



CABINET OFFICE

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From the Director: Sir John Boreham, K.C.B.

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Dear Prime Minister

You might again be interested in seeing the latest results of the CSO's work in analysing the effects of taxes and benefits on household incomes; this was published in December 1984 Economic Trends which appeared on 15 January and an offprint is enclosed.

There are two special features in this year's article. The first assesses the impact of the tax-benefit system on households according to "life-cycle" stages. It shows how the tax-benefit system has a levelling effect on income through the life-cycle, particularly in raising the income of the retired.

The second examines the trend in redistribution between 1975 and 1983. It shows that although the distribution of income before taxes and benefits, (ie original income), became more unequal over this period, this trend was largely offset by the associated growth in cash benefits.

I would very much welcome any comments and suggestions.

Yours sincerely
John Boreham

JOHN BOREHAM

The Rt Hon Margaret Thatcher MP
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The effects of taxes and benefits on household income, 1983

Introduction

This article is the latest in a series which have appeared annually in *Economic Trends* since the early sixties. Its aim is to examine how the distribution of income amongst households is modified as a result of Government intervention through the tax-benefit system. During 1983 the Government raised and spent £138 billion; directly or indirectly most of this revenue is raised from households and the expenditure benefits households. Although greater equality of incomes is not necessarily a primary aim of this process it is nevertheless one of its consequences.

Some Government expenditure programmes are designed specifically to protect people against common sources of hardship such as old age, sickness, unemployment, disability, and so on. These programmes can be collectively described as expenditure on social protection, and are those from which households can most readily perceive a direct benefit, whether in cash or in kind. The Statistical Office of the European Communities has designed a framework for the presentation of information on such current expenditure and this has been adopted by Member Countries as the European System of Integrated Social Protection Statistics (ESSPROS). The sources of hardship or need to which the measures are directed are called 'functions', and data for the United Kingdom, classified by social

protection function, are presented in Table A. Government is not the only agency to undertake social protection programmes; the private sector may also do so in the form, for example, of occupational pension schemes or payments made by friendly societies. By definition, the social protection measures must involve the intervention of a 'third party'. In Table A below, Government and non-Government expenditures are distinguished and, although the coverage of non-Government programmes is not complete, it can be seen that Government assistance is predominant and that the private sector makes a significant contribution only in the fields of sickness and old age. Government expenditure on social protection constituted 20 per cent of GDP in 1982/83. Thus the state plays a central role in cushioning the effect of events which reduce the earning power of individuals or impose major financial burdens on them.

In the following analysis, most of these items of Government expenditure are allocated to those households who benefit from them, though the classifications used are those of the national accounts rather than those of ESSPROS. Certain other types of Government expenditure not regarded as social protection are also allocated to households, the main one being education expenditure. However, as well as benefiting from these

Social protection expenditure 1982/83

TABLE A

million

Function	Government programmes		Non-government programmes		Total	Notes
	Benefits in cash	Benefits in kind	Benefits in cash	Benefits in kind		
1. Sickness	590	10 470	2 320	—	13 380	Includes: National Insurance sickness benefit; National Health Service (excluding maternity and services for disabled); employers sick pay.
2. Invalidity, disablement, occupational accidents and diseases	3 450	2 480	210	—	6 140	Includes: social security benefits for the disabled; NHS services for the disabled; personal social services for the disabled.
3. Old age and survivors (e.g. widowhood)	21 020	1 110	4 990	—	27 120	Includes: National Insurance retirement and widows pensions; supplementary pensions; personal social services for the elderly; occupational pensions.
4. Family and maternity	5 330	2 460	—	—	7 790	Includes: child benefit; one parent benefit; family income supplement; NHS maternity services; welfare foods.
5. Unemployment and promotion of employment	6 880	300	550	—	7 730	Includes: unemployment benefit; redundancy payments; supplementary benefit; special employment measures.
6. Housing	1 020	—	—	—	1 020	Includes: rent rebates and allowances.
7. Miscellaneous	220	480	—	—	700	Includes: legal aid and items not separately identifiable.
Total expenditure	38 510	17 300	8 070	—	63 880	

CHART 1

Stages of redistribution

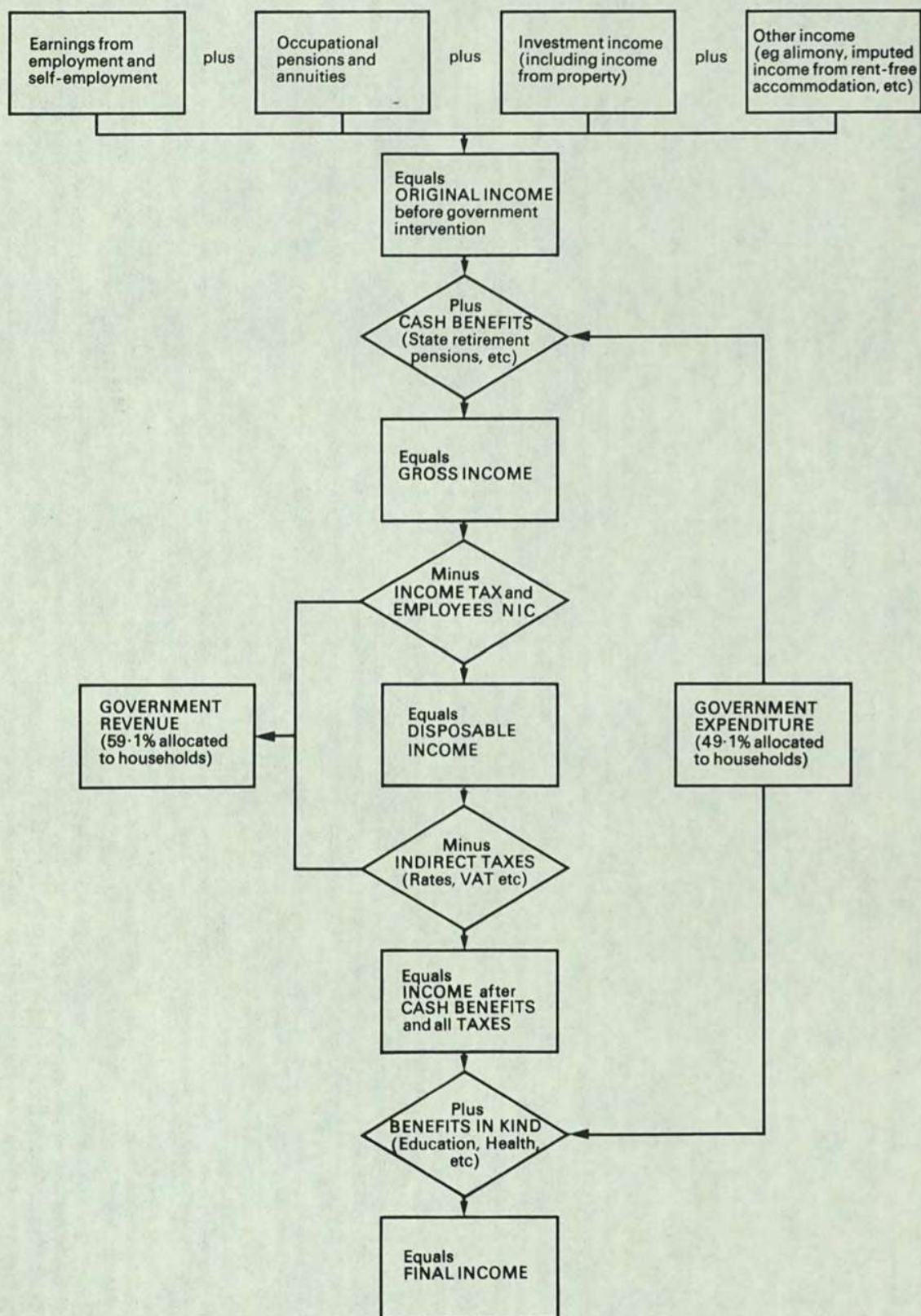
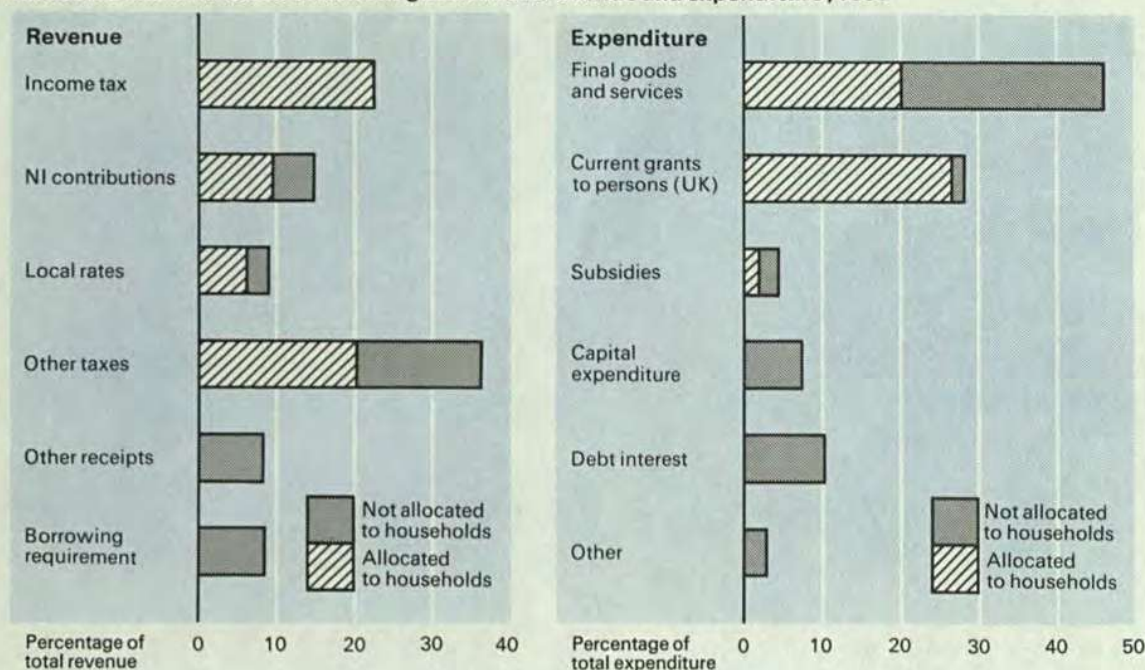


CHART 2

Allocated and unallocated items of government revenue and expenditure, 1983



programmes, households also contribute towards their cost through direct and indirect taxation and National Insurance contributions (NIC). For any one household, it is most unlikely that in any one year payments will equal benefits; the aim of this article is to examine how the balance varies by income level, and therefore how the distribution of income is altered by the tax-benefit system. It has been possible to allocate to individual households only 59 per cent of Government revenue and 49 per cent of expenditure (Charts 1 and 2). The remaining items of revenue and expenditure have not been allocated to households either because it would be inappropriate to do so (e.g., the Government Borrowing Requirement) or because the data required to do so are not available (e.g., expenditure on libraries, museums and the arts). Since the total amount of revenue allocated exceeds the total amount of benefits, less significance should be attached to the exact figures of 'gains' and 'losses' in cash terms than to broad patterns of redistribution, particularly in the middle income ranges.

Chart 1 illustrates the stages of redistribution examined in this article. Initially, households receive income from various sources: as a result of their employment (e.g., wages and salaries, income from self-employment); from occupational pensions; from their investments; from other households (e.g., gifts and alimony payments) and from private non-profit making institutions such as charities. Total income from these sources constitutes original income, that is, the income received by a household before Government intervention. 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. This article aims to quantify the effects of these actions on the distribution of income amongst households.

The main source of data is the Family Expenditure

Survey (FES) 1983. This is a continuous household survey covering the United Kingdom, collecting information on household composition, and on the income, direct tax payments and expenditure of each household member aged 16 years or over. In 1983, 6973 households participated. The response rate in Great Britain was 67.3 per cent, lower than that recorded in 1981 and 1982 but similar to the response rates experienced in the late seventies. The variation in response rates does not affect the main analysis and results of the work described in this series of articles.

The methods used in preparing the estimates are described in Appendix 1 and the detailed results are given in Appendix 4.

Summary of main results

The main results of the analysis are:

- (i) In 1983 taxes and benefits increased the share of total income of the bottom 20 per cent of households from 0.3 per cent to 6.9 per cent. The impact is more marked amongst retired than amongst non-retired households. Cash benefits play the largest part in reducing income dispersion.
- (ii) The impact of the tax-benefit system varies according to life-cycle stages, which in turn mark significant changes in economic circumstances through life. Households are divided into eight groups chosen to represent the stages of a typical life-cycle, and the effect of taxes and benefits on each is examined. This analysis shows that the tax benefit system has a smoothing effect on income through the life-cycle, compensating for the drop in economic activity rates for households with young children and helping to offset the decline in income of the elderly.

(iii) Part II of the article examines changes in Government revenue and expenditure and their effect on households between 1975 and 1983. Although the distribution of income before taxes and benefits became more unequal over this period, this trend was largely offset by corresponding growth in cash benefits.

(iv) The 20 per cent of households with the lowest incomes now rely almost entirely on cash benefits. The mix of household types forming this group changed considerably between 1975 and 1983, with increasing numbers of households with children appearing in the low income group and a decreasing proportion of retired households.

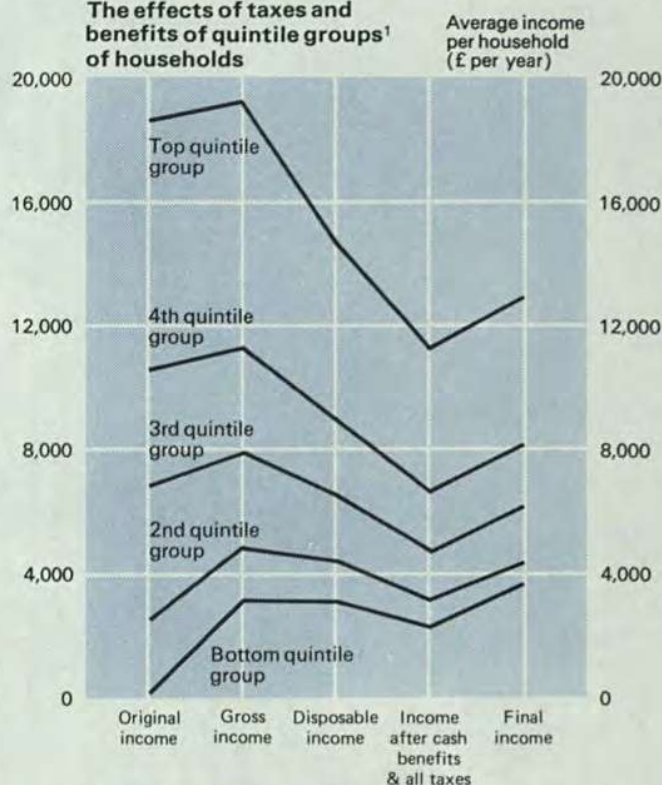
PART I RESULTS FOR ALL HOUSEHOLDS

The distribution of household original income is highly unequal. The 20 per cent of households with lowest original income (the lowest 'quintile group') had an average original income of only £120 per annum in 1983, compared with an average original income of about £18 640 per annum in the highest quintile group (Table B). Chart 3 shows how the dispersion of incomes is reduced at each stage of redistribution, so that average final income ranges from £3 630 to £12 920, a ratio of about 1:4 compared with the ratio for original incomes of about 1:160.

The size of the original income of a household depends to a large extent on how many economically active people it contains. Only one in eighteen households in the lowest quintile group contain one or more economically active people. Nearly two-thirds of the households in this group are retired (Table C) – 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. The remainder include households either containing no earners (such as single full-time students and lone parent households with young children) or whose only earners are unable to work for all or part of the year. Only 3 per cent of households

CHART 3

The effects of taxes and benefits of quintile groups¹ of households



¹ Households are ranked throughout by their original incomes

in the lowest quintile group contain one or more people who were in employment for the whole year.

An alternative way to illustrate the extent of income redistribution is to examine how income shares are modified by the tax-benefit system (Table D). For example, households in the highest quintile group receive 48 per cent of all original income. After taking into account cash benefits, this group's share falls to 42 per cent. At the other end of the scale, the share of

Summary of the effects of taxes and benefits, 1983

TABLE B

	Quintile groups of households ranked by original income					Average over all households
	Bottom	2nd	3rd	4th	Top	
Average per household (£ per year)						
Original income	120	2 580	6 880	10 570	18 640	7 760
<i>plus</i> cash benefits	3 020	2 250	1 100	730	600	1 540
Gross income	3 140	4 840	7 980	11 300	19 240	9 300
<i>less</i> income tax ¹ and employees' NIC	10	410	1 410	2 340	4 510	1 740
Disposable income	3 130	4 420	6 570	8 960	14 730	7 560
<i>less</i> indirect taxes	840	1 270	1 850	2 280	3 380	1 920
Income after cash benefits and all taxes	2 290	3 150	4 720	6 680	11 350	5 640
<i>plus</i> benefits in kind	1 340	1 250	1 470	1 470	1 570	1 420
Final income	3 630	4 400	6 190	8 160	12 920	7 060
<i>Percent that are public sector tenants</i>	<i>59</i>	<i>34</i>	<i>28</i>	<i>17</i>	<i>9</i>	<i>30</i>
Average per household (number)						
Children (i.e. under 16)	0.4	0.4	0.9	0.9	0.7	0.7
Adults	1.5	1.7	2.0	2.2	2.6	2.0
People in full-time education	0.3	0.3	0.7	0.8	0.7	0.6
Economically active people ²	0.1	0.6	1.3	1.7	2.2	1.2
Retired people	0.9	0.7	0.2	0.1	0.1	0.4

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

² See Appendix 1 paragraph 10 for definition of economically active.

The composition of each quintile group of households ranked by original income¹, 1983

TABLE C

	Quintile group					Total
	Bottom	2nd	3rd	4th	Top	
Percentages						
Household type						
Retired	65	47	7	3	2	25
Non-retired						
1 adult	9	15	14	7	3	10
2 adults	5	15	23	28	27	20
1 adult with children	8	5	2	1	—	3
2 adults with children	9	13	39	38	28	25
3 or more adults	3	5	15	23	41	17
Total	100	100	100	100	100	100

¹ Appendix 4, Table 7 gives fuller details.

the lowest quintile group rises from 0.3 per cent to 5.8 per cent. Further, but comparatively smaller, compressions of the income distribution occur at the stages of disposable and final income.

