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HOW TO MEASURE THE REVENUE IMPACT OF CHANGES IN TAX RATES

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INTRODUCTION

One of the most important fiscal policy debates developing in this election involves the question of whether changes in tax policy have “supply-side” effects. In other words, will lower tax rates increase economic growth, resulting in more jobs, higher wages, and bigger profits? If the answer is yes—meaning that lower tax rates cause taxable income to rise—it is reasonable to argue that a tax cut will be at least partially self-financing. The extent to which increased revenue from a bigger tax base helps offset the revenue loss from lower tax rates then becomes an empirical question. This is what “static” versus “dynamic” scoring is all about. Static analysis assumes that tax changes have no impact on economic growth, meaning no increases in revenue; dynamic analysis recognizes that taxes do affect the economy. Unfortunately, government estimators use a static approach.

The battle over revenue-estimating methodology may seem an esoteric, inside-the-Belt-way issue, but it has important implications. Politicians generally favor tax cuts, but they do not relish voting for higher deficits and certainly are loathe to approve offsetting savings from the spending side of the budget. Dynamic scoring, assuming it is used properly, can facilitate sound tax policy by reducing the politically “unpleasant” side-effects of tax cuts.¹ In the short term, a proper understanding of the importance of dynamic scoring would make it easier either to repeal the 1990 and 1993 tax hikes or to provide an across-the-board reduction in tax rates.² In the long term, the move to a flat tax would be expedited if dynamic scoring were used to allow the lowest possible rate.

1 It is conventional wisdom that voting for lower spending is bad politics. This fear may or may not be justified, but it certainly is true that lower spending is good economics. Ideally, lawmakers would want to reduce both taxes and spending as part of an overall effort to boost growth and enhance freedom.

Because dynamic scoring would make tax rate reductions more attractive, it is understandable that those who oppose tax cuts want to maintain the current system of static scoring. An objective examination of the historical evidence, however, demonstrates that dynamic scoring gives policymakers more accurate information.³ When taking steps to modernize the revenue-estimating process, policymakers should consider the following points:

- ✓ **Learn from history.** Static scoring routinely overestimates how much revenue will be generated by tax increases. The 1990 luxury tax, the income tax rate increases of 1990 and 1993, and the 1986 capital gains tax rate increase are all examples in which revenues fell far short of static predictions. By contrast, the 1981 Reagan tax cuts, the 1978 capital gains tax reduction, the Kennedy tax cuts of the 1960s, and the 1986 Tax Reform Act all demonstrate how pro-growth tax changes will generate revenue feedback.⁴
- ✓ **Don't make the perfect the enemy of the good.** It is impossible to predict all the effects of any single change in government policy. The fact that dynamic scoring cannot pinpoint all the multiyear effects of a change in tax policy, however, is not an argument for maintaining a static process guaranteed to give an answer that is wrong and farther from the truth.
- ✓ **Not all tax cuts are created equal.** The higher the tax rate, the bigger the supply-side response when the rate is reduced. Likewise, reducing tax rates on capital income, which is more easily controlled by the taxpayer, will have a greater impact than similar tax reductions on labor income. And some tax cuts, such as credits, will have little or no revenue feedback effects since incentives to engage in productive behavior remain unchanged.⁵
- ✓ **Open the process to public scrutiny.** Even though they are the ones who pay the bills, taxpayers today are not allowed to examine the static models and methodology used by revenue estimators at the Joint Committee on Taxation and the Treasury Department. Whether or not the revenue-estimating process is improved, policymakers should insist on full disclosure. If policymakers adopt dynamic scoring, an open process will keep the system honest by inhibiting those who are tempted to exaggerate the benefits of tax cuts.

2 Harvard Professor Martin Feldstein, former Chairman of the Council of Economic Advisers, estimates that repeal of the higher tax rates approved in 1993 would result in a revenue loss of less than \$10 billion, or less than one-third of the static estimate. For further detail, see Martin Feldstein, "The Case for Dynamic Analysis," *The Wall Street Journal*, December 14, 1994.

3 Somewhat startlingly, an opponent of tax rate reductions admitted recently that the revenue feedback effect of lower tax rates was 35 percent. See Lawrence Chimerine, "Return of the Supply-Siders," *The Washington Post*, July 23, 1996.

4 For a detailed analysis of the positive effects of lower tax rates, see Daniel Mitchell, "The Historical Lessons of Lower Tax Rates," Heritage Foundation *Backgrounders* No. 1086, July 19, 1996.

5 Tax cuts also stimulate the economy according to Keynesian theory, but the analysis is based on stimulating consumer spending by putting dollars back in people's pockets while ignoring the offsetting effect that occurs when government borrowing reduces private investment spending by a similar amount.

- ✓ **The goal of tax policy is to maximize growth, not tax revenues.** For years, budget deficits have played a big role in the political debate. As a result, some tax policy proposals, such as reductions in the capital gains tax, are judged primarily by their effect on tax collections. This myopic approach inevitably interferes with sound tax policy and should be discarded.
- ✓ **Include estimates of private and governmental compliance costs.** According to the Tax Foundation, the current tax system imposes \$225 billion in compliance costs on the productive sector of the economy.⁶ In addition to these private costs of lawyers, lobbyists, accountants, tax preparers, and lost man-hours, about \$13 billion in direct government expenditures is associated with taxation.⁷ Yet revenue estimators confess that "staff does not estimate the administrative costs incurred by either the IRS or taxpayers that may result from proposed legislation."⁸

WHAT IS STATIC SCORING, AND WHO DOES IT?

There are two official sources of revenue estimates in Washington. The Administration uses the Office of Tax Analysis (OTA), which is part of the Treasury Department, and Congress uses the Joint Committee on Taxation (JCT). Both use static scoring, though it is important to define the term.

Static scoring does not mean there is absolutely no recognition that taxpayers might modify their behavior in response to changes in tax policy. Defenders of the status quo thus argue that dynamic effects *are* incorporated into revenue forecasts. To a limited extent, they are right.⁹ If asked to estimate the revenue impact of a change in the gasoline tax, for instance, the current process attempts to measure the degree to which the change in the tax will affect the amount of gasoline purchased. Likewise, changes in income tax rates will include some calculation of tax avoidance behavior.¹⁰

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- 6 "Compliance Costs of Alternative Tax Systems, II," House Ways and Means Committee Testimony, Tax Foundation Special Brief, March 1996.
 - 7 Arthur Hall, "Growth of Government Tax Industry Parallels Growth of Federal Tax Code," Special Report No. 39, Tax Foundation, September 1994.
 - 8 *Discussion of Revenue Estimation Methodology and Process*, Joint Committee on Taxation, JCS-14-92, August 13, 1992.
 - 9 For good descriptions of the current revenue estimating process, see joint hearing, *Review of Congressional Budget Cost Estimating*, Committee on the Budget, U.S. House of Representatives, and Committee on the Budget, U.S. Senate, Serial No. 104-1, January 10, 1995, and Jane G. Gravelle, "Dynamic Revenue Estimating," *CRS Report for Congress*, Congressional Research Service, December 14, 1994.
 - 10 When estimating the effect of higher tax rates in 1993, the JCT examined several non-macroeconomic factors, such as "shifting from investments which yield interest and dividend income, taxed at the new higher rates, into investments that provide capital appreciation, which is taxed at unchanged lower rates. Also considered were shifts from taxable to tax-exempt assets, conversion to C corporation business form, conversion of wage income into tax-deferred compensation or tax-exempt fringe benefits, and increased noncompliance and avoidance." All these factors, however, only reduced the pure static revenue loss by 7 percent over the five-year period. See Staff Paper, *Methodology and Issues in the Revenue Estimating Process*, Joint Committee on Taxation, January 24, 1995.

