Theories of Personal Deductions in the Income Tax

by

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Personal deductions have an enormous impact on the revenues raised by the federal income tax. The medical deduction and the exclusion of employer-provided health insurance alone are estimated to reduce tax revenues by nearly thirty billion dollars annually.1 Additional billions of dollars of potential tax receipts are lost by allowing deductions for charitable contributions, nonbusiness state and local taxes, and interest on owner-occupied dwellings.2 It is not surprising, then, that personal deductions have been a popular subject of tax scholarship. Though much of the tax literature in this area focuses on the merits of particular code provisions, some scholars have offered more general theories of the appropriate role of personal deductions in an income tax. Three of these theories are particularly important.

The tax expenditure model advocated by the late Stanley Surrey is, perhaps, the most prominent theory.3 The tax expenditure model treats

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1. For fiscal year 1987, revenue losses from the exclusion of employer-provided health insurance were estimated at $23.3 billion and from the deduction for medical expenses at $3.1 billion. BUDGET OF THE UNITED STATES GOVERNMENT, 1988, SPECIAL ANALYSIS G, at 45 (1987) [hereinafter 1988 SPECIAL ANALYSIS G].

2. The revenue losses from the deduction for charitable contributions were estimated at $11.1 billion ($870 million for education, $1.27 billion for health, and $9 billion for other charities), the losses from the deduction for nonbusiness state and local taxes (other than taxes on owner-occupied housing) were estimated at $18.8 billion, and the losses from the mortgage interest deduction on owner-occupied dwellings were estimated at $24.9 billion. Id. at 43-46.

3. Surrey, as Assistant Secretary of the Treasury for Tax Policy from 1961 through 1969, urged the development of the tax expenditure concept by the Treasury and oversaw the calculation of the first “tax expenditure budget” for fiscal year 1968. After leaving the Treasury, Surrey joined the faculty of Harvard Law School and wrote a series of articles and books,
personal deductions and other departures from the Surrey-defined "normal" tax base—a variant of net income—as equivalent to direct government expenditures. Surrey argues that these tax expenditures should be evaluated by the same standards as direct government outlays. Applying these standards, Surrey concludes that most tax expenditures are undesirable because they provide fewer benefits to the poor than to the rich, who are subject to higher marginal rates and thus are better able to use the deductions.

A second theory of personal deductions is offered by Professor William Andrews. Like the tax expenditure model, the Andrews model assumes that an ideal tax base exists, and that it is useful to judge departures from that base as direct government expenditures. The Andrews model, however, argues that the ideal base is "personal consumption and accumulation of real goods and services" rather than net income. The Andrews model then defines personal consumption in a way that excludes from taxation the amounts spent on medical expenses.


Although the popularization of the tax expenditure concept was due in large part to the efforts of Surrey, the idea that tax preferences act much like direct subsidies was voiced by tax scholars as early as the 1960s. See, e.g., Blum, The Effects of Special Provisions in the Income Tax on Taxpayer Morale, in Staff of the Joint Committee on the Economic Report, 84th Cong., 1st Sess., Federal Tax Policy for Economic Growth and Stability 251, 252 (Comm. Print 1955); Heller, Some Observations on the Role and Reform of the Federal Income Tax, in House Comm. on Ways and Means, Tax Revision Compendium, 86th Cong., 1st Sess. 181, 190 (1959); Van Alstyne, Tax Exemption of Church Property, 20 Ohio St. L.J. 461 (1959).

4. Pathways, supra note 3, at 3.
5. Id. at 35-36; Tax Expenditures, supra note 3, at 1.
6. Speech by Professor Surrey, Money Marketeers (Nov. 15, 1967), cited in Pathways, supra note 3, at 35-40; Tax Expenditures, supra note 3, at 72-82.
8. Id. at 313.
and charitable contributions.\textsuperscript{9}

A third theory of personal deductions is suggested by Professor Mark Kelman.\textsuperscript{10} The Kelman model, like the Surrey model, adopts net income as the ideal tax base. Kelman argues that such a base would both reflect differences in earnings capacity and respect decisions not to exercise that capacity.\textsuperscript{11} Under this base, as under the tax expenditure model, medical and charitable deductions are inappropriate.

While these models differ in several important respects, they share a critical flaw: none is grounded on a coherent normative principle. This Article describes each model and attempts to discern its underlying ethical basis. The Article then presents a model that evaluates alternative tax treatments of the personal deduction for medical expenses under two normative principles—utilitarianism and a variant of the "Rawlsian" maximin principle. Finally, the Article concludes that a satisfactory tax policy must make its underlying ethical assumptions and distributional goals explicit.

I. Personal Deductions as Direct Government Expenditures: Surrey's Tax Expenditure Model and Upside-Down Subsidies

A. Overview of the Surrey Tax Expenditure Model

Stanley Surrey's tax expenditure model begins with the notion that the income tax can be divided into two distinct elements. The first element consists of the "structural provisions" needed to implement what Surrey calls the "normal tax structure."\textsuperscript{12} These provisions include the rate structure, personal exemptions, and the choice of accounting period and taxable unit.\textsuperscript{13} The second element is comprised of "special preferences." These are "departures from the normal tax structure" that are "designed to favor a particular industry, activity, or class of persons."\textsuperscript{14}

\textsuperscript{9} Id. at 314-15.

\textsuperscript{10} Kelman, Personal Deductions Revisited: Why They Fit Poorly in an "Ideal" Income Tax and Why They Fit Worse in a Far from Ideal World, 31 STAN. L. REV. 831 (1979). Kelman's article is structured as a lengthy and highly critical examination of Andrews' theory of personal deductions, rather than an explication of his own model. Thus, his model is not as fully developed as those of Surrey and Andrews.

\textsuperscript{11} Id. at 835.

\textsuperscript{12} Surrey sometimes uses the term "normative tax" interchangeably with "normal tax." See, e.g., Tax Expenditure Concept, supra note 3, at 683. For clarity, this Article will use only the term "normal tax" to describe Surrey's conception of the ideal tax base.

\textsuperscript{13} PATHWAYS, supra note 3, at 15-24; TAX EXPENDITURES, supra note 3, at 3.

\textsuperscript{14} TAX EXPENDITURES, supra note 3, at 3; see also PATHWAYS, supra note 3, at 6-14 (discussing the theoretical background of the tax expenditure budget).
The special preferences include the deductions for medical expenses, charitable contributions, and casualty losses, and the exclusion for employer-paid medical insurance premiums. 15

The tax expenditure model calls departures from the so-called normal tax structure "tax expenditures" to indicate that they are equivalent to direct government outlays. 16 Beneficiaries of a tax preference are viewed as having paid the taxes owed under the "normal structure" and then as having received a government appropriation equal to the amount of the tax reduction due to the preference. 17

The Surrey tax expenditure model's conception of the underlying normal structure of the United States tax system is a modified version of the Haig-Simons concept of income, which measures income as consumption, plus the net change in wealth during a specified time period. 18

Under the Haig-Simons definition, income includes all expenditures other than the costs of producing income. 19 Haig-Simons income thus includes many items not taxable under the Internal Revenue Code, such as gifts received, employer-provided health and pension plans, unrealized appreciation of property, imputed income from property, and the full amount of social security, welfare, and other transfer payments. 20

The Surrey tax expenditure model's "normal tax base" modifies Haig-Simons income to reflect certain "generally accepted" concepts of taxation, such as the nontaxation of unrealized appreciation in property and the exclusion from income of imputed income from owner-occupied homes and other property. 21 It is not clear, however, why these provisions are deemed part of the "generally accepted" tax structure, while other equally long-standing provisions, such as the charitable deduction and the exclusion for interest on municipal bonds, are deemed tax...

15. See Tax Expenditures, supra note 3, at 6-25 (listing tax expenditures).
16. Id. at 25.
18. Tax Expenditures, supra note 3, at 4; see also R. Haig, The Concept of Income—Economic and Legal Aspects, reprinted in The Federal Income Tax 7 (R. Haig ed. 1921) (defining income as "money value of the net accretion to one's economic power"); H. Simons, Personal Income Taxation 50 (1938) (defining personal income as consumption plus net change in wealth). Surrey used the term "Schanz-Haig-Simons" in recognition of the contributions of German economist George von Schanz. This Article uses the more conventional term "Haig-Simons." For a discussion of the work of von Schanz and other early German scholars on the concept of economic income, see H. Simons, supra, at 60-79.
20. H. Simons, supra note 18, at 47, 56.
21. Tax Expenditures, supra note 3, at 4, 188.
preferences.22

The normal tax base also reflects legislative choices regarding the proper taxable unit, the rate structure, and the choice of an integrated or unintegrated system of corporate taxation.23 Although these legislative choices are not determined by Haig-Simons income, once the choices have been made, departures from them are considered tax expenditures.24 Finally, the normal tax structure embraces standard financial accounting practices, modified to reflect certain tax accounting principles, such as those that mitigate the impact of the annual accounting period.25

Lying outside the normal tax structure are “special preferences” that the model designates as tax expenditures. These “special preferences” fall into two categories: “tax incentives” and “hardship relief.”26 A tax incentive seeks to change a taxpayer’s behavior, while hardship relief helps to reduce the impact of a taxpayer’s misfortune. For example, the research tax credit is a tax incentive because it is intended to promote increased research.27 The medical deduction, on the other hand, is better characterized as hardship relief because it is designed to reduce the tax burden on individuals who have suffered high medical expenses.28 A general rate reduction, however, is viewed as neither a tax incentive nor hardship relief—even if it is designed to reduce the tax burden on the poor or to stimulate economic growth—and thus is not characterized as a tax expenditure at all.29

22. Id. at 6-25.
23. Id. at 3, 184-92.
24. Id. at 191-93.
25. Id. at 4, 188-90. Deviations from financial accounting that Surrey does not classify as tax expenditures include loss carrybacks and carryforwards, and the special treatment of the reporting of installment sales. Id. at 189-90.
26. Emerging Issues, supra note 3, at 228.
28. I.R.C. § 213. When originally enacted in 1942, the medical deduction was justified as much as a tax incentive as it was a hardship relief provision. The deduction was recommended “in consideration of the heavy tax burden” borne by individuals during the war and in light of “the desirability of maintaining the present high level of public health and morale.” S. Rep. No. 1631, 77th Cong., 2d Sess. 6 (1942). The original deduction was available for expenses that exceeded 5% of net income, but was limited to a total of $2500 in the case of a joint return or head of a family, and $1250 in the case of an individual. Id. at 95. These limitations were changed by the Internal Revenue Act of 1954 because it was recognized that they sometimes prevented the deduction of “extraordinary” medical expenses and thereby created a hardship. H.R. Rep. No. 1337, 83d Cong., 2d Sess. 30 (1954).
29. TAX EXPENDITURES, supra note 3, at 4, 220-22. Professor Bittker argues that consistent application of tax expenditure analysis would require that general rate reductions implemented to further government policies such as higher economic growth be included in the list of tax expenditures. Bittker, Accounting for Federal “Tax Subsidies” in the National Budget,
There are two methods for estimating the dollar amounts of tax expenditures. The "revenue loss" method calculates the difference between the amount of revenue raised by a rate structure that includes the tax preference, and the amount that would be raised by that same rate structure if the preference were eliminated. This method was adopted in the first tax expenditure budget prepared by the Treasury and is still used in tax expenditure budgets calculated by the Joint Committee on Taxation. The second method for calculating the dollar amounts of tax expenditures is the "outlay equivalent" method, which was adopted by the Treasury beginning with its tax expenditure budget for fiscal year 1983. This approach calculates the amount that the federal government would be required to spend to duplicate the effect of tax preferences through direct outlays.

Amounts calculated under the outlay equivalent method generally are higher than those determined under the revenue loss method. This is because an individual who receives funds as direct outlays usually must pay tax on those funds, while an individual whose after-tax income increases because of a deduction or credit pays no tax on that increase.

For example, consider a tax preference that decreases an individual's tax


Surrey argues that definitional problems involve only "borderline situations" and do not represent a fundamental problem with tax expenditure analysis. Emerging Issues, supra note 3, at 236-38; see also Davenport, Tax Expenditure Analysis as a Tool for Policymakers, 11 Tax Notes 1051, 1052 (1980) (evaluating the appropriateness of the term "tax expenditure"); Shoup, Surrey's Pathways to Tax Reform—A Review Article, 30 J. Fin. 1329, 1334 (1975) (arguing that the apparent differences between the views of Bittker, Surrey, and Hellmuth on "full" or "complete" accounting are not as major as their writings suggest). This may be plausible with respect to certain items, such as the personal injury exclusion, but the question of the proper treatment of matters, such as imputed income and the rate structure, involves more than borderline questions.


assessments by $50. Under the revenue loss method the tax expenditure for the preference is $50. If the individual were in the 28% bracket, however, a $50 direct outlay would only net $36 after the payment of taxes.\textsuperscript{34} To generate a $50 benefit after the payment of taxes, a direct government expenditure of $69.44 would be required.\textsuperscript{35} Thus, under the outlay equivalent method $69.44 is the amount of the tax expenditure.

The distributional impact of a tax preference can also be estimated using these two methods. Under the revenue loss method each income class is deemed to have been allocated funds in the amount that its tax liability is reduced by the preference. Under the outlay equivalent method each class is deemed to receive the amount that the government would have been required to spend to duplicate the benefit of the preference.\textsuperscript{36}

Amounts calculated under either method are only rough estimates. They do not consider, for example, either changes in the behavior of taxpayers in response to the tax law or the impact of the tax code on economic growth.\textsuperscript{37} Moreover, the amount of each tax expenditure is determined by assessing the revenue gains that would result from eliminating the expenditure if the rest of the code were kept unchanged. Thus, the impact of the simultaneous elimination of several tax expenditures cannot be determined simply by summing the revenue losses associated with each expenditure.\textsuperscript{38}

\section*{B. Influence of the Tax Expenditure Model}

The tax expenditure model has had a significant impact on the formulation of tax policy.\textsuperscript{39} After the publication of the first tax expenditure budget for fiscal year 1968,\textsuperscript{40} tax expenditure budgets continued to

\begin{itemize}
\item 34. $0.28 \times $50 = $14. $50 - $14 = $36.$
\item 35. $0.28 \times $69.44 = $19.44. $69.44 - $19.44 = $50.$
\item 36. \textit{See Tax Expenditures, supra note 3, at 248 n.2. A recent calculation of the distribution of tax expenditures by income class is contained in JCT 1988-1992 Estimates, supra note 30, at 18-22.}
\item 40. 1968 Treasury Report, supra note 31, at 322-40.
\end{itemize}
be prepared by the Treasury and by the Joint Committee on Taxation. In 1974, Congress enacted a law directing the President to report on tax expenditures in the annual budget and requiring congressional committees to provide estimates of tax expenditures in any tax bill they report. The Treasury continues to prepare tax expenditure budgets as a part of the annual budget process, and tax expenditure budgets also are prepared by the Joint Committee on Taxation. The tax expenditure model also has had an impact in the academic world. Tax scholars frequently apply the tax expenditure model in their analysis of individual code provisions, and the concept has become a staple of the law school tax curriculum. Additionally, the tax expenditure concept has been influential internationally. In 1983, ten countries, besides the United States, had adopted tax expenditure budgets.

