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The Economics of Tax Reform

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Citation

Harik, Bassam, ed. 1988. The Economics of Tax Reform. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research. https://doi.org/10.17848/9780880995573



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The Economics of TAX REFORM

Bassam Harik Editor

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W. E. Upjohn Institute for Employment Research

LIBRARY OF CONGRESS Library of Congress Cataloging-in-Publication Data

The Economics of tax reform: papers presented in a seminar series conducted by the Department of Economics, Western Michigan University / Bassam Harik, editor.

p. cm.

Contents: Tax reform, theory and practice / Joseph E. Stiglitz — Rating tax reform on growth / Joseph J. Minarik — Fiscal illusion and fiscal reality / Laurence J. Kotlikoff — Federal tax reform / Ronald C. Fisher — Tax reform, poverty, and inequality / Sheldon Danziger.

ISBN 0-88099-054-6 (pbk.)

- 1. Taxation—United States—Congresses. I. Harik, Bassam.
- II. Western Michigan University. Dept. of Economics.

HJ2381.E237 1987 336.2'05'0973—dc19

87-32164 CIP

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W. E. UPJOHN INSTITUTE
FOR EMPLOYMENT RESEARCH

300 South Westnedge Ave. Kalamazoo, Michigan 49007

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Introduction

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Bassam Harik Western Michigan University

The Tax Reform Act of 1986 has been called, among other superlatives, a "legislative miracle" and an "historic achievement." The Tax Act is certainly the most sweeping tax legislation since the inception of the tax code in 1913. Even though it received overwhelming support in Congress, the Tax Act is not without its critics inside and outside Congress. Some members of Congress felt that they had been railroaded into voting under pressure on a bill that was negotiated behind closed doors. Some of the other criticisms came from the business sector, especially those businesses that, perceived themselves to be adversely affected by the Tax Act.

One provision that threatened to undermine the tax bill compromise was the cutback in deductions for individual retirement accounts (IRAs): families with income exceeding \$50,000 and who are covered by employers' pension plans are no longer eligible for deductions of contributions to IRAs. Individuals not covered by employers' pension plans and those whose income is less than \$40,000 would still be able to retain the full \$2,000 deduction in contributions to IRAs. Nonworking spouse deduction remains at \$250. Reduced deductions will be allowed for those with incomes between \$40,000 and \$50,000. Nondeductible contributions up to \$2,000 with the deferred taxes on earnings still can be made by those who are not allowed deductible IRAs. The tax conferees resisted all attempts to introduce amendments dealing with IRAs because they were afraid of opening the floodgates for other amendments.

Another controversial provision was that dealing with capital gains. Long-term capital gains are no longer given

preferential tax treatment, but are to be taxed at the same rate as other income, i.e., a top rate of 33 percent. Supporters of the provision say that maintaining a preferential rate would unfairly benefit the rich who have already benefited from the reduction of the top rate on income. Furthermore, this simplifies the tax law and reduces the inefficiency which occurs when individuals try to protect ordinary income by transforming it into long-term capital gains. Opponents of the provision have argued that eliminating the historical preference will discourage investment.

Unlike earlier versions that had dealt a sweeping blow to most deductions, the bill that emerged retained most of the popular deductions. Some of the major retained deductions are mortgage interest payments on first and second homes, and state and local income and property taxes. Business and medical expenses are allowable if they exceed 2 percent and 7.5 percent respectively of a taxpayer's adjusted gross income. Interest on consumer loans gradually will become nondeductible by 1991.

Tax shelters are to be eliminated. Taxpayers are no longer able to offset ordinary income with passive paper losses. Rather, they have to be active participants in partnerships in order to claim any losses, and even then there is a limit on the losses to be claimed. This provision made the reduction of the top rate on income from 50 percent to 33 percent more acceptable. Investment in oil and gas drilling operations, however, has been exempted. The new rules will be completely phased in by 1991.

With respect to businesses, the Act includes some major changes, the ultimate impact of which is far from certain. At first blush, it seems that businesses such as heavy industries that rely heavily on the investment tax credit will be losers, as will commercial real estate developers. Businesses in the service sector and those that have been paying high effective tax rates would be beneficiaries under the Tax Reform Act. The preferential treatment currently given to oil and gas producers was left almost intact.

Here are some of the provisions dealing with businesses. As with individuals, there is a significant change in tax rates for businesses. The top corporate tax rate has been dropped from 46 percent to 34 percent. There are two more brackets, 15 percent for income up to \$50,000 and 25 percent for income between \$50,000 and \$75,000. Here again, there is a 5 percent tax surcharge for income between \$75,000 and \$100,000 and the 34 percent rate will apply to all income when income exceeds \$100,000. The rate on corporate net capital gains has been raised from 28 percent to 34 percent. This provision benefits those businesses that have not been taking advantage of the various tax breaks and are currently paying high effective tax rates. These changes were completely phased in by mid-1987.

The investment tax credit is to be repealed, and depreciation allowances are to be reduced. These two provisions will have an adverse effect on businesses investing heavily in plant and equipment and on real estate developers. This is a far cry from the 1981 tax breaks designed to favor these businesses.

Oil and gas producers have retained most of their tax allowances under the bill. The cause of this industry was helped by some influential key members of Congress, and by the fact that the industry is in a depressed condition. It would have been more difficult to plead the industry's case in the late 1970s when windfall profit taxes on oil companies were popular.

In response to the public outcry over the fact that some large and profitable corporations have sometimes paid little or

no taxes at all, the Act includes a new minimum tax on businesses. The alternative minimum tax of 20 percent is computed after adding back many of the tax breaks to taxable income. The alternative minimum tax must be paid if it exceeds the ordinary tax. This is similar to the alternative minimum tax on individual earnings.

In other business-related areas, the Act extends the targetedjob credit for three years, and the research and development tax credit is also extended for three years. Tax credits allowed for rehabilitation of old buildings were reduced. The tax incentive for construction of low-income housing has been replaced by a generous new tax credit. Some changes in allowable accounting practices are expected to raise tax revenue. The Act also includes changes in the use of taxexempt bonds and foreign tax credits.

When President Reagan directed Treasury to study tax overhaul in early 1984, the stated objectives were to achieve simplicity, fairness, efficiency, and revenue-neutrality. Simplicity was given low priority soon after the overhaul process started because it was judged incompatible with the other objectives, although one could argue that having three tax brackets for individuals instead of fourteen is simpler. In chapter 2 of this volume, Joseph Stiglitz points out, however, that looking up one's tax in the tax tables involves little work.

The Tax Reform Act rates higher on fairness. According to Sheldon Danziger (chapter 6), the Act promotes horizontal equity because of the expanded tax base and reduced number of brackets. Even though it is estimated that about six million poor and near-poor taxpayers will be removed from the tax rolls, however, Danziger believes that this is not enough to offset the large increases in poverty and inequality that have taken place since 1973. In order to insure that high-income individuals and corporations will pay some tax regardless of

allowed deductions, the Act includes an alternative minimum tax. Stiglitz argues, however, that the prosperous firms will not be greatly affected by the minimum tax because of leasing provisions. Stiglitz also points out that shifting the tax burden from individuals to corporations ignores the fact that it is individuals who must bear the burden of taxation, and that it violates the *principle of political responsibility*.

Lowering the top tax rates is expected to promote efficiency and economic growth and to result in stronger incentives for increased labor market participation. Eliminating the tax avoidance schemes means that investments will be undertaken for their own merit and not for their tax implications. One should add that eliminating many of the investment tax incentives might have a negative short-term effect on capital formation. Joseph Minarik argues in chapter 3 that the reduction of tax sheltering would redirect funds from unproductive investments in tax-favored areas into more traditional investment fields. Furthermore, Minarik states that reduced tax rates and cutbacks of deductibility of interest on consumer loans will decrease borrowing and modestly increase saving, making more funds available for traditional investments. Laurence Kotlikoff (chapter 4) argues that a reduction in investment incentives results in a capital gain to owners of old capital, which means that older generations will benefit and young and middle-aged generations will be worse off because they must pay higher prices to acquire capital stock. Taxing capital gains at full rates will remove the most important form of tax arbitrage. Stiglitz cautions, however, that raising the maximum tax rate on capital gains from 20 percent to 33 percent may have serious consequences for efficiency.

Revenue-neutrality is supposed to have been achieved by lowering the tax rates and expanding the tax base, and by raising business tax revenues while lowering tax revenues from individuals. Estimating changes in revenue as a result of tax changes generally involves a great deal of guesswork. There are uncertainties regarding the impact of lowering marginal tax rates for individuals, boosting corporate profit taxes, and eliminating preferential treatment for capital gains, to name a few specific examples.

The five economists in this volume discuss the issues of taxation and tax reform from different points of reference.

Stiglitz provides a general theoretical background for the principles of taxation and the assessment of the impact of taxation. He discusses at length how various tax policies lead to tax arbitrage activities. He also points out that taxes on capital assets are capitalized, and that individuals bear all taxes. Among the principles of taxation, Stiglitz discusses the principle that taxpayers should know what they are paying—"truth-in-government." Using the principles of taxation for guidance, Stiglitz assesses the various tax reform proposals. He concludes that the proposals ignore many of the principles of taxation. Stiglitz gives his qualified support to the introduction of a value added tax, discussing both the merits and drawbacks of such a tax. One can use the standards employed by Stiglitz to evaluate the advantages and the shortcomings of the new tax provisions.

Minarik looks at the impact of tax reform on investment and growth. He points out that the roots of the recent tax reform drive were in the Economic Recovery Tax Act (ERTA) passed in 1981. Minarik argues that ERTA, with its Accelerated Cost Recovery System (ACRS) and the Investment Tax Credit (ITC) provisions, has resulted in inconsistencies and revenue reductions to the government, giving the impetus to tax reform. Minarik further argues that, contrary to common wisdom, ERTA was not instrumental in stimulating investment. Investment subsidies, he contends, do not always

stimulate risk-taking and innovation. On the contrary, the recent subsidies have encouraged low-risk tax shelters. Minarik also argues that the elimination of tax subsidies would have no negative impact on investment in the long run.

In his paper, Kotlikoff discusses the impact of fiscal policy on intergenerational redistribution of income. He discusses the redistribution effects of income taxes, as well as the social security tax system and government borrowing. He argues that some of our current accounting definitions lead to "fiscal illusion" in the way we view the budget deficit and the national debt. Kotlikoff proposes redefining social security "taxes" as "loans" since the contributors are lending money to the government during their working years and receiving benefit payments during retirement. He would also have the government raise funds by levying a "head tax" with the promise to repay the tax plus interest as a tax credit in the future, instead of the present practice of selling bonds. Redefinitions such as these, according to Kotlikoff, would lead to more relevant estimates of the budget deficit and the national debt. Consequently, one could concentrate on the impact of fiscal policy on intergenerational redistribution of income and its effect on saving, growth and economic efficiency.

Ronald Fisher (chapter 5) examines tax reform from the perspective of state and local governments. Since the paper was presented before the passage of the new tax law, it contained an analysis of the impact of the loss of deductibility of state and local taxes on those governments. Even though this is no longer an issue, the analysis itself stands of its own and the conclusions are very interesting from a theoretical point of view. Fisher concludes that any tax plan should be judged on its aggregate impact rather than its impact on specific sectors of the economy.

Danziger concentrates on the impact of tax reform on poverty and income distribution. He argues that the policy of helping the poor via economic growth has not been successful. Policies such as ERTA have not had the desired effect on income distribution or on alleviating poverty. He stresses that tax reform should be and can be effectively used to aid the poor. Danziger introduces some statistics showing a shift towards greater poverty and inequality since the late seventies, and explores possible explanations of these phenomena. He then discusses the impact of the new tax law on the poor. In order to correct the recent trend, Danziger proposes the expansion of the current Earned Income Tax Credit and Per Capita Refundable Credit that would replace the present personal exemption. In discussing the merits of these proposals, he argues that they offer efficient options for helping the poor.

Like many tax changes in the past, the real impact of the Tax Reform Act cannot be fully predicted. There will be some unforeseen side effects; there will be pressures to rework some of the provisions. Some urgent problems will be addressed by tax revisions, but the bias will always be there. It is easier to effect a policy through tax incentives and disincentives than through appropriation or disappropriation. After all, this is how our tax system got to be the monster that it is today. There are still some unanswered questions with respect to the impact of the Act on the foreign sector and on the value of the dollar. The revenue-neutrality of the Act is based on estimates and projections that are far from perfect. The issue of the budget deficit has not been addressed by this Act.

It is hoped that this volume will provide some insight into the complexity of the world of tax reform. History has shown us that tax reform is an ongoing process and it does not end with the signing of this specific legislation. 2

Tax Reform: Theory and Practice

Joseph E. Stiglitz Princeton University

Each year, as April 15 approaches, we are forced to spend some moments thinking about our income tax system. There is, and has been, a great deal of dissatisfaction with our system. There is a general consensus that others are paying less than their fair share.

Popular concern has focused on the inequities and complexities of the system. Economists' concerns have been centered not only on these matters, but also on the inefficiencies to which our tax system allegedly gives rise.

The dissatisfaction has been so great that President Reagan made tax reform one of the highest priority items in his agenda for his second term. In spite of the importance he attached to it, there has not yet been a tax reform bill as of this writing. But by now, the outlines of what is likely to pass—and there is a consensus that a bill will pass—has emerged. It is not the tax reform bill that President Reagan had hoped would lead to the Second American Revolution. It is certainly not the tax reform bill about which economists had dreamed.

Why and to what extent do I think the bill which is likely to emerge will represent a failure of the movement to reform our income tax system? What lessons can we learn from this seeming failure of reform? What implications does it have for how the government should raise the revenues required to finance its operations? These are the questions which I shall address this evening. First, however, I should like to review

some of the economists' traditional principles concerning tax design and some facts concerning the consequence of a tax system.

Some Basic Propositions Concerning the Effects of Taxation

There are five basic facts concerning the consequences of a tax system I should like to mention.

First, the inefficiencies associated with a tax system—what economists' call the dead weight loss of the tax system—are associated with the marginal tax rates, the extra tax an individual pays for the extra dollar of income. This determines the extent to which the tax system distorts the decision of whether to work more, to retire later, to stay in school longer, or to save more.¹ Our tax system has been criticized for its high marginal tax rates, though the levels today are far lower than they were some years ago.

Second, any tax system that taxes different incomes—whether income to different individuals or income received in different forms—opens itself to the possibility of what we call tax arbitrage, the attempt to change the form in which transactions occur, or to engage in transactions the purpose of which is to reduce total tax liabilities. Let me illustrate.

Because capital gains are taxed at a lower rate than ordinary income, there is an incentive for individuals to attempt to reap their returns in the form of capital gains. In an inflationary period, real estate values are often much higher than the depreciated basis of an asset. If an individual who is at a low income tax bracket sells his real estate to a high bracket individual, the former will have to pay a tax on his capital gain;² but this is more than offset by the advantages arising from the higher depreciation allowances accruing to

the high tax individual.³ In these circumstances, the tax system thus gives rise to an incentive to churn assets.

Perhaps the most notorious tax arbitrage activities growing out of the 1981 Tax Bill were those associated with Safe Harbor Leasing. Firms that did not have the income against which to offset their accelerated depreciation allowances and investment tax credits arranged for other firms with surplus income—in quite different lines of business—nominally to purchase machines for them; they would then lease the machines back. Thus Chrysler might arrange to have its machines purchased by, say, Exxon. But it was a pure paper charade. Chrysler would have purchased the machine by borrowing, say, 80 percent from a bank, and putting up 20 percent of its own capital. Chrysler might now pay Exxon 20 percent as the first lease payment, and Exxon would borrow the remaining 80 percent from the same bank. Exxon has done nothing but sign some papers. In fact, the tremendous tax advantages which would accrue to Exxon mean that it would be willing to pay a considerable amount, perhaps enough to relieve Chrysler of most of its earlier payments.⁴ Notice that it is the difference in tax bracket between Chrysler and Exxon which provides the motivation for these transactions.

These tax arbitrage activities have several consequences. First, they make it difficult to ascertain the true incidence of the tax structure—who really pays the taxes. Thus, there has been considerable publicity given to the failure of several of the major American corporations to pay any taxes in recent years, largely because of these leasing arrangements. But in most cases, the companies, like Exxon and GE, who "buy" the machine and lease it—nominally taking the tax advantages—are not the true beneficiaries: rather it is the companies in dire straits (Chrysler, for example) to whom more than 85 percent of the benefits accrue. The result is little different from

what it would be if the government made the investment tax credit cashable (that is, a company with zero income would receive a check from the government); or if the government allowed individuals to defer taking advantage of the tax credit until the firm had a positive income, but credited the firm with interest for the deferment (as most economists believe should be done).

(Similar issues arise in interpreting who gets the benefits from the provisions of tax exemption of interest on state and local bonds. A significant fraction of those benefits accrue to the municipalities, not to the individuals, who earn lower returns on those bonds than they would on taxable bonds.)

Furthermore, tax arbitrage activities *undo* some of the distortions which would otherwise be associated with the tax system. In the example given above, in the absence of leasing, the marginal cost of investment for a firm with no income against which to offset its investment tax credit and its accelerated depreciation allowances (Chrysler) is greater than for a company with a high income (Exxon). It is questionable whether, as a matter of national policy, we would wish to introduce discriminatory legislation of that form. Leasing undoes this distortion.

At the same time, tax arbitrage often does lead to distortions in economic activities. While *pure* tax arbitrage has no effect other than to induce certain paper transactions, that is, the only dead weight loss is the transaction costs, much of the activity which I loosely refer to as tax arbitrage is not *pure*. To take advantage of the special provisions for capital gains, individuals may be induced to purchase real estate (because it is easier to obtain loans against property, and thus take advantage of the differential treatment between the full deductibility of interest and the 40 percent taxation of long-term capital gains).⁵

Finally, these tax arbitrage activities probably imply that the true degree of progressivity of the tax system is less than the nominal degree of progressivity. Wealthier individuals are in a position to take advantage of these tax avoidance activities (and have a greater motive to do so). This is, in fact, one of the reasons for the widespread dissatisfaction with our current tax system.

The third basic fact concerning the effects of taxation is a simple and seemingly obvious one, but one which has been obfuscated in the current debate: it is individuals who bear all taxes. Corporations may pay taxes, but ultimately, the burden of all taxation must rest upon individuals—the managers or workers of the corporation, the shareholders, or the customers.

