Federal Reserve Bank of Cleveland

Assessing Fundamental Tax Reform

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Fundamental tax reform remains a hot topic, for reasons that should come as no surprise. The current U.S. tax structure is complex, distortionary, and replete with tax preferences.

The adjective "fundamental" is important here. Although the personal income tax code has undergone six major revisions during the past two decades, none of those changes can be deemed truly fundamental in the sense of significantly simplifying the U.S. tax code. On the contrary, the 1997 tax bill introduced further complexity, distortions, and preferences.

Now, there seems to be genuine interest in fundamental tax reform among Capitol Hill policymakers, but there is also a wide range of opinions about how to accomplish it.¹ The complexity that surrounds changing the federal tax code arises in no small measure from the fact that feasible reforms often involve tradeoffs among competing objectives. The issues were clearly articulated by President Clinton in a December 16, 1997, press conference:

I would not rule out a further substantial action to simplify the tax code. But I will evaluate any proposal, including any one that our people might be working on, by the following criteria: First of all, is it fiscally responsible? Secondly, is it fair to all Americans? That is, we don't want to shift the burden to middleclass taxpayers to lower income taxes on upper-income people....Thirdly, will it be good for the economy? And fourthly, will it actually lead to a simpler tax system? Our goal in this *Economic Commentary* is to examine a few broad, and typical, variants of fundamental tax reform along the dimensions emphasized by the president. The information we report is based on formal quantitative experiments that appear in our research paper, "Simulating U.S. Tax Reform."²

The Criteria

The issues identified by the president probably reflect the concerns of many American voters. It is difficult, however, to debate the merits of alternative reform proposals without a clear idea about how each of his four criteria can be quantified. How, for example, does one define "fairness"? Before proceeding, we will look at each requirement a bit more precisely.

Is It Fiscally Responsible?

At its most basic level, this one is relatively easy. We could simply require that any new policy yield the same stream of expected revenues before and after the reform, a property commonly referred to as "revenue neutrality." Revenue neutrality does not, however, imply that the government's budget outlook is *independent* of tax policy. Suppose, for example, that interest rates fall as a consequence of a policy change. This would reduce outlays and cause the government's surplus to rise over time.

We can resolve this complication by stipulating that any change in policy must yield the same flow of government revenues less interest payments that would occur without the change. This property, which we will refer to as "net revenue neutrality," is equated with "fiscal responsibility" in the discussion that follows.^{3,4}

President Clinton recently stated that he would consider legislation aimed at simplifying the U.S. tax code if it were fiscally responsible, fair to all Americans, good for the economy, and truly created a simpler tax system. This article looks at how some basic tax reform proposals—including the flat tax and an alternative known as the X tax—stack up against these sometimes competing criteria.

Will It Be Good for the Economy?

This, of course, is a subjective matter. However, in strictly material terms, we define this question as analogous to the relatively straightforward query, "Does the tax reform lead to an increase in per capita GDP and per capita income?"

Will It Actually Lead to a Simpler Tax System?

We define simplification to mean eliminating most deductions and preferences from both the corporate and personal tax codes. All of the reforms considered below impose some form of simplification, the specifics of which we will discuss as we consider each change in turn.

Is It Fair to All Americans?

The issue of fairness is undoubtedly one of the most contentious problems surrounding any change in government policy, and it is central in discussions of tax reform. We could certainly examine shifts in tax burdens to assess fairness, but we suspect that people would generally accept a doubling of their taxes if doing so would guarantee a tripling of their income. To skirt that particular problem, we might look at changes in the distribution of after-tax income, but a better position on the income distribution ladder would likely be a small comfort to someone who gained only because he was forced to work harder as a result of distortions or wealth losses wrought by tax policy.

What we are really concerned with here is whether individuals would likely *perceive* themselves to be better or worse off after a change in tax policy once we account for both how much consumption they can enjoy and how much work effort they have to expend to afford it. In the jargon of economists, we are asking how policy-induced changes in consumption and leisure flows affect the level of an individual's lifetime "utility."

