WHY NOT A TRUE FLAT RATE TAX?

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Introduction

A true flat rate tax on income has two characteristics: first, the tax base is a comprehensive measure of income with no preferential treatment given to specific sources or uses of income, and second, a single tax rate is applied to that base. In short, a flat rate tax is a proportional tax on total income. By contrast, all of the proposals for reform of the federal individual income tax that have received serious attention are so-called modified flat tax proposals. They differ from a true flat rate tax by using a less comprehensive definition of taxable income (though often more comprehensive than under current tax law) and by applying a small number of graduated tax rates to that base. Since any of the modified flat tax proposals are more complex, more inefficient, and more horizontally inequitable[1] than a true flat rate tax, why are modified flat rate tax proposals considered the only serious contenders in the tax reform sweepstakes?

There is, of course, a simple answer to that question, an answer that seems to be almost universally accepted. In the words of the recent Treasury Department study on tax reform options (Treasury I 1984, pp. 21–23):

> These important advantages [of the flat rate tax] must be compared to the troublesome distributional implications of a pure flat rate tax. A single, totally flat rate, whether imposed on income or on consumption, would involve a substantial shift of tax burden from those in the highest income brackets to low- or middle-income taxpayers.

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[1]Horizontal inequity refers to the imposing of different tax burdens on people with equal ability to pay taxes. In other words, two people with the same incomes may pay different taxes because one makes greater use of tax preferences.

> ... Because of the massive redistribution of tax burdens a pure flat
> tax would produce, the Treasury Department recommends against
> its enactment.

Put differently, a true flat rate tax is thought to harm low- and middle-income taxpayers, a politically unacceptable consequence. Although there may be other disadvantages to the flat rate tax, this is the only one the Treasury Department mentions, and we suspect it is the principal objection most people have to the idea of a true flat rate tax.

The primary purpose of this paper is to examine carefully this objection to a true flat rate tax. Basically, we show that a flat rate tax will harm lower income households to a much smaller degree than is generally believed or estimated, and may even benefit them over the long run. Our conclusions follow from an analysis that incorporates the efficiency gains from the tax reform as offsets to the direct effects of changing tax liabilities.

The Economic Effects of Flat Rate Taxation

In examining the effects of a flat rate tax, we assume that a flat rate tax is substituted for the present federal individual income tax and that the single tax rate is set so that government revenues remain unchanged. In this framework, it is reasonable to suppose that government expenditure policies do not change, so we can concentrate on the consequences brought about by the change in tax policy alone. As will become clear, most of the advantages expected from this change in tax policy are really the alleviation of the disadvantages of the current income tax.

One of the most important advantages of the flat rate tax is that it will improve incentives to produce by reducing the marginal tax rates of most or all taxpayers. It is important to recognize that the marginal tax rate that applies to the earnings of productive resources is what produces adverse effects on resource supplies. If the marginal tax rate is 40 percent, for instance, a person who has an opportunity to earn an extra $100 will decide whether it is worth the effort based on the $60 in after-tax income that he gets to keep. The higher the marginal tax rate, the lower is the net rate of remuneration received and the more adversely resource supply is likely to be affected. Currently, marginal tax rates under the federal income tax range from 11 percent to 50 percent. In 1979, 35 percent of taxpayers filing joint returns faced marginal rate brackets of 28 percent or higher, and 13 percent were in marginal rate brackets of 37 percent or higher.

Under a flat rate tax using a comprehensive definition of income, the single marginal rate used could be as low as 10 to 12 percent. Thus, most or all taxpayers would confront a substantially lower marginal tax rate, and this in turn means the after-tax reward for earning more income would be increased. Although the magnitude of response to the higher after-tax returns is disputable, recent empirical research as well as common sense suggest that people will choose to make greater efforts to earn income when the returns are higher. These efforts could take the form of increased labor supply or increased saving and investment (or both).

Two further advantages can be expected from the use of a comprehensive measure of income coupled with a low marginal rate. Currently, taxable income is only about half of total personal income—which accounts in part for the high marginal rates that must be used today. When high marginal tax rates are applied to an emasculated definition of income, taxpayers are encouraged to channel part of their incomes into untaxed forms. This change in the composition or use of income reflects a loss in economic productivity as taxpayers devote resources to lower-valued uses simply because they are untaxed. Consider a person in a 50 marginal percent tax bracket. An additional $100 in taxable income is only worth $50 to him since the government collects $50 in taxes. If the taxpayer can transfer the $100 in taxable income to a nontaxed form, he will be better off even if the nontaxed use of $100 produces benefits worth only $51. In this case, the taxpayer benefits by $1 while the government loses $50 in revenue; $49 is effectively lost because the $100 in resources is devoted to a lower-valued use.

This type of waste, or efficiency loss, reflects a misallocation of resources caused by the existence of many untaxed sources and uses of income. A flat rate tax with a comprehensive measure of income would avoid this problem. In addition, even if some items continue to be given preferential treatment, the incentive for taxpayers to utilize these tax "loopholes" would be reduced due to the lower tax rate of the flat rate tax, so the efficiency losses of any remaining tax preferences would be lower.

Another benefit from the use of a more comprehensive tax base is that it would produce a fairer distribution of taxes among those with equal real incomes. Currently, taxpayers who are able to shift large portions of their incomes into untaxed forms pay less in taxes than those with equal incomes who are unable or unwilling to make as much use of tax preferences. The result is a wide dispersion in tax burdens among those who are equally well off. A flat rate tax with a

broad measure of income would come closer to the ideal that "equals should be treated equally."

A final advantage that can be claimed for the flat rate tax is that it would be simpler. No one needs to be told that the present tax law is highly complex. Tax returns require a good deal of time to fill out correctly, and additional time is required to keep the necessary records. The time required to comply with the tax laws is a (socially) unproductive use of resources: if a taxpayer could pay the same final tax without spending 30 hours locating records and filling out forms, he would be better off and the government would receive the same tax payment. In the same sense, payments for professional tax assistance represent an efficiency loss. Today, nearly half of all taxpayers use professional tax preparers, up from 10 to 15 percent 30 years ago.

Complexity exacts another cost in addition to these outright resource costs: it makes the consequences of the income tax more difficult for the public to understand. Consider, for instance, the widely held view that wealthy taxpayers largely avoid paying taxes through ingenious and excessive use of tax loopholes, perhaps even to the extent of paying a smaller share of their incomes in taxes than middle income taxpayers. While the evidence shows this view to be untrue for the average high income person—only a tiny percentage of wealthy taxpayers accomplish this feat—it requires a fairly sophisticated knowledge of the present complex system to recognize how tax burdens are really distributed among income classes. A flat rate tax would not only be simpler to comply with, it would also be easier to understand the broader social consequences it produces.