The fourth basic fact concerning the assessment of the effects of taxation is that the effects of any tax cannot be assessed in isolation: it is the impact of the whole tax structure which is relevant. This is true with respect to an evaluation of both the efficiency and equity consequences. Thus, the marginal tax rate which is relevant for distorting individual behavior is not just the rate imposed by the federal income tax, but the total marginal rate, taking into account social security taxes (and benefits), state income taxes, and sales taxes.

The final basic fact that is particularly important in assessing the consequences of tax changes is that taxes on capital assets are capitalized; that is, the price of existing assets reflects future anticipated tax changes. Thus, if there are particular assets which are taxed at higher (or lower) rates than other assets, it is not the current owners who bear the burden of the tax (or receive the benefits), but the owners of the asset at the time the tax was imposed (or the favorable treatment granted).⁶ As a consequence, changes in the tax

treatment of particular capital assets may have enormous effects on current owners of assets. Moreover, removing the favorable treatment accorded some class of assets does not necessarily remove the inequity created when the favorable treatment was granted, but may compound the inequities: for the current owner, who is hurt by the removal of the favorable treatment, may well not be the same individual who owned it at the time the favorable treatment was granted. Conversely, removing the discriminatory treatment on some class of assets may not provide compensation for those who incurred losses at the time the discriminatory treatment was imposed.⁷

Principles of Taxation

In evaluating the desirability of a tax system, economists have traditionally invoked five principles:

A good tax system should be equitable, first vis-a-vis its treatment of individuals in roughly similar economic straits (the principle of horizontal equity), and second, vis-a-vis its treatment of individuals in different economic circumstances (the principle of vertical equity). There is one aspect of these principles of fairness to which I would like to call attention: the difficulty of ascertaining what an individual's fair contribution is, and of devising ways of implementing whatever principle one adopts within a legal code. There is a widespread belief that income is the appropriate basis of taxation, a good surrogate for ability to pay. Yet virtually all economists—and most noneconomists—would agree that income should not be measured on a daily, or weekly basis. Most economists would argue that the appropriate time unit is the individual's lifetime income; that is, the government should not penalize those individuals whose incomes have fluctuated over their life time. as our progressive tax structure does. But a lifetime income tax is, in fact, equivalent to a consumption tax (with appropriate treatment of bequests and inheritances). Thus, if one believes in a lifetime income tax, one should exempt interest income, which can be viewed as a discriminatory tax on those who prefer to consume goods later on in their lives.

Third, a good tax system should "minimize" the distortions it introduces (the principle of efficiency).

A fourth principle is that a good tax system should not impose undue administrative costs, either directly, or indirectly, on the parties being taxed.

This leads me to the fifth principle of a good tax system, one about which there is not universal agreement: a good tax system is one in which individuals know what they are paying. I sometimes refer to this as the principle of political responsibility. Just as we believe it is only fair that lenders tell their potential borrowers what the interest rate they charge is, and that manufacturers of food tell their potential customers what ingredients are contained in the packages they sell, so too it is only right that the government should tell its citizens what each, individually, is contributing to the support of public services. The reason that I say there is not universal agreement on this principle is that just as lenders often argue that the truth-in-lending law just confuses potential borrowers, scaring them off from doing what they intuitively know is in their own best interests, so, too, some politicians are concerned that truth-in-government legislation would simply confuse tax payers and induce them to vote for smaller budgets than they otherwise would, leading to a cutback in important public services.

There are, of course, important trade-offs among these principles. A more progressive ("vertically equitable") tax system is likely to have a greater dead weight loss.

Some of the distinctions we introduce into our tax system, e.g., concerning the deductibility of medical expenses are there

because we believe that they increase the *equity* of the tax system; those who have had to pay large medical expenses have a lower ability to pay than those who have not. But at the same time, they introduce further inequities. There are two types of error in any tax system: some individuals (of a given income) who should have had their taxes reduced (because of their special circumstances) do not get a tax reduction; and some individuals who should not have had their taxes reduced do get a tax reduction. If we tighten rules for medical deductibility, more individuals who should get a tax reduction do not; but fewer individuals who should not have gotten a tax reduction do. There is a trade-off in the two types of error.

There is, moreover, a trade-off between simplicity and equity. To make fine distinctions (e.g., between those who do or do not get a medical deduction) requires a complex law; to simply disallow deductions is simple, but may be unfair.

An Assessment of the Current Reforms

With these principles and facts in mind, let us review the direction that tax reform appears to be taking in order to ascertain the extent to which it conforms with these basic principles.

The major hallmark of the tax reform is the reduction in the top tax brackets from 50 percent, to 33 percent.8

The tax reform bill has not gone as far in base broadening as the advocates of reform would have liked. While only medical expenses in excess of 7.5 percent will be deductible, the far more important area of employer-provided health benefits has been left untouched. While state sales taxes will not be deductible, the more significant state income and local property taxes remain deductible.

In retaining the provisions for the deductibility of mortgage interest, the government probably has undone much of its effort to reduce the tax deductibility of interest; individuals will simply substitute home equity loans for car loans—as they were already doing before the new tax law. Again, the provision will have some impact, for example, on those individuals who itemize, but do not own a home; how significant a group this is, and whether this is a particular group which should be penalized, are questions we should ask ourselves.

Capital gains will be taxed at full rates. This has one distinct advantage; it eliminates one of the most important sources of tax arbitrage. But the raising of the tax rate on capital gains by more than half, from the current effective maximum rate of 20 percent to 33 percent, may have serious consequences for economic efficiency. Moreover, most economists would argue that it is real capital gains, not nominal capital gains, which should be taxed.

The major effort of the government in simplifying the tax system has been to replace the system of many tax brackets with three tax brackets. This, I think, is an inconsequential simplification. There is little work associated with looking up one's tax in the tax tables. In other respects, the new tax law may actually make life more complicated.

One of the more popular proposals for dealing with the inequities which will remain within our tax system, given the seeming inability to redesign the tax structure to eliminate the major "loopholes," is to impose a minimum tax. There is, again, less to this than meets the eye. As we have noted, many of the prosperous firms who pay little tax do so because of leasing provisions. Forcing these firms to pay a minimum tax will not seriously disadvantage them because most of the benefits of the leasing provisions accrue to the less well-off

firms. Thus, the minimum tax may actually work more to the disadvantage of the less well off, and will increase the distortions associated with our tax system.

Most of the currently discussed tax reform proposals entail shifting the burden of taxation from the individual to the corporation; this violates the principle of political responsibility. The proponents of this either simply ignore the fact that it is individuals who must bear the burden of taxation, or are engaged in a political swindle: precisely because it is not easy to recognize who bears the burden makes such taxes politically desirable. (There is a third reason for the corporation tax, to which I shall return later: the belief that it is shareholders and managers who bear the burden, but direct income taxation is an ineffective way of getting revenue from these individuals.)

This list of criticisms is not meant to be exhaustive, but merely to be indicative of the extent to which current proposals ignore some of the basic principles of taxation.

The Reasons for the Failure of Tax Reform

Indeed, though it may be too soon to make a final pronouncement, I am willing to venture that—at least from the perspective of most economists—the tax bill which finally emerges from Congress will be a failure; it will fall short of a major reform dreamed of a little more than two years ago. What are the reasons for this failure? I want to suggest three contributing factors.

First, economists have failed to convince the public and those involved in political decision making of the appropriateness of their models. This is partly because some of the models are, in fact, inappropriate, and it is hard for the nonspecialist to distinguish among those which are and those which are not. This has left the politician in the position of selectively using economists' arguments: when they wish to reduce tax rates (to reduce the degree of progressivity), they refer to supply-side effects and economic efficiency; when they wish to subsidize smokestack America, they ignore the economists' advice concerning the desirability of investment neutrality.

Let me give some examples of where the models that are predominately in use among economists seem, at best, questionable. Perhaps nowhere is there more evidence than in their analysis of the capital market and corporation taxation. Most economists' models assume that firms can borrow freely at the market rate of interest, and this assumption has lead economists to focus on the effect of taxation on the marginal cost of capital. This effect is undoubtedly important. But many firms face credit rationing and are unable to raise funds on equity markets (or it is prohibitively expensive for them to do so). They are thus concerned with their after-tax resources, i.e., their average rate of taxation.

Equalizing marginal tax rates and equalizing average tax rates are two quite different matters, when investment patterns differ. One kind of neutrality does not imply the other kind of neutrality.

The economists' traditional tirade against IRAs misses the point that most individuals do not have easy access to borrowing, and may be induced to increase their savings by this kind of "gimmick." The evidence to date is mixed: wealthier individuals are more likely to take advantage of IRAs, but there is little evidence of the widespread tax arbitrage that economic theory would predict.

Indeed, even economists have been somewhat schizophrenic in their analyses of the effects of taxation within their traditional neoclassical models. Their models, when strictly applied, simply fail to explain important aspects of individual and firm behavior. At crucial junctures, they have resorted to ad hoc assumptions in order to "resolve" what would appear to be, within the confines of their model, inexplicable paradoxes. Let me mention a few instances. In some earlier work (Stiglitz 1983, 1985), I took the economists' standard models of the tax system and of the capital market (perfect capital markets) and showed that there were tax arbitrage activities which could completely eliminate all taxes on capital, and indeed, if carried far enough, all taxes on earned income as well. I also showed that the optimal behavior of the corporation entailed it never paying dividends (this has come to be called the dividend paradox); there are tax preferred wavs of distributing funds from the corporate to the unincorporated sector (Stiglitz 1973). (I also showed that there were no efficiency losses from the corporation income tax for a firm, facing no uncertainty provided the firm pursues an optimal financial policy.) (Stiglitz 1973, 1976.) I do not necessarily believe the conclusions of these studies: I do not believe that the corporation tax is nondistortionary. I certainly do not believe that individuals have eliminated all taxes through tax arbitrage. But what these models show is how woefully inadequate the traditional economists' models are for analyzing the consequences of taxes. This is not to say that some of the effects, which they have emphasized are not important. But I suspect that many politicians, not thoroughly indoctrinated into the economists' way of thinking, smell, if not a rat, at least a little mouse; they suspect something is wrong with the model, but are obviously not in a position to determine what it is.

Political decision makers may also be somewhat confused by the seeming vagaries of the profession. A quarter century ago, economists like Nicky Kaldor and Milton Friedman could write, quite convincingly, of the desirability of the consumption tax based on considerations of economic efficiency, because it reduced the number of distortions. Then economists, following a rediscovery of Frank Ramsey's classic paper of the late 1920s (Ramsey 1927), realized that two small distortions might be better than one large distortion (one could not simply count distortions), and derived conditions under which an interest income tax would be economically efficient. But Ramsey had conducted his analysis on the assumption that there was no progressive income tax. When this was recognized, the presumption in favor of no interest income tax was restored.¹⁰

Following this confusion, economists have switched their arguments for a consumption tax from a focus on economic efficiency to one on administrative simplicity: much of the complexity of the tax code, and most of the tax avoidance activities, are centered around the taxation of capital. (See Bradford 1986.)

There are further, quite convincing arguments for the abolition of the taxation of the return to capital. We alluded to one of these earlier: the belief that the appropriate time period for taxation is the individual's life time.

Moreover, much of the lost revenue from the abolition of the taxation of capital is income which, under an ideal tax system, would not be taxed anyway: nominal (as opposed to real) returns, including nominal capital gains. With real interest rates traditionally at less than 1 or 2 percent, the loss of revenue from the taxation of the real return to capital may be negligible (although the returns to risk-taking may not be insignificant).

On the one hand, one might contend that the abolition of the capital tax hardly constitutes a "solution" to the administrative problem of taxing capital; on the other hand, if the revenues lost are not too great, if one believes that it is lifetime income which is the appropriate basis of taxation, and if much of the complexity and most tax avoidance activity are indeed associated with capital taxation, elimination of capital taxation becomes an attractive possibility. Yet this is not the route that the current tax reform has taken, largely because of the belief, whether mistaken or not, that it would be, or would appear to be, inequitable.

This brings me to the second explanation for the failure of tax reform. Our tax system is an important forum within which our national values become stated. In other words, what is at issue is more than just economics. We have seen this repeatedly.

The Jeffersonian ideal of a country of small farmers may be inappropriate for a modern industrial society, but we still believe that individuals should have the right to own their own house, to have an equity claim, so to speak, in America. I am not unsympathetic with this view, as contrary as it may seem to economists' traditional obsession with the neutrality between rental and owner-occupied housing. (As an aside, economists' modelling of the differences between these economic arrangements leaves much to be desired; the central issues of moral hazard, the incentive effects of maintenance of one's own house, are, in this work, completely ignored.) House ownership has, I suspect, important effects on individuals' views of themselves and their relationship to their society; and it may have positively beneficial effects on voting behavior, and hence on the nature of local communities. (See Stiglitz 1986.)

The positive encouragement of ESOP plans (by which individuals obtain an equity share in the firms for whom they work) and IRAs can be justified on similar terms.

Charity has always played an important role in the American ideal and the decentralized provision of public goods encouraged by the charitable contributions has had, overall, a tremendously positive influence on our society. Without its privately supported medical foundations and educational institutions, America would not be what it is today. Thus it is not surprising that the charitable deduction has been defended with such vehemence, and retained.

But once one recognizes the desirability of retaining the charitable deductions, it is hard to eliminate completely the deduction for local and state taxes, part of which perform functions not dissimilar to charity: the compulsory contribution of an elderly individual to support a local public school system in similar in many ways to his voluntary gift to support a local private university.¹¹

The third reason for the failure of tax reform is related to simple political economy considerations: there are vested interests who are willing to fight quite hard to retain the special provisions which benefit them. Some of this may be put down to simple greed. But I have increasingly become convinced that there is frequently more to it than that: we live in a complex world, where the consequences of various policies are hard to ascertain. Those who are in an industry know the industry better than anyone else, except perhaps the economists who have made a study of them; but for reasons I have already alluded to, the economists' model often appears to be suspect. Thus, economists might argue that risk markets work almost perfectly, but the lobbyist for the oil and gas industry may make a convincing case that this is not true, and that unless special tax provisions are given, the tax structure will adversely affect this important industry.

Moreover, as I have also argued, there is more at stake than just efficiency considerations: there are values. The housing industry may concede that mortgage deductibility is not neutral, but argue that is precisely why it is good.

The problem is to distinguish between legitimate arguments, and those that are self-serving.

The political economy problems associated with taxation should not come as a surprise. Indeed, one can interpret the restrictions imposed on taxation within the Constitution as a recognition of them. The writers of the Constitution were well aware that certain forms of taxation could be used to discriminate against different groups, and to favor other groups. The South, afraid that the more populous North would impose export taxes, to the South's disadvantage, succeeded in making such taxes unconstitutional. But they failed to recognize that in a general equilibrium model, export taxes and import duties are equivalent, and the North was successful in imposing these taxes with differential burdens on the South.

The writers of the Constitution also imposed a uniformity clause, though the recent decision of the Supreme Court in upholding the constitutionality of the exemption of North Slope oil from the windfall profits tax decimated what little force was left in this important provision.

As most of you may be aware, the Constitution also originally prohibited direct taxes (such as an income tax) on a basis other than per head. Whether they intuited the kinds of problems that we now face may be debated. But certainly the writers of the amendment allowing the income tax seem, at least in retrospect, to have been insufficiently aware of the abuses to which the power to impose that form of taxation is subject.

Where Do We Go From Here?

What lessons are there to be learned from this failure of tax reform? Where do we go from here?

First, it appears to me that we have asked too much of our tax system. By asking more, we may have gotten less. We have been overly ambitious in our attempts to redistribute income through the tax system, and as a result, we have provided incentives for massive tax avoidance. We have attempted to address the energy crisis and other social ills with our tax system; from an administrative perspective, this may not be unreasonable. It may be cheaper, for example, to subsidize the rehabilitation of our inner cities through the tax system than to set up a grants program. But the overall loss in faith in the equity of our system of financing public services may not be worth the savings in administrative costs.

Second, I think one can safely conclude that a major revamping of our income tax system appears unlikely for the foreseeable future. It should be borne in mind that there are significant costs associated with continually revising our tax system; individuals find it difficult to plan for the future, and this, in itself, may be a discouragement to investment. Given that a general tax reform appears unlikely, the only way to reduce the inefficiencies and inequities associated with the tax system is to reduce the amounts of revenue that we seek to collect from it. Moreover, reducing the tax rates reduces incentives to engage in tax avoidance activities.¹²

This leads me to a qualified support for the introduction of a value added (consumption-based) tax. Most economists have been suspicious of such a tax because it is *equivalent* to a proportional income (or consumption) tax (depending on the specific rules of the tax); thus the introduction of such a tax, in effect, serves to reduce the overall progressivity to the tax system. Moreover, it introduces an additional administrative apparatus. Why, economists have asked, have two administrative systems, when one can do just as well with one?

What this argument ignores is the fact that there are also administrative costs associated with tax avoidance activities. Thus, while it might pay an individual to attempt to avoid a 20 percent income tax, it might not pay him to engage in activities to avoid a ten percent income tax, and a separate set of activities to avoid a 10 percent value added tax. Moreover, the way these taxes are collected, in fact, means that there are different tax avoidance possibilities in each. Thus, the principle of multiple nets suggests that one might obtain a more equitable tax system, with indeed lower overall administrative costs per dollar raised, by having two separate systems. This principle of multiple nets can be used to justify two other aspects of our tax code. If we had a well-functioning estate and gift tax system, then a consumption tax, combined with such an estate and gift tax, might well be desirable. But our gift and estate taxes are far from perfect. We can think of our present tax system, which exempts much of life cycle savings (housing, IRAs, pensions, etc.) as an attempt to capture the returns to some of the capital which escape the estate gift tax net. The corporation tax may be justified on similar grounds.

I qualify my support for these proposals for a value added tax for two reasons. First, there will be pressures to have a nonuniform value added tax. The more differentiated the tax, the greater the administrative problems, and the more likely we are to wind up in the same quagmire that we now find ourselves in with respect to the income tax. Second, there is concern that political leaders will take advantage of consumer ignorance, of their inability to ascertain their true tax liabilities, and that the imposition of the value added tax will provide a mechanism for an expansion of the scale of the public sector.

The growing recognition of what I call the "political economy problems," what the popular press refers to as the

lack of restraint on government expenditures and government's propensity to dispense favors to special interest groups, and what economists might loosely describe as the lack of optimality of political equilibrium¹³ (see Atkinson and Stiglitz 1980 or Stiglitz 1986), has given rise to a movement for constitutional restrictions on the level of government expenditures and the size of the deficit.