The tax expenditure model, however, has not been without controversy. For instance, the Treasury Department under President Reagan was skeptical about the tax expenditure concept. In the tax expenditure budget for fiscal year 1983, the Treasury adopted a new definition of tax expenditures that was substantially narrower than that used by Surrey. The Reagan Treasury defined tax expenditures as code provisions


43. See 1988 SPECIAL ANALYSIS G, supra note 1, at G-1.


46. See generally INTERNATIONAL ASPECTS OF TAX EXPENDITURES: A COMPARATIVE STUDY 3-4 (P. McDaniel & S. Surrey eds. 1985) (containing tax expenditure lists from five other countries: Canada, France, the Netherlands, Sweden, and the United Kingdom).

47. See McIntyre, How to Identify Tax-Based Spending Programs, 14 TAX NOTES 91, 91-94 (1982). For a critique of the tax expenditure concept by the Reagan Treasury Department, see 1983 SPECIAL ANALYSIS G, supra note 32, at 3-5.

that are exceptions to an enacted general tax rule, called the "reference tax law," and are applicable to a class of transactions that are narrow enough to be replaced by direct expenditure programs administered by a federal agency other than the Internal Revenue Service.\textsuperscript{50} The immediate impact of this new definition was to exclude the rapid depreciation authorized by the Accelerated Cost Recovery System (ACRS) from the list of tax expenditures, since ACRS was categorized as a general tax rule. The removal of ACRS from the list of tax expenditures reduced, by billions of dollars, the amounts in the tax expenditure budget listed as outlays to support business.\textsuperscript{51}

The theoretical implications of the reference law definition of tax expenditures are even more significant. The Surrey tax expenditure model posits an ideal tax structure, based on Haig-Simons income, which is largely independent of the particular code provisions enacted by Congress.\textsuperscript{52} In adopting the reference law approach, the Treasury specifically abandoned the notion of an ideal baseline tax structure, stating that "there is no common agreement" on the appropriate standard.\textsuperscript{53} Thus, the categorization of a code provision as a tax expenditure under the reference law approach has little prescriptive force, because under this approach the provision is not deemed a departure from an ideal tax base. The reference law approach, then, is more appropriately viewed as a rejection of the Surrey tax expenditure model than a refinement of it.\textsuperscript{54}

The debate over the proper role of the tax expenditure concept, however, continues within the federal government. The tax expenditure

\textsuperscript{50} 1988 SPECIAL ANALYSIS G, supra note 1, at 4; 1983 SPECIAL ANALYSIS G, supra note 32, at 5-8.

\textsuperscript{51} In 1983 the revenue cost of the Accelerated Cost Recovery System was estimated at $12.67 billion. 1983 SPECIAL ANALYSIS G, supra note 32, at 7. The Surrey tax expenditure model uses economic depreciation as the normal tax base. As a proxy for economic depreciation, Surrey also accepts the declining balance method for machinery and equipment, and the straight line method for real estate. TAX EXPENDITURES, supra note 3, at 209-11.

The reference law approach also eliminated from tax expenditure treatment other items such as the graduated corporate rate structure, the maximum tax on earned income, and the exclusion from income of government transfer payments. 1983 SPECIAL ANALYSIS G, supra note 32, at 6.

\textsuperscript{52} Surrey adopted an approach similar to the reference law approach when he found the Haig-Simons concept silent on a point. Surrey viewed the choice between an integrated or unintegrated corporate tax, for example, as a matter of arbitrary legislative choice. He argued, however, that once a choice is made, departures from it are tax expenditures. TAX EXPENDITURES, supra note 3, at 4.

\textsuperscript{53} 1983 SPECIAL ANALYSIS G, supra note 32, at 4.

\textsuperscript{54} Surrey and McDaniel explicitly rejected the reference law approach as "highly idiosyncratic" and "inconsistent with tax theory." TAX EXPENDITURES, supra note 3, at 194-96; see also How to Identify Them, supra note 3, at 597-99 (arguing that the reference approach is not a useful standard).
budgets of the Joint Committee on Taxation have not adopted the reference law approach and continue to use a modified version of Haig-Simons income as a baseline tax structure.\(^5\) Beginning with the tax expenditure budget for fiscal year 1985, the Treasury has calculated tax expenditures using both the reference law and the Surrey normal tax approaches.\(^6\) In addition, the Treasury is currently conducting a general review of the tax expenditure concept.\(^7\)

Despite these challenges, the Surrey tax expenditure model remains the dominant method of tax expenditure analysis.\(^8\) Moreover, the tax expenditure's view of personal deductions as departures from an ideal tax base make it particularly influential in the formulation of tax policy.

C. Tax Expenditures as Upside-Down Subsidies

The characterization of a code provision as a tax expenditure has a profound effect on the standard by which the provision is judged. Although Surrey claims that classifying a code provision as a tax expenditure is not pejorative,\(^9\) tax expenditure supporters reject almost all such provisions. The primary reason is simple: a disproportionate share of the benefits of most code provisions that are classified as tax expenditures accrue to high income individuals.\(^10\)

The skewed distribution of the benefits of tax preferences is not difficult to explain. High income individuals are better able to take advantage of certain deductions and exclusions than are low income individuals. For example, the interest exemption for state and local bonds can only be used by individuals with funds available for investment. Similarly, the deduction for state and local income and property taxes is most valuable to individuals with substantial amounts of income and property.\(^11\) Moreover, many low income taxpayers get no benefit at

\(^7\) 1988 SPECIAL ANALYSIS G, supra note 1, at 2.
\(^8\) Tax casebooks, for example, generally refer to the Surrey model in their discussion of tax expenditure analysis. See sources cited supra note 46.
\(^9\) TAX EXPENDITURES, supra note 3, at 5; Tax Expenditure Concept, supra note 3, at 685 n.12; see also JCT 1988-1992 ESTIMATES, supra note 30, at 3 (listing items as tax expenditures is no judgment of their desirability in terms of public policy).
\(^10\) PATHWAYS, supra note 3, at 35-40, 50-72; TAX EXPENDITURES, supra note 3, at 71-82; Manvel, Tax Expenditures by Income Class, 7 TAX NOTES 55 (1978).
\(^11\) In 1977, for example, the United States Treasury Department calculated that the top 1.4% of taxpayers received 85.4% of the benefits from the exclusion of interest on state and local bonds and the top 16.5% of taxpayers received 85% of the benefits from the deduction of state and local taxes. Emerging Issues, supra note 3, at 368 app. B. A 1982 Treasury study calculated that the top 4.4% of taxpayers received 94.1% of the benefits from the exclusion of
all from personal deductions because their total deductions do not exceed the amount of the standard deduction.62 Most important, under a progressive rate structure a deduction or exclusion of a given amount has a greater dollar value to the rich than to the poor because the rich are subject to higher marginal rates.63 Thus, according to tax expenditure analysis, even deductions and exclusions that are used heavily by individuals in all income classes undermine the goal of progressivity.64

The following example illustrates how the progressive rate structure causes tax expenditures to be distributed disproportionately to the rich. Consider a high income taxpayer subject to a 28% marginal tax rate and a low income taxpayer subject to a 15% marginal rate. Each incurs $1000 of deductible medical expenses. The $1000 deduction is worth $280 to the high income taxpayer, but only $150 to the low income taxpayer. Surrey argues that such an "upside down subsidy" would never be enacted by Congress as a direct outlay. He writes:

It is clear, then, that most tax incentives have decidedly adverse effects on equity as between taxpayers at the same income level, and also, with respect to the individual income tax, between taxpayers at different income levels. As a consequence of these inequitable effects, many tax incentives look, and are, highly irrational when phrased as direct expenditure programs structured the same way. Indeed, it is doubtful that most of our existing tax incentives would have been introduced, let alone accepted, if so structured, and many would be laughed out of interest on state and local bonds. TAX EXPENDITURES, supra note 3, at 72. The Joint Committee on Taxation's calculation of the distribution of selected individual tax expenditures by income class, at 1988 rates and income levels, found that the top 2% of taxpayers (with incomes over $100,000) received about 43% of the benefits ($7009 of $16,053 million total) of the state and local income tax deduction and 22% of the benefits ($6134 of $27,726 million) of the home mortgage interest deduction. By comparison, the top 2% of taxpayers receive only 1.7% ($59 of $3458 million) of the benefits from the child care credit. JCT 1988-1992 ESTIMATES, supra note 30, at 20-22 (percentages calculated from dollar estimates in Table 3).

62. TAX EXPENDITURES, supra note 3, at 77. For taxable years on or after January 1, 1988, the standard deduction is $5000 for married individuals filing jointly and for surviving spouses, $4400 for heads of households, $3000 for single individuals, and $2500 for married individuals filing separately. I.R.C. § 63(c)(2) (1988).

63. PATHWAYS, supra note 3, at 36; TAX EXPENDITURES, supra note 3, at 77-79. For taxable years beginning after January 1, 1987, married individuals filing joint returns and surviving spouses are subject to a 15% rate on taxable income up to $29,750 and a 28% rate on the excess over $29,750. I.R.C. § 1(a). For unmarried individuals (other than surviving spouses and heads of households) the 15% rate is applied to taxable income up to $17,850 and the 28% rate to additional income. I.R.C. § 1(c). A 5% surcharge is applied to each rate schedule for certain high income taxpayers. I.R.C. § 1(g).

64. For example, the additional personal exemption for the blind and the aged, now replaced with an additional standard deduction, each provided over 10% of their benefits to individuals with incomes in the top 1.4% of the population. See Emerging Issues, supra note 3, at 366-67 (citing 1977 Treasury Department figures).
Congress. 65

Surrey goes on to discuss a proposed amendment to the code which would eliminate the floor, then 3% of adjusted gross income, under the medical deduction for the aged.

What HEW Secretary would propose a medical assistance program for the aged that cost $200 million, and under which $90 million would go to persons with income over $50,000, and only $8 million to persons with incomes under $5000? The tax proposal to remove the 3 percent floor under the medical expense deductions of persons over age 65 would have had just that effect. 66

Little wonder, then, that Surrey asserts that both "horizontal" and "vertical" equity would be improved if all tax expenditures were eliminated from the code. 67

Why, then, are tax expenditures enacted? Surrey can find no legitimate policy objective and so attributes their existence either to a failure of legislators to understand the tax expenditure concept or to undue influence of special interest groups. 68 If this analysis is valid, it presents a strong case for the elimination of virtually all tax preferences. Before accepting this conclusion, however, a closer examination of the upside-down subsidy argument is necessary.

As stated previously, much of the upside-down subsidy effect of tax preferences results from the higher marginal rates imposed on the wealthy under a progressive rate structure. This leads to the curious result that an increase in the marginal tax rate on the rich increases their share of the tax expenditure budget. 69 Conversely, a shift towards a flat rate or regressive tax structure reduces tax expenditures benefiting the

65. PATHWAYS, supra note 3, at 136.
66. Id. An estimate of the distributional consequences of the medical deduction under 1988 tax law found that the top 2% of taxpayers received approximately 20% ($443 of $2161 million) of the tax savings from the deduction. JCT 1988-1992 ESTIMATES, supra note 30, at 19.
67. Emerging Issues, supra note 3, at 255. Tax credits appear to avoid the upside down subsidy problem because they reduce the tax burden of the rich and the poor by the same dollar amount. If, for example, a 28% bracket taxpayer and a 15% bracket taxpayer each incur $1000 of medical expenses, a 20% tax credit will reduce the tax burden of each by $200. Nevertheless, tax expenditure analysis finds tax credits to provide greater benefits to the rich than to the poor because amounts received as tax credits are exempt from taxation and this exemption is worth more to individuals in higher tax brackets. A $100 tax credit, for example, would have the same value to a 28% taxpayer as a taxable grant of $138.89 (0.28 x $138.89 = $38.89; $138.89 - $38.89 = $100). For a 15% taxpayer, however, a $100 tax credit would be equivalent to a taxable grant of only $117.65 (0.15 x $117.65 = $17.65; $117.65 - $17.65 = $100). See Tax Expenditure Concept, supra note 3, at 693 n.43.
69. If the marginal rate on the wealthy is 28%, a $1000 tax deduction would represent a
The distribution of tax expenditures, therefore, offers little guidance regarding the degree to which the overall tax system benefits the wealthy.

Nevertheless, supporters of the tax expenditure model argue that once a progressive rate structure is established, tax deductions and exclusions will undermine its progressivity because a tax deduction or exclusion reduces taxes on the rich by a larger dollar amount than it reduces taxes on the poor. Whether this actually undermines progressivity, however, depends upon how progressivity is measured.

Consider, for example, a society in which there are two income classes with equal numbers in each class. The "poor" have an income of $20,000 and the "rich" have an income of $80,000. Assume that a tax of 20% is imposed on all taxable income up to $20,000, that a tax of 40% is imposed on all income greater than $20,000, and that all individuals spend $4000 per year for medical care.

If no medical deduction is allowed, the poor would pay a tax of $4000\(^{71}\) and the rich a tax of $28,000\(^{72}\). Adoption of a deduction for medical expenses lowers the taxable income of both the rich and the poor by $4000, reducing the tax on the rich by $1600\(^{73}\) and the poor by $800.\(^{74}\) Thus, the deduction has a greater dollar value to the rich than to the poor and is viewed under tax expenditure analysis as an upside-down subsidy, which undermines the progressivity of the rate structure.\(^{75}\) This assertion assumes, however, that the proper measure of progressivity is the difference in the absolute amounts of tax paid by the rich and the poor or, equivalently, the dollar gap in their after-tax incomes. In this example, the introduction of a medical deduction reduces the tax burden of the rich by $800 more than it cuts the tax burden of the poor and thus increases the absolute size of the gap in after-tax incomes between the two classes by $800.

There are alternative ways, however, to judge the progressivity of a tax structure. One could instead look at the relative amounts of tax paid by the rich and the poor. If no medical deduction is allowed in the above example, the tax liability of the rich is 7 times as great as the tax burden of $280 (0.28 × $1000 = $280). If the tax rate on the wealthy is increased to 50%, the tax expenditure increases to $500 (0.50 × $1000 = $500).

70. In the extreme case, if all income above a certain level is exempt from taxation, the stated tax expenditures on the highest income individuals will be zero.
71. 0.2 × $20,000 = $4000.
72. (0.2 × $20,000) + (0.4 × $60,000) = $28,000.
73. 0.4 × $4000 = $1600.
74. 0.2 × $4000 = $800.
75. PATHWAYS, supra note 3, at 136; TAX EXPENDITURES, supra note 3, at 71-82.
of the poor, but if a medical deduction is permitted the wealthy must pay 8.25 times as much tax as the poor.

Allowing a medical deduction has a similar impact on the average tax rates of the rich and the poor. Without a medical deduction the average tax rate on the poor is 20% and the average tax rate on the rich is 35%. Allowing a medical deduction reduces the average rate on the rich by only 2 percentage points to 33%, while it decreases the average tax rate on the poor by 4 percentage points to 16%. The medical deduction thus lowers the average tax rate paid by the poor as a percentage of the average tax rate paid by the rich from 57% to about 48%.

