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Fiscal Forecasting: A Perilous Task

Reasonable Tax Policy Suffers from Over-Dependence on Long-Range Revenue Estimates

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Introduction

The Congressional Budget Office (CBO) recently released its updated projection of the current fiscal year's federal budget surplus/deficit. As widely anticipated and in sharp contrast to its estimates of a year ago, CBO has now projected a current year deficit of \$21 billion and a fiscal year 2003 deficit of \$14 billion. This change in fiscal position has been called by some "the most dramatic fiscal deterioration in our nation's history."

The fact of the matter is that, while drastic, such swings in fiscal projections are par for the course. Fiscal forecasting is fraught

percent of this variance was due to legislative changes. The rest was the result of changing technical and economic assumptions (see Figure 1).

Despite these known difficulties with fiscal forecasting, lawmakers have come to base major legislation on them. Last year's tax relief measure, the Economic Growth and Tax Relief Reconciliation Act of 2001 or EGTRRA, is a case in point.

Generally, tax relief was a welcome legislative initiative that has allowed millions of taxpayers to keep more of their hard-earned money and, most likely, has prevented a more serious recession than we are currently experiencing. But the details of EGTRRA are exceedingly complex, not for any specific policy reason but because of lawmakers' reliance on fiscal forecasts and artificial budget windows. There are 108 occurrences of phase-ins, phase-outs, changes in rates, scale-ups, scale-downs, and other such unnecessary complexities within the legislation. Most amazingly, because of the unnecessary but increasing reliance on fiscal forecasts, the entire bill sunsets after 2010. This marks the first time in history that major tax legislation was passed on a temporary basis.

Reliance on fiscal forecasts also gives rise to dubious economic theories such as the conventional wisdom that a high level of federal debt (caused either by annual budget deficits or a lack of annual surpluses used to pay down outstanding debt) results in high long term interest rates. There is no conclusive evidence that this is true. In fact, the basic data point to a negative correlation between publicly held federal debt and inter-

Abominably complex tax legislation is almost guaranteed when the driving force behind its implementation is a ten-year budget window over which deficits and surpluses are projected.

with difficulties not the least of which is predicting the economic outlook of the country ten years into the future. Margins of error of 50 percent or greater and swings in deficit/surplus projections of hundreds of billions of dollars are typical. Just over the past five years re-estimates by CBO of last year's surplus swung by \$448 billion dollars and ranged between a projected deficit of \$167 billion and a surplus of \$281 billion. Only about 20

est rates. In other words, a prudent level of publicly held federal debt may actually help keep long-term interest rates lower than otherwise would be the case.

hitting specific targets and staying within fiscal forecasts. As we shall see in this paper, these targets and forecasts are hardly ever reliable and could never be the basis for sound policy.

Between 1997 and 2001, estimates of the FY2001 fiscal picture varied from a deficit of \$167 billion to a surplus of \$281 billion, a swing of \$448 billion. The actual budget surplus ended up at \$127.2 billion, making the average error 110 percent.