Note that the change in the constitutional restrictions on the set of admissible taxes may be closely tied to concerns about the size of the public sector. Popular support for government expenditure programs may be much greater if one believes that someone else (or no one) pays for it. With a progressive income tax, or a corporation tax, one can be mislead into believing that it is the "rich" or "corporations" which pay. Many of our current programs might not be supported if we had to finance them out of a head tax.¹⁴

That is one of the reasons I have emphasized earlier the importance of the *principle of political responsibility* in tax systems.

I have mixed feelings about these proposals for a constitutional amendment. The dangers of the loss of flexibility from a constitutional amendment must be balanced against the possible advantages in ameliorating the problems with which we have been concerned here. Moreover, I am not convinced that the proposals I have seen will deal adequately with the problem. Restrictions in deficits, in the absences of an adequate capital budget, give rise to incentives to sell government assets such as the sale of offshore oil and gas leases during the past few years merely to balance the books, regardless of long-term costs to the American taxpayer. Restrictions on government expenditures give rise to the use of tax expenditures, loan guarantees, and other devices, regardless of their merits relative to direct expenditures. Nor do the standard

proposals do anything to address directly the abuses of our tax system, i.e., the structure problems which are the center of concern of the tax reform movement.

There are no easy solutions. As an educator, I have a strong belief in the value of information. That is why I think it important to have some truth-in-government legislation, where the government details the tax burden imposed on each individual. Is I also think this kind of forum you have been holding here this year on taxation, the objective of which is to increase the general understanding of the effects of our tax system, is vital. I am pleased and honored to have been invited to address you this evening, and to participate with you in these endeavors

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NOTES

- 1. The marginal tax rate determines the magnitude of the *substitution* effect (at a given level of welfare, which is related to how the individual trades off consumption and leisure, or present consumption and future consumption), the average tax rate determines the magnitude of the *income* effect. The total effect is the sum of the two. The *inefficiency* associated with the tax system is associated with the substitution effect. The absence of a significant total effect (with substitution and income effects offsetting each other) has often been confused with the absence of any *distortionary* effect.
- 2. And there may possibly be a tax at ordinary rates on the recapture of his depreciation.
- 3. Even taking into account recapture. See Stiglitz (1985).

- 4. This description oversimplifies by ignoring the important risks which Exxon might face in the presence of a default on the part of Chrysler. One of the main consequences of the Safe Harbor Provisions were to reduce those risks.
- 5. In addition, the "at risk" provisions are more favorable in real estate.
- 6. Or more accurately, at the time that it became believed that such a tax would be imposed (or such a favorable treatment would be granted).
- 7. Or more accurately, at the time that it became believed that such a tax would be imposed (or such a favorable treatment would be granted).
- 8. The legislated top rate is 28 percent, but as individuals' incomes increase, there is a reduction in their exemptions (and standard deductions) so that the effective rate is 33 percent.
- 9. There are good reasons for this, based on theories of imperfect information. See Stiglitz and Weiss (1981, 1983) and Greenwald, Stiglitz, and Weiss (1984).
- 10. See Atkinson and Stiglitz (1976). More accurately, there are conditions under which there should be an interest income tax, and other conditions under which there should be an interest income subsidy. It appears difficult to ascertain empirically which of these conditions actually prevail.
- 11. The minimum tax may similarly be viewed as desirable, not because it actually increases equity, or because it increases efficiency, but because it represents a statement of values, that is, the principle that every one above a certain income level should pay at least 20 percent of his income to the government, and it should be transparent that he does so.
- 12. Though much of the cost of those activities may be the fixed costs associated with learning about how to avoid taxes. If that is the case, then a reduction in tax rates may not reduce tax avoidance activities substantially.
- 13. Or, indeed, the absence of an equilibrium (see Arrow 1951).
- 14. Similarly, the scope for redistribution at the local and state level is much different than at the national level. The extent of distribution which well emerges if responsibility for welfare is placed at the state and local level differs from that which will emerge if the locus of responsibility is at the national level.
- 15. There are obvious difficulties, because not even economists can agree on who pays the corporation tax. But these ambiguities can be noted in the "information" sheet sent to each individual.

3

Rating Tax Reform on Growth

Joseph J. Minarik The Urban Institute

Let me begin this lecture with a hypothetical question: suppose that you were confronted with two alternative lottery tickets, one with relatively attractive odds of a small prize and the other with longer odds but a larger prize.

How would you evaluate the alternatives? What would influence you in making your choice?

Would you place a bet only if your preferred alternative were made available, or would you take a chance either way?

I raise these questions because they are much like the choices among alternative investments that many businesses must make. Further, the tax system can make business choices more like either the high-percentage, low-stakes bet or the low-percentage, high-stakes bet.

Of course, the most fundamental elements of the tax system are very much on the bargaining table right now, in a process that has come to be known as tax reform. This process is highly controversial, with conflicting claims of paradise and inferno as the likely result. Nowhere have the claims and counterclaims been more frequent and more strident than in the field of business taxation. Some business spokesmen have seen tax reform as a step toward a more efficient and neutral allocation of investment capital among sectors, leading to faster growth and greater productivity. Advocates of other firms, however, have been particularly adamant that tax reform will choke off investment and lead to stagnation.

Which side is right? Is either side right?

Even in this environment of uncertainty, we can say some things about what a sound tax policy would be, guided by basic principles and by recent economic history. The stakes are high, and so this inquiry is well worth the effort.

I will begin this lecture by setting the scene for the tax reform debate with the tax cuts of 1981. We will see that this law's attempts to stimulate growth caused much of the impetus for tax reform today. We will also see how today's proposals for reform of the individual income tax largely determine the outlines of proposals for business tax reform, and that these outlines lead to much of the opposition on grounds of investment and growth. Finally, we will examine the track record of the current law on investment, and consider the prospects for investment under distinctly different tax rules.

Tax Reform Yesterday

Several years ago, an imaginative pundit wrote a mostly (but not totally) tongue-in-cheek piece called "The Ten Commandments of Tax Reform." Commandment number one (as I recall) was a dictum apparently well known to policymakers, instinctively if not consciously: "Whatever you want to do, call it 'reform.'"*

On this basis, it is not surprising that we have had a lot of tax "reform" in recent years.

It is not a huge logical leap from the nearly universal cries that our tax system today is in desperate need of "reform" to

^{*(}I confess that, with the best of intentions and calling upon the most knowledgeable people in the field, I cannot document this article that is so vividly etched upon my memory. Perhaps someone who hears or reads this lecture will be able to help me along. Or in the best of all possible outcomes, perhaps I only imagined it. Then I would have only nine commandments to go, and I could write the article myself)

a realization that the many recent "reforms" somehow missed their mark. The proof of this idea is no farther away than the last major piece of tax "reform" legislation, and indeed the root of our current budgetary crisis: the Economic Recovery Tax Act of 1981, commonly identified by its acronym of ERTA.

ERTA was motivated, for the most part, by two strongly held beliefs of its early champions: that the level of individual marginal income tax rates was so high as to deter work and saving; and that the tax treatment of business investments in depreciable capital, the carriers of technological progress and the instruments of growth, was so rigorous as to choke off such investments. Obviously, with an agenda such as that, tax reform was quite simple; cutting individual income tax rates is intellectually trivial, and accelerating business growth can be (and was) done in simple ways.

Of course, the political salvation of ERTA was that it did not hurt anyone (with very few exceptions, to be discussed later). ERTA was the tax equivalent of throwing money at problems—roughly \$747 billion over five years, to be specific. Roughly two-thirds of this tax cut went to individuals, and about one-third to corporations. With an uplifting theme like "reform," and all that money to go around, who could be opposed?

The problem, as we now see so clearly, is that ERTA both gave away money that we as a nation did not have, and that it did so in an inconsistent manner. On the question of raw dollars, ERTA opened a budget chasm that was to be filled with future unspecified budget cuts. The nation took the cash with a smile, and only recoiled when the spending-cut bills came due. Without the spending cuts that a now-informed nation refuses to make, the tax cuts are unjustifiable.

Equally troublesome for tax policy, however, are the internal inconsistencies that ERTA created. Though allegedly evenhanded because of equal percentage tax rate cuts across the board, ERTA in fact shortchanged the poor and nearpoor. The percentage tax rate cut did little for millions of low-income persons whose personal exemptions and zero bracket amounts, badly eroded by five years of rapid inflation, were left to continue to erode over five more years.

A further and more structural inconsistency of the post-1981 tax law was demonstrated by the enactment and heavy use of safe-harbor tax leasing. ERTA, in its zeal to encourage business investment in depreciable capital, including the Accelerated Cost Recovery System (ACRS). ACRS made tax depreciation extraordinarily generous—so generous, in fact, that many firms found that the early-year deductions, in combination with the investment tax credit (ITC), completely wiped out their tax liabilities, with still more deductions left over. These deductions were temporarily wasted unless the investing firm had income from other sources against which the deductions could be offset. This gave an important advantage to large, highly profitable firms, who could use all of the their tax advantages from depreciation; smaller firms, especially new firms with little or no taxable income, would have to raise more cash to undertake investments (because they could not enjoy an immediate tax reduction from depreciation and the ITC), and so such firms might choose to postpone investments until they could use the tax breaks.

The Reagan administration foresaw this problem, and chose to remedy it by allowing safe-harbor leases—paper transactions through which firms that could not use their full depreciation deductions and ITCs could sell their assets to more profitable firms that could use the tax benefits. The public outcry that followed the "buying and selling of tax breaks," however, with the spectacle of banks, insurance

companies, and General Electric claiming deductions and credits for other firms' investments and paying no income tax on billions of dollars of profits, caused the Congress to promptly reverse its field and repeal the leasing law. Congress did not, of course, repeal the ACRS and ITC provisions that motivated safe-harbor leasing; so while the symptom has been cured, the disease remains. New symptoms have appeared, including mergers involving firms with unused reservoirs of tax deductions and credits.

Both the internal inconsistencies and the revenue inadequacies of the post-1981 tax law have motivated the current drive for tax reform. The role of the internal inconsistencies is obvious: the President and all other tax reform advocates cite the need for tax relief for the poor and an end to overgenerous depreciation. (In the case of the President, of course, this is quite an about-face from four years ago.) The revenue motivation for tax reform is perhaps less obvious, however; the President insists that any tax reform be revenue neutral, and all other reform proposals claim to follow that line (though some fall short). Nonetheless, many advocates of these proposals acknowledge that a tax increase to narrow the deficit is inevitable. The motivation for reform is that the current tax law, laden as it is with internal inconsistencies, could not provide substantial additional revenues without harmful side effects. If the President stands in the way of a tax increase but would welcome tax reform, it would be wise to get the first half of the job out of the way. Then when the need for revenue becomes even more apparent, possibly in a crisis, the necessary revenue tool will be ready.

Tax Reform Today

The new tax reform proposals are different from the 1981 model in that they cannot give any money away. They are

further different in that they address the issue that was the heart of the tax reform debate for decades before the 1981 distraction: the definition of the tax base. In response to complaints from the household sector that the income tax is unfair, the President and others propose to repeal numerous deductions, exclusions, and credits from the tax law, reducing tax rates in compensation. Of course, with no money to give away and major changes in the law, it follows immediately that some taxpayers will win in the process, but others will lose. Nevertheless, by transferring revenues from the corporate sector to finance a household sector tax cut, the President can promise most households tax relief when the dust finally settles.

This kind of tax reform is acceptable to just about everyone (except those who lose deductions, exclusions, or credits that are particularly close to their hearts and wallets). In fact, tax reform is remarkable in uniting the tax field's "old fogies" and the "young turks." Old line tax reformers, of course, would like nothing more than a broader individual income tax base with lower rates. And even the supply-siders, if they really mean what they say about the primary importance of reducing marginal tax rates, have to agree with the wisdom of such tax reform. For them, a tax cut in dollar terms is not a necessary condition for supply-side economics to work. (In fact, from a more conventional point of view, supply-side economics could be successful if the tax base were broadened to recoup the revenue loss, and so no money were given away. In that case, the lower tax rates could encourage more work and saving, without a cash windfall to encourage leisure and spending.) So individual income tax reform à la Reagan 1985 has become part of the conventional wisdom of economic policymaking, even if it is not every interest group's cup of tea.

Business tax reform proposals follow right along with the individual version. Many of the individual income tax prefer-

ences that cause the most unfairness and manipulative tax sheltering—ACRS, the ITC, accelerated and exaggerated writeoffs for oil and gas drilling, accounting abuses—also are used in the corporate sector. If they are repealed for households, then they must be repealed for corporations too. Just as marginal tax rates are reduced for households in compensation for the revenue gains from base broadening, so they are reduced for corporations. After all, the corporate income tax is really just a proxy tax on income that is temporarily held outside of the household sector; we tax corporations because, if we did not, households could set up corporations to hold and invest their money and therefore act as tax shelters. The reduction of corporate marginal tax rates keeps the top corporate rate roughly in line with the top individual rate, so that the proxy tax does not encourage the organization of businesses in either incorporated or unincorporated forms.

Thus, the conventional wisdom on individual income tax reform dictates the nature of tax reform on the corporate side; and because it is both conventional and wisdom, with agreement from many ideological adversaries, everything must be hunky dory.

Mustn't it?

Lately there have been two distinct challenges to the corporate branch of tax reform as now preached and practiced. One challenge comes from within the traditional tax reform ranks and some other mainstream economists. This group argues that low-rate, low-subsidy corporate tax reform fails to make a proper distinction between old and new investments in plant and equipment. The argument goes like this: Corporations invested in depreciable capital in the past assuming that they would pay tax on any net income at 46 percent (the highest corporate rate, at which most corporate income is taxed). Under tax reform, however, that tax rate

would be cut to anywhere from 30 to 35 percent. That tax cut, the argument goes, is a pure windfall for investment that is already made, so that much of the revenue lost through the rate cut is wasted. The merit of the investment tax credit and accelerated depreciation, the story continues, is that they benefit only new investment. The high corporate tax rate that goes along with these subsidies (of necessity, to make up the revenues loss) then soaks up much of any abnormally high profits (or "rents") of old investments, without discouraging new investment. So this challenge is based on arguments of both economic and cost efficiency. (This argument underlies the Reagan administration's proposed "windfall recapture tax" on the benefits of past accelerated depreciation.) An extension of this argument is that a high corporate tax rate, falling as it most likely does on owners of capital, helps to make the overall tax system more progressive.

The other challenge comes not so much from economists as from the business sector. Some (but by no means all) business leaders argue that any diminution of incentives to invest, either through increases in the corporate tax burden (which the Reagan administration proposes to fund individual income tax cuts) or through cutbacks of targeted investment subsidies, pushes in the wrong direction. The nation needs more investment, this argument goes, because a shortage of investment has been the culprit in our recent economic sluggishness. More investment would increase productivity, because investment is what brings the latest technology into the production process. From this point of view, tax reform's emphasis on the efficient allocation of investment, rather than on the raw amount of investment, is misplaced; we could end up with a better allocation of less capital, and be worse off when the dust settles.

Of course, this business argument is far from universally held; and keeping in mind business' tendency to look at the bottom line, this is not surprising. Remember that under a revenue-neutral business tax reform, some corporations would pay less tax, and some corporations would pay more. Because every business executive probably has a very keen sense of his firm's contribution to society, those executives whose firms would lose cash flow naturally have had negative things to say. Likewise, of course, leaders of firms that would win from tax reform (including primarily those firms most heavily taxed under the current law) have come forward aggressively to favor reform. This is another respect in which 1985 differs most vividly from 1981; four years ago, businesses marched in lockstep for the huge tax cut represented by ACRS; today, because there would be losers as well as winners, the ranks are highly fractionated.

Consequently, economists and business leaders are divided on business tax reform, with the ultimate emphasis on growth. Some policy analysts and businessmen say that tax reform would make our nation leaner and tougher; others counter that business would be smaller and weaker. In the corporate sector, this division is easily explained by self-interest; but similar disagreements among economists prevent us from assuming that the only issue is whose oxen are gored. If we want to make the best possible judgment, we must go beyond the politics of the issue and analyze the economics.

Taking Stock

So what are the merits of these arguments? Will tax reform encourage or inhibit growth? To approach an answer, we must use economic theory, our recent experience, and (because we are contemplating new policy tools) some new thinking. We should certainly start by examining the link between tax policy and investment, but before we finish, we must also reconsider the often-assumed link between investment and growth.

Theory. Unfortunately, as even the most avid theorists and econometricians would admit, our understanding of what causes investment is fuzzy at best. Two theories probably hold the most currency: the cost of capital theory and the accelerator theory.

The cost of capital theory relies on neoclassical economics, putting a heavy emphasis on the supplies of factors of production, and less on the levels of aggregate demand needed to assure that those factors of production are fully employed. The cost of capital model focuses on how much it costs—in interest, depreciation, and taxes, among other expenses—to use a given quantity of capital for a given length of time. Because an equity investor in a unit of capital will want some positive return to justify his investment, there will most likely be some tax liability as part of the cost of capital. This tax liability increases the before-tax return needed to provide the investor with the minimum acceptable after-tax return (the least return that would induce the investor to make the investment). Thus, an increase in taxes on investment would make some previously acceptable investments unacceptable; it would raise the cost of capital for the marginal investment.

The accelerator theory, in contrast, looks more closely at the state of aggregate demand, and less closely at the supply of factors of production. It holds that investment is induced by increases in consumer demand which push on productive capacity, rather than by tax cuts for investment per se. From the point of view of the accelerator theory, a tax cut for investment income while businesses by and large have excess capacity would be wasted; it would be "pushing on a string," to invoke a common analogy. The revenue loss would go largely to businesses that would be investing anyway.

As was suggested not too long ago, neither of these two theories can claim an extreme of predictive accuracy. Empirical studies suggest that business behavior depends on many factors, surely including businessmen's varying perceptions of the conditions in their own varied markets. This diversity of view surely has much to do with the failure of any theoretical model to explain actual behavior.

Of the two models, though, it is the cost of capital model that is the more pertinent to the criticisms of tax reform related above. Economists would argue that incentives should be targeted to new investments, and businessmen would emphasize the level of business taxes, whether through incentives or not. The kind of demand-push fiscal stimulus envisioned in the accelerator model seems to be out of the question at the moment; our demand seems to have been pushed about as far as it would go in 1981.