Missing from the equation, however, is any effort to capture the revenue effects caused by changes in macroeconomic variables. Revenue estimators assume that economic growth, job creation, and income will remain unchanged, regardless of how much taxes are reduced or increased. The Treasury Department's Office of Tax Analysis, for example, in a 1995 analysis of the flat tax wrote that:

no attempt is made to estimate the tax-induced behavioral responses of either individuals or corporations. Following the standard revenue estimating conventions used by both the Office of Tax Analysis and the Joint Committee on Taxation, the macroeconomic aggregates, such as the level of compensation, prices, employment, and gross domestic product, have been assumed to be unchanged by the proposal.¹¹

These assumptions effectively require the Treasury Department and the Joint Committee on Taxation to ignore the real world. This may be a reasonable approach for minor alterations of the tax code,¹² but it certainly produces inaccurate answers when examining significant changes. Thus, if asked to predict what would happen if tax rates were doubled, for instance, revenue estimators would assume that tax collections, with some minor modifications, would double as well. Some may think this is an exaggeration, but consider the actions of the Joint Committee on Taxation. In 1988, Senator Robert Packwood (R-OR), ranking Republican on the Finance Committee, asked the JCT to estimate the revenue impact if the government confiscated all income over \$200,000 annually.

The revenue estimators at JCT responded that such a tax would raise \$104 billion the first year, \$204 billion the second year, \$232 billion the third year, and \$263 billion and \$299 billion in the fourth and fifth years, respectively.¹³ As Senator Packwood noted, however, this view of the world is impractical because it "assumes people will work if they have to pay all their money to the Government. They will work forever and pay all of the money to the Government when clearly anyone in their right mind will not."¹⁴

To be fair, the revenue estimators are not really the ones at fault.¹⁵ The decision to modernize and improve the scoring process will have to come from the top. At the Office of Tax Analysis, presidentially appointed officials at the Treasury Department are the only ones with the power to authorize this change. On Capitol Hill, this power lies with the Members of Congress who serve on the Joint Committee on Taxation, particularly the Chairman and Vice-Chairman. Indeed, the JCT has set up a Revenue Estimating Advi-

11 Office of Tax Analysis, Department of the Treasury, "Preliminary Analysis of a Flat Rate Consumption Tax," March 10, 1995.

12 Statement of Alan Greenspan, Chairman, Federal Reserve Board of Governors, in joint hearing, *Review of Congressional Budget Cost Estimating*.

13 Letter to Senator Bob Packwood from Joint Committee on Taxation, November 15, 1988.

14 *Congressional Record*, November 14, 1989, p. S15534.

15 The Joint Tax Committee learned an important lesson from this episode. When Senator Packwood made a similar request in 1994, the committee responded by reporting the amount of after-tax income over \$200,000 while noting that "If the 100-percent tax rate were to be in effect for a substantial period of time, so that taxpayers would have no rational hope of avoiding or evading the 100-percent tax in the outyears by deferring income to lower rate years or using other tax avoidance or deferral plans, then in our judgment there would be a substantial reduction in income-producing activity in the economy and, thus, a significant reduction in tax receipts to the Federal government." Letter to Senator Packwood, October 12, 1994.

sory Board to explore "ways to improve the estimating process and estimating methodology."¹⁶

WHAT IS DYNAMIC SCORING?

In simple terms, dynamic scoring means that estimates would be designed to capture revenue effects from changes in overall economic conditions. Instead of deliberately ignoring these

variables, as is the convention today, revenue estimators would predict whether a change in policy would be likely to affect the level of compensation, prices, employment, and gross domestic product (GDP). If

there is an effect on one or more of these variables, they would then calculate the amount of revenue feedback or loss.

How would this work? Take the example of the 15 percent across-the-board tax cut proposed some weeks ago by Senator Spencer Abraham (R-MI). Static revenue estimates reportedly show this proposal reducing tax revenues by about \$500 billion over a six-year period.¹⁷ If such a proposal boosted the economy's rate of growth by one-half of one percentage point over the same period, however, Congressional Budget Office sensitivity tables (designed to measure the effects of selected economic changes on budget projections) indicate that \$170 billion of that loss would be recouped in the form of revenue feedback and lower interest costs. Administration figures show the feedback would be more than \$200 billion.

As shown in Table 1, both the Congressional Budget Office (CBO) and the Office of Management and Budget (OMB) agree that faster growth helps reduce the budget deficit. These numbers work both ways, incidentally, with slower growth boosting the budget deficit. The key questions are whether a change in tax policy will promote growth and, if so, by how much.

Billions of Dollars	1996	1997	1998	1999	2000	2001	2002
CBO Estimate of Reduction in Deficit if Economic Growth is 0.1% Higher Each Year:	\$1	\$2	\$4	\$7	\$9	\$12	\$16
OMB Estimate of Reduction in Deficit if Economic Growth is 0.1% Higher Each Year:	\$8	\$30	\$54	\$82	\$110	\$143	\$177

Sources: Congressional Budget Office, *Economic and Budget Outlook: Fiscal Years 1997-2006*, May 1996; Office of Management and Budget, *Budget of the United States Government, Fiscal Year 1997, Analytical Perspectives*, 1996.

16 "Joint Tax Committee Announces Changes in Revenue-Estimating Process," Bureau of National Affairs *Daily Tax Report*, May 19, 1995, p. G14.

17 Dan Balz and Blaine Harden, "Dole to Propose Cutting Income Tax Rates by 15%," *The Washington Post*, August 5, 1996.

Contrary to popular wisdom, dynamic scoring does not mean that tax cuts pay for themselves. The degree of revenue feedback depends on what tax rate is being reduced and by what amount.

Only in extremely rare circumstances is it believed that a tax rate reduction will generate enough economic activity to offset all of the revenue loss associated with the lower rate.

