Executive Summary

Last year's highly touted, grand-compromise budget agreement reached between President Bush and Congress will raise roughly $150 billion in new taxes over the next five years--making it the second largest tax increase in American history.(1) New revenues will come from increases in income tax rates, gasoline taxes, and beer and cigarette levies, and from a combination of other excise taxes. Altogether those taxes will raise the federal tax burden on American workers to an all-time peak.

Now it appears that the tax frenzy is not complete on Capitol Hill. To promote "tax fairness," Rep. Dan Rostenkowski, the Democratic chairman of the House Ways and Means Committee, has announced that he may soon introduce legislation to place a 10 percent income tax surcharge on Americans with incomes over $1 million. Others are calling for a new tax on energy usage to pay for the Persian Gulf War.

Politicians and many economists have been applauding the move to new taxes, insisting that higher revenues are necessary to reduce the deficit and thereby stimulate long-term economic expansion. President Bush, for one, has argued that the 1990 budget package sent a reassuring message to jittery U.S. financial markets that Washington is serious about tackling the deficit.

Yet so far the financial markets have responded not positively but negatively to higher taxes, contrary to the assurances of lawmakers. Ever since Bush announced his "yes, new taxes" campaign, the Dow Jones Industrial Average--one of the most reliable economic barometers--has tumbled in free fall (see Figure 1). On average, stocks have forfeited roughly 15 percent of their value since last summer when tax talks gained momentum.

Figure 1
(Graph Omitted)

Of course, part of the fall in prices is attributable to the Persian Gulf crisis. Still, the data in the figure underscore two points: First, the signs of a bear market originally emerged before the Persian Gulf crisis but after Bush capitulated on taxes. Second, the completion of the budget deal has done nothing to arrest the decline in stock prices that accelerated after the Iraqi invasion of Kuwait.

Yet with all the legislative sweat, the deficit is not going to decline as expected and will probably rise in the next several years. The Congressional Budget Office reported in December that the deficit would climb to record dollar totals of $250 billion to $300 billion in 1991 and 1992.(2) The CBO also has estimated that at least $100 billion in the purported five-year $490 billion in deficit reduction has already vanished because of continued deterioration of the
Why are the new taxes producing such unexpected consequences?

One primary reason is that the adverse impact of new taxes on the economy has been ignored entirely. President Bush and congressional leaders have carefully avoided discussing the possibility that the steep downturn in the economy is directly related to the contents of the anti-growth budget package itself. The economic models engineered by the OMB and the CBO do not assume any adverse economic effects from higher taxes--indeed, those models anticipate positive economic responses to more taxes. The OMB predicts, for instance, that because new taxes will lower government borrowing, interest rates on Treasury bills will fall by 1995 by 3 percentage points--to their lowest level in a quarter century.(4)

This study presents solid statistical evidence demonstrating that taxes do harm the economy in a significant and consistent way. Since 1960 tax increases (measured by total tax receipts as a percentage of gross national product) have led to slowdowns in economic growth, and often to recessions. Likewise, when Washington has reduced federal tax burdens over the past 30 years, there has been a statistically significant positive economic and employment stimulus in the following year.

The implication of this model is straightforward: by enacting tax increases last year that will bring the tax burden to record levels, President Bush and Congress have directly contributed to the current economic erosion, rather than combatted it. Specifically, from our historical model, we predict the following economic response to the budget package:

- Economic growth will be 0.7 percent per year lower than it would otherwise be.
- Four hundred thousand fewer jobs per year will be created than would otherwise be created.
- The tax burden will rise to 20.7 percent of GNP by 1992 (the greatest tax burden since World War II), which will increase the severity of any subsequent economic recession.(5)
- Approximately $330 billion, or roughly two-thirds, of the projected $491 billion in deficit savings from the budget package will be eliminated by the adverse economic impact of new taxes on the economy.

