
The evolution of household income for different social groups in the UK since 1966(*)

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1. INTRODUCTION

The period since the mid-nineteen sixties has seen a number of dramatic changes with the onset of rapid inflation in most Western countries, increasing economic difficulties, and rising unemployment. In industrial relations it has seen the development of severe pressures on centralised collective bargaining systems which has in some cases led to their breakdown, notably in Britain and Italy, and a shift of power to the shop floor both within companies, and within unions. In Britain and Italy there is good reason to believe that this underlies the decline in the skill differential. It can be argued that in many countries, including Britain and Italy, unions have tried to take advantage of inflation to regain the initiative from the shop floor by pressing for egalitarian policies which restrain increases in incomes for the higher paid, as in

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Britain, or for policies of flat rate indexation which greatly benefit the lower paid. In other countries, notably France, the unions have used the SMIG to raise the relative earnings of the low paid (compressing skill differentials in low paid industries) and Raymond Barre used a policy of greater restraint of the pay increases for the higher paid to give a more acceptable egalitarian turn to his own incomes policy in the "Plan Barre". The effect of such measures, combined with the action of inflation as a process for weeding out economically obsolete earnings differentials, has been to produce a marked narrowing of earnings differentials in many western European countries ⁽¹⁾, affecting the differential between skilled and unskilled workers in Britain, France and Italy, and between higher non-manual occupations and others in Britain, Germany, France, Italy and the Netherlands. A narrowing has also been found for earnings dispersions in Britain, France and the Netherlands.

To what extent have changes in the structure of occupational earnings been translated into changes in income differentials between households belonging to different socio-professional groups ⁽²⁾? Has the increased pressure on higher paid primary earners stemming from a decline in their relative pay been compensated by the action of other members of their household? Does the extra dimension of competition between social groups which is introduced by income tax and social security contributions affect the pattern of inequality between these? It should of course be recognised that the social groups in question here are of a more limited nature than those discussed by Aujac or Marchal ⁽³⁾ in their accounts of inflation as the outcome of competition between social groups, but competition even between these could be a potent force.

(1) A short account of this can be found in C. Saunders and D.W. Marsden, "A six-country comparison of the distribution of industrial earnings in the 1970s. Royal Commission on the Distribution of Income and Wealth, Background Paper No. 5 HMSO 1979, and David Marsden (with the assistance of Lydia Redlbacher), Study of the changes in the wage structure of manual workers in industry in six community countries since 1966. Report for the Statistical Office of the European Communities, July 1980 (Eurostat C2/80032).

(2) Unless otherwise specified, we shall deal throughout with the socio-professional status of *employee households*, ie. those whose head is bound by a contract of employment. The socio-professional status of a household will be defined by that of its head.

(3) H. Aujac. "Une hypothèse de travail: l'inflation, conséquence monétaire du comportement des groupes sociaux" *Economie Appliquée*. 1950.
J. Marchal. "Wage theory and social groups" in J.T. Dunlop ed. *The theory of wage determination*. Macmillan 1966.

In this short paper I shall look at some of the recent trends in UK household income in Great Britain according to the socio-professional status of the head of the household, and at the effect of tax and social insurance contributions, making some comparisons with the results of studies by the CERC and INSEE for France ⁽⁴⁾, and of the DULBEA for Belgium ⁽⁵⁾.

2. THE DATA FOR THE UK: THE FAMILY EXPENDITURE SURVEY

A limited discussion of these ideas is possible on the basis of data provided for the UK by the Department of Employment's Family Expenditure Survey.

The Family Expenditure Survey (FES) is a sample survey of about 7000 households carried out continuously through the year. Detailed information on expenditure patterns and sources of income is collected partly by interview (especially for income) and partly from the compilation of a diary record book of expenditure run over 14 consecutive days. The rate of response is about 70 per cent, and among the low responses are families with no children, and the self-employed. Data on income are not the main aim of the survey, so their reliability is a little lower than that for the Department of Employment's annual New Earnings Survey. The main defects in the earnings data reported are a slight tendency for the earnings of part-time women to be underreported, and for slightly erratic response of the highest incomes. The definition of income used is that of "gross weekly cash income at the time of interview, i.e. before deduction of income tax, national insurance contributions and other deductions at source." Such income is obtained on a current basis, while information on income from investment and self-employment is taken for the preceding twelve-month period.