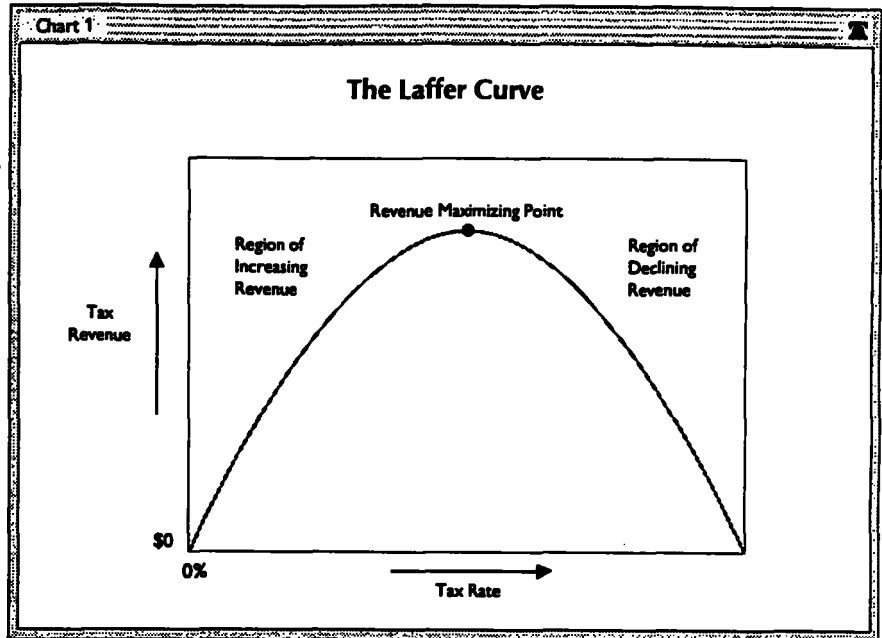
Chart 1, popularly known as the Laffer curve, illustrates this principle. A zero rate tax will stimulate considerable growth but, by definition, collects no revenue.

A 100 percent tax

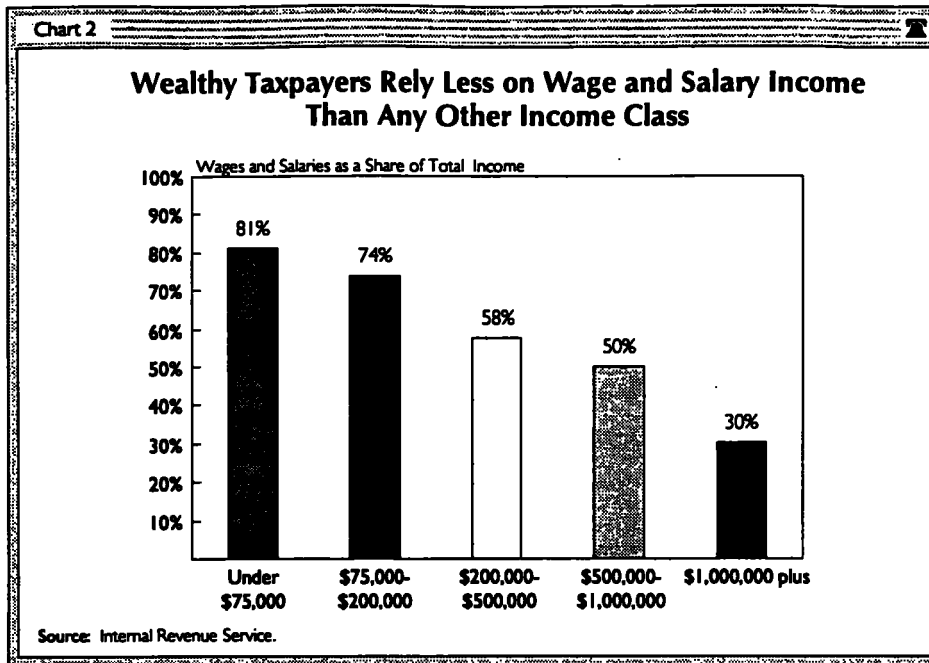
rate also generates no revenue, however, because it eliminates all incentive to earn income—not to mention what happens to the rest of the economy. What happens, though, if the government imposes a tax rate of, say, 10 percent? With a low, flat rate, almost all taxpayers presumably will continue to work, so the government will collect one-tenth of the income earned. As tax rates rise, however, taxpayers gradually become discouraged and reduce their earnings. As long as tax rates are not excessive, the increase in revenue associated with the higher tax rate exceeds the revenue loss caused by lower levels of income. At some point, however, the tax rate reaches a revenue-maximizing level. Any efforts to raise tax rates beyond this level will reduce revenues because of the fall in taxable income.

Tragically, there are some taxes in America that fall on the wrong side of the Laffer curve. These include:

- ✗ **Income tax rates on the rich.** Wealthy taxpayers are particularly sensitive to high tax rates. Not only can they afford the best tax lawyers, accountants, and financial planners, but they also receive most of their income in the form of dividends, interest, capital gains, and other business income (see Chart 2). When tax rates become too onerous, these taxpayers can shift their assets to tax-free status, move their money offshore, or take other steps to alter the timing or composition of their income.¹⁸ According to recent research by James Poterba of the Massa-



¹⁸ This was especially evident at the end of 1992 when corporate executives, sports figures, and the future First Lady all arranged to realize income in 1992 that normally would have been received in 1993. The reason, of course, was to avoid the widely expected higher tax rates that were supported by President-elect Bill Clinton.



chusetts Institute of Technology, lower tax rates on the richest 0.5 percent would generate higher rather than lower tax revenues.¹⁹

- X **Estate taxes.** The government confiscates 55 percent of a person's assets in excess of \$4 million upon death.²⁰ Those smart enough to build up businesses and portfolios of this value, however, typically are also smart enough to protect their families' wealth from the government.²¹ Thus, even though the estate tax collects about \$15 billion annually, it is estimated that the government loses money because of reduced income tax collections caused by aggressive estate planning (which occurs in the years prior to death when wealthy taxpayers transfer funds, cease working, set up trusts, give to charity, and take other steps to reduce the tax value of their assets).²²
- X **Capital gains taxes.** Revenue estimators from both Congress and the Administration acknowledge that lower capital gains taxes will boost sales (or realizations) of stock, bonds, real estate, and other assets. This "unlocking effect," by itself, may be large enough to produce a net revenue increase.²³ Unfortunately, both the JCT and the OTA fail to calculate the impact of lower capital gains taxes on economic growth. If the revenue estimates included the effects of higher growth, they almost surely would show a significant revenue gain.

¹⁹ Alan Murray, "Dole Seeking Credible Economic Plan," *The Wall Street Journal*, July 29, 1996.

²⁰ Conference Report, H.R. 2264, The Omnibus Budget Reconciliation Act of 1993, *Congressional Record*, August 4, 1993.

²¹ For more information on the estate tax, see William Beach, "The Case for Ending the Estate Tax" Heritage Foundation *Background*, forthcoming.

²² B. Douglas Bernheim, "Does the Estate Tax Raise Revenue?" in *Tax Policy and the Economy*, Vol. 1, ed. Lawrence H. Summers (Cambridge, Mass.: National Bureau of Economic Research, MIT Press, 1987).

²³ Gravelle, "Dynamic Revenue Estimating."

