33	18	
Intermediate taxes											-		
Commercial and industrial rates		57	67	89	115	136	157	175	206	247	344	159	
Employers' NI contributions		61	72	98	131	153	175	196	230	280	388	178	
Duty on hydrocarbon oils		29	34	45	65	71	78	85	100	124	166	80	
Vehicle excise duty		7	8	11	17	18	20	22	25	32	43	20	
Other		25	30	40	52	62	71	79	94	112	151	72	
Total indirect taxes		741	952	1 303	1 747	2 144	2 445	2 695	3 130	3 671	4 887	2 372	
ncome after cash benefits and all taxes	5	1 736	2 557	3 343	4 170	5 189	6 301	7 777	9 264	11 510	19 765	7 161	
Benefits in kind							- 4-						
Education		136	213	451	669	610	745	825	893	910	886	634	
National health service		759 96	828 116	921 114	79 7 8 1	797 61	815 52	718 37	731 29	745 17	774 14	789	
Housing subsidy		11	5	15	16	21	22	32	36	58	94	62 31	
Rail travel subsidy		36	42	45	34	28	23	22	19	19	25	29	
School meals and milk		10	27	57	60	45	28	25	22	20	15	31	
Total		1 049	1 231	1 602	1 656	1 561	1 684	1 659	1 730	1 769	1 807	1 575	

 $[\]frac{1}{2} On$ mortgage interest and life assurance premiums $\frac{1}{2} N_{\text{BH}}$ of the rate rebata element of housing benefit, but including water, atc. charges

	f	per yea	r					
	-]uintile g	roup					Average over all
	1	st		2nd	3rd	4th	Sth	quintile groups
Quintile points (£)	1	435	663	1 436	5 460 1 436	10 517 1 435	16 153 1 436	7 178
Original income								
Earnings of main earner Other earnings		11		1 424 76	5 984 714	9 403 2 756	16 050 6 724	6 575 2 054
Occupational pensions, annuities		54		766	716	481	619	527
Investment income		52 11		399 131	483	428	1 181	509
Other income		129		2 797	132 8 029	113 13 181	215 24 788	121 9 785
Direct benefits in cash							21,700	3 703
Contributory								
Retirement pension		497 40		1 437 89	467	209	138	749
Unemployment benefit Invalidity pension and allowance		123		205	83 78	52 36	39 19	61 92
Statutory sick pay		-		14	29	34	36	23
Industrial injury disablement benefit		16		18	10	5	2	10
Sickness, industrial injury benefit Widows' benefit		6 57		18 87	10 49	7 26	7 17	10 47
Maternity allowance		4		4	12	11	6	7
		8		9	3	1	1	4
Non-contributory								
Supplementary benefit		728 161		279 164	76 267	64	54	240
Rent rebates and allowances		504		177	37	318 6	278 6	238 146
		50		34	19	12	12	25
industry distributed in		28		31	19	13	6	19
		19 40		14 28	6 24	7 14	5 8	10
		36		13	26	20	22	23 23
		6		13	14	31	21	17
. Girling Transfer and Parket		3		29	5	1		7
Other non-contributory benefits		45		62	17	8	2	27
Total		3 3 7 1		2 726	1 253	875	680	1 781
	3	500		5 523	9 281	14 056	25 468	11 566
Income tax and Employees' NIC				207				
Income tax Employees' national insurance contribution	ns.	11		297 82	1 204 466	2 200 842	4 826 1 318	1 708
less: Tax relief at source		17		53	184	335	491	542 216
Total	-	-5		326	1 486	2 707	5 653	2 034
Disposable income		505		5 197	7 795	11 349	19 815	9 533
Indirect taxes								
		150		311	400	460	593	383
Taxes on final goods and services		214		202	500			
VAT Duty on tobacco		214 137		393 179	636 220	880 240	1 438 234	712
Duty on beer and cider		24		46	83	121	158	202 86
Duty on wines		5		12	20	32	70	28
Duty on spirits		25		43	54	78	123	64
Duty on hydrocarbon oils Car tax	, .	27 1		78 8	143 22	198 29	306 64	151
Vehicle excise duty		15		43	67	91	126	25 68
		37		45	50	53	54	48
		1 12		4 18	10	19	33	14
		15		21	27 55	36 41	53 37	29 34
		11		13	17	21	29	18
Intermediate taxes								
		65		102	147	189	294	159
Employers in continuent		70 34		114 54	165 75	211 92	331 144	178
,		В		14	19	23	37	80 20
		28		46	67	86	131	72
Total indirect taxes		B82		1 544	2 277	2 900	4 254	2 372
Income after cash benefits and all taxes	2	623		3 653	5 518	8 449	15 561	7 161
Benefits in kind								
Education		371		452	648	851	845	634
National health service		907 131		867 81	733 49	712	723	789
		9		13	26	31 30	16 77	62 31
		41		43	23	18	21	29
School meals and milk	٠.	47		42	25	24	16	31
Total	. 1	507		1 499	1 505	1 667	1 697	1 575
1018		130		5 151	7 023			. 3,3

