

UC Berkeley

Working Papers

Title

Expenditure incidence in an ability to pay context

Permalink

<https://escholarship.org/uc/item/05c4266x>

Author

Einhorn, Robin L.

Publication Date

1993

A 1458
no. 93-4

5/28/93

**EXPENDITURE INCIDENCE IN AN ABILITY
TO PAY CONTEXT**

Robin L. Einhorn
Department of History
University of California, Berkeley

Working Paper 93-4

**INSTITUTE OF GOVERNMENTAL
STUDIES LIBRARY**

MAY 25 1993

UNIVERSITY OF CALIFORNIA



UNIVERSITY OF CALIFORNIA AT BERKELEY

EXPENDITURE INCIDENCE IN AN ABILITY
TO PAY CONTEXT

Robin L. Einhorn
Department of History
University of California, Berkeley

Working Paper 93-4

Working Papers published by the Institute of Governmental Studies provide quick dissemination of draft reports and papers, preliminary analysis, and papers with a limited audience. The objective is to assist authors in refining their ideas by circulating research results and to stimulate discussion about public policy. Working Papers are reproduced unedited directly from the author's pages.

EXPENDITURE INCIDENCE IN AN ABILITY TO PAY CONTEXT

ROBIN L. EINHORN

DEPARTMENT OF HISTORY, 3229 DWINELLE HALL

UNIVERSITY OF CALIFORNIA, BERKELEY

BERKELEY, CA 94720

This research was supported by the University of California at Berkeley Humanities Division, Institute for Governmental Studies, and Townsend Center for the Humanities. The author would like to thank Paul Alpers, David Levine, Nelson Polsby, and Jacqueline Stevens for their comments on drafts of the essay.

EXPENDITURE INCIDENCE IN AN ABILITY TO PAY CONTEXT

As Americans embark on another season of intensive national tax reform, data on the distribution of government spending -- on "who benefits" from the programs that taxes finance -- would seem highly useful. It is often assumed that most government spending favors the poor over the rich, that its bulk consists of those items collectively known as "welfare." As a result, it is often also assumed that progressive taxation (charging the rich at higher rates than the poor) can be defended only by invoking such inherently contested concepts as "social responsibility" or, in the arcane language of classical tax theory, an "equal sacrifice" that depends on the subjective utility individuals derive from their incomes.¹ From the 1950s to the 1970s, however, American economists developed a method for measuring the distribution by income class -- the "economic incidence" -- of total government spending, at the federal as well as the state and local levels.² As the far better known studies of tax incidence³ answered the question "who pays for government," studies of expenditure incidence answered the question "who benefits from it." They said that their findings showed that government gave greater benefits to the poor than the rich but, as this paper will demonstrate, their data actually indicate quite the opposite. They said that the distribution of expenditure benefits was "pro-poor," but it really was decidedly "pro-rich."⁴

The very consistency with which the expenditure incidence studies repeated their conclusion that expenditures were "pro-

poor" seems to have discouraged continued research in the field; it was a problem solved, and thus no longer a fit subject for research. While some of the most significant empirical studies were reprinted in public finance texts in the 1980s, the most recent "macro-study" of the entire United States governmental system was published in 1981 using data from 1970.⁵ Aside from econometric theoretical work, American economists in the 1980s have studied fiscal incidence almost solely in the context of policy-making for third-world countries and under the aegis of institutions such as the World Bank.⁶ Thus, at the very moment when the policies of the "Reagan revolution" began radically to transform federal taxing and spending policies, forging the outlines of our current debate, American economists abandoned the empirical measurement of the distributional impact of government. For a decade in which redistributing the burdens and benefits of government action has been a crucial feature of policy-making, analysis of the redistributive effects of these policies has been left primarily to journalists (e.g. Phillips 1990). One aim of this essay, then, is to call for renewed empirical research into the incidence of government expenditures in the Reagan and post-Reagan years.

Another aim concerns theory. The relevance of considering benefits in designing proper tax systems has been a controversial issue in the theory of taxation from the beginning of economics as a social science. By the turn of the twentieth century, and largely as a result of the intellectual history constructed by

American economist E.R.A. Seligman (1908), two schools of thought on the subject had crystallized: "benefit theory" -- the idea that tax burdens should be allocated to individuals in proportion to benefits they receive from government actions -- and "ability to pay" -- which denied that such benefits could be measured and demanded instead that tax rates be set in relation to individual income or wealth.⁷ These theories were not, strictly speaking, about distributing actual tax burdens; both could be (and were) invoked to justify both proportionality (a constant tax rate on all incomes) and progressivity (higher rates on higher incomes). Rather than designs for particular tax codes, the "benefit" and "ability to pay" theories addressed the issue of how to think about taxes in the first place, about the relationship between taxpayers and the state. They were, perhaps most directly, competing strategies for pursuing an objective shared by most partisans of both theories: persuading politicians to abolish the predominantly regressive tax systems of the time. While the century-old contest between "benefit" and "ability to pay" may seem today a mere curiosity of intellectual history, some of its arguments and assumptions have exerted a powerful influence on modern empirical research.

The second aim of this paper, then, is a history designed to explain why the analysts of expenditure incidence described their data the way they did, why they called "pro-rich" results "pro-poor." Briefly, by conflating elements of both the "benefit" and "ability to pay" theories, the expenditure analysts were led to

present their findings in percentages of household income rather than in absolute dollar amounts. Government expenditures, they found, comprised smaller proportions of higher incomes than of lower incomes. While unsurprising in itself, this interpretation masked the finding that, according to every study, the government distributed larger amounts of spending benefits to higher-income than to lower-income households. The simplicity of this error is beguiling: why did these economists choose to present their data in a way that reversed its meaning, turning "pro-rich" results into "pro-poor" interpretations? This essay will address this question by charting the path from nineteenth-century tax theory to twentieth-century empirical research and analyzing the often remarkably transparent politics of that intellectual history. It will conclude by recalculating the expenditure incidence results and presenting them in a more theoretically appropriate format.⁸ This will show the strikingly "pro-rich" bias of expenditures in the decades before the rise of Reaganism.

THE STATE IN ABILITY-TO-PAY THEORY

Judging by popular as well as scholarly opinions about the proper way to allocate tax burdens, "ability to pay" has been the reigning tax ideology in the United States for at least the last century. Most Americans, according to opinion polls, believe that fairness (in the sense of "vertical equity") requires that the rich pay higher taxes than the poor. (Minarik 1985:4-18;

Eisenstein 1961). Economists studying the economic incidence of American taxes have concurred, presenting their findings as a series of "effective rates" (the percentages of income, by income class, that are paid in taxes), and viewing regressivity (rates that decline as income increases) as an injustice policy-makers should redress by altering tax laws. (Minarik 1985; Ando, Blume and Friend 1985; Pechman 1985; Pechman and Okner 1974) Although there is less consensus on whether "ability-to-pay" requires progressivity, as opposed to proportionality, in "effective" tax rates, regressivity is clearly considered unacceptable. Yet the poll data is fairly consistent on the idea that the reason for a proportional or progressive tax structure is not the abstract justice of a redistribution of income in society. Rather than wanting to take from the rich to give to the poor, Americans seem to favor proportional or progressive taxation on the basis of an idea, however vaguely understood, of "ability to pay." (Minarik 1985:22-23; Blum and Kalven 1963:x-xi).