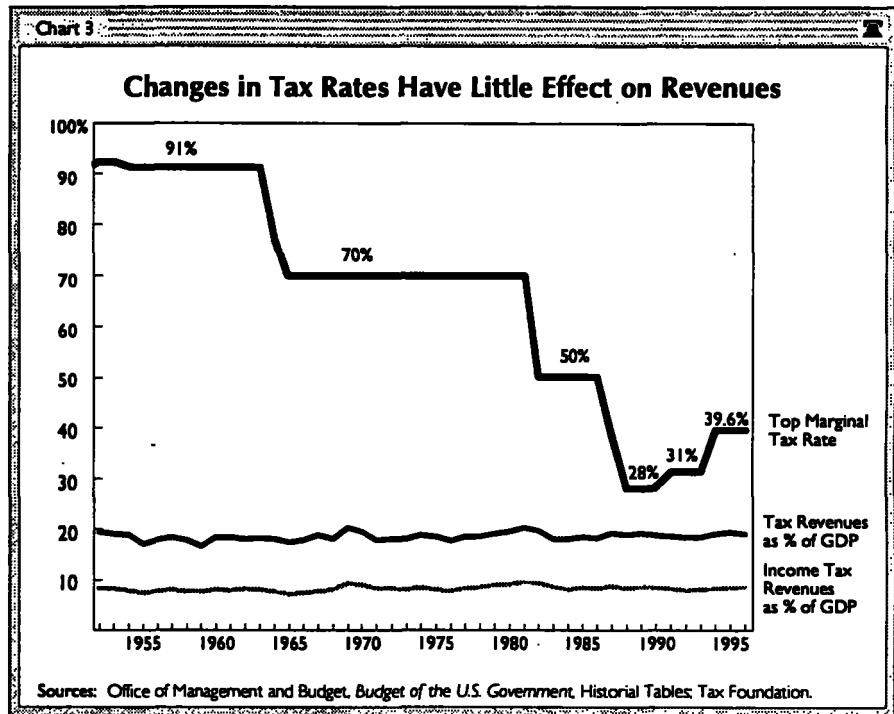
Tax rates that are so punitive that they actually lose revenue certainly should be reduced. The lower rate would please conservatives who favor economic growth, and should please liberals who want the government to collect more money.²⁴ It is important to recognize, however, that there is a huge difference between the revenue-maximizing tax rate and the growth-maximizing tax rate. Largely because of hefty value-added taxes (a form of national sales tax), many countries in Europe take a much higher percentage of their citizens' money than America does.²⁵ These nations may be near the revenue-maximizing point of the Laffer curve, but it comes at a heavy price. European countries, compared to the United States, suffer from higher unemployment, slower growth, larger budget deficits, and lower incomes.

HISTORICAL EXAMPLES

The strong theoretical argument for dynamic scoring is augmented by a great deal of historical evidence. The United States has experienced significant shifts in tax policy over the years, and the historical record both demonstrates the shortcomings of static analysis and provides ample proof that the revenue-estimating process should be modernized.

Before looking at specific examples, however, it may be useful to look at the broad picture. As Chart 3 illustrates, tax revenues traditionally have con-

sumed about 19 percent of America's economic output.²⁶ This relationship has been remarkably stable even though tax rates have shifted by large amounts. At times, the top income tax rate has exceeded 90 percent, while at other times it has fallen to less than 30 percent. The chart also shows income tax collections as a percentage of GDP. As is the



²⁴ This may be a rash assumption. In his insightful book *Getting it Right* (Cambridge, Mass.: MIT Press, 1996), Harvard economist Robert Barro polled liberal friends and colleagues and was surprised to find that many of them favored keeping tax rates high, even if the government collected fewer taxes.

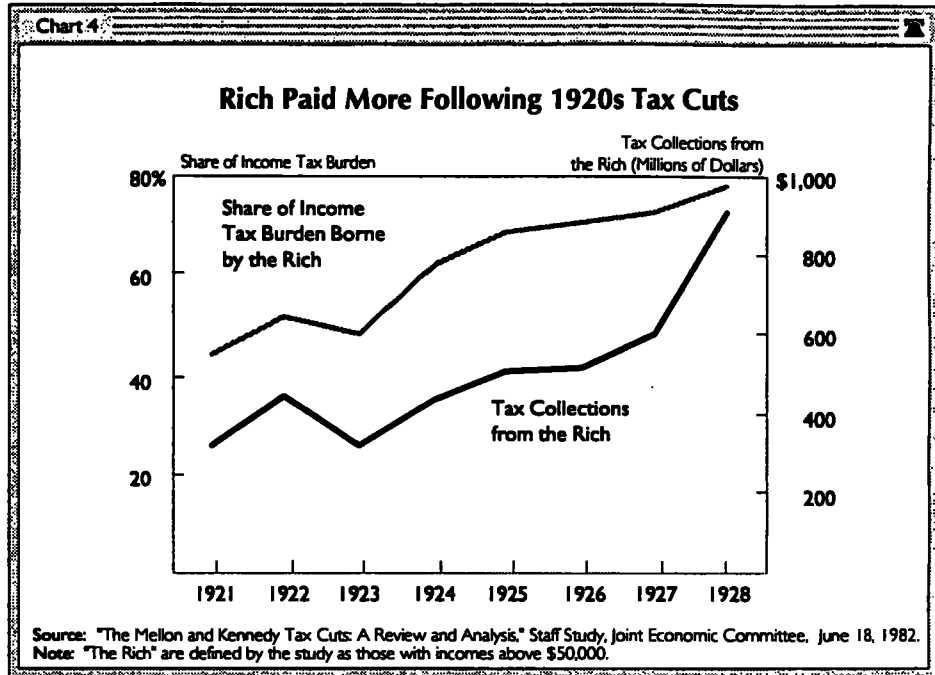
²⁵ For further information on value-added taxes, see Daniel Mitchell, "How a Value Added Tax Would Harm the U.S. Economy," Heritage Foundation *Backgrounders* No. 940, May 11, 1993.

²⁶ "Return of the Tax Olympiad," *The Wall Street Journal*, May 7, 1993.

case with total tax revenues, income tax collections are remarkably stable, hovering between 8 percent and 9 percent. The only two times they reached 9.4 percent or more, in 1969 and 1981, the economy fell into recession.²⁷

- ✓ **The Tax Cuts of the 1920s.** Tax rates were slashed dramatically during the 1920s, falling from 73 percent to 24 percent.²⁸ The economy boomed, growing at an average annual rate of 6 percent between 1921 and 1929.²⁹ Personal income tax revenues increased substantially, rising from \$719 million in 1921 to \$1,160 million in 1928.³⁰

This 61 percent increase in revenue occurred at a time of no inflation. As Chart 4 shows, the percentage of the tax burden borne by the rich jumped dramatically, climbing from 44.2 percent in 1921 to



78.4 percent in 1928. These results, not surprisingly, would not have been predicted by static analysis.