On mortgage interest and life assurance premiums. Net of the rate rebate element of housing benefit, but including water, etc. charges

Average incomes, taxes and benefits, 1986

By quintile groups of households ranked by gross income

TABLE 8

		£ per year									
		Quintile	group				Average over all				
		1 st	2nd	3rd	4th	5th	quintile groups				
Quantile points (£)			4 184	7 455	11 553	17 034					
Number of households in the sample	,	1 436	1 435	1 436	1 435	1 436	7 178				
Original income		498	2 853	7 791	13 075	24 707	9 785				
Direct benefits in cash Contributory											
Retirement pension		1 461	1 187	607	300	193	749				
Unemployment benefit		29	84	86	61	43	61				
Sickness/ injury related		80	205	191	119	81	135				
Other contributory benefits		67	83	67	43	35	59				
Total contributory benefits Non-contributory		1 637	1 559	951	523	353	1 004				
Supplementary benefit		377	502	177	74	71	240				
Child benefit		73	227	284	310	294	238				
Rent rebates/ allowances		378 26	265 131	64 115	16 61	6 55	146 78				
Sickness/ disablement related		48	115	78	70	64	78 75				
Other non-contributory benefits		902	1 241	718	531	491	776				
Total non-contributory benefits											
Total cash benefits		2 539 3 037	2 800 5 653	1 669 9 460	1 054 14 129	843 25 550	1 781				
Gross income	• •	3 037	5 033	9 400	14 125	25 550	11 566				
Income tax		51	317	1 157	2 200	4 813	1 708				
National insurance contributions		11	122	449	821	1 306	542				
less: Tax relief at source		17	68	185	324	486	216				
Total		45	371	1 421	2 697	5 633	2 034				
Disposable income		2 993	5 282	8 039	11 432	19 917	9 533				
Indirect taxes Domestic rates ²		184	281	394	463	593	383				
Taxes on final goods and services											
VAT		198	391	639	888	1 446	712				
Duty on tobacco		102	198 49	234	236 118	240	202				
Duty on beer		21 6	11	85 19	33	158 70	86				
Duty on wines		24	38	59	77	124	28 64				
Duty on spirits		28	75	146	198	306	151				
Duty on hydrocarbon oils		20	9	19	30	64	25				
Car tax		16	41	68	91	127	68				
Television licences		37	45	50	53	55	48				
Stamp duty on house purchase		2	4	10	20	33	14				
Customs' duties		10	18	27	36	54	29				
Betting taxes		13	21	55	41	37	34				
Other		10	13	18	22	29	18				
Intermediate taxes											
Commercial and industrial rates		62	102	147	191	296	159				
Employers' NI contributions		67	114	164	213	334	178				
Duty on hydrocarbon oils		32	55	75	93	145	80				
Vehicle excise duty		7	14	19	23	38	20				
Other		27	46	67	86	132	72				
Total indirect taxes		846	1 525	2 294	2 913	4 279	2 372				
Income after cash benefits and all tax	es	2 146	3 757	5 745	8 520	15 638	7 161				
Benefits in kind		174	560	677	859	898	634				
Education		793	859	806	725	759	789				
National health service Housing subsidy		106	97	56	33	15	62				
Rail travel subsidy		8	15	21	34	76	31				
Bus travel subsidy		39	40	25	20	22	29				
School meals and milk		19	58	37	24	17	31				
Total		1 140	1 629	1 623	1 695	1 788	1 575				
Final income		3 286	5 386	7 368	10 214	17 426	8 736				