Insight into how we are measuring the concepts "better off" and "worse off" can be gained by considering the following scenario: Suppose we could tell you the consequences-in terms of how much consumption you will enjoy and how many hours you will need to work to obtain it-of moving from the present tax system to some alternative scheme. We then might ask whether you would be willing to pay money to live under the alternative regime. If you can honestly answer yes, then clearly you would perceive that you are better off with tax reform. If, on the other hand, your answer is no. I would have to be compensated to accept tax reform, then clearly you would feel better off under the existing tax structure.

What we report below is whether our experiments indicate that particular groups of people would pay to see tax reform implemented or whether they would have to be compensated to accept the reform. The answers correspond to a formal measurement of "winners and losers" in terms of a broad concept of economic well-being, or utility. Modified in this way, the president's fairness condition means that wealthier individuals will not be made "utility winners" at the price of making the less wealthy "utility losers."

We want to emphasize that our discussion will be framed in what economists refer to as the life-cycle perspective. That is, we do not define concepts such as "high income" and "low income" in terms of an individual's income at a specific point in time, but in terms of his relative income over a lifetime. Thus, a person in medical school would likely have very low current income, but would be defined as a member of a highincome group by virtue of the fact that his income will be higher than most when viewed over an entire lifetime.

The life-cycle perspective is the appropriate vantage point for considering the wisdom of a given tax reform. A policy change in which a 40-year-old, for instance, loses in the first year but gains in every subsequent year of his working life will probably look like a pretty good deal to that person. For this reason, we focus our attention on how tax reform could be expected to affect different groups of taxpayers over their remaining lifetime.

■ The Flat Tax (A Consumption Tax by Any Other Name ...)

Many economists and policymakers believe that a system which raises revenue by taxing consumption is superior to the income-based tax structure that currently exists at the federal level in the United States. In terms of the multiple objectives of tax reform, however, some fundamental trade-offs exist between these two types of systems.

On one hand, the consumption tax base is smaller than the income tax base. It follows that at any point in time, a consumption tax will require a higher rate to raise a given level of revenue. Because a consumption tax is in many ways similar to a wage tax (a point we will return to below), these higher rates may lower the incentives to earn labor income. On the other hand, by not taxing returns to new saving, a consumption tax promotes saving and capital accumulation. (Furthermore, higher after-tax returns to saving introduce an incentive for households to shift leisure, as well as consumption, to the future, which works against the negative wage effect on labor supply.⁵) Theoretically, then, the net economic impact of moving to a consumption-based tax system is ambiguous.

The emphasis on "new" saving is important and helps to clarify both the nature of consumption-based tax reforms and their ultimate economic impact. Often unstated in the reform debates is that a shift toward a consumption tax base need not take the form of direct taxation of consumption expenditures, as in, say, a national sales tax. Consumption-based taxation can be implemented indirectly by way of a tax system in which 1) only labor income is taxed at the household level, and 2) businesses are subject to a cash-flow tax, implying that firms' investment expenditures are completely expensed at the time they are incurred. In fact, true flat-tax proposals based on the original work of economists Robert E. Hall and Alvin Rabushka are designed to implement consumption taxation with this type of a labor-income/ cash-flow tax base.⁶

The expensing provision of a Hall-Rabushka-type reform means that a firm can immediately write off the full value of new purchases, instead of depreciating them over time, as required by current law. New investments are thus effectively tax free at the margin, since a firm's tax on its cash flow is reduced by the amount of the investment. Existing assets, however, lose their depreciation allowances and do not enjoy the favorable tax treatment applied to new investments. As a consequence, implementing a consumption-based tax via a laborincome/cash-flow tax base exempts new saving from taxation, but not old saving.

