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THE POST FISC DISTRIBUTION:
1961 AND 1970 COMPARED

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ABSTRACT

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This paper compares the size distribution of income in 1961 and 1970

after allocating all government taxes and expenditures across households.

Despite sizable government efforts toward a more egalitarian distribution

during the 1960's, we find that final distributions changed very little in

ten years. The paper also presents new and detailed data for 1970, and

discusses some common criticisms of the methods employed in this and similar

studies.

THE POST FISC DISTRIBUTION:
1961 AND 1970 COMPARED

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This paper compares the size distribution of income in 1961 and 1970
after allocating all government taxes and expenditures across households
(final income). The motivation, of course, is to assess whether there
were any detectable changes over the decade in the overall impact of the
fisc upon the distribution of income and if so, what directions and magni-
tudes were involved. Perhaps in no decade since the depression did govern-
ment appear to engage in so much effort of an avowedly egalitarian nature.
If we interpret recent discourse properly, however, intellectuals are now
much less sanguine about the ability of government to successfully engineer
sizable redistributions than they were in the 1960's. These opinions rest
upon a variety of evidence, from causal impressions to careful studies of
individual programs.[1] This study adds to this discussion by employing the
conventional techniques of public finance to discover whether final income
was any more equally distributed in 1970 than it was in 1961.

[1]For example, Kenneth E. Boulding and Martin Pfaff, eds., Redistribution
to the Rich and the Poor, Belmont: Wadsworth Publishers, Inc., 1972 and S.
Weintraub, ed., Income Inequality: The Annals, 409 (September 1973), Alice M.
Rivlin, Systematic Thinking for Social Action, Washington, D.C.: Brookings
Institution, 1971.

To answer this question, we have constructed new estimates for 1970
and compared these results with similar studies done in previous years,
especially that of the Tax Foundation (1967).[2] The procedure for estimating
net fiscal incidence involves three major steps: (1) constructing an
income base; (2) distributing the burdens of tax payments by income class;
and (3) distributing government expenditures by income class. The first
section compares the overall incidence of the fisc in 1961 and 1970 using
a variety of techniques. A precise description of methods and results for
1970 is in the second section and in the appendices, where the data base is
presented. A final section discusses some of the crucial difficulties and
qualifications of this conventional method of assessing overall incidence
and whether the results warrant any degree of confidence.

I. Comparing Aggregate Fiscal Incidence

Establishing a Set of Expectations. We begin by recounting some trends
revealed by the National Income Accounts in the period 1961 to 1970. First,
over the decade total state and local taxes rose from 51 to 58 percent of
total Federal taxes, implying a decline in the degree of progressivity of
the overall tax structure because state and local taxes are generally
believed to be less progressive than the Federal tax structure. Second,
among state and local taxes, the property tax has had the slowest rate of
growth while individual and corporate income taxes have had the fastest
rates of growth, indicating some decline in the degree of regressivity at
the state and local level. Third, the most striking feature of the Federal

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[2]Tax Burdens and Benefits of Government Expenditures by Income Class,
1961 and 1965, New York: Tax Foundation, Inc., 1967. We have also made
comparisons with Gillespie's study, "Effects of Public Expenditures on the
Distribution of Income," in R. Musgrave ed., Essays in Fiscal Federalism,
Washington, D.C.: The Brookings Institution, 1965.

tax structure has been the rapid expansion of social security taxes relative to corporate income taxes, which apparently indicates a decline in the progressivity of Federal taxes.

On the expenditure side, it is somewhat more difficult to generate expectations about distributive effects because of the relatively recent development of incidence assumptions for various types of expenditures. However, one relevant feature to note is that over the decade, state and local expenditures (including grants in aid from the Federal government) rose from 56 to 74 percent of Federal expenditures (excluding the grants in aid). This change in the composition of government expenditures could affect the distributive impact of government, but there is no consensus about whether Federal or state-local governments are more progressive in expenditures.[3] Among Federal expenditures the most striking feature is the sharp growth in Social Security outlays, which implies an increasingly pro-poor distributive effect, if allocated in the conventional manner. Other compositional changes are difficult to assess, particularly at the state and local levels, but it would appear that expenditure patterns might be more egalitarian over this period because of the expansion of education and public assistance relative to programs like highways and veterans payments. Finally, total government expenditures have risen from 31 to 35 percent of NNP over the decade and because public output is more equally

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[3]Gillespie finds state-local government more pro-poor in expenditure incidence than the Federal government, op. cit., pp. 164-65, and the Tax Foundation does not explicitly make an expenditure comparison between levels of government, although taxes are compared. Since grants-in-aid undoubtedly alter state expenditure and tax schedules it may not be meaningful to separate the effects of levels of government on the post-fisc distribution. In this study grants-in-aid appear in state and local expenditures and not in federal expenditures.

BY INCOME CLASS, NET FISCAL INCIDENCE AS A PERCENTAGE
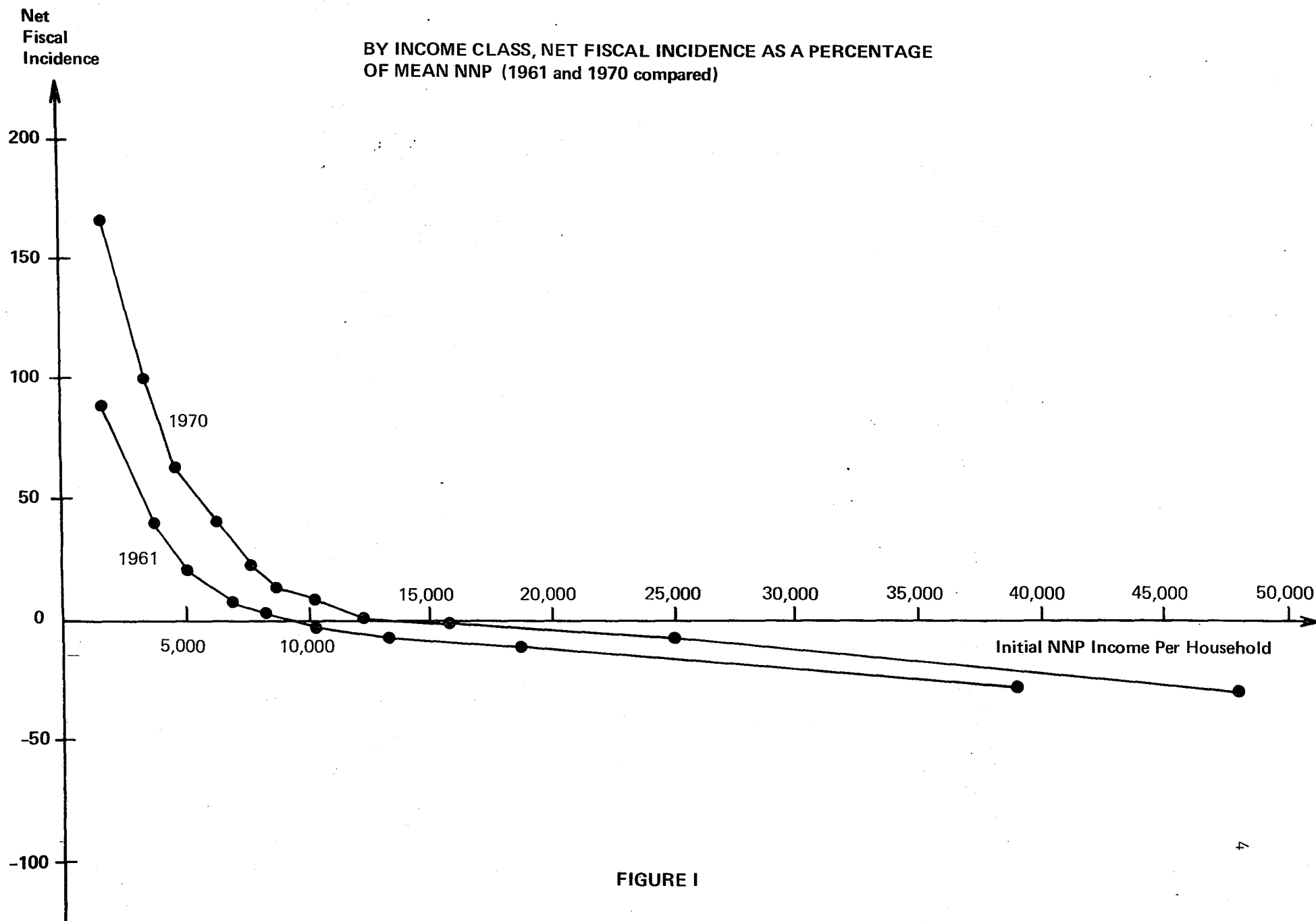OF MEAN NNP (1961 and 1970 compared)

FIGURE I

distributed than private output, the growth of government is a factor which

presumably reduces inequality in the after-tax, after-expenditure pattern.[4]

On balance, it would appear that the tax and expenditure structures have

moved in opposite directions and that the size effect is move toward greater

equality. The combined distributive impact, or net fiscal incidence by

income class, cannot be confidently predicted from these opposing forces.