- ✓ **The Kennedy Tax Cuts.** Lower taxes on savings and investment were approved in 1962, followed by across-the-board tax rate reductions in 1964. Economic growth picked up, with GDP increasing at an average annual rate of 5 percent between 1961 and 1968.³¹ The Kennedy tax cuts triggered the longest expansion in America's history, and revenues grew by 62 percent over the seven-year period.³² One of the most compelling pieces of supply-side evidence is the way different income groups re-

27 Alan Reynolds, "Estimates vs. Reality," in *Unleashing America's Potential: A Pro-Growth, Pro-Family Tax System for the 21st Century*, Report of the National Commission on Economic Growth and Tax Reform, reprinted in *Tax Notes*, January 22, 1996.

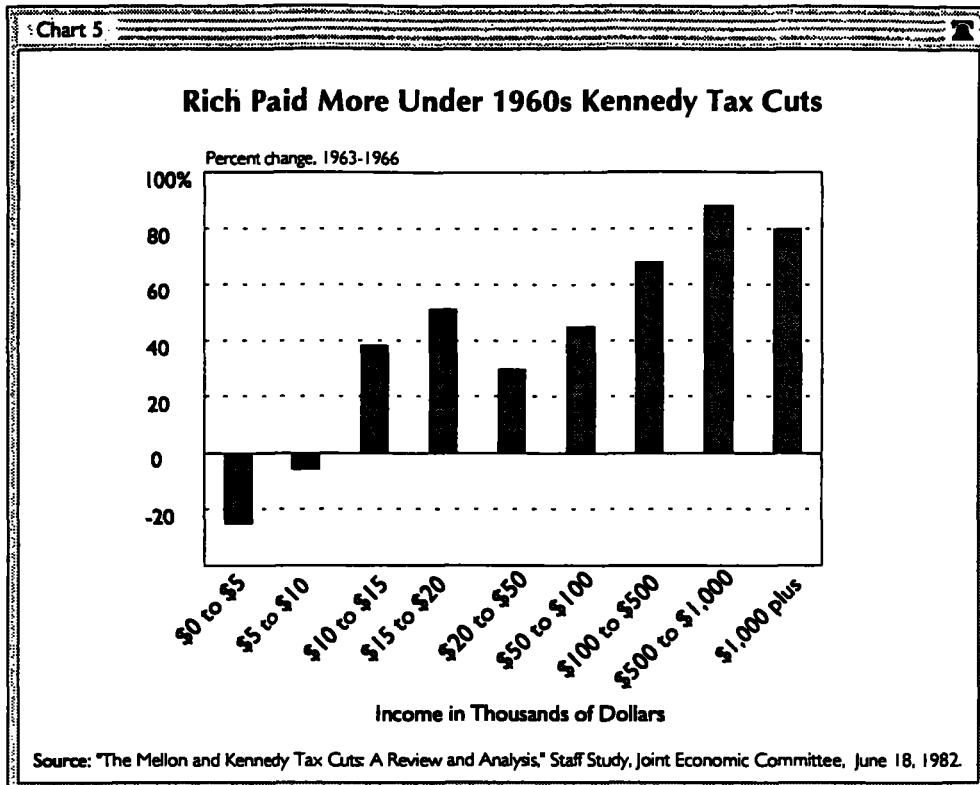
28 Tax Foundation, *Facts and Figures on Government Finance, 1988-1989 Edition* (Baltimore, Md.: Johns Hopkins University Press, 1988).

29 Bureau of the Census, *Historical Statistics of the United States: Colonial Times to 1970, Part 1*, 1976.

30 Christopher Frenze, "The Mellon and Kennedy Tax Cuts: A Review and Analysis," Staff Study, Joint Economic Committee, June 18, 1982.

31 Council of Economic Advisers, *Economic Report of the President, 1996*, February 1996.

32 Office of Management and Budget, *Budget of the United States Government, Fiscal Year 1997, Historical Tables*, 1996.



sponded to lower tax rates. As seen in Chart 5, wealthy taxpayers wound up paying significantly more tax revenues after their tax rates were reduced—exactly as dynamic forecasting would have predicted.

- ✓ **The 1978 Capital Gains Tax Cut.** The more control a taxpayer has over a taxable activity, the more pronounced the supply-side effect. Capital gains taxes are the best example of this phenomenon since a taxpayer can avoid the tax by not selling assets. In 1968, legislation was approved raising the capital gains tax from 25 percent to 49 percent. (Effective tax rates almost always were higher—sometimes over 100 percent—since the government did not, and still does not, allow taxpayers to adjust asset prices for inflation.) Not surprisingly, capital gains revenues were sluggish throughout the 1970s. In 1978, however, the rate was reduced to 28 percent.³³ The very next year, revenues jumped 45 percent.³⁴ Capital gains tax revenues continued to rise, climbing even more when the Reagan tax cuts lowered the rate even further, down to 20 percent in 1981.
- ✓ **Windfall Profits Tax.** During the Carter Administration, a heavy tax was imposed on crude oil. The Joint Committee on Taxation estimated in 1979 that the tax would collect \$184.5 billion between 1980 and 1985. But it brought in just \$77.7 billion.³⁵ To be fair, the huge revenue gap probably was due to President Reagan's decision to de-control oil prices, something the JCT could not have predicted in 1979. At the same

33 Bruce Bartlett, "The Case for Ending the Capital Gains Tax," *Financial Analysts Journal*, May-June 1985.

34 Lawrence B. Lindsey, *The Growth Experiment: How the New Tax Policy Is Transforming the U.S. Economy* (New York, N.Y.: Basic Books, 1990).

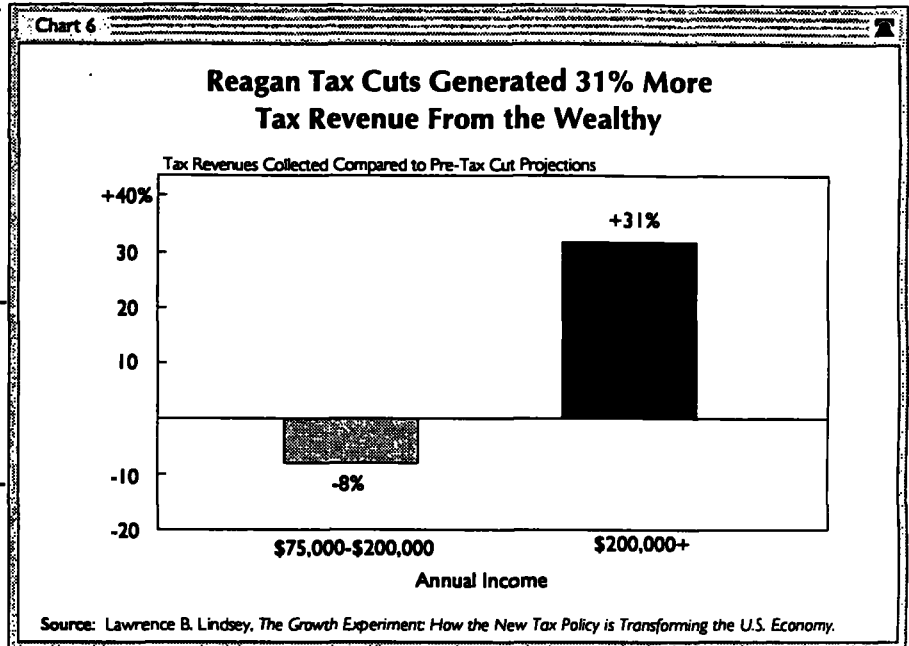
35 Bruce Bartlett, "Static Scoring Gets It Wrong," *The Wall Street Journal*, December 14, 1994.