(4) Centre d'Etude des Revenus et des Coûts, *Les Revenus des Français* No 37/38, and the *Deuxième Rapport sur les Revenus des Français* No 51, published by the *Documentation Française*, Paris, 1977 and 1980, and André Villeneuve, *Les Revenus Primaires des Ménages en 1975*, *Economie et Statistique* No 103, September 1978, and more generally the reports by the INSEE "Les Revenus des Ménages" for 1956, 1962, 1965, 1970 and 1975 now published in the Collections de l'INSEE Série Ménages, various numbers.

(5) For Belgium see: "Distribution et Redistribution des Revenus entre Groupes Socio-professionnels, Belgique 1953-77" by E.S. Kirschen, M. Culus, P. Praet, and D. Van Regemorter, Editions du Département d'Economie Appliquée de l'Université Libre de Bruxelles, 1980.

Given the complexity of payment systems in Britain, and the big changes in earnings associated with our high rate of inflation, the income data should be treated with some caution. Nevertheless, the sample numbers in each of the occupational groups covered in this paper never fall below about 500 (except for the self-employed, and for 1966) so reasonably small degrees of statistical error should be attached to our estimates of means and medians.

Occupational groups used in this paper:

	<i>Sample numbers in 1978</i>	
	Nos	Per cent
Professional and technical	508	7.3
Administrative and managerial	529	7.6
Clerical	415	5.9
Manual	2764	39.4
Self-employed ⁽⁶⁾	434	6.2
Retired and unoccupied	2055	29.4
Other	296	4.2
	<hr/>	<hr/>
All groups	7001	100.0

These categories are based on a regrouping of the occupational headings used in the population census, and are based upon the principal occupation of the head of household. The professional and technical group includes such occupations as doctors, dentists, aircraft pilots, engineers, technicians, scientists, and creative artists and the clergy. The administrative and managerial group includes those in “line” as opposed to “staff” functions and includes proprietors and managers of all kinds of organisation, and also includes government ministers, civil service executive officers, local authority senior officers, and finance and insurance brokers etc. The clerical group includes office managers, clerks, cashiers, office machine operators, secretaries and typists. Manual workers include foremen, craftsmen, skilled, semi-skilled, and unskilled workers. Teachers in all institutions and shop assistants have been omitted. The self-employed (indépendants) are those working on their own account.

This classification differs from those used in the DULBEA and CERC studies. Agricultural workers, no doubt because of their small

⁽⁶⁾ In the analyses in this article the self-employed workers of whatever socio-professional group are classified separately.

numbers, are not classified separately in the FES, nor are civil servants who will be spread mainly between the administrative and the clerical groups, nor the liberal professions, who will be mainly concentrated in the professional and technical group. The FES distinction between administrative and managerial on the one hand, and professional and technical on the other, is based on functional differences, while that between “cadres supérieurs” (senior management) and “cadres moyens” (middle management plus foremen and technicians) is based largely on the level of authority.

There is a better correspondence between the clerical and manual categories, except that foremen are counted as manual in Britain and as “cadres moyens” in France, and the distinction between clerical and “cadres” in the Belgian study was based on income, the top twenty per cent of non-manual workers being counted as “cadres”.