The Results: Comparing Post Fisc Distributions Over the Decade. Since

there is no consensus about the best way to describe a size distribution of

income, much less contrast two size distributions, four comparisons are

presented. The first is shown in Figure 1, where net fiscal incidence as

a percentage of average money income is plotted against average money income

in each income class for the years 1961 and 1970.[5] Net fiscal incidence in

1970 more than doubled the net income of households initially in the under

$2000 class while reducing the income of the over $25,000 class by 32 percent.

By contrast, the net gain from government in 1961 for the lowest class was

one-half that of 1970, while net income in the over $15,000 class was reduced

by 27 percent, slightly less than the reduction for the top class ($25,000+)

in 1970.[6]

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[4]Income originating in the government sector can also be viewed as more equally distributed than income originating in the private sector and thus makes for greater equality in the pretax, pretransfer distribution.

[5]These summary results for 1961 were obtained from the Tax Foundation, Inc., op. cit., Tables 3 and 5, pp. 14 and 17. The aggregate income base is NNP in current dollars in both years. For 1961 the base is distributed by money income before taxes according to the Survey of Consumer Expenditures, 1960-61. See, Tax Foundation, Appendix B. For 1970 the distributors money income according to the CPS. For further discussion see our Appendix B.

[6]The Gillespie study found a 55 percent gain in the lowest class and a 13 percent loss in the highest class ($10,000+) in 1960.

Perhaps the most prominent features of Figure 1 are the substantial increases in the ratio of net fiscal incidence to initial incomes in the lower half of the distribution and the rise in the breakeven point over the decade. One explanation is that the effective tax schedule remained relatively fixed and that the rise in public output was financed by the increased taxes paid by families whose incomes increased. Under these conditions a family whose nominal income remained fixed over the decade would be better off by the absolute rise in public output. Moreover, the percentage increase in net fiscal incidence would be larger the lower the income level of the fixed income household. Figure 1 is consistent with this explanation because mean income in each class is approximately the same at the beginning and the end of the decade and subsequent regression analysis will confirm that the tax schedule was relatively unchanged.

The second comparison is of unweighted, ordinary least squares regressions with dollars gained (or lost) as the dependent variable and mean income per income class as the independent variable for each year.[7] The regressions reveal a relatively fixed tax schedule as required by our explanation of Figure 1. The regression coefficients also serve as a convenient summary of the changes in the composition of taxes and expenditures over the period.

The rise in the ratio of net fiscal incidence to income at the low end of the initial income distribution could have occurred because the function relating dollars of net fiscal incidence to income became more steeply negative,

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[7]Regressions weighted by the frequency distribution of households and constant elasticity regressions were also calculated. They yielded results which were equivalent to the unweighted linear regressions.

TABLE 1

A Regression Comparison of Government Incidence, 1961 and 1970

	INTERCEPT		SLOPE		R^2	
	1961	1970	1961[a]	1970	1961[a]	1970
State & Local						
Benefits	612	1307	.036	.052	.990	.964
Taxes	195	55	.080	.128	.998	.982
Net	416	1252	-.043	-.076	.996	.956
Federal						
Benefits	1043	1961	.088	.068	.958	.810
Taxes	-1363	-1497	.366	.369	.962	.924
Net	2406	3459	-.279	-.301	.958	.927
All Government						
Benefits	1646	3268	.125	.120	.982	.895
Taxes	-1170	-1442	.446	.497	.976	.943
Net	2815	4710	-.321	-.377	.968	.935

[a]Calculated from Tax Foundation, 1961.

Expenditure and Tax Functions for 1961 and 1970

$(000)

Net Fiscal
Incidence

Benefits, 1970

Benefits, 1961

Tax, 1961

Tax, 1970

5

4

3

2

1

0

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

$(000)
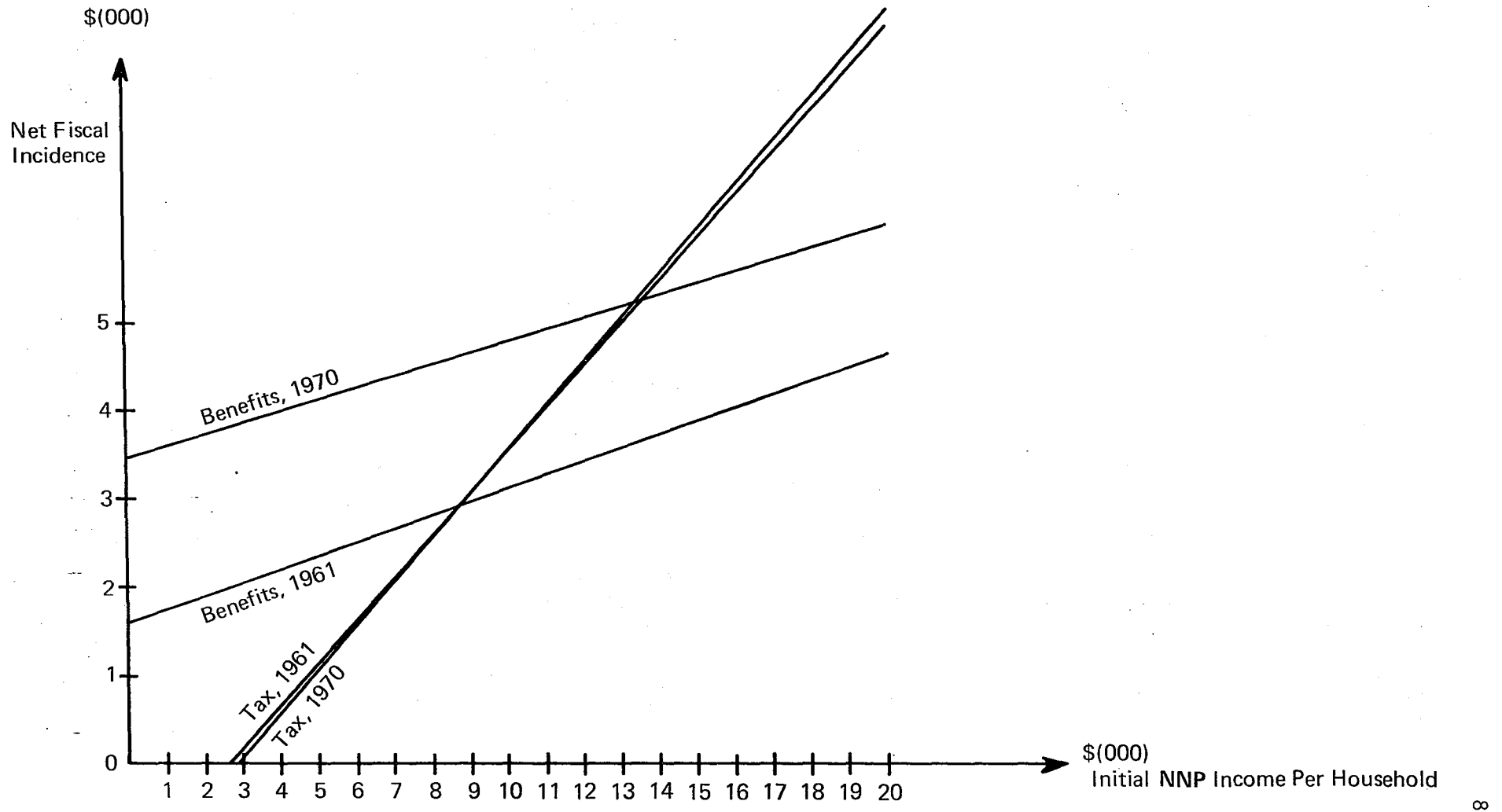Initial NNP Income Per Household

FIGURE 2

or because the whole function shifted upward. The regression estimates in Table 1 clearly reveal that an upward shift is the dominant factor. The intercepts are the estimated dollars worth of net gain at zero income and the slope coefficients are the cents worth of change in either benefits or taxes per dollar increase in income. If we compare the slope coefficients along the bottom row of Table 1, we find that the net fiscal incidence function became slightly steeper over the decade (-.321 versus -.377), that is, more pro-poor, but this change is small. The intercept however shifted up considerably, nearly doubling, to the relative advantage of households at the low end of the distribution. These features are illustrated in Figure 2, where the regression lines for benefits and taxes are plotted for 1961 and 1970. The benefit function flattens slightly, the tax function becomes steeper, but the dramatic change is the upward shift in the benefit function.