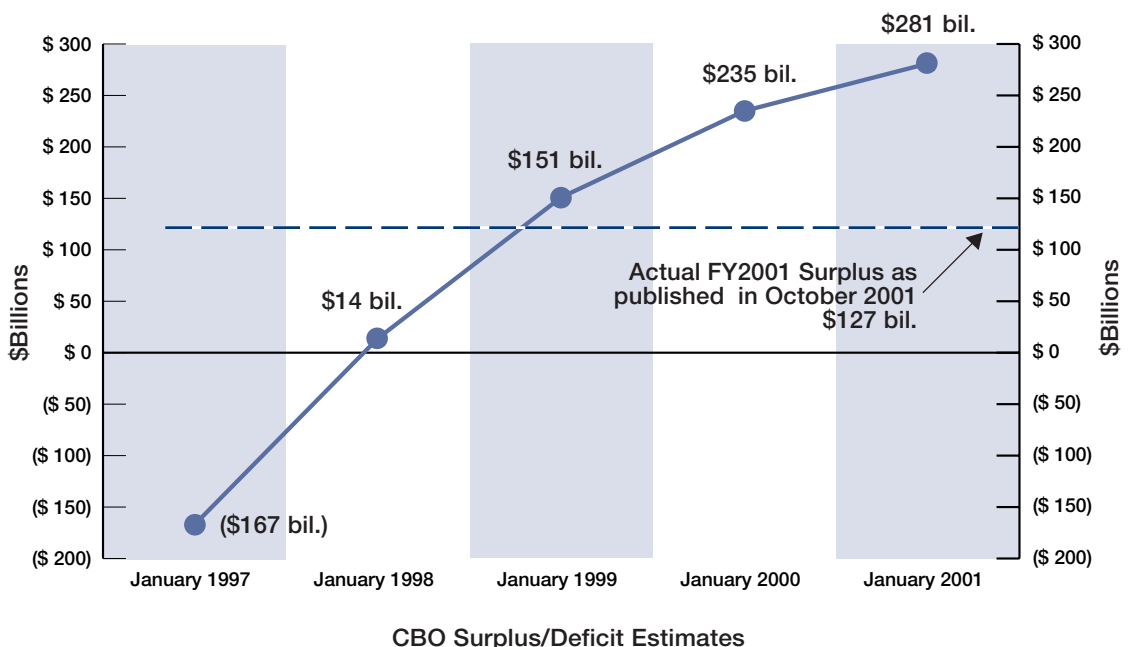
Background

The projected fiscal position of the federal government has changed significantly over the past year. As recently as May 2001, CBO and the Office of Management and Budget (OMB) were predicting annual surpluses through at least 2011. In its May *Budget and Economic Outlook*, CBO forecast a total of \$5.6 trillion in accumulated budget surpluses over the next ten years, fiscal years 2002 through 2011. OMB published the same estimate in the President's budget on April 9, 2001.

Most fundamentally, reliance on fiscal forecasting means that lawmakers are distracted from sound, time-honored, principles of sound fiscal policy. Principles that date back to at least the writings of Adam Smith including simplicity, stability, and neutrality are thrown out the window in the name of

More recent estimates from CBO and the OMB paint a much different picture. The August *Budget and Economic Outlook Update* from CBO forecasted accumulated surpluses over the next ten years of \$3.4 trillion, 40 percent less than expected in May. An unofficial update from the House and Senate Budget Committees dated October 4, 2001 re-estimated CBO's expected surpluses for

*Figure 1
CBO Estimates of the Fiscal Year 2001 Surplus/Deficit
1997-2001
(\$Billions)*



Source: Congressional Budget Office.

changes in policy and economic conditions to a total of only \$2.6 trillion over the same ten year period, or 54 percent less than the May estimate. Now CBO is projecting a total of only \$1.6 trillion in total surpluses over the 2002–2011 period, a 71 percent decline from the May estimate.

The October update from the budget committees contained “pessimistic” and “optimistic” alternatives of the fiscal outlook based on a 50-percent confidence interval of the baseline projections (see Figure 2). The pessimistic alternative forecast a mere \$270 billion in accumulated surpluses over the period FY2002–FY2011, and a mere \$15 billion in accumulated surpluses over the next five years. If the pessimistic alternative forecast by the budget committees were to come to pass and the Congress were to pass a stimulus bill similar to that passed by the House of Representatives (H.R. 3090), then the federal government could actually be in deficit from FY2002 through FY2004, with an accumulated deficit of \$180.4 billion over the next five years and aggregate surpluses of only \$111 billion over the period FY2002–FY2011. A similar fiscal scenario was alluded to by OMB Director Mitch Daniels in a