Perhaps the best way of measuring the progressivity of a tax provision is to examine its impact on the after-tax distribution of income. One might look at, for example, the ratio between the after-tax income of the wealthy and the after-tax income of the poor. If no medical deduction is allowed, the rich will have $52,000 of after-tax income and the poor will have $16,000. This leaves the rich with 3.25 times as much after-tax income as the poor. If a medical deduction is permitted, the rich will have $53,600 of after-tax income and the poor will have $16,800, leaving the rich with about 3.19 times the after-tax income of the poor.

The most common measure of the degree of inequality in an income distribution is the Gini coefficient. The Gini coefficient is equal to one-half the expected difference between the incomes of two randomly selected individuals as a proportion of mean income. Thus, a Gini coefficient of 0.25 indicates that the expected difference between the incomes of two individuals selected at random is equal to 50% of mean income, and a Gini coefficient of zero indicates complete equality of income. The Gini coefficient of the pre-tax distribution of income in a society with two equal-sized classes with incomes of $20,000 and $80,000 is

76. $28,000/$4000 = 7.
77. $26,400/$3200 = 8.25.
78. $4000/$20,000 = 20%.
79. $28,000/$80,000 = 35%.
80. $26,400/$80,000 = 33%.
81. $3200/$20,000 = 16%.
82. 20%/35% = 57.1%; 16%/33% = 48.5%.
83. $80,000 - $28,000 = $52,000.
84. $20,000 - $4000 = $16,000.
85. $52,000/$16,000 = 3.25.
86. $80,000 - $26,400 = $53,600.
87. $20,000 - $3200 = $16,800.
88. $53,600/$16,800 = 3.19.
89. A. Atkinson, The Economics of Inequality 53 (2d ed. 1983).
90. Id.
0.3. The income tax described above without a medical deduction lowers the income of the rich and the poor to $52,000 and $16,000, respectively, and reduces inequality as measured by the Gini coefficient to 0.265. Allowing a medical deduction increases the after-tax incomes of the rich and the poor to $53,600 and $16,800, respectively, and lowers the Gini coefficient further to 0.261, indicating a greater reduction in inequality.

Thus, under each of these relative measures of inequality, the medical deduction increases the progressivity of the tax system despite the higher dollar value of the deduction to the rich. Progressivity is increased because the tax saved by individuals as a result of the adoption of a medical deduction is distributed more equally than income generally. In the above example, the rich enjoyed 3.25 times the after-tax income of the poor under a tax system without a medical deduction. Allowing a deduction that increases the income of the rich by only two times as much as the income of the poor reduces the relative inequality of the after-tax income distribution.

It is possible, of course, for a tax preference to make the relative distribution of after-tax income less equal. A preference that is used primarily by the wealthy, such as the interest exclusion for state and local bonds, is likely to reduce the progressivity of the tax system under any plausible measure. It is unlikely, however, that such provisions are so prevalent in the code that the overall impact of tax deductions and exclusions is regressive. A recent study that examined the impact of tax ex-

91. If two people are chosen at random from this population, there is a 50% chance of an income disparity of $60,000 and a 50% chance of an income disparity of zero. Thus, the expected disparity is $30,000. The mean income is $50,000. $30,000/$50,000 = 0.6. One-half of 0.6 = 0.3, the Gini coefficient.

92. Expected difference in income is $18,000: (0.5 × $36,000) + (0.5 × 0). Mean after-tax income is $34,000. $18,000/$34,000 = 0.529; 0.5 × 0.529 = 0.265.

93. Expected difference in income is $18,400: (0.5 × $36,800) + (0.5 × 0). Mean after-tax income is $35,200. $18,400/$35,200 = 0.523; 0.5 × 0.523 = 0.261.

94. Similar results are obtained with other measures of inequality, such as the coefficient of variation—the standard deviation divided by the mean—and the variance of the logarithms of incomes. In this example, the introduction of a medical deduction lowers the coefficient of variation from 0.529 to 0.523 and lowers the variance of the logarithms of incomes from 0.066 to 0.063. For a discussion of various summary measures of inequality, see J. Meade, The Just Economy 112-35 (1976).

95. See Kelman, supra note 10, at 871-72 n.122 (showing that a deduction that is used equally by the rich and the poor increases progressivity).

96. The value of tax benefits from investments may be capitalized, reducing or eliminating the relative advantage of those investments. Thus, the nominal benefit of the interest exclusion for state and local debt instruments may be reduced substantially by the lower interest rate paid on those instruments. See Bittker, Equity, Efficiency and Income Tax Theory: Do Misallocations Drive Out Inequities?, 16 San Diego L. Rev. 735, 739-42 (1979).
penditures in the 1979 and 1983 tax codes found that if all tax rates were reduced by the same percentage, keeping total tax revenues the same, then the elimination of all or most tax expenditures would make the after-tax distribution of income less equal. The elimination of tax preferences reduced inequality only if aggregate tax revenues were kept unchanged by measures that focused relief on the lower income classes, such as an increase in the standard deduction.

The determination of the impact of a tax change on progressivity also requires examining the effect of the change on government expenditures. The implementation of a medical deduction without an offsetting change in the rate structure would reduce tax revenues so that the government could provide fewer public services. A complete analysis of the impact of the medical deduction, therefore, must take into account the distributional impact of these cuts.

Ultimately, the broad assertion of tax expenditure analysis that tax deductions and exclusions undermine progressivity is not substantiated. Even so, a narrower claim might be made that such deductions and exclusions are less progressive than alternatives, such as direct expenditures or tax credits with values that do not vary with the recipient's marginal rate. The argument that direct outlays or tax credits would result in a more progressive tax structure, however, assumes that the nominal rate structure alone reflects the appropriate distribution of the tax burden. Under this view, the elimination of tax deductions would not lead to a change in the underlying rate structure, but would simply implement the level of progressivity that Congress had intended all along. This argument, however, ignores the fact that the same Congress that enacted the rate structure also enacted the deductions. It is hard to see why the rate structure alone represents the legislature's view of the appropriate level of redistribution.

Surrey suggests that tax deductions and exclusions may be the unin-
tended result of a failure to understand the tax expenditure concept.\textsuperscript{103} The very success of the tax expenditure concept, however, makes this a tenuous position. Tax expenditure budgets are prepared annually at the direction of Congress, and the revenue cost and distributional impact of tax expenditures are calculated for new tax legislation and routinely debated on the House and Senate floors.\textsuperscript{104} Moreover, the history of the Tax Reform Act of 1986 suggests that Congress understands the distributional impact of tax preferences. In the debates leading up to the Act, Congress explicitly decided to adjust the rate structure, not only to keep total tax revenues constant, but also to keep the distribution of the tax burden among income classes essentially unchanged.\textsuperscript{105} Thus, the elimination of the capital gains exclusion and other tax preferences that had been enjoyed primarily by the wealthy\textsuperscript{106} was coupled with a sharp reduction in the top marginal rate.\textsuperscript{107}

In sum, the argument that tax expenditures undermine progressivity assumes that income inequality should be measured by the absolute dif-

\textsuperscript{103} See generally Tax Expenditures, supra note 3, at 71-82 (Congress would never enact direct outlays with distributional impact of tax expenditures).

\textsuperscript{104} See supra text accompanying notes 39-44.

\textsuperscript{105} See J. Birnbaum & A. Murray, Showdown at Gucci Gulch 59 (1987). The exception was a decision to reduce the tax burden on the poor, particularly the working poor. This was accomplished primarily by increases in the personal and dependency exemptions, in the standard deduction, and in the earned income credit. Staff of the Joint Comm. on Taxation, 100th Cong., 1st Sess., General Explanation of the Tax Reform Act of 1986, at 14-18 (Comm. Print 1987). Most analyses of the Tax Reform Act of 1986 have estimated that the overall distribution of the tax burden by economic class is generally similar to that under prior law. Staff of the Joint Comm. on Taxation, 99 Cong., 2d Sess., Data on Distribution by Income of Effects of the Tax Reform Act of 1986, at 1-11 (Comm. Print 1986), reprinted in 33 Tax Notes; Kiefer, The Progressivity Effects of the Finance Committee Tax Reform Bill, 31 Tax Notes 1031, 1034 (1986).


\textsuperscript{107} The 1986 Act reduces the marginal rate of individuals with the highest income from 50\% to 28\%. I.R.C. \textsection 1(a)-(d) (1988). In some income ranges, however, the marginal rate is 33\% due to a 5\% surcharge to phase out the benefits of the personal exemption and the 15\% rate. I.R.C. \textsection 1(g); see also Makin & Allison, Tax Reform 1986: A Fragile Victory, 34 Tax Notes 251, 253 (1987) (discussing the addition of a third individual tax rate of 35\% and the lowering of the 15\% tax rate to 14\%).

The failure of recent tax reform to increase significantly the progressivity of the tax system dismayed many individuals, including this writer. See, e.g., Mitchell, Mitchell Asks Colleagues to Support Third Bracket and Capital Gains Exclusion, reprinted in 31 Tax Notes 1167 (1986) (Letter from Senator George Mitchell to Senate Colleagues on June 13, 1986, discussing the imposition of an additional third individual tax rate of 35\%); Musgrave, Whatever Happened to Progressivity?, Wall St. J., May 29, 1986, at 30, col. 3 (arguing that the broadening of the tax base should not lead to a reduction in the progressivity of the rate structure).
ference in income between the rich and the poor. Under the more widely accepted view that inequality should be measured by the relative distribution of income, however, the impact of tax expenditures on progressivity is ambiguous. Tax expenditure analysis also assumes that the nominal rate structure represents society's judgment of the ideal level of income redistribution. It is more likely, however, that Congress enacts a rate structure with the understanding that its distributional impact will be modified by a system of tax deduction and exclusions.

D. Disentangling Distributive Goals from the Choice of Tax Base

Surrey's tax expenditure analysis confuses the issues of the proper level of redistribution and the appropriate tax base. Tax expenditure analysis concludes that the elimination of tax preferences would increase equality because most tax preferences have a higher dollar value for the wealthy. In fact, the issue of the appropriate distribution of the tax burden is separable from the choice of the proper tax base; almost any desired income distribution can be achieved under a broad range of tax bases simply by adjusting the rate structure. Thus, a tax preference should be evaluated by comparing distributionally equivalent tax structures with and without the preference.

To illustrate, consider again a society in which the "poor" earn $20,000, the "rich" earn $80,000, and the average individual in each in-

108. See supra text accompanying notes 59-64, 75.
109. Andrews, supra note 7, at 339; Brannon, Tax Expenditures and Income Distribution: A Theoretical Analysis of the Upside Down Subsidy Argument, in The Economics of Taxation 87, 88-89 (H. Aaron & M. Boskin eds. 1980); Brannon & Morss, The Tax Allowance for Dependents: Deductions v. Credits, 26 Nat'l Tax J. 599, 601-02 (1973). Where the tax base is very narrow, it may be impossible to achieve significant redistribution through rate changes. For example, if all income from capital were excluded from the tax base it would be difficult to raise large sums from wealthy individuals who derive a significant portion of their income from property. See Okun, Equality of Income and Opportunity, in Wealth, Income and Inequality 16 (A. Atkinson 2d ed. 1980) (income from capital flows mainly to top income groups).

Surrey seems to have recognized that the upside-down subsidy of a tax deduction might be offset by a rate change; he has noted, for example, that a switch from a deduction to a tax credit may be equivalent to a change in the rate structure. Pathways, supra note 3, at 289 n.20; Emerging Issues, supra note 3, at 263-64.

110. It might be argued that in practice it is unlikely that the rate structure will be changed to offset the distributional impact of tax preferences. Tax Expenditures, supra note 3, at 251-52 n.19. Thus, an individual might oppose a tax preference because of its distributional impact even though he would support the preference if it were accompanied by a change in the rate structure to maintain distributional neutrality. In such a case, the individual would recognize that the ideal tax base was being sacrificed in order to further distributional goals. See Brannon & Morss, supra note 109, at 607-08 (credit might be preferred to a deduction even if it is less equitable between families if it is the only politically feasible way to increase progressivity).
come class incurs $4000 of medical expenses. As noted earlier, if the first $20,000 of taxable income is taxed at a 20% rate and additional income is taxed at a 40% rate, then allowing a medical deduction reduces the tax burden on the poor by $800 and on the rich by $1600. This leads tax expenditure analysis to condemn the deduction as an upside-down subsidy. This result can be avoided, however, by adjusting the rate structure to make the introduction of the deduction both revenue neutral—raising an identical amount of total revenue—and distributionally neutral—keeping the tax burden of each income class unchanged. In this example, revenue and distributional neutrality can be achieved on the introduction of a medical deduction by increasing the tax rate on the first $20,000 of taxable income from 20% to 25%, and by increasing the rate on taxable income over $40,000 to 41.071%. This modified rate structure raises an additional $800 of tax revenue from the poor and an additional $1600 from the rich, just offsetting the value of the medical deduction to each class. Table A summarizes these results.

In this example, all taxpayers have identical medical expenses, so that the adoption of the medical deduction, when accompanied by rate changes to create distributional and revenue neutrality, does not change the tax burden of any taxpayer. The situation is quite different, however, if medical expenses vary among individuals within each income class. This can be illustrated by modifying the previous example to assume that one-half of the individuals in each income class incur $8000 in medical bills while the remainder incur no medical expenses. Again, the average medical expenses of individuals in each class are $4000. A rate change that maintains both revenue and distributional neutrality again can be generated by increasing the rate on the first $20,000 of taxable income to 25%, and by increasing the rate on additional income to

111. See supra text accompanying notes 59-64, 75.
112. In this Article, "distributional neutrality" refers only to the apportionment of tax burdens among different income classes. Thus, a change in the tax structure that changes only the distribution of the tax burdens within each income class will be considered distributionally neutral.
113. The medical deduction reduces the taxable income of the poor from $20,000 to $16,000. Without the medical deduction their taxes are $0.2 \times 20,000 = $4000. With the medical deduction their taxes are $0.25 \times 16,000 = $4000. The medical deduction reduces the taxable income of the rich from $80,000 to $76,000. Without the medical deduction their taxes are $0.2 \times 20,000 + (0.4 \times 60,000) = $28,000. With the medical deduction their taxes are $0.25 \times 20,000 + (0.41071 \times 56,000) = $28,000.

