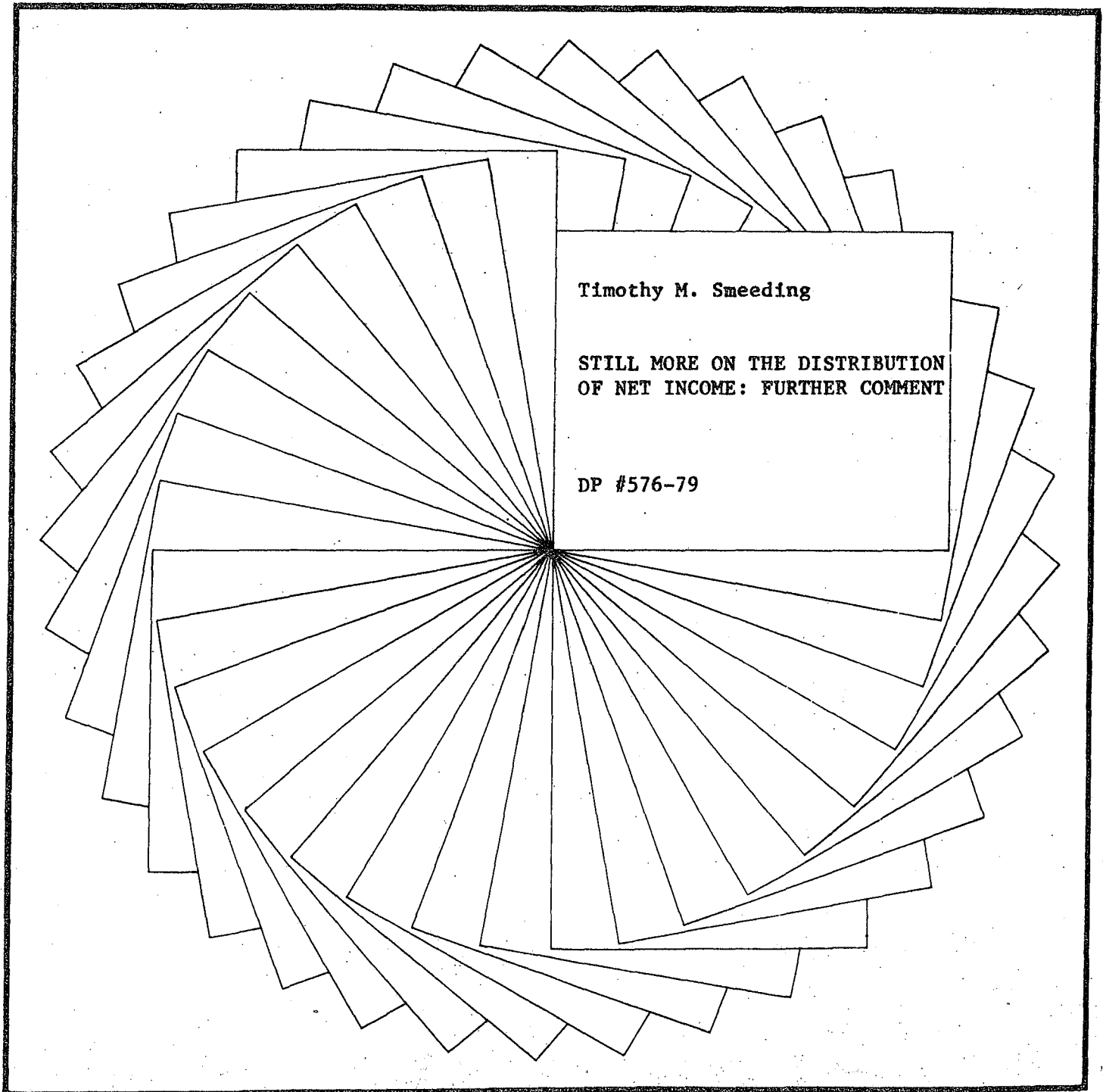University of Wisconsin-Madison

Institute for Research on Poverty

Discussion Papers

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STILL MORE ON THE DISTRIBUTION
OF NET INCOME: FURTHER COMMENT

DP #576-79

Still More on the Distribution of
Net Income: Further Comment

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ABSTRACT

The author comments further on methodological and substantive issues raised in considering the distribution of net family income, continuing a discussion with Edgar Browning begun in the pages of the _Southern Economic Journal._