At the state and local level (which includes grants-in-aid), Table 1 reveals that the benefit intercept more than doubled and the tax intercept fell, which produced a tripling of net fiscal incidence at zero income. The intercept changes at the Federal level were less favorable for low income households, with net fiscal incidence rising by less than fifty percent. The net slope coefficient for state and local government changed in favor of the poor because an adverse rise in the benefit slope was more than offset by a favorable rise in the tax slope. The Federal coefficients show a decline in the benefit slope and an unchanged slope for taxes, which resulted in a slightly steeper (more pro-poor) net incidence slope. The overall result is that the decade was marked by households moving along a steeper tax

schedule, accompanied by much higher government expenditures, from which the low end of the distribution benefited absolutely as much as the high end, and proportionately much more.

Despite all this, the effect on final income inequality was negligible if we compare coefficients of variation in 1961 with those for 1970. After all taxes and expenditures are allocated to income classes, the coefficient of variation is .546 in 1961 and .544 in 1970. Although relative variation in final income was unchanged the coefficient of variation in initial income increased from .747 to .787 over the decade. Some might therefore infer that the fisc should be characterized as offsetting the growing inequality in the initial income distribution. It is possible that it was the fisc, however, that was responsible for the widening of the initial distribution. If that is so, it would have to be concluded that the net effect of the fisc was unchanged over the period. In short, the direction of causation is unknown.

The fourth and final method of comparison--Lorenz curves--yields a slightly different picture than the coefficients of variation. Figure 3 shows that the initial distribution of income for 1961 lies within the distribution for 1970 up to the 88th percentile. The Gini ratios are .362 for 1961 and .400 for 1970, which corresponds to the higher coefficient of variation in 1970. After taxes and expenditures are assigned, the final 1961 distribution of income also lies within that of 1970 up to the 88th percentile, with Gini ratios of .275 and .290 respectively. In other words, even though the comparison shows government activity decreasing the Gini ratio by .11 in 1970 versus .09 in 1961, this was insufficient to offset the greater inequality in initial distributions. By contrast, the coefficient of

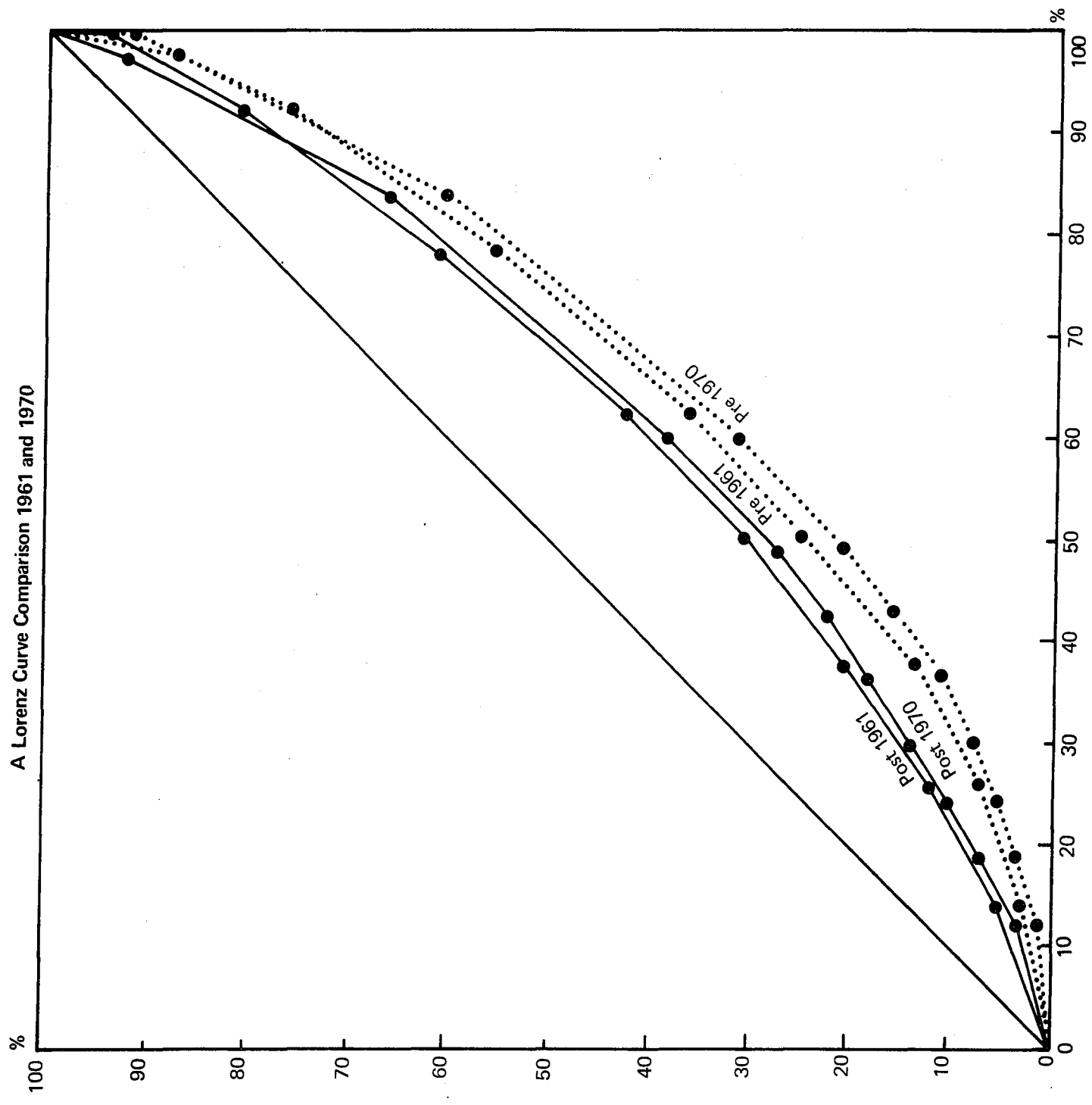A Lorenz Curve Comparison 1961 and 1970

FIGURE 3

variation indicated that the government offset the increase in initial inequality.

For these various comparisons we conclude that conventional assignment by income classes yields relatively small observed differences in the distributional outcome over the decade. The differences are probably well within the margin of error associated with this approach, and we conclude that final distribution has changed relatively little in ten years. Whether these findings reflect what has happened or simply result from severe measurement error is a major question for the concluding section.

II. Individual Taxes and Expenditures in 1970

This section briefly describes the procedures used to produce the 1970 estimates and then presents tables showing effective tax and expenditure rates as a percent of income in each income class. In general purely descriptive statements are made rather than detailed justifications of incidence assumptions, because we have adopted the conventional intermediate assumptions of previous studies, which can be consulted for evaluation.[8] Furthermore, the final section is devoted to defending the general techniques of assigning benefits and taxes by income class.

The income base adds up to net national produce and is distributed across income classes by the Current Population Survey distribution of money income.[9] This means that the sizable difference between personal money income and NNP is imputed to households in the same manner as money income.

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[8]Especially Tax Foundation, Inc., op. cit., pp. 7-12. Also, detailed description of the procedures for 1970 is contained in Appendices A-D.