Though not without its drawbacks, the Gini coefficient is the most widely used summary measure of the inequality of the distribution of income (see paragraphs 38 and 39 of Appendix 1). 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 49.1 per cent to 36.3 per cent shown in Table D clearly confirms that cash benefits produce the largest reduction in income inequality.

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 nearly half of those in the second quintile group are retired (Table C). The income profile of the retired is very different from that of households whose head is of working age, as is their expenditure pattern (which is

Percentage shares of total household income, 1983

TABLE D

	Percentage in each quintile group of households re-ranked at each stage				
	Original income	Gross income	Disposable income	Post-tax ¹ income	Final income
Quintile group					
Bottom ..	0.3	5.8	6.9	6.0	6.9
2nd ..	7	11	12	11	12
3rd ..	18	17	18	17	18
4th ..	27	25	24	24	24
Top ..	48	42	40	42	39
Total ..	100	100	100	100	100
Decile group					
Bottom ..	—	2.3	2.8	2.1	2.6
Top ..	29	25	24	26	24
Gini coefficient (percent) ..	49.1	36.3	33.0	36.1	32.7

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

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 will be analysed separately. Non-retired households are examined first, followed by a discussion of the impact of the tax-benefit system on retired households.

RESULTS FOR NON-RETIRED HOUSEHOLDS

Original income

The distribution of original income amongst non-retired households is less unequal than amongst all households, ranging from an average of £1 440 per annum in the lowest quintile group to £20 230 in the highest (Table E). The relationship between a household's original income and the number of economically active people it contains is again very strong.

Summary of the effects of taxes and benefits on non-retired households, 1983

TABLE E

	Quintile groups of non-retired households ranked by original income					Average over all households
	Bottom	2nd	3rd	4th	Top	
Average per household (£ per year)						
Original income ..	1 440	6 070	8 880	12 150	20 230	9 750
plus cash benefits ..	2 730	1 090	790	660	540	1 160
Gross income ..	4 170	7 160	9 670	12 820	20 770	10 920
less income tax ¹ and employees' NIC ..	190	1 200	1 910	2 750	4 910	2 190
Disposable income ..	3 980	5 960	7 760	10 070	15 860	8 730
less indirect taxes ..	1 210	1 720	2 080	2 560	3 550	2 220
Income after cash benefits and all taxes ..	2 780	4 240	5 680	7 510	12 310	6 500
plus benefits in kind ..	1 670	1 440	1 520	1 550	1 570	1 550
Final income ..	4 440	5 680	7 200	9 060	13 880	8 050
Percent that are public sector tenants ..	54	33	21	15	8	26
Average per household (number)						
Children (i.e. under 16) ..	0.9	0.9	1.0	0.9	0.7	0.9
Adults ..	1.7	2.0	2.1	2.3	2.7	2.2
People in full-time education ..	0.7	0.6	0.8	0.8	0.7	0.7
Economically active people ² ..	0.6	1.3	1.6	1.9	2.3	1.5
Retired people ..	0.1	0.1	0.1	0.1	0.1	0.1

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

² See Appendix 1 para 10 for definition of economically active.

Cash benefits

Most cash benefits are designed to help the aged, the sick and disabled, or people on low incomes (Table F). For non-retired households, income-related benefits such as Supplementary Benefit (SB) form the most important source of cash benefit income and, as would be expected, these are heavily concentrated in the lowest quintile group. Child-related benefits (mainly Child Benefit) are spread fairly evenly over the income distribution, though less benefit is received by the top quintile group where there tend to be fewer children per household (Table E). The presence of elderly people and widows within non-retired households means that these households still receive some age-related benefits (widow's pensions and allowances are classified as age-related benefits). On average, cash benefits formed 11 per cent of the gross income of non-retired households; their payment resulted in a significant reduction in income inequality.

Average value of cash benefits¹ for each quintile group of non-retired households ranked by original income, 1983

TABLE F

	Quintile group					Total
	Bottom	2nd	3rd	4th	Top	
£ per household						
Age-related	390	290	180	140	100	220
Income-related ²	1 720	350	190	140	130	510
Child-related	310	300	320	320	250	300
Other ³	310	150	100	70	60	140
Total	2 730	1 090	790	660	540	1 160
Cash benefits as a percentage of gross income	65	15	8	5	3	11

¹ Appendix 4, Table 5 gives more details of cash benefits.

² Includes unemployment benefit.

³ Mainly related to sickness and disability.

The Housing Benefit scheme, which came into operation in November 1982 for certain Supplementary Benefit (SB) recipients and in April 1983 for other claimants, replaced the former system of rent rebates/allowances, rates rebates, and the 'housing requirements' element of SB. This was essentially only an administrative change and has had no effect on the distribution of final income, though the intermediate stages are altered slightly (see Box and Appendix 2 for details).

Income tax and National Insurance contributions

Both income tax payments and employees' National Insurance contributions are closely related to the size of original income. Thus the size of employees' National Insurance contributions paid by each household varies with the number of persons in employment and with their earnings. However the existence of an earnings

HOUSING BENEFIT

The Unified Housing Benefit scheme came into operation in November 1982 for certain Supplementary Benefit (SB) recipients and in April 1983 for other claimants. It replaced the previous arrangements under which SB recipients received a 'housing requirements' element in their SB payment and then paid their rent and rates in full, and others eligible for assistance with their rent and rates payments received rebates or allowances from their local authority. Under the new system, all those eligible for housing assistance receive it from their local authorities through rent and rates rebates if they are public sector tenants or rent allowances and rates rebates if they are private sector tenants. The effect of the scheme is to decrease SB payments by the amount of any rent or rates assistance included in the 'housing requirements' element, and to raise rent rebates/allowances and rates rebates by a similar amount. In Table F rent rebates and allowances and SB payments are classified as income-related cash benefits, and so this item will have fallen by the amount of rates assistance formerly included. Domestic rates are classified as an indirect tax and in the past have been shown as far as possible net of rebates. However, since the rates rebate element of SB could not be separately identified, SB recipients had to be shown as paying their rates in full, despite the fact that these costs may have been met at least in part by the DHSS. Under the new system it is possible to calculate rates net of rebates for all households, and this is the basis for the calculation of rates payments in Table H. Appendix 2 gives further information on these treatments.

ceiling means that 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.

With the introduction of the Mortgage Interest Relief at Source (MIRAS) scheme in April 1983, the income tax payments reported after that date by most individuals with mortgages under £30 000 no longer reflected their true income tax liability. This is because under the scheme, tax relief at the basic rate (30 per cent) is deducted by borrowers from their mortgage interest payments to the lending institution, and their income tax payments rise by the same amount. In Table G, for households affected by this change, tax relief obtained under MIRAS has been imputed and deducted from their recorded income tax payments. Also deducted is the relief given by deduction at source obtained on life assurance premiums, formerly treated as a benefit in kind in previous articles.

The personal tax allowances are large enough to prevent households in the lowest quintile group from paying much tax. Due to the progressive nature of the income tax system, the proportion of gross income paid in income tax rises from 2.6 per cent for the lowest quintile group to 18.4 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, 1983

TABLE G

	Quintile group					Total
	Bottom	2nd	3rd	4th	Top	
Income tax ¹	2.6	11.2	13.7	15.2	18.4	14.7
Employees' NIC	1.9	5.6	6.1	6.2	5.3	5.4
Total	4.6	16.7	19.7	21.4	23.7	20.1

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

Indirect taxes

Indirect taxation is the only component of the tax-benefit system which does not have the effect of reducing income inequality. In total, indirect taxes form a declining proportion of disposable income as original income rises (Table H), ranging from 30.3 per cent in the lowest quintile group to 22.4 per cent in the highest. However, individual taxes have divergent effects on income inequality.

Domestic rates, tobacco duty, beer duty and intermediate taxes (see box) all fall as a percentage of disposable income as income rises. The fall in tobacco duty payments is particularly marked because the incidence of smoking is higher amongst people with low incomes. VAT is not levied on basic necessities such as food and since such items form a declining proportion of expenditure as income rises, VAT payments tend to be smaller for low income households than for others. Car ownership increases with income and therefore so does the related expenditure, in the form of car tax, vehicle excise duty and duty on hydrocarbon oils.

Although some indirect taxes such as VAT are broadly progressive, Table H shows that the impact of each of the indirect taxes declines for the top quintile group compared with the fourth quintile group. This is so partly because higher income households tend to save a larger proportion of their income than households with smaller incomes.

INTERMEDIATE TAXES

Some taxes, such as VAT and excise duties on petrol or spirits, 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.

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 two largest items for which such imputations are made are health and education services, which together accounted for 21.1 per cent of total general government expenditure in 1983. Other items for which imputations are made are welfare food (mainly free school meals), the housing subsidy, travel subsidies, and expenditure on the option mortgage scheme, together accounting for a further 2.7 per cent of general government current expenditure.

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; higher imputed benefits are accorded to those in higher education (sixth form, university, etc.) than, for example, those in primary education. The bottom quintile group contains the largest number of student households for whom the costs of education are greatest, and this means that this quintile group is allocated the highest average imputed benefit (Table J). The impact of welfare foods, which benefit mainly children, is greatest in the lower income groups since children from these

Indirect taxes¹ as a percentage of disposable income for each quintile group of non-retired households ranked by original income, 1983

TABLE H

	Quintile group					Total
	Bottom	2nd	3rd	4th	Top	
Domestic rates ²	6.2	4.9	4.3	3.7	2.9	3.9
VAT	6.9	7.6	7.4	7.4	7.0	7.2
Duty on beer	1.2	1.3	1.2	1.1	1.0	1.1
Duty on wines and spirits	0.8	1.1	0.9	1.1	1.1	1.1
Duty on tobacco	4.8	3.2	2.7	2.0	1.5	2.4
Duty on hydrocarbon oils	1.2	1.7	1.8	1.9	1.6	1.7
Car tax and vehicle excise duty	0.7	1.0	1.1	1.1	0.9	1.0
Other taxes on final goods and services	1.9	1.8	1.7	1.5	1.3	1.5
Intermediate taxes	6.6	6.3	5.8	5.6	5.1	5.7
Total	30.3	28.9	26.8	25.4	22.4	25.5

¹ Appendix 4, Table 6 gives more detailed figures on taxes.

² Net of rate rebates and the rates element of housing benefit supplement, but including water, etc. charges.

Average value of benefits in kind¹ for each quintile group of non-retired households ranked by original income, 1983

TABLE J

	Quintile group					Average over all households
	Bottom	2nd	3rd	4th	Top	
£ per household						
Education	840	650	730	800	790	760
Health	560	630	630	600	600	610
Housing subsidy	130	80	60	40	20	60
Travel subsidies	50	60	60	70	130	70
Other	100	30	30	30	20	40
Total	1 670	1 440	1 520	1 550	1 570	1 550
Benefits in kind as a percentage of post-tax² income	60	34	27	21	13	24

¹ Appendix 4, Table 6 gives more details of benefits in kind.

² Income after cash benefits and all taxes.

households are more likely to take school meals and to have them provided free of charge. Welfare foods form about 90 per cent of the 'other benefits in kind' in Table J, the only other allocated item being option mortgage expenditure. The option mortgage scheme was in operation only until April 1983 when it was subsumed in MIRAS.

Expenditure on health services has been allocated to individuals according to the average cost to the Exchequer of each type of service and to the estimated use made of each service by people of different age and sex. Benefits are then aggregated for members of the household to yield figures on a household basis, so that not only the sex-age composition but also the size of the household determines the distribution 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. Table J shows that these benefits are lowest for the bottom quintile group but fairly flat in the remainder of the income distribution.

Housing subsidy is taken to be the excess of expenditure over income on the aggregate local authority housing revenue account, that 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. Since the proportion of households who are public sector tenants is 54 per cent in the lowest quintile group compared with only 8 per cent in the highest group (Table E), the imputed housing subsidy is larger for low income households than for others. In this article, tax relief on mortgage interest is treated as an adjustment to income tax, not as a housing subsidy.

Travel subsidies cover the passenger element of the grants made to various public transport operations. This year the bus travel subsidy (including the cost of concessionary fares for the elderly) has been allocated to households for the first time, in addition to the passenger rail travel subsidy (see Appendix 3 for methodology and detailed results). 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. Since households in the middle and upper ranges of the income distribution tend to make heavier use of the railways and those on low incomes make more use of bus transport, the combined effect of these travel subsidies shows some rise over the income distribution, except that the heavy use of railways by households in the top quintile group means that their imputed benefit is nearly twice the average for all households.

Table J shows that taken together the absolute values of these benefits in kind show no clear relationship with household income, falling in the lower half of the distribution and rising in the upper half. However as a proportion of post-tax income, benefits decrease from 60 per cent in the lowest quintile group to 13 per cent in the highest quintile group, indicating that this expenditure contributes to the reduction in income inequality.

The overall effect of the various stages of the tax-benefit system on non-retired households is summarised in Table K. Households in the highest quintile group receive 41 per cent of all original income, compared with 3 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 8 per cent and that of the highest falls to 37 per cent. Cash benefits are the major factor underlying these changes, causing the Gini coefficient to fall from 38.1 per cent based on original income to 31.0 per cent based on gross income. Income tax and employees' National Insurance contributions produce a further reduction in inequality, but payment of indirect taxes increases the Gini coefficient. Benefits in kind reduce income dispersion further.

Percentage shares of total household income for non-retired households, 1983

TABLE K

	Percentage in each quintile group of non-retired households re-ranked at each stage				
	Original income	Gross income	Disposable income	Post-tax ¹ income	Final income
Quintile group					
Bottom ..	3.0	7.2	8.1	6.8	7.6
2nd ..	12	13	14	13	14
3rd ..	18	18	18	18	18
4th ..	25	24	23	23	23
Top ..	41	38	37	39	37
Total ..	100	100	100	100	100
Decile group					
Bottom ..	0.1	2.6	3.1	2.3	2.7
Top ..	25	23	22	24	22
Gini coefficient (percent)	38.1	31.0	28.8	32.3	29.4

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

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

Effects of taxes and benefits on retired households, 1983

TABLE L

										Quintile groups of retired households ranked by original income					Average over all households
										Bottom	2nd	3rd	4th	Top	
Average per household (£ per year)															
Original income	..									—	110	550	1 550	6 390	1 720
<i>plus</i> cash benefits															
Age-related	..	..	..	..	..	..	..	..	..	1 930	2 120	2 170	2 180	2 160	2 110
Child-related	..	..	..	..	..	..	..	..	..	—	—	—	10	—	—
Income-related	..	..	..	..	..	..	..	..	..	760	470	300	120	50	340
Other	..	..	..	..	..	..	..	..	..	160	110	270	350	300	240
Gross income	..	..	..	..	..	..	..	..	..	2 850	2 810	3 290	4 200	8 900	4 410
<i>less</i> income tax ¹	..	..	..	..	..	..	..	..	..	—	—	40	220	1 540	360
<i>less</i> employees' NIC	..	..	..	..	..	..	..	..	..	—	—	—	—	20	—
Disposable income	..	..	..	..	..	..	..	..	..	2 860	2 800	3 250	3 970	7 340	4 050
<i>less</i> indirect taxes															
Domestic rates	..	..	..	..	..	..	..	..	..	200	190	200	260	410	250
VAT	..	..	..	..	..	..	..	..	..	120	140	170	250	460	230
Tobacco duty	..	..	..	..	..	..	..	..	..	90	70	90	100	80	80
Other taxes on final goods & services	..	..	..	..	..	..	..	..	..	100	130	170	240	440	220
Intermediate taxes	..	..	..	..	..	..	..	..	..	150	180	190	250	390	230
Income after cash benefits and all taxes	..	..	..	..	..	..	..	..	..	2 200	2 080	2 430	2 870	5 570	3 030
<i>plus</i> benefits in kind															
Education	..	..	..	..	..	..	..	..	..	—	—	10	30	20	10
National health service	..	..	..	..	..	..	..	..	..	830	840	850	850	900	860
Housing subsidy	..	..	..	..	..	..	..	..	..	140	110	90	60	40	90
Travel subsidies	..	..	..	..	..	..	..	..	..	60	60	60	70	90	70
Final income	..	..	..	..	..	..	..	..	..	3 220	3 100	3 450	3 880	6 630	4 060

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

the top quintile group and are receiving occupational pensions. However 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 Supplementary Pension. Thus cash benefits form a very high proportion of gross income for all but the wealthiest retired households. However, 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.

By definition, the National Insurance contributions of retired households are very small. All except those in the highest quintile group 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.

Domestic rates form the largest indirect tax payments made by retired households, followed by VAT and intermediate taxes. VAT, which is the largest indirect tax for non-retired households, is less important to most retired households because they spend a high proportion of their income on exempt or zero-rated goods such as food and heating.

Retired households derive significant benefits from health services and, to a lesser extent, the housing subsidy and travel subsidies. Health benefit is spread fairly evenly within the group of retired households, but housing subsidy is substantially higher for low income households because low income households 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.

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 make only a marginal reduction in dispersion and so the distribution of final income is virtually unchanged from the distribution of disposable income. A comparison of Table M with Table K 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.