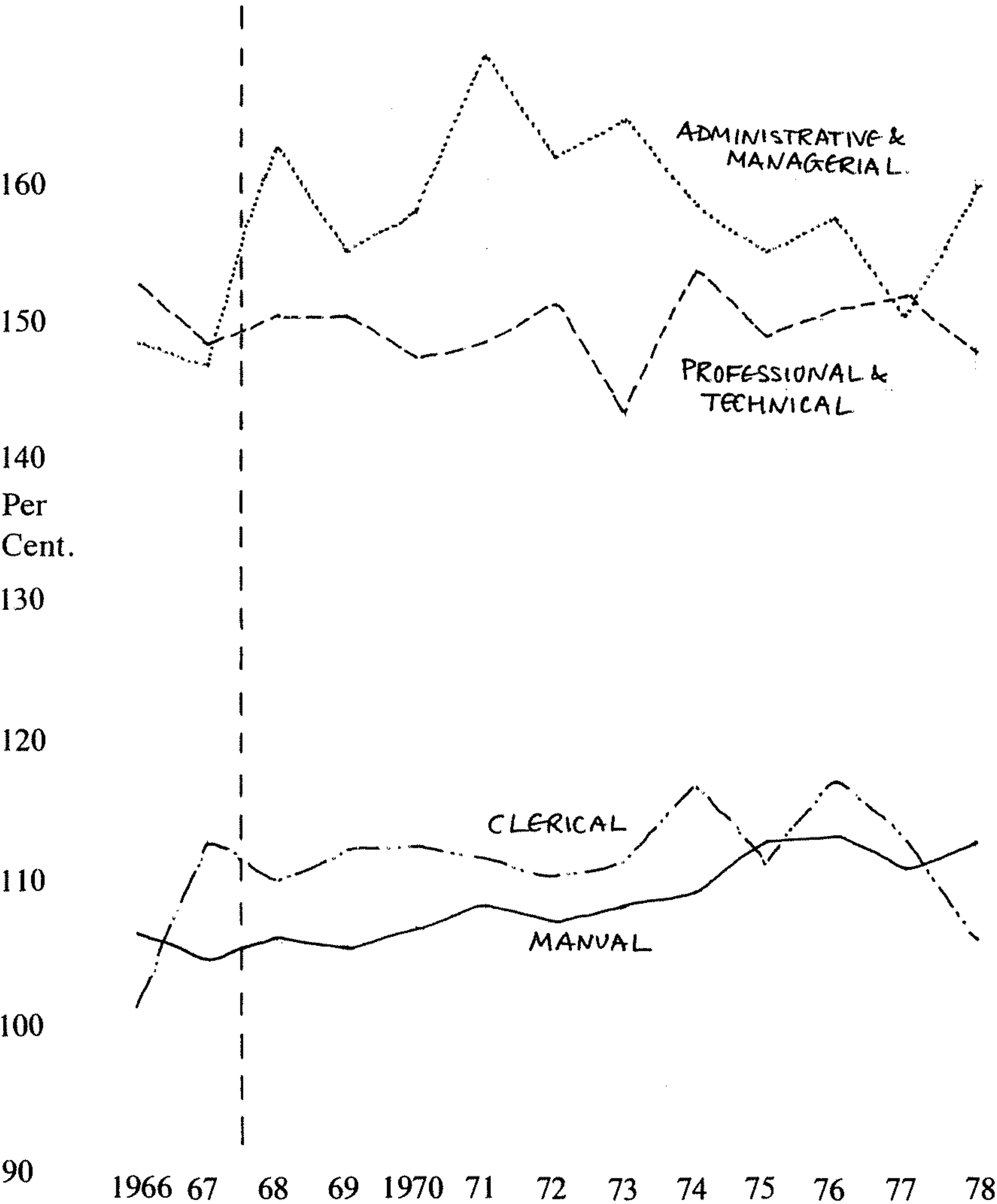
As a result, precise comparisons of differences in income between the socio-professional groups in the three countries cannot be made, but some general comparisons of inequality and trends are possible.

The general evolution of median gross household income for the professional and technical, administrative and managerial, clerical and manual households is shown in Chart 1, the actual figures being given in Appendix Table 2. Income is expressed as a percentage of the median for all households (including the retired and unoccupied). There is a break in the series owing to the inclusion of the self-employed in the occupational data up to and including 1967, and their exclusion thereafter.

The series does not appear to display the same stability as differentials in earnings, even if we discount the fluctuations between 1967 and 1968. Nor does it show much evidence of the fairly consistent decline in earnings differentials except for the gradual but steady improvement for manual workers' households. The increase in the relative income of the administrative and managerial households ⁽⁷⁾ up to 1971 and its subsequent decline becomes less certain when we take account of the size of year to year fluctuations.

(7) This may be linked to wives' working patterns in this group.

CHART 1
Median gross household income by occupation of head of household 1966-1978. Median as per cent of median for all households
(including retired and unoccupied)



Source. Appendix Table 2

These findings are broadly in agreement with those for Belgium and France, particularly as concerns the improvement in the relative income of manual households.

It is not possible, unfortunately, to see how far the decline in earnings differentials has been offset by other sources of income because of the absence of any long term data on the composition of household income by socio-professional status. Over the whole period, for all households, there was a small decline in the proportion of household income from wages and salaries, and self-employment. The big increases have come in social security payments, the income from subletting, and the imputed income from home ownership. Presumably, while the former help the poorer households, and particularly the unemployed whose number has grown considerably, the latter resulting from the rise in house prices may partially compensate for the declining differentials of the higher paid groups. The overall picture is given in Table 1.