time, however, foreknowledge of this move may have caused the revenue estimators to make an even bigger mistake, since most liberals believed that restoring competition to the petroleum market would cause oil prices to skyrocket.³⁶

- ✓ **The Reagan Tax Cuts.** Campaigning on across-the-board tax cuts, Ronald Reagan took office at a time when the economy was in horrible shape. The economy was in the middle of a severe double-dip recession. Inflation was running at double-digit rates, unemployment was rising, and interest rates had climbed to more than 20 percent.³⁷ Critics claimed the tax cuts would be inflationary and would do nothing to boost growth, but just the opposite happened. Americans did not receive a net tax cut until some-

time between July 1982 and January 1983 because previously legislated payroll tax increases and bracket creep offset the portions of the tax cut that took effect in 1981 and 1982.³⁸ Once the tax cuts did take effect, the longest peacetime economic expansion in the nation's history began.³⁹

The most comprehensive analysis of the revenue effect of the Reagan tax cuts shows two things: The lower tax rates on the rich more than paid for themselves, and there were substantial feedback effects from lower tax rates on other income classes as well (see Chart 6). Defenders of high tax rates condemn the Reagan program, noting that tax revenues in the early 1980s were well below the Administration's original projections.⁴⁰ But this reasoning is seriously flawed. First, it blames the tax cuts for the second half of the double-dip recession of 1980-1982, a drop in the economy that began before the economy received a tax cut. Second, it fails to recognize the irony that two-thirds of the revenue shortfall occurred because inflation was reduced



36 For a thorough discussion of this issue, see *Free Market Energy: The Way to Benefit Consumers*, ed. S. Fred Singer (New York, N.Y.: Universe Books, 1984).

37 Council of Economic Advisers, *Economic Report of the President, 1996*.

38 Lindsey, *The Growth Experiment: How the New Tax Policy Is Transforming the U.S. Economy*.

39 Robert Bartley, *The Seven Fat Years* (New York: The Free Press, 1992).

40 The White House, *Claim and Response Packet to Most Frequent Supply-Side Claims*, July 1996.

much faster than was originally thought.⁴¹ Significantly, the forecast of the Democrat-controlled Congressional Budget Office closely matched the Administration's.⁴²

- ✓ **The 1986 Tax Reform Act.** This legislation provides one of the best examples of why dynamic forecasting is needed. The Tax Reform Act lowered tax rates on individual income and increased the tax burden on corporate income.⁴³ According to the static estimates, the shift in taxes amounted to more than \$100 billion over the five-year period. Actual tax collections, however, showed a very clear and pronounced supply-side effect. As taxpayers responded to lower rates, individual income tax revenues grew faster than expected, nearly 6 percent above projections. The higher tax burden on corporate income, meanwhile, had the opposite effect. Corporate income tax receipts were very sluggish, falling nearly 25 percent below the static estimates.⁴⁴

The divergent responses of personal and corporate income tax collections are critical. Defenders of static forecasting always try to argue that the dynamic effects are a coincidence. The booming economy and rapid revenue growth of the 1920s, 1960s, and 1980s, for instance, are said to have had nothing to do with lower tax rates. Likewise, the economy's poor performance during the 1930s, 1970s, and 1990s is said to be just bad fortune completely unrelated to higher tax rates. These arguments fall apart when analyzing the Tax Reform Act, since it is impossible to blame sluggish corporate tax collections on a weak economy while at the same time claiming that strong personal tax collections are the result of a strong economy.

- ✗ **The 1986 Capital Gains Tax Rate Increase.** As part of the Tax Reform Act of 1986, policymakers increased the capital gains tax from 20 percent to 28 percent. Two noteworthy things happened. Capital gains realizations (asset sales) and revenues soared before the tax rate increase took effect and then collapsed by more than 50 percent when the higher rate took effect.⁴⁵ When the Congressional Budget Office put together its revenue baseline in 1990, however, it assumed that capital gains realizations would grow at the same rate they did during the early 1980s when the tax rate was low. This proved to be a huge error. In fact, the high capital gains tax discouraged asset sales, and realizations were stagnant, usually less than half of CBO's projections.⁴⁶ Moreover, the Joint Committee on Taxation used this inflated baseline in 1990 to put together static revenue estimates suggesting that a reduction in the rate would lose money and primarily benefit the wealthy. But the 1986 increase in the capital gains tax rate actually

41 Gary Robbins and Aldona Robbins, "Cooking the Books: Exposing the Tax and Spend Bias of Government Forecasts," Institute for Policy Innovation *Policy Report No. 129*, February 1995.

42 Bruce Bartlett, "Premature Ambush of Tax Cut Scorecard," *The Washington Times*, August 5, 1996.

43 Taxes on business are an illusion. Even when collected at the corporate level, all taxes ultimately are paid by individuals. When government imposes taxes on a "corporation," the real effect is lower profits for shareholders, lower wages for workers, and higher prices for consumers.

44 Robbins and Robbins, "Cooking the Books: Exposing the Tax and Spend Bias of Government Forecasts."

45 Christopher Frenze, "Capital Gains and the Revenue Estimation Process," *Economic Update*, Joint Economic Committee, September 1995.

46 Christopher Frenze, "Massive CBO Errors in Capital Gains Projections," *Policy Analysis*, Joint Economic Committee, February 1992.

hurt middle-income taxpayers more than the rich, since the tax rate on their gains rose from 14 percent to 28 percent.⁴⁷

- X The Luxury Tax.** The 1990 budget agreement included provisions imposing excise taxes on products thought to be purchased by the "rich," including luxury boats and private airplanes. These taxes backfired so badly that Congress repealed them. Actual collections from the boat tax reached \$32.5 million, according to the Treasury Department, far below the \$53 million originally forecast.⁴⁸ The Joint Committee on Taxation, meanwhile, admitted that the airplane tax collected just 10 percent of the static estimate.⁴⁹

Defenders of the tax have tried to argue that the revenue shortfall was coincidental,⁵⁰ but the actual effects are even worse than these numbers indicate. When boat builders lost their jobs and boatyards shut down, the federal government lost income and payroll taxes and also had to pay out unemployment benefits.⁵¹ The static estimates recognized that some people might have lost jobs as a result of the tax but assumed that those workers would immediately get jobs someplace else paying the same wage.⁵² Life in the real world, unfortunately, does not operate as flawlessly as these static blackboard models.