[9]Cf., Appendix B for a detailed description. Bishop has defended the use of net national product as the income base. See G.A. Bishop, "Income Redistribution in the Framework of the National Income Accounts," National Tax Journal, 19 (Dec., 1966), 378-390.

The incidence assumptions are equivalent to those used in the Tax Foundation study and can be described as intermediate in the sense that more regressive or progressive assumptions are possible and plausible, especially for indirect taxes whose incidence is still debated by economists.[10] To some extent, aggregate results are relatively insensitive to changes in incidence assumptions because the alternative distributors are highly correlated across income classes. For example, share of current consumption and share of wages and salaries are approximately the same. However, results can be substantially changed by adopting unconventional incidence assumptions. The appendix permits construction of different estimates by adopting different incidence assumptions, but alternatives are not discussed here.

The incidence of expenditures is assumed to fall entirely on recipients rather directly identified as beneficiaries--for example, automobile owners for highway expenditures, or, children under age 18 for elementary and secondary education expenditures. The general expenditures of government, for which direct beneficiaries cannot be readily identified, are arbitrarily distributed one-half by the distribution of households and one-half by share of income. The rationale is that households benefit on some equalitarian basis, as well as in proportion to income. General purpose expenditures are one-half of Federal and one-third of state and local outlays.

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[10] See footnote to Appendix Tables C-1 and C-2 for a description of incidence assumptions for tax burdens and footnotes to Tables D-1 and D-2 for a description of incidence assumptions for expenditures.

Tables 2 and 3 show tax burdens as a percent of income for Federal and state-local taxes respectively. Aggregate Federal taxes are mildly progressive in the lowest income classes, approximately proportional from $3000 to $25,000 (containing nearly 80 percent of households) and progressive thereafter. This pattern is heavily influenced by the personal income tax, which is nearly half of Federal tax receipts, and whose shape is similar to the aggregate distribution. The next two largest taxes, corporate income and social security, largely offset each other with opposite U-shaped distributions. Excise taxes are mildly regressive throughout.

Aggregate state-local taxes are smoothly regressive up to the top income class, where a mild reversal occurs. This pattern is dominated by the distribution of the sales and property tax burdens, which constitute 78% of state-local tax receipts. The sales tax is mildly regressive, which appears reasonable. However, the property tax is steeply regressive when distributed one-half by estimated house value by income class and one-half by current consumption. This result may well exaggerate the regressive nature of the property tax, especially in view of recent studies which estimate an income elasticity of demand for housing of approximately one, if a measure of permanent income is used.[11] However, even if proportional incidence by current income class for the residential property tax were assumed, the aggregate result would not be changed substantially because the property taxes collected from commercial properties constitute one-half of the total and they are mildly regressive.

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[11] Frank Deleeuw, "The Demand for Housing: A Review of Cross-Section Evidence," Review of Economics and Statistics, LIII (February 1971), 1-10; Stephen R. LeRoy and Peggy Brockschmidt, "Who Pays the School Property Tax?", Federal Reserve Book of Kansas City Monthly Review, November 1972, 3-13.

Table 2: Federal Tax Burden as Percent of NNP by Income Class, 1970

Income Class	$0-$2000	$2000-$3000	$3000-$4000	$4000-$5000	$5000-$6000	$6000-$7000	$7000-$8000	$8000-$10,000	$10,000-$15,000	$15,000-$25,000	$25,000+	Total
1. Personal Income Tax	.8	4.1	6.3	8.1	8.2	8.5	8.5	8.6	8.8	8.7	19.9	10.0
2. Estate & Gift Tax	-	-	-	-	-	-	-	-	-	-	3.1	.4
3. Corporate Income Tax	5.2	4.5	3.9	3.5	3.3	2.8	2.7	2.4	2.2	2.5	8.9	3.5
4. Excises & Customs	3.5	3.0	2.8	2.7	2.4	2.3	2.2	2.1	1.9	1.9	1.9	2.1
5. Social Security	3.9	4.3	6.1	6.4	6.7	6.7	7.0	6.9	5.8	4.9	4.4	5.6
TOTAL	13.3	15.9	19.1	20.6	20.6	20.2	20.3	20.0	18.7	18.0	38.2	21.5

Table 3: State-Local Tax Burden as Percent of NNP by Income Class, 1970

Income Class	$0-$2000	$2000-$3000	$3000-$4000	$4000-$5000	$5000-$6000	$6000-$7000	$7000-$8000	$8000-$10,000	$10,000-$15,000	$15,000-$25,000	$25,000+	Total
1. Personal Income Tax	.1	.5	.8	1.0	1.0	1.1	1.1	1.1	1.1	1.1	2.5	1.3
2. Estate & Gift Tax	-	-	-	-	-	-	-	-	-	-	.9	.1
3. Corporate Income Tax	.6	.5	.4	.4	.4	.3	.3	.3	.3	.3	1.0	.4
4. Sales & Excise Tax	9.5	8.2	7.6	7.3	6.6	6.3	6.0	5.8	5.3	5.1	5.2	5.6
5. Property Tax	13.2	8.5	6.9	5.9	5.5	4.7	4.4	4.2	3.8	3.5	3.2	4.1
6. Social Insurance Tax	.6	.7	1.0	1.1	1.1	1.1	1.2	1.2	1.0	.8	.7	.9
TOTAL	24.0	18.5	16.8	15.6	14.6	13.6	12.9	12.6	11.4	10.9	13.6	12.5

Table 4: Federal Expenditure as Percent of NNP by Income Class

Income Class	$0-$2000	$2000-$3000	$3000-$4000	$4000-$5000	$5000-$6000	$6000-$7000	$7000-$8000	$8000-$10,000	$10,000-$15,000	$15,000-$25,000	$25,000+	Total
1. National Defense, Internal Affairs, Space Research	47.7	24.0	18.8	15.5	13.6	12.3	11.3	10.2	8.8	7.5	6.2	9.8
2. Other General Expenditures	7.5	3.8	3.0	2.5	2.2	2.0	1.8	1.6	1.4	1.2	1.0	1.6
3. Social Security	54.7	39.7	26.6	18.6	11.2	7.1	4.9	3.2	1.9	1.1	.7	4.7
4. Unemployment Compensation	.5	.8	1.4	1.1	1.2	.8	.8	.6	.4	.2	.03	.4
5. Veteran's Benefits	4.6	5.6	4.3	2.8	2.0	1.7	1.1	1.0	.9	.7	.3	1.1
6. Other Transfers	.5	1.0	.6	.5	.6	.5	.4	.4	.3	.3	.2	.3
7. Net Interest Paid	5.6	5.0	3.9	3.7	2.4	1.7	1.7	1.2	1.0	1.1	2.7	1.7
8. Agriculture	1.8	1.3	1.3	1.2	.9	.8	.7	.5	.4	.3	.5	.5
9. Elementary, Secondary, Other Education	.5	.3	.3	.2	.2	.2	.2	.2	.1	.1	.04	.1
10. Higher Education, Highways & Labor	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
TOTAL	123.7	81.6	60.3	46.3	34.5	27.2	23.0	19.1	15.5	12.6	11.8	20.4

Table 5:. State-Local Expenditures as Percent of NNP by Income Class

Income Class	$0-$2000	$2000-$3000	$3000-$4000	$4000-$5000	$5000-$6000	$6000-$7000	$7000-$8000	$8000-$10,000	$10,000-$15,000	$15,000-$25,000	$25,000+	Total
1. General Expenditures	24.3	12.2	9.6	7.9	6.9	6.3	5.8	5.2	4.5	3.8	3.2	5.0
2. Public Assistance	32.1	23.5	13.7	9.1	3.8	2.1	1.0	.9	.4	.1	-	1.9
3. Primary, Secondary, Other Education	17.5	10.3	9.2	8.6	8.0	7.0	6.9	6.4	4.9	3.1	1.5	4.8
4. Higher Education	.3	.3	.3	.6	.7	.7	.7	.8	1.4	1.4	2.3	1.3
5. Streets & Highways	5.2	3.6	3.0	3.0	2.2	2.3	2.3	2.0	1.8	1.4	.8	1.7
6. Agriculture	.5	.4	.4	.3	.3	.2	.2	.1	.1	.1	.1	.1
7. Labor	-	-	-	.1	.1	.1	.1	.1	.1	.1	.1	.1
TOTAL	79.9	50.3	36.3	29.6	22.0	18.7	17.0	15.6	13.2	10.0	8.1	15.0

Tables 4 and 5 show major expenditure categories as a percent of income for Federal and state-local goverment respectively. Of course, the aggregate expenditure is definitely pro-poor at all levels of government. Only a few programs diverge significantly from this pattern. Higher education (line 4 in Table 5) has attracted much attention, but it obviously is exceptional in the pro-rich nature of its expenditure pattern.[12] Some other programs also diverge from the regressive expenditure pattern (e.g., Veteran's benefits, unemployment compensation, and interest paid) but none are sizable enough to more than attenuate the pro-poor pattern. As an additional note, the distributive pattern of general expenditures is quite similar to the overall pattern.