TABLE 1
The composition of average gross household income for all households 1966-78
Income sources

	Wages and salaries	Self- employ- ment	Invest- ments	Annuities State Pensions	Social Secu- rity	Sub-let and House ownership (imputed)	Other
1966	75.2	6.6	3.8	1.9	7.8	2.3	2.4
1970	74.4	6.5	3.9	2.5	8.7	3.0	1.0
1974	72.4	7.5	3.4	2.4	9.4	3.9	1.0
1978	71.7	5.0	2.8	2.9	11.8	4.6	1.2

Source: FES

Table 2 shows for 1978 the composition of household income by occupational group. A particularly interesting point is the broad similarity for all employee households with the exception of the unskilled, who are the smallest group.

The continued importance of earned incomes for all groups suggests that the maintenance of differentials in household income may well stem from increased participation by other members of the household, notably wives, rather than a switch to investment in other kinds of activity. "Do-it-yourself" to improve the value of one's house does not appear to be a direct alternative to paid employment, although this is not to deny the saving of expenditure that can be made.

TABLE 2
The composition of average gross household income by occupation of head
of household 1978
Income sources

	Wages and sala- ries	Self- employ- ment	Invest- ments	Annuities State Pensions	Social Secu- rity	Sub-let and House ownership (imputed)	Other
Professional & Technical	86.0	1.0	2.3	1.4	2.8	5.7	0.8
Admin & Manag.	85.5	1.0	3.2	1.2	2.7	5.9	0.5
Clerical	83.2	0.9	1.7	2.5	5.2	5.3	1.2
Manual skilled	90.2	0.4	0.7	0.4	4.6	3.3	0.4
Semi-skilled	85.8	0.4	1.0	0.8	8.0	3.1	0.9
Unskilled	81.0	0.7	0.5	0.4	14.4	2.3	0.7
Self-employed	21.1	60.5	4.8	1.4	5.5	5.5	1.2

Source: FES

So far most of our attention has been focused on gross incomes, ignoring the effects of direct taxation and employee contributions to National Insurance. Because of the inclusion of the self-employed in earlier years, it was decided to concentrate on 1973, taking income from wages and salaries (8).

The Board of Inland Revenue do not publish detailed information on income before and after tax by occupation, so it was necessary to make some rather rudimentary calculations on the basis of the FES results. To do this we have assumed a common type of household consisting of a husband, with a non-earning wife and two children, one under 11 years old, and the other aged between 11 and 15. The data relate to households of all types together, nor is it possible to allow for variations in family size between occupational groups, which might result from differing social norms, or from the different age distributions of each occupation. Moreover, while the FES is based on calendar years, tax years run from April to April. We took the tax year with the greatest overlap with the FES year in the calculations whose results are given in Table 3.

(8) A small inaccuracy is involved in attributing all such income to the head of the household.

TABLE 3

The effect of income tax and national insurance contributions on the median household earned income of different occupational groups in 1973 and 1978

Socio-professional Group	Median gross earned annual income		Percent income tax & national insurance		Earnings as percent of median for all four groups			
	1973	1978	1973	1978	1973		1978	
					Before tax & NI	After tax & NI	Before tax & NI	After tax & NI
Prof. & technical	2,967	6,445	23.8	29.3	122.5	120.1	121.9	118.6
Admin. & Manag.	3,326	6,921	24.4	29.6	137.3	133.4	130.9	126.9
Clerical	2,228	4,461	21.1	25.1	92.0	93.3	84.4	87.0
Manual	2,283	5,008	21.5	26.7	94.2	95.2	94.7	95.6
All 4 groups	2,423	5,288	22.2	27.3	100.0	100.0	100.0	100.0

Source: FES.

Two points emerge from the table. The first is the marked increase between 1973 and 1978 in the share of earnings taken by tax and national insurance, which is the result largely of “fiscal drag”, or failure to index tax thresholds. The second is the relatively small redistributionary effect of direct taxation, and the slightly regressive effect of national insurance contributions which are only graduated up to a rather low ceiling ⁽⁹⁾.

Of course, taxation can also have a redistributive effect through government expenditure, as the pattern of social security payments showed, but this should not be overstated. Much recent research on the take-up of the social services suggests that the better informed higher income groups benefit disproportionately ⁽¹⁰⁾, although the effect of this is probably weaker than that of redistribution through social security payments.

It is not easy to draw comparisons with the results of the French and Belgian studies on the effects of taxation because of the big differences in the definition of the socio-professional groups and in the income levels attached to them – the bigger the differentials with any mildly pro-

⁽⁹⁾ The reader should however remember that the initial differences between the groups were not very great, and that a stronger equalising effect might have been found between groups with bigger income differentials.