¹ On mortgage interest and life assurance premiums.
² Net of the rate rebate element of housing benefit, but including water, etc. charges

Distribution of households¹ co-operating in the Family Expenditure Survey, 1986

By decile groups of households ranked by original, gross, disposable, post-tax² and final incomes

TABLE 9

				Retired !	nouseholds	ds Non-retired households									
				1 adult	2 or more adults	1 adult	2 adults	3 or more adults	1 adult with children	2 adults 1 child	2 adults 2 children	2 adults 3 or more children	3 or more adults with children	All house- holds	
decile groups (nt origi	nal inco	me												
Bottom				258	96	106	46	8	91	30	37	36	10	718	
2nd				374	185	45	33	3	37	11	13	13	3	717	
3rd				217	236	72	62	15	49	20	20	15	12	718	
4th				78	135	132	145	38	44	42	45	32	27	718	
5th				30	75	145	183	56	26	71	73	32	27	718	
6th				18 6	34 22	101	197	51	8	96	134	43	36	718	
7th 8th				1	17	73 36	210 234	87	4	90	110	56	60	718	
9th				2	10	27	234	115 148	4 3	82	114	44	70	717	
Top				2	16	21	192	225		54	117	33	96	718	
										54	79	21	108	718	
Total				986	826	758	1 530	746	266	550	742	325	449	7 178	
Decile groups	of gros	s incom	e												
Bottom				488	10	147	21	1	33	8	7	3		710	
2nd				308	156	83	49	1	86	25	6	3	1	718 718	
3rd				82	262	101	79	6	74	32	51	26	4	718	
4th				49	136	120	165	34	37	49	51	48	29	718	
5th				26	98	104	192	43	16	77	87	44	31	718	
6th				17	64	79	191	67	8	87	128	40	37	718	
7th				8	40	51	226	83	6	90	108	51	55	718	
8th				5	25	32	216	133	3	74	106	50	73	717	
9th				-	18	21	216	149	3	55	118	37	101	718	
Top				3	17	20	175	229		53	80	23	118	718	
Total				986	826	758	1 530	746	266	550	742	325	449	7 178	
ecile groups	of dien	neable u	20000										440	, 170	
_	or dispo	osaule ii	COME												
Bottom				480	11	151	24	1	33	7	6	5		718	
2nd			-	332	128	112	41	2	76	20	6	1	-	718	
3rd				76 47	256 152	126	85	5	72	37	43	12	5	717	
4th 5th				26	86	117 89	161 213	26	38	51	59	46	21	718	
				14	83	64	200	35 69	24 7	78	88	46	33	718	
6th 7th				4	41	37	236	80	7	77	119	53	32	718	
-				4	33	25	209	143	5	92 80	112	50	59	718	
9th				1	20	22	194	162	3	56	103	51	64	717	
Top		,		2	16	15	167	223	1	52	118	35	107	718	
				986	826	758					88	26	128	718	
Total				300	626	/56	1 530	746	266	550	742	325	449	7 178	
Decile groups	of past	-tax inco	ome 2												
Bottom				328	55	168	54	8	50	18	20	12	5	718	
2nd			,	389	82	111	50	9	45	15	12	2	3	718	
3rd		,		146	214	99	85	10	62	36	40	19	6	717	
4th				60	174	111	134	29	47	51	60	33	19	718	
5th .				28	93	92	203	43	31	70	77	48	33	718	
6th .				17	78	68	202	62	16	68	114	55	38	718	
7th				9	52	36	218	95	8	107	95	46	52	718	
8th				3	39	28	194	137	4	69	111	48	84	717	
9th				3	16	22	209	157		62	119	36	94	718	
Top				3	23	23	181	196	3	54	94	26	115	718	
Total				986	826	758	1 530	746	266	550	742	325	449	7 178	
Decile groups	of final	income													
Bottom				324	40	236	60	0	2.		_	_			
				369	75	117	65 72	. 8	21 45	11	9	3	1	718	
				190	189	122	106	12 12	45 45	16	7	4	1	718	
				51	197	99	193	25	45 51	32 56	16	2	3	717	
				29	126	71	228	47	32	56	40	2	4	718	
				12	85	37	222	72	37	74 91	78	18	15	718	
				3	44	29	182	119	17		98	40	24	718	
				5	33	18	193	126	9	93	128	54	49	718	
8th 9th					17	16	139	150	6	68 50	126	79	60	717	
Top				3	20	13	130	175	3	59 50	128	79	124	718	
											112	44	168	718	
Total				986	826	758	1 530	746	266	550	742	325	449	7 178	