These results are quite predictable in a numerical sense. The total dollar expenditures assigned per household vary little by income class. Gross benefits are $3100 per household for incomes under $2000, approximately $4500 from incomes of over $2000 up to $15,000 with an increase to $5700 in the $15,000-$25,000 class and $9700 in the over $25,000 class. Such a slow rate of increase with income implies a pattern sharply in favor of low income households, even though absolute dollar benefits rise with income.

III. A Partial Defense of the Methodology

This paper demonstates that a conventional assignment of government expenditures and taxes by income class yields distributions of final income

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[12] For example, see W. L. Hansen and B. A. Weisbord, "The Distribution of Costs and Benefits of Public Higher Education: The Case of California," Journal of Human Resources, 4 (Spring 1969), 176-91; J. A. Pechman, "The Distributional Effects of Higher Education in California," Journal of Human Resources, 5 (Summer 1970), 361-70; Robert Hartman, "A Comment on the Pechman-Hansen-Weisbord Controversy," Journal of Human Resources, 5 (Fall 1970), 519-23.

which are nearly identical for 1961 and 1970. Has the size distribution of final output actually remained unchanged over the decade? The answer rests upon the acceptance or rejection of the methods we have used.

The conventional techniques, as commonly employed in the public finance literature, have been roundly and validly criticized.[13] We accept these criticisms, as have the authors of previous studies. The fundamental criticism is that it is not sensible even to try to discover the aggregate redistributive impact of government activity in any given year with existing economic tools because the general equilibrium problem is intractable. We cannot measure what slice of national income can be labelled government redistribution, nor can we isolate how it has changed the economic position of different income classes.

This assessment is devastating if the goal is the traditional one of comparing two distributions, initial and final, in the same year. The procedure of contrasting a measured distribution of money income before taxes, transfer and expenditure distribution implies breaking into the general interdependence of public and private decisions with a counterfactual of a zero government budget. A zero government budget is a most extreme conceptual experiment, particularly because the pre-fisc distribution already reflects a host of market adjustments to government behavior. This led

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[13]See for example, A. R. Prest, "Statistical Calculations of Tax Burdens," Economica, 22, August 1955, 234-45.

Cannan justifiably to comment in 1927 that such an "inquiry is a will-o-the-wisp" and "absolutely useless."[14]

The typical use for the data in our appendix has been to measure the redistribution of income in a given year, in which case the standard criticism fully applies. However, that has not been our intent. Rather, we have compared relative distributions of incomes after taxes and expenditures in two years of a decade. Our purpose was not to isolate the redistribution of income in 1970 but rather to replicate an earlier estimate of the distribution of final output in a later year, using comparable incidence assumptions but the new dollar amounts of income, taxes and expenditures. When the objective is expressed this way, the basic criticism of our procedures loses some of its force because only the change (if any) in a more comprehensive measure of the size distribution income is at issue. Our calculations need not be formally correct in all dimensions, but must only be an unbiased approximation of the changes in final distributions over time.

Measuring the change between years makes fewer demands upon the conventional technique than trying to measure the size and nature of redistribution in a single year for three reasons. First it obviates the need for a hypothetical counterfactual. Conceptually the final distribution of income is viewed as the simultaneous outcome of both public and private activity in the

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[14]Quoted by Prest, ibid., p. 244. Prest adds, "No one, I take it, is very much interested in the sort of situation which might prevail in a society without any government at all." loc. cit. This same consideration renders the recent attempts to isolate and evaluate redistribution through the fisc in a single year by specifying restrictive utility functions by income class also somewhat suspect, although they may ultimately prove valuable. Cf. H. Aaron and M. McGuire, "Public Goods and Income Distribution," Econometrica, 38 (1970), 907-20; S. Maital, "Public Goods and Income Distribution: Some further results, Econometrica, 41 (1973), 561-68. Rather than an implicit counterfactual of zero government, a more appropriate counterfactual is a Lindahl equilibrium as pursued by Aaron-McGuire and Maital.

period even though the calculations are performed in a stepwise fashion.

The two remaining reasons relate to any biases in the data. It is likely

that (1) any biases are in the same direction in both years, and (2) within

the range of distributive change in the U.S. during relatively short time

intervals, the magnitude of biases are likely to be similar. If these two

conditions hold, they are sufficient to ensure that any measured substantive

distributive change by income class will be of the appropriate direction and

magnitude. This assertion cannot be demonstrated with certainty but an

example is offered to suggest that the intertemporal comparison may be

unbiased even though the bias is large in each year.

Consider the case of the social security system, which illustrates the

bias resulting from using an accounting period of one year.[15] A single

year accounting period exaggerates the size of government redistribution by

almost any definition of redistribution. The costs and benefits of many

(perhaps all) public activities vary with a household's stage in the life-

cycle, as well as with current income and other variables.[16] The exaggerated

effect the age distribution produces in the conventional measure of redis-

tribution by social security emerges in the following way: as measured, in

each year cash payments are highly concentrated at the low end of the income

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[15] Edgar K. Browning, "Social Insurance and Intergenerational Transfers," _Journal of Law and Economics_, XVI, October 1973, pp. 215-37.

[16] These other variables also weaken the relationship between current income and government redistribution. Most government benefits are distributed inde- pendent of income and depend upon characteristics like being a farmer, or a veteran, or driving an automobile, going to college, etc. Thus most redistri- bution is back and forth within the middle income groups. Cf., G. Tullock, "The Charity of the Uncharitable," _Western Economic Journal_, IX (December 1971), 379-92.

distribution. Payroll taxes are roughly proportional over the middle por-
tion of the income distribution and smaller at both tails. Obviously this
allocation is very different from what would be observed in a permanent
income framework. The present value of life-time benefits would be distri-
buted somewhat like the present value of payments, and only the smaller
amount of redistribution inherent in the loose connection between taxes
and benefits would enter the redistributive measure.[17] Taking year to
year differences, however cancels much of this bias because the redistribu-
tive effects of the system are highly but approximately equally exaggerated
in each year. Measuring distributions only on a flow-basis probably
exaggerates the redistribution of much government activity (e.g., educa-
tion, debt finance, unemployment compensation) relative to some appropriate,
life-time cohort analysis.[18]

Although many other issues concerning biases in the estimates can be
discussed, we shall conclude with a few remarks about the incidence assump-
tions. The most traditional area of contention, tax incidence, is of rather
minor importance from a numerical standpoint in an aggregate study of this
sort, although theoretical problems remain.[19] Aggregate distributions of
tax burdens turn out to be relatively insensitive to alternative sets of

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[17]Of course there are other distributive issues associated with the social
security system such as any effect on the rate of aggregate income growth,
interest rates, etc.

[18]Since the latter approach has never been implemented, this assertion
cannot really be confirmed.

[19]For example, see Peter Mieszkowski, "Tax Incidence Theory: The Effects
of Taxes on the Distribution of Income," Journal of Economic Literature, VII,
December 1969, 1103-24.

incidence assumptions. For example, conventional incidence assumptions

can be grouped so that taxes can be distributed in a most regressive, a

most progressive, and in intermediate ways. Aggregate results remain quite

similar however because the major effect of different incidence assumption

is to change the weights in the series used to allocate the taxes across

income classes and there is a relatively high correlation between distribu-

tors such as shares of different factor earnings and shares of different

consumption expenditures by income class.[20] In an intertemporal comparison

where identical sets of incidence assumptions in each year are adopted,

choosing among them is even less critical.