The smaller increase in the top marginal rate is due to the fact that the 5% increase in the 20% bracket needed to raise an additional $800 from the poor taxpayer with a $16,000 taxable income is applied to the first $20,000 of the rich individual's income, raising an additional $1000. Thus, only an additional $600 must be collected from the remaining $56,000 of taxable income earned by the rich taxpayer.
41.071%. As shown in Table B, however, this tax structure significantly redistributes the tax burden within each income class.114

TABLE A
INDIVIDUALS WITH IDENTICAL MEDICAL EXPENSES

CASE A(1) NO MEDICAL DEDUCTION

<table>
<thead>
<tr>
<th></th>
<th>Tax Rates: 20% on first $20,000 of taxable income 40% on taxable income over $20,000</th>
<th>Net Income</th>
<th>Medical Expenses</th>
<th>Taxable Income</th>
<th>Taxes Owed</th>
<th>After-tax Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td></td>
<td>$20,000</td>
<td>$4,000</td>
<td>$20,000</td>
<td>$ 4,000</td>
<td>$16,000</td>
</tr>
<tr>
<td>Rich</td>
<td></td>
<td>$80,000</td>
<td>$4,000</td>
<td>$80,000</td>
<td>$28,000</td>
<td>$52,000</td>
</tr>
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</table>

CASE A(2) MEDICAL DEDUCTION ALLOWED

<table>
<thead>
<tr>
<th></th>
<th>Tax Rates: 25% of first $20,000 of taxable income 41.071% on taxable income over $20,000</th>
<th>Net Income</th>
<th>Medical Expenses</th>
<th>Taxable Income</th>
<th>Taxes Owed</th>
<th>After-tax Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td></td>
<td>$20,000</td>
<td>$4,000</td>
<td>$16,000</td>
<td>$ 4,000</td>
<td>$16,000</td>
</tr>
<tr>
<td>Rich</td>
<td></td>
<td>$80,000</td>
<td>$4,000</td>
<td>$76,000</td>
<td>$28,000</td>
<td>$52,000</td>
</tr>
</tbody>
</table>

TABLE B
INDIVIDUALS WITH VARYING MEDICAL EXPENSES: MEDICAL DEDUCTION ALLOWED

<table>
<thead>
<tr>
<th></th>
<th>Tax Rates: 25% on first $20,000 of taxable income 41.071% on taxable income over $20,000</th>
<th>Net Income</th>
<th>Medical Expenses</th>
<th>Taxable Income</th>
<th>Taxes Owed</th>
<th>After-tax Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td></td>
<td>$20,000</td>
<td>None</td>
<td>$20,000</td>
<td>$ 5,000</td>
<td>$15,000</td>
</tr>
<tr>
<td>Rich</td>
<td></td>
<td>$80,000</td>
<td>$8,000</td>
<td>$80,000</td>
<td>$29,643</td>
<td>$50,357</td>
</tr>
</tbody>
</table>

114. The poor with no medical expenses pay 0.25 × $20,000 = $5,000. The poor with $8000 of medical expenses pay 0.25 × $12,000 = $3000. The rich with no medical expenses pay (0.25 × $20,000) + (0.41071 × $60,000) = $29,643. The rich with $8000 of medical expenses pay (0.25 × $20,000) + (0.41071 × $52,000) = $26,357.
The introduction of a deduction for medical expenses decreases the tax of poor and rich individuals who have incurred medical expenses by $1000 and $1643, respectively, as compared with a distributionally equivalent system without a deduction. This constitutes a 5 percentage point decline (from 20% to 15%) in the average tax rate of the poor with medical needs and a 2 percentage point decline (from 35% to about 33%) in the average tax rate of the rich with medical needs. Poor and rich individuals without medical needs suffer identical increases in tax liability, so that the aggregate tax liability of the rich and poor remain unchanged by the deduction.

The coupling of tax preferences with rate changes to ensure revenue and distributional neutrality takes much of the force out of the upside-down subsidy argument. More important, the fact that the distributional impact of tax deductions and exclusions can be offset by rate changes suggests that tax preferences should be evaluated according to whether the resulting variations in tax liability between two individuals with the same net income are appropriate, rather than according to the impact of the preferences on the distribution of the tax burden among different income classes. In the case of a medical deduction, for example, the proper question is whether individuals with similar net incomes, but varying medical expenses, should bear different tax burdens and, if so, how those tax burdens should vary. Essentially, this is a question of the appropriate tax base.

E. Net Income as an Ideal Tax Base

As noted earlier, the ideal tax base under the Surrey tax expenditure model is net income—gross income less the costs of producing that income. Surrey makes little attempt, however, to justify the net income tax base. His main argument appears to be positivist: "We" have chosen to have an "income tax" and this choice implies a base of net income. Nonetheless, as Surrey himself is quick to point out, the tax structure contains many deviations from a net income base. These deviations in-

115. Pigou, for example, argues that the dependency exemption should increase with the taxpayer's income because a constant deduction would not adequately reflect the difference in expenses of a wealthy single individual and a wealthy individual with dependents. A. Pigou, A STUDY IN PUBLIC FINANCE 101-03 (3d ed. 1947); see also W. Vickrey, AGENDA FOR PROGRESSIVE TAXATION 294-96 (1947) (arguing that a flat-sum deduction per dependent fails to take into account other important considerations, such as a variation in the dependent's need according to age); Brannon & Morss, supra note 109, at 601-02 (arguing that a constant deduction will vary the tax rate between small-sized wealthy families and large-sized wealthy families, and seeking how to determine an appropriate family size differential).

116. See supra notes 18-25 and accompanying text.

117. PATHWAYS, supra note 3, at 17-18.
clude not only tax incentives and hardship relief, but also features of a consumption tax, like the exclusion from income of unrealized appreciation of property and the growth in the value of pension funds.\textsuperscript{118} Although the term “income tax” is used to describe this tax structure, there is no evidence that the choice of name reflects a popular understanding or legislative intent that the appropriate tax base is net income.

More important, even if Surrey were correct that we have adopted net income as the tax base, that is just a factual assertion. It does not explain why this base is appropriate. To support the normative claim that the tax base \textit{ought} to be net income, Surrey needs to show that a net income tax base is consistent with an attractive principle of distributive justice. He does not do so.

Surrey also does not provide any normative justification for his support of a progressive rate structure.\textsuperscript{119} In this respect he resembles another advocate of a net income tax base, Henry Simons, who eschews the attempt to tie support for progressivity to an independent ethical principle. According to Simons, progressive taxation must be justified simply on “the ethical or aesthetic judgment that the prevailing distribution of wealth and income reveals a degree (and/or kind) of inequality which is distinctly evil or unlovely.”\textsuperscript{120} It seems unsatisfying, however, to base redistribution simply on a taste for equality.\textsuperscript{121} Moreover, even if that standard is accepted, it is unlikely that net income, either in the pure Haig-Simons version or in the modified form of the Surrey normal tax, would be an appropriate tax base.

The basic problem with a net income tax base is that it divorces income from its impact on individuals. Under this base, the equalization of income is valued for its own sake, not because it reduces inequality of well-being or because additional income is more valuable to the poor than to the rich. Indeed, Simons explicitly rejects justifications for redis-

\textsuperscript{118} The base of a consumption tax is current consumption. Under a consumption tax an individual would not be taxed on the portion of income that is devoted to savings. The individual would be taxed, however, on any funds withdrawn from savings. The tax treatment of pension funds—exclusion from income when placed into the fund, tax-free accumulation in the fund and taxation in full on withdrawal—is consistent with the consumption tax. For discussions of the consumption tax, see N. Kaldor, \textit{An Expenditure Tax} (1955); Andrews, \textit{Fairness and the Personal Income Tax: A Reply to Professor Warren}, 88 Harv. L. Rev. 947 (1975); Andrews, \textit{A Consumption-Type or Cash Flow Personal Income Tax}, 87 Harv. L. Rev. 1113 (1974); Warren, \textit{Would a Consumption Tax Be Fairer than an Income Tax?}, 89 Yale L.J. 1081 (1980) [hereinafter Consumption Tax]; Warren, \textit{Fairness and a Consumption-Type or Cash Flow Personal Income Tax}, 88 Harv. L. Rev. 931 (1975).

\textsuperscript{119} Tax Expenditures, \textit{supra} note 3, at 192.

\textsuperscript{120} H. Simons, \textit{supra} note 18, at 18-19.

\textsuperscript{121} See H. Groves, \textit{Tax Philosophers} 77-78 (1974).
tribution that are based on differences in the value of income to the rich and the poor because of the uncertainty of that relationship.\textsuperscript{122}

Simons is correct, of course, that the connection between well-being and income is difficult to measure precisely; some poor individuals lead happy lives while some wealthy individuals are miserable. It seems sensible, however, to believe that increased wealth generally is conducive to happiness, and that additional income is worth more to a poor individual who will use it to purchase basic needs, than to a rich individual who will use it to purchase luxuries. Indeed, if there is no discernable connection between income and human welfare, it is hard to see why income distribution matters.

It is not that Surrey is unmindful of the problems of the sick, poor, and other needy. Surrey favors both a progressive rate structure and aid to the needy through direct government grants.\textsuperscript{123} In addition, although Surrey would abolish the medical deduction, he would replace it with other federally funded assistance for medical care.\textsuperscript{124} Surrey voices his dismay that wealthy individuals with fewer needs enjoy a proportionately larger share of tax expenditures than poor individuals with greater needs.\textsuperscript{125} Unfortunately, the Surrey tax expenditure model does not

\textsuperscript{122} H. SIMONS, supra note 18, at 4-15. Simons' refusal to base redistribution on the varying impact on income to different individuals is consistent with the rejection of interpersonal utility comparisons by many economists and public choice theorists, beginning with Robbins' arguments in the 1930s that such comparisons are "unscientific." L. ROBBINS, AN ESSAY ON THE NATURE AND SIGNIFICANCE OF ECONOMIC SCIENCE 136-43 (2d rev. ed. 1962); Robbins, Interpersonal Comparisons of Utility: A Comment, 48 Econ. J. 635 (1938); see also Blum & Kalven, The Uneasy Case for Progressive Taxation, 19 U. Chi. L. Rev. 417, 472-79 (1952) (rejecting the notion of a meaningful connection between income and utility); Scitovsky, The State of Welfare Economics, 41 Am. Econ. Rev. 303, 303-07 (1951) (noting and deploiring the widespread rejection of interpersonal utility comparisons).

Pigou, on the other hand, argued that "since it is impossible in practice to take account of variations between different people's capacity for enjoyment, this consideration must be ignored, and the assumption made, for want of a better, that temperamentally all taxpayers are alike." A. PIGOU, supra note 115, at 58. More recently, some public choice theorists have argued that interpersonal utility comparisons are essential for social decision-making. See J. MEADE, supra note 94, at 20-29; Y. NG, WELFARE ECONOMICS 12-15 (1980); Sen, Interpersonal Comparisons of Welfare, in CHOICE, WELFARE AND MEASUREMENT 264 (1982).

Lerner has demonstrated that even if individuals differ in the amount of utility they receive from income and it is impossible to identify which individuals gain the most, so long as income has declining marginal value, expected utility is maximized by equal distribution. \textsuperscript{126} A. LERNER, THE ECONOMICS OF CONTROL 29-34 (1944). Sen has shown under Lerner's assumptions, that expected welfare is maximized by equal distribution under all welfareist principles, not just utilitarianism. Sen, On Ignorance and Equal Distribution, in CHOICE, WELFARE AND MEASUREMENT 222 (1982).

\textsuperscript{123} PATHWAYS, supra note 3, at 200-03.
\textsuperscript{124} Id. at 202-03.
\textsuperscript{125} Id. at 136; TAX EXPENDITURES, supra note 3, at 71-82.
ground its choice of a tax system on a normative structure that reflects such needs.

F. Summary of the Surrey Model

The Surrey tax expenditure model makes two fundamental errors. First, the model asserts that tax deductions and exclusions undermine the progressivity of the tax system because they are worth a greater dollar amount to the rich than to the poor. In fact, however, deductions and exclusions can reduce the relative tax burden of the poor and make the relative after-tax distribution of income more equal. Moreover, any level of redistribution can be obtained under a wide variety of tax bases simply by modifying the rate structure. Second, the Surrey tax expenditure model fails to ground its ideal tax structure on any principle of distributive justice. Thus, the model does not explain why adopting a net income tax base or preserving a progressive rate structure is desirable.

II. The Andrews Model: Personal Consumption and Savings

A. Overview of the Andrews Model

Like the Surrey tax expenditure model, the model of personal deductions proposed by Professor William Andrews assumes that an ideal tax base exists and that departures from that base should be evaluated as direct government expenditures. The Andrews model, however, rejects net income as an ideal. Instead, the model favors a tax base of "personal consumption and accumulation of real goods and services." Andrews then defines personal consumption in a way that excludes from taxation amounts spent on medical expenses and charitable contributions.

Although the Andrews model purports to support medical and charitable deductions on the principle of taxing only personal consumption and accumulation, in fact the deductions are justified on wholly different grounds. The model justifies the medical deduction primarily on the principle that taxes should be apportioned according to "material well-being," and that the deduction makes the tax base better reflect such well-being. On the other hand, the model justifies the charitable deduction primarily on the principle that only "private consumption" that

126. Andrews, supra note 7, at 312.
127. Id. at 313.
128. Id. at 314-15. Andrews does not discuss in any detail the appropriate tax treatment of other personal expenditures, but he does suggest that interest expenses and state and local taxes also might be excluded from taxable income. Id. at 376.
129. Id. at 335.
"precludes . . . enjoyment by others" should be taxed, and that charitable contributions do not constitute such consumption.\textsuperscript{130} In each case, the more general principle of taxing only personal consumption and accumulation adds nothing to the argument.

B. Andrews' Concept of Consumption

Andrews states that his ideal tax base of personal consumption and accumulation is derived from Henry Simons' definition of income as the "algebraic sum of the individual's consumption and the change in the value of his property rights during a period . . . ."\textsuperscript{131} The Andrews concept of consumption, however, is quite different from that of Simons.

Simons views taxable consumption as including all uses of economic resources other than those related to the production of income. Difficult borderline questions exist under this definition regarding the proper treatment of expenditures that have both business and personal components, such as business meals and travel.\textsuperscript{132} All consumption unrelated to the production of income, however, should be included in the tax base.\textsuperscript{133}

Andrews, on the other hand, argues that some nonbusiness expenditures, such as amounts spent on medical services and charitable contributions, should be excluded from the tax base. The consumption of medical services should be excluded, Andrews argues, because such consumption generally reflects increased medical need rather than greater "material well-being."\textsuperscript{134} The tax base should exclude charitable contributions, on the other hand, because such contributions are not "preclusive consumption" of "divisible, private goods."\textsuperscript{135}

Andrews recognizes that his definition of personal consumption differs from the standard interpretation of Haig-Simons income, which views the concept as including all nonbusiness expenditures regardless of their use.\textsuperscript{136} Andrews argues, nevertheless, that his ideal tax base is consistent with Simons' "main point"—that source distinctions, such as the capital gains exclusion, should be eliminated from the income tax.\textsuperscript{137}

\begin{itemize}
\item \textsuperscript{130} Id. at 346.
\item \textsuperscript{131} H. Simons, supra note 18, at 125; Andrews, supra note 7, at 313, 315, 320-21.
\item \textsuperscript{132} H. Simons, supra note 18, at 53-54.
\item \textsuperscript{133} For administrative reasons, certain difficult to measure items of consumption, such as the value of home production or the imputed value of leisure, might be excluded from taxable income. \textit{Id.} at 51-53.
\item \textsuperscript{134} Andrews, supra note 7, at 314.
\item \textsuperscript{135} \textit{Id.} at 314-15.
\item \textsuperscript{136} Id. at 315 & n.9.
\item \textsuperscript{137} \textit{Id.} at 316-17 n.12, 375-76.
\end{itemize}
Under the Andrews model, such source distinctions are generally ignored because they seldom lead to differences in personal consumption and accumulation.

While Andrews is right that Simons would abolish source distinctions, Simons would also reject each of the personal deductions favored by Andrews. A deduction for charitable contributions (and other gifts) is explicitly rejected by Simons and medical expenditures fall squarely within Simons' definition of consumption as "the exercise of control over the use of society's scarce resources." Moreover, even if the Andrews model's tax base were entirely consistent with that of Simons, this would provide little reason to adopt that base since, as noted in Section I, Simons offers no normative justification for net income as the tax base.