Still More on the Distribution of Net Income: Further Comment

In an article entitled "The Trend Toward Equality in the Distribution of Net Income" (Southern Economic Journal, 1976:912-923) Edgar Browning argued both that the size distribution of net family income is much more equal than is popularly believed, and, further, that this same size distribution has displayed a marked trend toward equality over the 20-year period, 1952-1972. In the same journal in January, 1979, I took issue with Browning's article, arguing that Browning had made several errors in conceptualizing, calculating, and distributing net income (Smeeding, 1979a). After adjusting for these errors, I found only a slight equalization of the level of inequality in any year, and similarly for the trend over this same 30-year period. Browning (1979) challenged these criticisms in the same issue. Some of his comments, especially his criticism of my treatment of employer payroll taxes and the valuation of fringe benefits, I freely acknowledge to be valid. Others, however, seem to me to be misleading and based on mistaken interpretations of available data. At issue here is, I believe, a substantial disagreement over the relative shape of the income distribution and its trend, a disagreement which goes beyond a mere quibble over measurement of income sources, and hence a disagreement which I cannot leave in its current state.

Browning takes issue, first, with many of my objections to his original figures. I discuss these criticisms, mainly measurement problems, in section I below. Second, Browning comments on our conceptual and judgmental differences over what ought to be included in income, and with these, section II deals. Finally, Browning introduces a wholly new set of microdata-based income distribution estimates in an attempt to back up his original arguments.

I have several criticisms of these estimates, but I shall not argue them here.[1]

I. ISSUES OF MEASUREMENT

Since Browning has agreed to accept my estimates of the distribution of income underreporting adjustments, education transfers, and capital gains; they need no further comment. However, we still disagree sharply on both the amount and distribution of in-kind transfers, fringe benefits, and taxes.

In-kind tranfers. Browning's latest estimates of the value of in-kind transfers, which represent some modification of his 1976 estimates, remain unacceptable, even in their "compromise" form. Browning's arguments on the amount of in-kind transfers accruing to the lowest quintile rest solely on his citation of a 1974 U.S. Department of Health, Education, and Welfare estimate of the amount of federal in-kind transfers accruing to the poor. I knew nothing of the way in which these HEW estimates were derived, and I did not originally investigate them, since I have confidence in my own figures. Given the emphasis that Browning continues to place upon the HEW estimates, however, I have examined them closely.[2]

These HEW figures do not separate families and unrelated individuals, nor do they adjust for certain benefits accruing to persons not counted in the poverty population (e.g., the aged in nursing homes and institution-alized people). These adjustments are unarguably necessary if we want to make in-kind transfer totals consistent with the Census Bureau's family (noninstitutionalized) population on which all other income estimates are based. After making such adjustments, we are left with $7.4 billion of

federal in-kind transfers to poor families in the lowest quintile, not
the $11.7 billion with which Browning begins. Browning argues that my
in-kind transfer total is inconsistent with these HEW estimates. However,
if we subtract this amount from the $10.8 billion of total in-kind benefits
which I have estimated for the lowest quintile (Smeeding, 1977a, pp. 4-5),
we are left with $3.4 billion to account for other state-financed in-kind
transfers to poor families and for state or federal in-kind transfers to
nonpoor families in the lowest quintile. In other words, if Browning
had adjusted the HEW estimates to take account of the discrepancies which
I note above, he would have found the HEW figures to be consistent with
my own estimates of the amount of in-kind transfers accruing to the lowest
quintile and their distribution.

