

ECONOMIC POLICY BRIEF



JOINT ECONOMIC COMMITTEE – DEMOCRATS REPRESENTATIVE PETE STARK (D-CA)

MARCH 2003

POLICIES TO RESTORE FULL EMPLOYMENT AND PROMOTE LONG-TERM GROWTH

Comparing the President's Jobs and Growth Initiative with the Democratic Alternative

Executive Summary

This study compares the macroeconomic effects of the President's "Jobs and Growth Initiative" with a Democratic alternative modeled after proposals offered by Representative Pelosi in the House and Senator Daschle in the Senate. That comparison is done using standard macroeconometric and growth models and is similar in concept and approach to other studies of the macroeconomic effects of various stimulus proposals, including an analysis of the President's plan by his own Council of Economic Advisers.

Key findings include the following:

- More Stimulation of Jobs and Growth This Year in the Democratic Plan. In 2003, the Democratic proposal delivers roughly twice the jobs and growth as the President's plan. In one model, the Democratic plan raises GDP by 1.6 percent and creates 1.1 million new jobs by the end of 2003, compared with 1.1 percent additional growth and 600,000 new jobs from the President's plan. In another model, GDP is boosted by 1.1 percent and 756,000 new jobs are created by the Democratic plan, compared with 0.6 percent additional growth and 269,000 more jobs from the President's plan.
- Less Pressure on Interest Rates and Inflation in the Democratic Plan. Most of the costs (and effects) of the Democratic plan occur in 2003, when the economy most needs a boost. Most of the costs of the President's plan would occur in the years after 2003, when the economy is already moving back to full employment. Demand stimulus that occurs when the economy is already at full employment is inflationary unless it is offset by a contractionary monetary policy. But such a clash of monetary and fiscal policy produces higher interest rates, which depress investment and can lead to increased borrowing from abroad that needs to be financed out of future income.
- Lower national income from the President's Plan. The large ongoing budget deficits associated with the President's plan add to the national debt and reduce national saving. This lowers national income in 2013 by 0.4 to 0.6 percent. Any positive supply-side incentive effects from the President's plan are most likely considerably smaller than this. The reduction in national income can be traced to two sources: first, budget deficits directly crowd out investment, which directly lowers the capital stock; second, budget deficits induce inflows of capital from abroad to buy U.S. assets, and the subsequent financing of those capital flows is a drain on U.S. national income.



ECONOMIC POLICY BRIEF



JOINT ECONOMIC COMMITTEE – DEMOCRATS REPRESENTATIVE PETE STARK (D-CA)

MARCH 2003

POLICIES TO RESTORE FULL EMPLOYMENT AND PROMOTE LONG-TERM GROWTH

Comparing the President's Jobs and Growth Initiative with the Democratic Alternative

Introduction

Two years after falling into a recession, the American economy is still in a slump. Too many people are unemployed, too much productive capacity is idle, and economic growth is too tepid to restore full employment and high capacity utilization anytime soon. In February, for example, the unemployment rate was 5.8 percent and more than 300,000 payroll jobs were lost. Under these circumstances, the most immediate goal of economic policy should be to get people back to work and restore full employment as quickly as possible. Ideally, that goal should be achieved without damaging the longer-term budget and economic outlook.

Unfortunately, the main response of the Bush administration to the current economic situation is a "Jobs and Growth Initiative" that offers little stimulus in the short run, while incurring large ongoing budget costs that are likely to weaken growth in the long run. Congressional Democrats, in contrast, have offered a stimulus plan that concentrates on the immediate task of putting people back to work and restoring full employment. The Democratic plan has the added advantage of avoiding significant budget costs beyond the first year, so that it does not drain national saving and weaken economic growth in the future.