These general advantages of a true flat rate tax are widely recognized, but against them must be balanced one overriding disadvantage: the distributional effects of the tax. To examine that aspect of the issue, we will rely on data from the Joint Committee on Taxation. In 1982, the Joint Committee on Taxation estimated that a flat rate tax of 11.8 percent would raise the same amount of revenue in 1984 as the present tax (assuming income levels were the same in 1984 as in 1981) if the tax base were expanded by eliminating all exemptions, deductions, and tax credits and all capital gains were taxed. While it would be possible to define an even more comprehensive tax base, we will examine this specific flat rate tax because of the availability of data concerning how it would affect various income classes.

Table 1 shows how the Joint Economic Committee estimates the distribution of tax burdens would be affected by substituting a flat rate tax of 11.8 percent for the federal income tax in 1984. (Incomes are expressed at 1981 levels; although incomes and tax revenues would be higher at today's price and income levels, the general

TABLE 1

DISTRIBUTION OF TAX LIABILITIES:
FLAT RATE TAX VS. 1984 TAX LAW
(1981 Income Levels)

Expanded Income[a]	Number of Taxable Returns[b]	Tax Liability[c]		Change in Tax[d]
		1984 Law	Flat Rate Tax	
0–5	6.48	0.40	5.48	+783
5–10	15.06	5.77	14.28	+565
10–15	13.09	12.53	19.70	+548
15–20	10.74	17.46	22.50	+469
20–30	16.80	44.08	49.70	+335
30–50	13.57	63.83	60.58	−240
50–100	3.58	38.69	27.39	−3,156
100–200	0.63	18.66	9.87	−13,921
200 and up	0.16	16.39	7.68	−53,107
Total	80.11	217.80	217.17	−8[e]

[a]Thousands of dollars.
[b]In millions.
[c]In billions of dollars.
[d]Dollars per return.
[e]Average tax change.
SOURCE: Congressional Budget Office (1983, Table 7).

pattern of effects should be about the same.) Note that tax liabilities rise at expanded (that is, more comprehensively measured) income levels below $30,000 and fall at higher income levels.[2] In total, the 77 percent of taxpaying units with incomes below $30,000 are estimated to pay $31 billion more in taxes under the flat rate tax, while higher income taxpayers pay this much less. In 1981, $31 billion was about 1 percent of GNP and about 14 percent of income tax revenue. So the substitution of a flat rate tax for the present federal income tax can be expected to redistribute about 14 percent of the income tax burden from upper- to lower-income classes, a redistribution of about 1 percent of GNP.

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[2]We are puzzled by the large increase in taxes per return shown for the under $5,000 class. If every family had income at the top of that class ($5,000), its total tax from an 11.8 percent levy would be $590, but the table shows an increase of $783.07. We *suspect that this is due to the number of taxable returns in the table counting only those* that are taxable under current law, while the number would be much larger under the flat rate tax. If so, the increase in tax liability per family would be less than shown for the lower income classes which contain significant numbers of nontaxable returns under current law.

The redistributional consequences of a flat rate tax have led to its summary dismissal as a serious candidate for tax reform. Yet calculations of the sort appearing in Table 1 overstate the extent to which a flat rate tax would harm persons in lower income classes. These calculations are based on the assumption that each taxpaying unit's earnings would be the same under the flat rate tax as under the current tax, and therefore take no account of the beneficial effects of improved productive incentives of the flat rate tax. They also ignore the benefits of simplification and the broadened tax base. In short, Table 1 ignores all of the efficiency gains that are expected to result from a flat rate tax. Some of these gains will accrue to lower income classes, making the cost they bear less than is indicated in Table 1. Of course, the efficiency gains may offset only a trivial part of the cost on lower income classes. However, the analysis in the next two sections suggests that the efficiency gains of a flat rate tax significantly modify the picture of the distributional consequences suggested by Table 1.

Efficiency Gains: Labor Supply, Simplification, Broader Base

In this section, we will develop an estimate of the magnitude of the efficiency gain from a flat rate tax due to improved labor supply incentives, reduced compliance costs, and improved resource allocation from a more comprehensive tax base. In addition, we will allocate this aggregate gain among income classes. Making these estimates will require some heroic assumptions, but the economics literature does provide some guidance concerning the magnitudes we need to use. We caution, however, that this exercise does not purport to provide definitive conclusions; instead it is intended only to indicate the likely orders of magnitude involved.

We begin by considering the gains from increased labor supply under the flat rate tax. Two pieces of information are required to estimate how much labor supply will increase. First, we need to know how much marginal tax rates will fall under the flat rate tax since this determines how much after-tax rates of pay will rise. Second, we need to know how responsive workers are to an increase in the after-tax rate of pay. Our conclusion is that a flat rate tax will increase aggregate labor supply by about 5 percent. The reasoning that leads to this conclusion is fairly involved and occupies us for the next five paragraphs. For those readers willing to accept 5 percent as a reasonable figure, the next five paragraphs may be skipped. We should note at the outset that our estimate falls far short of the supply-side effects assumed by disciples of the Laffer curve. However, we

believe it is a plausible estimate of the labor supply response to a flat rate tax that substantially reduces marginal tax rates.

In evaluating the effect on labor supply, it is important to distinguish between effective and statutory marginal tax rates. The statutory rates are simply those nominal rates in the law that identify the marginal rate that applies to changes in taxable earnings. The effective marginal tax rate measures the marginal tax relative to changes in total earnings, comprehensively measured. Changes in effective marginal tax rates are what affect labor supply, but unfortunately these changes are not easily measured.

To see the significance of the distinction between statutory and effective marginal tax rates, consider how a hypothetical taxpayer now in a 30 percent statutory marginal tax bracket is affected when his gross earnings rise by $100. Part of the $100 increase is likely to be received in nontaxable forms, such as fringe benefits, and part is likely to be devoted to outlays that are deductible, such as charitable contributions. Thus, taxable income may rise by only $70, and the 30 percent rate applied to this sum results in $21 in additional taxes. Relative to total incremental earnings, the effective marginal tax rate is only 21 percent, and we argue that it is the effective marginal rate that acts as an impediment to work incentives, not statutory rates. To see this, suppose that the statutory marginal rate is reduced to 21 percent at the same time that the tax base is broadened so that the entire incremental $100 is taxable. Nothing will have changed: if $100 more is earned, $21 in taxes will be paid and $79 retained. Although the statutory rate is lower, the *effective* rate is not, and there is no reason to expect work incentives to be improved. Only reductions in effective marginal tax rates will improve work incentives. While a flat rate tax will reduce effective marginal tax rates, it will reduce them less than the change in statutory rates suggests.