The Record. It is here that recent history can lend a hand. Surely the 1981 tax law was the quintessential reduction in the tax component of the cost of capital; it cut business taxes significantly through a substantial acceleration of depreciation, targeted on new investment. In fact, its reduction in the tax component of the cost of capital was so great that in many instances, it made that tax component negative. That is, it gave such accelerated deductions for depreciation, coupled with the pre-existing investment tax credit, that the tax deductions and credits wiped out the tax liability of the typical investment in its early years, with more tax benefits left over. If the investor had income from other sources against which he could claim the deductions and credits, those tax savings exceeded (in present value terms) the tax on the investment in question in its later years, after the deductions and credits were used up. Taking into account the tax savings on other income and the time value of money, ACRS and the ITC were so generous as to make many typical investments into tax shelters. If that wouldn't stimulate investment, what would?

But did it stimulate investment? Here opinions differ. Some business advocates argue that the recovery of investment from the 1981-82 recession has been remarkable, and they seem to have the numbers on their side. Business investments in nonresidential structures and in equipment have grown more rapidly after this recession than they have in the typical previous post-World War II recovery. Advocates of generous tax treatment of investment assign this growth to the 1981 tax cuts.

A critical look at the numbers, however, leads to a far different outcome. The most important issue is just where this apparent boom in investment has gone. Barry Bosworth has shown that the increase in investment in equipment is highly concentrated in two types of assets: computers and business automobiles. It happens that the one area where ACRS was not generous was in its treatment of computers, which in fact fell between the cracks and were made subject to longer, not shorter, depreciable lives. The stimulus to investment in computers seems to have come from another direction; their falling prices. This episode just serves as a reminder that tax policy is by no means all of economics, and should not be the first resort for action on any problem that happens along. The boom in investment in business automobiles has an equally ideosyncratic explanation; consumers have become more interested in automobile leasing as an alternative to purchase, and a leased automobile, even if used purely for personal purposes, is considered an investment by the leasing firm hence the jump in the investment figures.

When he omits computers and business automobiles from the investment statistics, Bosworth finds that the investment recovery from the 1981-82 recession looks much more typical from an historical perspective. In fact, when he measures the investment recovery relative to the previous business cycle peak, rather than the low point of the recession (which in 1981-82 was extraordinarily low), Bosworth finds that the investment recovery has been below average (Barry P. Bosworth, "Taxes and the Investment Recovery," *Brookings Papers on Economic Activity* 1:1985, pp. 1-38).

A further qualification of the strength of the investment recovery comes from an examination of investment in types of structures. Investment in industrial structures—factories—has been virtually flat since 1980. The growth of investment in nonresidential structures has been confined to commercial structures—such as shopping centers and office buildings. Most analysts, certainly including many business advocates, would admit that investment in commercial structures was not a goal of the 1981 tax law, and has little potential impact on U.S. growth and competitiveness.

It is my conclusion from the data as described above that the extreme attempt at investment stimulus through tax policy undertaken in 1981 has failed, thus far, to produce demonstrable results. This is especially true in light of the reinforcing of the "cost of capital" tax cut strategy with an "accelerator" tax cut promising a rush of consumer demand and encouraging firms to build up their productive capacity.

There is certainly an argument that insufficient time has passed to pronounce judgment on the 1981 tax law, and that circumstances since 1981 have been extraordinary and have not allowed a fair test. One point worth considering, however is that the 1981 tax cuts may well have helped to create those extraordinary circumstances. Massive tax cuts, even on the order of ACRS taken alone, will increase the federal government deficit and drive up interest rates. This is especially true because tax inducements to investment invariably are enjoyed by those who would have invested without the incentives, as

well as the few who are affected at the margin. If the monetary authorities should fear an inflationary burst of excess demand and restrain the growth of the money supply, that will increase interest rates further. Because interest expense is an element of the cost of capital—again, investment is determined by more than taxes alone—an extreme strategy of investment subsidy through tax cuts can boomerang.

While we do not now have ironclad proof, the track record of tax subsidies for investment appears less than promising. In my judgment, we might well regard advocates of further investment subsidies in the tax code as 19th century physicians leaving a comatose patient to get more leeches.

The Issues

Why have tax incentives for investment had so little effect? In my opinion, despite its logical underpinnings, the cost-of-capital theory has some significant weaknesses as a guide to policy, especially when taken to extremes. I would like to discuss four areas in which I believe this is true.

New, Risky, and Recent-Loss Firms. To encourage investment under the cost-of-capital approach, taxes must be cut on the marginal investment. Significant tax cuts on investments earning only a minimum acceptable rate of return can take on strange forms, however. To stimulate investment in this way, ERTA resorted to such enormous accelerations of depreciation allowances that the tax on many marginal investments became negative. As was explained earlier, investors receive more deductions and credits than they need to wipe out all tax on the income generated by an investment early in its life. The excess deductions and credits can be used to offset tax on the investor's other income.

A problem arises if the investor does not have any other taxable income. In that case, the excess deductions just sit on

the firm's accountant's shelf, depreciating with the passage of inflation. A firm in this situation has to raise more money in the credit markets to undertake an additional investment, because it does not have any reserves against taxes to draw down in anticipation of the value of the resulting tax preferences. Such a firm may postpone investments until a later date, when it expects to become profitable; or it may become prey for a takeover by some other firm that does have taxable income. (As was noted earlier, the 1981 tax law included safe-harbor leasing as a safety valve for just such situations, but the public found the results of tax leasing too offensive.)

These problems befall particular kinds of firms: new firms, which typically make large start-up investments and do not earn profits for several years; firms that have recently been unprofitable and are attempting to turn their situations around; and technologically advanced (colloquially, "high tech") firms, which make large investments with long gestation periods and uncertain chances of success. For these firms and for any others that cannot use their investment subsidies immediately, the tax benefits are significantly less valuable; consequently, some portion of the business population is left out of the investment subsidy strategy and disadvantaged by it. This could well make our investment performance under a cost of capital strategy less favorable than we might expect. Furthermore, it is far from clear that it is in our economic interest to favor large, established firms in traditional lines of business.

Tax Shelters. As was noted earlier, even a traditional investment can receive a negative effective tax rate under ACRS. It should not be surprising, then, that tax shelter brokers can achieve new heights of manipulation under the current law. In 1981, for the first time in a quarter century of compiled statistics, the entire partnership sector of the econ-

omy (partnerships are the preferred vehicles for tax shelters) showed an aggregate net loss, so great was the boom in tax sheltering. In 1982, this dubious distinction was repeated. The availability of ACRS depreciation deductions effective January 1, 1981, was an important cause of this development. Tax shelters cost the federal government revenue, and they waste capital as well; without the benefits of tax sheltering, there is no doubt that less of the U.S. capital stock would be allocated into investments in the oil and gas industry, and in residential and commercial real estate.

The use of real estate as a tax shelter causes another serious problem of resource misallocation. Commercial and residential real estate makes an effective tax shelter because it is easily resaleable (apartment and office buildings make safe and liquid investments because they almost always have many alternative users), and so it can be highly leveraged. That way, small amounts of cash can generate large amounts of depreciation deductions. In contrast, factories have fewer alternative users, and so they are riskier investments, and less amenable to debt finance. If commercial and industrial structures received depreciation treatment equally generous to that of equipment, this tax sheltering would get completely out of hand. To prevent this, depreciation for shelters is made less generous than that for equipment (measured by the actual reduction in value, i.e., economic depreciation, over time). But this less generous depreciation treatment of structures carries over to disadvantage investments in factories, as opposed to shopping centers and office buildings. The tax bias away from industrial structures can only hinder growth over the long run by encouraging investments in modern equipment to be placed in outmoded structures. It is an inevitable outgrowth of an unbalanced policy with extreme incentives for investments in equipment.

Double Taxation of Corporate Income. Another aspect of the investment incentive strategy is its effect on the double taxation of corporate source income. As was noted earlier, the rich investment incentives in the current law cost revenue, and so for any given revenue target, statutory tax rates must be higher. (Because the same generous depreciation must be made available to individual as to corporate investors, this strategy increases individual tax rates as well as corporate tax rates.) These higher tax rates increase the double tax on corporate source income at the margin, that is, on an additional dollar of fully taxable corporate income that is then distributed.

Sensitivity to Inflation. Another source of distortions because of the high tax rates required to finance large investment incentives is the interaction of the income tax and inflation. With higher tax rates, the mismeasurement of income and of interest expense due to inflation is more serious. (Further, ACRS itself is highly sensitive to inflation; at the low inflation rates that we currently enjoy, ACRS is an even greater net subsidy to investment than was anticipated at its enactment during the high inflation of 1981.)

Summary. A frequently heard argument for investment subsidies is that they encourage risk taking and innovation. As the foregoing analysis suggests, however, this is true in only a limited sense. Rich tax subsidies like ACRS encourage a risk taking and innovation, but mostly by large, established firms; newcomers and revitalized firms get less of a tax advantage. Further, if the incentive to innovate is a function of the after-tax income that the innovation will yield, and if the tax rate is close to 50 percent for either an individual or a corporation, that incentive has to be blunted. A firm or an individual with a new idea has to think twice about the relationship of after-tax reward to risk. What our current tax code seems to foster more than anything, in fact, is ultra-safe investments like real estate.

It was with this tenor of the current tax code in mind that I raised my opening question about a low-risk, low-return lottery compared to a high-risk, high-return one. The current tax law, for all its stated intentions about innovation, seems more directed toward stand-pat investments. Business lobby-ists may well argue that the world will end if our rich investment incentives are cut back or repealed. We should not be surprised by this; after all, that is what business lobbyists are (well) paid to do. Business executives, if they do what they are (well) paid to do, will seek out investments where there is profit to be made; and that task will not be changed by the repeal of tax subsidies for investment.

We can only wonder how our economy would perform if the tax code were purged of opportunities for low-risk, tax-shelter arbitrage, and were left with only a substantial reward for truly productive activity. There are some thoughts, however, that might give some idea of the potential benefits of tax reform.

Tax Reform Tomorrow

There is reason to believe that many of the allegations of tax reform harming investment are either unimportant or inaccurate. There are other reasons why tax reform could in fact create a better climate for investment than many observers would anticipate. And there is further reason to expect that in tax reform as currently contemplated, getting there will be half the fun

Investment and Growth. One possible criticism of tax reform from the cost-of-capital view of the world would be the likely increase in the tax burden on the marginal investment. With ACRS extending negative tax rates to many investments, there is no question that the current law reduces the required rate of return for investment. Tax reform, by repealing these net subsidies, would raise the required rate of return. Is this a serious disadvantage of tax reform? What would its effect be?

From a real world perspective, it is difficult to evaluate just how important it is to drive down the required rate of return to the extent that ACRS does. There is no telling just how often a firm contemplates an investment that it truly believes to be marginal. Some investments wind up earning barely a required rate of return; indeed, some wind up earning only losses. But it is unlikely that those investments were undertaken in anticipation of performing unsatisfactorily, or even marginally.

Further, and more important, the connection between investment and growth is almost certainly exaggerated by many casual commentators; in particular, the value of stretching investment a margin further in a given year is easily overstated. If markets work (and if they do not, I am unsure why you invited an economist to speak to you this evening). then the best investments, the ones that make the greatest contributions to productivity and growth, are the ones that will pass any reasonable market test. The investments that could then be teased out of the economy at the margin are the ones whose value is, well, marginal. As I argued earlier, a good deal of the additional investment stimulated by ACRS was apparently in tax shelters. This suggests that we must examine critically those casual notions about investment being the engine of all progress and growth, and the risks that tax reform, being less generous at the margin, will somehow reduce our well being.

Benefits of Tax Reform. Criticisms of tax reform on the basis of its impact on the tax component of a cost of capital formula ignore its other potentially beneficial effects.

As was noted above, the likely outcome of a low-rate income tax with neutral, nonsubsidized depreciation is a

reduction of tax sheltering. This welcome development would redirect billions of dollars from socially unproductive investments in real estate and other tax-favored areas into more traditional investment fields. The additional capital would offset the effect of the elimination of investment subsidies.

Likewise, a reduction in marginal tax rates for individuals has the potential to encourage saving. In all likelihood, the increase in saving would be modest, but it would be welcome; and it would make more funds available for traditional investments. Perhaps even more significant, reduced tax rates and cutbacks of deductibility of interest on consumer loans (including increases in the zero bracket amount, which reduce the number of people who itemize) will decrease borrowing, which is negative saving.

The importance of these developments should not be ignored. Many business advocates seem to take a tunnel view of tax reform and investment, seeing only the repeal of the investment credit or of ACRS. What such observers fail to see is favorable movements of another element of the cost of capital: interest expense. If capital moves from tax shelters into traditional investments, and household saving and borrowing shift modestly but favorably, tax changes in the cost of capital could be offset by reduced borrowing costs, leaving the business sector better off.

Another beneficial effect of tax reform and lower marginal tax rates will be a greater incentive to work. Again, changes will likely be modest, but favorable. When all of these changes occur simultaneously, and all are movements in the right direction, there is at least the potential for a favorable synergism where the whole is greater than the sum of its parts.

The Joy of Transition. In most changes of tax laws, the transition phase is a source of pain and complexity. In many

respects, a major tax reform may be no different. But in terms of the incentive to invest, the transition may be a major plus.

President Reagan has proposed a tax cut for individuals to be financed by a tax increase on corporations. Many of the revenue-raising steps under the corporate tax, by their nature, grow into their full effect over several years. This is generally true of changes in depreciation, which affect only investments made after the passage of the law, and so embrace the entire capital stock only as the pre-existing capital stock wears out over a period of years. (This revenue pattern would not hold under the administration's current depreciation proposal which, through newfound generosity, in fact loses revenue in the long run. This is a source of concern regarding the administration's plan.)

Because the revenue gain tends to be less in the early years, revenue neutrality requires that certain steps be taken to raise revenue in the first years after enactment. One such proposal was the administration's windfall recapture tax, which would add into taxable income a fraction of accelerated depreciation allowances claimed since 1980, and would raise revenue for only four years. As was explained above, this provision is intended to recover some of the windfall gain to corporations who invested in anticipation of paying tax at a 46 percent rate, only to be greeted by a tax reform that would impose tax at only 33 percent. Whatever its merits, the windfall recapture tax has met with extreme hostility, largely on grounds of being a retroactive burden. Its chances of enactment are considered to be slim.

The obvious alternative to the recapture tax as a purely temporary revenue raiser is a phasing in of the corporate tax rate reduction. While politically only a second choice to the current administration, the corporate rate cut phase-in is an economic gold mine. Consider these attributes:

First, the rate cut phase-in acts as a short-run investment incentive. A firm that invests early on can claim its depreciation deductions against a higher tax rate, making them more valuable.

And second, the phase-in concentrates the benefits of the ultimate rate reduction on new rather than old capital. In the first years of the phase-in, pre-existing capital is subject to a relatively high rate of tax, reducing the windfall for which some economists criticize tax reform. As the pre-existing capital wears out, however, the statutory tax rates are reduced, giving the relief to a greater extent to capital purchased after the tax reform takes effect. In the long run, the rate reduction rains down more than it otherwise would on new capital, making tax reform more cost effective in terms of stimulating new investment.

Thus, a temporary provision needed to make tax reform revenue-neutral over the short run could defuse much of the criticism of the entire grand undertaking on grounds of its effect on investment.

Summary. Several aspects of tax reform have the potential to improve significantly the economic climate in general, and that for investment in particular. Observers who view tax reform from one particular perspective have a tendency to miss this big picture. We should keep the broad view in mind when we make our decisions on tax reform.

Conclusion

Over the past few years, in our frequent episodes of tax "reform," we have tended to look for tax remedies to too many of our problems—economic and otherwise. By now, it is almost an article of faith to some people that tax policy is the most important determinant of business investment. Perhaps

this is only predictable, because a business lobbyist who can wheedle a tax preference from the Congress can deliver to his clients risk-free cash flow, while an engineer or designer can only give his firm a roll of the dice in the free and competitive market.

As difficult as it may be, though, we must question those new preconceptions of taxation as the key to our future. After all, if tax incentives are so important, how did our nation grow so fast before it even had an income tax? Was Christopher Columbus really sailing for Washington to make the case for an exploration tax credit? Did anyone really argue whether the wagon trains were depreciable or not?

As one who has specialized in the economics of taxation, I can only report my opinion: that tax policy is crucial to our economy now only because it has been stretched beyond all reasonable bounds, to interfere in sector after sector. If it were drawn back, the economy would thrive in the short run, after some transition pains, only because it would be freed from the shackles that the current tax law imposes. In the long run, our economic prospects would depend on our ingenuity and energy. No one can guarantee that those qualities will be enough in an ever more competitive world economy, but for myself, I would rather rely on our energy and ingenuity than on some purported incentive in an incomprehensible tax law.

4

Fiscal Illusion and Fiscal Reality:

Do the Budget "Deficits" Have Clothes?

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Fiscal policy has been a hot topic in recent years and remains so today. No wonder. Since 1981 the federal government has made substantial cuts in personal income taxes, provided the largest investment incentives in the country's history, significantly altered the projected course of Social Security benefits, and run enormous official budget deficits. However, all this fiscal action has apparently just whetted the appetites of fiscal enthusiasts who are now proposing what has been billed as fundamental tax reform.

My focus in this talk is not to review recent fiscal history or presage current tax reform bills, but to discuss an issue that has bothered me repeatedly over the past few years. Put simply, my question is the following: in thinking about fiscal policy and particularly about government debt, have we been taken in by the accountants and have we, as a result, been missing the economic forest for the trees? I hope to convince you that the answer, if not yes, is at least maybe. My sniping at economic accounting is not to disparage the accounting profession; indeed my real gripe is not with accountants, but rather with economists who are so often misled by the labeling of economic variables and then compound the error by misleading others.

Before I turn to substantive points, let me say that I am not arguing for different or better accounting. In my view, ac-

counting is properly chosen after, not before, one chooses one's economic model. The accounting constructs that are appropriate for one model may be totally inappropriate for another. For example, while one can conceive of a model in which the government's current definition of the deficit is meaningful, one can also write down other models in which the current definition has little or no relation to the government's fundamental debt policy. Unfortunately, economists, when speaking publicly, typically fail to explicate their models and take the easy route of discussing the official numbers that are available and generally familiar, despite the fact that these numbers may be highly misleading indicators of the numbers actually suggested by their theories.

In this and other respects, we are tyrannized by our accounting. Somehow or other, official numbers invite concern and comment, and, when research funding is available, official numbers also invite investigation. A prime example is the industry of international finance economists who investigate changes in countries' balances of payment. Fortunately, we do not keep balance of payment accounts for each state in the U.S. or we would have an industry of economists studying the balance of payments crisis between Michigan and Tennessee and related nonsense.