A much more important set of incidence problems involve errors of

ommission on both the tax and expenditure sides, in addition to the con-

tinuing problem of allocating indivisible general expenditures. For example,

various tax subsidies, market regulations and other implicit taxes (inflation)

which are small in explicit budget accounts but potentially large in distri-

butive effects, could have changed enough in the decade to produce substantive

distributional change, but these effects go unmeasured in explicit terms in

both years. Similarly, among expenditure programs, there is not attempt to

account for external effects. For example, cash and in-kind transfers have

been assumed to increase the income of direct recipients by the amounts of

expenditure and decrease incomes of taxpayers, with no accounting for indirect

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[20]As illustrations, see Benjamin A. Okner and Joseph A. Pechman, "Who
Paid the Taxes in 1966?," paper presented at American Economic Association
meetings, December 1973: A. T. Eapen and Ana N. Eapen, "Income Redistribu-
tive Effects of State and Local Fiscs: Connecticut, A Case Study," Public
Finance Quarterly, 1, October 1973, 372-87.

benefits or costs to non-recipients. Nor have indivisible general expenditures been allocated in any but a conventional, even if plausible, manner.

Although a large set of issues remain unresolved, this exercise has convinced us of two important, although many will say unsurprising, features of the post-fisc income distribution. The first is that it is virtually impossible with any set of conventional incidence assumptions, to make net fiscal incidence appear pro-rich.[21] This is clearly contrary to the convictions of some who concentrate on particular distributive exceptions (higher education or agricultural price supports) in their overall assessment of what government is doing. Secondly, despite the relatively rapid growth in government, expansion of state-local relative to federal government, and sizable changes in the composition of taxes and expenditures over a decade, no major changes in final income distributions were discovered.[22] Some critics might contend that this failure to find a change confirms the hopeless inadequacy of our crude research methods, but the burden is on these critics to show the contrary.

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[21]An approach such as Maital's, op. cit., which assumes diminishing marginal utility of income can yield a pro-rich distribution.

[22]Cf., G. Tullock, op. cit.

Appendix A: The Statistical Bases of Allocation
by Income Class, 1970

Table A-1 presents the various statistical bases used to construct
the income base, to distribute tax burdens, and to distribute expenditure
benefits. The distributive items under lines 1-12 were calculated from
the Consumer Population Survey, 1970 (CPS), lines 13-19 were calculated
from the Statistics of Income 1970, and lines 20-24 were estimated from
various sources. See the footnote to Table A-1 for specific descriptions
for any item.

Table A-1: Statistical Bases of Allocations by Income Class, 1970

Income Class	$0-$2000	$2000-$3000	$3000-$4000	$4000-$5000	$5000-$6000	$6000-$7000	$7000-$8000	$8000-$10,000	$10,000-$15,000	$15,000-$25,000	$25,000+	Total
Item:												
1. Households	11.3	6.6	6.2	5.8	6.0	6.0	6.1	12.1	22.1	14.2	3.7	100.0
2. Wages & Salaries	0.2	0.7	1.3	2.0	2.9	3.8	4.7	11.6	29.7	29.2	13.8	100.0
3. Money Income	1.3	1.7	2.2	2.7	3.4	4.0	4.7	11.2	27.8	27.2	13.7	100.0
4. Property Income	1.8	2.5	3.5	3.6	3.8	4.2	3.6	6.6	17.2	21.4	32.1	100.0
5. Social Security Benefits	15.3	14.5	12.6	10.8	8.2	6.1	4.9	7.8	11.3	6.5	2.0	100.0
6. Public Assistance	22.2	21.3	16.1	13.1	6.9	4.5	2.6	5.6	6.0	1.6	0.3	100.0
7. Unemployment Compensation	1.6	3.2	6.9	6.8	9.3	7.4	8.4	15.9	27.1	12.3	1.1	100.0
8. Workman's Compensation	2.2	4.0	3.1	5.2	10.8	6.6	9.2	15.8	28.8	14.2	0.0	100.0
9. Government Pensions	1.3	3.5	4.6	6.0	7.2	5.4	7.3	11.9	21.8	22.1	8.9	100.0
10. Veteran's Payments	5.4	8.5	8.6	6.9	6.2	6.1	4.7	10.3	22.9	16.7	3.7	100.0
11. Other Public Transfers	1.7	5.2	3.6	4.3	6.0	5.7	5.7	11.9	26.6	22.3	7.0	100.0

Income Class	$0-$2000	$2000-$3000	$3000-$4000	$4000-$5000	$5000-$6000	$6000-$7000	$7000-$8000	$8000-$10,000	$10,000-$15,000	$15,000-$25,000	$25,000+	Total
Item:												
12. Children under age 18	4.7	3.6	4.2	4.8	5.6	5.8	6.7	14.9	28.4	17.2	4.2	100.0
13. Dividends	1.7	1.9	2.0	1.9	2.5	1.9	2.2	4.1	9.2	15.1	57.4	100.0
14. Capital Gains	4.5	1.6	1.8	2.0	2.2	2.2	2.2	4.7	10.1	13.6	55.2	100.0
15. Estate & Gift Income	2.4	2.3	2.4	3.3	2.9	2.6	3.9	3.9	11.5	16.8	48.0	100.0
16. Interest Income	4.4	5.1	5.2	6.1	4.9	4.1	4.8	8.1	17.0	17.6	22.7	100.0
17. Personal Income Tax	0.1	0.7	1.4	2.2	2.8	3.4	4.0	9.7	24.5	23.7	27.4	100.0
18. Farm Net Income	4.6	4.3	5.5	6.1	6.2	6.5	6.5	10.9	20.4	17.0	12.0	100.0
19. Net Rent Income	5.7	5.6	4.8	4.6	5.1	4.1	5.0	6.8	13.6	17.0	27.9	100.0
20. Estimated Automobiles Owned	3.9	3.5	3.8	4.6	4.3	5.2	6.2	12.8	28.0	21.4	6.3	100.0
21. Estimated House Value	6.1	4.5	4.3	4.2	5.0	4.7	5.0	11.4	24.6	21.7	8.6	100.0

Income Class	$0-$2000	$2000-$3000	$3000-$4000	$4000-$5000	$5000-$6000	$6000-$7000	$7000-$8000	$8000-$10,000	$10,000-$15,000	$15,000-$25,000	$25,000+	Total
Item:												
22. Estimated Consumption	2.2	2.5	3.0	3.5	4.0	4.5	5.0	11.6	26.2	24.9	12.8	100.0
23. Estimated Social Security Tax	.9	1.3	2.4	3.1	4.1	4.8	5.9	13.8	29.0	24.0	10.8	100.0
24. Estimated Expenditures on Higher Education	.3	.4	.6	1.2	1.8	2.1	2.5	6.7	29.4	30.0	25.0	100.0

Footnotes for Table A-1

Sources:

Line:

1. "Measurement of Transfer Income in the Current Population Survey" by Dorothy S. Projector and Judith S. Bretz for the Conference on Research in Income and Wealth of the National Bureau of Economic Research, Oct. 3-4, 1972, Pennsylvania State University, Table 1, p. 30.

2.-4. Ibid; Table 5, p. 38.

5.-11. Ibid; Table 7, p. 43.

12. "U.S. Current Population Survey, 1971: Employment Histories of Individuals in the Labor Force," by the Bureau of the Census. Data obtained from the Center for Demography, University of Wisconsin, Madison, Family Records, Children 0-13 years; Person Records, Children 14-17 years.

13. "Preliminary 1970 Statistics of Income, Individual Income Tax Returns," Department of the Treasury, Internal Revenue Service, Table 4, p. 30, Dividends in Adjusted Gross Income.

14. Ibid; Table 4, page 30, Sales of Capital Assets, Net Gains.

15. Ibid; Table 4, page 31, Estates and Trusts, Net Income.

16. Ibid; Table 4, page 30, Interest Received.

17. Ibid; Table 1, page 22, Total Income Tax.

18. Ibid; Table 4, page 29, Farm Income, Net Profit.

19. Ibid; Table 4, page 31, Rents, Net Income.

20. "A Panel Study of Income Dynamics: 1971 Interviewing Year, Wave IV," by the Institute for Social Research, the University of Michigan, Ann Arbor, Michigan, 1972, Variable No's 157 and 426. The Mean Number of Automobiles, by income class, as reported by the Michigan study, multiplied by the number of households, by income class, as reported by CPS, 1971 data.