Employer-subsidized fringe benefits. Because employer contributions to vested
pension plans increase the net worth of the individual on whose behalf
they are made, and because (subject to certain restrictions) most employees
can liquidate these pension contributions if they so desire, they should be
included as income. Browning disagrees, arguing that to do so would be to
double-count pensions; once when the contributions are made and later when
they are returned as retirement benefits (1979:947). I argue that in concept
and in practice, vested pension contributions and profit sharing should be
counted as income in exactly the same way as unrealized capital gains are
counted as income. To exclude vested pension contributions is unwarranted
in terms of Browning's own income concept. Browning is, however, correct
in that it is conceptually inconsistent to count pension benefits both
when received, and when employer contributions are made on one's behalf. The
CPS, and Browning, count pensions only when received. If we wish, however,

to count pensions as income when contributions are made, the correct

adjustment is to subtract the annuitized value of these same employer

contributions from total pensions when later received, thus leaving

only the accumulated interest on the original contributions to be

counted as retirement income. Because employer pension contributions

for younger workers far exceed the interest value of pensions

received by older retirees by increasing amounts in any of these

three years, and because pension rights favor the rich in their

distribution more than pensions received favor the poor, the net

effect of including pensions is to increase both the level and trend

in inequality. In summary, the practice of excluding pension rights

when contributions are made and of counting pensions only when

received biases Browning's figures toward greater equality. Although

the figures in Smeeding (1979a) might possibly overstate the equalizing

impact of pensions (owing to my failure to separate retiree pension

rights from interest earned on those rights),[3] the distributional

impact of my treatment of pensions is certainly closer to their true

impact on income inequality than the CPS (Browning) treatment.

Another discrepancy deals with our treatment of employer-subsidized health

insurance, $11.7 billion in 1972. Browning (1979:947-948) argues that these

benefits are distributed across workers as a fixed amount per worker, regardless

of employee's wage level. It follows that such contributions represent a

higher proportion of earnings for those with low wages. However, because

Browning cannot calculate the way in which these benefits are distributed

across money income classes, and because he argues that they would have

a trivial effect on income shares, he chooses to ignore them. On the other

hand, I argue that they should be distributed in proportion to the amount of

wage and salary income in each bracket. Low-wage earners and part-time workers

usually do not receive as much in employers' medical benefits as do high-wage earners and full-time workers. Because the former type of workers **prevails in the lowest quintile, and the latter type in the highest quintile,** I believe that my choice of distributors is a fair one; hence I choose to include medical benefits as I have originally argued (Smeeding, 1977a:9), allocating 0.4 billion (3 percent) to the lowest quintile.[4]

Taxes. Browning argues that only direct taxes need be included in determining the after-tax distribution of income, for indirect taxes are already reflected in money incomes. But in the first place, Browning's tax measure includes only federal personal income taxes and employee payroll taxes. It ignores state and local income taxes, residential and personal property taxes, and motor vehicle taxes. These, however, are generally considered to be direct taxes and should also be subtracted from factor income.[5]

In the case of indirect taxes, our differences turn mainly on the incidence assumptions underlying each type of indirect tax. In his response to my comment, Professor Browning presents two examples which indicate that incomes received represent the after-tax distribution of income, regardless of the shifting assumptions employed. In one instance, where taxes are back-shifted, factor incomes received already reflect the effects of the tax. However, in Browning's second example--where indirect taxes are fully forward-shifted--he argues that the relative positions of his two hypothetical income recipients remain the same, despite the fact that their real incomes are lower, and that indirect taxes should not be subtracted. I disagree. To the extent that indirect taxes are forward-shifted, Browning's two income recipients are in the same relative positions only if their average

__propensities to consume (APC's) are the same.__ Because APC's rise with

declining incomes, there is a differential effect which need be taken

account of in determining the distribution of economic well-being after taxes

and transfers are taken into account.[6]

Table 1 assesses the importance of these differences in calculating

the 1972 distribution of net income. In order to focus on the major issue

at hand, i.e., the income share of the bottom quintile, the shares of

other quintiles have been excluded from Table 1. The top panel of Table 1

includes Census money income, adjustments for income underreporting, capital

gains, education transfers, and federal personal income and payroll taxes.