- X The Bush Tax Rate Increase.** In 1990, President Bush reneged on his no-new-taxes promise and signed into law a major tax increase, including an increase in the top rate from 28 percent to 31 percent. Rather than bring in new revenues, however, the government began to collect less revenue than was projected before tax rates were increased.⁵³ In 1991 alone, revenues fell by more than \$6 for every \$1 the tax increase was supposed to generate.⁵⁴

Defenders of static scoring admit this happened but blame the stagnant economy for the drop in revenues. Since the tax increase certainly helped throw the economy into the tank, however, this excuse rings hollow. Even if one accepts the unlikely assumption that the tax increase had nothing to do with the recession, there are other compelling numbers showing the dynamic effect. In 1991, income tax receipts from those making more than \$200,000 fell by more than 6 percent.⁵⁵ Yet tax collections from those making less than that rose by 1 percent. In other words, the government wound up collecting less in revenue from the taxpayers who were slapped with higher tax rates, but collecting more from those whose taxes did not go up.

47 Alvin Rabushka, "Ten Myths About Higher Taxes," *Essays in Public Policy* (Stanford: Hoover Institution, 1993).

48 Lucinda Harper and David Wessel, "A Primer: What Congress Will Face in Debate Over Taxes and Revenue," *The Wall Street Journal*, December 27, 1994.

49 Staff Paper, *Methodology and Issues in the Revenue Estimating Process*.

50 U.S. General Accounting Office, *Luxury Excise Tax Issues and Estimated Effects*, GAO/GGD-92-9, February 1992.

51 Joint Economic Committee, *1992 Annual Report*, April 1992.

52 J. D. Foster, "The Prospects for Improving Official Revenue Estimates," *Tax Foundation Special Brief*, February 1995.

53 Office of Management and Budget, *Mid-Session Review of the Budget*, July 16, 1990, and *Budget of the United States Government, FY1997, Historical Tables*, 1996.

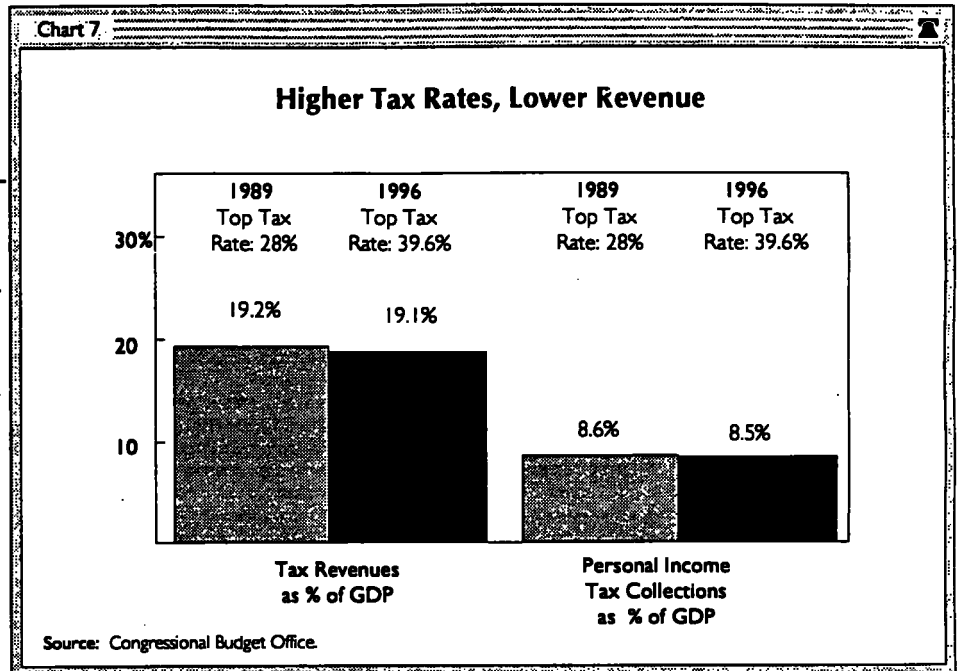
54 U.S. General Accounting Office, *1991 Budget Estimates: What Went Wrong*, GAO/OCG-92-1, January 1992.

55 Paul Gigot, "Oops! Weren't We Going to Soak the Rich?" *The Wall Street Journal*, July 9, 1993.

X **The 1993 Clinton Tax Rate Increase.** Without a vote to spare in either the House or the Senate, President Clinton during his first year in office imposed the largest tax increase in history. His increase in tax rates,

from 31 percent to 39.6 percent,⁵⁶ was the biggest jump since Herbert Hoover boosted the rate from 25 percent to 63 percent in 1930. Harvard economist Martin

Feldstein estimates that the tax rate increase raised only one-third of the promised revenue.⁵⁷ The combined effect of the Bush and Clinton tax rate increases has been an utter failure. As shown in Chart 7, revenues from the personal income tax actually have declined as a percentage of economic output since Reagan left office.⁵⁸



REVENUE ESTIMATES AND THE FLAT TAX

The perils and pitfalls of static forecasting are clearly evident in the flat tax debate. Representative Richard Armey (R-TX) resuscitated the idea of moving to a simple and fair one-rate tax system in 1994. Almost immediately, the proposal was attacked by the Administration. Shortly before the mid-term elections that year, the press reported a Treasury Department estimate that the flat tax would require a rate of 25.8 percent to be revenue neutral.⁵⁹ Six months later, the Administration criticized the flat tax yet again, but this time charged that the rate would have to be 22.9 percent to avoid increasing the deficit.⁶⁰ More recently, the Treasury Department issued its third static estimate of the flat tax, this time claiming that the revenue neutral rate would be 20.8 percent.⁶¹

56 He also lifted the cap on the amount of income subject to the Medicare 2.9 percent payroll tax. This means the effective top rate is really 42.5 percent.

57 Martin Feldstein, "What the '93 Tax Increases Really Did," *The Wall Street Journal*, October 25, 1995.

58 Congressional Budget Office, *Economic and Budget Outlook, Fiscal Years 1997-2006*, May 1996.

59 "Treasury Analysis Finds GOP 'Flat Tax' Too Costly," *The Washington Post*, October 31, 1994.

60 U.S. Department of the Treasury, "A Preliminary Analysis of a Flat Rate Consumption tax," April 1995.

The Clinton Administration's inability to settle on a single rate is instructive for two reasons. It demonstrates that even static revenue estimates, which involve more simplistic calculations, are far from exact. Even more important, the White House inadvertently has provided compelling evidence for the flat tax. The Treasury Department's most recent estimate, predicting a revenue neutral rate of 20.8 percent, is still exaggerated.⁶² But it confirms that Representative Arme y's 20 percent flat tax, which includes \$40 billion in budgetary savings,⁶³ is deficit-neutral—even using static analysis.

Not surprisingly, dynamic estimates of the flat tax, using more sophisticated econometric and modeling techniques, find that growth increases significantly. This additional growth, as illustrated earlier, results in substantial revenue increases. An important question, of course, is who benefits from the economy's expansion. Representative Arme y and Senate co-sponsor Richard Shelby (R-AL) believe that taxpayers should reap the benefit of faster growth. As a result, they reduce the flat rate to 17 percent in the third year.