It is also important to recognize that it is the reduction in the combined effective marginal tax rate from all taxes affecting labor earnings, including the federal and state income taxes, social security, and sales and excise taxes, that is significant. Moreover, this rate varies among households. Ideally, we should consider the change for each household separately, but the detailed information necessary to do this is lacking. Instead, we will consider how the weighted average for the combined effective marginal tax rate of households will be affected. Based on other research, it is reasonable to take 44 percent as an economywide average value for the combined effective marginal tax rate.[3] According to a study by Barro and Sahasakul

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[3]Browning and Johnson (1984, Table 3) have developed estimates of weighted average

(1983), the weighted average marginal tax rate for the individual income tax alone was 29 percent in 1979 (which should be similar to 1984 levels). This may seem to suggest that a flat rate tax of 11.8 percent would reduce marginal rates on average by 17.2 percentage points. However, this estimate is larger than the reduction in the effective marginal rate: the Barro-Sahasakul estimate is for the average statutory marginal rate under current law, but the 11.8 percent rate would apply to a broader measure of earnings. So instead of assuming a 17.2 percentage point drop in the effective marginal tax rate, we assume the 11.8 percent rate only represents a reduction of 8 percentage points in the effective marginal tax rate. Although the precise value is largely conjecture on our part, we believe it is more accurate than simply assuming that the statutory reduction of 17.2 percentage points produces an identical reduction in effective marginal tax rates.

Thus, we assume that a flat rate tax of 11.8 percent applied to a comprehensive base will reduce the effective marginal tax rate from 44 percent to 36 percent on average. This assumption in turn implies that the after-tax rate of pay will rise from 56 percent of the before-tax rate of pay to 64 percent, a 14.3 percent rise. Next, we need to consider how much labor supply will increase as a result. The size of the adjustment in labor supply depends on how responsive workers are to changes in net wage rates at the margin. Labor supply elasticities, which estimate the percentage change in labor supply resulting from a given percentage change in the wage rate, have been studied extensively. Based on available evidence, an economywide average value for the labor supply elasticity of 0.3 seems reasonable.[4] This implies that labor supply would rise by 4.3 percent, a result that does not seem excessive given a 14.3 percent increase in the net rate of pay.

This calculation, however, understates the effect of the flat rate tax. Recall that the 11.8 percent rate is estimated to raise the same amount of revenue if actual incomes remain unchanged; if incomes rise, as

marginal tax rates for each quintile of households in 1976. By weighting each of these rates by the share of labor earnings of each quintile we get an overall rate of 43 percent. Since both social security and income taxes are higher today, we think 44 percent is a reasonable figure to use, though it could easily be off by a few percentage points.

[4]We interpret the 0.3 figure as a compensated labor supply elasticity. Since the tax reform in question does not change the amount of tax revenue collected, there is no income effect for the community as a whole, and the compensated change in labor supply should equal the actual change. For references to the econometric literature dealing with labor supply elasticities, see Browning and Johnson (1984) and Stuart (1984).

we have argued they would, a lower rate could be used and still raise the same revenue. Based on the assumptions described above, we estimate that a 10.0 percent tax rate would raise the same total revenue as an 11.8 tax rate with no increase in work effort.[5] Making these adjustments, the effective marginal tax rate would fall from 44 percent to 34.2 percent, and the after-tax rate of pay would rise by 17.5 percent. With a labor supply elasticity of 0.3, this implies labor supply would rise by 5.25 percent. This is our estimate of how much labor supply would rise under a flat rate tax applied to a comprehensive measure of income.

With such an increase in labor supply, labor earnings would rise by about $105 billion (at the 1981 levels used in Table 1). This increase does not represent a net gain to taxpayers, however, since they would be working more (consuming less leisure) to produce the additional $105 billion. The net gain is the extra earnings less the value of leisure given up. By using the after-tax rate of pay to value leisure, we estimate that the cost (in sacrificed leisure) of producing the extra $105 billion is $64 billion.[6] Therefore, we arrive at a net gain to taxpayers as a group of $41 billion from the improved work incentives of the flat rate tax.

There are two other efficiency gains that we can roughly estimate. First, there is the gain from tax simplification. Taxpayer compliance cost and the costs of collecting taxes would be lower under the flat rate tax. Slemrod and Sorum (1984) have recently estimated that the time cost of taxpayers complying with the current tax has a value of about 5 percent of tax revenue. In addition, the costs firms bear in administering withholding, costs of professional assistance, and collection costs of the Internal Revenue Service can conservatively be estimated at 2 percent of revenue. Therefore, total compliance and collection costs are probably about 7 percent of revenue, or $15 billion. We assume that the simpler flat rate tax would reduce these costs by one-third, or by $5 billion.

Second, there is the gain from the use of a more comprehensive tax base, which avoids the uneconomic shifting of resources to lower-valued uses because of tax advantages. The efficiency cost of these

[5]This 10.0 percent tax does not yield the same revenue as the present income tax. With additional labor earnings, tax revenues under social security, state income, and sales and excise taxes will rise, so an unchanged total government revenue implies less revenue from the income tax considered by itself. From a welfare standpoint, it is total revenue and not its distribution among separate taxes that is important.

[6]The after-tax rate of pay is initially 56 percent of the market rate and rises to 65.8 percent under the flat rate tax, so the average value of the after-tax rate of pay over the change in earnings is 60.9 percent. Multiplying this by the increase in earnings gives the value of leisure given up in earning the extra $105 billion.

distortions under the present tax has been estimated to be about 7 percent of revenue (J. Browning 1979), or a total of $15 billion at 1981 levels. Since no feasible tax base is likely to eliminate all these distortions, we assume that a flat rate tax will result in a gain of $10 billion through improved resource allocation due to base-broadening.

Combining these three efficiency gains yields a total annual net gain of $56 billion. Again, we emphasize that this is only a rough estimate, but the assumptions on which it is based are entirely reasonable given the available evidence. This gain means that shifting to a flat rate tax of equal yield will increase the real income of the nation by $56 billion annually (at 1981 levels). Stated differently, the real burden of a flat rate tax that raises the same revenue as the present income tax would be about 20 percent less.

Recognizing these efficiency gains does not mean that everyone would benefit from the flat rate tax. The question of who would receive these gains is therefore of interest. We start with the changes in tax liabilities by income classes implied by the data in Table 1; the changes in tax liabilities are shown explicitly in the first column of Table 2. Recall that these changes are based on the assumption of an 11.8 percent tax rate applied to an unchanged level of earnings.