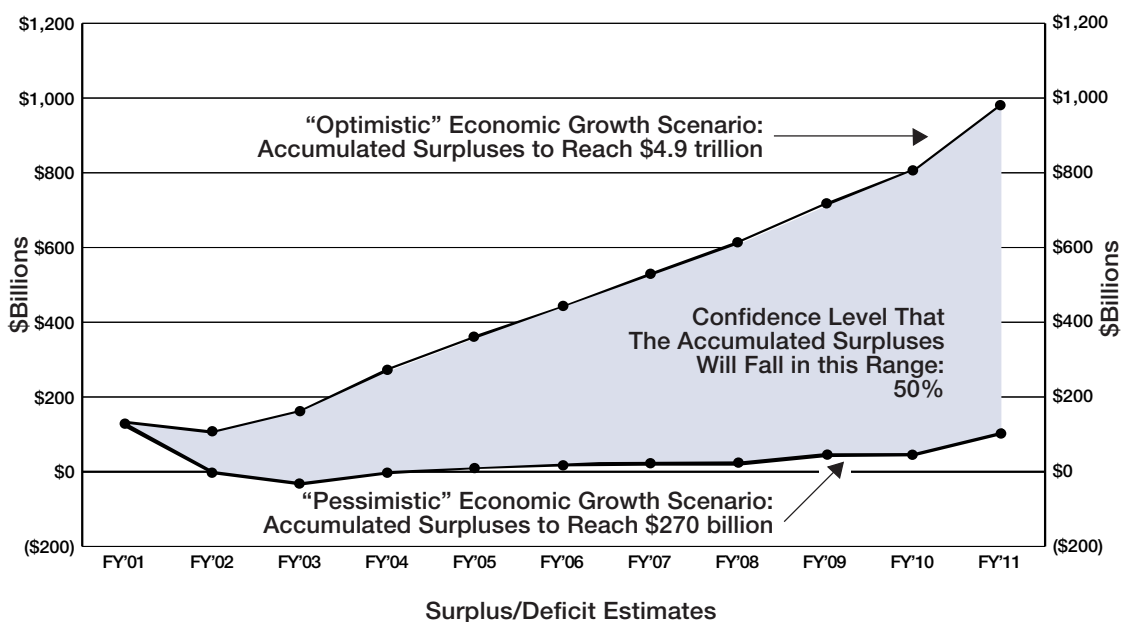
speech on November 28, 2001, “... it is regrettably my conclusion that we are unlikely to return to balance in the federal accounts before possibly fiscal '05.”

General Difficulties in Fiscal Forecasting

The task of fiscal forecasters is as daunting as that of Sisyphus, the mythological character cursed by Zeus to continually roll a large stone uphill, only to have it roll down again. Fiscal forecasting is necessary given current budget rules and lawmaking procedures, but it is a task fated to result in massive errors.

For example, CBO has reported an estimated or projected federal deficit/surplus for fiscal year 2001 as part of its regular *Budget and Economic Outlook* since 1997. Over this period, estimates and projections of the FY2001 fiscal picture varied from a deficit of \$167 billion (reported in January 1997) to a surplus of \$281 billion (reported in January 2001). These estimates represent a swing of some \$448 billion over the course of five estimates. The actual budget surplus, as reported by the Office of Management and

Figure 2
House and Senate Budget Committee Estimates of Future Surplus/Deficit
Fiscal Years 2001–2011
(\$Billions)



Source: Budget Committees of the U.S. House of Representatives and U.S. Senate.

Budget on October 29, 2001, was \$127.2 billion. Therefore, the average error in CBO's estimates between January 1997 and January 2001 was 110 percent (see Figure 1).

Changing Economic Factors

There are three major components to revised estimates of federal deficits/surpluses: changes in economic conditions, policy

Between 1997 and 2001, technical corrections accounted for 41.6 percent of the revisions made to the FY2001 deficit/surplus estimates made by CBO, often due to unintended, yet legal, consequences of new federal programs.

changes, and technical corrections. Changes in economic conditions include changes in gross domestic product, inflation, unemployment, and interest rates. These economic factors affect all areas of spending and collection estimates but are most pronounced on tax collections and mandatory spending programs. For example, a slight change in the expected rate of inflation affects medical costs and therefore Medicare outlays. Changes in inflation expectations also affect cost of living adjustments (COLAs) and there-

fore federal government employee pay, Social Security payments, and outlays through several other entitlement programs.

Between 1997 and 2001, changes in economic conditions accounted for 38.1 percent of the revisions made to the FY2001 deficit/surplus estimates made by CBO (see Figure 3).