This victory of "ability to pay" over its nineteenth-century rivals -- "benefit" theory and the "socialist" insistence on redistribution to reduce inequality and promote the ultimate socialization of capital -- implies a victory also for a part of the "ability-to pay" view: that in determining what any given individual should pay in taxes, information about what he may receive in benefits from government is irrelevant. Ability-to-pay theorists generally ignored benefits, though they seem to have preferred an equal distribution -- one that, if it were

stated in quantitative terms, would be roughly per capita. More often, however, ability-to-pay theorists held that the benefits of government were immeasurable. As John Stuart Mill phrased it in a famous passage (1909:805 [book v, ch. ii]):

Government must be regarded as so pre-eminently a concern of all, that to determine who are most interested in it is of no real importance. If a person or class of persons receive so small a share of the benefit as makes it necessary to raise the question, there is something else than taxation which is amiss, and the thing to be done is to remedy the defect, instead of recognizing it and making it a ground for demanding less taxes.

Half a century later, E.R.A. Seligman (1913:336-38) said much the same thing, though in more moralistic terms: since the correct metaphor for the state was the family, according to Seligman, it was improper for any individual to tote up the benefits he might receive in order to determine the contribution he owed for the support of the whole. The idea that tax rates should depend on the distribution of benefits, Seligman implied, resembled the rationalizations of irresponsible fathers seeking excuses for withholding the support they owed to their families.⁹

Yet there was another important aspect to this resistance to the measurement of benefits. Both Mill and Seligman thought that if the incidence of government benefits could indeed be measured, and that if this measured incidence then were used as the basis for allocating taxes, the result would be a tax system that was

regressive. This followed from a relatively unexamined judgment that the benefits of government spending actually were enjoyed disproportionately by the poor. Mill put the case as a logical deduction (1909:805):

If we wanted to estimate the degrees of benefit which different persons derive from the protection of government, we should have to consider who would suffer most if that protection should be withdrawn: to which question if any answer could be made, it must be that those would suffer most who were weakest in mind or body, either by nature or by position. Indeed, such persons would almost infallibly be slaves.

At the time Mill wrote this passage, of course, many persons who lived under the jurisdiction of the United States government were in fact slaves, a situation that required a great deal of legal, police, and even post-office activity (censorship of abolitionist literature from the mail) to sustain. Mill believed something was seriously "amiss" in American slavery (1909:249-55 [book ii, ch. v]), though the example does illustrate that the prevention of slavery is an incomplete definition of the "benefits" derived from government.

Seligman (1913:337) attacked the issue more directly, though less than convincingly. The benefits distributed by the modern state, he argued, were "frequently in inverse proportion to the wealth of the individual." While the poor had to use public schools, the rich could pay for private schools; while the poor

depended on the police for security, the rich could hire private guards; while the poor sometimes needed welfare programs, the rich never did. Seligman ignored the problematic nature of his benefit attributions; if the idea that the police benefit the poor more than the rich is clearly questionable, many scholars have shown the ways in which education and welfare also perform socializing and disciplining functions essential for the long-term (if not the immediate) interests of the rich by maintaining the stability of a society structured to allow them to accumulate and enjoy their wealth. (e.g., Piven and Cloward 1971) Seligman, however, was undaunted by such considerations, reasoning from his assumed "pro-poor" distribution of government benefits that the benefit theory of taxation was fatally flawed. "A theory which would practically result in placing greater burdens upon the poor man than upon the rich man must, therefore, be defective in one of its premises." (1913:337) Disapproving of the results that an analysis based in benefit theory would generate, in other words, Seligman responded by dismissing the theory.

Mill had done the same thing: "If there were any justice" in benefit theory, the threat of mass enslavement implied that "those who are least capable of defending themselves," the poor, "ought to pay the greatest share of [government's] price." But this result -- a regressive allocation of the tax burden -- was "the reverse of the true idea of distributive justice, which consists not in imitating but in redressing the inequalities and wrongs of nature." (1909:805) Here Mill veered from "ability to

pay" toward the "socialist" theory of taxation, which Seligman would take greater care to disavow and which would not appear in mainstream American discussion until Simons (1938:18-19) defended progressive taxes for the simple and direct reason that "the prevailing distribution of wealth" exhibited an "inequality which is distinctly evil or unlovely." The central point, however, is that the classical "ability-to-pay" theorists had predicted a result for the empirical measure of expenditure incidence. If such an analysis were undertaken, they thought, it would show that government distributed greater benefits to the poor than to the rich. The publication of such results, in turn, would help the rich to reduce their taxes at the expense of the poor, making the tax system even more regressive than it already was. Thus, measuring the incidence of government expenditures was more than irrelevant: it was an undertaking that any socially responsible economist should discourage.

THE RELEVANCE OF INCOME

The ideal distributions of taxes and government benefits in the nineteenth-century tax theories can be juxtaposed easily, and in a way that makes the conservatism of the classical version of "ability to pay" doctrine plain:

Socialist: tax each according to his abilities, benefit each according to his needs.

Ability to pay: tax each according to his abilities, benefit each in an equal amount.

Benefit: tax each according to his benefits and, though only by implication, benefit each according to his taxes.

Nineteenth-century benefit theorists did not say that benefits should reflect taxes; unlike the expenditure incidence analysts, who (as will be shown below) really do portray the ideal benefit distribution this way, the nineteenth-century theorists took the existing benefit distribution as a given from which to theorize about an ideal tax structure. Wealth, property, or income was simply an intervening variable for benefit theorists, a way of measuring whether the tax-benefit equality existed.

Benefit theorists, however, differed from ability-to-pay theorists in their assumptions about the actual distribution of government benefits. They thought that the rich benefited more than the poor. Since the main purpose of government was to protect property, they reasoned, those who owned more property enjoyed greater benefits from government than those who owned less. Like the ability-to-pay theorists, therefore, the benefit theorists advocated either proportional or progressive taxation rather than the regressivity that the ability-to-pay proponents considered an inevitable outcome of applying the benefit logic. (Seligman 1908:150-204) In terms of what empirical analysis would reveal about the economic impact of government, therefore, benefit theorists were far less optimistic than ability-to-pay theorists. Predicting the outcome of an analysis of expenditure

incidence, benefit theorists anticipated a pro-rich skew which, if their theory were used to set tax rates, would strengthen the political case for proportional or progressive taxation. Far from irresponsible, the study of expenditure incidence would, according to benefit theorists, provide political ammunition for the poor to use against the rich.

This debate was entirely academic before the 1930s, when the data necessary for reasonably sophisticated empirical analyses of either taxes or expenditures became available for the first time. It is a measure of the dominance of the ability-to-pay view that while tax incidence studies proliferated, becoming rapidly more sophisticated and generating a broad consensus about the correct methods for treating particular taxes, the field of expenditure incidence languished, such that a study completed as late as 1977 still had to invoke the ritual disclaimer about "the relatively recent development of incidence assumptions for various types of expenditures." (Reynolds and Smolensky 1977:47; Thurow 1975:185-86). The politics of this imbalance -- intensive tax analysis and a few highly marginalized expenditure studies -- was crystal clear at the 1953 American Economic Association meeting, when Rufus S. Tucker of the General Motors Corporation presented a pioneering expenditure study couched in combatatively reactionary political rhetoric.¹⁰ Tucker's paper purported to show that in 1929, 1935, 1941, and 1948 the had rich paid higher taxes while the poor had gained higher benefits from government spending. This use of government to redistribute income from rich to poor

seemed to Tucker to pose a dire threat to civilization, and he ended his paper with a warning (1953:534):

Redistribution of incomes by means of progressive taxation and regressive [pro-poor] distribution of the proceeds may be an effective weapon for increasing the national income and improving the general welfare; or it may be a dangerous device that will halt or reverse the growth of national income and bring about economic, political, and moral deterioration. Like the scientists engaged in perfecting the atomic bomb, we owe it to our consciences to study the matter carefully and proceed with the utmost caution.