Percentage shares of total household income for retired households, 1983

TABLE M,

	Percentage in each quintile group of retired households re-ranked at each stage				
	Original income	Gross income	Disposable income	Post-tax ¹ income	Final income
Quintile group					
Bottom	—	9.6	10.3	8.7	9.8
2nd	1	13	13	14	14
3rd	6	16	17	17	18
4th	18	21	21	21	22
Top	74	41	38	40	37
Total	100	100	100	100	100
Decile group					
Bottom	—	4.3	4.6	3.2	4.0
Top	53	27	24	25	23
Gini coefficient (percent)	71.8	31.1	27.3	30.4	26.3

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

LIFE-CYCLE ANALYSIS OF REDISTRIBUTION

Although the sharpest contrasts in the impact of the tax-benefit system are to be observed between retired and non-retired households, there are also significant differences in its effects at various stages throughout the 'life-cycle' of a household. To examine these effects in more detail, the following eight household types are defined:

- (i) Single adult under 30 years
- (ii) Married couple, no children, head of household under 30 years
- (iii) Married couple with child(ren), the youngest under 5 years
- (iv) Married couple with child(ren), all over 5 years
- (v) Married couple with 'child(ren)', at least one of whom is dependent and aged 16-24 years
- (vi) Married couple, no children, head of household aged 45-65 years
- (vii) Married couple, retired
- (viii) Single person, retired

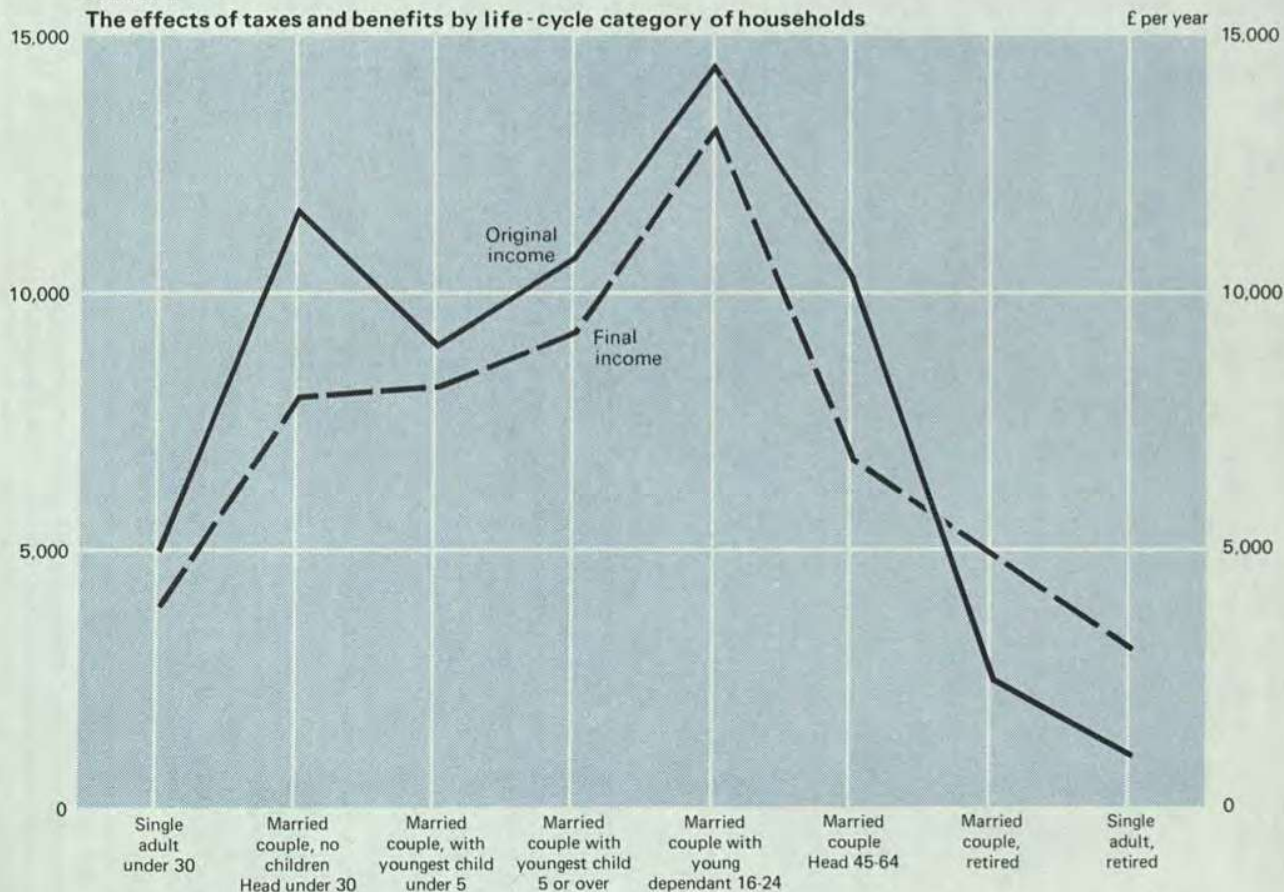
This life-cycle pattern of marriage, family-building, children leaving home and return to two adult and then one adult households is only one of many patterns which actually take place; others are adults remaining single, married couples remaining childless, and married couples with children becoming lone parent households. Appendix 4 Table 8 gives details of these alternative life-cycle household types as well as the eight described above. However, these eight types account for about two-thirds of the FES sample.

The original income of young childless married couples is more than twice that of young single adults (Table N and Chart 4), partly because they tend to be older and also because there are more student households in the latter group. It falls back sharply when there are pre-school children in the household since it is then much less likely that both parents will be economically active. The original income of young childless couples is only exceeded when the children have all reached the age of 16, at which stage household wages and salaries are at a peak. Final income is also at a maximum for this group, having risen at each stage of the life-cycle rather than dipping during the period when there are children under 16.

Older married couples with no children in the household experience a drop in household original income, despite the fact that the head is at an age at which one might expect individual earnings to be at their highest. It was found in the 1980 Department of Employment/Office of Population Censuses and Surveys Women and Employment Survey that women in their fifties are less likely than younger women to work, and so there are less likely to be two wage-earners in these older households than in those where the head is aged under 30 years. This is confirmed by the fact that on average there are 1.4 economically active persons per household where the head is aged 45-65 compared with 1.8 where the head is aged under 30. Wages and salaries per worker are in fact slightly higher for the older age group.

CHART 4

The effects of taxes and benefits by life-cycle category of households



Average incomes, taxes and benefits by life-cycle categories, 1983

TABLE N

	Single adult aged under 30	Married couples non-retired					Married couple retired	Single adult retired
		no children head aged under 30	youngest child under 5	youngest child 5 or over	with young dependant(s) aged 16-24	no children head aged 45-64		
<i>Number of households in the sample</i>	167	243	921	785	287	577	698	911
Average per household (£ per year)								
Original income	5 010	11 660	8 980	10 670	14 450	10 290	2 450	990
plus cash benefits	610	330	1 240	970	1 200	510	3 100	2 160
Gross income	5 610	11 990	10 220	11 640	15 650	10 800	5 550	3 150
less income tax and employees' NIC	1 190	2 520	1 860	2 370	3 320	2 440	540	210
Disposable income	4 420	9 470	8 360	9 270	12 330	8 370	5 010	2 950
less indirect taxes	1 270	2 090	2 030	2 350	3 010	2 160	1 350	700
Income after cash benefits and all taxes	3 150	7 380	6 330	6 920	9 320	6 210	3 660	2 250
plus benefits in kind	810	620	1 860	2 320	3 930	580	1 170	810
Final income	3 960	8 000	8 190	9 240	13 250	6 790	4 830	3 060
Average per household (numbers)								
Children	—	—	2.0	1.9	0.8	—	—	—
Adults	1.0	2.0	2.0	2.0	3.6	2.0	2.0	1.0
In full-time education	0.2	—	0.9	1.9	1.9	—	—	—
Economically active people	0.8	1.8	1.2	1.6	2.4	1.4	0.1	—
Retired people	—	—	—	—	—	0.2	1.7	1.0
Gini coefficients (per cent)								
Original income	44.4	26.7	34.2	29.9	27.8	34.9	67.2	74.4
Gross income	33.6	24.3	26.2	24.9	24.3	31.0	27.7	22.9
Final income	32.1	26.6	23.9	20.2	19.6	30.7	22.1	19.3

The degree of dispersion of original incomes within each of the eight life-cycle groups, as measured by the Gini coefficient, is reduced by the tax-benefit system, though the impact of taxes and benefits varies considerably at different stages of the life-cycle. The largest reductions occur for retired households (though a reduction of a similar size occurs for lone parent households—see Appendix 4 Table 8). Of the non-retired groups, dispersion is reduced significantly amongst young single adult households and amongst households with children under school-leaving age, but the tax-benefit system has very little impact on income distribution within the groups of non-retired married couples at either end of their working lives.

Table N also shows how the importance of the different components of the tax-benefit system varies at different stages of the life-cycle and more detailed information is contained in Appendix 4 Table 8. Employees' payments of National Insurance contributions are lowest when receipts of contributory benefits are highest, with the main contributory benefit, the state retirement pension, reaching its maximum at a time when virtually no contributions are paid. Of the remaining contributory benefits, married couples with pre-school age children receive most Unemployment Benefit, followed by married couples with heads between 45 and 65, and single adults under 30. Non-contributory benefits peak much earlier in the life-cycle, for married couples with pre-school age children, and the most important of these benefits, Supplementary Benefit and Child Benefit, are also at a maximum for this group.

Payment of income tax depends not only on income but also on the tax allowances for which a household is eligible. Thus, households with the same income may pay different amounts of tax according to whether, for

example, the income is earned by the husband only or by the husband and wife, the amount of mortgage interest relief allowable, and so on. Thus young married couples pay less income tax than their older counterparts both in absolute terms (£1710 per annum compared with £1900 per annum) and as a percentage of gross income, because both husband and wife are more likely to be earning and so their personal allowance will be higher, and any mortgages held by this group are likely to be less mature and thus eligible for more tax relief. Married couples with pre-school children pay less income tax as a proportion of gross income than any other of the non-retired household groups because of the importance in their gross income of non-taxable benefits such as Child Benefit and Supplementary Benefit (unless paid to an unemployed head of household).

Married couples with children over 16 pay most indirect taxes of all the life-cycle groups shown, though as a proportion of disposable income their payments are actually below average. Single retired people pay less in indirect taxes than any other group.

Of the benefits in kind allocated to households, by far the highest education benefit is received by families where the children are over 16. In these families, those young adults still in education will be in either sixth forms or further education, which are more expensive services to provide than primary education. Health benefits show considerable variation over the life-cycle, ranging from £140 per annum for young single adults to £1010 per annum for retired married couples. Since the cost of providing health care to a baby or a very young child is similar to the cost of providing health services to an elderly person, families with pre-school children receive benefits at a comparable level to retired couples (£1000 per annum). Taken together, allocated benefits in kind peak for married couples with children over 16.

PART II

RESULTS FOR THE YEARS 1975 TO 1983

This part of the article examines the changes which took place between 1975 and 1983 in the impact of taxes and benefits on household income. The main conclusion is that although the distribution of original income became more unequal over this period, taxes and benefits largely offset this trend so that the distribution of final income in 1983 was little changed from that in 1975. This has been achieved mainly through the increased role played by cash benefits in household income over the period, but other components of the tax-benefit system have also altered in importance. The changes in the tax-benefit system in aggregate will be examined first, by reference to the level and composition of government expenditure and financing over the period. This is followed by a discussion of demographic factors, which can also influence the distribution of income between households and the impact of taxes and benefits on them. These two aspects give the background to the period 1975-83. The changes observed over the period in the shares of household income at different stages of the tax-benefit system are then examined in detail.

Total government expenditure 1975-83

Government expenditure and revenue at current prices rose throughout the period, largely due to inflation (Table P). However, when allowance is made for the effects of inflation, the pattern of growth from year to year has been rather uneven, as is clear from comparing the growth in government expenditure with that of gross domestic product (GDP). Taking the period as a whole, the growth in GDP has exceeded the growth in government expenditure measured in current prices.

The growth in government current transfer payments has exceeded that in final consumption throughout the period, more than trebling in current price terms since 1975. Much of this growth can be attributed to increases in the number of recipients, such as retired people and those out of work requiring income support.

Growth in gross domestic product and general government expenditure, 1975-83

TABLE P

	1975	1977	1979	1981	1983
Gross domestic product					
At current market prices (1975 = 100)	100	137	185	239	284
At constant (1980) market prices (1975 = 100)	100	105	111	107	113
General government expenditure and financing (1975 = 100)	100	120	166	227	268
Government expenditure categories (1975 = 100):					
Current transfer payments	100	140	197	281	336
Capital transfer payments	100	36	103	103	90
Final consumption	100	127	168	240	285
Capital formation and stocks	100	98	104	91	115

Allocated and unallocated expenditure

Of the four types of government expenditure shown in Table P, a part of both current transfer payments and final consumption is allocated to households in this study. Both these items have shown strong growth between 1975 and 1983, and Tables Q and R illustrate the changes which have taken place in their composition over this period.

Taken together, the current transfers allocated to households have increased as a proportion of all transfers from 48 per cent to 60 per cent (Table Q). This has been due mainly to the growth in importance of non-contributory benefits which increased from 8 per cent of all transfer payments in 1975 to 18 per cent in 1983. The rise between 1975 and 1979 was partly due to the introduction of Child Benefit, but the main cause over the period as a whole has been the growth in Supplementary Benefit payments. Contributory benefits, mainly the state retirement pension but also Unemployment Benefit, have also increased their share but the growth has been much less marked. The rise in the level of long-term unemployment over the period has had a big impact on total expenditure on Supplementary Benefit, because Unemployment Benefit is payable only for a year after which those out of work may become solely dependent on Supplementary Benefit.

Changes in the composition of Government transfer payments, 1975-83

TABLE Q

Percentages

	1975	1977	1979	1981	1983
Current transfers					
Allocated					
Cash benefits: contributory	27.2	33.3	28.6	30.1	30.0
non-contributory	8.4	11.6	13.6	15.5	18.0
other ¹	2.2	2.8	2.3	2.2	4.3
Subsidies ²	6.1	6.7	6.6	5.7	4.2
Other ³	3.7	4.3	3.4	3.5	3.2
Total	47.6	58.9	54.6	57.0	59.8
Unallocated	31.4	34.7	33.1	34.1	33.6
Capital transfers (unallocated)	21.1	6.5	12.3	8.9	6.7
General government transfers	100.0	100.0	100.0	100.0	100.0

¹ Student maintenance grants, rent rebates and allowances.² Housing subsidy, travel subsidies (excluding concessionary fares).³ Institutional cost of university education, option mortgages expenditure.

Changes in the composition of government final consumption, 1975-83

TABLE R

Percentages

	1975	1977	1979	1981	1983
Current expenditure on goods and services					
Allocated					
Health	20.8	21.6	21.9	22.9	22.9
Education ¹ .. .	21.4	20.0	19.3	18.8	18.5
Welfare foods, concessionary fares .. .	2.0	1.9	1.6	1.3	1.2
Total	44.1	43.4	42.8	43.0	42.6
Unallocated .. .	52.6	53.0	53.6	53.4	54.2
Other final consumption ² .. .	3.3	3.5	3.6	3.6	3.2
General government final consumption .. .	100.0	100.0	100.0	100.0	100.0

¹ Universities are part of the personal sector in the National Accounts therefore the institutional cost of university education forms part of government transfer payments.

² Non-trading capital consumption.

The pattern of government final consumption has remained much more stable than the pattern of transfer payments. The items of final consumption allocated to households have decreased slightly in importance from 44 per cent of final consumption in 1975 to 43 per cent in 1983, though at the same time individual items have changed in importance; health expenditure increased from 21 per cent to 23 per cent whilst education expenditure has fallen from 21 per cent to 18 per cent (Table R).

Allocated and unallocated revenue

The pattern of government financing changed considerably between 1975 and 1983 (Table S). Of those items not allocated to households in this article, borrowing halved in importance as a source of revenue, falling from 19 per cent to 9 per cent, whilst other receipts, such as those from petroleum revenue tax, rose by a similar amount. However the major shift affecting households is the decline in the importance of income tax from 28 per cent to 23 per cent of total revenue, and the rise in the share of indirect taxes from 24 per cent to 29 per cent. There was a significant increase in the share of indirect taxes between 1975 and 1977 due to above average increases in revenue from most specific duties, since when their share has increased steadily in line with government policy to shift the balance of personal taxation from income to expenditure. Income tax fell from 28 per cent of total revenue in 1977 to 24 per cent in 1979 when the basic rate of tax was reduced from 33 per cent to 30 per cent and higher rates of tax were reduced.

In terms of revenue allocated to households rather than total revenue, the shift from income tax to indirect taxes has been even more marked, income tax having

Changes in the composition of general government financing, 1975-83

TABLE S

Percentages of total financing

	1975	1977	1979	1981	1983
Allocated revenue:					
Income tax .. .	28.0	28.2	23.8	23.6	22.7
Employees' NIC .. .	5.4	6.1	5.4	6.0	7.2
Indirect taxes on households ¹ .. .	24.3	27.2	28.0	28.7	29.2
Total	57.7	61.5	57.2	58.3	59.1
Unallocated revenue:					
Borrowing .. .	18.9	7.2	14.3	9.7	8.7
Other receipts .. .	23.4	31.3	28.5	32.0	32.2
Total financing .. .	100.0	100.0	100.0	100.0	100.0

¹ Including employers' NIC allocated to households.

declined from 49 per cent of allocated revenue to 38 per cent and indirect taxes having risen from 42 per cent to 49 per cent. Since income tax increases as a proportion of gross income as gross income rises whereas most indirect taxes tend to decrease, one might expect these shifts in government financing to have resulted in some increase in dispersion of post-tax incomes. The extent to which this has actually happened is examined below.

Changes in household formation

Demographic changes and changes in household size can have an impact on income distribution even if tax-benefit policy remains unchanged. A trend towards smaller households, for example one parent households, may mean that although individual incomes remain unchanged, average household incomes fall and there are more low income units. Increased numbers of retired households can also result in more low income units and in greater dependence on cash benefits in the lower ranges of the income distribution.

Because the FES is known to under-represent the elderly, trends in household formation are better studied using the General Household Survey (GHS) which does not suffer from this problem and, in addition, has a larger sample size of about 10 000 respondent households per annum. The household types which can

Changes in household formation, 1975-83

TABLE T

Percentages

	1975	1977	1979	1981	1983
By composition					
1 adult over retirement age ¹ .. .	14	14	15	15	16
2 adults, both over retirement age ¹ .. .	9	10	9	9	10
2 adults, one over retirement age ¹ .. .	6	6	5	6	6
1 adult, under retirement age ¹ .. .	6	7	8	7	8
2 or more adults, no children .. .	26	26	26	26	26
2 or more adults, 1-3 children .. .	34	33	32	32	30
2 or more adults, 4 or more children .. .	3	2	2	2	1
1 adult with children .. .	3	3	3	3	3
All households	100	100	100	100	100
By size:					
1 person .. .	20	21	23	22	23
2 people .. .	32	33	32	31	32
3 people .. .	18	17	17	17	17
4 people .. .	17	18	17	18	18
5 people .. .	8	7	7	7	7
6 or more people .. .	5	4	4	4	3
All households	100	100	100	100	100

¹ 60 for women, 65 for men.