 $^{^{\}rm I}$ See appendix 2 for definitions of retired households, adults and children, $^{\rm 2}$ Income after cash benefits and all taxes but before benefits in kind,

Percentage distribution of original, disposable, post-tax, and final income, households re-ranked at each stage, 1975-86

TABLE 10

				1975	1977	1979	1981	1983	1985	1986
Original Inco	ome									
Quintile gro										
Bottom				0.8	0.6	0.5	0.6	0.3	0.3	0.3
2nd				10	10	9	8	7	6	6
3rd				19	19	19	18	18	17	16
4th				26	27	27	27	27	27	27
Top				44	44	45	46	48	49	51
ТОР			, ,							
All househo	lds			100	100	100	100	100	100	100
Disposable										
Quintile gro				6.6	6.9	6.5	6.7	6.8	6.5	6.2
Bottom				13	13	12	12	12	0.5 11	
2nd										11
3rd				18	18	18	18	18	17	17
4th				24	24	25	24	24	24	24
Тор				38	38	39	39	40	41	42
All househo	olds			100	100	100	100	100	100	100
Income afte	er cash be	nefits and a	d taxes							
Quintile gro	up									
Bottom				6.2	6.4	6.1	6.0	6.0	5.6	5.1
2nd				12	12	11	11	11	11	10
3rd				18	18	18	17	17	17	16
4th				24	24	25	24	24	24	24
Top				39	39	40	41	42	43	45
All househo	olds			100	100	100	100	100	100	100
Final incom										
Quintile gro	que					7.4		• •		
Bottom				7.1	7.3	7.1	7.2	6.9	6.7	6.3
2nd				13	13	12	12	12	12	11
3rd				18	18	18	18	18	17	17
4th				24	24	24	24	24	24	24
				38	38	38	39	39	40	42
Тор										

Gini coefficients for the distribution of income at each stage of the tax-benefit system, 1975-86

TABLE 11

	1975	1977	1979	1981	1983	1985	1986
Gini coefficients (per cent)							
Original income	43	44	45	47	49	51	52
Gross income	35	34	35	36	36	38	40
Disposable income	32	31	33	33	33	35	36
Income after cash benefits and all taxes	33	33	35	36	36	38	40
Final income	31	31	32	32	33	34	36

