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HOW EFFECTIVE HAVE FISCAL POLICIES BEEN IN
CHANGING THE DISTRIBUTION OF INCOME
AND WEALTH

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ABSTRACT

This paper was written to provide some background for a session on fiscal policy and distribution at the AEA Meetings. It examines some of the evidence on the redistributive effects of taxes and benefits in the United States, United Kingdom and Sweden. The difficulty of computing measures of inequality for the distribution of annual household original factor incomes is discussed, and measures for the distribution of post-tax incomes computed for the three countries.

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"We're all living in a house called the Money System; and as a result most of us are suffering from a disease called poverty". (The Ragged Trousered Philanthropists)

"When the State spends too much... there is less wealth with which to improve our standard of living". (Conservative Party Manifesto 1979).

Despite the expansion of empirical research in public finance, there remains considerable uncertainty about the distributional consequences of fiscal policy. I shall divide the issue into two questions. How effective has fiscal policy been in reducing inequality? How big are the potential gains from further redistribution? These questions are discussed in Sections I and II respectively.

In Section I we examine some of the evidence on the redistributive effects of taxes and benefits in three countries, the US, the UK and Sweden. We shall concentrate on the distribution among households, and not among tax units, individuals, or by type of factor income. This ignores the fact that the formation of households is itself endogenous and depends, in part, on fiscal policy, especially subsidies to housing costs. Any statement about the impact of taxes on distribution depends on a counterfactual assumption about the distribution which would be observed in the absence of taxes and benefits. Since there is no overwhelming evidence in favour of any one particular set of assumptions, I shall argue that it is helpful to pose a second question, the answer to which does not depend on assumptions about incidence. Namely, given the distribution which emerges from the existing

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Sweden. In both the UK and US most of the reduction in inequality comes not from the tax system but from state transfers (pensions, unemployment benefit and so on).

This picture is borne out by studies of effective tax rates in the three countries. In Sweden Franzen et al, (1975) found that for most household types the net effect of the Swedish tax system was highly progressive. It is difficult to compare the results of this study with those for the UK and the US because results are presented only for six income groups and the definition of income includes some transfers but not others. The ratio of taxes to net income rises from 41.1% in the lowest income group to 81.5% in the highest. For the UK and the US it is possible to compare effective tax rates by decile of the income distribution. These have been computed for the US by Pechman and Okner and by Musgrave et al using the MERGE file, and for the UK by the Central Statistical Office. In both cases, of course, the results depend upon the assumptions made about tax incidence. These are

difficult to defend, but at least the US studies present estimates for more than one set of assumptions which enables us to examine the sensitivity of the conclusions to the assumptions made. In Table 2 we show these effective tax rates for two assumptions about incidence in the US, and for the single set of assumptions employed in the UK study (in which corporation tax and taxes on capital are not allocated to households). Since transfers are much more important in the UK than the US (the ratio of government transfers to employees' compensation was about 18% in the UK compared with 9% in the US in the years in question), the effective tax rates for the UK are shown both for original income and for the distribution by original income plus cash transfers.

The estimates of the effective tax rates depend upon the assumptions

the growth of state pensions has had a marked effect on the share of the bottom 80% - in the UK it rose from 22.4% to 27.4% in 1976 if occupational pension rights were included in wealth, and to 44.7% if state pension rights were included.

Unfortunately, the data on the distribution of wealth in different countries are not really comparable. Both the US and the UK produce estimates based on the estate multiplier method, but in Sweden less reliable data based on other tax statistics are used. For what it is worth, the evidence suggests that the distribution of wealth in the UK is more highly concentrated than that in the US, and that this may be due to the greater importance of inheritance in the UK. Although there are obvious loopholes in the taxation of transfers of capital in both countries, these seem to be more serious in the UK. The revenue from transfer taxes actually fell in nominal terms from £459 million in 1972/3 to £396 million in 1978/9. This represents a decline of 65% in real terms. As far as the top decile is concerned, the combination of unanticipated inflation and the failure to index the taxation of capital income has been more significant than tax policy.

The effect of fiscal policy on the distribution of wealth is unlikely to have been a 'mean-preserving contraction' nor one that can be accurately measured by examining the share of the top one or five per cent. We badly need more evidence on the wealth holdings, and their composition, of the rest of the population.

II The Gains from Further Redistribution

How big are the potential gains from further redistribution over and above that which results from the existing tax and benefit system? To be more precise, what proportion of national income would we be prepared to give up in order to obtain complete equality of incomes? The answer to this question is

TABLE 3 GAINS FROM FURTHER REDISTRIBUTION
(as percentage of national income)

ϵ	US	UK	SWEDEN
0.5	13.7	7.9	7.7
1.0	26.9	15.4	15.8
2.0	49.9	29.4	32.5

Source: own calculations based on the decile distributions in Pechman and Okner (1974) Table 4-6, Economic Trends January 1979 Table 11, and Stark (1977) Table 102.

To examine the redistributive effects of fiscal policy we need to compare the degrees of inequality of the distribution of original incomes before state intervention and of final incomes after taxes and benefits. No statistical measure (such as the Gini coefficient) can do this for us and the distributions must be compared using social judgements such as those illustrated in Table 3. But this immediately highlights the impossibility of carrying out such an exercise without explicit consideration of the life cycle. The problem is that in any given year a sizeable number of households have almost no original income and rely entirely on state transfers (pensions, unemployment benefit). In all three countries the share of the bottom decile in original incomes is practically zero. But inspection of (1) shows that if a group has zero income, then for any value of ϵ of unity or above the degree of inequality is unity, irrespective of the number of people with zero income or the distribution among the rest of the population. Conclusions about the effect of fiscal policy on inequality will be dominated by the position of those with no original income, and this suggests that if we are to use annual data we should focus less on the overall distribution and more on the distribution within a cohort.

the impact of fiscal policy as a whole, but, in the light of the data which are currently available, it may be of more practical value.

TABLE 2 EFFECTIVE TAX RATES BY DECILE OF INCOME

	DISTRIBUTION, US AND UK			
	US 1970		UK 1977	
	Most Progressive	Least Progressive	Original Income	Income plus Cash Transfers
Lowest Decile	18.8	25.8	250.0	3.6
Second Decile	19.5	24.2	53.8	13.3
Third Decile	20.8	24.2	37.5	22.1
Fourth Decile	23.2	25.9	37.0	30.8
Fifth Decile	24.0	26.4	36.6	33.2
Sixth Decile	24.1	26.2	37.4	35.2
Seventh Decile	24.3	26.2	37.2	35.5
Eighth Decile	24.6	26.4	37.4	36.0
Ninth Decile	25.0	26.1	37.8	36.7
Highest Decile	30.7	27.8	38.1	37.3
Average	26.1	26.7	37.6	33.1

Source US Okner (1979) Tables 2 and 3

UK Economic Trends, January 1979 Table D

Note

The US figures were obtained from the MERGE file using the most and the least progressive assumptions about incidence as defined by Pechman and Okner (1974). The figure for the lowest decile refers only to the sixth to tenth percentiles. The UK figures are based on data from the Family Expenditure Survey.

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