This paper compares the Bush "Jobs and Growth Initiative" with a generic Democratic alternative

that is very much in the spirit of the specific plans offered by Minority Leader Daschle in the Senate and Minority Leader Pelosi in the House. That comparison is done using standard macroeconometric and growth models and is similar in concept and approach to other studies of the macroeconomic effects of various stimulus proposals, including an analysis of the President's plan by his own Council of Economic Advisers. The paper reaches the following three key conclusions:

- The Democratic plan provides more stimulus when it is needed most. In the first year, the Democratic alternative provides up to twice the additional GDP growth and job creation as the President's plan, and thus restores full employment more quickly.
- Interest rates are lower under the Democratic stimulus plan. Once the economy is back to full employment, the President's plan continues to provide stimulus, which forces the Federal Reserve to raise interest rates to keep the economy from overheating. By concentrating its stimulus in the first year and avoiding unnecessary stimulus beyond that, the Democratic alternative allows the Fed to pursue a more accommodative monetary policy, with lower interest rates.

• National income is higher in the future under the Democratic alternative. The substantial long-term budget costs of the President's plan (nearly \$1 trillion over 10 years, once interest costs are taken into account) add to the national debt and drain national saving. Less national saving translates into less investment, less growth, and ultimately less future income. The Democratic alterative has a 10-year cost closer to \$100 billion, and therefore does not entail those long-term budget and economic costs.

In short, the Democratic alternative not only delivers substantially more stimulus "bang" for the budgetary "buck" than the President's plan, it also boosts job creation and incomes more in the short run without sacrificing income growth in the long run.

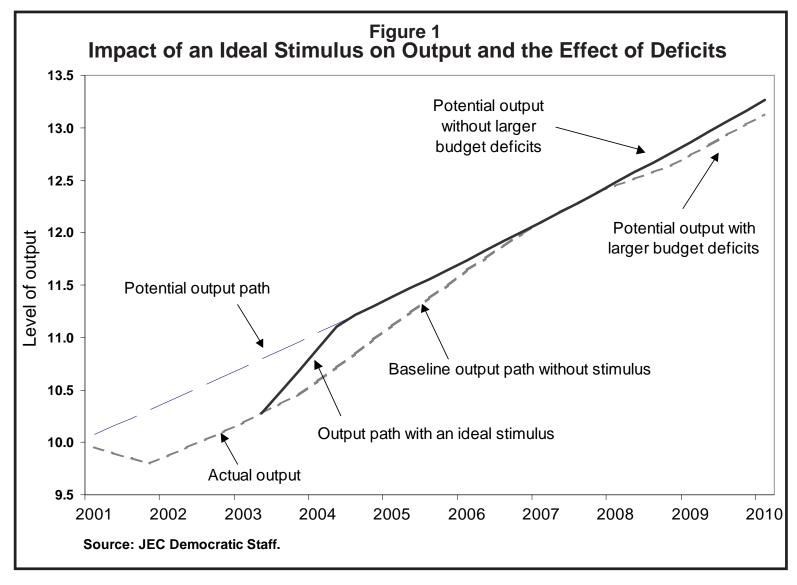
The Stimulus Challenge: Getting Back to Potential

In contrast to current conditions, which are weak and uncertain, the underlying long-term strength of the economy is more encouraging—as long as reckless policies are not adopted. No one can know for certain whether the strong productivity revival of the late 1990s is sustainable, but the trends thus far have been positive. With the labor force growing at about 1 percent per year and with productivity (output per hour) growing at about 2 percent per year, the long-run sustainable rate of growth of real (inflation-adjusted) output is a little over 3 percent per year. That is the rate of growth of what economists call "potential output," the output that can be produced when the labor force is fully employed and factory utilization is at its highest sustainable rate. In the current slump, the economy is operating below its potential, with excess unemployment and idle capacity.

Economic growth can be faster than 3 percent in the short run, as unemployed workers and idle capacity are put back to work. In fact, economic growth has to be faster than 3 percent to restore full employment and get the economy back to potential. But once full employment is restored, growth that is too much above 3 percent is likely to be inflationary and prompt a tightening of monetary policy.