Tucker's commentators, recognizing how high the stakes could be, wasted little energy on critiques of the particular methods by which Tucker had generated his statistical results. Rather, they rejected his inquiry outright. Harold Groves, a leading liberal public finance expert, dismissed the measurement of benefits as an "unprofitable occupation," quoting Mill on the public nature of government. Earl Rolph thought that while direct government subsidies might be measured, there was "no justification" for measuring the allocation of other kinds of spending; because, as Rolph said, the distribution of most spending was immeasurable "in principle," Tucker's work "adds nothing to our knowledge." Richard Goode, as the final commentator, doubted that measuring benefits was "realistic or useful," though he did not join the others in ruling out further study entirely. (Tucker 1953:536, 538, 542)¹¹ Tucker's paper made Seligman's fears about the

political uses of expenditure incidence vividly real, and his intellectual heirs recognized the threat when they saw it.

The longer-term victory, however, would be Tucker's. Not only was there, according to one commentator, an "avalanche" of expenditure incidence studies, but the methodology employed in the studies was, for the most part, the one that Tucker invented in the 1950s. (de Wulf 1981:55, Meerman 1978:295) Even more interesting, the American part of the avalanche uniformly tended to confirm Tucker's empirical finding that governmental taxing and spending redistributes income from rich to poor. Tucker doubtless would have liked the "policy implications" provided by Gillespie in the most influential American study of expenditure incidence (1965:166): the fact that expenditures benefit the poor and thus offset the regressivity of the tax system, according to Gillespie, "raises the question whether suggested reforms of the tax structure to render it less regressive are relevant. In the context of total fiscal incidence -- at least over the middle income range -- the allocation of benefits and costs seems to be optimal." Gillespie's results can be considered "optimal," of course, only if it is assumed that taxes should equal benefits, if it is assumed that greater benefits to the poor justify higher taxes on the poor. Gillespie never defended his definition of the optimal relationship between taxes and benefits; it is not clear that he even noticed it. Where Tucker had self-consciously sought a rationale for conservative policy-making, Gillespie was oblivious to the underlying normative assumptions of his study.

This was true on two separate grounds. Gillespie's notion of optimality might be excused as a marginal part of his analytic effort, a mere afterthought to his quantitative research design. Yet this design itself was also embedded in unexamined normative assumptions, the assumptions that led Gillespie to follow Tucker in measuring benefits against income. The tradition of measuring the incidence of taxes against income (of constructing "effective tax rates") follows directly from the normative specification of ability-to-pay theory: that taxes should be levied in accordance with income (or some other measure of "ability" such as wealth). To assess a tax system on ability-to-pay grounds, therefore, the researcher must compare taxes against incomes. Yet, as we have seen, ability-to-pay theory specifies no normative comparison between expenditures (or the "benefits" of expenditures) and incomes, and particularly not a notion that benefits should be distributed in proportion to incomes. In fact, it is difficult to imagine anyone making such a claim today either as economic theory or as political practice. Nobody -- except perhaps Rufus Tucker -- would argue that the government should distribute its benefits in proportion to income. An empirical finding that the government does distribute benefits this way would sound like the revelation of a scandal. Expenditure incidence studies, however, all compare benefits with income. Their results, like those of Tucker and Gillespie, array expenditures as percentages of income by income class. The intervening variable in nineteenth-century benefit theory -- the way to measure the relationship between

taxes and benefits -- is recast in expenditure incidence studies as the standard against which the expenditure pattern should be judged. The existing distribution of income is assumed to be the optimal distribution of government expenditures.

Perhaps the most direct reason expenditure analysts adopted this peculiar assumption was a simple desire to present their results in symmetry with the tax incidence literature that it was intended to supplement. The first American tax incidence study that considered federal, state, and local taxes together argued that taxes alone provided an incomplete picture of "the effects of the fiscal system on the distribution of real income." In judging taxes, Helen Tarasov said in this influential 1941 study, "the use made of their yield should not be ignored." (Colm and Tarasov 1941:1)¹² Thus, Tarasov argued, the sharp regressivity of the social security payroll tax might appear in a different light and be judged less harshly if the distribution of social security benefits were taken into account. Tarasov invoked the nineteenth-century benefit logic in a pure form in calling for the comparison of taxes with benefits. And such a comparison seemed to require an identical unit of measurement to make a computation of "net benefit" (benefits minus taxes) practical. Because taxes were measured in percentages of income (because of the normative specifications of ability-to-pay), benefits were measured in percentages of income as well. No consideration of whether it actually was appropriate to measure benefits against income seems ever to have entered into this logic. One had

measured the "redistribution" of wealth by government if one had arrayed, by income class, the percentage of income taken in taxes and the percentage of income returned in expenditures. If taxes were levied on individuals in proportion to their incomes while government expenditures were distributed on a per capita basis, a "redistribution" of wealth from the rich to the poor would exist by definition. Yet the significance of this result is unclear and potentially quite misleading.

THE RESULTS OF EXPENDITURE INCIDENCE

The results of expenditure incidence studies of the entire fiscal system (federal, state, and local) of the United States are presented in Table 1. The table shows, for each study, the income-class breakdown used and, for each class, the percentage of income taken in taxes, the percentage of income returned in expenditures, and, for those studies that compute it, the "net fiscal incidence" or "net benefit" of the system (expenditures minus taxes, by income class). The methods and assumptions used to measure taxes and expenditures vary from study to study. All, however, differentiate on the spending side between "allocable" and "general" expenditures, between spending that can be assumed to benefit particular classes of individuals and spending whose benefits cannot be assigned to any class of the population. In treating allocable expenditures, the studies apply statistical "allocators" to distribute spending benefits by income class.

Thus, they allocate spending on welfare by the distribution (by income class) of welfare recipients, schools by the distribution of school-age children, highways by the ownership of cars and trucks, and interest on government debt by ownership of the debt instruments. These allocations are performed with more or less sophistication, depending on the study. For "general" spending, meanwhile -- the costs of such things as the President, Congress, governors, legislatures, mayors, city councils, courts, police, national defense, and diplomacy -- most of the studies apply two separate allocations that traceable to the nineteenth-century theoretical debate. First, on the ability-to-pay assumption that everyone benefits equally from these things (or that they are inherently immeasurable), the studies allocate general spending on a per capita or per household basis. Second, on the benefit assumption that those with higher incomes benefit more from the maintenance of the existing social, political, and economic order than those with lower incomes, they allocate general spending in proportion to income. Most studies present the results obtained on the basis of both treatments of general spending separately. Two studies take an intermediate position, allocating half of general spending by household and half by income.