Source: General Household Surveys

be identified from the GHS are not precisely the same as those identified in the FES, but have been chosen to align as closely as possible. Table T shows the distribution of households by composition and by size over the period 1975 to 1983. Changes in population structure occur only very slowly and a longer time period than that chosen for this article is needed to observe underlying trends; thus Table T does not show any dramatic movements. Nevertheless some changes can be discerned. Retired households have increased as a proportion of all households, in particular one person retired households, and the proportion of households with children has declined. The increase in one person retired households is part of a general trend towards more one person households, whilst the number of large households containing six or more people has declined. Comparison of 1971 and 1981 Census data confirms that these trends are part of long-term structural changes in household formation.

The effect of taxes and benefits on household income, 1975 to 1983

In using the FES to study the effects of changes in government expenditure and financing on household incomes, interpretation can be complicated by year to year variation in the mix of households responding to the survey, though such variation is generally quite small. It can be eliminated by imposing a standard mix of households on the sample, but such a process will also remove any genuine changes in household formation over the period such as those shown in Table T. No attempt has been made to standardise FES data in the discussion below, but this caveat should be borne in mind when interpreting the results and undue significance should not be attached to small year to year changes.

The results of the changing pattern of government expenditure and revenue are illustrated in Table U. Cash benefits have grown as a proportion of gross income from 11 per cent in 1975 to 17 per cent in 1983 for all households, and this growth has been spread throughout the income distribution. Between 1975 and 1979 part of the rise was caused by the introduction of Child Benefit; this benefit was phased in between 1977 and 1979 and replaced child tax allowances and family allowances. Throughout the period the increase in the number of retired households has also been a factor. The lowest quintile group have come to rely even more heavily on cash benefits as their major source of income during the period, but the largest change has been in the composition of gross income of the second quintile group, for whom cash benefits have grown in importance from 24 per cent to 47 per cent of gross income. This is largely because in 1983 a much higher proportion of this quintile group were retired households compared with 1975 (47 per cent in 1983 compared with 21 per cent in 1975).

Income tax and employees' National Insurance contributions (NIC) as a percentage of gross income declined throughout the income distribution over this period. The biggest drop occurred in 1979 with the reduction of the standard rate of income tax, and had its greatest impact at the top of the income distribution. However, because high income households tend to be under-represented in the FES sample the drop in overall tax burdens in 1979 is likely to be understated in Table U since the full effect of the reduction of the higher rates of tax is not reflected. At the lower end of the distribution, the bottom quintile group paid negligible amounts of income tax and employees' NIC throughout the period, but the tax burden of the second quintile group fell significantly from 14 per cent of gross

Taxes and benefits as percentages of income by quintile group of households

TABLE U

Households ranked by original income

	1975	1977	1979	1981	1983
Cash benefits as a percent of gross income					
Bottom quintile group	87	91	92	92	96
2nd	24	29	33	37	47
3rd	6	8	9	11	14
4th	3	4	5	6	7
Top	2	2	3	3	3
Average over all households	11	13	13	14	17
Income tax and NI contributions as a percent of gross income					
Bottom quintile group	1	1	—	—	—
2nd	14	13	10	11	9
3rd	20	19	18	18	18
4th	22	22	19	21	21
Top	26	25	21	23	23
Average over all households	21	20	18	19	19
Indirect taxes as a percent of disposable income					
Bottom quintile group	21	22	23	26	27
2nd	24	25	25	28	29
3rd	23	24	25	27	28
4th	22	23	24	25	25
Top	20	21	21	22	23
Average over all households	22	23	23	25	25
Benefits in kind as a percent of final income					
Bottom quintile group	34	34	35	38	37
2nd	27	27	27	29	28
3rd	24	22	23	24	24
4th	19	18	17	18	18
Top	14	14	12	12	12
Average over all households	21	20	19	20	20

income to 9 per cent, partly because of the fall in the basic rate of tax in 1979 but also because of the increasing importance to them of non-taxable income such as Supplementary Benefit.

Indirect taxes rose steadily as a proportion of disposable income between 1975 and 1983 both on average and at all income levels, though the rise was rather greater in the lower half of the income distribution than in the upper half. Benefits in kind fell marginally between 1975 and 1979 from 21 per cent of final income to 19 per cent, but then rose to 20 per cent in 1981 and stayed at that level in 1983.

Table V shows the effect of these changes on shares of income at the various stages of the tax-benefit system, and in Table W their effect is summarised by Gini coefficients. The distribution of original incomes became more unequal over this period, with the shares of the first three quintile groups falling, that of the fourth quintile group rising marginally and the share of the top quintile group increasing from 44 per cent to 48 per cent. These changes are reflected in the increase in the Gini coefficient from 43 per cent to 49 per cent. However, to a large extent the tax-benefit system counteracted this increase in inequality so that the distribution of final income showed little change in 1983 from that in 1975 and the increase in the Gini coefficient based on final income, from 31 per cent to 33 per cent, was much smaller.

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

TABLE V

	1975	1977	1979	1981	1983
Original income					
Quintile group					
Bottom	0.8	0.6	0.5	0.6	0.3
2nd	10	10	9	8	7
3rd	19	19	19	18	18
4th	26	27	27	27	27
Top	44	44	45	46	48
All households	100	100	100	100	100
Disposable income					
Quintile group					
Bottom	6.6	6.9	6.5	6.7	6.9
2nd	13	13	12	12	12
3rd	18	18	18	18	18
4th	24	24	25	24	24
Top	38	38	39	39	40
All households	100	100	100	100	100
Income after cash benefits and all taxes					
Quintile group					
Bottom	6.2	6.4	6.1	6.0	6.0
2nd	12	12	11	11	11
3rd	18	18	18	17	17
4th	24	24	25	24	24
Top	39	39	40	41	42
All households	100	100	100	100	100
Final income					
Quintile group					
Bottom	7.1	7.3	7.1	7.2	6.9
2nd	13	13	12	12	12
3rd	18	18	18	18	18
4th	24	24	24	24	24
Top	38	38	38	39	39
All households	100	100	100	100	100

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

TABLE W

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

As would be expected from all the foregoing discussion, it is the payment of cash benefits which has contributed most towards maintaining roughly the same distribution of final income over this period. Although the Gini coefficient based on gross income increased slightly, the rise was much less than that based on original income. Payment of income tax and employees' National Insurance contributions resulted in a further reduction in the Gini coefficient of about 3 percentage points throughout the period. The payment of indirect taxes caused an increase in the dispersion of incomes in each of the years examined and, as government financing shifted in favour of taxes on expenditure over the period, the difference between Gini coefficients before and after indirect tax payments widened. However, since benefits in kind are highest in percentage terms for low income households they redress the effect of indirect taxes, so that the distribution of final income is very similar to that of disposable income.

Low income households

With significant shifts in government expenditure and financing having taken place between 1975 and 1983, it is of interest to examine what their impact has been not only on the overall distribution of income amongst households but in particular on those households with low incomes. The final paragraphs will therefore discuss the changes which have taken place affecting the 20 per cent of households with the lowest original incomes, the bottom quintile group.

The first point to note is that the mix of household types in the bottom quintile group of original income has changed considerably between 1975 and 1983 (Table X). In 1975, 80 per cent of these households were retired, compared with 65 per cent in 1983. Although it appears from Table S that the proportion of lone parent households in the national population did not change very much over this period, the proportion of lone parent households in the bottom quintile group rose from 5 per cent to 8 per cent. The increase in 2 adult households with children was even greater, from 2 per cent to 9 per cent. It thus seems that there have been increasing numbers of households with children appearing in the lowest income group, mainly because of the rising levels of unemployment over this period, and this has meant that more retired households now appear in the second quintile group.

Referring back to the information on the bottom quintile group contained in Table U, these households now rely almost entirely on cash benefits. Changes in income tax rates and employees' NIC have no impact on them since the vast majority are not liable for either

composition of the lowest quintile group of households ranked by original income.

TABLE X

	1975	1977	1979	1981	1983
Percentages					
Household type					
Retired	81	80	83	78	65
Non-retired					
1 adult	7	5	6	6	9
2 adults	4	4	3	3	5
1 adult with children	5	5	5	6	8
2 adults with children	2	4	4	6	9
3 or more adults	1	1	—	2	3
All households in the bottom quintile group	100	100	100	100	100

type of payment. However, the shift of taxation from income to expenditure has had a greater than average effect on the bottom quintile group, with indirect tax payments rising from 21 per cent of their disposable income in 1975 to 27 per cent in 1983. This compares with the rise from 22 per cent to 25 per cent for all households. Finally, although benefits in kind averaged over all households remained virtually constant at about 20 per cent of final income between 1975 and 1983, their importance to low income households has increased so that these imputed payments formed 37 per cent of final income in 1983 compared with 34 per cent in 1975.

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APPENDIX 1

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 are not covered in the FES and which are difficult to apportion to individual households. Indeed, most people would probably not think of these as leading to a reduction in their personal incomes. 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. He also gives 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 *Family Expenditure Survey Report* for 1983, containing detailed data on household characteristics, income, and expenditure, will be published shortly. 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 1983 was 6 973. The response rate in Great Britain was 67.3 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. In addition response in Greater London is noticeably lower than in other areas (see 'Family Expenditure Survey: a study of differential response based on a comparison of the 1971 sample with the census' by W F F Kemsley, *Statistical News* No. 31, November 1975 (HMSO)). However at present the results in the article are based on the responses of those households which actually co-operated in the survey. This means that some of the figures differ from those produced by other surveys (see also 'Differential response in the Family Expenditure Survey: the effect on estimates of redistribution of income' by R Harris in *Statistical News* No. 39, November 1977 (HMSO)).

Unit of analysis

5. The basic unit of analysis in the article is the household, and not the family or the individual. 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 housing, fuel and light and food, is largely joint spending by the members of the household. Without further information or assumptions it is impossible 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 in which the combined income of members who are at least 60, and who describe themselves as retired or unoccupied, amounts to at least half the total gross income of the household; or in which the head is over state pension age, and more than three quarters of the household's income consists of national insurance retirement and similar state pensions, or related supplementary benefit.

8. By no means all retired people are in retired households; about one in three 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; 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

ies 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 babysitters.

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* other benefits = 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 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 twelve 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 an index of income from self-employment derived from the National Accounts. 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 on *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:

Age-related

Retirement and old persons' pension (including graduated and additional pensions), Widows' benefits, Christmas bonus for pensioners and others.

Child-related

Child benefit, Maternity allowance, Maternity grant.

Income-related

Unemployment benefit, Family Income Supplement, Supplementary benefit, Rent rebates and rent allowances, Student maintenance awards.

Other cash benefits

War pension, Invalidity pension, Non-contributory invalidity pensions, Mobility allowance, Job Release allowance, Statutory Sick Pay, Attendance allowance, Sickness benefit, Industrial injury disablement benefit, Death grant, other benefits.

15. This division involves some arbitrary allocations (for example, most income-related benefits depend on the number of children in the household), and it differs from classifications used elsewhere. It is adopted in the article purely for the purpose of shedding further light on the redistributive effects of cash benefits. 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. Supplementary Benefit includes all supplementary allowances where they are separately distinguished by respondents.

17. Income tax and employees' and self-employed contributions to National Insurance and National Health services are then deducted to give disposable income.

18. The 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 1983 there were two types of tax relief obtained in this way: mortgage interest relief and life assurance premium relief. As explained in the article, 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. Where the interest component is not known it is estimated by reference to the size of instalment and the age of the mortgagor.

19. Life assurance premium relief is calculated by allocating the amount paid by Central Government to life assurance funds in respect of this relief in proportion to each household's premium payments.

20. 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.

21. The order in which the remaining allocated items are presented is to some extent arbitrary.

22. *Direct taxes 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
- Television licences
- Stamp duties
- Gas Levy

23. 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.

24. 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.) As explained in the article, local authority rates are shown net of all rebates, whereas in the past the rates assistance received by Supplementary Benefit recipients could not be separately identified. The Housing Benefit scheme replaced the 'housing requirements' element of Supplementary Benefit payments by a system of rebates for all households. Further details of the scheme and its treatment in this article are contained in Appendix 2.

25. 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 purchases of new cars. In allocating taxes, expenditures recorded in the FES on alcoholic drink, tobacco, ice cream, soft drinks and confectionary are weighted 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.

26. 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 the 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).

27. *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
- National insurance surcharge
- Customs (import) duties
- Stamp duties
- VAT

28. 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.

29. Finally, we add the effects of *benefits in kind* for which there is a reasonable basis for allocation to households, to obtain *final income*. Benefits in kind are:

- State education
- School meals, milk and other welfare foods
- National Health Service
- Housing subsidy
- Rail travel subsidy
- Bus travel subsidy
- Concessionary bus fares for senior citizens
- Option mortgage expenditure

30. *Education benefit* is estimated by the Department of Education and Science as the cost per pupil or student in special schools, primary, secondary and direct grant 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 not counted).

31. The value of *school meals and other welfare foods* is based on their cost to the public authorities. Any payment by the individual households is subtracted to arrive at a net contribution.

32. Each individual in the FES is allocated a benefit from the *National Health Service* according to the estimated average use made of health services by people of the same age and sex, and according to the total cost of providing those services. The benefit from the maternity services is assigned separately to those households receiving maternity grant.

33. In this article public sector tenants are defined to include the tenants of local authorities, New Town Corporations, the Scottish Special Housing Association (SSHA) and the Northern Ireland Housing Executive (NIHE). The total *housing subsidy* includes the net excess of current expenditure over income on the housing revenue accounts of local authorities; and grants paid to the New Town Corporations, the SSHA, the NIHE and the Housing Corporation. 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. The grant to the Housing Corporation has been similarly allocated to housing association tenants in the UK. Housing subsidy does not include mortgage interest tax relief, rent rebates and allowances or rate rebates (see paragraphs 16, 18 and 24 respectively).

34. The rail travel subsidies allocated are those to British Rail passenger operations and London Transport railways (the Underground). The method of allocation has been revised this year and is described in more detail in Appendix 3.

35. The bus travel subsidy (including the cost of concessionary travel schemes for senior citizens) has been allocated to households for the first time in this year's article. The methods used are described in Appendix 3.

36. **Option mortgages** are those where the building societies (or other bodies) charge a low rate of interest, being compensated for this by payments from central government. The interest payments do not then qualify for tax relief, the scheme being primarily for the benefit of non-taxpayers. The benefit to each household holding an option mortgage is assumed to be in proportion to its last interest payment. This scheme ended in April 1983 with the implementation of MIRAS (see paragraph 18 above).

37. 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 tax payer rather than to some other party, for example, 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

38. 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 household share. The curve representing complete equality of income is thus a diagonal line, as in Diagram A, while complete inequality (with only one recipient of income) is represented by a curve comprising the horizontal axis and the right-hand vertical axis.

39. A more typical Lorenz curve is illustrated in Diagram B. 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. This is the shaded area in Diagram B. 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

40. This article is the latest in an annual series. Earlier articles covering the years 1957 to 1982 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 and November 1983. The January 1981 article contains a comprehensive account of the changes in treatment over the years. As far as is practicable with the resources available, the Central Statistical Office will provide on request analyses for 1983 on a basis comparable with those for earlier years. Enquiries should be addressed to D Westcott, Branch 8, Central Statistical Office, Great George Street, London SW1P 3AQ, Telephone 01-233 8300.

DIAGRAM A

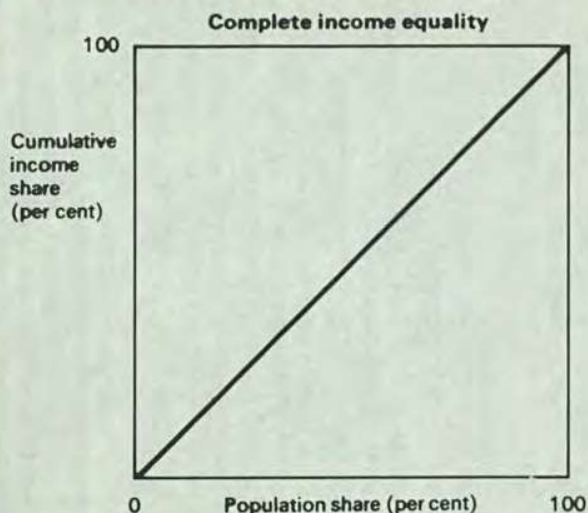
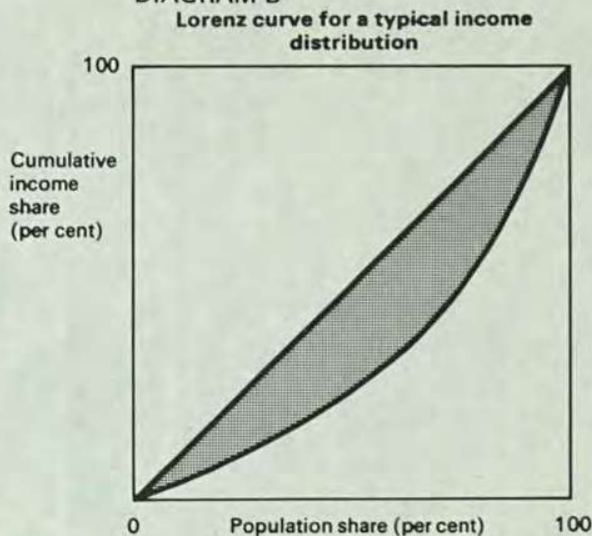


DIAGRAM B



APPENDIX 2

Housing Benefit Scheme

The new Housing Benefit scheme came into operation on 22 November 1982 for certain Supplementary Benefit recipients and on 1 April 1983 for other claimants. Prior to November 1982, assistance with housing costs could be obtained in one of two ways. People in receipt of Supplementary Benefit could have the amount of their benefit assessed to include a 'housing requirements' element. Others could receive assistance from their local authority in the form of rate rebates, rent rebates to council tenants, or rent allowances to tenants of private landlords. Under the new scheme all government assistance with rents and rates payments is paid through local authorities and Supplementary Benefits are reduced accordingly.