TABLE 2

DISTRIBUTIONAL EFFECT INCORPORATING SOME
EFFICIENCY GAINS

		Efficiency Gains[b]		
Expanded Income[a]	Change in Tax Liability[b]	From Increased Labor Supply	From Simplification and Broader Base	Change in Real Incomes[b]
0–5	+5.08	1.03	0.03	−4.02
5–10	+8.51	2.70	0.40	−5.41
10–15	+7.17	3.72	0.86	−2.59
15–20	+5.03	4.25	1.20	.42
20–30	+5.62	9.38	3.04	6.80
30–50	−3.25	11.44	4.40	19.09
50–100	−11.30	5.17	2.66	19.13
100–200	−8.78	1.86	1.29	11.93
200 and up	−8.71	1.45	1.13	11.29
Total	−0.63	41.0	15.01	56.6

[a]In thousands of dollars.
[b]In billions of dollars.
SOURCE: Table 1 and calculations explained in text.

Because of the increase in earnings under the flat rate tax, we have seen that a 10 percent tax rate can be used. Thus, even though all households may not increase labor supply to the same degree, all will benefit from the efficiency gain which permits use of a 10 percent rate rather than an 11.8 percent rate. (Note that a household whose income does not rise at all will benefit because its tax burden would be nearly 20 percent lower than estimated in Table 1.) Since all households benefit from a lower tax rate, we can allocate the efficiency gain from increased labor supply in proportion to tax liabilities calculated for the flat rate tax when no change in earnings is assumed. Column 2 in Table 2 shows the size of this efficiency gain when apportioned among income classes in this way.

The gains from improved simplicity and a broader tax base are allocated in a different way. These gains will likely accrue primarily to those who pay taxes under the present system, and are probably greater the more taxes currently paid. Therefore, the $15 billion efficiency gain from these sources is allocated in proportion to tax liabilities under the present income tax. The distribution of these gains by income class is shown in column 3 of Table 2.

The change in real net income for each income class is given by combining the change in tax liability as originally calculated in column 1 with the efficiency gains in columns 2 and 3; the results are displayed in column 4. Recall that Table 1 suggested that the lowest five income classes would suffer a loss of $31 billion from the substitution of the flat rate tax for the present income tax. The estimates in Table 2, however, imply that the combined loss of the lowest three income classes (the only ones that lose) is only $12 billion. Families with incomes above $15,000 are estimated to gain a total of $68 billion. Tax reform is not a zero sum game; the gains to those who are benefited are more than five times as large as the losses to those who are harmed.

This exercise shows that the adverse distributional consequences of a flat rate tax are likely to be substantially smaller than common estimates that ignore efficiency gains would imply. Moreover, there is one significant efficiency gain that we have not yet considered, namely, the gain from the increase in saving that a flat rate tax would produce.

The Efficiency Gain from Increased Saving

There are several reasons why the introduction of a flat rate tax can be expected to increase private saving. First, the redistribution of the tax burden in favor of upper income classes will increase total

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saving if upper income households tend to save more out of disposable income at the margin than lower income households. Second, lower effective marginal tax rates will tend to increase the after-tax return from saving, and more saving may be forthcoming when the return on saving increases. It is important, however, not to overstate the extent to which the after-tax rate of return will increase. Since much saving is already preferentially treated under the present income tax, moving to a flat rate tax might not increase after-tax returns for many taxpayers. Third, some portion of the increase in labor earnings that results from the improved work incentives will be saved.

In order to estimate the gain from increased saving, we require an estimate of how much saving will rise. Because saving is already preferentially treated and we do not know how much (if any) after-tax rates of return will increase under a flat rate tax, our estimate is based exclusively on the third source of increased saving mentioned above, that is, increases in saving resulting from increased labor earnings. In the last section, we estimated that disposable incomes would rise by $105 billion as a result of increased labor supply. Now we further assume that the marginal propensity to save is 0.15; thus, we estimate that saving will rise by $15.75 billion. This figure would represent about a 4 percent increase in the level of annual saving.

Why is an increase in saving a source of an efficiency gain? Under certain circumstances, it would be irrelevant to our analysis whether people spent or saved their increments in labor earnings. Specifically, if taxes on labor earnings are the only distortions in an otherwise competitive economy, there would be no efficiency gain. In this case, a person who saves an additional dollar receives the entire gain associated with providing funds that finance capital formation. If the real rate of interest is 5 percent, for example, an additional dollar saved would finance capital that (net of depreciation) will augment future production at an annual return of 5 percent. The saver, then, would receive the full increment in production that his saving makes possible. In this situation, if an increase in work effort raises income and leads to a dollar increase in saving, only the saver receives any benefit, and that benefit is correctly measured as one dollar.

The situation is different, however, when the government levies taxes on capital income. In the United States, several taxes fall on the return to capital, notably state and federal corporation income taxes, property taxes, and state and federal income taxes. The combined effect of these taxes is to make the rate of return received by the saver less than the rate of return actually generated when that saving finances capital investments. In a recent study, it was estimated that the before-tax real return to capital investments in the

corporate sector was about 10 percent, but after taxes savers receive a real rate of return of about 3 percent (Feldstein, Poterba, and Dicks-Mireaux 1981). In other words, the effective tax rate on corporate capital is about 70 percent.

Consider what happens when a person saves an additional dollar, and the return on that dollar is taxed at a rate of 70 percent. To make matters simple, assume that the person will maintain the principal intact in the future and only consume the net return it provides. The saver then receives a stream of annual returns of 3 cents per year from a one dollar investment; that part of the gain from increased saving is received by the saver himself. At the same time, however, there is another gain that is not received by the saver, namely, the stream of annual capital tax payments of 7 cents per year that is also produced by one dollar in savings. People other than the saver himself will benefit because the increased future tax collections that his saving generates can finance lower tax rates and/or higher public expenditures. This part of the gain from increased saving was not taken into account in our previous estimates, and it represents a further increase in real incomes that result from the tax reform.

Now we turn to the estimation of the magnitude of the efficiency gain from increased saving. While the proper way to do this is a complex theoretical issue, we can easily explain why this gain is likely to be substantial by continuing with our previous example. The after-tax rate of return of 3 percent can be taken as a measure of how much people discount benefits received in the future: a benefit of $1.03 one year in the future has a present value of $1.00. When saving rises by one dollar, society in total receives a stream of annual benefits of $0.10 ($0.07 of which will go to the government and $0.03 of which goes to the saver). The present value of an infinite stream of annual benefits of $0.10, when the discount rate is 3 percent, is equal to $3.33 ($0.10/.03). Thus, when saving rises by $1, the present value of the future benefits is $3.33; one dollar of this is the present value of the benefit received by the saver and the remaining $2.33 is the present value of the future tax payments that the saving will generate.