Let me illustrate my concern about fiscal illusion by asking you to consider the Social Security taxes you pay to the government. Notice that the word "taxes" has been ascribed to the Social Security payments you and your employer send to the government. But why is the word "taxes" used? It's used because some accountant or economist arbitrarily chose that word back in 1936 or thereabouts. Suppose we label these payments to the government differently. Let's label them "loans" from you to the government. You may object to this nomenclature, but bear with it for the moment.

Loans are typically repaid, so let's also label Social Security benefit payments "return of principal plus interest." Note that from your point of view the new terminology is not completely foreign. With the new language, you can now think of yourselves as lending money to the government (in the form of Social Security contributions) during your working years and receiving principal plus interest (in the form of Social Security benefit payments) during your retirement. Surely this sequence of payments and receipts is very similar to those associated with purchasing a government Treasury bond. When you purchase a Treasury bond or other security, you make payments to the government now in exchange for future receipts from the government. Hence, from your point of view, your payment of what is called Social Security "taxes" is, in most respects, equivalent to your purchase of a government liability. While the mean return and risk properties of your invisible Social Security bonds differ from those of official government bonds, such differences in risk properties provide no basis for labeling one set of payments to the government "taxes" and the other set of payments "loans."

Let's now make the invisible Social Security bonds visible by supposing that the federal government, starting at the inception of the Social Security system, had also adopted the language of lending and borrowing to describe its flows of payments from and to the public sector and, indeed, had issued explicit Social Security bonds to the public in exchange for Social Security contributions. We are supposing then that Social Security system sends a piece of paper marked Social Security bond to each worker in exchange for his or her Social Security contribution.

Consider now the impact on the government's measure of official debt of switching from the "tax" and "transfer" language to the language of "lending" and "repayment." As you can read in the Appendix to chapter 4 of the 1982

Economic Report of the President, this change in language, while involving no change in fundamentals, would have radically altered current and past reports of the federal debt and federal deficits. The government would have reported official deficits in the 1960s over \$300 billion dollars for several years and deficits over \$100 billion dollars for most years during the 1960s and 1970s. Since the price level and size of the economy was much smaller then than now, as a fraction of GNP these alternative deficit figures would swamp those of recent years. With this alternative labeling of Social Security receipts and payments 1985 official government debt would exceed its current \$1.5 trillion value by a factor of roughly 5.

Presumably, such a redefinition of official government liabilities would raise the question of classifying other implicit commitments to future expenditures as government debt. If one is willing to label implicit promises to pay future retirement benefits official liabilities, why not include implicit expenditure commitments to maintain the national parks, to defend the country, or to provide minimum sustenance to the poor?

A heated debate about the appropriate definition of government debt would likely lead some shrewd economist to suggest eliminating official government debt and deficits entirely by just using some more of what is essentially innovative accounting. This economist would suggest that rather than raise additional funds by issuing government securities, the government should simply levy a head "tax" per adult promising to provide each adult in the following or some subsequent year a refundable tax credit equal to the "tax" plus interest on the "tax." If the adult died before repayment, the "tax" credit would be paid to his or her estate. Furthermore, those who are liquidity-constrained would be permitted to borrow against their future "tax" credits.

The equality, in present value, between each household's head tax and its head tax credit leaves household budgets and, therefore, private behavior unaltered. However, since future tax credits, like future Social Security benefit payments, are not reported in the current federal budget, this policy permits the government to report a smaller deficit. If the head tax is sufficiently large, the government could potentially eliminate not only this year's official deficit, but indeed the entire stock of outstanding government debt. If it made the head "tax" sufficiently large, the government could report a very substantial surplus. Those of you who are following closely the details of this head "tax"—"tax" credit policy—will see that it effectively amounts to relabeling as "taxes" the receipts the government obtains from selling bonds, and relabeling as "tax" credits the payments made by the government of interest plus principal on its sale of bonds.

To summarize, I've pointed out that with a little change in labeling of Social Security receipts and payments, the government's reported debt would be roughly five times its current value; alternatively, with a little relabeling of the money it receives and pays out in its bond transactions, the government could wipe out any reported debt and report instead enormous surpluses. But my point is not that we can color red what is really black or color black what is really red. My point is that in most economic models, particularly the standard neoclassical model, there is really no fundamental distinction between what is currently painted red and what is currently painted black, i.e., in most models there are no real reds and blacks when it comes to labeling government receipts and payments.

If I have you scratching your heads, I'm happy. I'm delighted if you believe, as do I, that money which the government calls taxes could just as well be called borrowing

and vice versa. But if I've gotten you to agree with me that our official debt numbers are inherently arbitrary, then you should also agree that these numbers provide little guide to the fundamental stance of fiscal policy. If we can't rely on these numbers, how do we go about assessing the extent of redistribution from younger to older generations, which is what most economists and perhaps most noneconomists associate with the concern about government debt?

The answer is that we need to examine directly the lifetime budget constraints of different generations and ask whether government policies have expanded the lifetime consumption opportunities of older generations at the price of reduced lifetime consumption opportunities of younger and future generations. The answer to this question is invariant to how we label particular receipts and payments between the private economy and the government. Accounting doesn't matter when looking at a generation's budget constraint because the bottom line is how much can the generation afford to consume; this depends on the generations' lifetime receipts from the government net of payments to the government, not on how particular receipts and payments are labeled.

Once one becomes attuned to thinking about economic debt policy in terms of intergenerational redistribution, it becomes clear that a variety of government policies, many of which have no direct effect on reported government deficits, transfer resources from later to earlier generations. Before describing these mechanisms, it's worth mentioning why one should care about intergenerational redistribution towards older generations. The answer is that, as a result of such a transfer, older generations are likely to increase their consumption by more than younger generations lower their consumption. The reason is that older generations have fewer years left to live and consequently have fewer years over which

to consume the additional resources. Younger generations, on the other hand, spread their reduction in lifetime resources over more years; hence, their response to the transfer is to lower their consumption this year somewhat, knowing they will also lower their consumption for many years in the future. In the jargon of economists, older generations are likely to have larger marginal propensities to consume than younger generations. If this is true, then intergenerational redistribution will eventuate in an increase in total national consumption and, according to neoclassical models, a decline in total national saving. The decline in saving may also spell a decline in investment and higher real interest rates as capital becomes a relatively scarce factor of production.

Economists and others in the U.S. are properly concerned abut this crowding-out process. Since 1980 we have been saving only 4.7 percent of our net national product. In contrast, we saved 7.8 percent of NNP in the 1970s, 8.7 percent in the 1960s, and 8.8 percent in the 1950s. While the current saving rate of 5.2 percent is above that of the early 1980s, it is still 41 percent lower than the saving rate of the 1950s.

In addition to redistributing to older generations by cutting "taxes" now and raising "taxes" in the future, i.e., reducing payments from the private sector to the government now and increasing such payments in the future, the government employs several other mechanisms of intergenerational redistribution, some of which are quite subtle. One somewhat subtle mechanism is running an unfunded, "pay as you go" Social Security system.

In this Ponzi scheme, younger working generations pay money to Social Security which hands the money over to older, retired generations in the form of retirement benefits. In this scheme, every generation pays for the retirement benefits of the previous generation with one exception; at the initiation of the program the first generation receives benefits without having to finance the retirement of its immediate predecessors. This generation receives a windfall at the expense of younger and future generations whose lifetime budgets would be greater were they not enrolled in Social Security.

While many of the big winners from Social Security are already deceased, there is still significant intergenerational redistribution from Social Security. Middle income households who were born in 1930 are predicted roughly to break even from the system. In contrast, middle income households in the cohort born in 1990 are projected over their lifetimes to lose, on net, roughly \$60,000 in present value as a consequence of participating in Social Security.

Another subtle intergenerational transfer mechanism is changes in the tax base that shift the burden of "taxation" (payments to the government) from older to younger generations. An example here is switching from an income tax that taxes the capital income of the elderly as well as the labor earnings of the young and middle-aged to a wage tax that hits only the young and middle-aged. A variant of this type of fundamental debt policy is increases in the progressivity of the income tax. Switching from a less to a more progressive income tax shifts more of the tax burden onto middle-aged and younger workers whose annual incomes are larger than those of retired elderly for whom income consists simply of the return on savings.

Perhaps the most subtle mechanism of intergenerational redistribution is government policies that lower the market value of financial assets. Since older generations are the primary owners of assets, a reduction in asset values reduces the consumption opportunities of the elderly; at the same time, it expands the consumption opportunities of younger

generations who, through time, can purchase these assets from older generations at a lower price.

An example of such a policy is reducing investment incentives, which, by the way, is part of the President's tax reform proposal. Since investment incentives in the U.S. are effectively restricted to new investment, old capital, capital that has been fully or partially written off, sells at a discount reflecting the preferential tax treatment available to new capital. A reduction in investment incentives means a smaller discount on old capital, i.e., a capital gain to owners of old capital. This capital gain accrues to older generations, and young and middle-aged generations are worse off because they must pay a higher price to acquire claims to the economy's capital stock.

Having pointed out these various mechanisms for running true economic debt policies and having argued strongly that one cannot gauge these policies by looking at official debt numbers, it's time to look at the reality of recent economic debt policy. The Reagan personal income tax cuts have certainly enhanced the lifetime budgets of older generations at the expense of younger generations, but, up to the present, the magnitude of this intergenerational redistribution appears small when set against the massive intergenerational redistribution in the 1960s and 1970s associated with Social Security.

A second feature of Reagan's fiscal policy is the sizable investment incentives passed in 1981. As argued above, this policy generates capital losses to owners of existing (old) capital and constitutes an economic surplus policy. My sense of the magnitude of this redistribution when set against the redistribution from the tax cuts is that it corresponds, very roughly, to having postponed the tax cuts by one year.

The third significant fiscal policy altering the intergenerational resource distribution is the 1983 Social Security reform.

From the perspective of at least 1977, Social Security's long-run finances seemed fairly secure. But the ensuing recessions and other economic and demographic events changed the long- as well as short-run picture. The 1983 reforms made very substantial cuts in the future benefits of all current young generations. The new Social Security law gradually raises the retirement age to 67 and envisions, through the process of bracket creep, the eventual income taxation of Social Security benefits of all retirees, not simply high income retirees as is now the case.

For current young generations, these legislated long-term cuts in Social Security benefits are very sizable when compared, for example, with the tax savings they have enjoyed to date from the Reagan tax cut. Hence this policy also represents a significant economic surplus policy since it is reducing the welfare of current young generations while improving the projected welfare of future generations.

My assessment is that the Reagan fiscal policy has, to date, generated, on net, a small economic surplus, although this assessment could change signs if tax rates are not raised in the near future. However, whether one views the policy in toto as transferring to older or to younger generations, it is clear that the national hysteria concerning deficits has been predicated on a set of numbers that have little or no relationship to the issue of fundamental concern. Asserting that the deficit numbers have no clothes is not the same as asserting that all is fine in our economic house. On the contrary, it appears clear that the country is experiencing a secular decline in saving which may well be the result of the unreported enormous economic deficits associated with Social Security in the last three decades.

In closing, let me point out that a very real problem with the current fixation on the official budget deficit is that once that number is fixed, through either a real or an accounting policy, the public and the government will lose interest in the question of debt, and, indeed, may return to the kinds of hidden debt policies of the last 30 years. It is high time to remove the blinders. Fiscal illusion is a very real problem; it not only blinds us to current fiscal reality, it also leaves us very little guide to improving our economic future.

Federal Tax Reform: State and Local Perspective

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Introduction*

As you know, the nation is now embroiled in a debate concerning the merits of major structural reform of the federal income tax system involving both the broadening of the tax base by elimination of exclusions, exemptions, and deductions, and the reduction of both the number and progressivity of rate brackets. A central element of nearly all such tax reform plans is curtailment or elimination of the itemized deduction for state and local taxes now available to individual taxpayers. Therefore, I will discuss first how federal tax reform might directly affect state and local governments, and second, how those subnational governments might respond to the federal tax changes. The potential pattern of winners and losers among the states will be discussed, and how state and local governments might be able to offset some of the effects of curtailment of federal deductibility and other reform changes by altering their own fiscal structure and behavior will be considered.

Before considering the tax reform proposals specifically, it may be useful to note the opinion of several experts regarding tax reform. In introducing his tax reform proposal to the nation in May of 1985, President Reagan concluded that "The tax system has come to be unAmerican." In contrast, Senator Russell Long, at one time chairman of the Senate Finance

^{*}These comments were first offered as a lecture in January 1986. A postscript has been added to incorporate details of the tax bill adopted by Congress in September 1986.

Committee (the committee which considers tax policy in the U.S. Senate) noted in 1967 that

Many businessmen contribute to legislators who have fought against taxes that would have been burdensome to their businesses, whether the tax increase was proposed as a so-called reform, a loophole closer, or just an effort to balance the federal budget.

(Congregational Record, April 4, 1967.)

Finally, at an unknown date and regarding an unknown topic, Yogi Berra is reported to have said: "It's déjà vu all over again."

Obviously, these views are very different. The President, on the one hand, argues that the tax system, with its myriad exclusions, deductions, and credits, is unAmerican, and perhaps that it is unpatriotic to support the current tax structure and oppose major reform. In response, the President offered what he called "America's tax plan." But Senator Long, with long tax experience in the Congress, had a very different notion. He argued that businessmen will contribute to political officials in an attempt to protect their own economic interest. Rather than being unAmerican, Senator Long suggests that this behavior is typical of and fully expected in American politics. I think we can expand his notion of businessmen to almost everyone. Certainly we have recently observed that state and local government officials and their representatives can be equally as active, and perhaps equally as effective, as businessmen in trying to influence the Congress when it comes to tax reform. And, as Mr. Berra noted, it is déjà vu all over again! The tax code which the President characterized as unAmerican developed over many years, not instantly. In addition, most of the ideas included in the current tax reform proposals have been proposed and debated in the

past, at least over the last 25 years. And what Senator Long observed in 1967 is equally true today.

What, then, is different about the current tax reform debate? Perhaps it is that in the past, reform proposals have largely come from experts—economists, lawyers, and others—outside of government, while recently those same proposals have been offered first by several Senators and Representatives, then by the U.S. Treasury, and, most recently, by the President.

Review of Recent Proposals

Although a number of different tax reform plans were introduced in Congress in the past three years, let us concentrate here on the developments beginning with the release, in November 1984, of a proposal developed by the U.S. Department of the Treasury at the President's request. That proposal, which came to be called Treasury I, would have increased the personal exemption and standard deduction, generally eliminated the itemized deductions (except in a very few cases), and indexed the tax structure for inflation, not only including indexation of tax rates, the personal exemption and the standard deduction, but also indexation in calculation of depreciation as well as interest and other capital income. Fringe benefits, such as employer-provided health insurance, would have been added to the tax base in a substantial way. Tax rates would have been confined to brackets of 15 percent. 25 percent, and 35 percent. Business deductions would have been reduced or eliminated, the investment tax credit repealed, and the corporate tax rate set at 33 percent. The tax system would certainly have been simpler in what truly would have been significant reform.

In May of 1985, the President moved away from Treasury I, introducing his own tax reform plan, entitled "The President's

Tax Proposals to the Congress for Fairness, Growth, and Simplicity," which came to be called Treasury II and referred to here as the President's Plan. This second plan encompassed major tax reform, but was substantially different from the original proposal in several important areas. Some itemized deductions, for example for charitable contributions, found their way back into the tax structure. The broad taxation of fringe benefits which had been proposed in Treasury I was effectively eliminated in Treasury II. The remaining proposed taxation of health insurance, for example, was effectively insignificant. A minimum tax was created to force individuals or firms which would not have liabilities under the general rules to pay some amount of tax. The second plan followed the first in raising personal exemptions and the standard deduction and using three rate classes (15 percent, 25 percent, 35 percent).

With the President's proposal in hand, the Congress went to work. The House considered the issue throughout the summer and into the fall. Negotiations were alternately going forward at full speed and the next day breaking down. Finally, the House Ways and Means Committee reported out a bill, under the direction of chairman Rostenkowski, and in December the House passed a tax reform bill. This plan was substantially different from the proposal which the President had offered in May, and even more substantially different than the original Treasury proposal of the previous November.

First of all, the itemized deduction for state and local taxes was still allowed under the House bill; it would not have been under either of the two Reagan/Treasury proposals. A major issue of confrontation, therefore, was how to treat state and local taxes. There also was substantial difference in the treatment of fringe benefits. While the Reagan proposal would tax fringes less than the original Treasury proposal, the

House proposal does so even less, so much so that, for all practical purposes, fringe benefits are not taxed in the House bill at all. The House proposal added a fourth rate bracket at 38 percent, which would apply to joint returns with adjusted gross income at or about \$100,000 a year. The concept of the minimum tax which found its way into President Reagan's proposal was also retained in the House proposal.

In some ways, it is as interesting to consider what these various tax reform proposals do not do. For example, social security income will not be taxed more than it is currently. Apparently, social security income is just politically untouchable. The credit for business research and development activities is maintained. In a national sense, this credit is not very substantial, but it turns out to be very important to firms in Michigan. While the original Treasury proposal adopted more or less complete indexation of the tax code for inflation applying to all of the nominal dollar amounts in the tax code as well as the definition of capital income, the political process has reduced the degree of indexation substantially. Interestingly, despite substantial popular discussion over the last three or four years about flat taxes, none of the proposals is truly a flat tax, that is, with one rate. Some progressivity in the rate structure is maintained.

During the tax reform debate, state and local government officials and their representative interest groups have generally been vocal critics of all the tax reform proposals. They have criticized the notion of ending the deduction for state and local government taxes. They have been vocal critics of changing the definition of the kinds of activities for which state and local governments can sell bonds, the interest from which is not taxed as income in the federal code. In general, states are concerned about the interstate distribution of tax savings from reform and about how the loss of deductibility

might affect the ability of state and local governments to raise taxes in the future or continue to provide financing for current services. Each of those concerns is now considered.

First Concern: Interstate Distribution of Tax Savings

Early consideration of the likely effects of tax reform for states focused on the implication for the interstate distribution of federal tax reductions (or interstate increases) caused by reform. Federal tax reform will not be geographically neutral. The residents of some states will benefit more than the residents of others, if for no other reason than federal tax reform treats different income taxpayers differently, and states differ in their income distributions. The U.S. Department of the Treasury estimated that the President's proposal would have reduced personal income taxes by 7 percent in aggregate, with nearly 60 percent of taxpayers receiving some reductions. Thus, the likely concern is the *relative* amount of tax reduction by state, i.e., which states have less than a 7 percent aggregate reduction and which more. To date, the Treasury Department has not released or published any state-by-state analysis of the tax reform plan's effect.