Under the new scheme there are two types of claimant:

- (i) Standard claimants - persons who are liable to pay rent or general rates on the dwelling they occupy as a home, and who are not receiving Supplementary Benefit.
- (ii) Certificated claimants - persons who are treated as householders for Supplementary Benefit purposes, and who are entitled to a supplementary allowance or pension.

The effects of the changes on the national accounts are as follows:

- (i) Central government grants to the personal sector no longer include the 'housing requirements' element of Supplementary Benefit or the central government share of local authority rent rebates/allowances, and are thus reduced by about £1 800 million.
- (ii) The central government share of the cost of the housing benefit scheme is now included in current grants to local authorities which are thus increased by about £2 000 million.
- (iii) Payment of local authority rates are now shown net of all rebates, including those paid to Supplementary Benefit recipients, and are thus reduced by about £400 million.
- (iv) Local authority grants to the personal sector now include all rent rebates and allowances, and are thus increased by about £1 400 million.

Thus the total receipts of the personal sector from general government are reduced by the amount of rates assistance formerly included in Supplementary Benefit, an estimated reduction of £400 million, and consumers' expenditure on housing in respect of rates payments is reduced by the same amount.

Previous treatment of housing assistance

In previous articles in this series Supplementary Benefit, including the 'housing requirements' element, has been treated as an income-related cash benefit as have rent

rebates/allowances received from local authorities. However, in accordance with national accounts practice, domestic rates are treated as an indirect tax, net of any local authority rate rebates received. However, since the rate rebate element of the 'housing requirements' part of Supplementary Benefit could not be identified, recipients of Supplementary Benefit had to be shown as paying their local authority rates in full even though these costs were being met in part or in full by the DHSS. To try to get around this problem, certain tables gave a range of payments of domestic rates, based at the lower point on the assumption that Supplementary Benefit recipients paid zero rates and, at the upper point, that they paid their rates in full. The true position lay somewhere between the two.

Treatment of housing benefit

The main difference in this year's article compared with previous years is that the new scheme enables rates payments to be shown net of rebates for *all* households, including those on Supplementary Benefit. In detail, the treatment of the various elements of the scheme is as follows:

- (i) *Supplementary Benefit* continues to be treated as an income-related cash benefit, though receipts will have fallen by the amount of 'housing requirements' no longer payable under the new scheme.
- (ii) *Rent rebates/allowances* continue to be treated as income-related cash benefits, and will rise by the amount of rent assistance formerly included in the 'housing requirements' element of Supplementary Benefit.
- (iii) *Domestic rates* continue to be shown as an indirect tax, net of all rebates. Payments will fall by the amount of rates assistance formerly included in the 'housing requirements' element of Supplementary Benefit payments.

Housing Benefit Supplement (HBS) is a form of Supplementary Benefit created under the housing benefit scheme. It is payable to claimants who receive less in standard housing benefit than they would have received in rent and rates assistance if the former Supplementary Benefit scheme had continued. It is assessed by the local authorities based on information supplied by the DHSS and paid with standard housing benefit. In theory it should be shown as a separate income-related cash benefit or included with Supplementary Benefit. However, in practice it is paid as an enhanced rebate and as such is virtually indistinguishable from other rebates and allowances. A negligible number of FES respondents were able to identify HBS separately. In cases where HBS was separately identified, the amounts were allocated to rent and rates rebates in proportion to the gross rent and rates payable by the household.

APPENDIX 3

Changes in the treatment of travel subsidies

In 1983, for the first time, the subsidy to bus travel and the cost of concessionary bus travel schemes for the elderly have been allocated to households. In addition, the method of allocating rail travel subsidy has been revised and, in line with the changed treatment in National Accounts, the proportion of rail subsidies allocable to households has been increased. The total effect of these changes has been to increase considerably the importance of travel subsidies in the analysis.

Bus subsidies and concessionary fares schemes

The main difficulty which had hitherto prevented an allocation of bus subsidies to households was the value to assign to concessionary fares for senior citizens under the various schemes in operation in different areas of the country. Apart from the difficulty inherent in the data, that is to say the problem of estimating at the household level how much these concessions were being used by the elderly, there were profound conceptual difficulties in putting a value on this usage with such a wide variety of schemes operated by local authorities. In addition, because it is the purpose of the analysis to allocate National Accounts totals for the household sector to individual households any valuation would have to sum to these totals. Data on concessionary fares were first collected by the FES in 1980, but it was not until several years' results were available and improved data-handling facilities had been developed that it was possible to test concepts by making experimental allocations. Broadly, the method used to allocate the cost of concessionary fares in 1983 was to derive the valuations for the various types of passes from a comparison of recorded expenditure in the FES on bus travel by holders of 'free' passes and 'half-fare' passes. Thus the valuations were in terms of expenditure on fares saved by pass holders. But the sum of these valuations could at the same time be taken as a measure of the loss of revenue by bus operators from the use of such passes. Happily, the grossed up estimates agree quite closely with the amounts of money paid over by public authorities and included in National Accounts to compensate bus operators taking part in these schemes. In addition, the relative values of the various types of passes derived from FES figures by the method outlined above agree broadly with estimates made by Department of Transport.

In order to retain, as far as was practicable, regional differences, three separate allocations were made for the GLC, the English Metropolitan areas and the rest of the United Kingdom. Using aggregates of bus receipts, bus subsidies and the cost of concessionary fares and after making allowances for the use of road passenger transport by tourists, the business sector and the institutional part of the personal sector, figures for the total cost of providing bus travel to households in these three areas was estimated. The estimated cost was then divided between households according to their usage of buses. This usage figure was derived from expenditure on road travel recorded in the FES plus the valuations assigned to concessionary passes held by household members. Thus, for each household the combined figure for bus subsidy and concessionary

fares expenditure was found by deducting any payments made by the household from the estimated cost of providing bus travel to that household.

Rail travel subsidy

As mentioned above, the method of allocating passenger rail travel subsidy to households has been revised. Formerly, the basis of the allocation was simply to divide the total amount of subsidy appropriate to the household sector between households in proportion to their recorded expenditure on rail travel. The revised allocation, however, attempts to make some provision for the varying amounts of subsidy to rail travellers using inter-city, London and South East and other services. To this end 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 were made for the use of rail travel by the business sector, tourists and the institutional part of the personal sector.

The results

Tables 1 and 2 show how the two elements of travel subsidy differ in their impact on households. Rail travel subsidy rises strongly with original income amongst non-retired households, being associated both with levels of economic activity and with higher personal incomes (Table 1). The increase in the highest quintile group is most striking. Bus travel subsidy however is rather flat across the income groups of non-retired households. Taken together travel subsidies rise quite strongly with income.

The impact of travel subsidies also differ according to household composition (Table 2). Rail travel subsidy predominantly benefits non-retired households. On the other hand bus subsidy is of particular benefit to retired households who receive, on average, about twice as much subsidy as non-retired households despite their much smaller average size. This is primarily due to the large amount of concessionary fares expenditure included in the allocation of the bus subsidy.

Average value of travel subsidies for each quintile group of non-retired households ranked by original income, 1983

TABLE 1

	Quintile group					
	Bottom	2nd	3rd	4th	Top	Total
£ per household						
Rail subsidies	21	24	36	44	100	45
Bus subsidies	29	32	27	25	31	29
Total	49	56	64	69	132	74

Average value of travel subsidies for each household type, 1983

TABLE 2

				Retired		Non-retired								
				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 households
£ per household														
Rail subsidies				10	21	44	53	66	15	36	31	22	59	38
Bus subsidies				40	67	22	32	50	26	19	14	20	43	35
Total				51	88	66	86	115	41	55	45	42	102	73

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General government expenditure in 1983

TABLE 1

	£ million	Percentage of total expenditure
Allocated expenditure		
Allocated cash benefits		
Social security benefits ¹		
National Insurance (contributory)		
Retirement	14 370	10.4
Widows and guardians	770	0.6
Unemployment	1 540	1.1
Sickness/Statutory sick pay	740	0.5
Invalidity	1 860	1.3
Maternity	170	0.1
Disablement	380	0.3
Other	180	0.1
Non-contributory		
Child benefit	4 330	3.1
Supplementary benefit	5 840	4.2
War pension	520	0.4
Other	1 300	0.9
Student maintenance grants ²	700	0.5
Rent rebates and rent allowances	2 250	1.6
Allocated benefits in kind ¹		
Health services	15 080	10.9
Education	14 150	10.2
School meals, milk, welfare foods	560	0.4
Option mortgage scheme	90	0.1
Housing subsidy	1 560	1.1
Travel subsidies ³	1 510	1.1
	67 900	49.1
Unallocated expenditure		
Other current expenditure on social, environmental and protective services		
Social services		
Social security benefits administration	1 470	1.1
Personal social services	2 680	1.9
Other	50	—
Environmental services		
Housing	260	0.2
Water, sewerage, land drainage and public health	1 350	1.0
Parks, etc	860	0.6
Miscellaneous local authority services	1 250	0.9
Libraries, museums, and arts	750	0.5
Protective services		
Police	2 950	2.1
Parliament, courts, and prisons	1 690	1.2
Fire services	640	0.5
	13 950	10.1
Capital expenditure on social, environmental and protective services		
Social services	1 690	1.2
Environmental services		
Housing	2 500	1.8
Other	1 510	1.1
Protective services	260	0.2
	5 960	4.3
Other current expenditure		
Defence and external relations	17 910	12.9
Roads, transport and communications	2 370	1.7
Industry, trade, agriculture, research and employment	7 230	5.2
Other	1 950	1.4
	29 460	21.3
Other capital expenditure	4 240	3.1
Debt interest	14 660	10.6
Non-trading capital consumption	2 140	1.5
Total expenditure	138 310	100.0

¹ Including benefits to people not living in private households.² Estimated.³ Including concessionary fares expenditure.

Financing of general government expenditure in 1983¹

TABLE 2

	£ million	Percentage of total financing
Allocated financing²		
Income tax ³	31 370	22.7
Employees' and self-employed NI contributions	10 010	7.2
Indirect taxes		
Domestic rates (net of rebates)	5 460	3.9
Taxes on final goods and services		
VAT	11 790	8.5
Duty on beer	1 620	1.2
Duty on wines and spirits	1 870	1.3
Duty on tobacco	3 730	2.7
Duty on hydrocarbon oils	2 690	1.9
Car tax, vehicle excise duty and driving licences	1 640	1.2
Other	1 390	1.0
Taxes and NI contributions on intermediate goods and services		
Employers' NI contributions	3 440	2.5
Commercial and industrial rates	3 130	2.3
Duty on hydrocarbon oils	1 410	1.0
VAT	720	0.5
National insurance surcharge	620	0.4
Motor vehicle duty and driving licences	410	0.3
Other	470	0.3
	81 770	59.1
Unallocated financing		
Employers' NI contributions not allocated	7 190	5.2
Indirect taxes		
Commercial and industrial rates not allocated	3 970	2.9
Taxes on final goods and services not allocated		
VAT	3 640	2.6
Duty on hydrocarbon oils	1 390	1.0
National insurance surcharge	1 290	0.9
Other	2 630	1.9
Other taxes		
Corporation tax	5 640	4.1
Petroleum revenue tax ⁴	6 120	4.4
Taxes on capital	1 480	1.1
Other receipts ⁵	11 150	8.1
Government borrowing requirement	12 040	8.7
Total financing	138 310	100.0

¹ See Appendix 1 for notes on definitions for these items.² Including taxes paid by people not living in private households.³ Net of tax relief at source on mortgage interest and life assurance premiums.⁴ Including supplementary petroleum duty.⁵ Receipts of rent, royalties and licence fees on oil and gas production, interest, dividends, trading income and miscellaneous transactions (net).

Source: United Kingdom National Accounts, 1984 Edition, Table 9.1

Average incomes, taxes and benefits, 1983

By decile groups of households ranked by original and disposable incomes

TABLE 3

		£ per year										Average over all decile groups	
		Decile group											
		1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th		
(i) Ranked by original income													
All households													
Decile points (£)	.. .. .	18	623	2 418	5 100	6 904	8 589	10 450	12 816	16 656			
Number of households in the sample	.. .. .	697	698	697	697	697	698	697	697	698	697	6 973	
Original income	.. .. .	1	241	1 360	3 808	6 011	7 742	9 515	11 617	14 491	22 788	7 757	
Direct benefits in cash													
Age-related	.. .. .	1 083	1 756	1 627	925	459	324	243	170	187	117	689	
Child-related	.. .. .	191	71	92	186	271	319	298	313	263	259	226	
Income-related	.. .. .	1 668	811	563	518	303	260	128	144	133	129	466	
Other	.. .. .	274	187	321	275	166	103	107	67	74	46	162	
Gross income	.. .. .	3 218	3 065	3 962	5 711	7 210	8 748	10 290	12 311	15 149	23 339	9 300	
Income tax ¹ and Employees' NIC	.. .. .	2	15	152	674	1 227	1 594	2 081	2 602	3 380	5 650	1 738	
Disposable income	.. .. .	3 216	3 050	3 810	5 036	5 983	7 154	8 209	9 709	11 768	17 690	7 562	
Domestic rates ²	.. .. .	231	199	241	282	295	327	341	370	404	489	318	
Taxes on final goods and services	.. .. .	449	413	608	850	1 044	1 232	1 322	1 516	1 860	2 470	1 176	
Intermediate taxes	.. .. .	201	186	251	316	373	429	463	538	630	904	429	
Income after cash benefits and all taxes	.. .. .	2 335	2 252	2 710	3 588	4 271	5 166	6 084	7 285	8 874	13 827	5 639	
Benefits in kind													
Education	.. .. .	456	263	310	433	574	730	638	788	751	817	576	
National health service	.. .. .	714	784	721	673	648	664	633	603	612	620	667	
Housing subsidy	.. .. .	158	105	75	86	75	64	52	39	27	18	70	
Travel subsidies	.. .. .	48	54	69	64	56	59	68	67	92	150	73	
Other allocated benefits	.. .. .	65	25	32	34	32	31	30	31	29	20	33	
Final income	.. .. .	3 776	3 483	3 917	4 878	5 657	6 714	7 504	8 813	10 386	15 453	7 058	
(ii) Ranked by disposable income													
All households													
Decile points (£)	.. .. .	2 657	3 613	4 486	5 520	6 658	7 762	8 982	10 684	13 455			
Number of households in the sample	.. .. .	697	698	697	697	697	698	697	697	698	697	6 973	
Original income	.. .. .	412	890	1 860	3 748	5 802	7 567	9 202	11 433	14 317	22 342	7 757	
Direct benefits in cash													
Age-related	.. .. .	1 204	1 448	1 302	789	560	407	388	285	284	223	689	
Child-related	.. .. .	27	53	145	247	301	301	322	311	276	279	226	
Income-related	.. .. .	514	732	914	699	467	339	310	230	225	226	466	
Other	.. .. .	73	127	179	268	214	217	168	142	129	103	162	
Gross income	.. .. .	2 232	3 250	4 399	5 750	7 345	8 831	10 390	12 402	15 231	23 172	9 300	
Income tax ¹ and Employees' NIC	.. .. .	136	149	366	754	1 248	1 623	2 031	2 607	3 327	5 135	1 738	
Disposable income	.. .. .	2 096	3 101	4 033	4 996	6 097	7 208	8 359	9 795	11 903	18 037	7 562	
Domestic rates ²	.. .. .	188	223	256	281	307	324	343	367	405	485	318	
Taxes on final goods and services	.. .. .	317	434	658	854	1 056	1 184	1 314	1 628	1 863	2 456	1 176	
Intermediate taxes	.. .. .	167	193	252	316	378	418	467	561	633	906	429	
Income after cash benefits and all taxes	.. .. .	1 424	2 253	2 867	3 545	4 355	5 283	6 235	7 239	9 002	14 190	5 639	
Benefits in kind													
Education	.. .. .	106	145	296	549	628	643	752	803	864	973	576	
National health service	.. .. .	559	687	722	674	699	676	671	648	656	682	667	
Housing subsidy	.. .. .	78	108	113	99	89	64	62	34	34	18	70	
Travel subsidies	.. .. .	44	58	61	56	60	67	62	66	89	162	73	
Other allocated benefits	.. .. .	9	13	40	59	46	37	36	30	36	23	33	
Final income	.. .. .	2 221	3 264	4 098	4 982	5 878	6 770	7 819	8 820	10 681	16 049	7 058	

¹ Net of tax relief at source on mortgage interest and life assurance premiums. See Appendix 1.² Net of rate rebates and the rates element of housing benefit supplement, but including water, etc. charges.

Average incomes, taxes and benefits, 1983

By quintile groups of original income within household type

TABLE 4

										£ per year					
										Quintile group					Average over all quintile groups
										1st	2nd	3rd	4th	5th	
(i) 1 adult retired															
Quintile points (£)										— 86 500 1 378					
Number of households in the sample										365 ¹ 183 182 183					913
Original income										13 240 888 3 784					989
Direct benefits in cash															
Age-related										1 688 1 739 1 706 1 661					1 696
Child-related										— — — —					—
Income-related										719 359 151 26					395
Other										65 46 81 112					74
Gross income										2 485 2 384 2 827 5 582					3 154
Income tax ² and Employees' NIC										—2 23 115 897					207
Disposable income										2 487 2 360 2 712 4 685					2 947
Domestic rates ³										199 179 212 352					228
Taxes on final goods and services										212 241 302 533					300
Intermediate taxes										147 135 178 256					172
Income after cash benefits and all taxes										1 929 1 805 2 020 3 545					2 246
Benefits in kind															
Education										1 — — 4					1
National health service										717 675 640 596					669
Housing subsidy										133 98 64 41					94
Travel subsidies										46 42 59 60					51
Other allocated benefits										— — — —					—
Final income										2 826 2 621 2 783 4 245					3 061
(ii) 2 or more adults retired															
Quintile points (£)										130 633 1 522 4 317					
Number of households in the sample										164 164 164 164 164					820
Original income										29 354 1 011 2 662 8 614					2 534
Direct benefits in cash															
Age-related										2 696 2 739 2 589 2 552 2 288					2 573
Child-related										— 7 15 — 4					5
Income-related										623 372 263 77 64					280
Other										341 313 604 511 329					419
Gross income										3 688 3 785 4 483 5 802 11 298					5 811
Income tax ² and Employees' NIC										—6 20 84 424 2 188					542
Disposable income										3 693 3 765 4 399 5 378 9 110					5 269
Domestic rates ³										206 205 238 316 431					279
Taxes on final goods and services										570 551 710 866 1 232					786
Intermediate taxes										215 226 256 336 472					301
Income after cash benefits and all taxes										2 703 2 783 3 195 3 860 6 975					3 903
Benefits in kind															
Education										— 17 63 — 47					25
National health service										1 147 1 084 1 029 1 046 1 013					1 064
Housing subsidy										131 104 83 49 36					81
Travel subsidies										85 77 70 87 121					88
Other allocated benefits										— 1 6 — —					1
Final income										4 066 4 067 4 446 5 042 8 192					5 163

¹ More than a fifth of these households had no original income, so the bottom group is undefined.² After tax relief at source on mortgage interest and life assurance premiums.³ Net of rate rebates and the rates element of housing benefit supplement, but including water, etc. charges.