This feature of the flat-tax reform implies a one-time "lump-sum" tax, or wealth levy, on existing assets. Although this levy reduces the tax rate (and resulting distortions) necessary to maintain revenue neutrality, it comes at the expense of individuals who have been high savers prior to the reform. Appreciating the full consequences of shifting the U.S. tax system toward a consumption base therefore requires disentangling the various tensions between the potentially higher labor taxes, greater saving incentives, and implicit wealth levies inherent in a consumption tax implemented through a Hall-Rabushka-style flat tax.

Economic Effects of a Flat Tax

Consider first the case of a relatively straightforward, single-rate consumption tax that, like the flat tax, eliminates most major tax-base reductions, but, unlike the flat tax, provides no personal exemptions or tax shelters for housing wealth. Our study shows that under such a plan, national income would be 7 percent higher than in the no-reform case. We also find that in the long run, real output would increase by nearly 11 percent about \$800 billion in 1996. Unfortunately, the rising tide of the flat tax does not, in this case, raise all boats (at least not in utility terms): The least wealthy taxpayers (in terms of lifetime income) would indeed lose, while more affluent Americans would gain. An obvious way to resolve this problem is to maintain standard deductions that absolve the poorest individuals of any tax liability. This is, in fact, a feature of most flat-tax reform proposals in the Hall-Rabushka tradition. In addition, taxation of housing wealth is not seriously contemplated in the current reform plans, so a more accurate picture of any probable flat-tax system would include tax sheltering of housing wealth.

With standard deductions and full tax exemption of existing housing, the economic benefits of a flat tax are lower but still large. Our analysis indicates that relative to the no-reform case, output would increase about 2½ percent in the short run and just over 6 percent in the long run.

On the economic welfare side, the flat tax with standard deductions delivers long-run across-the-board utility gains. Although these gains are again relatively large for the wealthiest group of taxpayers, they are also sizeable for the poorest Americans. However, a potentially serious drawback to this type of reform is that middle-income groups—those with peak lifetime incomes between about \$20,000 and \$50,000—are made worse off in the short run.

The short-run utility losses suffered by middle-income taxpayers are a consequence of imposing revenue neutrality. In the near term, the tax rates required to satisfy this requirement are higher for these groups than they would be under current policy. As the positive effects of the reform take hold in the economy, tax rates do fall, but too late to overcome the negative effects that occur at the time of the transition to the flat-tax system.

Continuing existing depreciation allowances and interest-expense deductions on capital in place at the time tax reform is implemented—thus providing some transition relief for owners of old nonhousing capital—further reduces the advantages of reform. With these provisions, our experiments indicate very little short-run gain in output and a long-run expansion of less than 2 percent. Providing this type of transition relief helps to protect the elderly, who generally hold a relatively large share of their wealth in capital assets. Without such relief, the current elderly tend to lose in the transition to a flat tax. Transition relief, however, exacerbates the burden on current middle-income groups, because a reduction in the value of the wealth levy means that distortionary taxes must be higher in order to generate the same amount of net revenue. In fact, our analysis shows that even in the long run, middle-income Americans lose if transition relief is granted to older generations.

An Alternative Proposal: The X Tax

An alternative scheme for moving to consumption-based taxation is the socalled X tax proposed by economist David Bradford. Like the standard Hall– Rabushka flat tax, the X tax system would shift the federal tax base toward consumption via expensing. However, it would maintain progressivity of marginal tax rates on labor income, and would also set the marginal tax rate on business cash flows at the highest rate applied to labor income.

Introducing tax rate progressivity on labor income does not distort the accumulation of new capital: Expensing implies that the effective rate is still zero. Increasing the business cash-flow tax does, however, substantially boost the effective tax on old capital. In fact, this wealth levy is large enough to maintain revenue neutrality while at the same time lowering the tax rate enough on middleincome groups to make them better off under the reform, even in the short run.