Browning and I do not disagree on these figures.

In the second panel I add three items: in-kind transfers (as in

Smeeding 1979a, Table 1, panel B, line 3); fringe benefits in the form of

employers' vested pension contributions, and health and life insurance

contributions as discussed above; and finally "other taxes." This last item

includes those direct taxes which Browning omits (residential and personal

property taxes, state and local income taxes) and forward-shifted indirect

taxes (sales and excise taxes, and one-half of the corporate income tax) that

differentially affect high-and low-income families. Distributors for these

taxes were obtained from Pechman and Okner (1974, Tables 4-8 and 4-9).

These figures have been adjusted to exclude the shares of unrelated individuals.

On this basis, I calculate that the income share of the bottom quintile is

7.5 percent of net income. The third panel presents Browning's figures,

which include his estimates of in-kind transfers but exclude fringe benefits

and other taxes. On this basis, Browning's estimates indicate that the bottom

quintile receives 8.6 percent of net income.

Table 1

The Distribution of Net Income, 1972: Browning vs. Smeeding
(billions of dollars)

Row	Income Component	Income of Lowest Quintile Amount ($)	% Share of Total	Total (Aggregate) Income
	Income Not in Dispute[a]			
1		$50.0		$728.0
	Smeeding's Additions			
2	In-kind transfers	$10.8		22.2
3	Fringe benefits[b]	$ 1.4		4 .7
	Minus			
4	Other taxes[c]	$ 9.2		89.4
5	Smeeding Net Income (1 + 2 + 3 - 4)	$53.0	7.5	707.5
	Browning's Additions			
6	In-kind transfers	$15.0		28.0
7	Browning net income (1 + 6)	$65.0	8.6	756.0

a. Includes those income estimates on which Browning and I are in agreement. It represents money income, adjusted for underreporting, plus educational and capital gains, minus personal income and payroll taxed.

b. Fringe benefits include employers' (including government) vested pension contributions, and health and life insurance contributions.

c. Other taxes include residential and personal property taxes, state and local income taxes, sales and excise taxes, and one-half of the corporate income tax.

In order, then, to accept Browning's estimates, one must, first, accept a set of unadjusted HEW figures for in-kind transfers which, once adjusted for data discrepancies, are entirely consistent with my own estimates of in-kind transfers; secondly, one must argue that employers' fringe benefits do not add to employees' current level of economic well-being; and finally one must argue that residential property taxes, sales taxes, and other forward-shifted taxes do not differentially affect the distribution of income after taxes and transfers and hence may be ignored. I cannot accept any of these arguments.

II. CONCEPTUAL AND JUDGMENTAL ISSUES

This section of the paper concentrates on two substantive--albeit largely subjective--differences between Browning and myself: the valuation of in-kind transfers, and adjustments for leisure (or as Browning prefers: "potential additional income").[7]

.Browning claims that adjustments for the welfare costs of in-kind transfers by counting them at their cash equivalent value to the recipient, roughly 70 percent of their government cost, are inconsistent (since other welfare costs have not been taken into acount) and inappropriate (because of possible "misinterpretation by noneconomists"). Instead, he prefers to count them at their government cost. The relevance of his second argument escapes me. But I cannot accept his first claim. These adjustments are indeed necessary; moreover, the welfare costs of many government policies are already reflected in the money income figures we both are using. Hence, it is not at all inconsistent to include such an adjustment. Further, in-kind transfers have a massive effect on the income share of the lowest quintile; thus it is particularly important to include this adjustment to avoid

overstatement of their income share. Browning believes the opposite: that to include such an adjustment biases the income share of the bottom quintile by understating their incomes.