Average incomes, taxes and benefits, 1983

By quintile groups of original income within household type

TABLE 4 (continued)

							£ per year					Average over all quintile groups
							Quintile group					
							1st	2nd	3rd	4th	5th	
(iii) 1 adult non-retired												
Quintile points (£)	..	..	..	..	..	..	647	3 844	5 995	8 700		
Number of households in the sample	..	..	133	133	133	134	133				666	
Original income	..	..	..	..	..	..	118	2 218	5 021	7 207	12 347	5 385
Direct benefits in cash												
Age-related	..	..	..	..	..	..	339	520	269	106	95	265
Child-related	..	..	..	..	..	..	—	—	—	—	—	—
Income-related	..	..	..	..	..	..	1 325	464	124	24	2	387
Other	..	..	..	..	..	..	361	81	30	21	8	100
Gross income	..	..	..	..	..	..	2 143	3 283	5 443	7 358	12 452	6 138
Income tax ¹ and Employees' NIC	..	..	..	..	..	..	10	356	1 201	1 843	3 226	1 328
Disposable income	..	..	..	..	..	..	2 133	2 927	4 242	5 515	9 226	4 810
Domestic rates ²	..	..	..	..	..	..	191	207	252	304	358	263
Taxes on final goods and services	..	..	..	..	..	..	421	478	703	902	1 231	747
Intermediate taxes	..	..	..	..	..	..	162	196	253	326	442	276
Income after cash benefits and all taxes	..	..	1 359	2 046	3 034	3 984	7 195	3 524				
Benefits in kind												
Education	..	..	..	..	..	..	340	244	95	59	60	160
National health service	..	..	..	..	..	..	197	244	193	181	180	199
Housing subsidy	..	..	..	..	..	..	104	71	62	56	38	66
Travel subsidies	..	..	..	..	..	..	33	49	62	98	87	66
Other allocated benefits	..	..	..	..	..	..	3	—	5	3	—	2
Final income	..	..	..	..	..	..	2 036	2 653	3 450	4 381	7 560	4 017
(iv) 2 adults non-retired												
Quintile points (£)	..	..	..	..	..	..	5 023	7 935	10 663	14 649		
Number of households in the sample	..	..	275	275	276	275	275					1 376
Original income	..	..	..	..	..	..	2 443	6 476	9 346	12 511	20 967	10 348
Direct benefits in cash												
Age-related	..	..	..	..	..	..	939	502	250	155	74	384
Child-related	..	..	..	..	..	..	25	7	6	3	—	8
Income-related	..	..	..	..	..	..	1 002	218	105	58	56	288
Other	..	..	..	..	..	..	363	156	83	43	20	133
Gross income	..	..	..	..	..	..	4 772	7 359	9 790	12 770	21 117	11 160
Income tax ¹ and Employees' NIC	..	..	..	..	..	..	387	1 298	2 051	2 966	5 355	2 411
Disposable income	..	..	..	..	..	..	4 384	6 061	7 739	9 804	15 762	8 749
Domestic rates ²	..	..	..	..	..	..	245	300	316	356	470	338
Taxes on final goods and services	..	..	..	..	..	..	798	1 082	1 378	1 523	1 973	1 351
Intermediate taxes	..	..	..	..	..	..	277	372	439	501	726	463
Income after cash benefits and all taxes	..	..	3 064	4 308	5 606	7 424	12 592	6 598				
Benefits in kind												
Education	..	..	..	..	..	..	189	76	47	52	105	94
National health service	..	..	..	..	..	..	557	502	429	385	375	450
Housing subsidy	..	..	..	..	..	..	92	54	40	33	13	46
Travel subsidies	..	..	..	..	..	..	60	54	76	88	150	86
Other allocated benefits	..	..	..	..	..	..	1	5	16	9	—	6
Final income	..	..	..	..	..	..	3 962	4 998	6 213	7 992	13 236	7 279

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

Average incomes, taxes and benefits, 1983

By quintile groups of original income within household type

TABLE 4 (continued)

							£ per year					Average over all quintile groups
							Quintile group					
							1st	2nd	3rd	4th	5th	
(v) 3 or more adults, with no children												
Quintile points (£)	..	..	..	..	..	..		7 569	11 037	14 663	19 133	
Number of households in the sample	..	..	..	..	..	..	142	141	142	141	142	708
Original income	..	..	..	..	..	..	4 549	9 429	12 966	16 889	24 566	13 681
Direct benefits in cash												
Age-related	..	..	..	..	..	..	687	667	356	222	179	422
Child-related	..	..	..	..	..	..	72	68	62	66	67	67
Income-related	..	..	..	..	..	..	1 633	592	301	257	307	619
Other	..	..	..	..	..	..	638	338	176	152	95	280
Gross income	..	..	..	..	..	..	7 579	11 094	13 860	17 586	25 215	15 069
Income tax ² and Employees' NIC	..	..	..	..	..	..	849	1 939	2 897	3 965	6 432	3 217
Disposable income	..	..	..	..	..	..	6 730	9 155	10 963	13 620	18 783	11 851
Domestic rates ³	..	..	..	..	..	..	285	340	353	363	444	357
Taxes on final goods and services	..	..	..	..	..	..	1 388	1 697	2 093	2 473	3 092	2 149
Intermediate taxes	..	..	..	..	..	..	461	553	637	726	979	671
Income after cash benefits and all taxes	..	..	..	..	..	..	4 596	6 566	7 880	10 058	14 268	8 675
Benefits in kind												
Education	..	..	..	..	..	..	1 327	726	423	525	845	770
National health service	..	..	..	..	..	..	712	748	706	656	700	704
Housing subsidy	..	..	..	..	..	..	108	73	47	38	33	60
Travel subsidies	..	..	..	..	..	..	90	104	70	83	230	115
Other allocated benefits	..	..	..	..	..	..	9	7	6	7	5	7
Final income	..	..	..	..	..	..	6 842	8 223	9 132	11 367	16 080	10 330
(vi) 1 adult with children												
Quintile points (£)	..	..	..	..	..	..		—	80	1 248	4 906	
Number of households in the sample	..	..	..	..	..	..		91 ¹	45	46	45	227
Original income	..	..	..	..	..	..		5	579	3 023	7 868	2 289
Direct benefits in cash												
Age-related	..	..	..	..	..	..		28	111	97	38	61
Child-related	..	..	..	..	..	..		585	617	685	586	612
Income-related	..	..	..	..	..	..		2 647	2 393	877	189	1 751
Other	..	..	..	..	..	..		77	120	13	16	61
Gross income	..	..	..	..	..	..		3 343	3 821	4 695	8 697	4 773
Income tax ² and Employees' NIC	..	..	..	..	..	..		30	—5	216	1 122	277
Disposable income	..	..	..	..	..	..		3 313	3 825	4 479	7 575	4 496
Domestic rates ³	..	..	..	..	..	..		317	274	232	337	295
Taxes on final goods and services	..	..	..	..	..	..		370	478	585	997	559
Intermediate taxes	..	..	..	..	..	..		215	231	258	429	269
Income after cash benefits and all taxes	..	..	..	..	..	..		2 411	2 843	3 404	5 812	3 372
Benefits in kind												
Education	..	..	..	..	..	..		912	1 510	1 117	991	1 088
National health service	..	..	..	..	..	..		541	488	427	419	483
Housing subsidy	..	..	..	..	..	..		220	142	124	88	159
Travel subsidies	..	..	..	..	..	..		41	24	38	61	41
Other allocated benefits	..	..	..	..	..	..		187	260	144	69	169
Final income	..	..	..	..	..	..		4 312	5 267	5 253	7 439	5 312

¹ More than a fifth of these households had no original income, so the bottom group is undefined.² After tax relief at source on mortgage interest and life assurance premiums.³ Net of rate rebates and the rates element of housing benefit supplement, but including water, etc. charges.

Average incomes, taxes and benefits, 1983

By quintile groups of original income within household type

TABLE 4 (continued)

							£ per year					Average over all quintile groups
							Quintile group					
							1st	2nd	3rd	4th	5th	
(vii) 2 adults, 1 child												
Quintile points (£)							5 494	7 758	9 629	13 046		
Number of households in the sample							117	117	118	117	117	586
Original income							2 416	6 664	8 690	11 304	17 972	9 408
Direct benefits in cash												
Age-related							150	41	—	—	29	44
Child-related							364	375	371	355	352	363
Income-related							1 716	231	114	123	32	443
Other							317	64	64	25	36	101
Gross income							4 964	7 376	9 240	11 807	18 421	10 359
Income tax ¹ and Employees' NIC							357	1 207	1 740	2 503	4 227	2 006
Disposable income							4 606	6 169	7 499	9 304	14 193	8 353
Domestic rates ²							271	301	330	378	457	347
Taxes on final goods and services							849	1 125	1 177	1 414	1 767	1 266
Intermediate taxes							312	369	412	520	691	461
Income after cash benefits and all taxes							3 174	4 374	5 581	6 992	11 278	6 279
Benefits in kind												
Education							577	445	392	459	528	480
National health service							793	712	704	650	673	706
Housing subsidy							151	82	56	45	18	70
Travel subsidies							78	26	28	66	76	55
Other allocated benefits							52	12	30	26	27	29
Final income							4 826	5 651	6 790	8 238	12 600	7 620
(viii) 2 adults, 2 children												
Quintile points (£)							6 300	8 238	10 573	13 514		
Number of households in the sample							163	163	164	163	163	816
Original income							3 335	7 295	9 351	11 880	19 191	10 209
Direct benefits in cash												
Age-related							23	—	11	—	—	7
Child-related							659	628	637	622	615	632
Income-related							1 392	102	55	13	9	314
Other							177	33	43	8	19	56
Gross income							5 586	8 057	10 097	12 522	19 833	11 218
Income tax ¹ and Employees' NIC							492	1 424	2 049	2 777	4 162	2 181
Disposable income							5 094	6 633	8 048	9 745	15 671	9 037
Domestic rates ²							268	323	355	415	520	376
Taxes on final goods and services							935	1 119	1 339	1 472	2 001	1 373
Intermediate taxes							343	403	487	562	855	530
Income after cash benefits and all taxes							3 549	4 789	5 867	7 295	12 296	6 758
Benefits in kind												
Education							1 040	1 024	1 139	1 247	1 238	1 138
National health service							878	828	778	679	651	763
Housing subsidy							108	57	43	17	3	46
Travel subsidies							34	23	45	39	85	45
Other allocated benefits							141	58	45	52	52	70
Final income							5 750	6 779	7 916	9 331	14 325	8 819

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

Average incomes, taxes and benefits, 1983

By quintile groups of original income within household type

TABLE 4 (continued)

							£ per year					Average over all quintile groups
							Quintile group					
							1st	2nd	3rd	4th	5th	
(ix) 2 adults, 3 or more children												
Quintile points (£)								3 428	6 760	9 039	12 821	
Number of households in the sample							72	71	72	71	72	358
Original income							804	5 424	7 968	10 784	18 160	8 631
Direct benefits in cash												
Age related							—	—	—	—	—	—
Child-related							1 079	970	979	984	968	996
Income-related							3 195	448	94	70	71	779
Other							280	169	40	63	8	112
Gross income							5 359	7 012	9 082	11 901	19 207	10 518
Income tax ¹ and Employees' NIC							82	896	1 662	2 345	4 383	1 875
Disposable income							5 277	6 116	7 420	9 556	14 824	8 643
Domestic rates ²							297	281	322	382	487	354
Taxes on final goods and services							859	996	1 215	1 252	1 747	1 214
Intermediate taxes							328	408	477	525	756	499
Income after cash benefits and all taxes							3 793	4 431	5 407	7 396	11 834	6 576
Benefits in kind												
Education							2 474	1 999	2 062	2 102	1 875	2 103
National health service							1 093	1 000	922	921	977	983
Housing subsidies							233	93	149	48	15	108
Travel subsidies							36	32	30	20	90	42
Other allocated benefits							420	145	76	98	85	165
Final income							8 049	7 700	8 646	10 584	14 876	9 976
(x) 3 or more adults, with children												
Quintile points (£)								7 225	10 308	12 969	16 708	
Number of households in the sample							101	100	101	100	101	503
Original income							3 962	8 826	11 610	14 621	22 068	12 219
Direct benefits in cash												
Age-related							238	314	111	257	54	194
Child-related							699	557	590	480	561	578
Income-related							2 196	646	363	280	218	742
Other							650	219	130	80	27	222
Gross income							7 744	10 563	12 804	15 718	22 929	13 955
Income tax ¹ and Employees' NIC							641	1 738	2 429	3 191	5 062	2 613
Disposable income							7 103	8 825	10 375	12 527	17 866	11 342
Domestic rates ²							273	315	348	380	507	365
Taxes on final goods and services							1 462	1 427	1 791	2 185	2 894	1 952
Intermediate taxes							498	524	653	726	1 081	696
Income after cash benefits and all taxes							4 870	6 559	7 582	9 237	13 385	8 328
Benefits in kind												
Education							2 235	1 924	2 075	1 842	1 915	1 999
National health service							908	920	759	814	811	842
Housing subsidy							119	63	62	45	30	64
Travel subsidies							74	81	73	141	140	102
Other allocated benefits							171	73	76	61	39	84
Final income							8 377	9 620	10 627	12 140	16 320	11 419

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

Average incomes, taxes and benefits, 1983

By decile groups of households ranked by original income

TABLE 5

£ per year												Average over all decile groups
Decile group												
1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th			
Decile points (£)	18	623	2 418	5 100	6 904	8 589	10 450	12 816	16 656			
Number of households in the sample	697	698	697	697	697	698	697	697	698	697	6 973	
Original income												
Earnings of main earner	—	32	394	2 392	4 781	5 976	7 126	8 349	9 570	14 878	5 350	
Other earnings	—	—	12	137	359	927	1 573	2 502	3 783	6 428	1 572	
Occupational pensions, annuities	—	89	544	725	452	445	386	321	482	400	384	
Investment income	1	97	309	436	334	302	354	318	496	876	352	
Other income	—	23	101	118	85	91	76	128	161	206	99	
Total	1	241	1 360	3 808	6 011	7 742	9 515	11 617	14 491	22 788	7 757	
Direct benefits in cash												
Age-related												
Retirement and old persons' pension	1 038	1 689	1 547	849	376	270	225	154	162	111	642	
Widows' benefit	38	56	70	69	80	53	16	16	24	6	43	
Christmas bonus for pensioners, etc	7	11	10	6	3	2	2	1	1	1	4	
Child-related												
Child benefit	187	70	90	174	255	306	282	302	256	252	217	
Maternity allowance	3	1	1	10	14	11	14	10	6	6	8	
Maternity grant	1	—	—	1	2	2	2	1	1	1	1	
Income-related												
Supplementary benefit	958	381	230	199	113	104	42	53	49	46	217	
Unemployment benefit/TOPS, etc, awards	74	50	123	150	94	105	64	60	66	44	83	
Rent rebates and allowances	590	331	168	115	57	25	6	6	2	2	130	
Student maintenance grants	45	44	34	30	30	22	14	23	16	37	29	
Family income supplement	2	5	9	24	8	3	2	2	—	—	6	
Other												
Invalidity pension and allowance	168	85	162	132	67	41	41	29	19	8	75	
Sickness, industrial injury benefit	13	7	14	32	25	25	22	12	16	11	18	
Attendance allowance	34	20	27	20	12	13	5	4	9	6	15	
Disablement and war disability pension	10	9	26	13	12	2	8	1	4	2	9	
Industrial injury disablement benefit	4	11	38	22	5	7	11	1	8	7	11	
Mobility allowance	17	8	16	11	11	4	7	3	5	4	9	
Job release allowance	5	16	23	18	18	3	—	4	—	—	9	
Statutory sick pay	—	—	—	7	7	6	6	6	6	7	4	
Non contributory invalidity pensions	15	14	6	8	6	—	4	4	1	—	6	
Miscellaneous cash benefits	9	16	7	13	4	2	3	3	3	—	6	
Total	3 216	2 824	2 602	1 903	1 200	1 006	775	694	657	551	1 543	
Gross income	3 218	3 065	3 962	5 711	7 210	8 748	10 290	12 311	15 149	23 339	9 300	
Income tax and Employees' NIC												
Income tax	4	19	140	523	911	1 213	1 604	2 005	2 678	4 725	1 382	
Employees' national insurance contributions	4	3	22	179	373	478	602	751	877	1 171	446	
less: Tax relief at source ¹	6	7	9	27	57	97	126	154	175	246	90	
Total	2	15	152	674	1 227	1 594	2 081	2 602	3 380	5 650	1 738	
Disposable income	3 216	3 050	3 810	5 036	5 983	7 154	8 209	9 709	11 768	17 690	7 562	
Indirect taxes												
Domestic rates ²	231	199	241	282	295	327	341	370	404	489	318	
Taxes on final goods and services												
VAT	169	163	253	365	453	524	598	691	860	1 225	530	
Duty on tobacco	144	100	126	156	180	210	193	184	227	237	176	
Duty on beer	25	22	36	52	76	95	87	103	131	162	79	
Duty on wines	5	5	9	15	19	22	25	30	40	77	25	
Duty on spirits	16	20	29	44	49	56	53	72	91	138	57	
Duty on hydrocarbon oils	20	21	42	75	97	127	146	189	207	262	119	
Car tax	1	2	4	13	14	15	24	26	41	45	19	
Vehicle excise duty	9	14	28	38	49	59	69	78	87	101	53	
Television licences	25	31	34	35	38	40	41	42	43	44	37	
Stamp duty on house purchase	1	1	2	4	5	7	10	16	21	38	11	
Customs' duties	11	10	14	19	24	26	29	34	42	52	26	
Betting taxes	12	14	18	20	23	32	29	30	41	51	27	
Other	11	10	12	14	17	18	20	20	26	36	18	
Intermediate taxes												
Commercial and industrial rates	62	59	79	99	117	136	146	171	199	287	135	
Employer's NI contributions	77	72	98	125	147	170	184	215	252	363	170	
Duty on hydrocarbon oils	30	26	34	43	50	57	60	69	81	115	56	
Vehicle excise duty	8	7	9	12	14	16	17	19	23	33	16	
Other	24	23	31	38	46	52	56	65	76	106	52	
Total indirect taxes	881	798	1 100	1 448	1 712	1 988	2 126	2 424	2 894	3 863	1 923	
Income after cash benefits and all taxes	2 335	2 252	2 710	3 588	4 271	5 166	6 084	7 285	8 874	13 827	5 639	
Benefits in kind												
Education	456	263	310	433	574	730	638	788	751	817	576	
National health service	714	784	721	673	648	664	633	603	612	620	667	
Housing subsidy	158	105	75	86	75	64	52	39	27	18	70	
Rail travel subsidy	8	4	25	22	22	30	42	42	64	118	38	
Bus travel subsidy	41	50	43	42	34	28	25	25	28	33	35	
Welfare foods	64	25	31	31	27	25	19	25	23	18	29	
Option mortgage subsidy	1	—	2	3	5	5	11	6	6	2	4	
Total	1 442	1 231	1 207	1 290	1 386	1 548	1 420	1 528	1 512	1 626	1 419	
Final income	3 776	3 483	3 917	4 878	5 657	6 714	7 504	8 813	10 386	15 453	7 058	