Figure 1 is a stylized illustration of the challenge facing policymakers today. The economy went into recession in 2001, with actual output falling below potential. The economy began to grow again in 2002, but not fast enough to close the gap between actual and potential output. We are on a path that is likely to close the gap over the next several years but there are considerable near-term downside risks. Effective stimulus would increase the rate of growth in the short run, putting people back to work faster, and closing the gap between actual and potential output more quickly and with greater certainty. The ideal stimulus policy would provide a strong boost to output and job-creation in the short run with a minimal longer-term budget impact. That means most of the budgetary costs and fiscal impact should be concentrated in the first year.

Policies that add substantially to the deficit beyond the first year provide stimulus that is unnecessary and could be harmful. If the economy is already operating close to its potential, with full employment, additional fiscal stimulus runs the risk of igniting inflation. To counteract such an inflationary effect from the fiscal accelerator, the Federal Reserve will be forced to apply the monetary brakes. Just as it is hard on a car to drive it using the accelerator and the brakes at the same time, it is hard on the economy to have an overly stimulative fiscal policy and an overly contractionary monetary policy at the same time. The net effect of that policy mix is to raise interest rates, which "crowds out" business investment or encourages borrowing from abroad to support spending in excess of what can be supported by domestic income alone. Too much crowding out over too long a period of time will lead to less capital



formation, slower productivity growth, and ultimately, a lower path of sustainable output. These crowding out effects can easily be larger than the positive supply-side incentive effects that might arise from cutting tax rates.

Given these longer-term effects, stimulus policies must be judged not only in terms of their impact on the economy in the short run, but also on whether they have any impact on investment, capital formation, and potential output in the longer run. In the 1980s, for example, the large Reagan tax cut in 1981 probably played a role in bringing the economy out of the deep 1981-82 recession, though an easing of monetary policy was certainly critical. However, that fiscal stimulus came at a high cost,

because the tax cuts affected budget deficits for years to come (so much so that the Congress and President Reagan undid some of the tax cuts in 1982 and subsequent years). In the 1990s, in contrast, a policy of fiscal discipline aimed at controlling budget deficits allowed the Federal Reserve to pursue an accommodative monetary policy that created an attractive interest-rate environment and encouraged investment. The result was the nation's longest economic expansion on record.

Contrasting Stimulus Proposals

The President and Congressional Democrats have offered contrasting views of what policies will be most successful in restoring full employment and promoting long-term growth. The President has proposed to spend over \$700 billion between now and 2013 on tax cuts aimed at restoring jobs and growth. (In fact, the President's 2004 Budget contains additional tax cuts that are not explicitly part of his stimulus package and are not included in this analysis.) The upper panel of Table 1 describes the key provisions and illustrates how much of the cost occurs in the years beyond 2004 and how more than half of the cost is represented by the President's dividend tax relief proposal.

Congressional Democrats, in contrast, have offered various proposals that share important common elements. One is that the maximum impact should occur in the first year. A second, related element is that the proposal should have a minimal impact on deficits in subsequent years. A third is that income tax cuts should be focused on middle- and lowerincome taxpayers, who are most likely to spend the extra income. A final common element in the Democratic alternatives is that stimulus should include more than just tax cuts, in particular expanded unemployment insurance and relief for cash-strapped state and local governments. The bottom panel of Table 1 describes a generic Democratic alternative similar to those proposed by House Democratic Leader Pelosi and Senate Democratic Leader Daschle.

A Qualitative Assessment

The following discussion assumes that the most pressing problems facing economic policymakers right now are ensuring that the economy does not slip back into recession and restoring full employment as quickly as possible. Concerns over the economy's underlying long-term growth potential are less pressing, given the available evidence on productivity. Thus, the President's "Jobs and Growth" proposal and the Democratic alternative are evaluated primarily by the criteria that are appropriate for assessing economic stimulus proposals. Of course, ancillary effects on long-term growth are part of any such evaluation.