Andrews does not, however, simply rely on consistency with Simons to justify his views. Andrews notes that a tax base must be selected in light of the underlying purpose of the tax system. Thus, a personal deduction that helps make the tax base conform with the fundamental goals of the tax system should be regarded as part of the ideal tax structure, rather than a tax expenditure. On the other hand, a deduction that serves a purpose extrinsic to the tax system's goals should be evaluated by the standards applied to direct government outlays.

Unfortunately, Andrews' specification of the tax system's goals is ambiguous. He first states that the primary purpose of the tax system is to shift economic resources away from private consumption and accumulation in order to fund government expenditures. This purpose, however, tells us nothing at all about the appropriate tax base, since any reasonably broad-based tax—including a head tax—can raise sufficient tax revenues if the proper rate is adopted.

At another point, Andrews notes that the tax system has distributational, as well as revenue-raising goals, and that the tax base must be consistent with those goals. He argues that if one goal of the progressive rate structure is relative redistribution, then "[w]hat we mean to redistribute, ultimately, must be shares of real goods and services which persons otherwise would be consuming or accumulating." Thus, to Andrews "it makes sense to try to define taxable income to provide as refined a reflection of aggregate real consumption and accumulation as it

138. H. SIMONS, supra note 18, at 57-58, 139-40.
139. Id. at 49.
140. See supra notes 119-21 and accompanying text.
142. Id.
143. Id. at 325-26.
144. Id. at 326.
is practical to achieve.”145 This formulation of the goals of the tax system, however, would not support the medical deduction since, as Andrews recognizes, the use of medical services clearly consumes “real economic resources.”146

Traditional tax analysis often justifies progressive taxation consistent with the principle of taxation according to “ability to pay.” Andrews, however, rejects ability to pay as a basis for taxation because it is unclear how ability should be measured.147 He points out, for example, that unadjusted money income may not be an accurate assessment of ability to pay, since individuals with identical money incomes may have different levels of wealth or earnings capacity.148 Andrews would not, however, include an individual’s earnings capacity in the tax base even though doing so would lead to a more accurate measure of ability to pay. Taxing earnings capacity, he argues, would pose daunting measurement problems and would force individuals to work at higher paying jobs than they would otherwise choose in order to pay the tax.149

Though he rejects ability to pay as a principle to justify progressive taxation, Andrews does not present any alternative principle. Nonetheless, in his discussion of the proper tax treatment of medical expenses, he suggests apportioning the tax burden according to “material well-being.”150 One interpretation of this concept suggests a utilitarian principle of distributive justice that might provide an attractive principle on which to base a system of personal deductions.

C. The Medical Deduction and the Concept of Material Well-Being

Andrews recognizes that the use of medical services represents the private consumption of scarce societal resources. Nevertheless, he argues that the tax base should not include consumption of medical care because such consumption does not show a higher level of “material well-being.”151 He writes that “the purpose for which personal consumption is used in specifying a personal tax base is not simply to account for the distribution of the national product; it is rather to provide an index of

145. Id.
146. Id. at 335.
147. Id. at 326-27.
148. Id. at 327.
149. Id. Other scholars have also rejected a tax on earnings capacity on the grounds that it would infringe liberty or other important values. See, e.g., Gunn, The Case for an Income Tax, 46 U. CHI. L. REV. 370, 381-82, 399-400 (1979); Kelman, supra note 10, at 841-42; Consumption Tax, supra note 118, at 1114.
150. Andrews, supra note 7, at 335.
151. Id. at 314, 335-36.
relative material well-being on the basis of which to distribute tax burdens.\textsuperscript{152} It is not clear, however, what it means to allocate the tax burden according to material well-being.\textsuperscript{153}

An examination of Andrews' argument in favor of taxation according to material well-being reveals two distinct and essentially inconsistent underlying normative principles. The first principle holds that the tax burden should be apportioned according to a taxpayer's overall level of well-being so that an individual with a higher level of overall welfare will bear a greater tax burden, even if the difference is due to nonmonetary factors. This principle of taxation is egalitarian.\textsuperscript{154} The second principle holds that the tax burden should be allocated to maximize the marginal well-being created by income. This principle would require that the tax burden be apportioned to reduce the aggregate welfare loss from taxation and thus maximize utility. This principle is utilitarian.

The difference between these two interpretations of the principle of taxation according to material well-being can be illustrated by the treatment of a special tax preference for the blind. Under the egalitarian principle of taxation according to overall well-being, a tax preference for the blind can be justified simply on the grounds that a blind individual is worse off than an individual with sight, even if the tax reduction benefits the blind person less than an identical reduction would benefit a sighted person. In contrast, under the utilitarian principle of taxation according to the marginal well-being created by income, a tax preference for the blind is justified only if the blind person has greater needs than a sighted person, so that the tax reduction would be more valuable to the blind than to the sighted. Andrews does not distinguish between these principles and shifts from one to the other without comment. As discussed below, however, the two principles have very different implications for the ideal tax base.

\textsuperscript{152} Id. at 335.

\textsuperscript{153} Discerning the principles that underlie Andrews' argument for the medical deduction is hindered by his style of argument. Rather than presenting explicit normative principles and then showing how they might be implemented in the tax code, Andrews offers various arguments by analogy. This method of argument, common in tax scholarship, is especially misleading in the analysis of the appropriate tax base because many types of imputed income are not and cannot be taxed. Thus, it is always possible to show that individuals who earn income in market transactions are overtaxed by comparison with individuals who receive untaxed imputed income.

\textsuperscript{154} The term "egalitarian" could be applied to other tax principles as well. For example, a tax structure that sought to minimize the Gini coefficient of the after-tax income distribution also might be viewed as egalitarian. Such a notion of egalitarianism is quite different than that underlying taxation according to overall well-being.
(1) Taxation According to Overall Well-Being

The principle of taxing individuals according to their overall level of well-being is suggested by Andrews' discussion of the tax treatment of amounts received in settlement of personal injury claims. Historically, these amounts—including payments for medical expenses incurred by an injured individual—have been excluded from taxable income. Andrews argues that the exclusion is appropriate:

It would seem strange to call the provision of medical services in such a case a windfall since it only serves as a remedy for the injury. The taxpayer is no better off after the whole transaction than before he incurred his injury, and it would be unnatural to view the provision of medical services in isolation from the injury as producing a taxable gain.

Andrews then argues that if it is appropriate to exclude from the tax base medical expenses provided to an injured party by a tortfeasor, it is also appropriate to exclude medical care provided by an employer or paid for by the injured party. Moreover, he argues that if it is correct to exclude from the tax base the consumption of medical care relating to an injury, then there is no reason to tax the consumption of medical care relating to an organic disease.

The critical factor favoring tax-free treatment in each of these cases, Andrews states, is "the fact that the treatment only puts the taxpayer back where others are who have suffered no injury." This principle of taxation according to the overall level of well-being would exclude from the tax base not only amounts received for medical expenses, but also all compensatory payments received for personal injuries. If, for example, a taxpayer who suffers the loss of an arm receives $500,000 for pain and suffering from a tortfeasor, that amount would be excluded from income because it represents compensation for a loss rather than an improvement in well-being.

The principle of taxing individuals according to their overall well-being has far-reaching implications. If individuals who receive a cash

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155. The Revenue Act of 1918 excluded from gross income all amounts received as compensation for personal injuries. Revenue Act of 1918, ch. 18, § 213(b)(6), 40 Stat. 1057, 1066 (1919) (current version at I.R.C. § 104(a) (1988)).
156. Andrews, supra note 7, at 334.
157. Id.
158. Id.
159. Id. An exception might exist for some optional medical procedures. Cosmetic surgery, for example, may be difficult to distinguish from the purchase of beauty aids. Id. at 337. Certain voluntary aspects of otherwise involuntary medical procedures (such as the choice of a private room) may also have a consumption element. These problems are similar to the problem of classifying mixed business and personal expenditures under a net income tax base.
recovery for personal injuries do not recognize taxable income because they are no better off than before the injury, then individuals who suffer similar injuries, but who do not receive a cash recovery, should be entitled to deductions for their loss. Thus, if a taxpayer who loses an arm would have received $500,000 as compensatory damages for pain and suffering in a tort judgment, that taxpayer should receive an identical deduction if the injury is uncompensated. Moreover, nothing limits the principle of taxing individuals according to their overall well-being to injuries from accidents. Presumably, it would also entitle individuals to deductions for any loss in welfare.

It is impossible, of course, to measure the overall level of well-being of taxpayers with any precision, and Andrews acknowledges that the medical deduction is only a partial reflection of differences in good health. Nevertheless, if under an ideal tax system the distribution of the tax burden would be based on overall well-being, such well-being should be measured as accurately as possible. Athletic ability and a pleasant singing voice add to material well-being just as robust good health does. A tax structure based on the overall distribution of well-being would, ideally, measure such attributes so that coordinated divas could be taxed at higher rates than clumsy people who can not carry a tune. It is unlikely, however, that Andrews would favor such a tax structure even if measurement and administrative problems could be overcome.

Despite its far-reaching implications, apportioning the tax burden according to overall well-being has attractive features. Many individuals believe it is fair to provide a larger share of material goods to persons who are unfortunate in other respects, such as the handicapped. Under egalitarian principles, the allocation of additional income to less well-off individuals can be justified even if those individuals do not have greater economic needs so long as the allocation reduces inequality of overall well-being. Personal injury recoveries for pain and suffering, for example, are granted favorable tax-free treatment even if the injured individual does not have greater economic needs as a result of the injury.

160. Id. at 335.

161. Allocating the tax burden according to overall well-being does require, however, acceptance of the hyper-egalitarian principle that increasing equality is desirable even if it means a decrease in well-being for everyone, including the most miserable. Thus, an allocation of tax burdens according to overall well-being may not support confiscatory rates if the incentive effects of those rates so reduced output that the welfare of the poor as well as the rich was reduced.
(2) Taxation According to the Marginal Well-Being Created by Income

Utilitarianism sees the proper goal of a society as the maximization of the well-being or utility of its members. A utilitarian ethic applied to a tax structure would require the minimization of the total loss in well-being caused by taxation. This would be achieved by collecting taxes from those individuals for whom the payments would cause the least reduction in well-being. Under the assumption that money has declining marginal utility, a utilitarian ethic would result in higher taxation of the rich. Such an assumption seems reasonable; an extra dollar of income is likely to have less utility to a rich individual who would use the dollar to purchase luxuries, than to a poor individual who would use the dollar to purchase necessities. The utilitarian impulse to redistribute income from the rich to the poor is limited, however, by the impact of such redistribution on incentives.

Unlike the principle of taxation according to the overall level of well-being, utilitarianism focuses on the marginal burden of taxation. Thus, utilitarianism would not support the exclusion of personal injury recoveries from the tax base if the recipients do not have increased economic need. Utilitarianism would reject Andrews' argument that personal injury recoveries should be excluded simply because they are compensatory and thus do not represent an increase in welfare. Instead,


163. The assumption that income has diminishing marginal utility for any given individual is standard in economics. See, e.g., L. ATKINSON, ECONOMICS 426-28 (1982); A. BRAFF, MICROECONOMIC ANALYSIS 10-11, 20-21 (1969); P. HARDWICK, B. KHAN & J. LANGMEAR, AN INTRODUCTION TO MODERN ECONOMICS 52-56 (1982). For tax policy purposes, however, interpersonal comparisons of the marginal utility of income are required. Such interpersonal comparisons are far more controversial. See supra note 122 and sources cited therein.

164. Almost a century ago, F.Y.L. Edgeworth demonstrated that if income has declining marginal utility, if taxation has no disincentive effects, and if individuals have identical tastes and needs, then total welfare in the society is maximized by taxing all individuals above a certain income level at a 100% rate and all other individuals at a zero rate. Edgeworth, The Pure Theory of Progressive Taxation, in ECONOMIC JUSTICE 371-85 (E. Phelps ed. 1973). Implementation of a 100% rate of taxation would, of course, have a devastating impact on incentives. It is necessary, then, to balance the gain in welfare from redistributing income to those who need it most against the loss in welfare from discouraging production. Recent work in the field of optimal taxation has attempted to develop a method of balancing the gains from income redistribution against the losses from reduced production. The seminal work is Mirrlees, An Exploration in the Theory of Optimum Income Taxation, 38 REV. ECON. STUD. 175 (1971). For a discussion of this literature and its application to the problem of progressive taxation, see Bankman & Griffith, Social Welfare and the Rate Structure: A New Look at Progressive Taxation, 75 CALIF. L. REV. 1905 (1987).
the utilitarian would look at the impact of personal injuries on the marginal value of income to the recipient. If the victim who receives a settlement for a personal injury has no greater economic need as a result of the injury or if the victim's additional need is satisfied by only a portion of the award, then the excess payments should be subject to taxation.

Although Andrews' defense of the exclusion of personal injury recoveries is inconsistent with utilitarianism, he makes other arguments for the medical deduction that are consistent with utilitarian principles. For example, Andrews argues that the consumption of unusual amounts of medical services is more likely to reflect a greater level of need than an enhanced standard of living and that two taxpayers with identical levels of consumption excluding the consumption of medical expenses will have an identical taxable capacity and should be taxed identically. The key point here is the suggestion that nonmedical consumption, rather than total income, best indicates taxable capacity. Andrews argues, for example, that a taxpayer who must spend large amounts on medical services suffers a reduced ability to purchase other consumption goods similar to the reduction in purchasing capacity of a taxpayer who suffers a layoff. Accordingly, since a laid-off taxpayer's taxable income is reduced by the amount of the lost wages, a taxpayer whose income is reduced by high medical expenses should receive a similar tax savings. Stated in utilitarian terms, the marginal value of income to an individual is measured better by the individual's level of nonmedical consumption than by total income, so that the higher taxes for individuals with higher levels of nonmedical consumption will minimize the total burden of taxation and thus maximize utility.

A utilitarian tax system also provides flexible taxation for individuals with identical incomes, but different needs. An individual with several dependents, for example, will require a higher income to satisfy urgent needs and thus should bear a lower tax burden than an individual with no dependents. Similarly, an individual who requires substantial medical care will need more money to purchase the necessities of life than will a healthy individual and therefore should pay less tax. Personal deductions like the medical and dependency deductions may enable the tax base to reflect such differences.

(3) Summary

Andrews' arguments for the medical deduction appear to be based

166. Id.
on two quite different normative principles. The first principle is to allocate the tax burden according to the level of overall well-being, reflecting an egalitarian concern for the distribution of overall utility. The second principle is to apportion the tax burden according to the marginal welfare derived from income, reflecting a utilitarian concern with maximizing total welfare. Though both of these normative principles generally support redistributive taxation, they do so for quite different reasons. The egalitarian supports redistributive taxation because it will improve the welfare of the less well-off. The utilitarian, on the other hand, supports redistributive taxation because income is worth more to poorer individuals. The egalitarian, unlike the utilitarian, will continue to support redistribution to the less well-off even if, due to incentive effects or other factors, the improvement in the welfare of the less well-off is smaller than the reduction in the welfare of the better-off.