21. Ibid; Variable No's 23 and 426, the mean house value, by income class, as reported by the Michigan study, multiplied by the number of households, by income class, as reported by CPS, 1971 data.

22.   "Tax Burdens and Benefits of Government Expenditures by Income Class,
       1961 and 1965," by the Tax Foundation, Inc. Consumption was estimated
       by assuming that the marginal propensity to spend from money income
       was the same in 1970 as in 1961.

23.   "Individual Taxes and the Distribution of Income," by Benjamin A. Okner,
       a paper prepared for the National Bureau of Economic Research, Conference
       on Research in Income and Wealth, Pennsylvania State University, Oct. 3,
       1972. The Social Security tax distributor assumes that both the employee
       and the employer components are borne entirely by the employee. It was
       estimated by using the effective tax rates as a percent of 1966 income.

24.   Same as #22. Expenditures on higher education were estimated by assuming
       that the marginal propensity to spend on higher education from money
       income, by income class, was the same in 1970 as in 1961. The resulting
       percent distribution of dollar amounts appears to conform well to other
       studies of higher education, such as W. Lee Hansen and Burton A. Weisbrod,
       Benefits, Costs, and Finance of Public Higher Education, Chicago: Markham
       Publishing Company, 1969.

Appendix B: The Income Base, 1970

The income base chosen for this study is one which adds up to net
national product (NNP). A number of aggregate income bases could be used,
including GNP, or smaller totals such as national income, personal income,
etc. From these possibilities, we have chosen NNP for two primary reasons.
First, the Tax Foundation used an NNP income base. Since our primary pur-
pose is to assess the difference in government distributional impact between
1961 and 1970, use of the same income base avoids a possible source of
spurious distributional changes. Second, the NNP base has conceptual merit
independent of what preceding studies have done. NNP is the broadest measure
of net output. Since we are dealing with all government taxes and expenditures,
we should compare tax burdens and expenditure gains with total output, and
hence total income by income group, from which taxes come and expenditure
benefits go.

Table B-1 describes two income bases constructed for 1970. The one used
throughout the analysis in the text is shown in lines 9 and 10. NNP is
simply distributed across income classes by the Current Popultion Survey dis-
tribution of money income. This distribution was used because it is comparable
to those used in earlier studies, and since our concern is an intertemporal
comparison, we have retained this kind of income base.

A major criticism, however, is that this income distribution already
includes government transfer income. The result is that some double counting
is involved at the low end of the income distribution because government
transfers are distributed across income classes in subsequent calculations.
One answer to this problem is to construct an alternative income base which

attempts to include only factor earnings, but also aggregates to NNP. Lines 1-6 in Table B-1 shows the dollar amounts of each type of factor income (plus indirect business taxes) imputed to households in the eleven income classes, using appropriate distributors from Table A-1. The resulting total factor earnings are shown in line 7, and the average factor earnings per household are shown in line 8. The distribution is similar to line 10, except that the share of NNP is slightly smaller in all income classes but the highest. This is primarily due to corporate profits, which are distributed by share of dividend income and, hence, the highest income class realizes a higher share. If this latter income base were employed in the text comparisons, estimates of government redistribution in any year would be raised appreciably, but it would do so for all years.

Table B-1:   The 1970 Household Income Base [$ millions]

Income Class	$0-$2000	$2000-$3000	$3000-$4000	$4000-$5000	$5000-$6000	$6000-$7000	$7000-$8000	$8000-$10,000	$10,000-$15,000	$15,000-$25,000	$25,000+	Total ($)[a]
Item:												
1. Compensation of Employees	$1204	4213	7824	12,037	17,454	22,871	28,287	69,816	178,752	175,743	83,056	601,858
2. Proprietors Income	$ 134	468	869	1337	1939	2541	3143	7757	19,860	19,526	9228	66,869
3. Net Rental Income	$1329	1305	1119	1072	1189	956	1166	1585	3170	3963	6504	23,312
4. Net Interest	$1452	1683	1716	2013	1617	1353	1584	2673	5610	5808	7491	33,012
5. Corporate Profits	$1204	1346	1417	1346	1771	1346	1558	2904	6517	10,696	40,660	70,836
6. Indirect Business Taxes	$1994	2266	2720	3173	3626	4079	4533	10,516	23,752	22,573	11,604	90,655
7. Total Factor NNP	$7317	11,282	15,665	20,979	27,597	33,146	40,271	95,252	237,663	238,311	158,546	886,542
8. Average Factor NNP	$ 961	2537	3750	5369	6827	8200	9799	11,684	15,962	24,910	63,602	13,170
9. Total CPS NNP	$11,525	15,071	19,504	23,937	30,142	35,462	41,667	99,293	246,459	241;139	121,456	886,542
10. Average CPS NNP	$1514	3389	4669	6126	7457	8773	10,139	12,180	16,553	25,206	48,724	12,170

Income Class	$0-$2000	$2000-$3000	$3000-$4000	$4000-$5000	$5000-$6000	$6000-$7000	$7000-$8000	$8000-$10,000	$10,000-$15,000	$15,000-$25,000	$25,000+	Total ($)[a]
11. Percent Distribution Factor NNP	.8	1.3	1.8	2.4	3.1	3.7	4.5	10.7	26.8	26.9	17.9	100.0
12. Percent Distribution CPS NNP	1.3	1.7	2.2	2.7	3.4	4.0	4.7	11.2	27.8	27.2	13.7	100.0

Sources:

[a]Survey of Current Business, "National Income and Product in 1970," July 1971, Table 1.10: National Income by Type of Income.

Line: Basis for Distributing Dollar Amounts

1. CPS, 1970, Wage and Salary Distribution, line 2 in Table A-1 (includes proprietor income).
2. Same as line 1.
3. Internal Revenue Service, Statistics of Income, 1970, line 19 in Table A-1, Net Income from Rents.
4. Internal Revenue Service, Statistics of Income, 1970, line 16 in Table A-1, Interest Income.
5. Internal Revenue Service, Statistics of Income, 1970, line 13 in Table A-1, Dividend Income.
6. Share of Consumption by Income Class, line 22 in Table A-1.
7-9. Calculated from lines 1-6.
10. CPS, 1970, Share of Money Income, line 3 in Table A-1.

Appendix C: Distribution of Government Tax Burdens

Tables C-1 and C-2 show the burden of taxes by income class in 1970 for the federal and state-local governments, respectively. Footnotes to each table describe the exact means of distributing each tax.

Table C-1: Distribution of Federal Tax Burden, 1970 [$ Millions]

Income Class	$0-$2000	$2000-$3000	$3000-$4000	$4000-$5000	$5000-$6000	$6000-$7000	$7000-$8000	$8000-$10,000	$10,000-$15,000	$15,000-$25,000	$25,000	Total ($)[a]
1. Personal Income Tax	$ 88	619	1238	1946	2476	3007	3537	8578	21,666	20,958	24,230	88,343
2. Estate & Gift Tax	$ -	-	-	-	-	-	-	-	-	-	3726	3,726
3. Corporate Income Tax	$ 598	674	766	827	1011	980	1103	2404	5421	6125	10,748	30,684
4. Excises & Customs	$ 400	455	546	637	728	814	910	2112	4769	4533	2330	18,239
5. Social Security Tax	$ 444	641	1184	1529	2022	2367	2910	6806	14,302	11,836	5326	49,317
TOTAL FEDERAL TAX	$1,530	2,389	3,734	4,939	6,237	7,173	8,460	19,900	46,158	43,452	46,360	190,114

[a]Source: Survey of Current Business, "U.S. National Income and Product Accounts, 1967-70," July 1971, Table 3.1--Federal Government Receipts and Expenditures.

Line: Statistical Bases for Allocation of Federal Expenditures

1.   Distributed by Personal Income Tax (line 17 in Table A-1).

2.   Distributed entirely to the highest income class.

3.   Distributed one-half by Dividends (line 13 in Table A-1) and one-half by Estimated Consumption (line 22 in Table A-1).