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

Average incomes, taxes and benefits, 1983

By decile groups of households ranked by gross income

TABLE 6

												£ per year																
												Decile group										Average over all decile groups						
												1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th							
Decile points (£)												..	..	..	..	..	2 717	3 749	4 956	6 492	8 053	9 597	11 313	13 621	17 261			
Number of households in the sample												..	697	698	697	697	697	698	697	697	697	698	698	697	6 973			
Original income												..	..	..	..	..	289	646	1 444	3 715	5 888	7 633	9 346	11 526	14 391	22 696	7 757	
Direct benefits in cash																												
Age-related												..	..	..	..	..	1 229	1 545	1 376	761	510	380	354	280	275	182	689	
Child-related												..	..	..	..	..	28	62	173	249	281	307	316	309	271	267	226	
Income-related												..	..	..	..	..	561	828	1 034	700	405	315	247	191	190	187	466	
Other												..	..	..	..	..	71	132	273	304	215	175	148	102	119	79	162	
Total												..	..	..	..	..	1 889	2 567	2 855	2 014	1 412	1 177	1 065	881	855	714	1 543	
Gross income												..	..	..	..	..	2 178	3 213	4 298	5 729	7 300	8 811	10 411	12 407	15 245	23 410	9 300	
Income tax and Employees' NIC																												
Income tax												..	..	..	..	..	29	74	164	516	864	1 228	1 570	2 035	2 616	4 725	1 382	
National insurance contributions												..	..	..	..	..	11	17	53	200	360	479	593	733	864	1 147	446	
less: Tax relief at source ¹												..	..	..	..	..	5	8	16	35	63	97	120	148	170	242	90	
Total												..	..	..	..	..	35	84	202	681	1 161	1 610	2 043	2 620	3 311	5 630	1 738	
Disposable income												..	..	..	..	..	2 142	3 129	4 097	5 048	6 139	7 201	8 368	9 787	11 935	17 780	7 562	
Indirect taxes																												
Domestic rates ²												..	..	..	..	..	185	226	256	279	303	326	338	367	408	491	318	
Taxes on final goods and services																												
VAT												..	..	..	..	..	129	179	253	364	443	533	589	726	864	1 222	530	
Duty on tobacco												..	..	..	..	..	68	103	161	178	187	205	179	203	225	247	176	
Duty on beer												..	..	..	..	..	15	23	39	53	77	86	90	110	132	164	79	
Duty on wines												..	..	..	..	..	4	7	11	13	17	25	23	30	41	77	25	
Duty on spirits												..	..	..	..	..	12	22	31	37	48	59	45	77	100	137	57	
Duty on hydrocarbon oils												..	..	..	..	..	15	24	43	76	97	121	156	187	208	259	119	
Car tax												..	..	..	..	..	1	2	4	10	15	16	23	30	37	46	19	
Vehicle excise duty												..	..	..	..	..	10	17	27	37	48	57	72	76	87	101	53	
Television licences												..	..	..	..	..	25	30	32	36	38	40	41	42	43	44	37	
Stamp duty on house purchase												..	..	..	..	..	1	1	2	3	5	8	10	16	22	38	11	
Customs' duties												..	..	..	..	..	8	11	14	19	23	26	29	35	42	52	26	
Betting taxes												..	..	..	..	..	8	11	20	24	27	28	32	28	43	51	27	
Other												..	..	..	..	..	8	11	13	15	16	17	20	21	27	36	18	
Intermediate taxes																												
Commercial and industrial rates												..	..	..	..	..	51	62	80	100	118	134	149	173	202	287	135	
Employers' NI contributions												..	..	..	..	..	63	77	98	126	147	168	187	218	255	363	170	
Duty on hydrocarbon oils												..	..	..	..	..	23	27	34	43	50	56	62	70	82	115	56	
Vehicle excise duty												..	..	..	..	..	6	7	9	12	14	15	17	19	23	33	16	
Other												..	..	..	..	..	19	24	31	39	45	52	57	66	77	106	52	
Total indirect taxes												..	..	..	..	..	651	865	1 157	1 466	1 719	1 970	2 121	2 495	2 918	3 871	1 923	
Income after cash benefits and all taxes																	1 491	2 264	2 940	3 582	4 420	5 230	6 247	7 292	9 016	13 909	5 639	
Benefits in kind																												
Education												..	..	..	..	..	111	175	379	547	607	667	761	828	824	862	576	
National health service												..	..	..	..	..	569	718	752	704	665	657	661	643	657	648	667	
Housing subsidy												..	..	..	..	..	86	112	117	91	77	69	59	37	33	19	70	
Rail travel subsidy												..	..	..	..	..	8	14	17	23	20	27	44	43	67	116	38	
Bus travel subsidy												..	..	..	..	..	34	46	46	38	34	33	27	28	29	34	35	
Welfare foods												..	..	..	..	..	8	17	51	55	33	27	28	25	23	21	29	
Option mortgage subsidy												..	..	..	..	..	1	1	1	4	5	8	7	8	5	2	4	
Total												..	..	..	..	..	817	1 082	1 362	1 463	1 439	1 487	1 588	1 611	1 637	1 702	1 419	
Final income												..	..	..	..	..	2 308	3 346	4 302	5 044	5 859	6 718	7 834	8 904	10 653	15 611	7 058	

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

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

Average incomes, taxes and benefits by life-cycle categories, 1983

Typical life-cycle categories

TABLE 8a

	Single adult aged under 30	Married couples non-retired					Married couple retired	Single adult retired
		no children head aged under 30	youngest child under 5	youngest child 5 or over	with young dependant aged 16-24	no children head aged 45-64		
<i>Number of households in the sample</i>	167	243	921	785	287	577	698	911
Average per household (£ per year)								
Original income								
Wages and salaries	4 503	10 291	7 310	9 049	12 713	8 152	78	5
Other income	504	1 366	1 671	1 620	1 736	2 137	2 375	984
Total	5 007	11 658	8 981	10 669	14 449	10 290	2 452	989
Cash benefits								
Contributory								
Retirement pension	—	—	—	8	57	106	2 479	1 654
Sickness/injury-related	20	25	64	53	140	154	226	39
Unemployment benefit	83	61	112	68	59	92	7	1
Other	8	11	61	5	1	6	17	48
Non-contributory								
Supplementary benefit	173	133	251	176	180	67	63	114
Child benefit	—	—	600	568	537	—	—	—
Sickness/disablement-related	—	8	13	20	31	38	69	15
Other	322	92	138	77	200	51	240	293
Total	606	331	1 238	975	1 204	513	3 101	2 164
Gross income	5 613	11 988	10 219	11 644	15 653	10 803	5 553	3 154
Income tax (net)	851	1 714	1 308	1 733	2 462	1 896	536	206
National insurance contributions	342	809	552	641	859	542	3	—
Total	1 194	2 523	1 861	2 374	3 320	2 437	538	207
Disposable income	4 419	9 465	8 359	9 270	12 333	8 366	5 015	2 947
Indirect taxes								
Domestic rates (net)	213	291	346	383	414	362	281	228
Taxes on final goods and services	767	1 334	1 214	1 431	1 872	1 342	775	300
Intermediate taxes	287	464	473	538	727	451	294	172
Total	1 267	2 088	2 033	2 351	3 013	2 156	1 350	701
Income after cash benefits and all taxes	3 152	7 377	6 326	6 919	9 320	6 210	3 665	2 246
Benefits in kind								
Education	541	150	677	1 588	3 002	—	—	—
National health service	138	316	999	556	718	462	1 008	669
Housing subsidy	34	34	75	49	34	49	75	94
Travel subsidies	94	99	50	44	111	68	84	51
Other	4	23	63	86	63	1	—	—
Total	810	623	1 865	2 322	3 928	581	1 167	814
Final income	3 962	7 999	8 190	9 241	13 247	6 791	4 832	3 060
Average per household (numbers)								
Children	—	—	2.0	1.9	0.8	—	—	—
Adults	1.0	2.0	2.0	2.0	3.6	2.0	2.0	1.0
In full-time education	0.2	—	0.9	1.9	1.9	—	—	—
Economically active people	0.8	1.8	1.2	1.6	2.4	1.4	0.1	—
Retired people	—	—	—	—	—	0.2	1.7	1.0
Gini coefficients (per cent)								
Original income	44.4	26.7	34.2	29.9	27.8	34.9	67.2	74.4
Gross income	33.6	24.3	26.2	24.9	24.3	31.0	27.7	22.9
Final income	32.1	26.6	23.9	20.2	19.6	30.7	22.1	19.3

Average incomes, taxes and benefits by life-cycle categories, 1983

Alternative life-cycle categories

TABLE 8b

	Single adult aged 30 or over	Single adult with children	Married couple no children head aged 30-44	All house- holds
<i>Number of households in the sample</i>	499	227	220	6 973
Average per household (£ per year)				
Original income				
Wages and salaries	4 507	1 449	12 396	6 210
Other income	1 004	840	1 393	1 548
Total	5 512	2 289	13 789	7 757
Cash benefits				
Contributory				
Retirement pension	150	—	8	639
Sickness/injury-related	85	30	61	109
Unemployment benefit	57	19	68	67
Other	205	70	4	59
Non-contributory				
Supplementary benefit	140	1 037	73	217
Child benefit	—	604	1	217
Sickness/disablement-related	36	29	29	38
Other	129	695	75	196
Total	802	2 484	320	1 543
Gross income	6 313	4 773	14 109	9 300
Income tax (net)	1 060	176	2 367	1 292
National insurance contributions	313	102	905	446
Total	1 373	277	3 272	1 738
Disposable income	4 941	4 496	10 837	7 562
Indirect taxes				
Domestic rates (net)	279	295	360	318
Taxes on final goods and services	741	559	1 687	1 176
Intermediate taxes	272	269	566	429
Total	1 292	1 124	2 612	1 923
Income after cash benefits and all taxes	3 649	3 372	8 225	5 639
Benefits in kind				
Education	32	1 088	64	576
National health service	219	483	320	667
Housing subsidy	77	159	21	70
Travel subsidies	56	41	95	73
Other	2	169	7	33
Total	386	1 939	506	1 419
Financial income	4 035	5 312	8 731	7 058
Average per household (numbers)				
Children	—	1.7	—	0.7
Adults	1.0	1.0	2.0	2.0
In full-time education	—	1.3	—	0.6
Economically active people	0.8	0.4	1.8	1.2
Retired people	—	—	—	0.4
Gini coefficients (per cent)				
Original income	46.9	69.7	27.1	49.1
Gross income	35.4	26.4	25.2	36.3
Final income	34.1	23.1	27.4	32.7



LLOYDS BANK ECONOMIC BULLETIN

*File Taxation
and Budget*

A MONTHLY ANALYSIS FROM LLOYDS BANK

NUMBER 73 JANUARY 1985

Rejig mortgage interest relief

Since the Chancellor of the Exchequer has indicated that he is examining with a critical eye all forms of tax relief, and he has already moved with unexpected daring against corporation tax allowances, it may be thought that mortgage interest relief (MIR) is on the agenda for the March 1985 Budget. On the other hand, the Prime Minister appears to be committed to feeding rather than killing this particular sacred cow, as evidenced by the raising of the ceiling from £25000 to £30000 in the 1983 Budget.

There are 7 million taxpayers with mortgages, the vast majority of whom are getting MIR. (Those who do not are unemployed owner-occupiers whose mortgage interest is paid — to themselves and not to the building societies — as part of housing benefit.) The number of taxpayers on higher rates getting MIR is 600,000, or about 9 per cent of the total. It is also estimated that 9 per cent of all mortgages are over the £30000 MIR ceiling, a percentage that must increase with a fixed ceiling and a rising average mortgage.

The present system

The cost of mortgage interest relief to the Treasury has risen, as shown in table 1, from £1450m in 1979-80 to £3500m in 1984-85. It has thus risen from 0.7 per cent of gdp at market prices to 1.1 per cent. It should be noted that the rise has not been even. MIR has risen and fallen with interest rates during this period; it has fallen as marginal rates of tax have been cut and tax bands raised, and risen with the amount of mortgage finance.



Table 1
COST OF MORTGAGE
INTEREST RELIEF £m

	Total	Relief	Higher rate taxpayers
			In excess of basic rate
1979-80	1450	200	80
1980-81	1960	300	115
1981-82	2050	450	170
1982-83	2150	390	150
1983-84	2750	375	140
1984-85	3500	410	160

Source: *Hansard*, 12 June, 26 July, 31 October 1984.

MIR of £3.5bn is 3.5 per cent of outstanding mortgage debt of about £100bn, and is thus equivalent to 3.5 percentage points off the current advised building society mortgage rate of 11.75 per cent. This is a reduction of 30 per cent in the mortgage interest rate, corresponding to the basic rate of income tax, which is what nine-tenths of mortgagors get. To take the extreme case, a high income taxpayer getting all his relief at the top marginal rate of 60 per cent on a mortgage of £30000 gets an interest subsidy of 7 percentage points, and is paying an effective 4.8 per cent for his loan.

The average MIR is £270 per owner-occupier, but £500 per mortgagor, on the average mortgage of £14300. If MIR did not exist, the basic rate of income tax could be lowered by 3 percentage points, to 27 per cent. But in this case, the average tax cut for all taxpayers would be no more than £170, and the average mortgagor would lose £330 on the deal.

It may not be generally known that in granting MIR the UK is typical of the vast majority of industrial countries. In

fact mortgage interest relief was never brought in as such in the UK. Until 1968, all UK borrowers got interest relief against tax, just as they all paid tax on interest received. It was in that year that the Labour Government withdrew relief for consumer and other personal borrowing, thus by default restricting it to mortgages and home improvements. The position was reversed by the Conservative Government in 1972, and reversed again by the next Labour Government in 1974, when the £25000 ceiling on mortgage interest relief was first introduced. This is a classic example of the see-saw effect of adversary politics on economic policy.

The IMF has shown that among 16 OECD countries, only Australia has no mortgage interest relief, see table 2. Ten of these countries, including the USA, have MIR broadly similar to that in the UK, and four give tax relief for the principal as well as the interest, and are thus more generous than the UK. Among the countries which give MIR, six allow deductions for consumer credit as well. Half of the 16 countries tax imputed income from owner-occupation. While the UK abolished Schedule A in 1963, it still has domestic rates, which represent a much higher tax on house property than in any other industrial country apart from the USA.

Is MIR a subsidy?

MIR is sometimes discussed as a subsidy to owner-occupation, along with exemption from capital gains tax on principal residences. The case for or against then becomes an argument about the merits of owner-occupation versus rented accommodation. There is no particular virtue about owner-occupation as such, since many young couples in the

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Table 2
PERSONAL INCOME TAX DEDUCTIBILITY

	Owner-occupied housing	Consumer credit
	Imputed income taxable only	Deductibility for interest + principal
Australia	x	
Austria	x	
Belgium	x	
Canada	x	
Denmark	x	x
France	x	
Germany	x	
Ireland	x	
Italy	x	
Japan	x	
Netherlands	x	x
Norway	x	x
Sweden	x	x
Switzerland	x	x
United States	x	x
United Kingdom	x	

Source: *Taxation, Inflation and Interest Rates* (1984)
Ed. Vito Tanzi, (Washington: IMF) page 59

UK today resort to it willy-nilly for want of an adequate market in private rented property. Nor is there any correlation between the percentage of tenures in owner-occupation and the standard of living. Certainly the USA, with a higher standard of living than the UK, has a slightly higher percentage of owner-occupiers; but Switzerland, also with a higher standard of living, has an owner-occupation ratio of only 30 per cent. Developing countries typically have the highest ratios of owner-occupation.

The level of subsidy, as John Ermisch has pointed out, should be measured not by the amount of public money spent, but by the broader criterion of the difference between the price of housing and some measure of its true cost. By this criterion, rent control creates a subsidy for most of the rented sector, but MIR and other forms of fiscal privilege cause an artificially high price for owner-occupied and the upper range of private rented housing. It can be argued, however, that the gradual removal of rent control, by creating a supply of private rented accommodation at a reasonable price, would itself bring down the premium on owner-occupied housing.

The arguments about owner-occupation do not lead to any clear conclusion. It is doubtful whether MIR should be regarded as a subsidy at all, on three counts. First, it is not applied in such a way as to be of particular benefit to those most in need. Second, while it

makes interest payments cheaper, it makes house prices more expensive, so it is not clear whether it reduces total housing costs or not. Thirdly, it can be seen as arising naturally out of general rules about the tax treatment of interest paid and received.