Immediate versus delayed impact. The President's proposal provides about \$40 billion of stimulus in fiscal year 2003 (or roughly \$70 billion in calendar year 2003), compared with about \$140 billion of 2003 stimulus in the Democratic alternative. Thus, the President's plan would have to be well over twice as potent as the alternative for the immediate impact of his proposal to be as large this year when it matters. As discussed below, this is unlikely to be the case. The President's proposal provides more stimulus in 2004 and subsequent years than it does in 2003 and more than is in the Democratic alternative. But this delayed stimulus runs the risk of coming too late and forcing the Fed to raise interest rates.

Effect on the budget. The President's proposal costs more than \$700 billion over 2003-13 (about \$1 trillion when the associated debt service costs are factored in). The Democratic alternative, in contrast, is designed to concentrate its effect in the first year. The longer-term cost in that plan is actually lower than the first year cost, in part because the investment incentive component simply moves costs from future years to the first year. If the country's major economic problem were weak underlying long-term growth potential, it might make some sense to try any policy that might have an impact, but in light of recent productivity performance, there are better uses for \$700 billion than the tax cuts the President has proposed. The Democratic alternative provides stimulus without significantly worsening the budget in the long run.

Temporary versus permanent tax cuts. Most economists recognize that, other things equal, people are more likely to change their spending behavior when they receive a permanent tax cut than when they receive a one-time tax cut. Thus, if the President's proposal were truly permanent and if that were the main thing that distinguished it from the Democratic alternative, one might expect a more immediate effect on spending and job creation from the President's proposal. However, the President's tax cuts may not be perceived as permanent if

Table 1
Static Impacts of Alternative Plans on Federal Budget Deficit
(Billions of dollars, by fiscal year)

	2003	2004	2003 to 2013
Change in deficit under the Bush plan	40	116	730
Taxes	40	114	726
Acceleration of already enacted tax cuts	30	79	264
Eliminate individual tax on dividends	8	23	396
Increase expensing for small businesses	1	3	29
Relief for payers of alternative minimum tax	1	9	37
Spending			
Re-employment accounts	0	2	4
Change in deficit under the Democratic alternative	143	-24	110
Taxes	107	-33	59
Rebate of individual tax	71	0	71
50 percent depreciation bonus in 2003	32	-31	1
Small business expensing	2	-1	1
50 percent health tax credit	3	1	4
Corporate governance	-1	-2	-19
Spending	36	9	50
Federal aid to states	26	10	41
Extend unemployment insurance	10	-1	9

Sources: JEC Democratic Staff calculations using estimates from the Joint Committee on Taxation and the offices of the Democratic Senate and House Leadership.

people believe that the problem of large budget deficits will be addressed through a tax increase at some point in the future. Moreover, there are other significant differences between the President's proposal and the Democratic alternative.

First, the President's proposal provides substantial benefits to high-income taxpayers, who have a higher saving propensity than middle or lower income taxpayers and are therefore likely to spend a smaller fraction of their tax cut. In contrast, middle- and lower-income taxpayers may face borrowing constraints that keep them from spending as much as they would like. Thus, they are much more likely than upper-income taxpayers to spend any new income they receive. Second, the

Democratic proposal contains more than temporary tax cuts. It includes spending for expanding unemployment insurance benefits, which would almost surely be spent by workers who have been out of a job for an extended period of time. It also includes grants to cash-starved state and local governments. These grants support immediate spending because they relieve states with balanced budget requirements from raising taxes or cutting spending. Finally, to the extent that its long-term budget costs add to perceptions of eroding fiscal discipline, the President's program puts immediate upward pressure on interest rates, which discourages investment and other interest-sensitive spending.