D. The Charitable Deduction and Preclusive Appropriation

Andrews does not invoke the concept of well-being to justify the charitable deduction. Instead, he excludes charitable contributions from the tax base by defining personal consumption to include "only the private consumption of divisible goods and services whose consumption by one household precludes their direct enjoyment by others." Donations to charitable organizations are not considered preclusive consumption because the satisfaction received by the donor does not prevent enjoyment of the contribution by the donees.

The principle of taxing only the preclusive consumption of economic resources excludes from the tax base not only anonymous charitable contributions to the poor, for which the donor may receive no benefit other than private satisfaction, but also contributions to cultural and educational institutions that are patronized primarily by the rich and for which the donor receives public acclaim. Thus, season ticket holders' contributions to a local opera company that publishes donors' names on a conspicuous list of benefactors are not considered personal consumption because the benefits of the contributions inure not only to the donors, but also to other opera fans.

167. Id. at 346.
169. The difference between anonymous contributions to the poor and public donations to cultural or educational organizations largely patronized by members of the upper-class may well justify different tax treatment of those donations. The element of personal consumption appears much stronger in the case of donations to cultural or educational organizations. Do-
Andrews’ argument for taxing only preclusive consumption is supported by a comparison of a physician and a tax attorney who each wish to contribute to the welfare of the poor. The medical doctor works every Friday at a free medical clinic for the homeless, while the tax lawyer, without special skills useful to the poor, spends every Friday working in his law office, but donates all fees earned that day to the poor. Andrews argues that if it is proper to exclude from taxation the imputed value of the doctor’s services to the poor, there is no reason to tax the lawyer on the cash that he earns and then donates.  

While Andrews’ analogy is appealing, it fails to account for instances of nonpreclusive consumption that should not be excluded from the tax base. Consider, for example, a doctor who receives free use of a pay movie channel for a year in return for treating a manager of a cable television station. Few would argue that the receipt of the cable services should be tax-free. Yet, the use is not preclusive. The transmission of the cable signal to the doctor’s television set neither prevents others from receiving the signal, nor consumes economic resources since the cable company incurs no marginal cost in providing the service. A similar analysis can be applied to the receipt of free attendance at a movie theater, free golf at a country club, or free air travel, so long as the privileges received can only be used during times when the facilities are not being used to capacity.  

The appropriate tax treatment of charitable contributions raises many difficult issues, including the appropriate treatment of the varying satisfactions—tangible and intangible—that flow from donations, and the determination of the proper method of funding artistic, educational, and religious activities. This Article will not attempt to resolve these questions. It is clear, however, that the notion of nonpreclusive appropria-

170. Id. at 347-48, 352.  
171. In the long run, however, certain costs that are fixed in the short run may become variable and thus be considered marginal costs. See A. KAHN, THE ECONOMICS OF REGULATION: PRINCIPLES AND INSTITUTIONS 70-75 (1970).  
172. See Kelman, supra note 10, at 845-46 (individuals are taxed on goods with no production cost).  
173. The charitable deduction has been widely discussed in the tax literature. See, e.g., Bittker, Charitable Contributions: Tax Deductions or Matching Grants?, 28 TAX L. REV. 37 (1972); Feldstein, The Income Tax and Charitable Contributions: Part I—Aggregate and Dis-
tion is not the answer.

E. Summary of the Andrews Model

Andrews' discussion of the medical and charitable deductions suggests several principles on which those deductions might be based. In support of the medical deduction, Andrews' analysis implies two principles of allocating the tax burden according to "material well-being": (1) an egalitarian notion that the tax structure should strive to improve the welfare of the least well-off members of the society, and (2) a utilitarian notion that the tax structure should attempt to increase total welfare. In support of the charitable deduction, Andrews suggests that nonexclusive consumption should be excluded from the tax base.

Andrews attempts to tie these quite different justifications to the concept of an ideal tax base consisting of personal consumption and accumulation. This concept, however, adds nothing to the separate arguments Andrews makes for the medical and charitable deductions. Though Andrews' analysis represents an advance over that of Surrey in its attempt to relate the ideal tax base to the underlying goals of the tax system, he fails to present either a clear definition of these goals or the normative principles on which they are based.

III. The Kelman Model: The Income Tax as a Levy on Market Transactions

A. Overview of the Kelman Model

Professor Kelman's model of the tax base, like the Surrey model, adopts net income base without medical or charitable deduction as an ideal. Unlike the Surrey model, however, the Kelman model does not ground its choice of a net income base simply on the argument that such a base reflects "our" decision to have an "income tax." Instead, Kelman argues that a net income base is consistent with two fundamental goals of the tax system. The first goal is to allocate the tax burden in a way that reflects individual earnings capacity. The second goal is to tax individuals only on market transactions. Kelman explains:

The tax system ought to measure inequality in earnings capacity, and yet respect a taxpayer's decision not to fulfill her earnings capacity.

175. PATHWAYS, supra note 3, at 17-18.
While the tax system should not force a taxpayer to take dominion over as many resources as she is able, once she voluntarily takes control of resources, her particular subsequent uses of those resources are irrelevant to tax law.\textsuperscript{176}

Kelman's assertion—that how individuals use their income is irrelevant—directly challenges Andrews' argument that, although distinctions according to \textit{sources} of income should not be made, distinctions according to \textit{uses} of income are appropriate.\textsuperscript{177}

Kelman rejects a tax on unexercised earnings capacity, even though the tax would reflect ability to pay, because such a tax would not respect decisions by individuals not to work.\textsuperscript{178} Kelman's rejection of an earnings capacity tax is shared by other scholars, including Andrews, who have noted that a tax on unexercised earnings capacity would be almost impossible to administer and would raise significant liberty issues.\textsuperscript{179} For example, talented individuals would be prevented from working as teachers by an earnings capacity tax because they would be required to pay taxes on the amount of income they might have earned as doctors or lawyers.

Kelman's argument against a tax on earnings capacity does not rest, however, only on such liberty and administrative grounds. Kelman also argues that a "widespread principle" exists "that people ought to be taxed only when they voluntarily convert property rights into marketable form" and that this principle "may really be a political recognition of a basic human resistance to commoditization."\textsuperscript{180}

\textbf{B. Commoditization}

Kelman's argument that only market transactions should be taxed is central to his case against Andrews. Andrews' justification of both the medical and charitable deductions is based on the conviction that imputed income should be treated in the same manner as income from market transactions. Andrews, for example, justifies the medical deduction on the ground that imputed income from good health should be taxed in the same way as good health purchased through medical expenditures. He justifies the charitable deduction on the ground that the tax-free treatment of the imputed value of donated services should be matched by the exclusion of earnings that are given away.\textsuperscript{181}

\textsuperscript{176} Kelman, \textit{supra} note 10, at 835.
\textsuperscript{177} Andrews, \textit{supra} note 7, at 375.
\textsuperscript{178} Kelman, \textit{supra} note 10, at 841-44.
\textsuperscript{179} See sources cited \textit{supra} note 149.
\textsuperscript{180} Kelman, \textit{supra} note 10, at 842.
\textsuperscript{181} See \textit{supra} notes 167-73 and accompanying text.
Kelman, however, challenges the presumption that imputed income should be taxed in the same way as market income. Rather, he argues that imputed income is not and should not be taxed because of an appropriate reluctance to commoditize nonmarket transactions. Kelman does not attempt to detail precisely what harms would result from the taxation of nonmarket transactions. Instead, he relies on the positivist argument that the tax code reflects a "wide-spread principle" against tax-ing such transactions. There is little evidence, however, that the tax code does reflect such a fundamental resistance to commoditization.

Administrative reasons dictate the nontaxation of many nonmarket transactions. For example, the taxation of the imputed value of an individual's leisure or an individual's home production, such as cooking, cleaning, and gardening, would involve very difficult valuation and enforcement problems that alone would justify exclusion from the tax base. Moreover, the exclusion of such items from the tax base may not lead to substantial inequity; the tax-free treatment of leisure, for example, is likely to offset roughly the tax-free treatment of home production because the leisure an individual enjoys tends to be inversely related to the individual's level of home production.

When practical considerations do not preclude taxation, the tax code sometimes does "commoditize" income from nonmarket transactions by taking it into account in allocating the tax burden. Single income married couples, for example, are likely to have a significantly greater level of imputed income than double income couples because of the potentially greater home production of the nonworking spouse. If one goal of the tax system is to avoid commoditization, this difference in home production would be ignored. Prior to the enactment of the Tax Reform Act of 1986, however, double income married couples were entitled to reduce their taxable income by a portion of the lower wage earner's salary, so that such couples paid less tax on identical earned income than single income couples. The greater tax burden placed on

182. Kelman, supra note 10, at 842.
183. Id. Indeed, Kelman's argument resembles Surrey's justification of the net income base on the ground that "we" have chosen to have an "income tax." See supra notes 117-25 and accompanying text.
184. For this reason, Henry Simons believed that the exemption of imputed income from home production did not lead to a serious inequity in the tax code, while the exemption of imputed income from property, such as home ownership, which is not balanced by a reduction in the imputed value of leisure, posed a more serious equity problem. H. SIMONS, supra note 18, at 110-24.
single income couples can be viewed as a putative tax on that couple's higher level of home production. Although the deduction for double income couples was repealed by the Tax Reform Act of 1986, the repeal was based on revenue needs and on the assertion that the flatter rate structure made the deduction unnecessary. There is no evidence that the repeal reflected a reluctance to commoditize the nonmarket production of single income couples.

The earned income tax credit also reflects a putative tax on nonmarket production. The credit is available to low income taxpayers only for income that is derived from employment. The effect of the earned income tax credit is that poor individuals who do not work, and who consequently are likely to have a greater level of home production and leisure, pay higher taxes than individuals with the same income who do work.

Kelman discusses two other areas of tax law to support his argument that resistance to commoditization is a fundamental principle underlying the tax code: (1) the exclusion from income of personal injury recoveries for invasion of privacy; and (2) the exclusion from income of the receipt of certain unsolicited property. Upon closer inspection, however, neither of these exclusions appears to support his commoditization argument.


186. The double income deduction also was justified as reducing the "marriage tax"—the tax increase suffered, upon marriage, by two working individuals with similar incomes. Thus the double income deduction was viewed as promoting traditional family values by reducing the tax incentive to "live together in sin." See Rosen, The Marriage Tax Is Down But Not Out, 40 NAT'L TAX J. 567, 568 (1987). For a discussion of the taxation of the family, see Bittker, Federal Income Taxation of the Family, 27 STAN. L. REV. 1389 (1975); Blumberg, Sexism in the Code: A Comparative Study of Income Taxation of Working Wives and Mothers, 21 BUFFALO L. REV. 49 (1971); Gann, Abandoning Marital Status as a Factor in Allocating Income Tax Burdens, 59 TEX. L. REV. 1 (1980); McIntyre & Oldman, Taxation of the Family in a Comprehensive and Simplified Income Tax, 90 HARV. L. REV. 1573 (1977).


188. The argument was that under a rate structure that was both flatter and lower, the difference between the tax treatment of singles and working couples would be smaller. Thus, the "marriage penalty"—the additional tax that is incurred when two working singles marry—would be smaller under the post-1986 rate structure. For most double income couples, however, the change in the rate structure did not fully offset the loss of the second-earner deduction. See O'Neil & Ostrowski, Tax Reform Proposals and the Marriage Penalty, 31 TAX NOTES 1017 (1986); Rosen, supra note 186, at 569.

189. I.R.C. § 32 (1988). The deduction is limited to individuals who have children and who are either married, surviving spouses, or heads of household. Id. The deduction also has been justified as an offset to the social security tax for poor individuals. Steurle & Wilson, The Taxation of Poor and Lower-Income Workers, 34 TAX NOTES 695, 704 (1987).
Kelman argues that the exclusion from income of personal injury recoveries for invasion of privacy is motivated by a resistance to commoditization, noting that these recoveries are not taxed, while proceeds from the voluntary marketing of privacy rights are included in taxable income. Kelman rejects the explanation that recoveries for invasion of privacy are not taxed because they simply compensate individuals for their loss of privacy, arguing that a similar loss occurs in the taxable sale of privacy rights.

This argument is not persuasive. In a tort recovery, whether for invasion of privacy or for other personal injuries, the measure of damages is the amount of the harm; victims generally are entitled to compensation and no more. It is reasonable to believe, then, that such a recovery does not constitute a gain to the individual. Individuals will sell privacy rights, however, only if they are better off because of the sale.

The history of the exclusion of personal injury recoveries is also consistent with the view that such recoveries are not taxed because they do not represent gain. Early Treasury rulings and court cases held that personal injury recoveries should not be taxed because they are purely compensatory. As one court stated, compensation for injury "adds nothing to the individual . . . . It is an attempt to make the plaintiff whole as before the injury." More recently, it has been argued that personal injury damages do not constitute gain because they represent recovery of human capital. Other commentators have justified the exclusion on grounds such as sympathy for the victim or a belief that damage awards seldom provide adequate compensation to injured persons.

190. See I.R.C. § 104(a)(2).
192. Id. at 843.

The tax-free treatment of compensation for injuries received by P.O.W.s and for compensation for the abridgement of civil and personal rights has also been justified on the basis that such compensation does not represent gain. See Rev. Rul. 56-518, 1956-2 C.B. 25, clarified by Rev. Rul. 57-505, 1957-2 C.B. 50; Rev. Rul. 56-462, 1956-2 C.B. 20; Rev. Rul. 55-132, 1955-1 C.B. 213.

Damage awards for personal injuries frequently include compensation for lost income, in addition to compensation for medical expenses and pain and suffering. Since the lost income...
There is little support, however, for Kelman's assertion that the personal injury awards are excluded from income to avoid commoditization. Moreover, the tort system has already commoditized the harm caused by personal injuries by placing a dollar value on the injury. It is unlikely that the nontaxation of such amounts is motivated by the fear that taxation would lead to further commoditization.