Changing Tax and Spending Levels

Changes in policy obviously affect fiscal forecasts. A change in tax policy, either a tax increase or a tax decrease, will directly affect tax collections. Changes in annual appropriations from baseline estimates will also have an effect. Finally, even small changes in mandatory federal programs can have a large impact on the overall fiscal outlook of the federal government. For example, CBO estimates that instituting a \$10 copayment for home health care visits covered under Medicare would result in savings of \$35 billion over the period 2002-2011 compared to the outlays expected under current law.

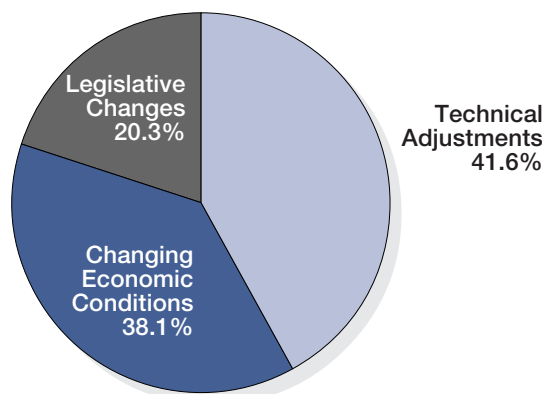
Between 1997 and 2001, changes in policy accounted for 20.3 percent of the revisions made to the FY2001 deficit/surplus estimates made by CBO.

Changing Technical Corrections

Finally, CBO makes technical corrections several times per year to its estimates and projections of federal deficits and surpluses. Technical corrections include many one-time adjustments such as re-estimates of revenue raised through electromagnetic spectrum auctions conducted by the Federal Communications Commission. However, technical corrections, as defined by the CBO, also include such important adjustments as re-estimated tax collections not accounted for by changes in economic conditions and changes in the number of entitlement beneficiaries not due to policy changes. CBO also includes changes in interest payments and debt service costs associated with technical corrections in this category.

Another interesting category of technical correction made by CBO is adjustments made for "increased use by states of certain financing mechanisms that generate additional federal payments."¹ Such adjustments are becoming increasingly important as more and more federal programs depend upon grants-in-aid to the states. This technical correction also hints at a larger issue, specifically, changes in fiscal forecasts due to unintended, yet legal, consequences of new federal programs. As the magnitude of these adjustments makes clear, predicting the total effect of any new

*Figure 3
Causes of Total Adjustments to the Estimates of the Fiscal Year 2001 Surplus/Deficit
January 1997 - August 2001*



Source: Tax Foundation.

Table 1
Federal Finance Data
1940-2001
(\$Millions)