Model-Based Comparisons

Econometric model simulations of the President's proposal and the generic Democratic alternative prepared by the Democratic staff of the Joint Economic Committee support the qualitative conclusions reached in the last section. The findings reported here with respect to the President's proposal are broadly consistent with the analysis by President Bush's Council of Economic Advisers (CEA) and Macroeconomic Advisers, LLC (MA), a leading private modeling and forecasting firm.¹ The relative magnitudes of the first-year impact of the Democratic alternative compared with that of the President's proposal is broadly consistent with an analysis by Economy.com, another well-known private forecasting firm.²

The JEC Democratic staff simulations were carried out using two different econometric models. One is the MA model, a commercial model that is widely used by government and private forecasters, including the CEA. The other is an academic model developed by Professor Ray Fair of Yale University. Each of these models is recognized as a credible, mainstream macroeconomic forecasting model.

A problem that can arise in interpreting the results of model simulations such as those discussed here is that different analysts using the same model to answer the same question can reach quite different answers depending on the specific assumptions and judgments they make. The assumptions used in the simulations reported in this paper try to stay in a middle ground of plausible assumptions that do not systematically bias the findings in the direction of one policy or the other. They are described in a technical appendix, which is available separately.

Two key assumptions that merit comment are the assumption about the baseline path against which the policy changes are measured and the assumption about how monetary policy responds to the policy change. The impact of a given tax or spending change on key macroeconomic variables will be different depending upon whether or not the economy is operating close to full employment and whether or not monetary policy is accommodative. Thus, \$100 billion of fiscal stimulus (tax cuts or spending increases) at a time when there is substantial excess capacity and low inflationary expectations would be expected to have more of an impact on jobs and economic growth than on actual or expected inflation. However, that same \$100 billion of stimulus at a time when the economy is already near full employment is likely to have less impact on jobs and growth and more impact on inflation. In the former case, the Federal Reserve may well keep interest rates constant and allow the fiscal stimulus to have its full effect on jobs and growth. In the latter case, the Fed is far more likely to raise interest rates in order to choke off the fiscal stimulus and keep the economy from overheating.

The key baseline assumptions in the models used here are that the economy is in the process of recovering from its current slump and will make it back to full employment in the middle of the decade. The largest gap between actual and potential GDP is in 2003, with the gap narrowing and slack disappearing in subsequent years (as illustrated in Figure 1). Thus, the time when stimulus is likely to have its maximum impact on jobs and GDP is this year. In subsequent years, there is an increasing

risk that the Fed will tighten monetary policy and choke off the stimulus if the economy is, in fact, already close to full employment.

The analysis of the President's "Jobs and Growth" proposal done by the CEA assumes that monetary policy accommodates the fiscal stimulus by allowing the money supply to grow faster than in the baseline in order to keep the Fed's interest rate target the same as in the baseline in the face of additional fiscal stimulus. Macroeconomic Advisers, in their own preliminary analysis of the President's plan, assumes instead that the Fed is more restrictive and keeps the money supply growing at the same rate as in the baseline, so that interest rates go up as a result of the fiscal stimulus. Another alternative is to assume that the Fed has a "reaction function" based on its assessment of the relative risks of inflation and unemployment and adjusts the money supply accordingly. While this last assumption might seem to be the most reasonable, it rests on the assumption that the reaction function built into the model and based on past Fed behavior is a reasonable predictor of what the Fed would actually do in the face of the policy change being simulated.

The results reported here follow the CEA's monetary policy assumption, keeping the path of the Fed's interest rate target the same as it is in the baseline. Under this assumption, the first-year results are the most reliable, because there is considerable economic slack and monetary policy can be accommodative without risking inflation. Later-year results are less reliable and less easy to interpret, because the modeler must make some assumption about how and when the Fed would respond if a policy calls for more demand stimulus even though the economy is already at full employment (as is the case in the President's plan).