Kelman offers Revenue Ruling 70-498\textsuperscript{198} as a final example of the tax code's resistance to commoditization. According to Kelman, this ruling provides that an individual who receives complimentary books from a publisher will not be taxed on the market value of those books unless that individual sells the books or takes a deduction for their donation to charity.\textsuperscript{199} He argues that the books are not taxed prior to their donation because, as reading matter to the recipient, they have not been commoditized.\textsuperscript{200} Furthermore, Kelman rejects alternative explanations for the nontaxation of the books. The exclusion from income cannot be a result of the realization requirement, he argues, because the receipt of marketable securities is taxable whether or not they are sold. He also contends that the exclusion cannot be the result of valuation difficulties because books are easily appraised.\textsuperscript{201}

Many items of "non-commoditized" property, however, are fully taxable upon receipt. For instance, an individual who receives a free trip to Hawaii from a travel agent or a free refrigerator from an appliance store is taxed on the value of the item even if the item is not sold or donated.\textsuperscript{202} Hence, the more favorable tax treatment of the receipt of complimentary books in Revenue Ruling 70-498 was more likely a result of the special context in which they were received, rather than a resistance to commoditization. The ruling involved the receipt of unsolicited books by a newspaper book reviewer. The book reviewer did not include the books in his income calculations, but then claimed a deduction for their contribution to a charitable organization. The ruling held that the value of the donated books must be included in the taxpayer's taxable income.\textsuperscript{203}

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\textsuperscript{198} 1970-2 C.B. 6.
\textsuperscript{199} Kelman, \textit{supra} note 10, at 843.
\textsuperscript{200} \textit{Id}.
\textsuperscript{201} \textit{Id}. at 843-44.
\textsuperscript{203} Strictly speaking, the ruling did not hold that the reviewer would not have been taxed had he not taken a charitable contribution for the donation. In fact, the ruling cites I.R.C. § 61 and Commissioner v. Glenshaw Glass, 348 U.S. 426 (1955), for the principle that taxable
There is no suggestion in either the ruling or the two reported cases that cite the ruling, that taxability hinges on the commoditization of property through its donation. The courts instead held that the donation of the property demonstrates that a taxpayer has accepted the unsolicited property and thus is subject to taxation on its value.204

It may be true, nevertheless, that, as a practical matter, the Internal Revenue Service would not require a book reviewer to include unsolicited books in her income if the reviewer simply keeps the books, even if the reviewer acknowledges possession of them. This would be reasonable since the reviewer would be allowed a business expense deduction if the books were purchased by the reviewer.205 Thus, excluding the value of the books from the reviewer’s income reaches the same result as fully taxing the receipt of the books and allowing a deduction for their purchase. If books are received in a nonbusiness capacity, on the other hand, as in the receipt of a free set of Encyclopaedia Britannica as a door prize, there is little doubt they are fully taxable to the recipient.206 Therefore, it appears that administrative convenience207 and the principle that business expenditures are deductible, rather than a fear of commoditization, underlies the exclusion from income of the receipt of certain unsolicited property.208

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205. After the Tax Reform Act of 1986, employee business expenses are deductible only to the extent that they, together with other miscellaneous itemized deductions, exceed 2% of the taxpayer’s adjusted gross income. I.R.C. § 67.


207. Once an individual takes a charitable deduction for the books, administrative simplicity is no longer a significant factor since the books already have been valued for purposes of the deduction.

208. The notion that certain activities should not be “commoditized” by sale in the market may well underlie certain legal rules. Restrictions on prostitution or on the sale of infants may be justified on the grounds that treating sex or babies as commodities is dehumanizing and fosters a social context that disregards personal values. Radin, Market-Inalienability, 100 Harv. L. Rev. 1849, 1921-22, 1927-28 (1987). Similarly, the taxation of the imputed value of certain types of “home production” such as parental child care may be inconsistent with the personal nature of the activity. The fact that the taxation of certain activities might lead to inappropriate commoditization of personal attributes or activities, however, does not support Kelman’s assertion that a resistance to commoditization underlies the exclusion of most imputed income from the tax base.
C. Personal Deductions and Kelman's Vision of Society

Kelman states that his disagreements with Andrews about the appropriate role of personal deductions ultimately "reflect the different ideological lenses through which [they] view reality." In Kelman's view, society is saddled with extreme economic stratification. Progressive taxation is appropriate to mitigate that stratification and personal deductions undermine progressivity.

In part, Kelman's argument against medical and charitable deductions is that they often are abused by the rich. Undoubtedly, therapeutic swimming pools, private hospital rooms, cosmetic surgery, and psychotherapy all may contain elements of nonmedical personal consumption. Similarly, charitable contributions may bring deference, invitations to social events with the rich and famous, and other personal benefits.

Since Kelman views personal deductions as inherently opposed to progressivity, he wants to eliminate medical and charitable deductions altogether rather than merely reform them. As noted earlier, this view is flawed since virtually any distributional goal can be reached under any reasonably broad-based tax by adjusting the rate structure.

Although Kelman deplores the level of economic stratification in our society and supports a progressive tax as a means of reducing that stratification, he does not connect his desire for redistribution to a principle of distributive justice. It is unclear, for example, whether Kelman favors increased equality of net income as an end in itself or as a means to some other end such as decreasing the power of the wealthy or reallocating economic resources to those who have the most urgent needs. The choice of a distributive norm has significant consequences for determining a tax base. If, for example, the goal is to redistribute income to those who need it most, Kelman's unvarnished net income tax base would not satisfy that goal because net income is likely to be a less accurate measure of need than a tax base that takes into account such items as medical expenses and casualty losses.

D. Summary of the Kelman Model

Kelman argues that the tax system should both reflect differences in earnings capacity and respect individual decisions not to exercise that

210. Id. at 880-81.
211. Id. at 849-51, 856-58, 864-65.
212. Id. at 881.
213. Id. at 882-83.
capacity. The latter principle, he contends, is part of a more general resistance to commoditization. Kelman argues that these principles suggest a progressive rate structure applied to a net income tax base without medical or charitable deductions.

Kelman's argument, however, is problematic. He does not offer a normative justification for his two basic principles of tax policy and his positive claim that the current tax structure reflects a resistance to the commoditization of nonmarket transactions is not persuasive. Kelman's vision of a tax system that would more adequately address the economic inequalities in our society is appealing. It is unlikely, however, that such a system would fail to adjust net income to reflect differences in individual needs.

IV. Normative Principles and Personal Deductions: A Preliminary Mapping

Tax scholars have no special expertise in resolving the thorny problem of choosing among normative principles. They can, however, help analyze how alternative ethical principles might be reflected in a tax structure. Accordingly, this section presents a simple model which evaluates alternative tax treatments of medical expenses under two different principles of distributive justice: a utilitarian ethic which seeks to maximize the average utility of individuals in society, and a leximin ethic, loosely based on the work of John Rawls, which seeks to maximize the welfare of the least well-off individual in society. The model is not intended to provide a comprehensive appraisal of the medical deduction. Indeed, the model makes several unrealistic simplifying assumptions. Rather, the purpose of the model is to suggest an approach to the
evaluation of personal deductions that is grounded in explicit normative principles.

A utilitarian principle of distributive justice ranks social states according to the average utility of individuals in those states. Thus, under a utilitarian ethic, society $A$ is preferred to society $B$ if and only if the average well-being of individuals in society $A$ is greater than the average well-being of individuals in society $B$. A leximin principle of distributive justice, on the other hand, ranks social states according to the welfare of the least well-off individual in the social state or, if that individual is equally well-off in each state, according to the well-being of the second least well-off individual, and so on. Under a leximin ethic, then, if the least well-off individual in society $A$ is better-off than the least well-off individual in society $B$, society $A$ will be judged better than society $B$, even if all other individuals are better-off in society $B$.\footnote{For an axiomatic definition of utilitarianism and the leximin, see Sen, \textit{On Weights and Measures: Informational Constraints in Social Welfare Analysis}, in \textit{Choice, Welfare and Measurement} 233-38 (1982).}

Both utilitarian and leximin principles of distributive justice are welfarist, that is, they view social welfare entirely as a function of individual welfare. They differ only in the way in which they weigh individual welfare—the utilitarian assigns equal weight to each individual and the leximin assigns all weight to the least well-off individual. Other welfarist weightings are also possible. For example, an ethic that ranks social states according to the product of the utilities of individuals in those states would give disproportionate weight to the utility of the less well-off, but would assign some weight to the utility of each individual.\footnote{Consider a society made up of two individuals, $A$ and $B$, with utility levels of 10 and 4, respectively. If social welfare is equal to the product of individual utilities, the society has a welfare level of 40 ($10 \times 4$). If the utility of $A$ is increased by one from 10 to 11, social welfare increases to 44 ($11 \times 4$); an increase of one unit in the utility of $B$ from 4 to 5, however, would increase social welfare to 50 ($10 \times 5$).}

The welfarist approach is subject to various objections. Entitlement to property based on the method by which it is acquired is ignored, and rights are valued only to the extent that they improve individual welfare.\footnote{Nozick, for example, argues that an individual is entitled to property acquired in uncoerced exchanges with others and that the state has no right to redistribute such justly acquired goods, even if that redistribution would improve both aggregate welfare and the welfare of the least well-off. \textit{R. Nozick, Anarchy, State and Utopia} 150-60 (1974).} Welfarism also requires making interpersonal utility comparisons which, some argue, are not only difficult to make, but essentially meaningless.\footnote{See supra note 122.}

Nevertheless, welfarism has substantial appeal for tax policy analy-
sis. Many people believe that the impact of tax provisions on individual welfare is relevant, at least, to evaluate the desirability of those policies, and the welfarist approach is consistent with the existence of a progressive rate structure.\(^2\) Welfarism is also consistent with certain formulations of Andrews’ concept of taxation according to “material well-being”\(^3\) and may underlie traditional tax equity principles such as “ability to pay” and “vertical equity.”

To evaluate personal deductions under utilitarian and leximin principles, it is useful to express the level of social welfare in a society as a social welfare function.\(^4\) The utilitarian social welfare function can be written as \(W = \sum U_i/n\), in which \(W\) is social welfare, \(U_i\) is the utility of the \(i\)th member of the society, and \(n\) is the size of the population. Under this formulation, social welfare is equal to the average utility of an individual in the society.\(^5\) The leximin social welfare function can be expressed as \(W = \min U_i\), in which \(\min U_i\) is the utility of the least well-off individual in the society.\(^6\)

The model, which will be used to evaluate tax treatments of medical deductions under a utilitarian and a leximin ethic, makes the following simplifying assumptions:

1. The society has two equally populated income classes, the “poor” who earn $20,000 and the “rich” who earn $80,000. One-half of the individuals in each income class are sick and must spend $8000 on medical expenses. The other half have no medical expenses.

2. Individual utility is determined by the level of nonmedical consumption. Nonmedical consumption is equal to pre-tax income, less taxes paid and less the costs of medical treatment.

3. Treatment is essential to the health of sick individuals, so that the demand for medical treatment is completely inelastic.

\(^2\) For an analysis of implications of welfarism for the rate structure, see Bankman & Griffith, supra note 164.

\(^3\) See supra text accompanying notes 151-66.

\(^4\) A social welfare function expresses the level of social welfare achieved by a combination of factors affecting social welfare. Y. Ng, supra note 122, at 39; see also Burk, A Reformulation of Certain Aspects of Welfare Economics, 52 Q.J. ECON. 310 (1938) (stating the value judgments required to maximize economic welfare). The arguments of a welfarist social welfare function are the utilities of the individual members of the society.

\(^5\) If the goal is to maximize total utility, the social welfare function can be expressed as \(W = \sum U_i\).

\(^6\) More accurately, the formula in the text represents a maximin social welfare function since it ranks equally all social states in which the least well-off individuals have the same level of welfare. A leximin social welfare function may be defined more precisely as follows: Let \(i(x)\) be the \(i\)th worst off individual of the \(n\) individuals in social state \(x\). Under the leximin social state \(x\) is preferred to social state \(y\), if and only if there is some \(r\): \(1 < r < n\), such that \(U_r(x) > U_r(y)\), and \(U_i(x) = U_i(y)\), for all \(i < r\). See Sen, supra note 218, at 234.
(4) Medical treatment completely eliminates the impact of sickness, so that a treated sick individual is just as well-off as a healthy individual with an identical level of nonmedical consumption.

(5) The marginal utility of nonmedical consumption declines so that the value of an additional dollar of nonmedical consumption is inversely proportional to the amount of consumption already enjoyed. Thus, an extra dollar of nonmedical consumption is worth ten times as much to an individual who has $10,000 of such consumption as to an individual who has $100,000. This can be expressed by letting the utility from nonmedical consumption equal the logarithm of that consumption. Thus \( U_i = \ln C_i \), where \( C_i \) is the nonmedical consumption of the \( i \)th individual.

(6) Changes in the tax rate, at least within the ranges expressed in the model, will not lead to changes in individual work effort or pretax wage rates. It might be imagined, for example, that all individuals work forty hours per week at fixed salaries.

To demonstrate the application of the model, consider a tax system without a medical deduction or credit under which the first $20,000 of income is taxed at a 20% rate and additional income is taxed at a 40% rate.\(^\text{227}\) As shown in Table C, under this tax structure each rich individual faces a tax liability of $28,000,\(^\text{228}\) while each poor individual faces a tax liability of $4000.\(^\text{229}\) The healthy rich and sick rich have nonmedical consumption of $52,000\(^\text{230}\) and $44,000,\(^\text{231}\) respectively, while the healthy poor and sick poor have nonmedical consumption of $16,000\(^\text{232}\) and $8000.\(^\text{233}\) Minimum utility is 8.987\(^\text{234}\) and average utility is 10.055.\(^\text{235}\)

This tax system can be compared to tax systems that take medical expenses into account in four ways: (1) a tax deduction available to all taxpayers; (2) a 30% tax credit available to all taxpayers; (3) a 30% tax credit available to poor taxpayers only; and (4) a 100% tax credit available to all taxpayers. In each case, the rate structure will be adjusted so

\(^{227}\) This rate structure is chosen as an arbitrary baseline and is unlikely to be optimal under either utilitarian or leximin principles. As noted earlier, if there are no incentive effects, marginal rates of 100% should be levied on the rich. See supra note 164 and accompanying text.

\(^{228}\) \((0.2 \times 20,000) + (0.4 \times 60,000) = 28,000.\)

\(^{229}\) \(0.2 \times 20,000 = 4000.\)

\(^{230}\) \((80,000 - 28,000) - 0 = 52,000.\)

\(^{231}\) \((80,000 - 28,000) - 8000 = 44,000.\)

\(^{232}\) \((20,000 - 4000) - 0 = 16,000.\)

\(^{233}\) \((20,000 - 4000) - 8000 = 8000.\)

\(^{234}\) \(\ln 8000 = 8.987.\)

\(^{235}\) \((10.859 + 10.692 + 9.680 + 8.987)/4 = 10.055.\)
### Table C

**NO DEDUCTION OR CREDIT FOR MEDICAL EXPENSES**

<table>
<thead>
<tr>
<th></th>
<th>Net Income</th>
<th>Medical Expenses</th>
<th>Taxable Income</th>
<th>Taxes Paid</th>
<th>After-tax Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthy Rich</td>
<td>$80,000</td>
<td>0</td>
<td>$80,000</td>
<td>$28,000</td>
<td>$52,000</td>
</tr>
<tr>
<td>Sick Rich</td>
<td>$80,000</td>
<td>$8,000</td>
<td>$80,000</td>
<td>$28,000</td>
<td>$52,000</td>
</tr>
<tr>
<td>Healthy Poor</td>
<td>$20,000</td>
<td>0</td>
<td>$20,000</td>
<td>$4,000</td>
<td>$16,000</td>
</tr>
<tr>
<td>Sick Poor</td>
<td>$20,000</td>
<td>$8,000</td>
<td>$20,000</td>
<td>$4,000</td>
<td>$16,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Nonmedical Consumption</th>
<th>Utility from Nonmedical Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthy Rich</td>
<td>$52,000</td>
<td>10.859</td>
</tr>
<tr>
<td>Sick Rich</td>
<td>$44,000</td>
<td>10.692</td>
</tr>
<tr>
<td>Healthy Poor</td>
<td>$16,000</td>
<td>9.680</td>
</tr>
<tr>
<td>Sick Poor</td>
<td>$8,000</td>
<td>8.987</td>
</tr>
</tbody>
</table>

that the same amount of revenue is raised from the rich and the poor as in a tax system without a medical deduction; that is, each tax change will be both revenue neutral and distributionally neutral between income classes.