The model suggests that any realistic anti-recession economic package this year should contain three reforms. First, President Bush and Congress must begin to systematically repeal major tax components of the 1990 budget pact. Second, Congress should cancel any plans to raise more tax revenues in 1991, such as an income tax surcharge on the rich or an energy tax. Third, as measures to stimulate economic expansion and new jobs, Congress should consider pro-growth tax cut proposals, such as a reduction in the tax rate on capital gains or Sen. Daniel Patrick Moynihan's (D-N.Y.) rollback of social security payroll taxes and the proposal by Rep. Tom DeLay (R-Tex.) and Sen. Malcolm Wallop (R-Wyo.) to combine social security tax cuts with expansion of tax breaks for Individual Retirement Accounts and a reduction of the capital gains tax rate. Finally, deficit reduction should come in the form of expenditure reductions, not just reductions of projected increases in spending.

Taxes and Economic Behavior

Most static economic models ignore completely the negative economic effects of taxation.(6) In fact, it was not until the 1980s, when the election of President Ronald Reagan brought supply-side economists into ascendance, that the importance of marginal tax rates gained the attention of federal policymakers and some feedback models were put into use.(7) Most economists now acknowledge that punitive marginal income tax rates of 90 or 70 or 50 percent can stifle economic activity and growth. Indeed, a wealth of economic literature on the subject of taxes and economic growth now verifies that contention.(8)
The emphasis that supply-side economics places on the incentive effects of marginal tax rates has led some economists to conclude that only marginal income tax rates have negative economic effects. Hence policymakers have attempted to raise revenues by increasing consumption and sin taxes, as was done in the recent budget package. Because those taxes do not directly influence people's work effort or investment behavior, many analysts argue that their economic effect is fundamentally benign. Some even argue that taxing consumption has a positive effect; it may encourage people to consume less and save more. (9)

But aggregate tax burdens—that is, the total amount of the economy's resources directly transferred to the government—may be critically important to economic growth too, regardless of how those tax dollars are collected. If the resources allocated to the government are used inefficiently, or less efficiently than in private hands, economic growth is diminished and production falls. If additional tax dollars are used for a project that makes no contribution to productive capacity, and if the tax dollars raised prevent some private expenditure or investment that would have provided output and jobs in future years, growth is diminished.

Examples of government projects with low social returns abound in the federal budget. One need only look at the 24-volume 1982 Grace Commission report, which identified tens of billions of dollars of potential savings that could be realized by eliminating unnecessary government programs. (10) In such cases greater economic efficiency would be achieved by keeping in the hands of the private sector the tax dollars that are used to finance those activities.

Of course, some functions that are carried out by government may add to our future growth potential—such as law enforcement and national defense. (11) Modest taxes to pay for those essential government services may promote economic growth.

As increasing amounts of taxes are collected, they will almost assuredly be used by government to finance projects that offer declining social returns. One study by economist Gerald Scully of the University of Texas in Dallas found that taxes deter economic growth if they are above a certain minimum threshold of about 12 percent of GNP. (12) Scully also discovered that most nations—including the United States—impose taxes that are well above the rate at which economic growth is maximized.

**Measuring the Economic Impact of Federal Taxes**

If rising aggregate tax burdens do have an adverse economic impact, then over time we should be able to detect a pattern of higher levels of taxation associated with lower levels of economic performance in subsequent periods and vice versa.

Our model analyzes the impact of annual tax burdens (total federal tax receipts as a percentage of GNP) over the 1960-87 period on two measures of economic performance in the following year: (1) growth of GNP and (2) job creation. The GNP is an imperfect but fairly reliable and consistent measure of economic growth. For instance, it is highly correlated with other measures of economic and social wellbeing. To measure job creation, we use the Labor Department's calculation of total nonagricultural employment. We also add to the model a variable that measures the annual change in oil prices in the previous year to further explain variations in growth and job creation. The effect of rising world oil prices can be similar to that of a "tax" on American consumers.

The model confirms the theory that taxes are a leading indicator of employment creation and economic growth. (See Appendix for more detailed information on the economic model used.) Figure 2 shows the relationship between the tax burden and the economic growth rate with a one-year lag. Using the simple model, we have uncovered the following statistically significant relationships:

* Each 1.0 percent rise in the federal tax burden leads to a 1.8 percent reduction in economic growth. The model explains over half of the variation from year to year in growth rate.