Fiscal Year	Nominal GDP	10-Year Treasury Constant Maturity Rate	10-Year Treasury Maturity Rate (Inflation Adjusted)*	Receipts	Outlays	Deficit (-) or Surplus	Gross Debt	Debt Held by the Public
1940	\$ 101,300	n.a.	n.a.	\$ 6,548	\$ 9,468	\$ (2,920)	\$ 50,696	\$ 42,772
1941	126,700	n.a.	n.a.	8,712	13,653	(4,941)	57,531	48,223
1942	161,800	n.a.	n.a.	14,634	35,137	(20,503)	79,200	67,753
1943	198,400	n.a.	n.a.	24,001	78,555	(54,554)	142,648	127,766
1944	219,700	n.a.	n.a.	43,747	91,304	(47,557)	204,079	184,796
1945	\$ 223,000	n.a.	n.a.	\$ 45,159	\$ 92,712	\$ (47,553)	\$ 260,123	\$ 235,182
1946	222,300	n.a.	n.a.	39,296	55,232	(15,936)	270,991	241,861
1947	244,400	n.a.	n.a.	38,514	34,496	4,018	257,149	224,339
1948	269,600	n.a.	n.a.	41,560	29,764	11,796	252,031	216,270
1949	267,700	n.a.	n.a.	39,415	38,835	580	252,610	214,322
1950	\$ 294,300	n.a.	n.a.	\$ 39,443	\$ 42,562	\$ (3,119)	\$ 256,853	\$ 219,023
1951	339,500	n.a.	n.a.	51,616	45,514	6,102	255,288	214,326
1952	358,600	n.a.	n.a.	66,167	67,686	(1,519)	259,097	214,758
1953	373,400	3.0%	2.1%	69,608	76,101	(6,493)	265,963	218,383
1954	378,000	2.4	1.6	69,701	70,855	(1,154)	270,812	224,499
1955	\$ 395,200	2.7%	0.8%	\$ 65,451	\$ 68,444	\$ (2,993)	\$ 274,366	\$ 226,616
1956	427,700	3.0	(0.8)	74,587	70,640	3,947	272,693	222,156
1957	450,700	3.6	0.5	79,990	76,578	3,412	272,252	219,320
1958	461,100	3.3	1.1	79,636	82,405	(2,769)	279,666	226,336
1959	492,100	4.1	3.3	79,249	92,098	(12,849)	287,465	234,701
1960	\$ 518,900	4.3%	2.7%	\$ 92,492	\$ 92,191	\$ 301	\$ 290,525	\$ 236,840
1961	531,800	3.9	2.8	94,388	97,723	(3,335)	292,648	238,357
1962	568,500	4.0	2.6	99,676	106,821	(7,146)	302,928	248,010
1963	599,700	3.9	3.0	106,560	111,316	(4,756)	310,324	253,978
1964	641,300	4.2	2.5	112,613	118,528	(5,915)	316,059	256,849
1965	\$ 687,900	4.2%	2.3%	\$ 116,817	\$ 118,228	\$ (1,411)	\$ 322,318	\$ 260,778
1966	754,200	4.8	1.6	130,835	134,532	(3,698)	328,498	263,714
1967	813,500	4.9	1.9	148,822	157,464	(8,643)	340,445	266,626
1968	868,400	5.6	1.3	152,973	178,134	(25,161)	368,685	289,545
1969	949,200	6.3	1.0	186,882	183,640	3,242	365,769	278,108
1970	\$ 1,013,200	7.5%	2.5%	\$ 192,807	\$ 195,649	\$ (2,842)	\$ 380,921	\$ 283,198
1971	1,081,400	6.4	1.2	187,139	210,172	(23,033)	408,176	303,037
1972	1,181,500	6.1	2.1	207,309	230,681	(23,373)	435,936	322,377
1973	1,308,100	6.7	0.7	230,799	245,707	(14,908)	466,291	340,910
1974	1,442,100	7.3	(2.2)	263,224	269,359	(6,135)	483,893	343,699
1975	\$ 1,559,800	7.9%	(0.8%)	\$ 279,090	\$ 332,332	\$ (53,242)	\$ 541,925	\$ 394,700
1976	1,736,700	7.8	2.4	298,060	371,792	(73,732)	628,970	477,404
1977	1,971,300	7.3	0.9	355,559	409,218	(53,659)	706,398	549,104
1978	2,218,600	8.1	0.7	399,561	458,746	(59,186)	776,602	607,126
1979	2,503,800	9.0	0.4	463,302	504,032	(40,729)	829,471	640,310
1980	\$ 2,732,100	11.0%	1.9%	\$ 517,112	\$ 590,947	\$ (73,835)	\$ 909,050	\$ 711,932
1981	3,061,600	13.5	4.2	599,272	678,249	(78,976)	994,845	789,427
1982	3,228,600	13.9	7.8	617,766	745,755	(127,989)	1,137,345	924,605
1983	3,440,500	10.9	7.2	600,562	808,385	(207,822)	1,371,710	1,137,318
1984	3,839,400	12.4	8.7	666,486	851,874	(185,388)	1,564,657	1,307,046
1985	\$ 4,136,600	11.1%	8.2%	\$ 734,088	\$ 946,423	\$ (212,334)	\$ 1,817,521	\$ 1,507,357
1986	4,401,400	8.3	6.1	769,215	990,460	(221,245)	2,120,629	1,740,750
1987	4,647,000	7.9	4.8	854,353	1,004,122	(149,769)	2,346,125	1,889,922
1988	5,014,700	8.9	5.2	909,303	1,064,489	(155,187)	2,601,307	2,051,819
1989	5,405,500	8.8	5.2	991,190	1,143,671	(152,481)	2,868,039	2,190,956
1990	\$ 5,735,600	8.4%	4.4%	\$ 1,031,969	\$ 1,253,198	\$ (221,229)	\$ 3,206,564	\$ 2,411,831
1991	5,930,400	8.1	4.7	1,055,041	1,324,403	(269,361)	3,598,485	2,689,306
1992	6,218,600	7.2	5.0	1,091,279	1,381,684	(290,404)	4,002,123	3,000,073
1993	6,558,400	6.2	3.7	1,154,401	1,409,512	(255,110)	4,351,403	3,248,755
1994	6,944,600	6.5	4.4	1,258,627	1,461,902	(203,275)	4,643,691	3,433,449
1995	\$ 7,324,000	7.1%	5.0%	\$ 1,351,830	\$ 1,515,837	\$ (164,007)	\$ 4,921,005	\$ 3,604,797
1996	7,694,600	6.3	4.4	1,453,062	1,560,572	(107,510)	5,181,921	3,734,529
1997	8,185,200	6.5	4.6	1,579,292	1,601,282	(21,990)	5,369,694	3,772,832
1998	8,673,500	5.6	4.3	1,721,798	1,652,619	69,179	5,478,711	3,721,621
1999	9,130,400	5.3	3.9	1,827,454	1,702,875	124,579	5,606,087	3,632,927
2000	\$ 9,824,400	6.2%	3.8%	\$ 2,025,218	\$ 1,788,826	\$ 236,392	\$ 5,629,016	\$ 3,410,120
2001	10,312,700 (e)	5.2	2.9	1,990,000	1,863,039	126,961	5,807,463	3,339,310