APPENDIX 2

METHODOLOGY AND DEFINITIONS

The allocation of government expenditure and its financing 1. There are considerable difficulties in moving from the aggregates of government expenditure and financing published in the United Kingdom National Accounts - the CSO Blue Book - to apportioning taxes and benefits to individual households. We can obtain information about the types of household that receive cash benefits and pay direct taxes through surveys such as the Family Expenditure Survey (FES). From the replies respondents give to questions on their expenditure we can impute their payments of indirect taxes, and from information they supply about such factors as their ages and the number of children in the household we can estimate the average costs of providing them with social services, such as health and education. But there are other kinds of financing, such as corporation tax and government receipts from public corporations, which most people would probably not think of as leading to a reduction in their personal incomes, and therefore no attempt is made in this analysis to apportion them to households. Similarly, there are other items of government expenditure, such as capital expenditure and expenditure on defence and on the maintenance of law and order, for which there is no clear conceptual basis for allocation, or for which we do not in any event have sufficient information to make an allocation.

Family Expenditure Survey

- 2. The estimates in this article are based mainly on data derived from the FES. The FES is a continuous survey of the expenditure of private households. People living in hotels, lodging houses, and in institutions such as old peoples' homes are excluded. Each adult keeps a full record of payments made during 14 consecutive days and answers questions about hire purchase and other payments. The respondents also give detailed information, where appropriate, about income (including cash benefits received from the state) and payments of income tax. Information on age, occupation, education received, family composition and housing tenure is also obtained.
- 3. One of the main purposes of the FES is to yield information on household expenditure patterns to produce the weights used in compiling the index of retail prices. The survey is conducted by the Office of Population Censuses and Surveys on behalf of the Department of Employment who analyse and report on it. The revised Family Expenditure Survey Report for 1986, containing detailed data on household characteristics, income, and expenditure, was published in July 1988. Details of the survey method are set out in Family Expenditure Survey Handbook by W F F Kemsley, R U Redpath and M Holmes. Both are published by Her Majesty's Stationery Office.
- 4. The number of households in the United Kingdom responding to the FES in 1986 was 7,178. The response rate in Great Britain was 69 per cent. The available evidence suggests that older households, households where the head is self-employed, those without children and higher income households, are less likely to co-operate than others (see 'Family Expenditure Survey: a second study of differential response, comparing Census characteristics of FES respondents and non-respondents' by Bob

Redpath, Statistical News No 72, February 1986, (HMSO)). In addition response in Greater London is noticeably lower than in other areas. However at present the results in this article are based on the responses of those households which actually co-operated in the survey and they are not reweighted. This means that some of the figures differ from those produced by other surveys such as the Survey of Personal Incomes.

Unit of analysis

- 5. The basic unit of analysis in the article is the household, and not the family, individual or tax unit. A household is defined in the FES as comprising people who live at the same address and who share common catering for at least one meal a day. Spending on many items, particularly on food, housing, fuel and light, is largely joint spending by the members of the household. Without further information or assumptions it is difficult to apportion indirect taxes between individuals or other sub-divisions of households.
- 6. In classifying the households, adults have been taken as all people aged 16 and over. Most of the 'extra' adults in households with at least three adults are sons or daughters of the head of household rather than retired people.
- 7. A retired household is defined as one where the combined income of retired members amounts to at least half the total gross income of the household, where a retired person is defined as anyone who describes themselves as 'retired' or anyone over minimum NI pension age describing themselves as 'unoccupied' or 'sick or injured but not intending to seek work'.
- 8. By no means all retired people are in retired households; about one in six households comprising three or more adults contain retired people, for example, and households comprising one retired and one non-retired adult are often classified as non-retired.
- 9. The sample households have been classified according to their compositions at the time of the interview and it is particularly important to bear this in mind for households comprising one adult with children it is likely that many of these households changed their composition at some time during the year.
- 10. Economically active people comprise employees, the self-employed and others not in employment but who are seeking or intending, when able, to seek work. In 1982 there were changes in the FES in the definition relating to economic activity. The effect of these changes is to exclude all those out of employment for more than a year rather than five years. This exclusion applies regardless of the fact that they may still describe themselves as seeking work. Also excluded are those who have not been in paid employment since leaving full-time education unless they have worked within the previous year; certain of the part-time self-employed with very small incomes; and those whose only economic activity is working as mail-order agents or baby-sitters.