The cost, of course, is that older individuals who hold substantial amounts of wealth lose even more under the X tax than under the Hall-Rabushka flat tax. Nonetheless, given the criteria noted above, the X tax stacks up fairly well. In addition to being revenue neutral (by construction) and simpler (although somewhat less simple than the other proposals we have considered), it has a tremendous positive effect on output: Long-run GDP is only slightly lower under the X tax than under the flat-tax scheme without the standard deductions and housing shelter. Furthermore, the long-run utility effects of the X tax are quite progressive, with lower-income

groups being the biggest winners (in percentage terms). Obviously, the elderly lose at the time the reform is implemented, but these losses are highest for the wealthiest individuals. Even in the short run, the poorest elderly gain.

Some Lessons

We suspect that President Clinton's tax reform requirements are shared by many Americans. But whenever policy has multiple objectives, trade-offs inevitably arise that require some prioritization informed by serious discussions about ultimate social goals. Our analysis incorporates many complexities and omits some others, but it is doubtful that a more complicated study will overturn our key findings.

In general, the trade-offs between growth in overall output and the relative welfare of different income groups and generations seem to be significant. As an example, the treatment of potential wealth levies created by shifting to a consumption-based tax system has a marked impact on whether output and welfare increase in the long run. Such transition taxes allow lower tax rates over the long haul, but generate fairly large redistributions of wealth across both living and future generations. Proposals aimed at mitigating these distributional effects can, in the extreme, completely undermine any positive effects of shifting to a consumption tax.

Among the stylized reforms considered here, the X tax appears to come closest to meeting President Clinton's entire set of requirements. However, even this scheme involves some substantial transfer from the current elderly to younger and future generations. The "correct" approach, then, inherently becomes a question of what the nation decides is a "fair" intergenerational distribution of resources. The issue of intergenerational fairness is an area of active research and debate. It is also, as this paper shows, of great relevance to tax reform.⁷

Footnotes

1. Among the most prominent proposals are the flat tax introduced by House Majority Leader Dick Armey (R–Tex.) and Senator Richard Shelby (R–Ala.), a retail sales tax favored by Representative Billy Tauzin (R–La.) and Senator Richard Lugar (R–Ind.), and the "unlimited savings allowance (USA) tax," a combined value-added tax and progressive personal consumption tax proposed by Senator Pete Domenici (R–N. Mex.) and former Senator Sam Nunn (D–Ga.).

2. Congressional Budget Office, Technical Working Paper No. 97–6. This paper also appeared as National Bureau of Economic Research Working Paper No. 6248, October 1997.

3. This requirement does not presume that revenue raised from specific sources—wage income, for example—is unaltered by tax reform, a point that will become clear as we proceed.

4. Although the revenue neutrality concept is typically invoked, many economists and policymakers believe that a more appropriate definition of "fiscal responsibility" would ensure that there is no increase in the fiscal

burden placed on future generations. Satisfaction of this requirement is not guaranteed by revenue neutrality. The connection (or lack thereof) between the deficit and intergenerational equity is explored in Laurence J. Kotlikoff, *Generational Accounting: Knowing Who Pays, and When, for What We Spend.* New York: The Free Press, 1992.

5. For a more complete discussion of this effect, see Alan J. Auerbach, "The Future of Fundamental Tax Reform," *American Economic Review*, vol. 87, no. 3 (May 1997), pp. 143–46.

6. A complete discussion of the Hall– Rabushka proposal is contained in Robert E. Hall and Alvin Rabushka, *The Flat Tax*, 2d ed. Stanford, Calif.: Hoover Institution Press, 1995.

7. Recent research on intergenerational fairness shows that under baseline policy, future generations might face lifetime net tax rates exceeding those faced by current generations. See Jagadeesh Gokhale, Benjamin R. Page, and John R. Sturrock, "Generational Accounts for the United States: An Update," Federal Reserve Bank of Cleveland, *Economic Review*, vol. 33, no. 4 (Quarter 4 1997), pp. 2–22.

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