Table D illustrates the impact of allowing a medical deduction for all individuals. To maintain revenue and distributional neutrality, the tax rate on the first $20,000 of income is increased from 20% to 25% and the tax rate on additional income from 40% to 41.071%. The medical deduction decreases the tax burden of rich and poor individuals who are

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236. Under this tax structure, tax liability would be calculated as follows:

- **Healthy Rich:** Taxable Income = $80,000;
  
  Tax = $29,643.

- **Sick Rich:** Taxable Income = $72,000;
  
  Tax = $26,357.

- **Healthy Poor:** Taxable Income = $20,000;
  
  Tax = $5,000.

- **Sick Poor:** Taxable Income = $12,000;
  
  Tax = $3,000.

Utility would be calculated as follows:

- **Healthy Rich:** $50,357 = 10.827.
- **Sick Rich:** $45,643 = 10.729.
- **Healthy Poor:** $15,000 = 9.616.
- **Sick Poor:** $9,000 = 9.105.
# Table D

**Medical Deduction Allowed**

<table>
<thead>
<tr>
<th>Tax Rates:</th>
<th>25% on first $20,000 of taxable income</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>41.071% on taxable income over $20,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Nonmedical Consumption</th>
<th>Utility from Nonmedical Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthy Rich</td>
<td>$50,357</td>
<td>10.827</td>
</tr>
<tr>
<td>Sick Rich</td>
<td>$45,643</td>
<td>10.729</td>
</tr>
<tr>
<td>Healthy Poor</td>
<td>$15,000</td>
<td>9.616</td>
</tr>
<tr>
<td>Sick Poor</td>
<td>$9,000</td>
<td>9.105</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Average Utility</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthy Rich</td>
<td>= 10.069</td>
<td></td>
</tr>
<tr>
<td>Sick Rich</td>
<td>= 9.105</td>
<td></td>
</tr>
<tr>
<td>Healthy Poor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sick Poor</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Average Taxes Rich</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthy Rich</td>
<td>$28,000</td>
<td></td>
</tr>
<tr>
<td>Sick Rich</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Healthy Poor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sick Poor</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

sick by $1643^{237}$ and $1000^{238}$ respectively, as compared to a tax system without a medical deduction, while increasing the burden on rich and poor individuals who are healthy by the same amount. Thus, the nonmedical consumption of the sick rich and sick poor increases to $45,643^{239}$ and $9000^{240}$ respectively, while the nonmedical consumption of the healthy rich and healthy poor declines to $50,357^{241}$ and $15,000^{242}$ respectively.

The introduction of a medical deduction increases social welfare under both a utilitarian and leximin social welfare function. Average utility is increased by 0.014 to 10.069\(^{243}\) and minimum utility is increased by 0.118 to 9.105\(^{244}\).

The increase in average utility can be explained as follows. Sick individuals have fewer dollars to spend on nonmedical consumption than

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237. $28,000 - $26,357 = $1643.
238. $4000 - $3000 = $1000.
239. ($80,000 - $26,357) - $8000 = $45,643.
240. ($20,000 - $3000) - $8000 = $9000.
241. (80,000 - $29,643) - 0 = $50,357.
242. ($20,000 - $5000) - 0 = $15,000.
244. In 9000 = 9.105.
healthy individuals with similar incomes. Since consumption has diminishing marginal utility, redistribution from healthy to sick individuals will increase the well-being of the sick more than it will lower the well-being of the healthy. The medical deduction also improves nonmedical consumption of the sick poor, who are the least well-off group in the society and thus increases social welfare under the leximin principle.

The effect of a 30% tax credit for medical expenses, which is available to all individuals is shown in Table E.245 As compared to the deduction, the credit redistributes a larger sum from the healthy poor to the sick poor and a smaller sum from the healthy rich to the sick rich. The credit decreases the tax burden on all sick individuals and increases the burden on all healthy individuals by $1200 as compared to a system with no adjustment for medical expenses. Redistribution is slightly less than it would be under a medical deduction, which would result in an average of $1321.50 redistribution to the sick from the healthy.246 Distributional and revenue neutrality is maintained by increasing the tax rate on the first $20,000 of income to 26% while leaving the tax rate on additional income unchanged.

The tax credit leads to a slightly greater level of social welfare than the deduction under both utilitarian and leximin principles of distributive justice. Average utility is increased by 0.002 to 10.071247 and minimum utility is increased by 0.022 to 9.127.248 The credit improves average utility more than the deduction because it provides a larger measure of relief ($1200 rather than $1000) to the sick poor who value it most. The

245. Under this tax structure, tax liability would be calculated as follows:

Healthy Rich: Taxable Income = $80,000; Credit = 0;
Tax = (0.26 × $20,000) + (0.4 × $60,000) = $29,200.

Sick Rich: Taxable Income = $72,000; Credit = $2400;
Tax = (0.26 × $20,000) + (0.4 × $60,000) - $2400 = $26,800.

Healthy Poor: Taxable Income = $20,000; Credit = 0;
Tax = 0.26 × $20,000 = $5200.

Sick Poor: Taxable Income = $20,000; Credit = $2400;
Tax = (0.26 × $20,000) - $2400 = $2800.

Utility would be calculated as follows:

Healthy Rich In 50,800 = 10.836.
Sick Rich In 45,200 = 10.719.
Healthy Poor In 14,800 = 9.602.
Sick Poor In 9,200 = 9.127.

246. In each case the level of redistribution is measured by comparison to a tax system with no adjustment for medical expenses. A medical deduction lowers the tax burden of the sick rich and sick poor by $1643 and $1000 respectively for an average reduction of $1321.50.

247. \( (10.836 + 10.719 + 9.602 + 9.127)/4 = 10.071. \)

TABLE E

30% TAX CREDIT FOR ALL TAXPAYERS

<table>
<thead>
<tr>
<th>Income</th>
<th>Medical Expenses</th>
<th>Taxable Income</th>
<th>Tax Credit</th>
<th>Taxes Paid</th>
<th>After-tax Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthy Rich</td>
<td>$80,000</td>
<td>0</td>
<td>$80,000</td>
<td>0</td>
<td>$29,200</td>
</tr>
<tr>
<td>Sick Rich</td>
<td>$80,000</td>
<td>$8,000</td>
<td>$80,000</td>
<td>$2,400</td>
<td>$26,800</td>
</tr>
<tr>
<td>Healthy Poor</td>
<td>$20,000</td>
<td>0</td>
<td>$20,000</td>
<td>0</td>
<td>$5,200</td>
</tr>
<tr>
<td>Sick Poor</td>
<td>$20,000</td>
<td>$8,000</td>
<td>$20,000</td>
<td>$2,400</td>
<td>$2,800</td>
</tr>
</tbody>
</table>

greater improvement in the welfare of the sick poor under the credit more than offsets the smaller improvement in the welfare of the sick rich.

The result of enacting a 30% tax credit available to the poor only is illustrated in Table F. Since the rich no longer benefit from the tax credit, their marginal rate is lowered to 38%. The elimination of the tax credit for the rich leaves the welfare of the poor unchanged, but reduces the average welfare of the rich by eliminating any redistribution from the healthy rich to the sick rich. Thus, compared to a system with a tax credit for all, social welfare is reduced by a credit limited to the poor

249. Under this tax structure, tax liability would be calculated as follows:
Healthy Rich: Taxable Income = $80,000; Credit = $0;
Tax = (0.26 × $20,000) + (0.38 × $60,000) = $28,000.
Sick Rich: Taxable Income = $72,000; Credit = $0;
Tax = (0.26 × $20,000) + (0.38 × $60,000) = $28,000.
Healthy Poor: Taxable Income = $20,000; Credit = $0;
Tax = 0.26 × $20,000 = $5200.
Sick Poor: Taxable Income = $20,000; Credit = $2400;
Tax = (0.26 × $20,000) − $2400 = $2800.
Utility would be calculated as follows:
Healthy Rich In 50,800 = 10.836.
Sick Rich In 45,200 = 10.719.
Healthy Poor In 14,800 = 9.602.
Sick Poor In 9,200 = 9.127.
TABLE F

30% TAX CREDIT FOR THE POOR ONLY

<table>
<thead>
<tr>
<th></th>
<th>Net Income</th>
<th>Medical Expenses</th>
<th>Taxable Income</th>
<th>Tax Credit</th>
<th>Taxes Paid</th>
<th>After-tax Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthy Rich</td>
<td>$80,000</td>
<td>0</td>
<td>$80,000</td>
<td>0</td>
<td>$28,000</td>
<td>$52,000</td>
</tr>
<tr>
<td>Sick Rich</td>
<td>$80,000</td>
<td>$8,000</td>
<td>$80,000</td>
<td>0</td>
<td>$28,000</td>
<td>$52,000</td>
</tr>
<tr>
<td>Healthy Poor</td>
<td>$20,000</td>
<td>0</td>
<td>$20,000</td>
<td>0</td>
<td>$5,200</td>
<td>$14,800</td>
</tr>
<tr>
<td>Sick Poor</td>
<td>$20,000</td>
<td>$8,000</td>
<td>$20,000</td>
<td>$2,400</td>
<td>$2,800</td>
<td>$17,200</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Nonmedical Consumption</th>
<th>Utility from Nonmedical Consumption</th>
<th>Average Utility =</th>
<th>10.070</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthy Rich</td>
<td>$52,000</td>
<td>10.859</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sick Rich</td>
<td>$44,000</td>
<td>10.692</td>
<td>Minimum Utility =</td>
<td>9.127</td>
</tr>
<tr>
<td>Healthy Poor</td>
<td>$14,800</td>
<td>9.602</td>
<td>Average Taxes Rich =</td>
<td>$28,000</td>
</tr>
<tr>
<td>Sick Poor</td>
<td>$9,200</td>
<td>9.127</td>
<td>Average Taxes Poor =</td>
<td>$4,000</td>
</tr>
</tbody>
</table>

under utilitarianism, since average utility is lowered by 0.001 to 10.070.\(250\) Social welfare is also reduced under the leximin, because the welfare of the third least well-off group (the sick rich) is lowered from 10.719 to 10.692,\(251\) while the welfare of those who are even less well-off (the sick and healthy poor) remains unchanged.

The basic principles driving this simple model are easy to understand. Medical expenses lead to differences in nonmedical consumption within each income class. Since additional nonmedical consumption is worth more to those with less of it, redistributing income from those with higher levels of nonmedical consumption to those with lower levels will increase both average utility and the utility of the least well-off. This can be accomplished by either a medical deduction or a tax credit. If the aggregate amount of redistribution is the same, a credit will lead to a greater level of redistribution from the healthy poor to the sick poor and a smaller level of redistribution from the healthy rich to the sick rich. This raises average utility because increases in the nonmedical consumption of the sick poor generate larger utility gains than increases in the nonmedical consumption of the sick rich.

\(250\). \(\frac{(10.859 + 10.692 + 9.602 + 9.127)}{4} = 10.070.\)

\(251\). \(\ln 44,000 = 10.692.\)
In short, any reduction in the inequality of nonmedical consumption within an income class increases social welfare under both utilitarian and leximin principles of distributive justice, but a reduction in inequality of nonmedical consumption among the poor is particularly valuable. Thus, the ideal tax treatment of medical expenses under this model is a 100% tax credit for the medical expenses of both the poor and the rich. This tax structure, summarized in Table G, yields an average utility of 10.086 and a minimum utility of 9.393.

This model, of course, rests on a number of simplifying assumptions, and thus its results must be viewed with caution. For example, medical treatment seldom makes a sick individual as well-off as a healthy individual. Also, medical services may contain elements of personal consumption, and the demand for medical services is not completely inelastic. Most important, the changes in the rate structure that accompany different treatments of medical expenses have incentive effects. Indeed, as noted earlier, in the absence of such effects utility is maximized by completely equalizing consumption through a 100% marginal tax rate on individuals with incomes above the mean and transfer payments to individuals with incomes below the mean. The most that can be drawn from this simple model is a tentative conclusion that under at least two principles of distributive justice—utilitarian and leximin—the ideal tax base is likely to include some adjustment for medical expenses.

Conclusion

The central message of this Article is that a satisfactory theory of personal deductions must be grounded on appealing normative principles. The model of personal deductions developed in the last section

252. Under this tax structure, tax liability would be calculated as follows:
Healthy Rich: Taxable Income = $80,000; Credit = $0;
Tax = 0.4 × $80,000 = $32,000.
Sick Rich: Taxable Income = $72,000; Credit = $8000;
Tax = (0.4 × $80,000) − $8000 = $24,000.
Healthy Poor: Taxable Income = $20,000; Credit = $0;
Tax = 0.4 × $20,000 = $8000.
Sick Poor: Taxable Income = $20,000; Credit = $8000;
Tax = (0.4 × $20,000) − $8000 = $0.
Utility would be calculated as follows:
Healthy Rich In 48,000 = 10.779.
Sick Rich In 48,000 = 10.779.
Healthy Poor In 12,000 = 9.393.
Sick Poor In 12,000 = 9.393.
254. In 12,000 = 9.393.
TABLE G

100% TAX CREDIT FOR ALL TAXPAYERS

<table>
<thead>
<tr>
<th>Tax Rate: 40% on all income</th>
<th>Net Income</th>
<th>Medical Expenses</th>
<th>Taxable Income</th>
<th>Tax Credit</th>
<th>Taxes Paid</th>
<th>After-tax Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthy Rich</td>
<td>$80,000</td>
<td>0</td>
<td>$80,000</td>
<td>0</td>
<td>$32,000</td>
<td>$48,000</td>
</tr>
<tr>
<td>Sick Rich</td>
<td>$80,000</td>
<td>$8,000</td>
<td>$80,000</td>
<td>$8,000</td>
<td>$24,000</td>
<td>$56,000</td>
</tr>
<tr>
<td>Healthy Poor</td>
<td>$20,000</td>
<td>0</td>
<td>$20,000</td>
<td>0</td>
<td>$8,000</td>
<td>$12,000</td>
</tr>
<tr>
<td>Sick Poor</td>
<td>$20,000</td>
<td>$8,000</td>
<td>$20,000</td>
<td>$8,000</td>
<td>0</td>
<td>$20,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Nonmedical Consumption</th>
<th>Utility from Nonmedical Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthy Rich</td>
<td>$48,000</td>
</tr>
<tr>
<td>Sick Rich</td>
<td>$48,000</td>
</tr>
<tr>
<td>Healthy Poor</td>
<td>$12,000</td>
</tr>
<tr>
<td>Sick Poor</td>
<td>$12,000</td>
</tr>
</tbody>
</table>

Average Utility = 10.086
Minimum Utility = 9.393
Average Taxes Rich = $28,000
Average Taxes Poor = $4,000

showed that under certain assumptions allowing a tax deduction or credit for medical expenditures improves both total welfare and the welfare of the least well-off group in the society. More important, however, than the particular conclusions reached by the model was its approach—starting with explicit normative principles and then examining how those principles shape the tax structure.

The model developed in this Article considered only welfarist normative principles and, moreover, adopted several unrealistic simplifying assumptions. Further research is needed to evaluate the tax implications of nonwelfarist principles and to examine welfarist taxation under more plausible assumptions. Such scholarship has a substantially greater potential for advancing our understanding of the ideal system of personal deductions than research that leaves its normative assumptions unstated.