One often gets the impression from state and local government officials that the interstate distribution of personal tax reduction caused by tax reform arises almost entirely from changing the deduction for state and local taxes. They suggest, obviously, that states with both a relatively large fraction of taxpayers who itemize deductions and relatively large amounts of deductible taxes stand to "lose" most from eliminating the deduction. But many, if not all, of the tax features affected by the reform plans have uneven effects on the distribution of taxes among the states. Similarly, those tax features not curtailed (or perhaps even enhanced) by the plan also are significant for any interstate variation in tax burdens.

These features, too, are not expected to be geographically neutral. This fact has been noted by *Business Week*:

The nondeductibility of state and local taxes is but one factor, and probably not the most important one, determining states' futures. . . . If the tax plan is enacted in its present form there will be substantial variations in its regional impact. But which states and regions emerge as the biggest gainers and losers may be surprising. (June 17, 1985.)

For example, long-term nonresidential capital gain income varies greatly by state. The President's tax reform proposal (Treasury II) would have decreased the taxation of capital gains, while the House bill would have raised capital gains taxes slightly. In 1981, half of all taxable capital gains income accrued to residents of just six states: California, Colorado, Florida, Illinois, New York, and Texas. That fact understates the concentration, because nearly 35 percent of total capital gains income that year went to residents of only three states: California (16 percent), Texas (10 percent), New York (9 percent). If the deduction for state-local taxes were continued and the revenue loss made up by increasing the tax on capital gains, it is not clear that a state such as New York, whose officials have been prominent in opposing the curtailment of the state-local tax deduction, would be better off. That is, the distribution of any tax change needs to be compared to the distributional effects of the substitute tax provision.

As a second example, Clark and Neubig (1984) report the volume of new, private purpose tax exempt bonds issued in 1983 by state. The President's tax reform plan would eliminate the interest exemption for many of these state-local bonds. But the list of the 10 largest state users of this exemption in 1983 includes Texas (2), Florida (3), Arizona (8), and Virginia

(9), none of which are states usually identified as likely losers from ending the state-local tax deduction.

Finally, while all of the tax reform proposals would end the double personal exemption for senior citizens, both the President's and the House plans would expand the credit for low income taxpayers, including low income elderly taxpayers. Most of the analyses which I have seen suggest that low income elderly taxpayers would be substantially better off under either tax reform plan, while higher income elderly taxpayers would have smaller than average tax reductions. But of all elderly taxpayers with 1981 income less than \$10,000, nearly 40 percent lived in just six states: California, Florida, New York, Ohio, Pennsylvania, and Texas. Again, several states often classified as "losers" from elimination of the deduction for state and local taxes apparently stand to "gain" from this change in the treatment of elderly taxpayers.

In other words, it is not easy to determine which states' residents will be winners and which will be losers, on average, from the distribution of federal tax changes. As the tax reform proposals are adjusted, maintaining revenue neutrality, there may certainly be some surprises about the geographic effects of those changes. And to the extent that the tax reform plan would tax currently exempt or excluded activities, state-by-state data may not be available (certainly from tax sources) to estimate the effects.

It may be possible to estimate the interstate distribution of personal tax changes due to reform indirectly, however, if one is willing to assume that all of the changes can be reflected by income. The U.S. Treasury Department estimated, for the President's tax plan, the expected percentage reductions in personal taxes by income class. That information can be combined with income distribution data for each state to estimate the aggregate percentage personal tax reductions for

residents of each state. (See Table 1). Those calculations were done by an undergraduate student at Michigan State, Lori Brown, and me, using 1981 data. Essentially, we considered what the effect of the President's tax proposal would have been in 1981.

Table 1
Interstate Distribution of Tax Features

	Federal Tax Change Due to Reform As a Percentage of		Capital Gains	Percent of Aged & Blind Returns	
	Disposable Income	Federal Tax	Income as % of Total	With Income < \$10,000	
United States	1.21%	9.04%	_		
Alabama	1.15%	9.54%	0.9%	0.9%	
Alaska	1.51%	7.21%	0.3%	0.1%	
Arizona	1.17%	9.01%	1.5%	1.0%	
Arkansas	1.10%	10.17%	0.7%	1.1%	
California	1.18%	8.82%	15.7%	8.4%	
Colorado	1.33%	8.65%	2.6%	1.0%	
Connecticut	1.43%	8.46%	1.5%	1.7%	
Delaware	1.50%	9.48%	0.2%	0.2%	
Dist. Columbia	1.36%	9.11%	0.4%	0.4%	
Florida	1.32%	9.32%	7.3%	6.6%	
Georgia	1.28%	10.01%	1.7%	1.5%	
Hawaii	1.16%	9.27%	0.4%	0.4%	
Idaho	1.08%	9.71%	0.4%	0.5%	
Illinois	1.30%	8.65%	5.0%	4.7%	
Indiana	1.26%	8.78%	1.1%	2.3%	
Iowa	1.13%	9.06%	1.3%	2.0%	
Kansas	1.23%	8.64%	1.3%	1.1%	
Kentucky	1.14%	9.35%	1.5%	1.4%	
Louisiana	1.26%	8.38%	1.4%	0.8%	
Maine	1.24%	10.75%	0.3%	0.5%	
Maryland	1.35%	8.65%	1.3%	1.7%	
Massachusetts	1.41%	9.72%	2.0%	3.3%	
Michigan	1.14%	8.51%	2.0%	3.7%	
Minnesota	1.16%	8.91%	1.6%	2.5%	

Table 1
Interstate Distribution of Tax Features—Cont.

	Federal Tax Change As a Perce		Capital Gains	Percent of Aged & Blind Returns With Income < \$10,000	
	Disposable Income	Federal Tax	Income as % of Total		
Mississippi	1.15%	9.84%	0.7%		
Missouri	1.21%	8.76%	1.9%	3.1%	
Montana	1.16%	9.60%	0.4%	0.6%	
Nebraska	1.16%	9.72%	0.9%	1.0%	
Nevada	1.45%	9.37%	0.7%	0.4%	
New Hampshire	1.39%	9.57%	0.4%	0.6%	
New Jersey	1.32%	8.50%	1.9%	3.4%	
New Mexico	1.24%	9.35%	0.7%	0.4%	
New York	1.26%	9.07%	9.1%	8.1%	
North Carolina	1.17%	9.72%	2.0%	2.3%	
North Dakota	1.11%	9.03%	0.3%	0.4%	
Ohio	1.31%	9.30%	2.4%	5.7%	
Oklahoma	1.30%	8.93%	1.8%	1.2%	
Oregon	1.12%	8.91%	1.6%	1.4%	
Pennsylvania	1.28%	9.32%	2.4%	5.5%	
Rhode Island	1.27%	10.12%	0.3%	0.4%	
South Carolina	1.25%	10.31%	0.6%	1.0%	
South Dakota	1.03%	9.81%	0.6%	0.6%	
Tennessee	1.18%	9.33%	1.2%	1.6%	
Texas	1.44%	8.78%	10.0%	5.6%	
Utah	1.07%	9.05%	0.7%	0.5%	
Vermont	1.22%	9.98%	0.1%	0.3%	
Virginia	1.37%	9.38%	1.5%	1.9%	
Washington	1.25%	8.43%	2.0%	1.7%	
West Virginia	1.19%	9.29%	0.3%	0.7%	
Wisconsin	1.20%	9.02%	1.9%	2.8%	
Wyoming	1.32%	8.06%	0.6%	0.7%	

Source: L. Brown (1986).

We found that adoption of only the personal tax changes in the President's tax plan would have increased disposable personal income an average of 1.21 percent, with a range from 1.03 percent in South Dakota to 1.51 percent in Alaska. Michigan residents, by the way, would have had a 1.14 percent increase in disposable personal income. Measured instead in terms of percentage tax decreases, the results show an average 9 percent decrease in personal taxes, with a range of 8.4 percent in Louisiana to 10.8 percent in Maine. Again, Michigan is slightly below the average at 8.5 percent. Although this is an admittedly rough approximation, the pattern of results is similar to those derived by others who examine the effects of specific details of the tax plan. The results suggest that while federal tax reform will not be neutral between residents of different states, the differences between states are not likely to be very substantial, certainly not to the degree which has been suggested.

There is one important qualification to all of this. The notion of reduced taxes for individuals as a result of federal tax reform is an illusion. Because the proposed tax plans are designed to raise the same amount of revenue as the current structure would have raised, at least by estimation, there will be no reduction of total taxes. In essence, the intent is for increased corporate tax collections to substitute for reduced personal tax collections, with total taxes remaining the same. The tax systems proposed in the various plans are designed to withdraw approximately the same amount of resources from the private economy as the current structure. The myth of individual tax reduction is created by separating personal and corporate tax payments, and then ignoring the corporate payments. For this to make any sense requires that corporations operate as "black holes," where taxes enter, never to reappear. This is nonsense. The tax collected from corporations may cause higher prices or lower wages or lower returns on investment, all of which affect individuals. What tax reform

will do is alter the distribution of the tax burden among individuals.

Second Concern: Effect on Subnational Government Programs

The second issue about federal tax reform which concerns state and local government officials is whether curtailment of the deduction for state and local taxes will affect the ability of the states to finance services. The marginal price of state and local government services to taxpayers who itemize federal tax deductions is increased if state and local taxes can no longer be deducted. This increase in tax prices could, in some cases, actually bring about reductions from current state or local spending levels or, more likely, would slow the growth of state-local spending by making it harder to further increase state or local tax rates. For instance, the Wall Street Journal reported the Alaska revenue commissioner's fear that "residents would resist the need for new or higher revenue collections if the U.S. stops allowing taxpayers to deduct their local tax payments," (June 11, 1985, p. 58). Because the loss of deductibility would particularly raise tax burdens for higher income taxpayers, there is concern that some might want to leave high tax states or cities. Thus, New York Governor Mario Cuomo is quoted as saying "They're pitting state against state. A lot of my people will leave New York so that they can live where their taxes are lower" (Business Week, June 17, 1985).

First of all, it is important to emphasize that even if deductibility is retained in a federal tax reform plan, the value of that deduction would be reduced, and thus the subsidy to state and local governments would also be reduced. The value of the state-local tax deduction will be substantially eroded by the other features of reform. A larger standard deduction,

cutbacks in other allowed itemized deductions, and the greater personal exemption for nonitemizers which is part of the House plan, would all reduce the number of itemizers, so that fewer taxpayers would be deducting state-local taxes. Even for those taxpayers who would still itemize (and thus deduct state-local taxes) the value of the deduction will be smaller because tax rates will be lower. Some estimates suggest that as much as half of the current value of deductibility would be lost even if deductibility remains in the tax code. Therefore, part of the loss of the state-local government subsidy occurs generally as the result of tax reform (even if that specific deduction is retained) and part because of the curtailment of the deduction.

Will the loss of deductibility or the reduced value of deductibility matter? Evidence is sparse, but seems to show that deductibility has induced states and localities to increase spending slightly and to favor certain revenue sources (deductible taxes, for example) over others. A reduction of deductibility's value, then, might reduce state-local taxes slightly (or more correctly, slow their growth) and induce states to alter their tax structures. I expect that local governments, in many cases, will be affected less by the decreased value of deductibility than state governments because of state tax incentives. Local taxes (mostly property taxes) are deductible against state income taxes in 33 states, while 30 states have state credits for local property taxes (including Michigan). A number obviously have both. These features will become more important and will mitigate the effect on property taxpayers of a reduction in or loss of federal deductibility.

The following example, based on the Michigan property tax credit, illustrates that point. Consider a family of four with a \$40,000 income, which pays \$2,400 in property taxes and has a total of \$5,000 in federal itemized deductions. Such a family receives a Michigan property tax credit of \$600 and is in the 25

percent federal income tax rate bracket. As a result, an increase in property taxes of \$1 would actually cost this family only \$.30, after the federal deduction and the state credit. If the federal income tax is changed so that the personal exemption rises (to \$2,000) and tax rates are reduced (this family is now in the 15 percent federal rate class), then the family's cost of a \$1 property tax increase rises to \$.40 if no deduction for state and local taxes is allowed and to \$.34 if the deduction is retained.

First, this family's local tax cost rises due to federal tax reform even if deductibility is retained. Second, the increases in local tax cost due to federal tax reform (with or without deductibility) are small. The loss of federal deductibility increases this family's marginal property tax cost from \$.30 to \$.40, not from \$.75 to \$1.00, which would occur without the state credit. Without deductibility, the state credit becomes more important and offsets a larger amount of local taxes.

Exhibit 1 Marginal Property Tax Cost in Michigan: Deduction/Homestead Credit Illustration

Fiscal Details \$40,000 Income; 4 Exemptions \$80,000 House; 60 Mill Tax Rate

\$5,000 Itemized Deductions

Homestead Credit = 60% (\$2,400-\$1,400) = 600

Marginal Property Tax Cost = .4(1-7), where t = federal marginal tax rate of

itemizer

Current Structure Homestead Credit = \$600

Federal Taxable Income = \$31,000 Federal Marginal Tax Rate = 25% Marginal Property Tax Cost = \$.30

Federal Reform-No Deduction: Homestead Credit = \$600

Federal Taxable Income = \$28,000 Federal Marginal Tax Rate = 15% Marginal Property Tax Cost = \$.40

Federal Reform-With Deduction: Homestead Credit = \$600

Federal Taxable Income = \$27,000 Federal Marginal Tax Rate = 15% Marginal Property Tax Cost = \$.34

Summary: Marginal Property Tax Cost

			Tax Struct	ure
			Current,	Reform,
Deductibility	Current	Reform	No Credit	No Credit
Yes	\$.30	\$.34	\$.75	\$.85
No	\$.40	\$.40	\$1.00	\$1.00

One should also keep in mind that it is possible that the demand for state-local government services would rise because of other effects of federal tax reform. One such factor may be the change in the deduction (and thus subsidy) for other goods and services which may be strong substitutes for or complements to current subnational government services. Two potential cases may be charitable activities, the subsidy for which would be reduced because of lower marginal tax rates and the end of the charitable deduction for nonitemizers, and housing, which would be affected by lower rates and the possible loss of the deductions for property taxes and interest on second homes. These changes are expected to increase the marginal costs of both charitable contributions and housing consumption. One might expect that the activities of many charitable organizations are substitutes for state and local government services and expenditures, and it is known that charitable contributions are substantially more price-sensitive than is the demand for state-local goods. Thus one expects a relatively large decline in individual charitable contributions due to federal tax reform, which could increase the demand for government spending on similar services. The effect of changes in housing demand are more problematic, partly because the base for local property taxes as well as demand for services could be affected.

Finally, because the Treasury Department estimates that personal income taxes would decrease by 7 percent overall under the President's plan, with more than 58 percent of individual taxpayers enjoying some decrease, disposable per-

sonal income would increase for some taxpayers. Such an income gain implies an increase in the demand for subnational government spending. Nonitemizers are particularly expected to enjoy net tax decreases (that is, income increases) as a result of the reform plan. So while the desired level of state-local spending might fall for current itemizers because of the increased price, desired state-local spending by nonitemizers would increase. And nationally, only about 35 percent of taxpayers have itemized deductions in recent years.

In a slightly different version of this second concern, Henry Thomassen, an adviser to the Governor of Georgia, has argued that the biggest problem for states from the loss of deductibility is the redistribution of tax burden among different income taxpayers. Mr. Thomassen writes:

Deductibility provides tax expenditures to individuals rather than governments. Because of progressive income tax systems, the benefits received then differ greatly among individuals . . . if deductibility were suddenly ended, losses would be imposed upon taxpayers in inequitable fashion. Today's itemizers would carry an enlarged share of both the Federal and the State and local taxes. (*National Tax Journal*, September 1985.)

In response to this problem, states can, and I believe will, change their own tax structures. States and localities currently make use of some revenue sources, such as gasoline taxes, license fees, and user charges, which are not deductible. Even among deductible taxes there is wide variation in reliance and structure across states. One avenue of response for states to curtailment of the deduction, then, is change in their revenue structure. But if states or localities do change their revenue mix as a result of federal tax reform, this would also change the equity and efficiency effects of the reform plan. States

would want to reduce taxes on those residents who lose because of curtailment of federal deductibility. Some options are less progressive personal income tax rate structures and more reliance on business taxes. The result is to work against the incentives for those taxpayers to move or for those taxpayers to demand less state spending. The burden of the loss of deductibility gets spread over all taxpayers and thus the magnitude of effects is reduced. I firmly believe that if federal tax reform reduces the value of the state and local tax deduction uniformly, the states will use fees and direct business taxes more heavily than in the past and will adopt less progressive personal tax structures. If the state and local tax deduction is reduced for only some state and local taxes (such as the elimination of the deduction for sales taxes which was finally adopted), then states will move away from use of the tax which is no longer deductible.

Conclusions

Most economists believe that federal tax reform would be more efficient and more attractive if the tax base is broadened even more than is currently proposed, and thus tax rates lowered more than currently proposed. Such a plan could be fashioned by combining some features of the President's plan (such as reducing deductions for state and local taxes, consumer interest payments, and some business expenses and ending exemptions for some income from tax exempt bonds and transfer payments) with some features of the House bill (such as increased taxation of capital gains income, an effective minimum tax, and a two-tiered personal exemption).

This evening I have considered some of the ways federal tax reform might affect state and local governments. It appears that tax reform will not be neutral among the states, although the differences in changes in tax liabilities among states will likely be small. The loss of federal deductibility of state and local taxes and tax reform in general will increase the marginal cost of state and local tax increases. The result will likely be a small decrease in state and local taxes, but much of that effect may be offset by changes in state and local governments' tax structure, particularly by moving away from taxes which are no longer deductible or by adopting less progressive state-local tax systems.

In terms of the states' position about tax reform, my point of view is that the potential effects on the states have generally been overblown. State and local government concerns about federal tax reform have also been somewhat misdirected, in focusing almost exclusively on the loss of deductibility. Other aspects of the tax reform plan, particularly the decreased amount of itemizing and the lower rates, will have almost as big an effect for state and local governments as the loss of deductibility *per se*.

Regardless of these effects, no one sector of the economy should dictate the nature or possibility of tax reform. I think it is necessary to move away from thinking about how tax reform will affect Joe, how it will affect Michigan, how it will affect the computer industry, or how it will affect state and local governments. We have to think of what tax reform can do for our economy in an overall sense. It is only in that way that the diffused positive effects of tax reform can outweigh the apparent short-term costs to individual sectors.