4.   Distributed by Estimated Consumption (line 22 in Table A-1).

5.   Distributed by Estimated Social Security Tax (line 23 in Table A-1).

Table C-2: State-Local Distribution of Tax Burdens, 1970 [$ Millions]

Income Class	$0-$2000	$2000-$3000	$3000-$4000	$4000-$5000	$5000-$6000	$6000-$7000	$7000-$8000	$8000-$10,000	$10,000-$15,000	$15,000-$25,000	$25,000+	Total ($)[a]
1. Personal Income Tax	$ 11	78	156	245	311	378	445	1078	2723	2634	3045	11,114
2. Estate & Gift Tax	$ -	-	-	-	-	-	-	-	-	-	1082	1,082
3. Corporate Income Tax	$ 69	77	88	94	114	112	127	275	620	700	1228	3,499
4. Sales & Excise Tax[b]	$ 1093	1242	1491	1739	1988	2236	2484	5764	13,019	12,373	6360	49,690
5. Property Tax	$ 1520	1282	1336	1410	1647	1684	1830	4210	9299	8530	3917	36,611
6. Social Insurance Tax	$ 75	108	199	258	341	399	490	1147	2410	1994	897	8,309
TOTAL STATE-LOCAL TAXES	$2,767	2,786	3,269	3,745	4,401	4,809	5,376	12,474	28,070	26,231	16,530	110,305

[a] Source: Survey of Current Business, "U.S. National Income and Product Accounts, 1967-70," July 1971, Table 3.3--State Local Government Receipts and Expenditures.

[b] Includes $14,764 million in personal property taxes, license fees and other nontax receipts.

Footnotes for Table C-2 (con't.)

Line: Statistical Bases for Allocation of Federal Expenditures

1.   Distributed by Personal Income Tax (line 17 in Table A-1).

2.   Distributed entirely to highest income class.

3.   Distributed one-half by Dividends (line 13 in Table A-1) and one-half by Estimated Consumption (line 22 in Table A-1).

4.   Distributed by Estimated Consumption (line 22 in Table A-1).

5.   Distributed one-half by Estimated House Value (line 21 in Table A-1).

6.   Distributed by Estimated Social Security Tax (line 23 in Table A-1).

Appendix D: Distribution of Government Expenditures
by Income Class, 1970

Tables D-1 and D-2 show the dollar estimates of amounts of federal
and state-local expenditure benefits, respectively, received by income
class in 1970. Footnotes to each table describe the exact basis for
allocation of dollar amounts by income class.

We should note that the federal expenditure total of $180,722 million
excludes grants-in-aid to state and local governments which amounted to
$24,417 million in 1970. Federal grants-in-aids are included in the
appropriate state and local expenditure category.

Table D-1: Distribution of Federal Expenditures, 1970 [$ Millions]

Income Class	$0-$2000	$2000-$3000	$3000-$4000	$4000-$5000	$5000-$6000	$6000-$7000	$7000-$8000	$8000-$10,000	$10,000-$15,000	$15,000-$25,000	$25,000+	Total ($)[a]
I. General Expenditures												
1. National Defense, International Affairs, Space Research	$ 5496	3620	3664	3708	4100	4362	4711	10,163	21,764	18,057	7589	87,232
2. Other General Expenditures	$ 874	576	583	590	653	695	749	1618	3464	2874	1208	13,883
II. Transfer Programs												
3. Social Security	$ 6309	5979	5196	4453	3381	2515	2021	3216	4660	2680	825	41,235
4. Unemployment Compensation	$ 63	126	271	267	365	291	330	625	1065	483	43	3,930
5. Veteran's Benefits	$ 533	838	848	680	611	602	464	1016	2258	1647	365	9,862
6. Other Transfers	$ 52	158	109	131	182	173	173	362	808	677	213	3,038
III. Other Expenditures												
7. Net Interest Paid	$ 647	749	764	896	720	603	705	1190	2498	2586	3336	14,696

Income Class	$0-$2000	$2000-$3000	$3000-$4000	$4000-$5000	$5000-$6000	$6000-$7000	$7000-$8000	$8000-$10,000	$10,000-$15,000	$15,000-$25,000	$25,000+	Total ($)[a]
8. Agriculture	$ 212	198	254	281	286	300	300	502	940	784	553	4,610
9. Elementary, Secondary, Other Education	$ 57	44	51	58	68	70	81	181	345	209	51	1,214
10. Higher Education	$ 1	1	2	4	6	7	8	23	99	101	84	336
11. Highways	$ 8	7	7	9	8	10	12	25	54	41	12	193
12. Labor	$ 1	3	6	10	14	19	23	57	146	144	68	493
TOTAL	$14,253	$12,300	$11,755	$11,087	$10,394	$9,647	$9,577	$18,978	$38,101	$30,283	$14,347	$180,722

[a]Source for Federal Expenditure Totals: Survey of Current Business, "U.S. National Income and Product Accounts, 1967-1970," July 1971, Table 3.10--Government Expenditures by Type of Function.

Line: Statistical Bases for Allocation of Federal Expenditure

1. Distributed one-half by distribution of households (line 1 in Table A-1) and one-half by distribution of money income (line 3 in Table A-1).

2. Same distributive basis as line 1. Expenditures include general government (excluding interest), transportation (excluding highways), commerce and finance, housing and community development, health and sanitation, civilian safety, and miscellaneous.

3. Distributed by Social Security Benefits (line 5 in Table A-1).

4. Distributed by Unemployment Compensation (line 7 in Table A-1).

5. Distributed by Veteran's Payments (line 10 in Table A-1).

Footnotes to Table D-1

6. Distributed by Other Public Transfers (line 11 in Table A-1).

7. Distributed by Interest Income (line 16 in Table A-1).

8. Distributed by Farm Net Income (line 18 in Table A-1).

9. Distributed by Children Under Age 18 (line 12 in Table A-1).

10. Distributed by Estimated Expenditures on Higher Education (line 24 in Table A-1).

11. Distributed by Estimated Automobiles Owned (line 20 in Table A-1).

12. Distributed by Wages and Salaries (line 2 in Table A-1).

Table D-2:   Distribution of State-Local Expenditures [$ Millions]

Income Class	$0-$2000	$2000-$3000	$3000-$4000	$4000-$5000	$5000-$6000	$6000-$7000	$7000-$8000	$8000-$10,000	$10,000-$15,000	$15,000-$25,000	$25,000+	Total ($)[a]
I. 1. General Expenditures	$ 2801	1845	1867	1889	2090	2223	2401	5180	11,093	9204	3869	44,462
II. Transfer Programs												
2. Public Assistance	$ 3695	3546	2680	2181	1149	749	433	932	999	266	50	16,646
III. Other State-Local Expenditures												
3. Elementary, Secondary, and Other Education	$ 2018	1546	1803	2061	2404	2490	2877	6397	12,193	7385	1803	42,934
4. Higher Education	$ 34	45	68	136	204	238	283	759	3330	3398	2831	11,325
5. Streets & Highways	$ 604	542	589	713	666	806	960	1983	4337	3315	976	15,491
6. Agriculture	$ 59	55	70	78	79	83	83	139	259	216	153	1,272
7. Labor	$ 3	6	11	17	25	33	41	101	259	254	120	871
TOTAL	$9,214	7,585	7,088	7,075	6,617	6,622	7,078	15,491	32,470	24,038	9,802	133,001

Footnotes for Table D-2

Line: Statistical Bases for Allocation of Federal Expenditures

1.   Distributed one-half by the Distribution of Households (line 1 in Table A-1) and one-half by money income (line 3 in Table A-1). General expenditures consist of general government (excluding interest), transportation (excluding highways), commerce and finance, housing and community development, health and sanitation, civilian safety, and miscellaneous.

2.   Distributed by Public Assistance (line 6 in Table A-1).

3.   Distributed by Children Under Age 18 (line 12 in Table A-1).

4.   Distributed by Estimated Expenditures on Higher Education (line 24 in Table A-1).

5.   Distributed by Automobile Ownership (line 20 in Table A-1).

6.   Distributed by Farm Net Income (line 18 in Table A-1).

7.   Distributed by Wages and Salaries (line 2 in Table A-1).