Browning wishes to include in income an estimate of leisure value, or "potential additional earnings." Even if such an adjustment to income need be made in determining economic well-being (under certain circumstances, I would agree, such an adjustment should be made), Browning's estimates in this case do not take any account of involuntary unemployment, while also ignoring the paid leisure, i.e., vacations and holidays, of the employed.[8] Even under the best of circumstances, adjustments for leisure value are necessarily quite subjective ("crude" is Browning's term). For these reasons I choose to exclude such adjustments in my estimates; Browning, believing that his figures are accurate enough, chooses to include them in his measure of net income. Finally, because Browning accepts the fact that the reranking of households in the tax and transfer process substantively affects the composition and income shares of the bottom quintile, we both would agree that an adjustment for ranking families after taxes and transfers need be made.

Table 2 clearly lays out the importance of the conceptual and judgmental differences which separate my estimates of the level of inequality from Browning's. In the top panel, adjustment for the valuation of in-kind transfers reduces my estimate of the income share of the lowest quintile to 6.9 percent.[9] Further, adjustment for the reranking of households leaves me with an estimated income share of 6.5 percent for the bottom quintile.[10] It should be noted that this is the same estimate earlier reported in Table IV of my comment (Smeeding 1979a:942). Adding potential additional earnings to Browning's earlier estimates and adjusting for reranking leaves Browning

Table 2

The Distribution of Net Income: Browning vs. Smeeding
Adjustments to Income

| Row | Income Component | Income of Lowest Quintile | | Total (Aggregate) Income |
		Amount ($)	% Share of Total	
	Smeeding's Adjustments			
1	Smeeding's net income	$53.0	7.5	$707.5
2	Adjustment for valuation of in-kind transfers	-$ 5.5		-24.0
3	Smeeding's total (1+2)	$47.5	6.9	683.5
4	Adjusted for reranking	$44.4	<u>6.5</u>	683.5
	Browning's Adjustments			
5	Browning's net income	$65.0	8.6	756.0
6	Adjustment for potential additional earnings	$18.5		121.4
7	Browning's total (5+6)	$83.5	9.5	877.4
8	Adjusted for reranking	$74.6	<u>8.5</u>	877.4

with an income share of 8.5 percent for the lowest quintile.

Above, I have attempted to respond to Edgar Browning's criticism of my comment on his earlier paper in an evenhanded fashion. Objectively, I still believe that my estimates for in-kind transfers, fringe benefits, and taxes are more accurate and meaningful than Browning's. Subjectively, I have indicated the areas of conceptual disagreement which separate us, and the importance of these differences.[11] For those readers who have followed this debate, the subjective--perhaps ideological--biases which pervade both of our papers should be apparent. Clearly, the question of the level (and trend) in inequality is still open to varying factual, conceptual, and judgmental interpretations.

NOTES

[1]From the brief bit of information presented by Browning (1979:953–956) and Browning and Johnson (1978) it is difficult to determine the exact procedures used to adjust the Congressional Budget Office (CBO) data tapes for corporate retained earnings, indirect taxes, etc. However, two brief comments are in order. Although Browning's adjustment for leisure (1979:955–956) is conceptually quite close to the "earnings capacity" measure of economic status recently developed by Garfinkel, Haveman, and Betson (1977), and Garfinkel and Haveman (1978), his results are substantially more equalizing than those of these authors. Secondly, the CBO is currently updating and revising its data on in-kind transfers, under Congressional mandate. The revisions in methodology which they are undertaking are at least in part a response to the criticisms levied against their earlier techniques for distributing Medicare and Medicaid on the basis of benefits actually received. Hence the basic adjustments for in-kind transfers upon which Browning relies have been called into question.

[2]I would very much like to thank Gordon Fisher of HEW (the author of the HEW estimates) for his help in this investigation. It should be noted HEW discontinued these estimates in 1974. My in-kind transfer estimates were obtained from careful micro-data estimates of the distribution of benefits from Food Stamps, Medicare, Medicaid, and public housing. These estimates have been published in a number of places (e.g., Smeeding 1977b, 1977c); I have yet to see any substantive criticism of their accuracy.