What we have just illustrated with a simplified example is the calculation of what economists call the shadow price of capital. The shadow price of capital is intended to measure the present value of the future benefits that flow from an additional dollar of saving (and hence capital formation). Calculating a value for the shadow price of capital is more involved than in our example since the future effects of present saving also depend on how long the principal is held intact, the extent to which some of the annual net returns may them-

selves be saved, and other factors. In a recent survey related to these matters, Lind (1982) concludes that 3.80 is a reasonable estimate of the magnitude of the shadow price of capital. We will rely on his estimate, and hope that our example makes the size of this figure plausible.

Coupled with our estimate that a flat rate tax will increase saving by $15.75 billion, a shadow price of capital of 3.80 implies that the present value of future benefits from that saving is $59.85 billion. (Note that this is the present value of benefits from one year's increase in saving.) Of this gain, savers themselves receive $15.75 billion—the present value of the after-tax returns received—and that amount is already included in our previous analysis as part of the increase in labor earnings. The remaining $44.1 billion represents an efficiency gain from the increased saving.

For our purposes, we also need to know how this gain will be distributed among income classes. It is not clear how best to proceed in this case, and we propose two alternatives. First, since the gain takes the form of higher future capital tax revenues, it would be possible to reduce the flat rate tax in future years and still generate the same tax revenue. This suggests allocating the gain in proportion to tax liabilities under the flat rate tax. Alternatively, the government might spend this additional revenue rather than reducing tax rates. Based on other research, it seems reasonable to assume that benefits from government spending are distributed equally among taxpaying units.[7]

Table 3 uses both approaches to allocate the efficiency gain from increased saving. The first column gives our previous estimates of the changes in real incomes by income classes (from Table 2). Columns 2 and 3 show the additional efficiency gains accruing to each income class when the aggregate gain is allocated in proportion to tax liabilities under the flat rate tax (column 2) and alternatively when it is allocated in proportion to the number of taxpaying units (column 3). The last two columns give the two alternative estimates of the total change in real income for each income class. These represent our final estimates of the distributional effects of substituting a flat rate tax for the present federal income tax. The results are striking. Instead of an aggregate loss of $31 billion to lower income classes, the lowest two income classes (the only two estimated to be harmed)

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[7]In Browning and Johnson (1984), it is estimated that government transfers per household for each quintile in 1976 were $2,874, $3,317, $2,441, $2,117, and $2,485. These figures suggest to us that allocating the benefits of government spending to taxpaying units is not likely to be too far off.

TABLE 3

DISTRIBUTIONAL EFFECT INCORPORATING ALL
EFFICIENCY GAINS

Expanded Income[a]	Changes in Real Income Excluding Saving[b]	Efficiency Gains from Increased Saving Allocated to:		Change in Real Income Including Saving Allocated to:	
		Tax Liabilities[b]	Taxpaying Units[b]	Tax Liabilities[b]	Taxpaying Units[b]
0–5	−4.02	1.11	6.60	−2.91	2.58
5–10	−5.41	2.90	7.67	−2.51	2.28
10–15	−2.59	4.00	6.67	1.41	4.08
15–20	0.42	4.57	5.47	4.99	5.89
20–30	6.80	10.09	8.56	16.89	15.36
30–50	19.09	12.30	6.91	31.39	26.00
50–100	19.13	5.56	1.82	24.69	20.59
100–200	11.93	2.00	0.32	13.93	12.25
200 and up	11.29	1.56	0.08	12.85	11.37
Total	56.6	44.1	44.1	100.7	100.7

[a]In thousands of dollars.
[b]In billions of dollars.
SOURCE: Table 2 and calculations explained in text.

lose only $5.4 billion when the gain from saving is allocated in proportion to taxes, while the higher income classes gain about $106 billion. When the gain from increased saving is allocated to taxpaying units, all income classes are estimated to benefit from the tax reform. In both cases, the aggregate efficiency gain is estimated to be in excess of $100 billion.

Evaluation of Distributional Effects

Our analysis has been based on the fact that if a flat rate tax leads to increased labor supply and/or saving, then lower income classes will receive some benefit even if their own labor supply and saving does not change. The reason, often overlooked, is that increases in earnings will generate additional tax revenue and permit either a tax rate reduction or an expenditure increase (or both), and in this way the efficiency gains from tax reform tend to be spread more widely through the income distribution. Our major finding is that the harm done to lower income households is substantially less than commonly supposed; indeed, they could actually benefit. While the exact

values of our estimates should be viewed as merely suggestive, we believe they are based on plausible economic assumptions.

Before considering the significance of this finding, there are several additional aspects to the distributional issue that should be discussed. The first concerns the mobility of households within the income distribution. Figures like those in our three tables are based on the incomes households have in a single year. Often, however, a single year's income is not an accurate indication of the household's average economic position over a longer period of time. For example, suppose that a household in the lowest income class is there because of a temporary illness of the household head, and that in all other years that family has a higher income. In this situation, what really matters to the family's well-being is how the tax reform affects real tax burdens at the family's normal, higher income level. Calculations of the sort shown in our tables, which indicate how much taxes increase for the lowest income class, can be very misleading in situations like this.

From an equity standpoint, it is important to consider how the tax system affects households for longer than a single year. Unfortunately, what the distribution of income looks like over extended periods of time is not known exactly, but some recent estimates demonstrate that people shift around in the income distribution to a dramatic extent. For example, the Panel Study on Income Dynamics found that nearly half of families whose incomes placed them in the bottom 20 percent of the income distribution in 1971 were in higher income classes only seven years later (Lilla 1984, p. 70). The same study also found that only one-third of those counted as poor in a given year were poor in eight or more years out of a ten-year period. Even more interesting are the results of a computer simulation study of lifetime tax incidence in Canada by Davies, St.-Hillaire, and Whalley (1984, pp. 633–49). The Canadian study found that the poorest decile of households received only 1 percent of total national income in the annual data, but the lowest decile received 4 percent of total income when lifetime incomes were compared. To find that the lowest income class could have an average income over its lifetime that is four times as high as its income in each year's annual data is quite remarkable.

What data of this sort suggest is that it may be largely irrelevant how the tax system is estimated to affect people in the lowest one or two income classes shown in our tables: there may be very few households that remain in these classes when a longer-run viewpoint is adopted. Taking account of mobility, therefore, serves to strengthen our contention that low income groups will not be harmed as much

as conventional analysis of annual data imply. Moreover, families that are not upwardly mobile can be helped with income transfers, as we will discuss below.