The brunt of the case against MIR is that it distorts the market for funds towards mortgage loans, and away from industrial and commercial lending or, for that matter, consumer credit. This case is often no sooner stated than uncritically accepted. Yet interest relief is granted without question to business borrowing and not even mentioned in the Treasury's list giving the cost of various tax reliefs. All forms of borrowing by industrial and commercial companies, non-bank financial institutions and unincorporated businesses now amount to roughly £120bn, 20 per cent more than mortgage debt, or about the same as all household debt if another £20bn of consumer credit

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is added. Assuming an average interest rate of 2 per cent over base rate, the interest on business borrowing amounts to about £14bn a year, which is costing the Treasury £7bn at an average rate of 50 per cent, about double the cost of mortgage interest relief. This £7bn should no more be termed a subsidy to industry and commerce than MIR should be called a subsidy to owner-occupiers.

Unlimited relief at 30%

The after tax interest rate paid by UK businesses is about 6 per cent, somewhere between the 8.25 per cent paid by basic rate mortgage borrowers and the 4.8 per cent paid by the highest income top marginal rate borrowers. MIR should be looked at on the basis of whether it preserves approximate neutrality between business and mortgage borrowers. Since the rate of corporation tax is being reduced by stages from 52 per cent to 35 per cent — 30 per cent for small companies — by 1986-87, MIR should be limited to the 30 per cent basic rate of income tax so that it does not offer a possible 60 per cent relief compared with only 30 - 35 per cent for business borrowers.

Together with the abolition of MIR at higher rates of income tax should go the abolition of the £30000 ceiling, which appears to have survived simply as a sop to those who oppose MIR on principle, and has no logical justification. The net cost to the Treasury of the two reforms combined is likely to be of the order of £100m. Since the £25000 ceiling was introduced in 1974, prices have multiplied 2½ times; rather than raising the ceiling to £62500, it would be simpler to do away with it altogether, since the removal of higher rate relief will already be hitting those who might benefit from the absence of any ceiling. The ceiling has in fact concentrated demand more than otherwise on mortgages of less than or not much over £30000, and has thus helped to bid up the price of cheaper housing units. Its removal will thus make it slightly less difficult for first-time buyers to afford their first step onto the owner-occupation ladder.

The effect of different forms of MIR change on taxpayers above average earnings is shown in table 3. Variant 3, removal of the ceiling and restriction of relief to 30 per cent, shows MIR rising gradually in line with the mortgage as income rises, but remaining at 6 per cent of income. At least for those on above average incomes — who are those mainly affected by the changes — it gives distributive justice, being neither progress-



Table 3
MORTGAGES OF £30000 OR OVER — INTEREST RELIEF CHANGES

	Base case: £30,000 ceiling Marginal relief £	Variant 1: No ceiling 30% relief £	Variant 2: No ceiling 30% relief £	Variant 3: No ceiling 30% relief £
Gross income £/year				
15,000	900	900	900	900
20,000	1100	900	1250	1200
25,000	1325	900	1500	1500
30,000	1465	900	1800	1800
35,000	1500	900	2100	2100
40,000	1650	900	2400	2400
45,000	1725	900	2700	2700
50,000	1800	900	3000	3000
55,000	1800	900	3300	3300
60,000	1800	900	3600	3600

Assumptions: Other tax allowances - £3300 married allowance (1985-86 indexed figure given in *Autumn Statement 1984*). Mortgage interest rate - 10 per cent. Size of mortgage - two times gross income (base case and variant one assume a mortgage of at least £30,000, but are unaffected if the mortgage is over £30,000). Marginal relief - based on 1985-86 indexed tax bands given in *Autumn Statement 1984*.

sive nor regressive.

The main beneficiaries from the change will be those who have or wish to obtain mortgages or home improvement loans over the £30000 ceiling, particularly if they have incomes of about £16000 or less, since they do not now get any benefit from MIR at higher rates of tax. The main losers will be those on higher incomes, particularly £50000 and over, but with mortgages of £30000 or less. They will lose their higher rate relief, but get no benefit from the lifting of the ceiling. However, they will in many cases be householders whose mortgages were contracted some time ago; they will usually have a big unrealized capital gain on their houses; and they may show a net gain if they move house and take out a mortgage of over £30000.

Other housing taxes

If MIR is to be reformed, but essentially retained, it may be argued that the owner-occupiers who benefit from it should not receive other fiscal privileges. But the exemption from capital gains tax, which was estimated to cost £2.5bn in 1983-84, is of much less significance since capital gains tax was indexed. The accumulated liability on owner-occupied homes arises only because indexation has not been carried back before 1983, as arguably it should have been. The Chancellor is in any case reported to be in the throes of reforming or possibly even abolishing capital gains tax. Any final judgment on capital gains tax for housing must await these wider measures. There should be no question of bringing back Schedule A income tax, as long as domestic rates bring in a revenue

of £5.5bn a year, of which about £4bn probably comes from owner-occupiers. There is a good case for the rates (see 'Down with the Rates', *Lloyds Bank Economic Bulletin* No 39, March 1982), and a good case for updating rateable values if they are retained. Since the reintroduction of Schedule A would in any case require a nationwide revaluation, it would be better to spend five years carrying out this overdue task before deciding between rates and Schedule A as two alternative long-run options for the taxation of housing.

There is no sound economic reason for limiting personal interest relief to home loans, and denying it to borrowing for other purposes, including consumer credit and the purchase of financial assets. All personal interest qualified for tax relief before 1968 and between 1972 and 1974, and there is no justification for discriminating in favour of housing and against consumer spending or share ownership — both laudable economic objectives which have been favoured already by the present Government's policies. In fact the generalization of personal interest relief might divert some borrowing away from housing to other forms of personal expenditure, thus moderating the increase in house prices. The cost of extending interest relief at the basic rate to all personal borrowing would be about £900m, well within the Chancellor's expected 'fiscal adjustment' of £1.5bn in the March 1985 Budget.

However, the timing of this measure could be related to the state of consumer spending, which might lead to its postponement to the 1986 or 1987 Budget, rather than the 1985 Budget.

Conclusions

1. Mortgage interest relief is costing the Treasury £3.5bn this year, the equivalent of 3p in the pound income tax. It is received by 7m mortgagors, and is worth an average of £500 each.
2. Mortgage interest relief exists in almost all industrial countries, and some also give tax relief on the principal of mortgage loans.
3. There is no particular economic merit in owner-occupation, so this form of tenure is not in itself a valid justification for mortgage interest relief.
4. Mortgage interest relief can be defended on the grounds that interest relief is given on business borrowing, and should not therefore be withheld on home loans.
5. The Chancellor should reform mortgage interest relief in this year's Budget, by limiting it to the basic rate of income tax, and removing the £30000 ceiling, at a cost of about £100m.
6. Interest relief should be given to personal borrowers on consumer credit and share ownership loans, as well as on mortgages, at a cost of about £900m, but not necessarily in the next Budget.
7. Mortgage interest relief should be balanced by taxation on housing. This exists in the form of domestic rates. Although rates are not the best form of housing taxation, efforts to abolish them have failed. There is no case for an additional tax on housing services as long as rates remain.

CHRISTOPHER JOHNSON

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Main economic indicators

NOVEMBER

Two main economic events dominated November: The Chancellor's Autumn Statement to the House of Commons on 12 November and the flotation of the British Telecom £3.9bn issue two weeks later. Both were well received by the financial markets, though the latter has caused temporary distortions to the money supply figures, as a result of the building up of bank deposits prior to the issue. Together with a PSBR of £2.6bn in banking November, this contributed to an unexpected high rise in £M3 (2¼ per cent), and brought the annualized rate to 12¼ per cent, 2¼ per cent outside the top of the target band. Since banking December is likely to be affected by the unwinding of the effects of the BT issue, it will not be until early February, when banking January's figures are released, that a clear picture of monetary trends will emerge. In the real economy, there has been a marked rise in retail sales, industrial production and the leading indicators. However, the Treasury's forecasts of 3½ per cent growth in gdp in 1985 and in a slowing-down in inflation from 4¼ per cent in the fourth quarter of 1984 to 4½ per cent by the fourth quarter of 1985 are widely regarded as too sanguine. Although retail prices rose by only 4.9 per cent in the year to November and will probably rise by less in the year to December because of the impact of the reduction in the mortgage rate, producer input prices were up 8.9 per cent and producer output prices rose by 6 per cent. The rise in average earnings is also still running well above inflation, at an underlying rate of 7½ per cent.

Publication date		Series	Change	Comment
Nov	Dec			
22	21	Current balance of payments (October p, sa)	—£73m	Record visibles deficit of £851m, resulting from imports being brought forward to avoid the VAT changes introduced on November 1st and additional fuel imports. Current account was —£73m, compared with —£578m in September, as a result of £528m EEC rebate and £250m surplus on invisibles.
29	3	Unemployment (excludes school leavers, p, sa)	+3,500	Follows revised increase of 3,200 in October, bringing the seasonally adjusted total to all time high of 3,103,200.
Dec 4	Jan 3	UK Official Reserves	+\$143m	Underlying rise \$12m. Total \$15,496m (£12,874m).
4	9	Housing starts (October, p, sa)	+4%	Down 6% in latest three months, compared with previous three months, and 14% lower than in August - October 1983.
6	Q	Balance of payments (Q3)	—£542m	Invisibles surplus revised upwards to £1.1bn. Visibles deficit widened to £1.6bn and £3.4bn excluding oil.
10	14	Producer output prices (p)	+0.3%	Twelve month increase 6.0%, compared with 6.2% in October.
10	14	Producer input prices (p)	+0.9%	Twelve month increase 8.9%, compared with 9.0% in October.
10	14	Retail sales volume (p)	+1.7%	Up 2½% in latest three month period compared with previous three months, and 4% higher than Sept - Nov 1983.
13	17	Output of the production industries (October, p, sa)	+0.8%	Up 1% in latest three month period compared with previous three months. Manufacturing output fell by 0.7% in October, while energy production soared by 4.7% because of rapid increase in oil production.
14	18	Retail prices index	+0.3%	Twelve month increase 4.9% compared with 5.0% in October.
14	11	Building society savings	+£502m	Follows October's £1,504m rise. Net receipts, £363m, were low because of BT issue, interest credited to accounts £139m.
17	21	Longer leading cyclical indicators (p)		Fourth successive monthly rise. Caused by rising share prices and lower interest rates.
18	17	Public sector borrowing requirement (p)	£1.8bn	Brings total so far in 1984/85 to £9.8bn, compared with target of £8½bn in 1984/85.
19	16	Average earnings (October, p, sa)	+2.7%	Up 8.2% in latest twelve months, compared with 6.3% in September. Underlying rise unchanged at 7½%.
20	Q	GDP (average measure, Q3, p,)	+0.3%	Up 1.4% on Q3 1983.
20	17	M0 (BN, sa)	+0.6%	Increases at annual rate since start of target period (Feb 1984): M0 6.2%, M1 21.9%, M3 12.2%, £M3 12.2%, PSL2 16.9%. Target ranges set at 4 - 8% for M0 and 6 - 10% for £M3. Larger than expected rise in £M3 caused by high bank lending figure (£1.7bn, including Bank of England commercial bills) and large (£2.6bn) PSBR.
		M1 (BN, sa)	+3.3%	
		M2 (BN)	+0.9%	
		M3 (BN, sa)	+2.8%	
		£M3 (BN, sa)	+2.7%	
		PSL2 (BN,sa)	+2.2%	

All changes are on previous month or quarter. BN = Banking November. p = provisional. sa = seasonally adjusted. * = level not change.

ACCOUNTANCY AGE

15 NOVEMBER 1984

NEWS EXTRA

Despite predictions by many leading experts that change is inevitable in the tax rules covering partnerships, there can be few who believe that the Inland Revenue has made a serious move in this direction with last week's consultative document.

By precluding a switch to the current-year basis of assessment because 'it would go very much wider than partnerships', the Revenue has denied itself the only solution that makes any long-term sense, even if it would be accompanied by horrendous transitional problems.

'All the other measures outlined in this document have their problems,' said Bill Packer, tax partner with Touche Ross. 'Any basis other than current year is arbitrarily unsatisfactory for one reason or another.'

The consensus is that the Revenue's document is inadequate because it contains

You might like to see the reactions of the accountancy profession (who are also partners) to Inland Revenue's consultative document.

Stopgap measures in the reform of partnership tax

Simon Pincombe gauges initial reaction to the Inland Revenue's consultative document on changes to the taxation of partnerships

no positive recommendations. Instead it merely identifies a problem and puts forward several different methods of tackling it.

But the document is uncharacteristically quick to point out the disadvantages of each method.

This negative approach is

rather unusual in a Revenue consultative document and had prompted one source close to the Treasury to observe: 'The Revenue may well try to persuade the politicians that the time is not right to attempt such reforms and to shelve the project.'

But according to Wreford

Voge, president of the institute of taxation, there can be no doubt that the Revenue is still working hard towards a current-year basis of assessment.

'I think it is particularly keen to tackle the existing partnership rules,' Voge said. 'But the move to a current-

year basis will form part of an overall review of the tax system. The proposals in the consultative document are merely stopgap measures because the Revenue does not want to be seen as picking only on partnerships.'

Stopgap or not, the Revenue suggestions look certain to provoke a weighty response from partnerships, both individually and through the relevant professional bodies.

Few will argue that legal tax avoidance by partnerships under the present continuation and cessation provisions - which apply when there is a change in a partnership - can remain in principle. The document claims this could amount to £30 million a year. But it does not give any indication of how much revenue partnerships contribute to the exchequer's coffers.

Instead the profession will be keen to highlight the inherent difficulties in each of the Revenue's options and will press hard for equitable transitional arrangements to avoid undue hardship to individual partners.

Of the possible alternatives

continuation where the profits of a firm carrying on a continuing business would be assessed on the previous-year basis.

The commencement and cessation rules would apply only when a business actually began or ended and not when there was merely a change in the partnership line-up.

This approach would cut out all 'cessation coups' without placing an undue administrative burden on the Revenue and the taxpayers.

Other suggestions from the Revenue include the use of balancing adjustments. This was favoured originally by the public accounts committee when it drew attention in the late 1970s to the increasing use of tax avoidance by partnerships.

But the administrative burden on both the Revenue and firms would be immense. 'Good grief,' Hardman commented after considering the implications.

Although one tax partner said he was pleased that the Revenue 'had come out with an open mind' the document still has attracted pointed criticism.

One specific omission, according to Tansley, is the document's failure to address the subject of partnership mergers. 'This has been completely ignored,' he said.

And Wyman called the Revenue's insinuation that firms were manipulating their profits for cessation-coup purposes 'an unfortunate instance of mixing supposition with otherwise hard fact'.

The Revenue's final suggestion that there is a case for withdrawing the conventional accounting treatment used by some partnerships is also likely to provoke heated debate.

This has come as no surprise. But many believe the net gain will be immaterial to the Revenue while it is certain to completely upset affected firms' financing.

'This cannot be justified on equitable grounds - or any other grounds at all,' said Tansley.

lications.

'But it looks like the best approach,' Hardman said. Others, though, do not agree.

The first reaction of Deloitte Haskins and Sells tax partner Peter Wyman was to plump for an individual assessment of partners, despite Revenue complaints that this would mean employing 400 extra staff.

'While this option poses transitional problems the other measures contain potential elements of hardship in an ongoing situation,' he said.

Coopers and Lybrand tax partner Tony Tansley favoured yet another option in the extension of the existing commencement and cessation rules. 'Given that the only logical step of a switch to a full current-year basis has been precluded, this one looks like a fair bet,' he said.

The Revenue claims this would extend the cessation-coup cycle from five to nine years and reduce but not eliminate subsequent tax avoidance.



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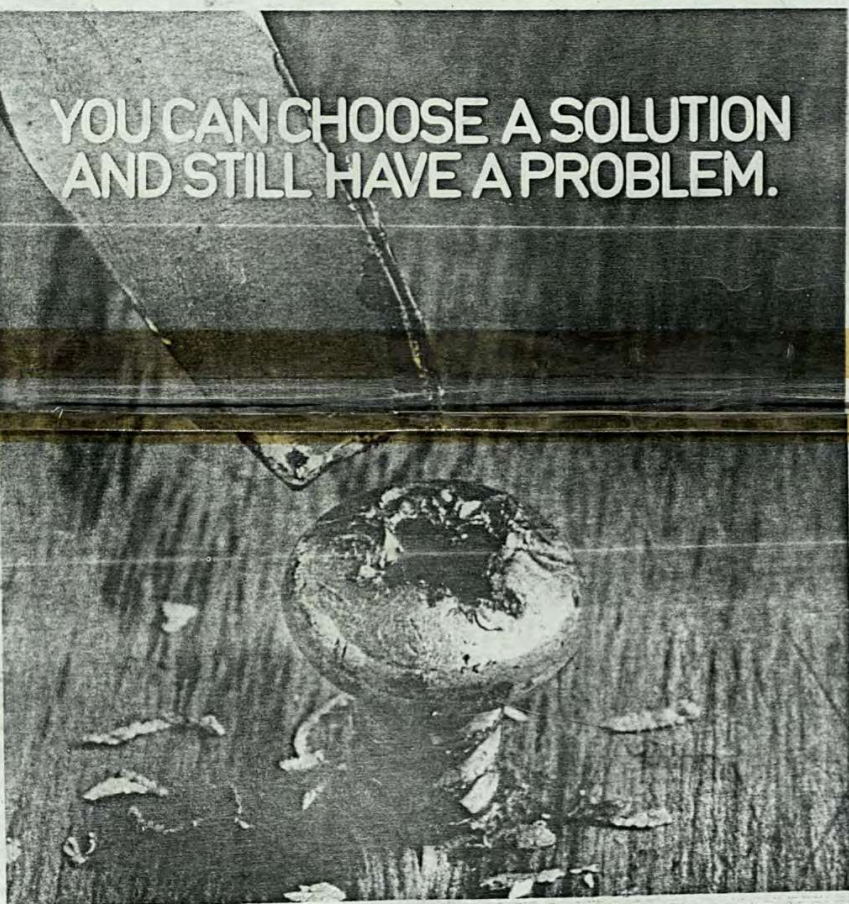
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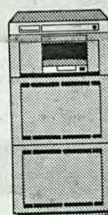
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