⁽¹⁰⁾ See for example, “Inequalities in Health” Report of a research working group, Department of Health and Social Security, London 1980.

gressive income tax system, the greater the leveling effect is likely to be. In the Belgian study one can see that differentials between fiscal households (ie. as defined for tax purposes) of different socio-professional status are smaller than those of gross income, disposable income in their study being gross income after tax and social security contributions, plus state transfer payments. Because the British data have been worked out by applying tax scales to median household income, and not therefore taking account of the effects of taxation on the whole dispersion of incomes within each socio-professional group, it was decided to turn to a different study by the INSEE which used the same method ⁽¹¹⁾. This also revealed a small lessening of the inequality between groups: the change in that between “cadres moyens” and manual workers was of about the same order of magnitude as that between administrative and managerial, and manual workers in Britain. The effect was greater for French senior management, but their income was about three and a half times that of manual households.

So far the main accent has been on distribution in terms of medians or means for these groups, but income differences between households in the same group are considerable, and are greater than those between groups, as can be seen in Table 4.

TABLE 4
Quantiles of gross weekly household income by socio-professional status
of the head of household in 1978

	Q10	Q25	Median	Q75	Q90
Prof. & Technical	80.5	104.1	142.4	188.2	245.2
Admin. & Managerial	86.1	115.8	153.8	205.7	263.3
Clerical	54.5	72.0	102.0	141.0	182.1
Manual	55.0	78.9	108.7	144.6	187.7
Self-employed (a)	42	66	103	160	263(b)
All households (inc. retired & unoccupied)	29.8	51.6	96.4	142.2	193.4

(a) Interpolated from large income ranges.
(b) Obtained by extrapolation of dispersion.

Source: FES.

⁽¹¹⁾ Les ressources des familles de salariés de 1970-1976. Collections de l'INSEE Série Ménages. M67.

The degree of overlap between the groups is considerable. For example, 10 per cent of clerical households (the poorest group) have a higher income than about 60 per cent of the administrative and managerial households (those with the highest incomes) and the self employed outstretch all other groups at both ends of the dispersion. Taxation probably has a greater effect upon the top decile of each group than it would on the relationship between the group medians, but the income sources at this level are more varied so that our present crude tax calculations would not really be very meaningful.

Comparing dispersions for 1968, 1973, and 1978 does reveal some narrowing for the top paid groups, and a widening for the clerical and manual ones. Selected quantile ratios of gross weekly household income are shown for 1968, 1973 and 1978 in Table 5. However, these figures need to be treated with some caution in view of the big year to year fluctuations in the relative income of the top paid groups noted earlier.

TABLE 5
Selected quantile ratios of gross weekly household income by socio-professional group of household in 1968, 1973, and 1978. (Per cent).

	Median/Q10			Q75/Q25			Q90/Q10		
	1968	1973	1978	1968	1973	1978	1968	1973	1978
Prof & Tech.	165.5	171.0	176.8	168.1	170.5	180.8	291.6	328.9	304.4
Admin & Manag.	173.3	169.9	178.7	175.1	176.4	177.6	329.8	320.4	305.9
Clerical	166.7	201.7	187.4	170.8	188.4	195.9	275.1	332.2	334.4
Manual.	177.7	186.4	197.8	171.2	174.5	183.1	299.6	309.9	341.5

Source FES.

The size of the dispersion of gross household income within each group, which can also be found in the French studies, has important implications for the analysis of income distribution in terms of the rather crude classification of groups used here. A comparison of the variance of income between these four groups with the total variance shows that differences between these account for only about 12 per cent of the total variance (excluding the retired and unoccupied households). This would appear to say that other factors account for nearly 90 per cent of the total variation in incomes, so that one would expect households to focus on these other factors in order to improve their share of national income rather than on possible forms of collective action to improve the position of their group as a whole.

How far would a finer disaggregation of these groups increase the explanatory power of occupation, particularly by separating out the liberal professions? Nothing certain can be said on this because of the lack of finer disaggregations of household income. However, our work on occupational earnings suggests that although it could be increased markedly, it might still fall well short of 50 per cent, and probably only rise to about 30 per cent unless a fine breakdown of very high paid occupations were available. Indeed, our research suggests that other factors like age (as a possible indicator of career structures) may have as big a differentiating effect upon earnings even allowing for the intercorrelation between the two.

In future years, with the further growth of large organisations, and of the importance of careers within these, we may well see a decline in the social importance of occupational groups as such, at least in terms of groups with a special labour market identity, as opposed to groups which may be defined by their position and career within organisational hierarchies.