[TABLE 1 ABOUT HERE]

Features of the procedure must be clarified.¹³ First, and crucially, the studies do not really measure the "benefits" that

TABLE 1
TAXES AND BENEFITS IN THE INCIDENCE STUDIES
(in percent of income)

<u>ADLER</u> Income (000)	1938-39		1946-47	
	Taxes	Benefits Gen by Income	Taxes	Benefits Gen by Income
0-1.0	18.0	52.8	19.6	80.5
1-2.0	17.5	23.6	15.1	32.5
2-3.0	17.4	18.0	17.3	24.6
3-4.0	17.7	18.4	17.7	21.0
4-5.0	18.2	20.8	22.9	18.5
5-7.5	18.7	25.1	24.2	14.6
7.5+	32.7	17.4	36.3	12.9
Average	20.2	25.9	24.2	20.9

<u>GILLESPIE</u> Income (000)	1960		Fiscal Incidence	
	Taxes	Benefits Gen by Inc	Gen Per HH	Gen by Inc
0-2.0	61.1	181.6	287.8	55.1
2-3.0	67.2	144.7	173.1	44.4
3-4.0	51.6	73.9	88.6	18.5
4-5.0	45.5	44.2	50.9	-1.3
5-7.5	33.2	30.4	31.5	-2.9
7.5-10	22.8	24.6	21.9	1.7
10+	31.9	20.5	12.0	-13.2
Average	33.7	33.5	33.5	

<u>BISHOP</u> Income (000)	1961	
	Taxes	Benefits Gen 1/2-1/2 Gen Per HH
0-2.0	27.3	112.7 144.9
2-3.0	26.3	68.4 80.1
3-4.0	29.4	48.9 54.6
4.5.0	29.1	35.5 37.8
5-6.0	29.4	30.9 31.3
6-7.5	28.6	26.6 25.3
7.5-10	28.7	23.1 20.2
10-15	30.9	20.9 16.5
15+	44.1	17.1 10.7
Average	30.5	31.4 14.8

<u>MUSGRAVE, CASE, LEONARD</u> Income (000)	1968		Net Incidence	
	Taxes	Benefits Gen by Inc Gen Per HH	Gen by Inc	Gen Per HH
0-4.0	28.5	127.3 180.4	95.6	148.7
4.0-5.7	30.5	64.1 77.0	29.9	43.8
5.7-7.9	32.8	45.8 57.9	10.5	22.6
7.9-10.4	33.1	36.5 40.8	0.9	5.3
10.4-12.5	32.8	31.4 32.8	-3.7	-2.3
12.5-17.5	33.9	28.8 26.2	-7.4	-9.9
17.5-22.6	32.4	25.8 20.4	-8.6	-13.9
22.6-35.5	32.9	25.6 16.5	-8.9	-18.0
35.5-92.0	31.6	24.4 12.3	-8.4	-20.0
92.0+	35.9	25.1 9.8	-11.9	-27.2
Average	33.0	35.1 35.1		

TABLE 1 -- continued

REYNOLDS AND SMOLENSKY 1970

Income (000)	Taxes	Benefits	
		Gen By Inc	Gen 1/2-1/2
0-1	58.8	211.2	315.7
2-3	45.9	139.5	173.7
3-4	44.7	98.0	118.4
4-5	41.4	73.7	85.5
5-6	38.5	53.2	60.9
6-7	36.2	43.4	48.4
7-8	34.4	38.1	41.0
8-10	34.0	34.7	35.8
10-15	31.2	30.8	29.4
15-25	29.8	26.6	22.7
25+	37.9	23.7	17.2
Average	33.9	35.4	35.4

RUGGLES AND O'HIGGINS 1970

Income Decile (Mean)	Taxes	Benefits Gen Per Cap	Net Benefits
1 \$ 1,108	135.5	372.8	237.2
2 2,385	76.2	181.8	105.6
3 3,930	64.8	142.9	78.1
4 5,693	59.9	94.4	34.5
5 7,429	57.4	70.2	12.8
6 9,228	57.6	60.6	3.0
7 11,030	55.4	50.5	-4.9
8 13,142	55.0	45.6	-9.4
9 16,244	53.7	38.0	-15.6
10 27,288	47.5	24.0	-23.5
Average	55.3	56.1	0.9

Sources

Adler: Table 38, p. 382 (taxes); Table 39, p. 388 ("Benefits").
 Gillespie: (all using "Broad Income Concept") Table 3, line 14 (taxes), p. 135; Table 17, lines 3, 6 ("Effective Expenditures," assumptions A, B), p. 180; Table 11, line 11 ("Total Fiscal Incidence"), p. 162.
 Bishop: Table 3 (taxes), p. 14; Table 5 (expenditures, on "standard assumption" and with general benefits allocated by family), p. 17.
 Musgrave, Case, Leonard: Table 2, line 42 (taxes, "benchmark" assumptions), p. 264; Table 7, lines 16, 18 ("Benefits," assumptions A, C), p. 292; Table 8, lines 10, 12 ("Net Budget Incidence," assumptions A, C), p. 294.
 Reynolds and Smolensky: Tables 4.2 and 4.3 (taxes, expenditures), pp. 51, 53.
 Ruggles and O'Higgins: Table 1, lines 1-2 (taxes), lines 3-4 (expenditures), line 7 ("Total net benefits"), p. 142.

Note: All figures presented exactly as they appear in the studies except for Ruggles and O'Higgins, where it was necessary to combine federal with state and local tax and expenditure totals.

the households in the income classes derive from government services. Instead, they measure the costs of the services and then allocate "costs incurred in behalf of" particular groups of households. Thus, for example, the "benefits" that a subsidized, public higher education confers on students might be measured in improved lifetime earning powers, a more satisfying intellectual life, or any of a number of subjective valuations with which the student and his family might view the relatively low-cost access to higher education that a public system provides. Rather than trying to quantify the "benefits" of higher education, which may differ radically depending on individual tastes and preferences, the studies use the cost of providing the education -- the size, say, of a state higher education budget. Second, in allocating these costs, the studies do not take externalities into account. Using the same example, higher education spending is assumed to be allocable as a "cost incurred in behalf" solely of students and their families. The fact that other people may subjectively like the idea of having low-cost access to higher education in their communities (and thus derive a "benefit" from it), or the fact that a well-educated workforce might tend to improve general economic conditions (and thus "benefit" everyone) is ignored. To allocate higher education spending among the income classes, the studies take the distribution, by income class, of students enrolled in public colleges and universities and then allocate proportions of the spending total accordingly. (See Hansen and Weisbrod 1969)

With the stated reservations, this procedure is reasonable for many expenditure items, the "allocable" part of the budget. The problem is magnified, however, when it is recognized that about one-third of total expenditure is deemed "unallocable" in most of the studies. This is where theory becomes critical. Looking, for example, at Gillespie's figures in Table 1, the importance of choosing by-income or by-household treatments of "general" spending is apparent. The households with the lowest incomes (\$0-\$2,000) receive government services costing almost twice as much as their incomes if general spending is allocated by income but almost three times as much if it is allocated per household. The Ruggles and O'Higgins study, which allocates general spending by population (the number of individuals rather than households), produces the steepest benefit distribution in the table. Recent theoretical and econometric analyses, drawing on the "benefit theory" analytic tradition in order to estimate demand schedules for public goods, provide evidence that the by-income method of allocating general expenditures reflects reality more accurately than the by-household method because the income elasticities of demand for public goods are large and positive (the rich benefit more from them than the poor).¹⁴ The point to note, however, is the arbitrariness of both methods -- even if we know that the rich benefit more than the poor, we still do not know by how much. Because "unallocable" spending is handled by such general assumptions, what is actually being measured is the "allocable" part of the total, what Seligman -- at least as early

as 1893 -- called "particular," as opposed to "general," objects of public expenditure.¹⁵ This is important and, really, saves the whole procedure, which will become apparent when Tables 2 and 3 are considered below.