* Each 1.0 percent rise in the federal tax burden leads to a 1.14 percent decline in national employment. In the employment model more than 40 percent of the growth in new jobs is explained by the federal tax burden and changes in oil prices.
In sum, when taxes as a percentage of GNP rise, the very next year growth in real GNP and employment will decline. The converse is also true: when federal tax burdens fall, economic growth and the unemployment picture will improve the following year.

**Implications of Recent Budget Actions**

Figure 3 shows the tradeoff that emerges from the model relating economic growth to the federal tax burden from 1960 through 1987. Figure 4 shows the same inverse relationship for employment growth.

Using those historical relationships as a benchmark, we can now roughly predict the impact the recent tax package will have on jobs and economic growth over the next five years, assuming that Congress and the president adhere to the benchmark levels of the budget agreement. Table 1 compares the forecasted federal tax burden before new taxes were enacted with the tax burden levels that are now expected through 1995 (using National Income Product Account figures). The table shows that taxes will rise to 20.4 percent of GNP in 1991, 20.7 percent in 1992, and 20.8 percent between 1993 and 1995.

Since each 0.1 percent rise in tax burdens destroys 100,000 jobs and slows economic growth by 0.18 percent, we are able to show in the last two rows of Table 1 how the economy is likely to react to the new taxes. Over the five-year period the unemployment rate will be, on average, 0.45 percent higher than otherwise, and GNP growth will be 0.7 percent slower than otherwise.
Because the economy will grow at a slower pace as a result of the increased taxes that were recently approved, and because the condition of the economy directly affects the size of the federal deficit, the budget package enacted last year cannot reduce the deficit as advertised. Indeed, by ignoring the impact of taxes on the economy, federal lawmakers have dramatically overestimated the reduction in deficit spending that their grand-compromise budget yields.

That point is illustrated in Table 2. According to the CBO's estimates, each 1.0 percent decline in real economic growth raises the deficit by $7 billion in the first year, $26 billion in the second year, $50 billion in the third year, $77 billion in the fourth year, and $108 billion in the fifth year, because the lower level of economic activity reduces the size of the tax base and increases expenditures for poverty programs. By multiplying those numbers by the percentages given in the last row of Table 1 (the annual impact of the new taxes on the economic growth rate), we derived estimates of the increase in the deficit due to lower economic growth.

Similarly, each 1.0 percent increase in unemployment raises the budget deficit by $32 billion in the first year, $52 billion in the second year, $60 billion in the third year, $66 billion in the fourth year, and $73 billion in the fifth year, because fewer people are working and paying income and social security taxes and more people are collecting unemployment benefits. By multiplying those numbers by the percentages in the third line of Table 1 (annual impact of the new taxes on employment), we derived estimates of the increase in the deficit due to higher unemployment.

Table 2 points to two important conclusions: First, we predict that the adverse impact of the new taxes will keep the deficit over $300 billion for the next four years, in contrast to the official government forecasts. Second, when we subtract the added deficit spending, which will occur as a result of poorer economic performance, from the levels projected by the OMB, we find that $340 billion, or two-thirds, of the purported $491 billion in budget savings is erased. Of course, that change does not mean that the remaining budget savings would occur. Those savings depend on promised entitlement reforms and reductions in spending below the projected CBO baseline. According to some experts, even those savings are highly suspect.

### Taxes and the Recession

Several theories have been proposed about why America has fallen into an economic recession after eight consecutive years of prosperity. One, which certainly has some validity, is that the shock to world oil markets in the wake of the Persian Gulf crisis has unsettled the nation's economy. Another is that the half-trillion-dollar savings-and-loan debacle is responsible. A third theory is that the onslaught of new government regulations, such as the Clean Air Act, has impeded business expansion. A fourth popular notion is that the chickens of Reagan's budget deficits have finally come home to roost.

Although each of those theories may offer a partial explanation of the business downturn, none tells the whole story. Few economic analysts have identified rising tax burdens on American workers as a possible culprit, even though the economic slump began when Bush capitulated on new taxes last summer. Our model provides solid evidence that taxes have contributed in a major way to the decline in the economy.