*adjusted by implicit GDP deflator (1996 = 100)

Sources: Office of Management and Budget; St. Louis Federal Reserve Bank; Tax Foundation calculations.

policy is very difficult to do.

Between 1997 and 2001, technical corrections accounted for 41.6 percent of the revisions made to the FY2001 deficit/surplus estimates made by CBO.²

While these three variables in any estimate—economic conditions, changes in policy, and technical corrections—may seem clearly delineated, they are interdependent.

While these three variables may seem clearly delineated, economic conditions, changes in policy, and technical corrections are interdependent. Often, policy changes have an effect on the economic conditions of the country and therefore, indirectly on tax collections and outlays. Variations in any one of

The bottom line is that the future is always uncertain, and there are so many unknowns in fiscal forecasting that commentators can essentially conclude whatever they want by changing the assumptions on which they base their projections.

them has an effect on debt service costs and interest payments. Some of these secondary, or feedback, effects are captured by the CBO in their estimates, but many are not and take time to be reflected in the overall economic and programmatic assumptions that underlie the Office's estimates and projections.

Facts of the Currently Dwindling Surplus

Mitch Daniels, Director of the Office of Management and Budget, said in his August 22, 2001 mid-session review, "Despite a nearly stagnant economy, the government's finances are remarkably sound. ... Even while weathering the [economic] slowdown and taking action on tax relief, we continue to

take in huge surplus revenues, and to use the extra receipts to steadily reduce the nation's outstanding debt." Three months later, in comments at the National Press Club, Daniels darkened his overall economic and fiscal outlook but remained steadfast that, "... the last thing anybody should be suggesting or should want in a time of recession is to strip away the long-term growth-inducing policies of that tax cut."

At the same time, a number of analysts and lawmakers have attributed the very same decline in estimated future surpluses to passage of H.R. 1836, the Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA). The Democratic Caucus of the House Budget Committee published one such report on November 29, 2001. The report states, "The President's enacted tax cut remains by far the largest single contributor to the deterioration of the budget outlook over the next ten years. Not including the stimulus bill or other pending tax initiatives, the tax cut contributed more than half—54.7 percent—to the depletion of the surplus over the ten years 2002–2011." More recently, Senate Majority Leader Tom Daschle stated, "But September 11 and the war aren't the only reasons the surplus is nearly gone. They're not even the biggest reasons. The biggest reason is the tax cut."