Income: redistributive stages

11. Stage one

Original income plus cash benefits = Gross income.

Stage two

Gross income minus income tax and employees' National Insurance contributions = Disposable income.

Stage three

Disposable income minus indirect taxes = Income after cash benefits and all taxes.

Stage four

Disposable income minus indirect taxes plus 'benefits in kind' = Income after all taxes and benefits (final income).

- 12. The starting point of the analysis is original income. This is the annual income in cash and kind of all members of the household before the deduction of taxes or the addition of any state benefits. It includes income from employment, self-employment, investment income and occupational pensions. Employment income is based on the last payment received before the interview or, where different, the amount usually received. Allowance is made for any periods of absence from work through sickness and unemployment in the preceding 12 months, and for bonuses. Income from self-employment is recorded in the FES for a past period. This is brought up to current levels using the average earnings index. Income from interest, dividends and rent is taken as the amount received in the 12 months before the interview. Income from occupational pensions is based on the last payment received.
- 13. Households living in rent-free dwellings are each assigned an imputed income based upon the rateable value of the dwelling. This is counted as employment income if the tenancy depends on the job.
- 14. The next stage of the analysis is to add cash benefits to original income to obtain gross income. This is slightly different to the 'gross normal weekly income' used in the FES Report, mainly because it excludes the imputed rent of owner-occupiers. Cash benefits are:

Contributory:

Retirement pension and Christmas bonus, unemployment benefit, sickness and industrial injury benefit, statutory sick pay, invalidity pension and allowance, industrial injury disablement benefits, widows' benefits, maternity allowance.

Non-contributory:

Supplementary benefit, child benefit, rent rebates and allowances, attendance allowance, mobility allowance, war pensions, severe disablement allowance, family income supplement, old persons pension, government training scheme a'lowance (YTS etc.), student maintenance grant, maternity grant.

15. Statutory Sick Pay is classified as a cash benefit even though it is paid through the employer.

- 16. Income from short-term benefits is taken as the product of the last weekly payment and the number of weeks the benefit was received in the 12 months prior to interview. Income from long-term benefits, and from rent rebates and allowances, is based on current rates.
- 17. Income Tax and employees' and self-employed contributions to National Insurance and National Health services are then deducted to give disposable income. Taxes on capital, such as capital gains tax and inheritance tax, are not included in these deductions because of the lack of data from the FES on their payment.
- 18. The tax estimates are based on the amount deducted from the last payments of employment income and pensions, and on the amount paid in the last 12 months in respect of income from self-employment, interest, dividends and rent. The income tax payments recorded will therefore take account of a household's tax allowances, with the exception of tax relief obtained 'at source'. In 1986 there were two types of tax relief obtained in this way: mortgage interest relief and life assurance premium relief. Where households are eligible for these reliefs imputations are made and deducted from recorded income tax payments. In the case of mortgage interest relief obtained through the MIRAS scheme, which was introduced in April 1983, these imputations are based on the interest component of the latest mortgage repayment.
- 19. As original income includes some elements not actually received in cash, disposable income as defined here does not correspond exactly to money available for the household to spend. It does however give an indication of the resources which are available to the household, and which influence spending decisions.
- 20. The order in which the remaining allocated items are presented is to some extent arbitrary.
- 21. Indirect tax on final consumer goods and services include:

Local authority rates on dwellings (after rebates)
Duties on beer, wines, spirits, tobacco, oil, betting, etc
Value Added Tax (VAT)
Customs (import) duties
Car tax
Motor vehicle duties
Driving licences
Stamp duties
Gas levy