For those reasons, the table on the following page shows the first year impact of the Bush and Democratic alternatives on key macroeconomic variables. Panel A shows the results of the JEC

Democratic staff simulation of the two proposals using the MA model. Assuming the policies are implemented beginning in July, real GDP would be 1.1 percentage point higher under the Bush plan by the end of the year, but 1.6 percentage points higher under the Democratic alternative. The Bush plan would create 600,000 new jobs, compared with 1.1 million new jobs under the Democratic alternative. The unemployment rate would be 0.4 percentage point lower under the Bush plan, compared with 0.7 percentage point lower under the Democratic alternative. These results for the Bush plan are consistent with those reported by the President Bush's Council of Economic Advisers in their February 4, 2003, estimate of the impact of the President's plan (as reported in Panel B of the table). The CEA analysis is based on the Administration's own estimates of the cost of its plan, while the JEC Democratic staff analysis uses the more recent, higher estimate by the Congressional Joint Committee on Taxation.

The simulation using the Fair Model shows a somewhat smaller impact for the same policies than does the MA simulation. However, the relative strength of the Democratic alternative is still obvious. The stimulus to GDP is nearly twice as big and the growth in jobs and reduction in unemployment are much larger with the Democratic alternative than they are with the President's plan.

The final section of the table reports results from a comparison done by the private forecaster Economy.com. That comparison is based on the Bush plan and the plan introduced by Senate Minority Leader Daschle (which is very similar to the Democratic alternative in the JEC simulations). Because Economy.com does not present its results on precisely the same basis as the others, the table compares the average level of the key economic variables in calendar year 2004 to their level in 2002 (this produces results that are crudely comparable with the results in the first three panels). The Economy.com simulations show that the Democratic alternative provides substantially more

Table 2
First year impact of Bush and Democratic Alternative

A. JEC Democratic Staff simulation using MA n	nodel	
	Bush	Democratic alternative
Impact of policy on:		
Real GDP in 2003:Q4 (percent)	1.3	1.6
Employment	600,000	1,122,000
Unemployment rate (percentage points)	-0.4	4 -0.7
B. Council of Economic Advisers (February 200	3)	
Impact of policy on:		
Real GDP in 2003:Q4 (percent)	1.0	n.a.
Employment	510,000	n.a.
Unemployment rate (percentage points)	-0.3	n.a.
C. JEC Democratic Staff simulation using Fair m	nodel	
Impact of policy on:		
Real GDP in 2003:Q4 (percent)	0.0	5 1.1
Employment	269,000	756,000
Unemployment rate (percentage points)	-0.2	-0.5
D. Economy.com		
Impact of policy on:		
Real GDP growth, 2002-04 (percent)	0.9	1.6
Employment	640,000	1,150,000

Note: n.a. = not applicable

Sources: JEC Democratic Staff simulations of the MA and FAIR models.

Unemployment rate (percentage points)

Council of Economic Advisers, "Strengthening America's Economy: The President's Jobs and Growth Proposals," (February 4, 2003)

-0.2

and Economy.com, "The Economic Impact of the Bush and Congressional Democratic Economic Stimulus Plans," (February 2003).

stimulus when it matters most than does the President's plan.

Intermediate-Term Crowding Out

While it is technically possible to run the simulations out over several years, the results

become more unreliable and difficult to interpret over time, as discussed earlier. For example, the CEA analysis of the President's plan concludes that by 2007, real GDP is about a percentage point higher than it is in the baseline. If that gain reflected the kinds of supply side effects the program is touted

-0.5

to produce, it would be an impressive outcome. But it almost surely does not.

The CEA does not provide information on sustainable increases in the labor force or the stock of productive plant and equipment compared with the baseline, but it is very unlikely that those effects are large. Rather the putative increase in output comes from continuing to stimulate demand even though the economy is at full employment. In the real world, the Fed would be very unlikely to allow such excess demand stimulus to go unchecked. Instead it would tighten monetary policy and raise interest rates. Under such circumstances the unemployment rate in 2007 would be about the same as in the baseline, but interest rates would be higher and the composition of GDP would be different. In particular, we would expect that consumption would be higher as a share of GDP and the trade deficit would be bigger (because higher interest rates tend to strengthen the dollar, which makes imports cheaper and makes our exports more expensive to foreign buyers). The impact on investment would depend on whether any encouraging effects from the tax cuts were enough to offset the discouraging effects from higher interest rates.