Meanwhile, looking at Table 1, the results presented in the studies, it is clear that if taxes and expenditures are measured against income, "fiscal incidence" in the United States appears sharply "pro-poor." In every case, moreover, a regressive or roughly proportional tax incidence was offset on the spending side to generate the "pro-poor" pattern. Adler (1951:404), in describing this result, heralded "the economic expression of the tendency toward social equity inherent in our political system." Bishop (1965:19) said the same thing, though in less flamboyant language: "the total effect of government taxing and spending is a substantial redistribution of income in favor of low income groups." Musgrave, Case, and Leonard (1974:295-96) noted that "the major contribution to the pro-poor result comes from the benefit side," and marked a "break-even point" at about \$8,500. "At 1968 levels of income," they explained, "this divided the population about equally between gainers and losers, a result which is not uninteresting from the point of view of voting theory. The mythical 'median voter,' it appears, strikes even." If one believes that government should redistribute income from the rich to the poor, Table 1 offers an invitation to join Adler in celebration. If not, Tucker's alarm seems appropriate.

Reynolds and Smolensky (1977) take the analysis one step further, computing linear regressions of the relationship between income and the incidence results in 1950, 1961, and 1970. While the "net benefit" functions are downward-sloping (the "pro-poor" pattern from Table 1), those for expenditure alone slope upward, indicating that dollar amounts of expenditure increased with rising income. It is here that the normative assumptions behind the Table 1 income-based presentation become plain. Reynolds and Smolensky interpret upward-sloping expenditure regressions as still being "pro-poor" because the "slopes are only one-third as large as those for an expenditure system proportional to factor income." (1977:55-56) Thus, any distribution of expenditures that is more equal than the existing distribution of income is to be considered a "pro-poor" distribution, even though government is shown to be spending more on the rich than the poor. For Reynolds and Smolensky, the implicit normative counter-factual -- the result that would be "neutral" -- would have the government distributing its expenditures in proportion to income. This, as was indicated earlier, is indefensible as the proper distribution of government services in a democracy.

The most recent study, that of Ruggles and O'Higgins, is the only one that presents expenditure incidence in absolute dollars as well as in percentages of income. The authors duly note that "expenditure benefits decline steadily as a proportion of income through the income range," causing a "considerable redistribution toward the bottom five deciles, and away from the top three or

four." But they also state that "expenditure benefits fall as a proportion of income, but rise in absolute amount with rising income." (1981:141, 147) Using a microdata file enabling them to crosstabulate several variables, they suggest that income may not be the most significant determinant of the benefit distribution. The importance of race, sex, and especially household size leads them to conclude that "income alone does not go very far toward explaining the distribution of public expenditure benefits."

(1981:162) Yet it is not clear how far income does go. Because Ruggles and O'Higgins do not perform multivariate tests on the relative impact of the variables, it is impossible to know how important income is in determining the expenditure distribution. In their regressions of expenditure with income, Reynolds and Smolensky (1977:55) produced R^2 s over .90; while this doubtless reflects intercorrelations of income with household size, sex, and race, it remains a quite remarkably strong relationship.

The determining role of income as an independent variable is less important, however, than the distribution of expenditures by income, the demonstration that the rich command disproportionate amounts of government expenditures. Whether the regression lines computed by Reynolds and Smolensky are less steep than they would be if expenditures were proportional to the income distribution is less enlightening than the regression slopes themselves: for every \$100 increase in income, households received an additional \$8 in government spending in 1950, \$12 in 1961, and \$11 in 1970. This is not an "equal" or even a "neutral" distribution of

government expenditures. It appears, in Mill's language, that "there is something else than taxation which is amiss."

[TABLE 2 ABOUT HERE]

THE DISTRIBUTION OF EXPENDITURE BENEFITS

Table 2 converts the "benefit" results of the expenditure incidence studies into dollars spent by government per household for each income class. Taxes could have been converted into dollar amounts as well, but the point of Table 2 is to present a theoretically consistent result in the context of "ability to pay" theory. There is no need to present taxes and benefits in comparable units of measurement because there is no theoretical reason to add or subtract them from one another. According to the classical ability-to-pay normative rule, it will be recalled, taxes should reflect either equal or rising percentages of income as income increases (proportional or progressive schedules) and benefits should be distributed equally, regardless of income. This would be a "neutral" fiscal incidence in an ability-to-pay context. With a view of government more liberal than that of the nineteenth-century "classical liberals," a view that conceives of government as a mechanism for redressing the socioeconomic needs reflected by very low incomes (a view called "socialist" in the nineteenth-century), we would want to find either 1) progressive taxes combined with benefits that are either equal regardless of

TABLE 2
TAXES AND BENEFITS IN AN ABILITY-TO-PAY CONTEXT
(taxes in percent of income, benefits in dollars per household)

<u>ADLER</u> Income (000)	1938-39		1946-47	
	Taxes	Benefits Gen by Income	Taxes	Benefits Gen by Income
0-1.0	18.0	\$ 354	19.6	\$ 560
1-2.0	17.5	351	15.1	613
2-3.0	17.4	456	17.3	720
3-4.0	17.7	602	17.7	868
4-5.0	18.2	889	22.9	889
5-7.5	18.7	1,454	24.2	1,043
7.5+	32.7	3,994	36.3	3,048
Average	20.2	442	24.2	850

<u>BISHOP</u> Income (000)	1961	
	Taxes	Benefits
		Gen 1/2-1/2 Gen Per HH
0-2.0	27.3	\$ 1,970 \$ 2,533
2-3.0	26.3	2,417 2,830
3-4.0	29.4	2,445 2,734
4.5.0	29.1	2,348 2,503
5-6.0	29.4	2,532 2,560
6-7.5	28.6	2,743 2,607
7.5-10	28.7	3,078 2,693
10-15	30.9	3,894 3,071
15+	44.1	6,707 4,218
Average	30.5	2,694 2,694

<u>MUSGRAVE, CASE, LEONARD</u> Income (000)	1968	
	Taxes	Benefits
		Gen by Inc Gen by HH
0-4.0	28.5	\$ 5,253 \$ 6,883
4.0-5.7	30.5	4,390 5,481
5.7-7.9	32.8	3,567 4,611
7.9-10.4	33.1	3,780 4,316
10.4-12.5	32.8	3,994 4,192
12.5-17.5	33.9	5,007 4,509
17.5-22.6	32.4	6,287 4,916
22.6-35.5	32.9	10,157 6,646
35.5-92.0	31.6	16,957 9,295
92.0+	35.9	62,126 31,053
Average	33.0	5,361 5,361

TABLE 2 -- continued

REYNOLDS AND SMOLENSKY 1970

Income (000)	Taxes	Benefits	
		Gen By Inc	Gen 1/2-1/2
0-1	58.8	\$ 2,030	\$ 3,035
2-3	45.9	3,539	4,407
3-4	44.7	3,675	4,442
4-5	41.4	3,957	4,592
5-6	38.5	3,632	4,154
6-7	36.2	3,559	3,970
7-8	34.4	3,733	4,017
8-10	34.0	4,055	4,184
10-15	31.2	4,916	4,691
15-25	29.8	6,626	5,656
25+	37.9	15,074	10,913
Average	33.9	4,658	4,656

RUGGLES AND O'HIGGINS 1970

Decile	Income (Mean)	Taxes	Benefits
			Gen Per Cap
1	\$ 1,108	135.5	\$ 3,795
2	2,385	76.2	4,336
3	3,930	64.8	5,615
4	5,693	59.9	5,375
5	7,429	57.4	5,213
6	9,228	57.6	5,593
7	11,030	55.4	5,573
8	13,142	55.0	5,994
9	16,244	53.7	6,182
10	27,288	47.5	6,563
Average		55.3	5,432

Sources: See Table 1.