As evidenced by such comments, the various factors that make fiscal forecasting difficult and the large margins of error associated with ten-year forecast windows leave the door open to widely divergent interpretations of changes in budgetary projections. The bottom line is that the future is always uncertain, and there are so many unknowns in fiscal forecasting that commentators can essentially conclude whatever they want by changing the assumptions on which they base their projections.

Optimistic and Pessimistic Forecasts

It is possible to see just how widely outlooks can vary depending on the assumptions used by taking a closer look at the Democratic Caucus's statement that 54.7 percent of the dwindling surplus was due to the passage of EGTRRA. Specifically, the Caucus's report is based on an October 4, 2001 "updated CBO baseline" forecast by the House and Senate Budget Committees. This report actually contains three different forecasts of future surpluses, a medium-growth "baseline" outlook, an optimistic outlook and a pessimistic outlook.

The baseline outlook, the one used by

the Democratic Caucus, results in aggregate surpluses of \$2.6 trillion over the period 2002–2011, or \$3 billion less than was projected by CBO in May 2001. The pessimistic forecast, which assumes economic growth will be lower than expected and technical changes will lead to lower than expected surpluses, resulted in aggregate surpluses over the period of just \$270 billion, or \$5.3 trillion less than CBO's May estimate. The

There is really no way to tell with any degree of certainty what the budget deficit or surplus will be in future years.

optimistic forecast, in which the economy is forecast to grow more rapidly and surpluses are projected to be higher, produces aggregate surpluses of \$4.9 trillion, or only \$700 billion less than was expected in May. Therefore, it makes a big difference which assumption is followed when sizing the dwindling surpluses.

Estimating the Tax Cut

In gauging the impact of the recent tax cut on the surplus, changing assumptions also makes a big difference. If one follows the baseline outlook, as did the Democratic Caucus, then the tax cut accounts for over half of the reduced surplus estimate.³ But if one follows the pessimistic forecast, which anticipates lower economic growth, then the tax

All of these numbers are based on “static” forecasting. This means that official estimates do not account for the fact that a change in tax policy affects people’s decisions to invest, work, save, and consume, and therefore the level and distribution of tax payments.

cut accounts for only about a quarter of the total reduction in surpluses. At the other end of the spectrum, under the optimistic or high growth outlook, total tax relief is actually greater than expected drops in future sur-

pluses. Moreover, all three of these analyses use an estimate of the size of the tax cut derived in May 2001. That estimate would certainly be different were it derived today, given current economic conditions.

This additional analysis illustrates a number of interesting points. First, the magnitude of difference in these projections, a total variance of \$4.6 trillion, indicates the general uncertainty involved in fiscal forecasting. This uncertainty is underlined further by the report's own admission that “... there is a 50 percent chance that the outcomes will be better or worse than the outcomes included in the range.” In other words, based on previous experience, there is a 50 percent chance that actual surpluses over the next ten years will be more than \$4.9 trillion or less than \$270 billion (see Figure 2). To wit, there is really no way to tell with any degree of certainty what the budget deficit or surplus will be in future years.

Second, the vast differences in potential budget scenarios, the wide range of possible errors, and the political uses to which these discrepancies are put all highlight the trouble with using long-term budget windows to determine policy. Abominably complex tax legislation is almost guaranteed when the driving force behind its implementation is a ten-year budget window over which deficits and surpluses are projected.

Take for example EGTRRA. As signed by the President, that legislation contains 108 occurrences of phase-ins, phase-outs, changes in rates, scale-ups, scale-downs, phase-outs of existing phase ins, accelerations of existing phase outs, and sunsets. And, this figure does not even include the fact that the entire bill sunsets after 2010. All of these unnecessary complexities were incorporated for budget scoring reasons—not because they represent a desirable public policy. Congress and the President felt it necessary to hit specific fiscal forecasts that, as demonstrated above and since passage of the law, are more likely than not to change drastically.