It is not just the most recent tax hike that has contributed to the fall in economic growth; taxes have been slowly rising...
since 1982. Over that period, 14 separate tax increases have been enacted. Thanks in large part to the rising burden of social security payroll taxes during the 1980s, between fiscal years 1989 and 1992 total federal tax receipts as a percentage of GNP will be higher than they have been in any previous four-year period. Over the current period, taxes will average 19.6 percent of GNP versus 19.5 percent from 1979 to 1982 (the turbulent period before the Reagan tax cuts) and 19.1 percent from 1967 to 1970 (the last time the federal budget was balanced). Even during the war years of 1944-47, the tax burden averaged only 19.2 percent of GNP (see Figure 5).(16)

The tax estimates for 1989-92 do not include the new taxes approved as part of the 1990 budget agreement. When the new taxes are included, next year's tax burden may rise to 20 percent of GNP, the highest level in the post-World War II era.

Our model indicates that whenever the tax burden rises above 20.0 percent of GNP, the nation enters an economic danger zone in which it runs a high risk of a recession. Indeed, only twice before in peacetime has the federal government collected more than 20 cents of every dollar earned by American families. The first time was in 1969--and in 1970 the economy slipped into a mild recession. The second occasion was 1981--the year before the most severe economic recession since the Great Depression. If the tax increases are imposed as scheduled over the next five years, our model suggests that the slowdown in economic activity could be long lasting, as opposed to the "soft-landing" scenario that the administration hopefully predicts.

Figure 5
Average Tax Burdens in High-Tax Periods
(Graph Omitted)

Conclusion

We have shown empirically that there is a direct relationship between the share of resources taken (ignoring the structure of the tax code) by the federal government and economic growth. Although some kinds of taxes--such as income taxes--are clearly more damaging to the economy than others, the model demonstrates that the aggregate federal tax burden has an adverse economic impact, regardless of how taxes are collected. Taxes have a negative effect because they deprive the private sector of resources to expand growth and often produce negative incentives for desirable activities, such as business investment or increasing work effort.

The estimates of the negative impacts of rising taxes derived from such a simple model may not always be right on the mark and should be interpreted with some caution. They do, however, show a consistent negative relationship between higher tax burdens and activities essential to economic growth. Our model also suggests that the most dangerous types of taxes are levies that could become government "money machines," such as the proposed value-added tax or a national sales tax. Under both of those tax plans, minor revisions in the tax schedule can pull significant amounts of productive resources out of the private sector and into the hands of government.

Policymakers must now ask themselves what economic remedies will pull the nation out of the current economic recession. Our model provides one overarching policy prescription for federal lawmakers: to end the current recession, they should be easing Americans' tax burdens, not raising them. The way to start may be by repealing the new gasoline, excise, and income taxes in the 1990 budget package.

Appendix

GNP is composed of three major components: consumption--expenditures on goods and services (about two-thirds of GNP); investment--private-sector outlays for new capital equipment, production facilities, and related goods; and government--public-sector purchases of goods and services. (The government component excludes all activities of the government related to the transfer of income. Those amounts show up in the consumption figures.)

The Simple Model

The simplest model focuses on the relationship between the share of resources taken (ignoring the structure of the tax code) by the federal government and economic growth. Economic growth is measured by the annual growth rate of real GNP. If our hypothesis that taxes harm economic growth is correct, then a ratio of federal taxes collected to GNP
that accelerates rapidly during one year may lead to decelerating economic growth in the very next year. The model would look like this:

\[
\text{% Change Real GNP}_t = f \left[ \frac{\text{Federal Tax Receipts}}{\text{GNP}(t+1)} \right]
\]

\[
\text{% Change in Employment}_t = f \left[ \frac{\text{Federal Tax Receipts}}{\text{GNP}(t+1)} \right]
\]

Federal tax receipts are defined as personal income tax receipts, corporate income tax receipts, federal excise tax receipts, and social security tax receipts. A simple mathematical relationship based on annual data from 1960 to 1987 yields the following results: The federal tax burden in year \(t\) relative to

\[
\text{% Change in Real GNP in Year } t+1: r = 0.70
\]

\[
\text{% Change in Employment in Year } t+1: r = 0.50
\]

Figure 6 shows graphically the "fit" of the model. The figure compares the model's predicted GNP growth with actual GNP growth over the 1960-87 period.