The JEC Democratic staff found it difficult to produce results that are easy to interpret for the years beyond 2003 in either the MA or the Fair Model. Typically, stimulus pushes the economy beyond full employment in 2004 and 2005 before restrictive Fed policy pulls it back below full employment in the next few years, setting off an oscillation around full employment. The CEA does not report year-by-year results beyond 2004, but the preliminary analysis of the Bush plan by Macroeconomic Advisers shows such a cyclical pattern, with the level of GDP eventually falling below the baseline level.

Economy.com does not report year-by-year results, but it does report ten-year average growth rates relative to baseline. The Economy.com simulation of the Democratic alternative is consistent with Figure 1: the gap between actual and potential output is closed more quickly than in the baseline, but once full employment is restored output is about the same as it would be in the baseline. The Bush policy, in contrast, has less initial stimulus and *ends up with GDP below baseline in 2013*, which is consistent with the crowding-out discussion in this section and the reduction in the potential growth path in Figure 1 associated with larger budget deficits.

National Saving and National Income in the Long Term

It takes time for either supply-side incentive effects or reduced national saving to have a noticeable impact on the labor supply, the capital stock, and the level of GDP, and these effects are typically modest. For example, in its own simulation of the President's plan, Macroeconomic Advisers finds that real GDP in 2017 is about 0.3 percentage point lower than it is in the baseline, because the national saving and crowding out effects on capital formation are larger than the tax cut's direct incentive effects. Because the Democratic alternative has little impact on the budget beyond the first year, it is essentially neutral with respect to both national saving and direct supply side effects.

For the reasons discussed earlier, the long-run macroeconomic effects estimated from a macroeconomic forecasting model are less interesting and useful than the short-run effects estimated from such models. Growth models of greater or lesser sophistication are probably more useful for estimating the long-term effects. This section discusses estimates based on a very simple "Solow growth model," named for the Nobel laureate economist Robert Solow. The analysis is similar in spirit to the discussion of how deficits affect interest rates by crowding out capital formation contained in the 2003 *Economic Report*

Long-Term Effects of Debt Financing

The 2003 Economic Report of the President has a brief section on calculating the effect of government debt on interest rates. That same framework can be used to evaluate the effect of debt on the capital stock and output. The CEA observes that a dollar of additional government debt crowds out about 60 cents of capital investment and attracts about 40 cents of capital inflows from abroad. Arguably, with the U.S. trade imbalance as large as it is and the rest of the world already holding a very large stock of dollar-denominated assets, such flows might not be sustainable. If there were more direct crowding out of investment, the interest rate effects of debt would be larger than those reported by the CEA. But from the standpoint of U.S. national income, what matters most is not how large the capital stock is but how much of it is U.S.-owned. (U.S. workers may be a little better off with a larger capital stock, irrespective of who owns that capital, because more capital per worker translates into higher real wages.)

Based on Congressional Budget Office estimates of the rates of growth of the capital stock, the labor force, and technical progress, the Democratic staff of the JEC estimated what the baseline capital stock and potential output would be in 2013. We then estimated the impact of the budget deficits associated with the Bush "Jobs an Growth Initiative" on both GDP and national income (the income earned by U.S. workers and owners of capital). Based on the CEA's figures, the increased debt needed to finance those budget deficits translates into a capital stock that is \$600 billion smaller than in the baseline and additional foreign capital inflows of \$400 billion. The smaller capital stock translates into 0.34 percent less GDP in 2013. In addition, an amount of income equal to about 0.23 percent of baseline GDP would go to paying for the money borrowed from abroad to finance the budget deficits. Together, these two effects translate into a reduction in national income of roughly 0.6 percent.