The potential promise of tax reform is that taxes become less important in economic decision making, less important at the margin, as economists like to say. That is accomplished largely through the lower tax rates. To maintain revenue neutrality, the base in broadened, which improves fairness and efficiency as well. Perhaps the clearest "winners" from tax reform will be low income workers who will be removed from

the tax rolls. And the clearest "losers" are likely to be high income individuals with substantial capital investments, particularly in tax shelters. That support for such a change arose across the political spectrum is remarkable in itself.

Postscript: The Tax Reform Act of 1986 is Adopted

In June 1986, the Senate approved a new tax reform proposal developed by the Senate Finance Committee under the direction of Chairman Packwood. The Senate bill, which in retrospect appears to have been the key to ensuring broad political support for reform, differed from the House proposal in at least five important ways. The Senate plan included only two tax rate classes for personal taxes, 15 and 27 percent. The very low top rate made the package particularly attractive, but required more base broadening to maintain revenue. Therefore, the Senate plan phased out the personal exemption for families with incomes above \$145,000, eliminated the deduction for consumer interest (except on mortgages), ended the deduction for state and local sales taxes, and continued deductions for individual retirement accounts only for taxpayers not covered by pension plans. Similarly, the Senate plan proposed lower corporate rates, but a broader base, than in the House bill.

After lengthy and uncertain conference committee sessions during the summer, agreement was reached on a compromise plan in August. A fundamental federal income tax reform bill was approved by the Congress in September. That version maintains two formal personal tax rate classes (15 and 28 percent), phaseout of the personal exemption (which effectively imposes a higher marginal tax rate on high income taxpayers), elimination of the deductions for consumer interest and state and local sales taxes, curtailment of the deduction for IRA accounts and includes taxation of capital gains

as ordinary income. Also, losses from most tax shelters, so-called "passive" investments, may not be used to offset income from other sources. On the corporate side, the top rate is 34 percent with the investment tax credit repealed and many deductions reduced or eliminated. Minimum taxes were added for both individuals and corporations.

This proposal which emerged from the conference committee was signed into law by President Reagan on October 22, 1986. The net effect is expected to be a substantial reduction in personal tax collections (perhaps about 6 percent) and a substantial increase in corporate tax collections.

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NOTE

1. This is far from a perfect procedure. In effect, it assumes that a taxpayer with a given income can expect the same percentage reduction in personal taxes regardless of state of residence.

6

Tax Reform, Poverty, and Inequality

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The Tax Reform Act of 1986 is the most significant antipoverty legislation of the last decade. It is important not only for the \$5 billion a year in tax relief it provides to the working poor but also because it reflects bipartisan support for using the tax system to increase the incomes of the working poor. The consensus to aid the poor, which emerged during debate over the 1986 Act, is particularly important because the Reagan administration had previously disavowed using tax reform for distributional purposes. In his 1982 *Economic Report*, President Reagan stated:

As a result of the passage of the historic Economic Recovery Tax Act of 1981, we have set in place a fundamental reorientation of our tax laws. Rather than using the tax system to redistribute existing income, we have significantly restructured it to encourage people to work, save and invest more (p. 6).

The Economic Recovery Tax Act (ERTA), unlike the 1986 Act, did not aid the working poor. Quite to the contrary, it actually increased their tax burdens. In addition to their adverse treatment by ERTA, the working poor have been adversely affected by two major economic and policy changes. First, the economic stagnation of the past 15 years raised poverty and income inequality well above the levels of the mid-1970s. And, although the current recovery has been long and robust, the poor have gained disproportionately little.

Second, the Reagan budgetary retrenchment of the early 1980s reduced income transfers and social spending targeted on the poor and the near-poor. As a result, many low-income families who would have received benefits had social programs not been cut receive no benefits today. And, despite the beneficial effects of the 1986 Act, the poor still have not regained their mid-1970s level of living.

Thus, since the early 1970s, changes in all three mechanisms by which income is generated and redistributed—the market, income transfer programs, the tax system—have tended to increase poverty. As I show below, the prospects for affecting the market-generated distribution of poverty or for reforming existing income transfer programs are not good. Thus, if poverty is to be reduced by 1990 to the level that existed in the early 1970s, even if the economy continues to grow without recession, we must move beyond the 1986 Tax Act. Although the Act eliminated the personal income tax burden for most of the poor, I conclude that further tax reforms offer the best way to aid the poor—particularly the working poor—in the late 1980s. Reforms such as those discussed below are feasible and are preferred by both taxpayers and the poor to reforms which would aid the working poor by taking them through the welfare system. But first we must ask whether the reduction of poverty is a legitimate goal to pursue.

Why Worry About Equity?

Why should an economists worry about the distribution of income in general and poverty in particular? Shouldn't s/he be interested in raising productivity and in achieving the most from society's scarce resources? Shouldn't the pursuit of efficiency be the primary goal? Isn't that why most of the papers in this volume emphasize the effects of taxes and tax reform on work, saving, capital accumulation, and economic growth?

My answer is "yes, but." If we were starting from an initial situation in which the endowments that individuals brought to the market had been attained in a market free of imperfections such as discrimination, then the answer would be much more emphatic for the "yes," and much more wavering for the "but." Given an initial distribution of income, the market, when all the assumptions of perfect competition are met, will produce the most efficient allocation of scarce resources. The goods to be produced and the resulting prices will determine an efficient post-market distribution of income. If however, we judge the initial distribution of endowments unfair, then we may want to change the distribution of income that results from the market, even if it has resulted from a perfectly competitive market process.

This highly simplified textbook example is relevant to the theme of this paper because the War on Poverty was premised on the belief that both the initial endowments being brought to the market by the poor and disadvantaged and how those endowments were compensated were adversely affected by market imperfections. If one accepts these underlying premises of the War on Poverty as still relevant 20 years later, then there remains a basis for public policies that provide more equality and less poverty than currently exist.

A call for expanded use of the income tax to aid the poor does not tell us how much more aid could promote equity without impairing efficiency. Indeed two recent articles, Joel Slemrod's "Do We Know How Progressive the Income Tax System Should Be?" (1983) and Anthony Atkinson's "How Progressive Should Income Tax Be?" (1983) review the literature on the optimal income tax and reach no definitive conclusions. The answer depends, first, on how we value various degrees of inequality, that is, on our social welfare

function; second, on how responsive taxpayers are to marginal tax rates; and third, on the distribution of endowments that generate the pretax (market) distribution of income. In general, Slemrod and Atkinson offer little more than the boundaries of the trade-offs, guidelines that argue against excessively high marginal tax rates without specifying the level at which efficiency losses become large.

Alan Blinder (1982) is much less technical, but much more eloquent. He concludes that:

... what this country needs now in the realm of income distribution policy is exactly what it needs, and has often been unable to get, in so many other problem areas: An economic policy with a hard head and a soft heart. A hard head to remind us of the wondrous efficiency of the marketplace, and how foolish it is to squander this efficiency without good reason. And a soft heart to remind us that championing the cause of society's underdogs has long been, and remains one of the noblest functions of government (p. 30).

My call for aiding the working poor through tax reform rather than welfare reform is based on a review of the efficiency effects of income transfer programs (see Danziger, Havemen, and Plotnick, 1981).² Because welfare programs involve much higher marginal tax rates than those put into place by the 1986 Tax Act, providing the same amount of aid to the poor through tax reform would have a lower efficiency cost than would providing it through welfare programs.

Why Not Rely on Economic Growth?

Why argue that the income tax be reformed further to provide more aid for the poor? What about the importance of

economic growth, which raises rather than redistributes income? Again, a careful review of the empirical literature suggests that economic growth is necessary, but not sufficient to aid many of the poor (see Gottschalk and Danziger, 1984; Danziger and Gottschalk, 1986).

This issue was clearly recognized at the early stages of the War on Poverty. In 1964, President Johnson stated:

We cannot, and need not wait for the gradual growth of the economy to lift this forgotten fifth of our nation above the poverty line. We know what must be done and this nation of abundance can surely afford to do it (p. 15).

Growth was to be an important tool, but only one of many, in the fight against poverty.

The Johnson administration set in motion a vast series of policy changes that placed the question "What does it do for the poor?" at the top of the nation's domestic policy agenda. Robert Lampman (1974) has argued that all government programs and policies—those related to education and transportation, for example, as well as those related to tax and income maintenance programs—had to explicitly address their impact on the poor. In my view, a major barrier to reducing poverty today is the fact that this question now is asked only rarely.

When President Reagan announced his program for economic recovery in 1981, he stated:

The goal of this administration is to nurture the strength and vitality of the American people by reducing the burdensome, intrusive role of the federal government; by lowering tax rates and cutting spending; and by providing incentives for individuals to work, to save, and to invest. It is our basic

belief that only by reducing the growth of government can we increase the growth of the economy (p. 1).

Thus, the question "What does it do for the poor?" was replaced by the question "What does it do for incentives to work and save?" Irving Kristol (1984), expanding on this view, stated that:

The administration's social policy cannot be understood apart from its economic policy—which is a policy of growth not redistribution.

I believe that this shift in domestic priorities helps explain why poverty declined rapidly as the economy grew in the late 1960s and why poverty has declined so slowly in the current economic recovery.

Ronald Reagan is not the only one who has chosen not to follow the path I am advocating and not to place antipoverty policy via tax reform high on the agenda. Henry Aaron, in "How to Make the President's Good Tax Reform Plan Even Better," (1985) listed three serious problems with the federal income tax: (1) a narrow tax base; (2) unnecessarily high marginal tax rates that result from the narrowed tax base. with both of these problems leading to distortions in consumption, saving, investment, and production; and (3) the deficit, that is, too little tax revenue. Also, in Aaron and Galper (1985) one finds much concern with horizontal equity—the equal treatment of those with equal incomes—as a way to reduce the "tax-induced distortions of labor supply, saving, investments and risk taking," but little discussion of vertical equity or the need to increase the progressivity of the existing system.

The president wanted a bill that was both revenue neutral and distributionally neutral—that is tax reform that broadens

the tax base and lowers marginal tax rates in such a way as to leave total revenue unchanged, that maintains the existing degree of progressivity, and achieves horizontal equity. So if Aaron only explicitly criticizes revenue neutrality, he must implicitly accept distributional neutrality.

It is evident, therefore, that public policy discussion has shifted away from a concern with poverty and inequality. Yet recent trends in the level and distribution of family incomes demonstrate a need for further reform of the personal income tax.

Recent Trends in Family Income

The period since the early 1970s has been not only one of economic stagnation but also one of increasing inequality. These macroeconomic changes contradicted two of the key assumptions of the War on Poverty-Great Society planners. First they thought the business cycle could be controlled by the tools of Keynesian economics, so that poverty could be fought against a background of healthy economic growth. Second, they believed that in such an economy, with low unemployment rates and with antidiscrimination policies and education and training programs in place, everyone—rich, poor, and middle class—would gain. At a minimum, it was expected that economic growth would be proportional and that all incomes would rise at about the same rate. At best, income growth for the poor would exceed the average rate.

The facts demonstrating the failure of these assumptions are clear, but explanations for the failure are much more difficult. For most of the post-World War II period, family income, adjusted for inflation, grew at an annual rate exceeding 3 percent per year. Since 1973, however, growth has been minimal. There were three recessions—1974-75, 1979-80, 1981-82—and unemployment has remained at the 7 percent level through the mid-1980s despite the longer-than-average

length of the current recovery. By historical standards, the current recovery is a very good one, but it is a recovery from the very depressed levels of 1981, not an economic high-water mark for the economy.

Table 1 compares the average annual growth in mean family income, adjusted for inflation, for the 1949-1969, 1967-1973, and 1973-1984 periods. The two postwar decades saw rapid growth in family income among both two-parent and female-headed families with children. Mean family incomes grew by about 6 percent per year. Between 1967 and

Table 1
Average Annual Rate of Growth of Real Family Income, 1949-1969,
Compared to 1967-1973 and 1973-1984

	Annual Rate	Annual Rate 1967-1973 ^b	Annual Rate
All Families with Children	5.75%	2.25%	- 0.75%
White	5.00	2.34	- 0.69
Black	8.34	2.73	- 0.96
Hispanic	5.88	n.a.	- 0.63
All Two-Parent Families			
with Children	6.17	2.96	- 0.28
White	6.18	2.86	- 0.33
Black	10.41	4.67	+0.35
Hispanic	6.39	n.a.	- 0.23
All Female-Headed			
Families with Children	5.67	0.21	- 0.71
White	5.68	0.02	- 0.71
Black	9.92	1.23	- 0.71
Hispanic	5.02	n.a.	- 1.21

Source for 1949 and 1969 data: Computations by the authors from the computer tapes from the 1950 and 1970 decennial Censuses.

Note While the Current Population Survey did not collect information on Hispanic origin in 1967, the decennial Censuses did collect those data.

^aDefined as 100 × [(1969 real income—1949 real income)/1949 real income] ÷ 20.

^bDefined as 100 × [(1973 real income—1967 real income)/1967 real income]

6.

[°]Defined as 100 × [(1984 real income—1973 real income)/1973 real income] ÷ 11.

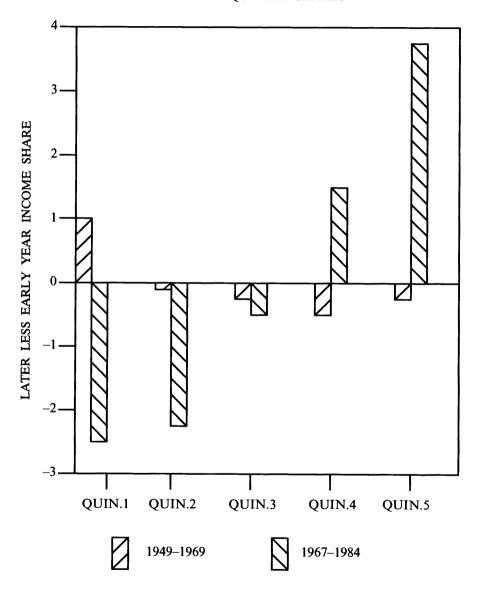
1973, growth was about 3 percent per year for two-parent families and less than 1 percent for female-headed families. Growth per year was actually negative from 1973 to 1984 for 11 of the 12 rows in the table.

Changes in the mean indicate how the "typical" family fared, but they obscure the differing patterns of income changes that have occurred for families at different positions in the income distribution. To see how families of "low," "middle," and "high" income have fared, we classify families with children into one of five quintiles and compute the percentage of income received by each of these fifths of families. Changes in income shares provide a useful indicator of changes in income inequality.

Just as with mean family income, the trend in quintile shares since 1967 differs dramatically from the period covering 1949 to 1969. Chart 1 shows the change in the proportion of aggregate income received by each quintile during the 1949-1969 and 1967-1984 periods. During the earlier period, the income distribution shifted somewhat toward less inequality as the lowest quintile increased its share and the shares of the other four quintiles declined a small amount. The share of the lowest 20 percent of all families with children increased by 1.02 percentage points while the share of the highest 20 percent declined by 0.25 percentage points. Between 1967 and 1984, inequality increased—the income share of the bottom three income quintiles declined and the share of the top two increased. The share of the bottom quintile declined by 2.43 percentage points while the share of the top quintile increased by 3.59 percentage points.

Table 2 shows the mean income in constant 1984 dollars for each quintile of families with children. Also shown are the mean incomes of these families and the percentage of persons in them with income below the poverty line.³ The mean

ALL FAMILIES WITH CHILDREN DIFFERENCES IN QUINTILE SHARES



income in a quintile changes when its income share changes and when the amount to be shared (aggregate income) changes. For example, between 1967 and 1984, mean income for all families increased by 4.1 percent, but the share of the lowest quintile declined sufficiently to result in a 34.3 percent decline, from \$9347 to \$6142. Over the same period, the mean income of the highest quintile increased from \$54,665 to \$62,198 because its share of the growing mean increased. A typical family in the second quintile lost 13 percent (\$18,950 to \$16,491) while one in the fourth quintile gained 11.1 percent (\$33,276 to \$36,967). Thus, there were shifts in income not only from the poorest to the richest families, but also from lower-middle-income to upper-middle-income families.

Table 2
Mean Income of Families with Children by Income Quintile in Constant Dollars, 1967-1984 (1984) dollars)

		Mean Income of Quintile:				Mean of	_
	1	2	3	4	5	All Families	Percentage Poor ^a
All Families with Children							
1967	\$9,347	\$18,950	\$25,602	\$33,276	\$54,665	\$28,369	13.5
1973	9,308	20,678	28,988	38,796	63,258	32,206	11.4
1979	8,057	19,179	28,855	38,203	61,256	31,138	12.7
1984	6,142	16,491	25,836	36,967	62,198	29,527	17.4
Percentage Cl	nange,						
1967-1984	-34.3	-13.0	+0.9	+11.1	+13.8	+4.1	+28.9
1973-1984	-34.0	-20.2	-10.9	-4.7	-1.7	-8.3	+52.6

^aPercentage of all persons in these families with incomes below the official poverty line.

With mean incomes declining and inequality increasing, it comes as no surprise that poverty rates increased between 1973 and 1984. The last column of Table 2 shows the incidence of poverty using the federal government's official definition of poverty. Poverty for all persons living in families

with children declined between 1967 and 1973, increased somewhat between 1973 and 1979, and then increased rapidly between 1979 and 1984.⁴

What has happened in the past 15 years is clear—income growth has been disappointing on average, and poverty and inequality have increased. The reasons put forward for these disappointing economic developments can be catalogued as resulting from demographic changes, from economic changes, or from government policy changes. All have been advocated as the primary causal factor by one or more analysts. My own view is that each has probably been important, but that we do not have enough evidence to carefully apportion the blame.

Let me merely list some of these factors:

- Demographic changes. The baby-boom generation surged into the labor market, as did wives. The economy created many new jobs, but wage rates were often low. The ratio of female to male wages did not rise despite the occupational and experience gains by many women. Unemployment rates remained high. Divorce rates increased as did the percentage of children born out of wedlock.
- Oil price shocks. These price changes first caused rapid inflation and severe economic dislocations in oil-importing areas of the nation; then, deflation and dislocation in oil-producing areas.
- Changes in industrial structure. Manufacturing employment declined; employment in service industries increased. International competition and an aging domestic capital stock contributed to these changes.
- Disincentives due to government programs. Because government benefits increased at the same time employment opportunities decreased, some workers who would have taken low-wage jobs dropped out of the labor force and drew on government benefits instead.⁵

The Redistributive Effects of the Personal Income Tax, 1964-1985

While the income distribution was moving slowly toward greater equality in the two post-World War II decades, so was the personal income tax. Minarik (1985) notes that the two most important devices promoting this trend were the introduction of the minimum standard deduction in 1964 and the earned income tax credit in 1975. Progressivity also increased for the unintended reason that inflation was pushing middle-and upper-middle-class taxpayers into higher and higher marginal tax brackets. Many analysts believe that these higher marginal tax rates produced great dissatisfaction with the personal income tax and contributed importantly to the popularity of President Reagan's goal of reduced taxation.