- 22. These taxes are either levied directly on the consumer (for example domestic rates) or are assumed to be fully incident on the consumer. For example, the amount of VAT which is paid by the household is calculated from the household's total expenditure on goods and services subject to VAT.
- 23. The figures for domestic rates include, as well as local authority rates, charges made by water authorities for water, environmental and sewerage services, although these charges to households in England and Wales are no longer counted as general government receipts in the National Accounts. (In Scotland these payments go to the local authorities and are so counted.) Local authority rates are shown net of all rebates received through the Housing Benefit scheme, including those received by Supplementary Benefit recipients. (The rent rebate element of Housing Benefit is shown as an income-related cash benefit.)

- 24. VAT and car tax affect the prices of secondhand cars and are therefore assumed to be incident on the purchasers of such cars as well as on the purchasers of new cars. In allocating taxes, expenditures recorded in the FES on alcoholic drink, tobacco, ice cream, soft drinks and confectionery are grossed up to allow for the known under-recording of these items in the sample. The true expenditure in each case is assumed to be proportional to the recorded expenditure.
- 25. The incidence of stamp duty on house purchase on an owner-occupying household has been taken as the product of the hypothetical duty payable on buying their current dwelling (estimated from rateable values) and the probability of a household of that type moving in a given year (estimated from the General Household Survey).
- 26. Indirect taxes on intermediate goods and services are:

Local authority rates on commercial and industrial property Motor vehicle duties

Duties on hydrocarbon oils

Employers' contributions to National Insurance, the National Health Service, the industrial injuries fund and the redundancy payments scheme

Customs (import) duties

Stamp duties

VAT

- 27. These are taxes that fall on goods and services purchased by industry. Only the elements attributable to the production of subsequent goods and services for final consumption by the UK personal sector are allocated in the article, being assumed to be fully shifted to the consumer. Their allocations between different categories of consumers' expenditure are based on the relation between intermediate production and final consumption using input-output techniques.
- 28. Finally, we add those benefits in kind provided to households by government for which there is a reasonable basis for allocation to households, to obtain final income. Benefits in kind are:

State education School meals and milk National Health service Housing subsidy Railway travel subsidy Bus travel subsidy

- 29. Education benefit is estimated by the Department of Education and Science as the cost per pupil or student in special schools, primary and secondary schools, universities, and other further education establishments. The value of the benefit attributed to a household depends on the number of people in the household recorded in the FES as receiving each kind of education (students away from home are excluded).
- 30. The value of school meals and other welfare foods is based on their cost to the public authorities. Any payment by the individual household is subtracted to arrive at a net contribution.
- 31. Each individual in the FES is allocated a benefit from the National Health Service according to the estimated average use made of the various types of health service by people of the same age and sex, and according to the total cost of providing those services. The benefit from maternity services is assigned separately to those households receiving maternity grant.