Some analysts believe that the higher interest rates associated with more debt might encourage some offsetting increase in private saving, which could partially offset some of the crowding out effects discussed here. But such effects would probably not reduce the loss by much more than 0.2 percent of GDP in 2013.

of the President, prepared by President Bush's Council of Economic Advisers.

This framework abstracts from business cycle fluctuations in the economy and focuses on potential output, which is determined by the size of the capital stock (factories and machines), the size of the labor force, and the pace of technological progress (which measures the extent to which, over time, the economy can produce more and better products for any given amount of labor and capital). Tax cuts can act directly on labor supply decisions, capital investment decisions, and possibly decisions affecting technological progress by creating positive (or sometimes negative) incentives. When these supply-side incentive effects are positive, they raise potential output and future incomes—though much

of the evidence suggests that the magnitude of these effects is modest. Moreover, even those modest effects will only be realized fully if the tax cuts are financed in a way that does not harm potential output and future incomes.

For economists, the best-case scenario for realizing the efficiency-enhancing effects of tax cuts is to replace a less efficient revenue source with a more efficient revenue source, leaving total revenue unchanged (though other considerations, such as fairness and administrative simplicity must also be factored in). Cutting valuable programs to pay for a tax cut or financing the tax cut with debt are less desirable and may, on balance, outweigh the supply-side benefits.

The apparent disregard for the harmful effects of budget deficits apparent in the President's 2004 Budget suggests that there is no intention to make the "Jobs and Growth Initiative" revenue-neutral. (Indeed, with the other tax cuts and spending decisions in the President's budget, the CBO estimates that the budget would be in deficit every year through at least 2013.) In that case, once interest costs are taken into account, the program would add about \$1 trillion to the public debt by 2013. That is \$1 trillion not available for capital investment that would raise potential output and national income in 2013. Calculations described in the box suggest that this increase in debt could lower national income in 2013 by roughly 0.4 to 0.6 percent. Any offsetting supply-side effects are very unlikely to be larger than this and are most likely to be significantly smaller.

Conclusion

This study has compared the macroeconomic effects of the President's "Jobs and Growth Initiative" with a Democratic alternative modeled after proposals offered by Democratic leaders Pelosi and Daschle in the House and Senate, respectively. The study has emphasized the first-year impact on jobs and growth, because the main problem in the economy is economic slack—too much unemployment and excess capacity and too little growth to restore full employment. Because it is larger and better focused in the first year, the Democratic alternative delivers roughly twice the job-creating stimulus of the President's plan at a time when such stimulus is most needed.

The Democratic plan is designed to provide short-term stimulus, and therefore shuts off after this year. In contrast, the President's plan provides most of its stimulus later, when it is less likely to be needed and more likely to be counterproductive. Stimulus that is applied when the economy is already at full employment would generate inflation if it were not offset by a contractionary monetary policy. But such a clash of monetary and fiscal policy produces higher interest rates, lower investment, and more borrowing from abroad.

In the long run debt-financed tax cuts lead to a crowding out of private investment and increased foreign borrowing that reduces national income below what it otherwise would be. Those effects are not trivial but they are relatively modest (a loss equal to roughly 0.5 percent of GDP in 2013 according to the calculations in this study). However, any likely positive supply-side incentive effects are probably smaller still. The Democratic plan has a much smaller impact on debt and hence is largely neutral with respect to long-term growth.

Endnotes

¹Council of Economic Advisers, "Strengthening America's Economy: The President's Jobs and Growth Proposals," (February 4, 2003); and Macroeconomic Advisers, LLC, "A Preliminary Analysis of the President's Jobs and Growth Proposals," Special Analysis, (January 10, 2003).

²Economy.com, "The Economic Impact of the Bush and Congressional Democratic Economic Stimulus Plans," (February 2003).