Numerous studies support the contention that the economy will expand dramatically if the existing tax code is replaced by a single-rate flat tax. For example:

- ✓ Professor Dale Jorgenson, Chairman of the Economics Department at Harvard, testified before the National Commission on Economic Growth and Tax Reform that a single-rate system could boost the economy by 15 percent or more within a decade.⁶⁴
- ✓ University of California professor Alan Auerbach, formerly an economist with the Joint Committee on Taxation, estimates that the economy would be 5.7 percent larger within five years with a flat tax.⁶⁵
- ✓ Stanford University economist Michael Boskin, a former Chairman of the Council of Economic Advisers, has testified that a flat tax would boost growth by 10 percent within ten years.⁶⁶
- ✓ Even without growth effects, two former Treasury Department economists estimate that a flat tax would be revenue neutral at 17 percent.⁶⁷
- ✓ Boston University economist Laurence J. Kotlikoff estimates that a move to a single-rate tax that does not double-tax capital income would raise living standards by between 7 percent and 14 percent.⁶⁸

61 U.S. Department of the Treasury, "An Analysis of the New Arme y-Shelby Flat Tax Proposal," January 1996.

62 Letter to Senator Connie Mack from Congressional Budget Office, March 28, 1995.

63 Office of Representative Richard Arme y, *The Treasury Department Analysis of the Flat Tax*, unpublished paper.

64 Dale Jorgenson, "The Economic Impact of Fundamental Tax Reform," testimony before Committee on Ways and Means, U.S. House of Representatives, June 6, 1995.

65 Alan Auerbach, "Tax Reform, Capital Allocation, Efficiency and Growth," unpublished draft, December 21, 1995, prepared for Brookings Institution Conference on Fundament al Tax Reform, February 15-16, 1996.

66 Michael Boskin, "A Framework for the Tax Reform Debate," testimony before Committee on Ways and Means, U.S. House of Representatives, June 6, 1995.

67 Gary Robbins and Aldona Robbins, "Which Tax Reform Plan? Developing Consistent Tax Bases for Broad-Based Tax Reform," Institute for Policy Innovation *Policy Report* No. 135, January 1996.

68 Laurence J. Kotlikoff, "The Economic Impact of Replacing Federal Income Taxes With a Sales Tax," Cato Institute *Policy Analysis* No. 193, April 15, 1993.

- ✓ A study by two academic economists found that a 17 percent flat tax would boost growth so much that tax revenues would increase by 1.8 percentage points.⁶⁹

QUESTIONS AND ANSWERS ABOUT DYNAMIC SCORING

Q: *Will lower tax rates reduce the underground economy, and will dynamic forecasting reflect this shift?*

A: Yes, but probably not enough to affect revenue forecasts. By definition, measuring the size of the underground economy is difficult. Those that have tried have produced estimates ranging from a low of 5 percent of GDP to a high of more than 25 percent of GDP.⁷⁰ An added problem is that no one knows how much of the underground economy exists for the purpose of evading taxes. It is safe to assume that most drug dealers, bookies, and prostitutes do not pay taxes, but that will not change if tax rates are lowered. For activities that are legal, however, lower tax rates would reduce tax evasion. The American Bar Association conducted a three-year study which concluded that lower tax rates encourage greater compliance.⁷¹

Q: *What safeguards would be needed to ensure that the party in power did not abuse dynamic forecasts?*

A: This is a legitimate concern. Politicians often exaggerate the benefits of legislation they support, and it does not take a wild imagination to envision revenue estimators pressured to produce excessively optimistic numbers. The Congressional Budget Office, for instance, was often accused of tailoring its figures to help the Democrats when they were in the majority.⁷² This is why public disclosure of the model and methodology is so important. If outside experts were allowed to review all decisions, the potential for mischief would shrink dramatically.⁷³

Q: *Should there be dynamic forecasts of spending legislation?*

A: If the scientific evidence is clear, the answer is yes. Considerable research has been done to show that government spending, particularly for consumption items, is a drag on economic growth.⁷⁴

69 Barry J. Seldon and Roy G. Boyd, "The Economic Effects of a Flat Tax," *NCPA Policy Report* No. 205, June 1996.

70 Paul Starobin, "The Economy You Can't See," *National Journal*, June 18, 1994.

71 American Bar Association, *Commission on Taxpayer Compliance, Report and Recommendations*, July 1987.

72 Edward McFadden, "Clinton's Funny-Number Factory," *The American Spectator*, November 1992.

73 Section 4 of H. Con. Res. 170, introduced by Representative Tom Campbell (R-CA), would require both the Congressional Budget Office and the Joint Committee on Taxation to divulge their methodology.

74 Eric M. Engen and Jonathan Skinner, "Fiscal Policy and Economic Growth," National Bureau of Economic Research, *Working Paper Series*, No. 4223, December 1992; Daniel Landau, "Government Expenditure and Economic Growth: A Cross-Country Survey," *Southern Economic Journal*, Vol. 49 (January 1983), pp. 783-792; John McCallum and Andre Blais, "Government, Special Interest Groups, and Economic Growth," *Public Choice*, Vol. 54 (1987).

Incorporating this new research into budget analysis would help policymakers make proper decisions. As with dynamic scoring of tax legislation, full disclosure is critical. The Congressional Budget Office, for instance, used a version of dynamic scoring during the debate over the 1995 Balanced Budget Act. Unfortunately, in predicting dramatic reductions in interest rates following enactment of legislation to reduce budget deficits,⁷⁵ the CBO was almost surely wrong.⁷⁶ If the CBO had to publish its analyses and defend them before outside experts, estimators would be forced to refine and improve their techniques.

CONCLUSION

During the post-Reagan years, the economy has experienced its worst seven-year performance since the end of World War II.⁷⁷ The average family has lost more than \$2,000 of real purchasing power,⁷⁸ and there is little reason for optimism about the future. The Congressional Budget Office estimates that economic growth over the next ten years will average only 2.1 percent if current tax and spending policies are maintained.⁷⁹

America can do better. From the end of World War II until the end of the Reagan years, the economy's growth rate averaged well over 3 percent—and that includes recession years.⁸⁰

To get America growing again, tax policy will have to change. In the short term, immediate tax rate reductions are needed to boost growth; in the long term, the entire tax code should be replaced by a simple, flat tax. Unfortunately, these pro-growth changes will be harder to achieve if revenue estimators continue to use outdated and inaccurate static models. Dynamic revenue estimates, by contrast, would provide policymakers with more accurate information. Dynamic forecasting is based on a proper understanding of how the economy works, and history has shown this approach to be far more realistic.

75 Congressional Budget Office, "Economic and Budget Outlook, December 1995 Update," CBO Memorandum, December 1995.

76 Daniel Mitchell, "The Deficit Hawks Lay an Egg," *The Wall Street Journal*, July 23, 1996.

77 Council of Economic Advisers, *Economic Report of the President, 1966*.

78 Median Family Income, Bureau of the Census, Department of Commerce.

79 Congressional Budget Office, *Economic and Budget Outlook, Fiscal Years 1997-2006*.

80 Council of Economic Advisers, *Economic Report of the President, 1996*.

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