Note: Except for Ruggles and O'Higgins, which provided this data, the rest of the table contains recalculations of the studies supplemented by the primary sources cited in them, which was necessary to obtain numbers of households by income class (most studies provided percentage distributions without totals). Gillespie's results could not be recalculated because his family distribution, a breakdown of sample data (from the 1961 Survey of Consumer Finances) rather than census data, contained no relevant absolute numbers of households.

income or declining as income increases, or 2) proportional taxes combined with benefits that decrease with rising income. In an ability-to-pay context, these are the only combinations that can be interpreted as "pro-poor." As Table 2 shows, this "pro-poor" incidence is not found in any study. The 1961 Bishop result comes closest to a classical ability-to-pay view of "neutrality," with largely proportional tax incidence and a U-shaped benefit curve, while Musgrave, Case, and Leonard produce the closest approximation to a "pro-poor" result for 1968, though the minor favoring of the bottom of the income distribution in this case is dwarfed by the much larger favoring of the top.

The dominant pattern clearly is a pro-rich distribution of expenditure benefits. While this pattern is more pronounced when "general expenditures" are allocated by income, the most striking result of the table is that the patterns remain pro-rich even when general expenditures are allocated by household. Thus, while Bishop's 1961 by-household result is U-shaped starting in the \$2,000-\$3,000 income class, its steepness is minimal (the result roughly proportional) until the top two income classes, which received far larger expenditure benefits than anyone else. The Musgrave, Case, and Leonard data for 1968 is much the same; here, perhaps because of the choice of income break-points, the top class appears to have attracted vastly more money from the government than anyone else. In the Bishop result allocating general spending on a half-and-half basis and in the Reynolds and Smolensky 1970 data computed this way, the U-shape again fails to

benefit the lowest income class. Ruggles and O'Higgins, using income deciles and a per capita general expenditure allocation, produce a smoother U-shape than the others, though again without any favors in governmental treatment of the (extravagantly highly taxed) bottom decile. The methodology used in the Adler study is much less sophisticated than the others, but its result is worth comparing with its rhetoric: "the tendency toward social equity inherent in our political system" is not apparent in Table 2.

Even if the allocation of "general" spending by income, and thus the more steeply pro-rich pattern, is deemed correct from the standpoint of an economic theory taking demand schedules into account, the by-household results are useful for what they really do portray: the distribution of those expenditures allocated less arbitrarily, on the basis of a reasoned assignment of "benefits" to "beneficiaries." Table 3 presents the Musgrave, Case, and

[TABLE 3 ABOUT HERE]

Leonard results for "allocable" expenditures alone; Part A is the result as provided in the study, while Part B is a recalculation into dollars per household. The "Total" columns demonstrate the differences. While the Part A figures appear sharply "pro-poor," the Part B figures are U-shaped with an almost incredible skewing of government spending toward incomes over \$92,000. The "median voter" at an income of \$8,500 does not do nearly as well in this context. In fact, households with incomes from \$7,900 to \$17,500

TABLE 3
 ALLOCABLE EXPENDITURES BY INCOME CLASS
 IN MUSGRAVE, CASE, AND LEONARD

A. IN PERCENTAGES OF INCOME

Income (000)	Educ	Hwys	Hosp	Agri	PubA	SSI	Unem	Vets	Int	Total
Under 4	11.6	1.8	7.6	0.0	28.7	52.5	0.8	5.8	2.2	110.6
4.0-5.7	21.1	2.4	7.4	0.2	3.1	14.5	0.9	1.6	2.1	44.4
5.7-7.9	22.0	2.8	3.9	0.3	1.2	6.2	0.6	0.8	1.2	29.1
7.9-10.4	18.6	2.6	2.0	0.4	0.4	2.8	0.4	0.6	0.6	19.8
10.4-12.5	14.3	2.5	1.2	0.3	0.2	1.7	0.3	0.4	0.6	14.7
12.5-17.5	11.5	2.3	0.7	0.4	0.0	1.4	0.2	0.3	0.8	12.0
17.5-22.6	6.6	1.8	0.5	0.8	0.0	1.1	0.1	0.2	1.0	9.1
22.6-35.5	5.8	0.9	0.3	1.8	0.0	0.8	0.1	0.2	1.8	8.9
35.5-92.0	3.2	0.7	0.1	2.6	0.0	0.2	0.1	0.0	2.4	7.7
92 +	1.1	0.4	0.0	0.8	0.0	0.2	0.0	0.0	6.5	8.4
Average	11.1	0.6	1.5	0.7	1.4	4.2	0.3	0.6	1.5	18.4

B. IN DOLLARS PER HOUSEHOLD

Income (000)	Educ	Hwys	Hosp	Agri	PubA	SSI	Unem	Vets	Int	Total
Under 4	186	56	235	0	880	1,617	25	179	66	4,740
4.0-5.7	745	170	507	17	213	991	62	114	140	3,246
5.7-7.9	990	240	336	29	105	540	55	74	106	2,124
7.9-10.4	1,189	306	247	49	48	345	54	71	75	1,721
10.4-12.5	1,123	372	172	50	34	251	44	57	93	1,480
12.5-17.5	1,174	426	132	71	9	278	41	62	161	1,712
17.5-22.6	894	473	150	196	0	284	29	58	260	2,020
22.6-35.5	1,131	350	130	682	0	324	26	60	704	3,772
35.5-92.0	1,039	388	123	1,610	0	114	24	21	1,480	6,440
92 +	1,030	622	0	1,693	0	324	0	61	13,096	28,074
Average	883	287	232	107	220	647	42	91	240	2,807

Categories do not add to totals because of an unspecified mode of allocating \$3 billion in "other transfers" (Table C, line 5). The average total equals the sum of the categorical averages (\$2,748) plus \$3 billion divided by the number of households, \$2,807 = \$2,748 + (\$3 billion/50.51 million), but this does not balance within the income classes.

Abbreviations:

Educ: Education	Hwys: Highways
Hosp: Health and hospitals	Agri: Agriculture
PubA: Public assistance	SSI: Social insurance and retirement
Unem: Unemployment compensation	Vets: Veterans' disability and pension
Int: Interest on public debt	

Source: Part A from Table 6, p. 285. Part B from data in Table C, p. 302, Table D, line 34, p. 304, and Table F, p. 306.