- 32. In this article public sector tenants are defined to include the tenants of local authorities, New Town Corporations, the Scottish Special Housing Association (SSHA), Northern Ireland Housing Executive (NIHE) and housing associations. The total housing subsidy includes the contribution from rate funds and from central government to the housing revenue accounts of local authorities; and grants paid to the New Town Corporations, the SSHA, the NIHE and housing associations. Within Greater London, the rest of England, Wales, Scotland and Northern Ireland each public sector tenant has been allocated a share of the region's total relevant subsidy based on the gross rateable value of his dwelling. Housing subsidy does not include mortgage interest tax relief, rent rebates and allowances or rate rebates (see paragraphs 18, 14 and 23 respectively).
- 33. The rail travel subsidies allocated are those to British Rail passenger operations and the London Underground. The subsidy to London and South East services is allocated to households living in the area and subsidies to provincial services to households living outside the South East, in proportion to households' expenditure on rail fares as recorded in the FES. A single allocation of the subsidy to inter-city services was made by dividing that subsidy between all households in proportion to their recorded expenditure on rail fares. In making both these allocations allowances are made for the use of rail travel by the business sector, tourists and the institutional part of the personal sector.
- 34. In this article, bus travel subsidy covers both the cost of concessionary travel schemes for senior citizens and others, and subsidies to operators. The method used to allocate the cost of concessionary fares is to derive valuations for the various types of passes from a comparison of recorded expenditure in the FES on bus travel by holders of 'free' and 'half-fare' passes. Separate allocations are then made for Greater London, the other metropolitan areas and the rest of the United Kingdom, Using aggregates of fares, subsidies to operators and the cost of concessionary fares and after making allowances for the use of road passenger transport by tourists, the business sector and institutional part of the personal sector, the total cost of providing bus travel to households in these three areas is estimated and this is then divided between households according to their usage of buses. This usage figure is derived from FES expenditure data and the value of concessionary passes estimated as described above. The amount of bus travel subsidy allocated to each household is then the cost of the bus travel provided less any payments made.
- 35. It must be emphasised that the analysis in this article provides only a very rough guide to the kinds of household which benefit from government expenditure, and by how much, and to those which finance it. Apart from the fact that large parts of expenditure and receipts are not allocated, the criteria used both to allocate taxes and to value and apportion benefits to individual households could be regarded as too simplistic. For example, the lack of data forces us to assume that the incidence of direct taxes falls on the individual from whose income the tax is deducted. This implies that the benefit of tax relief for mortgage interest, for example, accrues directly to the taxpayer rather than to some other party, for instance, the vendor of the land. It also implies that the working population is not able to pass the cost of the direct tax back to employers through lower profits, or to consumers through higher prices. And, in allocating indirect taxes we assume that the part of the tax falling on consumers' expenditure is borne by the households which buy the item or the service taxed, whereas in reality the incidence of the tax is spread by pricing policies and probably falls in varying proportions on the producers of a good

or service, on their employees, on the buyer, and on the producers and consumers of other goods and services. Another example is that we know only an estimate of the total financial cost of providing benefits such as education, and so we have to treat that cost as if it measured the benefit which accrues to recipients of the service. In fact, the value the recipients themselves place on the service may be very different to the cost of providing it; moreover, there may be households in the community, other than the immediate beneficiaries, who receive a benefit indirectly from the general provision of the service.

Gini coefficient

36. The Gini coefficient is the most widely used summary measure of the degree of inequality in an income distribution. It can most easily be understood by considering a Lorenz curve of the income distribution, ie a graph of the cumulative income share against the cumulative share of households. The curve representing complete equality of income is thus a diagonal line while complete inequality (with only one recipient of income) is represented by a curve comprising the horizontal axis and the right-hand vertical axis. The area between the Lorenz curve and the diagonal line of complete equality, as a proportion of the triangular area between the curves of complete equality and inequality, gives the value of the Gini coefficient. Thus a distribution of perfectly equal incomes has a Gini coefficient of zero; as inequality increases (and

the Lorenz curve bellies out), so does the Gini coefficient until, with complete inequality, it reaches its maximum value of 1 (or 100 per cent).

Previous articles

37. This article is the latest in an annual series. Earlier articles covering the years 1957 to 1985 were published in the following issues of Economic Trends: November 1962, February 1964, August 1966, February 1968, 1969, 1970, 1971, 1972, November 1972 and 1973, December 1974, February 1976, December 1976, February 1978, January 1979, 1980, 1981 and 1982, December 1982, November 1983, December 1984, December 1985, July 1986, November 1986 and July 1987.

38. The results in this article for 1986 are designed to be freestanding: they are not designed for direct comparison with previous years except where some limited comparisons are made in the article. Such comparisons are fraught with difficulty because of changes in definitions eg housing benefit in 1983. However, some broader measures like the Gini coefficients quoted in this article are relatively robust and will stand comparison with earlier years. Enquiries should be addressed to Dave Westcott, Branch 8, Central Statistical Office, Great George Street, London SWIP 3AO.