A second factor related to the significance of our estimates is the timing of the labor supply and saving consequences we have estimated. In our calculations, it was assumed that people would respond immediately to the lower marginal tax rate of the flat rate tax. In effect, we estimated the permanent, long-run effects of the tax reform. It takes time, however, for people to fully adjust to a major change in the tax structure, and the immediate, or short-run, effects will be quite different. For instance, two studies have estimated that it takes from two to four years for half the eventual change in labor supply to be realized. Moreover, the full effects of the increase in saving will be even more delayed; although we have expressed the benefits in present value terms, the effect of increased saving on augmenting capital income tax revenues would be quite small in the beginning and perhaps take 20 to 25 years to grow to its full magnitude.

In the short run, that is, the period immediately following the tax reform, labor supply and saving would probably not increase significantly. Consequently, the short-run, albeit temporary, effect of the tax reform on the distribution of income might look more like Table 1 than the other tables. In other words, the immediate consequences would involve substantial costs on low income households. Although these costs would diminish over time and for many households actually become benefits after a few years, there is no avoiding the fact that present costs must be borne for a time before future benefits will be realized.

Because the short-run effects of a movement to a flat rate tax differ in this way from its long-run effects, tax reform of this nature is likely to be difficult. Politicians are widely thought to take a short-run viewpoint in evaluating public policies, and that viewpoint naturally leads to an emphasis on the "massive redistribution" of tax burdens that a flat rate tax would produce. It would be unfortunate if such a perspective is the basis for rejecting a tax reform that holds out the promise of benefiting most people. Such an outcome is, however, understandable.

It is probably true that a concern for the well-being of low income households accounts for the lack of serious attention given a true flat rate tax. It is simply taken for granted that the income tax must exempt the neediest households from taxation. There are other ways, however, to assist the needy that should also be considered. For example, government transfer programs can also serve this function. In fact, transfer programs are far more important to the well-being of low

income households than is the federal income tax. Even if a flat rate
tax were used, government transfers to the poorest 20 percent of
households would still be three times as great as the total (federal,
state, and local) tax burden on these households. What this fact should
make clear is that our redistributional goals are now being served
primarily through our system of transfers instead of by the progres-
sive nature of the income tax. Moreover, this is as it should be.
Through transfer programs, we can better target assistance on the
neediest households than we can by manipulating the tax law. (Cut-
ting taxes for low-income people and raising taxes for high income
people, for example, does little to help the neediest families if they
have little or no taxable income. Increasing transfer payments, how-
ever, can help.)

What is not adequately appreciated is that the existence of a well-
developed (if not well-designed) system of transfers greatly reduces
our need to rely on the income tax as a redistributive device. It is
simply not necessary for every government policy to serve a redis-
tributive goal since transfers can be adjusted so that the net effect of
the system as a whole is to help the poor. For example, it would be
possible to couple enactment of a flat rate tax with a moderate (and
perhaps temporary) increase in transfers to the poor, thereby miti-
gating or avoiding harming the truly needy while at the same time
realizing the efficiency advantages of the flat rate tax. While we do
not necessarily advocate this approach (since it could easily be abused),
we only suggest it to show that the cost the tax reform considered by
itself would impose on the poor is not a sufficient reason to dismiss it.

Modified Flat Tax Proposals

All of the proposals for tax reform that are receiving serious atten-
tion are modified flat tax proposals. These proposals are quite differ-
ent from what we have described as a true flat rate tax. Specifically,
there are two important differences. First, the tax base is defined in
a way that continues to exempt large amounts of income so that
taxable income continues to fall far short of the total income of tax-
payers. Second, instead of a single rate applied to this base, a set of
graduated rates is used. Generally, however, the number of separate
marginal rate brackets is lower than under the present tax.

Perhaps the most important of the tax proposals are the Bradley-
Gephardt bill, the Kemp-Kasten bill, and the recent Treasury Depart-
ment proposal (Treasury I). All three of the proposals would selec-
tively eliminate cetain tax preferences, although there are differences

in exactly which preferences would be abolished. All three would increase personal exemptions, thereby expanding one important tax preference, and all three would reduce the number of separate marginal rate brackets effectively to three. Under Bradley-Gephardt, the marginal brackets are 14 percent, 26 percent, and 30 percent; under Kemp-Kasten, they are 20 percent, 28 percent, and 25 percent[8]; under Treasury I, they are 15 percent, 25 percent, and 35 percent.

We have argued that the efficiency gains of a true flat rate tax would probably be substantial. The natural question to consider now is how the modified flat tax proposals compare to the true flat rate tax in this regard. Supporters of these measures claim that their lower marginal rates—although not as low as could be achieved under a true flat rate tax—would increase incentives to work, save, and invest. However, we contend that none of these proposals would lead to any significant improvement in productive incentives.

To demonstrate this, it is not necessary to engage in any sophisticated theorizing. Instead, we need only accept the claims of the sponsors of these proposals that they would not effect any significant change in tax liabilities by income class. If the actual degree of progressivity of the present tax system is retained, it immediately implies that *effective* marginal tax rates have not been reduced at all. This is simply a matter of arithmetic. If the present and new tax liability is $3,000 at an income of $30,000, for example, and both taxes impose a liability of $5,000 at an income of $40,000 (the assumed unchanged degree of progressivity), then the effective marginal tax rate applied when income increases from $30,000 to $40,000 must be 20 percent under both taxes since the additional tax liability is $2,000. Similar reasoning applies for other income classes. It makes no difference whether the statutory marginal tax rates are lower; if they are applied to a broadened measure of income at the margin, as they must be if actual tax liabilities are to remain unchanged, then the effective marginal tax rates will not be any lower. And incentives will improve only if effective marginal tax rates are reduced.

We are not arguing that these proposals will not improve any single person's incentive to earn, but just that on average there will be no improvement. Some people may face lower effective marginal tax rates, but others in the same tax brackets must be facing higher

[8]The Kemp-Kasten plan has a nominal marginal tax rate of 25 percent that applies to all taxable income. However, it also utilizes an earned income exclusion of 20 percent of earnings that applies up to $40,000, and that makes the net marginal tax rate equal to 20 percent up to that level of income. The exclusion is gradually phased out at earnings between $40,000 and $100,000 in a way that makes the net marginal tax rate 28 percent over this range. For incomes over $100,000, only the 25 percent rate applies.

effective marginal rates if the tax liabilities by income class really do remain largely unaffected. For example, last year *Newsweek* (1984) published a comparison of average tax liabilities by income class under Bradley-Gephardt and the present tax. There was, in fact, very little difference in the average tax liabilities for each income class; Bradley-Gephardt produced slightly lower taxes on households with incomes under $25,000 and slightly higher taxes on those with higher incomes. This implies that the additional taxes paid if a taxpayer moves from a lower to a higher bracket will be greater under Bradley-Gephardt: how could this possibly give one more incentive to earn more under Bradley-Gephardt?