If we omit the 1960 recession from our data and begin our model at the start of an upturn in the business cycle in 1962, the relationship becomes even stronger. The federal tax burden in year \(t\) relative to

\[
\text{% Change in Real GNP in Year } t+1: r = 0.75
\]

\[
\text{% Change in Employment in Year } t+1: r = 0.69
\]

According to the above representation, last year's federal tax burden explains more than three-fourths of this year's change in real GNP growth and more than two-thirds of this year's change in employment growth. Also, as the ratio rises, future growth will decelerate.

**The Revised Model**

Next, in our revised model, we adjust the two relationships with regard to the percentage change in GNP (GNP) and the percentage change in employment (EMPLOYMENT) for oil price shocks—assuming that an increase in the price of foreign oil has the same economic effect as another "tax" on the American consumer (or an oil price decrease is a "tax cut" for consumers). If we add the percentage change in oil prices (OIL) as a second explanatory variable, our model becomes the following:

\[
\text{GNP}(t+1) = 38.4 - 1.83 \text{ TAX}_t - 0.02 \text{ OIL}_t
\]

In this model more than 50 percent of the change in real GNP growth is explained by the federal tax burden and changes in oil prices.

The refined employment model that adds oil price changes as an explanatory variable is as follows:

\[
\text{EMPLOYMENT}(t+1) = 24.4 - 1.14 \text{ TAX}_t - 0.02 \text{ OIL}_t
\]

In this model more than 40 percent of the growth in new jobs is explained by taxes and oil prices. The model shows that higher federal tax burdens lead to lower employment growth, and lower federal tax burdens lead to higher employment growth.

If we drop the 1960-61 recession from our sample period so we may begin the analysis at the start of a business cycle, the "fit" becomes even more impressive. The model becomes
GNP(t+1) = 43.1 - 2.06 TAXt - 0.02 OILt

This model, based solely on the federal tax burden and oil prices, explains almost two-thirds of the growth in the economy over the past 26 years.

Employment is also inversely related to the aggregate tax burden. Our regression equation is

EMPLOYMENT(t+1) = 29 - 1.36 TAXt - 0.02 OILt

The employment model, based on the federal tax burden and oil price fluctuations, also explains almost two-thirds of the growth in new jobs in the economy over the past 26 years. In both cases the effect of higher taxes is negative and significant.

Final Note

Tests of the model over other time periods have produced largely the same results, which suggests that the model is robust. We tested the model over the 1950-87 period and found a similar, though less significant, negative impact of taxes. In particular, the negative impact of taxes on job growth was not as strong. Also, when we added estimates for 1988-91, the relationship held.

Notes

(1) The largest single-year tax increase of all time came under the 1982 Tax Equity and Fiscal Responsibility Act.


(5) Figures are based on National Income Product Account numbers, which tend to be higher than the numbers in the budget.


(7) One criticism of the White House's budget-negotiating team during the 1990 budget summit is that it abandoned dynamic models, which predict economic responses to fiscal policy changes, and instead agreed to static models. That move sealed the fate of the capital gains tax cut idea and exaggerated the economic benefits of new taxes.


(9) For example, the American Council for Capital Formation believes that a value-added tax would improve prospects for new capital investment but supports a reduction in capital gains taxes.

Other parts of infrastructure that the government provides may promote economic efficiency—good roads, safe drinking water, and education. But there is substantial evidence that those things are produced more efficiently by the private sector. Privatization of many government activities typically reduces costs by 20 to 50 percent.


Our model controls for the impact of rising oil prices on economic growth and unemployment.


These numbers are not based on a National Income Product Account and thus differ slightly from the tax numbers used in other parts of this paper. These data come from the historical tables of the Budget of the United States.