UNITED KINGDOM

APPENDIX

TABLE 1

Household weekly income by occupational group of head of household (Median)
Family expenditure survey
(Pounds Sterling)

	1966(a)	1967(a)	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978
Professional & Technical	37.9	37.5	40.62	44.13	47.18	51.76	58.87	64.27	80.39	98.57	111.41	129.34	142.35
Admin. & Managerial	36.3	37.1	44.38	45.47	50.60	58.90	62.88	73.70	82.83	102.56	116.31	128.17	153.79
Clerical	24.7	28.5	29.70	32.91	36.05	38.93	42.97	49.93	61.18	73.89	86.39	96.19	102.04
Manual	26.0	26.4	28.57	30.89	34.21	37.76	41.65	48.58	57.13	74.67	83.22	94.57	108.70
Retired & Unoccupied	10.8	11.6	11.9	12.0	13.1	13.8	15.0	17.1	20.5	25.5	30.6	31.1	36.6
All households(a)	24.5	25.3	27.04	29.37	32.08	34.89	38.94	44.90	52.38	66.25	73.85	85.22	96.39

(a) including self-employed

UNITED KINGDOM

APPENDIX

TABLE 2

Median Household income (*gross*) by socio-professional category of head of household based on special detailed FES tabulations 1968 + (1966 and 1967 include self-employed in occupational groups)

Indices	1966(a)	1967(a)	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978
Professional & Technical	154.7	148.2	150.2	150.3	147.1	148.4	151.2	143.1	153.5	148.8	150.9	151.8	147.7
Admin. & Managerial	148.2	146.6	164.1	154.8	157.7	168.8	161.5	164.1	158.1	154.8	157.5	150.4	159.5
Clerical	100.8	112.6	109.8	112.1	112.4	111.6	110.3	111.2	116.8	111.5	117.0	112.9	105.9
Manual	106.1	104.3	105.7	105.2	106.6	108.2	107.0	108.2	109.1	112.7	112.7	111.0	112.8
Retired & Unoccupied	44.1	45.8	44.0	40.9	40.8	39.6	38.5	38.1	39.1	38.5	41.4	36.5	38.0
All households(a)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Percentage in each occupational group (*employees and self-employed*)

Prof. & Tech.	6.4	7.0	7.8	7.4	7.2	8.1	7.9	7.3	6.7	7.0	6.3	6.8	7.3
Admin. & Manag.	8.6	8.1	7.9	9.1	9.0	8.3	9.6	6.6	7.2	6.9	7.1	7.4	7.6
Clerical	6.6	7.0	7.1	6.8	6.2	6.6	6.7	6.4	5.8	6.7	6.2	6.1	5.9
Manual	51.2	50.2	49.0	48.6	48.8	47.0	47.0	42.3	40.9	40.3	41.0	40.3	39.5
Retired etc.	23.9	24.0	24.6	24.3	24.9	26.4	25.0	22.8	27.1	28.0	29.0	29.1	29.4
Other groups	3.3	3.7	3.6	3.8	3.9	3.6	3.8	14.6	12.3	11.1	10.4	3.2	4.2
All households	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Self-employed													
– manual								3.4	4.3	3.5	3.0	3.6	3.3
– non-manual								3.5	4.1	3.4	3.3	3.5	2.9

(a) including self-employed

RESUME

L'évolution du revenu des ménages par groupe socio-professionnel dans le Royaume Uni depuis 1966.

A la différence de la Belgique et de la France, il n'y a pas eu au Royaume Uni de baisse systématique par rapport à la moyenne du revenu des ménages dont le chef appartient aux deux groupes socio-professionnels les plus aisés (qui représentent 15 pour cent des ménages). Comme en Belgique et en France, les revenus des ménages ouvriers ont augmenté par rapport à la moyenne.

Depuis 1966 il y a eu une baisse dans la part du revenu des ménages provenant de l'emploi salarié, et une augmentation de celle provenant de la sécurité sociale (croissance du chômage) ainsi que de celle du revenu fictif provenant de la propriété de sa propre habitation (croissance des valeurs immobilières).

L'impact égalisateur de l'impôt sur le revenu est presque annulé par les cotisations à la sécurité sociale dont le plafond des cotisations est très bas. La part du revenu global prélevée par le fisc a augmenté depuis 1966.

Il existe une dispersion très importante du revenu des ménages à l'intérieur de chaque groupe socio-professionnel de sorte que la part de la variance totale expliquée par les différences entre groupes ne s'élève qu'à 12 pour cent. Les dispersions au sein des deux groupes aux revenus les plus élevés ont un peu diminué entre 1973 et 1978.