(45.3 percent of households) seem to have had rather significant cause for complaint in 1968. What this reveals "from the point of view of voting theory," is hardly a "break-even point" at the income median. Rather, those with household incomes under \$4,000 (19.9 percent of households) received somewhat more than average in expenditures-per-household, but those with \$35,500 to \$92,000 (1.7 percent of households) received more than twice the average. The very rich (0.6 percent of households) reaped a bonanza in government expenditures "in behalf of" their income class.

The by-household figures in Table 2 represent nothing more than expansions of "allocable" expenditure results, the results of considering that portion of total expenditure for which the investigator made a decision by choosing theoretically reasoned incidence assumptions (education costs to families with students, etc.). The econometric evidence that "general expenditures" actually benefit the rich more than the poor, however, suggests that the more accurate portrayal of total benefit incidence is the by-income portrayal, which is more strongly weighted toward the rich. In Table 2, this means patterns that are not U-shaped at all (except for the bottom income classes in Musgrave, Case, and Leonard and the slight favoring of the very poor in Adler). Rather than U-shaped, these patterns are almost consistently upward-sloping, like the regression results reported by Reynolds and Smolensky. This indicates, in short, that with a few minor exceptions, in every year investigated and regardless of the particular methods employed by the various investigators, it was

found that households in any given income class received greater expenditures "on their behalf" from the government, on average, than households in any income class below theirs. This, with taxation results either close to proportional or regressive, has been the "fiscal incidence" of government in the United States. In the context of ability-to-pay theory, this incidence can only be described as "pro-rich."

CONCLUSION: POLICY IMPLICATIONS OF EXPENDITURE INCIDENCE

Unlike some other forms of economic analysis, the study of tax and expenditure incidence is explicitly aimed at informing public policy. The data show how well government is achieving tasks that politicians declare as their objectives, as when they say they are redistributing income to eliminate poverty, but the data also measure class power as deployed in the political arena, which explains the high degree of politicization of this kind of research.¹⁶ When economists unanimously and repeatedly insist that the incidence of government expenditures is "pro-poor," they strengthen the political case for reducing tax progressivity and cutting spending on programs that help low-income households.¹⁷ It would be one thing if this "pro-poor" result had a meaning in comparison with some normative rule -- any normative rule -- that a fairly large proportion of Americans, or even a fairly large proportion of economists, would consider a reasonable benchmark for a "neutral" expenditure distribution. It is quite another

when "pro-poor" turns out to mean less than proportional to the existing distribution of income. Nobody would argue that the government should distribute expenditure benefits to households in proportion to their incomes. As this paper has demonstrated, expenditure incidence as measured against a more reasonable -- but still quite conservative ("classical liberal") -- definition of "neutrality," has been strongly pro-rich.

While the studies reviewed in this paper doubtless can take only a small share of either the credit or the blame, the fact is that since the time they were published the American tax system has indeed been made less progressive and spending on programs that help low-income households has indeed been reduced. This implies that, were it to be measured today, the incidence of government taxing and spending in the United States would be even more pro-rich than it was as measured by these studies. The fears of nineteenth-century ability-to-pay theorists and their twentieth-century intellectual heirs about the politically conservative uses of expenditure incidence studies need not be justified. Presented in ways that make normative biases and implicit comparisons clear, measures of expenditure incidence, with measures of tax incidence, can help Americans to demand that the government performs at least "neutrally" and, at best, equitably.

NOTES

1. For details on "sacrifice theories" of taxation see esp. Blum and Kalven (1963) and Musgrave (1959).
2. The fiscal incidence studies considered in this paper are: Adler (1951), Bishop (1967), Gillespie (1965), Musgrave, Case, and Leonard (1974), Reynolds and Smolensky (1977), Ruggles and O'Higgins (1981). See also Tucker (1953), Conrad (1954), Stauffacher (1941).
3. The classic study of American tax incidence is Pechman and Okner (1974). See also Minarik (1985); Ando, Blume, and Friend (1985); Pechman (1985); Phares (1980).
4. The terms "pro-poor" and "pro-rich" in expenditure incidence studies reflect the fact that the tax incidence language of "progressivity" and "regressivity" is counter-intuitive in the expenditure context. Thus, while a "regressive" tax distribution (percentages of income taken in taxes fall as income rises) favors the rich over the poor, a "regressive" expenditure distribution (percentages of income gained from expenditures fall as income rises) favors the poor over the rich. The pro-poor/pro-rich language avoids this ambiguity.
5. Ruggles and O'Higgins (1981). The term "macro-study," from Le Grand (1982:155-56), refers to analyses of the incidence of a nation's entire fiscal system rather than only of

particular programs. Many tax analysts have been skeptical about the validity of "partial equilibrium" results that fail to trace secondary economic effects through models of the entire economy. The most convincing objection to full "general equilibrium" analysis is that it is impossible in empirical terms, especially if the analyst plans to study state and local as well as federal fiscal policy. As Phares (1980:16) says, a "fully specified general equilibrium model for all state-local economies would defy description."

6. For econometric analyses, see esp. Aaron and McGuire (1970), McLure (1972), Maital (1973), Hewitt (1985), Hewitt (1987). Third-world studies conducted in the 1970s are reviewed in de Wulf (1981).
7. On these schools, Seligman (1908:129-302), Musgrave (1959: chaps. 4-5), Musgrave and Peacock (1958), Groves (1974), Blum and Kalven (1963), Witte (1985: chap. 2). Musgrave's revived benefit theory, based on the "voluntary exchange" model developed by Lindahl (in Musgrave and Peacock 1958), is somewhat different from the nineteenth-century versions described in this paper. Claiming that the proliferation of expenditure incidence studies revealed "a near consensus among neoclassical economists" about the measurability of benefit incidence, Meerman (1980:45-46) saw a victory of the nineteenth-century benefit theory over "ability to pay."
8. By "theoretically appropriate format," I mean consistent with the theory of "ability to pay," for reasons that will

be explained in the next two sections of this paper. Others have calculated expenditure incidence results that would be appropriate to a Marxist theory of the state, and it should be stressed that this paper is not so ambitious. Rather than reallocating the components of total fiscal incidence from the existing studies, I will merely take the results as generated in the studies, recalculating them to present them in a manner consistent with "ability to pay." See Peppard (1976), Sawers and Wachtel (1975). Also O'Connor (1973).

9. The misogynistic assumption here -- men contributed more to the family than women -- should be noted. Because it is undoubtedly wrong, as any consideration of working women's "double shifts" would suggest, the family is an unpromising metaphor from which to deduce, as Seligman did, the justice of progressive taxation. In the family, those with greater "faculty" (which Seligman defined as access to economic rewards in the larger society), actually contribute lower proportions of their work effort to family maintenance. The family as a metaphor produces a regressive tax distribution in which, for example, victims of employment discrimination should pay higher rather than lower taxes.
10. Tucker's statistics are not analyzed in this paper because they are not comparable with later studies: while Tucker computed the percentage of total expenditure benefits allocated to each income class, subsequent studies present the benefits as a percentage of income within each class.