Okner's (1979) simulation analysis shows the total impact of the tax cuts of 1964, 1969, and 1975 to have been moderately progressive. The top 10 percent of tax filers received about 10 percent of the 1964 cuts, 1 percent of the 1969 cuts, and actually paid increased taxes after the 1975 tax cut. Congress rejected, however, a progressive 1978 Carter administration tax-cut proposal. In its place, the 1978 cut Congress enacted allocated only about 5 percent of the tax cut to the bottom 50 percent of taxpayers, and about half to the top 10 percent.

Okner and Bawden (1983) show that while the 1981 Economic Recovery Tax Act (ERTA) reduced total tax revenues by a much larger amount than the 1978 cut, the distribution of the cuts was similar. The 1981 cuts were mostly proportional with respect to taxes paid. Because a proportional tax cut does not aid low-income households which pay no taxes, the 1981 cuts were regressive with respect to household incomes.

While ERTA addressed the problem of high marginal tax rates by cutting the top tax rate to 50 percent on all forms of income and by proportionally cutting all other rates, it clearly

reversed the pro-poor tilt of all the post-1964 tax changes. According to Minarik:

... the 1981 tax law can be judged unambiguously, at least by our post-1964 standards, to have been unfair to the poor; taxes of sub-median-income families have gone up since 1980, while the taxes of the better off went down (p. 41).

The anti-poor effects of the 1981 tax law, in marked contrast to the pro-poor effects of the 1986 Act, were not explicitly discussed in Congress.

The tilt toward the poor and near-poor up to 1975, and the tilt away from them between 1975 and 1985 are evident in Table 3, which is adapted from Steuerle and Wilson (1986). The first six columns show the average and marginal income tax rates for a four-person family with income at one-half the median income and at the poverty line, for selected years between 1950 and 1985, and projections for 1990. Column 7 shows the total (employer plus employee) payroll tax rates that might be added to both the average and marginal rates if one were to examine the combined effects of federal taxes.

In the case of the federal personal income tax, 1975 marks the year of its most progressive treatment of the poor. This was the year in which the earned income tax credit (EITC), which subsidizes the earnings of low-income families with children, was introduced. In the next decade, all three major pro-poor devices in the personal income tax were severely eroded by inflation—the EITC, the minimum standard deduction (also known as the zero bracket amount), and the personal exemption. For example, in 1975, because of the EITC, a family of four at the poverty line received a federal income tax credit of \$250 (-4.55 percent of \$5497). By 1985, this family paid \$370 in income taxes (3.37 percent of \$10,988), for an increase of \$620. If one adds the increased

social security taxes over this decade, then the increased tax burden is about equal to the amount of food stamps the poverty-line family of four could have received in 1985. (But food stamps do not fully offset the taxes of all of the poor because some families at the poverty line are ineligible for food stamps due to asset limits or other administrative rules, and others fail to apply for them.)

As discussed in the next section, by 1990, the average tax rate will again be negative for this poverty-line family because all three pro-poor devices—the standard deduction, the personal exemption, and the EITC were increased and indexed to inflation by the 1986 Act. Also, the marginal tax rate in 1990 will drop back to the 1975 level.

Table 3
Average and Marginal Income Tax Rates for Four-Person Families^a

	Income at One-half the Median			Income at Poverty Line			Social
	Income (1)	Average Rate (2)	Marginal Rate (3)	Income (4)	Average Rate (5)	Marginal Rate (6)	Security Tax Rate ^b (7)
1950	\$1,838	0.00%	0.0%	\$2,435	0.00%	0.0%	3.00%
1960	3,148	0.15	20.0	3,025	2.13	20.0	6.00
1970	5,583	4.65	15.0	3,966	1.94	14.0	9.60
1975	7,924	4 22	17.0	5,497	-4.55	10.0	11.70
1980	12,166	6.02	18.0	8,416	-0.66	26.5	12.16
1985	16,423	6.57	14.0	10,988	3.37	24.2	14.10
1990 ^c	21,643	5.57	15.0	13,117	-5 35	10.0	15.30

Source: Adapted from Steuerle and Wilson (1986).

Table 3 also shows that a family at one-half the median (a level in 1985 that was about 150 percent of the poverty line) was aided only slightly by the 1986 Act. Its average tax rate in 1990 will be midway between the 1975 and 1985 average rates. But the difference in rates between 1985 and 1990 is only 1 percent of family income for those at one-half the median, while it is almost

^aA negative rate implies that the earned income tax credit exceeded the tax liability.

^bEmployer plus employee share.

^cSteuerle and Wilson's projection

9 percent for the family at the poverty line. This result reinforces my view that further tax relief should be targeted on the low-income population.

The data presented thus far make it clear that the trend toward greater poverty and income inequality did not begin with the election of Ronald Reagan. In fact, much of the damage on both the income side and tax side occurred because of the high rates of inflation of the late 1970s. Inflation eroded the value of the pro-poor income transfers (which, except for those to the aged, were not indexed to prices) and the pro-poor components of the personal income tax. But the trends were unabated under Reagan, even though inflation slowed, because transfers were cut as part of the budgetary retrenchment and ERTA did nothing to correct the past or prevent further erosion of the pro-poor tax components.

That the recent tax changes have been quantitatively important can be seen in Table 4, which shows Census Bureau data that account for all taxes paid. Unlike the data presented thus far, these data allow us to break the increased inequality in the income share of households between 1980 and 1983 into two components. The first, shown in column 5, is due to changes in money income before taxes, reflecting (1) changes in cash income transfer programs, (2) results from recession, and (3) other economic factors. The second component, shown in column 6, reflects changes in state and local as well as federal income and payroll taxes.

The total difference between 1980 and 1983 in after-tax income shares, shown in column 7, reveals that each of the bottom four quintiles lost ground over this three-year period. The top quintile increased its income share by 1.4 percentage points, which amounts to a net increase of about \$2000 per household. The decline in the income share of the first quintile was due entirely to pretax income changes. The declines for the

other three were splint between pretax changes and tax changes. About one-third of the increased income share of the highest quintile was due to tax changes.

Unpublished tabulations from the Congressional Budget Office show a similar effect of federal tax changes on poverty. They show that in 1979, 675,000 people were taken into poverty by federal taxes; by 1984, this number had increased to 2,426,000.

Thus, a significant portion of the trend toward greater poverty and inequality in the period since the mid-1970s can be attributed to either direct government tax and transfer policy changes or to the failure of government policy to respond to poor economic performance. Although precise data that fully account for changes in taxes paid and all types of noncash transfers and employer-provided fringe benefits received are unavailable, it is probably the case that the distribution of after-tax income is more unequal today than at any time in the past 30 years.

Table 4
Percentage Share of Aggregate Income Received by Each Fifth of Households, before and after Taxes, 1980 and 1983

Difference Between 1980 and 1983 Shares Due to:

+0.5

00

+1.4

	1980		1983		Before		
Quintile	Before Taxes (1)	After Taxes (2)	Before Taxes (3)	After Taxes (4)	Tax	Tax Changes ^b (6)	Total Changes ^c (7)
Lowest fifth	4.1%	49%	3.9%	4.7%	-02	0.0	-0 2
Second fifth	10.2	116	99	11.1	-0.3	-0.2	-0.5
Third fifth	16.8	17.9	16.4	17.3	-0.4	-0 2	-0.6
Fourth fifth	24 8	25 1	24.7	24.8	-0 1	-0.2	-0.3

Source: For 1980, U.S Department of Commerce (1983), p 11; for 1983, U.S. Department of Commerce (1985), p. 3.

420

100.0

+09

0.0

45.1

100.0

44 2

100 0

Highest fifth

All fifthsd

40.6

100.0

^aDefined as (column 3 - column 1).

bDefined as (column 4 - column 3)—(column 2 - column 1)

^cDefined as (column 6 + column 5), which is equal to (column 4 - column 2).

dMay not sum to 100.0 or 0.0 because of rounding

The Tax Reform Act of 1986

The major goal of the 1986 Tax Reform Act was to lower tax rates and broaden the tax base. The law now has only two tax brackets—15 percent and 28 percent (although because of the surcharge and phaseout of the personal exemption at higher income levels, some taxpayers will face an effective rate of 33 percent). And many tax preferences were reduced or eliminated. The 1986 Act departed somewhat from distributional neutrality by raising corporate taxes. As a result, it provided disproportionate tax relief to the working poor while approximating revenue neutrality.

The major changes benefiting the poor are the increase in the personal exemption from \$1080 to \$2000 by 1989; an increase in the standard deduction for joint filers from \$3670 to \$5000 and for single heads of households from \$2480 to \$4400; and an increase in the maximum earned income tax credit from \$550 to \$800 by 1987. All of these devices are also indexed for inflation. As a result, about six million poor and near-poor taxpayers will be removed from the tax rolls.

Except for the poor, however, there will be little change in the overall progressivity of the income tax. This is because the expanded tax base increased progressivity to about the same extent as the reduced number of tax brackets lowered progressivity. Table 5 shows recent estimates of the distributional effects of the 1986 Act (U.S. Congress, Joint Committee on Taxation, 1986). For each income class, column (1) shows the average tax change; column (2), the average 1986 tax liability; and column (3) the percentage change in tax liability. Since the percentage reduction in tax liability generally falls as income rises, the overall effect is progressive.

There are, however, very large differences within income classes. Minarik (1986) refers to the Act as a "massive

Table 5
Distributional Effects of the Tax Reform Act of 1986

Income Class (thousands of 1986 dollars)	Estimated Mean Tax Change (1)	Estimated Mean 1986 Tax Liability (2)	Percentage Change in Tax Liability ^a (3)
Less than \$10	\$-39	\$21	-65.1%
10-20	-200	695	-22.3
20-30	-220	2,018	-9.8
30-40	-273	3,254	-7.7
40-50	-486	4,849	-9.1
50-75	-150	8,388	-1.8
75-100	-176	14,293	-1.2
100-200	-612	27,353	-2.2
Above 200	-3,362	135,101	-2.4
All filers	\$-194	\$ 2,982	-6.1%

Source: U.S. Congress, Joint Committee on Taxation (1986).

reshuffling," that is, as one primarily promoting horizontal equity. He points out that in the highest income brackets, the net change shown in Table 5 results from a situation in which about 45 percent of filers in the highest income bracket face tax increases of about \$50,000, while the remaining 55 percent have tax reductions of about \$53,000.7 Taxpayers with similar incomes will now pay tax rates that are much more similar than before because of the expanded tax base and the reduced number of tax brackets.

Under the new law, many fewer people will be taxed into poverty by the federal income tax and many more families with children will receive credits from the expanded EITC. Yet these changes will do little to offset the large increase in poverty and inequality that characterizes the period since 1973. It is against this background of economic and policy

^aDefined as column 1, tax change, divided by 1986 tax liability that would have resulted if Tax Act had not been passed times 100.

changes that I advocate further tax reforms targeted on the poor and near-poor.

Some Further Tax Reforms

What else would I do to reform the income tax in such a way as to provide greater assistance to the working poor and near-poor without taking them through the welfare system? Ideally, I would replace the personal exemption with a per capita refundable credit. Lerman (1985) proposes an annual \$600 refundable per capita credit which would be made available only to those who do not itemize deductions. Such a credit would be administered in the same fashion as the Internal Revenue Service currently administers the EITC. With a marginal tax bracket of 15 percent, a \$600 credit would be equal to an exemption of about \$4000; for the 28 percent bracket it equals an exemption of \$2143. Thus almost all of the additional costs associated with the credit would be targeted on taxpayers in the 15 percent bracket. Obviously, a refundable per capita credit better targets foregone revenue on those with lower incomes than would be the case if the same amount of revenue was foregone by raising the personal exemption.8

An even more ambitious proposal (Garfinkel and Haveman, 1983) would raise the value of the per capita refundable credit, and in return replace both the personal exemption and the Food Stamp program. The rationale is that such credits can effectively target funds upon the poor, lower their marginal tax rate, and avoid the stigmatization of recipients and the higher administrative costs of welfare programs. For example, a family of four with no other income is currently eligible for about \$4000 per year in Food Stamps and faces a benefit reduction rate (marginal tax rate) in that program of 33 percent. With a refundable credit of \$1000 per person, the

family with no other income is equally well off, and the only marginal tax rate comes from the payroll tax, not the sum of the payroll tax and Food Stamp rates. Of course, since the current personal exemption is not refundable, and many poor and near-poor families do not participate in the Food Stamp program, such a change would require additional revenues.

The lower marginal tax rates in the reformed income tax, however, provide a more efficient mechanism for raising revenue to aid low-income families than did the old rates. With the lower rates, the work disincentive effects of raising taxes decline. Assume, for example, that these refundable credits will be financed by broadening the tax base—say, by taxing the employers' contribution for health insurance. With only two brackets, a smaller percentage of the population will be shifted into a higher marginal tax bracket by this basebroadening than would have been so shifted under the pre-1986 rate structure. For most people then, any basebroadening will have only an income effect (reduced income) promoting greater work effort; only a small number will have an altered substitution effect (since few change tax brackets) promoting lower work effort. For the beneficiaries of such expanded credits, the income effect will lead to less work but the substitution effect will lead to more work because the credits will take the place of a welfare program, which had higher marginal tax rates.

A second reform would make the child care tax credit refundable. The current nonrefundable credit allows couples, when both spouses work, and working single parents, to partially offset work-related child care costs. Only about 1 percent of the poor two-parent families and 6 percent of poor single-parent families make use of the nonrefundable credit (Steuerle and Wilson, 1986). One the other hand, higherincome taxpayers receive credits up to \$960 if they have more than one child and if they spend at least \$4800 on care.

The credit begins at 30 percent for families with incomes below \$10,000. Consider the case of a single mother of one child who works part time, earns \$5.00 per hour for 1500 hours per year, and spends \$1.50 per hour, or \$2250, to keep her child in a day care center while she works. If this is her only income, she will not have a positive income tax liability (indeed the expanded EITC will offset a portion of her social security taxes). Her potential child care credit—\$675, or 30 percent of \$2250—is thus of no value to her because it is not refundable. Refunding this credit would not only raise her net income, it would also make welfare recipiency less attractive.

Conclusion

In sum, I have argued that the 1986 Tax Act was an important addition to antipoverty policy. However, in the late 1980s, inequality of family income is continuing to increase, and poverty is only slowly declining, despite a robust economic recovery. The pro-poor extensions of tax reform that I have proposed would not threaten any of the efficiency accomplishments of the recent tax reform and would have much smaller work and family disincentive effects than would any alternative plan to aid the poor through the welfare system.

The Tax Reform Act has helped to refocus attention on the question "What does it do for the poor?" The further reforms suggested here reemphasize this question without rejecting the Reagan-era question "What does it do for incentives to work and save?"

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NOTES

1. As an indication of the relative magnitude of the tax relief, note that the total cost of Food Stamp benefits is estimated at \$10.9 billion in fiscal year 1987.

- 2. This review suggests that total spending on all major income transfer programs reduced annual hours of work in the economy by about 4.8 percent in the late 1980s. One should not conclude from this that *marginal* changes in transfer programs would cause *large* efficiency losses.
- 3. The federal government's official measure of poverty provides a set of income cutoffs adjusted for household size, the age of the head of the household, and the number of children under age 18. (Until 1981, sex of the head and farm/nonfarm residence were other distinctions.) The cutoffs provide an absolute measure of poverty that specifies in dollar terms minimally decent levels of consumption. To make them represent the same purchasing power each year, the official poverty thresholds are updated yearly by an amount corresponding to the change in the Consumer Price Index. In 1985, the poverty lines ranged from \$7231 for a family of two to \$22,083 for a family of 9 or more; the line for a family of four was \$10,989.
- 4. Care must be taken in interpreting the official poverty data. When the poverty thresholds were set in the mid-1960s, the poor received few in-kind transfers and paid little in taxes. Therefore, one could at that time legitimately compare *cash* income with the official poverty lines to obtain a fairly accurate picture of resources available to meet the families' needs. During the late 1960s and early 1970s, however, noncash transfer benefits increased rapidly. While these noncash benefits represented only 12 percent of outlays on income-tested programs in 1966, the figure had risen to about 70 percent by 1983. Clearly a better measure of a family's ability to meet its needs should include the value of in-kind programs.

Likewise, taxes detract from the availability of resources to meet needs. If taxes had not increased very much over this period they could be ignored, since the original poverty definition was based on income before taxes.

Unfortunately, we do not have a consistent time series for poverty which adjusts for both taxes and the value of in-kind transfers. Nonetheless, while the inclusion of in-kind transfers would reduce the extent of poverty in any single year, and the subtraction of taxes paid would increase it, they would not significantly alter the trends discussed here.

- 5. My own view is that the disincentive effects of government programs have been exaggerated in the media and in such books as Charles Murray's *Losing Ground* (1984). For a review, see Danziger and Weinberg (1986).
- 6. The issue of increasing the progressivity of the income tax is completely separate from the move from multiple tax brackets to only a few brackets.

Hall and Rabushka (1985) show this explicitly in *The Flat Tax*, by presenting a table that shows various combinations of an adult exemption and a marginal tax rate that raise the same revenue. For example, while their basic plan contains an adult allowance of \$5500 and a rate of 19 percent, one could choose an equal-cost more progressive plan with an allowance of \$6600 and a rate of 23 percent.

- 7. Minarik's estimate was made before the tax bill was finalized. These numbers are, thus, merely suggestive of the reshuffling created by the Act.
- 8. For the poor, a refundable credit is clearly preferable to the exemption. Consider a family with no tax liability under current law—that is, all of its exemptions and deductions exactly offset its tax liability. Now assume that the family has another child. The additional exemption is worth nothing if family income is unchanged. However, the family would receive the full value of the refundable credit.
- 9. Depending on the amount of earnings, however, the relevant comparison may be between the 33 percent rate under Food Stamps and a 22 percent rate: the sum of the employee share of the payroll tax and the first bracket rate of 15 percent. This is because, under the exemption, the marginal income tax is zero until a tax threshold is reached which equals the sum of the standard deduction and the exemptions, while under a per capita credit, the tax threshold falls to the standard deduction only.