What the modified flat tax proposals do is to produce lower statutory marginal tax brackets by broadening the tax base in a way that does not produce the lower effective marginal tax rates on which incentive effects depend. An example may help to make this clear. Suppose a person is now in a 40 percent tax bracket; then the marginal tax is reduced to 36 percent at the same time the tax base is broadened by disallowing the deduction of state income taxes. Does this person have any greater incentive to earn income? If he is in a 10 percent state tax bracket, the answer is no. Suppose the person under current law earns $100 more. Ten dollars is paid to the state and 40 percent of the $90 taxable income under the federal tax ($100 less the $10 deduction), or $36, is paid to the federal government. He keeps $54 out of the $100; his effective marginal tax rate is 46 percent. Under the alternative tax, the $10 deduction is not allowed, and the lower statutory rate of 36 percent applies to the full $100, so the federal tax liability is still $36 and the state liability is still $10. He still gets to keep only $54 out of the extra $100 earned; his effective marginal tax rate is still 46 percent even though the statutory rate of the federal tax has been reduced from 40 percent to 36 percent.

Insofar as these modified flat tax proposals really do not significantly change actual tax liabilities at each income level, they must do so in a way analogous to the example above. They produce illusory lower marginal tax rates by applying these rates to a larger part of each additional dollar of earnings than the present law. Consequently, it is difficult to see how they can be expected to improve incentives to earn income.

The modified flat tax proposals, therefore, cannot be expected to produce the increases in labor supply and saving that a true flat rate tax can. This is not the same as saying that they are undesirable, but only that the efficiency gains will be less than under the tax reform we evaluated earlier in this paper. To indicate the significance of this, we estimated a total efficiency gain for a flat rate tax of $100

billion annually, of which $41 billion was due to increased labor supply and $44 billion to increased saving; a modified flat tax would realize none of these gains because saving and work effort would be unaffected. The remaining $15 billion gain we estimated for a true flat rate tax was due to improved resource allocation from a broadened tax base and to the greater simplicity of the tax. Since the modified flat tax proposals broaden the tax base by less than a true flat rate tax and simplify the tax less, they will produce only a fraction of the $15 billion in efficiency gains. Overall, the efficiency advantages of the modified flat tax proposals can realistically be expected to be only a small fraction of the gains that could be expected from a true flat rate tax.

Modified flat tax proposals are predicated on the assumption that it is politically infeasible, or for some other reason undesirable, to substantially change the distribution of tax burdens by income class. Accepting that as a constraint, however, is equivalent to forgoing much of the sizable efficiency gain that is possible from a true flat rate tax.

Conclusion

Why not a true flat rate tax on total earnings in place of the present complex, inequitable, and inefficient income tax? As we have seen, the advantages are substantial. The major objection that has forestalled debate on this type of tax reform has been that it will impose huge costs on middle- and low-income households. We have argued that the efficiency gains are sizable enough to offset a large part of these costs. Moreover, once it is recognized that transfer programs are a better way to insure adequate income for the truly impoverished, the possibility of a meaningful improvement in our tax system becomes real. We can have a simpler, more easily understood, more equitable, and more efficient tax system.

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LINGERING QUESTIONS ABOUT
TAX REFORM

Pamela P. Peterson

The debate over tax reform includes the proponents of a flat rate tax system, although the term "flat tax" has been used to describe many rate structures. In their paper, Browning and Browning (1985) favor a single-rate flat tax. They note, quite correctly, that many of the so-called flat tax schemes introduced in recent years are really modified flat rate taxes. Supporters of these modified flat rate systems reject a true flat rate tax because of their concern over the distributional problems associated with the shift to a single rate system. The Brownings' paper, however, demonstrates that a true flat rate will not injure lower income households to the degree conjectured in other studies. In fact, a true flat tax may benefit lower income households in the long run. The major reasoning behind this position is that efficiency gains from tax simplification and a single rate system may exceed any increase in the tax burden for lower income households.

Advantages of a Flat Rate Tax

The authors cite four advantages to be gained by moving to a true flat rate tax system. One advantage is that a reduction in marginal tax rates may improve the incentives to produce. The example provided, however, assumes that a person who has an opportunity to earn additional income will not seek out tax avoidance for all or part of any additional income. If individuals do seek out this avoidance, then the reduction of marginal tax rates may not significantly affect the willingness to produce, assuming that methods of avoidance are available.

Another advantage of a flat rate system, which rests on a more comprehensive definition of income, is that the marginal tax rate could be reduced. The authors estimate that the expansion of the

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definition of taxable income can lower the marginal tax rate to the range of 10–12 percent. Aside from the lower marginal tax rate, the base broadening may encourage the reallocation of resources from less productive uses (currently subject to preferential tax treatment) to more productive uses. This shifting of resources may then provide gains to the economy, correcting the misallocation of resources encouraged under the present tax system.

A further advantage of the flat rate tax system is the more equitable distribution of tax burdens among the "informed" and the "uninformed" taxpayers. While the present tax code is complex and the attendant regulations and cases provide opportunities for tax avoidance, it is not clear from empirical evidence that taxpayers do in fact utilize the avoidance provisions to their advantage. For whatever reason underlying the less aggressive tax positioning of taxpayers, the disparity in tax burdens among informed and uninformed taxpayers in equivalent financial situations may not be wide.

Another advantage of moving to a true flat tax system would be the reduction in the compliance burdens of the taxpayers and the enforcement burdens of the tax collector. While the Tax Reform Act of 1976 may be referred to as the "Accountants' Right to Work Act," the simplifying tax reform may be referred to as the "Accountants' Unemployment Act." The changeover to a simpler tax system may provide accountants and lawyers with a short-term burst of business due to the restructuring of taxpayers' investment portfolios, but the long-term effect would be to reduce the demand for these services.

A disadvantage of a single flat tax cited by proponents of modified flat tax plans is the distributional effects of any gains from simplification and broadening the income definition. As the authors point out, these gains may accrue to lower income classes. However, the effect of any gains on the tax burdens of lower income classes requires conjectures as to the magnitude and distribution of the gains. Termed "heroic" assumptions by the authors (and in fact the qualifier "very" may be added to "heroic") these assumptions directly determine the conclusions regarding distributions of tax burdens. The assumptions and their effect on the distribution of the tax burden are examined carefully by the authors.