11. The dismissal of the measurability of expenditure incidence "in principle" is repeated in Pechman and Okner (1974:3) and Pechman (1985:3).
12. The first spending study (Stauffacher 1941), appeared in the same year, though it considered federal spending only.
13. The material in this paragraph appears in almost every study and in all of the critical literature cited in this paper.
14. Aaron and McGuire (1970) was very influential and generated a great deal of debate, esp. Maital (1973). For more recent contributions, Hewitt (1987) and Hewitt (1985).
15. Meerman (1978) makes this point, suggesting that "public overhead expenditures" be excluded from analysis entirely. Seligman (1926:193-218, 354-83) contrasts "particular" and "general" benefits in great detail, though the distinction appears in his work at least as early as "The Classification of Public Revenues," reprinted in Seligman (1913:399-432).
16. Reynolds and Smolensky (1977:8-9) make this point in regard to the measurement of economic inequality in general, though it obviously applies even more strongly when the focus is directly on government's role.
17. Economists might object that promoting such policies is not their intention, that they use "pro-poor" and "pro-rich" in a purely technical sense. Nevertheless, to describe certain amounts of redistribution as "pro-poor" -- not to mention "optimal" -- is to invoke highly political language and to express an ideological preference that must not be made to

appear an "objective" description of data. Fiscal incidence is inherently political, there is no non-political reason for studying it, and the works reviewed here make policy recommendations based on their findings.

REFERENCES

- Aaron, Henry and McGuire, Martin. 1970. "Public Goods and Income Distribution." Econometrica 38:907-20.
- Adler, John A. 1951. "The Fiscal System, the Distribution of Income, and Public Welfare," with Eugene R. Schlesinger, "Appendix: The Statistical Allocation of Taxes and Expenditures in 1938/39." In Fiscal Policies and the American Economy, ed. Kenyon E. Poole. New York: Prentice-Hall.
- Ando, Albert, Blume, Marshall E., and Friend, Irwin. 1985. The Structure and Reform of the U.S. Tax System. Cambridge: MIT Press.
- Bishop, George A. 1967. Tax Burdens and Benefits of Government Expenditures by Income Class, 1961 and 1965. New York: Tax Foundation.
- Blum, Walter J. and Kalven, Harry Jr. 1963. The Uneasy Case for Progressive Taxation, 2nd ed. Chicago: University of Chicago Press.
- Colm, Gerhard and Tarasov, Helen. 1941. Who Pays the Taxes? Monograph No. 3, Temporary National Economic Committee. Washington: Government Printing Office.
- Conrad, Alfred H. 1954. "Redistribution Through Government Budgets in the United States, 1950." In Income

Redistribution and Social Policy, ed. Alan T. Peacock.

London: Jonathan Cape.

de Wulf, Luc. 1981. "Incidence of Budgetary Outlays: Where Do We Go From Here?" Public Finance 36:55-76.

Eisenstein, Louis. 1961. The Ideologies of Taxation. New York: Ronald Press.

Gillespie, W. Irwin. 1965. "Effects of Public Expenditures on the Distribution of Income." In Essays in Fiscal Federalism, ed. Richard A. Musgrave. Washington: Brookings.

Groves, Harold M. 1974. Tax Philosophers: Two Hundred Years of Thought in Great Britain and the United States. Madison: University of Wisconsin Press.

Hansen, W. Lee and Weisbrod, Burton A. 1969. "The Distribution of Costs and Direct Benefits of Public Higher Education: the Case of California." Journal of Human Resources 4:176-91.

Hewitt, Daniel P. 1987. "The Benefit Incidence of Consumption Public Goods." Public Finance Quarterly 15:138-65.

Hewitt, Daniel P. 1985. "Demand for National Public Goods: Estimates from Surveys." Economic Inquiry 23:487-506.

Le Grand, Julian. 1982. The Strategy of Equality: Redistribution and the Social Services. London: George Allen & Unwin.

Maital, Shlomo. 1973. "Public Goods and Income Distribution: Some Further Results." Econometrica 41:561-68.

McLure, Charles E., Jr. 1972. "The Theory of Expenditure Incidence." Finanzarchiv 30:432-53.

- Meerman, Jacob. 1980. "Are Public Goods Public Goods?" Public Choice 35:45-57.
- Meerman, Jacob. 1978. "Do Empirical Studies of Budget Incidence Make Sense?" Public Finance 33:295-313.
- Mill, John Stuart. 1909. Principles of Political Economy, ed. W.J. Ashley. London: Longmans, Green.
- Minarik, Joseph A. 1985. Making Tax Choices. Washington: Brookings.
- Musgrave, Richard A. 1959. The Theory of Public Finance: A Study in Public Economy. New York: McGraw-Hill.
- Musgrave, Richard A., Case, Karl E., and Leonard Herman. 1974. "The Distribution of Fiscal Burdens and Benefits." Public Finance Quarterly 2:259-95.
- Musgrave, Richard A. and Peacock, Alan T., eds., 1958. Classics in the Theory of Public Finance. London: Macmillan.
- O'Connor, James. 1973. The Fiscal Crisis of the State. New York: St. Martin's.
- Pechman, Joseph A. 1985. Who Paid the Taxes, 1966-85. Washington: Brookings.
- Pechman, Joseph A. and Okner, Benjamin. 1974. Who Bears the Tax Burden? Washington: Brookings.
- Peppard, Donald M., Jr. 1976. "Toward a Radical Theory of Fiscal Incidence." Review of Radical Political Economics 8/4:1-16.
- Phares, Donald. 1980. Who Pays State and Local Taxes? Cambridge: Oelgeschlager, Gunn, and Hain.

- Phillips, Kevin. 1990. The Politics of Rich and Poor: Wealth and the American Electorate in the Reagan Aftermath. New York: Random House.
- Piven, Frances Fox and Cloward, Richard A. 1971. Regulating the Poor: The Functions of Public Welfare. New York: Pantheon.
- Reynolds, Morgan and Smolensky, Eugene. 1977. Public Expenditures, Taxes, and the Distribution of Income: The United States, 1950, 1961, 1970. New York: Academic Press.
- Ruggles, Patricia and O'Higgins, Michael. 1981. "The Distribution of Public Expenditures Among Households in the United States." Review of Income and Wealth 27:137-64.
- Sawers, Larry and Wachtel, Howard M. 1975. "Theory of the State, Government Tax and Purchasing Policy, and Income Distribution." Review of Income and Wealth 21:111-24.
- Seligman, Edwin R.A. 1926. "The Social Theory of Fiscal Science." Political Science Quarterly 41:193-218, 354-83.
- Seligman, Edwin R.A. 1913. Essays in Taxation, 8th ed. New York: Macmillan.
- Seligman, Edwin R.A. 1908. Progressive Taxation in Theory and Practice, 2nd. ed. Princeton: American Economic Association Quarterly, 3rd. ser., vol. 10, no. 4.
- Simons, Henry C. 1938. Personal Income Taxation. Chicago: University of Chicago Press.
- Stauffacher, Charles. 1941. "The Effect of Governmental Expenditures and Tax Withdrawals Upon Income Distribution,

1930-1939. In Public Policy. Cambridge: Graduate School of Public Administration, Harvard University.

Thurrow, Lester C. 1975. "The Economics of Public Finance." National Tax Journal 28:185-94.

Tucker, Rufus S. 1953. "The Distribution of Government Burdens and Benefits." With Discussion: Harold Groves, Earl Rolph, and Richard Goode. American Economic Review, Papers and Proceedings. 43:518-43.

Witte, John F. 1985. The Politics and Development of the Federal Income Tax. Madison: University of Wisconsin Press.

U.C. BERKELEY LIBRARIES



C098095215