[3]Unfortunately, I can find no procedure to separate these two elements of received pension income for the years in question. My own figures were

[4]Using Browning's suggested distributors, i.e., equal medical benefits
per worker for all workers, I calculate that the lowest quintile would
receive $1.1 billion in medical benefits. Using this adjustment we would
find the income share of the lowest quintile increases by .1 percentage
point. Admittedly the 1972 difference is trivial, as Browning argues. But
because employer medical benefits have substantially increased in value since
1972, the method by which they are allocated could make a substantial
difference were this calculation repeated for for 1980 or 1982. Hence the issue at
hand is not, in my judgment, a trivial one.

[5]Browning in fact, does argue in his original article that residential
property taxes and state and local personal income taxes should be included as
well. He notes that he omits them because he could not find distributors
for them. But as I pointed out earlier (Smeeding, 1977a:10), several
different distributors do exist so that the calculation would be a relatively
simple one.

[6]Note that taxes which fall on factor incomes, whether back-shifted
(e.g., employer's payroll taxes) or not (e.g., the portion of corporate
income taxes which falls on the owners of stock), are reflected in the CPS
money income figures. Because we are interested only in the absolute
incidence of taxes, there is no need to add indirect taxes to "gross up"
factor returns to national income totals (as we would need do if our interest
was to compare the effects of various shifting assumptions for indirect
taxes and corporate income taxes, as in a differential incidence study).
Because public goods expenditures are not included in these estimates,
not all of national income collected in taxes is returned to households.
For more on the incidence and distributional effects of indirect taxes, see

Browning (1978) and Smeeding (1979b).

[7]There are two further conceptual issues: inclusion of unrelated

individuals and adjustments for family size. While our figures exclude

unrelated individuals, Browning and I both agree that they should be

included in a more complete assessment of income inequality. However,

given the macrodata bases which underly the figures presented in our papers,

it is not possible to adjust for differences in family size with an

acceptable degree of accuracy. While inclusion of unrelated individuals

(taken by itself) would exacerbate inequality, adjustments for family size

would lessen inequality. In any case, such thorny issues as the amount of

income sharing among unrelated individuals in the same household, and exactly

how to adjust the data for differences in the family size, need also be explored

before making such adjustments regardless of the data sources employed.

[8]One important cause of involuntary unemployment which has received

little attention is disability. Recently Wolfe (1979) has estimated that

fully 7 percent of all the noninstitutionalized population aged 20-64 has

some form of long-term illness or injury which permanently limits their

ability to work. One wonders if Browning and Johnson took disability into

account in determining their values for "leisure time"?

[9]Education and in-kind transfers are assumed to be valued by house-

holds at 70 percent of their market value. See Smeeding (1977, p. 21) for

a discussion of the derivation of this adjustment.

[10]That is, reranking them on the basis of post-tax and post-transfer

income, not on the basis of Census money (pretax, but post cash transfer)

income, as is the case with all previous figures in both tables. See

Smeeding (1977, p. 22) for a discussion of the basis of this adjustment. The

reranking adjustment reduces the income share of the bottom quintile

by 25 percent of the difference between their share of net income in line 3

(line 7 for Browning) and their share of Census money income in 1972

(i.e., 5.4 percent).

[11]No adjustments for unrelated individuals or differences in

household size were presented. In my opinion, the effect of these omissions

is yet uncharted. Browning and Johnson (1978) have compiled a microdata

estimate of the distribution of net income, but their analysis has not been

thoroughly investigated, and their conclusions are diametrically opposed to

those of others (e.g., Reynolds and Smolensky, 1977) who have attempted a

similar analysis. Hence, even if their adjustments for family size are

acceptable, other elements of their analysis may well be open to question.

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