Labor Supply, Simplification, and a Broader Base

The efficiency gains generated from changes in the labor supply are derived from the reduction in marginal tax rates; it is assumed that marginal tax rates are primary determinants of labor supply decisions. As the authors point out, reducing *statutory* tax rates is

not sufficient to stimulate labor supply unless *effective* marginal tax rates on labor income fall, because the tax base may be broadened.

Efficiency gains are also realized from moving to a more comprehensive tax base, say the authors, because resources will shift from less to more productive uses. The authors assume that it is possible to eliminate tax loopholes—avoidance measures that are unintentional in the design of the tax law and that favor unproductive uses of capital. Tax loopholes are analogous to the proverbial leaking dike—as one leak is plugged, another leak appears. It is questionable, however, whether these leaks can be stopped even under a flat rate tax, given the political nature of tax legislation and the complexity of our financial system.

The authors also discuss the benefits of tax simplification, namely, lower compliance costs and a more efficient tax collection system. While it is quite easy to see that there may be gains from shifting resources away from these tasks, the authors do not consider the loss of benefits (though perhaps small) attributable to the annual examination of taxpayers' financial positions and personal financial planning which is required under the present system.

Increased Savings under the Flat Tax

The authors argue that further efficiency gains are generated from the increased savings they expect to occur under a true flat rate tax. They indicate that the lowering of the marginal tax rate on earnings from savings may encourage savings. This is true, however, only if the returns from savings are taxed more heavily under the present system. In fact, many forms of savings are (essentially) not taxed under the present tax system (for example, earnings from IRAs and KEOGH plans); thus, if these preferential features are removed in the tax simplification process, there may be a revenue loss. The authors also assume that a portion of the increase in labor earnings will be saved, but the question of consumption versus savings of the benefits from reductions of tax burdens is still an unresolved question.

Distributional Effects

The authors estimate the benefits derived from the various sources by relying on empirical evidence from other studies. The net effect of a flat rate tax system is estimated to be approximately $100 billion, where the difference between the analysis provided in other studies of the flat rate tax and this study lie in the inclusion of benefits from labor supply changes, simplification, base broadening, and increased savings.

Aside from the problem of estimating the gross benefits from these changes, the authors are required to make heroic assumptions regarding how these benefits are distributed among income classes. Since the authors' primary purpose is to demonstrate the distributional effects of a tax change, the assumptions underlying the distribution of these benefits are very important. Much of the benefit from the shift to a single rate system is derived from the behavior of the economic agent, the taxpayer. That is, given the changes in the marginal tax rate, the definition of income, and the tax avoidance provisions, how does the taxpayer alter his decisions affecting work effort, savings, and investment? Although it is not possible to say a priori what the actions of taxpayers will be, conclusions regarding the distribution of benefits must be examined for their sensitivity to the distributional assumptions—a consideration that is noticeably absent from the present study.

Additional Considerations for Tax Reform

There are several other factors that should be considered in evaluating any tax reform proposal. First, the costs and benefits associated with a tax change or "overhaul" must be considered. When changes are made in a tax system that require a reallocation of capital and labor, and that alter savings incentives, there will be some costs associated with this transition. Moreover, while many of the benefits described in the present study and other studies are benefits expected during future time periods, the costs of transition are in today's dollars, not future dollars. A complete analysis of the effects of tax changes must therefore consider the present value of the benefits (discounted at a rate that considers the uncertainty of generated benefits) and the present value of costs of transition (which most likely will be concentrated in today's dollars). A study that ignores these costs and fails to consider the timing of the benefits to be received in the future is incomplete.

Further consideration must be given also to whether the proposed tax system is a "good" tax system—defined as one that is equitable, certain, convenient, and economical. The authors establish the present tax system as the benchmark for their analysis of the distributional benefits from switching to a flat rate tax system (Table I). However, two questions need to be raised before embarking on this analysis: First, is the present system equitable? Second, is the tax burden after the flat tax equitable? These questions are not addressed in the Brownings' study. To show that tax burdens are altered does not demonstrate that a system is equitable. Further, if "equitable" is

defined in terms of the wherewithal to pay, does not the expanded income definition risk violating the ability to pay principle?

Another feature of a "good" tax system is the certainty of the system. A dramatic changeover in the tax system—such as under the proposed flat rate tax—demands changes in taxpayer planning, which may be viewed as a violation of the certainty feature. Finally, in a system where tax policy is controlled by a political body, will a flat rate tax be immune to the tinkering of politicians responding to special interest groups?

After a change to a flat tax system, there most likely will be greater convenience and a more economical collection of taxes. However, these features are a function of a simplification of the system, rather than of the rate structure.

The main focus of the Brownings' paper is on the shifting of the tax burden among income classes. Before a tax system is proposed, however, the objective of the tax system must be clarified. Is the objective of the tax system to produce revenue for the federal government? Is the objective of the tax system to enact social policies (for example, welfare)? Is the objective of the tax system to carry out specific economic policies (for example, to increase savings and investment)? If the purpose of the tax system is to produce revenue, then the focus of tax policy should be on the most efficient method of collecting taxes; if certain social and economic goals are to be simultaneously achieved, then other vehicles to carry out policy must be employed. If, on the other hand, the objective of tax policy is to achieve certain social goals, then the optimal distribution of the tax burden should be agreed on beforehand. The tax structure that achieves the desired social goals can then be designed. Again, if the goal of the tax system is to stimulate labor effort, the labor effort goal should be examined and the tax system should be selected to achieve this goal, for a given revenue target. In other words, the evaluation of a tax proposal, whether it be a true flat tax, a modified flat tax, or a progressive tax, must be consistent with the objectives of tax policy. Comparing tax burden distributions, as the Brownings do in Tables 1, 2, and 3, does not address the more important question of whether a given distribution of tax burdens is desirable.

In closing, a few minor points need to be brought up. First, the authors fail to mention how the true flat rate system is to operate alongside a corporate tax system. Since there are several aspects of an individual's economic decisions that may be affected by the taxation of business enterprises, the analysis of benefits derived from a true flat tax must consider the effects of taxing business enterprises. Second, the authors do not mention the losses that may result when

current investment incentives are removed. The expanded income definition and the alteration of savings and investment income taxation may reduce incentives to invest, adversely affecting total investment. Third, in their criticisms of the modified flat tax proposals, the authors fail to recognize that these tax changes may generate benefits through tax simplification and base broadening. Thus, although the Brownings offer an interesting analysis of the flat rate tax, there are still many questions that deserve further study.

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