It is also important to remember that all of these numbers are based on what is known as static forecasting. This means that changes in tax collections due to the macroeconomic effects of tax cuts and changes in policy are not considered. Clearly, a change in tax policy affects people's decisions to invest, work, save, and consume. These changes in behavior have real, macroeconomic impacts that, in turn, affect the level and distribution of tax payments. Such macroeconomic feedback effects on tax collections

are often significant, with some economists putting changes in revenue estimates due to behavioral responses as high as 61 percent.⁴

The typical argument that deficits or smaller surpluses will lead to increased interest rates is tentative at best.

However, these macroeconomic effects are currently not accounted for in CBO projections, Joint Committee on Taxation revenue estimates, or Administration calculations.

The Tenuous Correlation Between Debt and Interest Rates

Underlying all of the political discussion about the need for fiscal austerity is an assumption that federal deficits (or, as the case

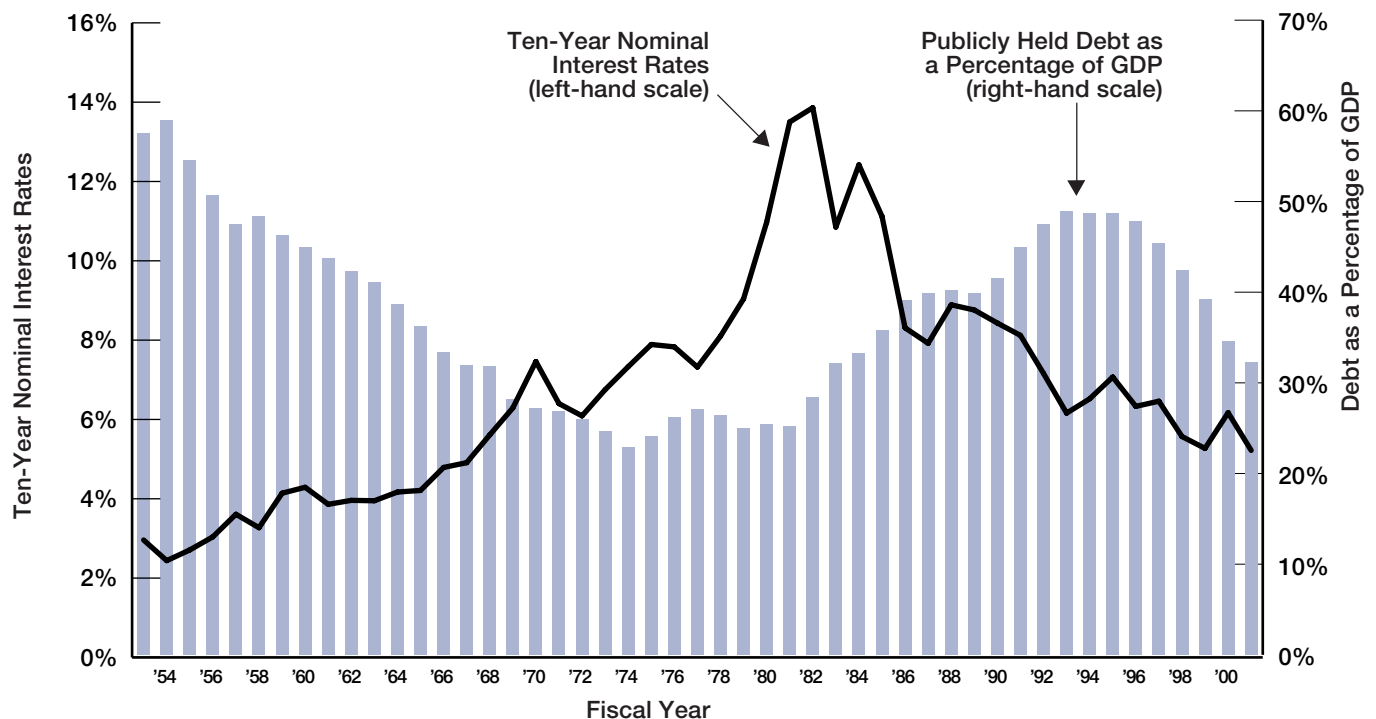
may be, shrinking surpluses) are bad and must be avoided at all costs. This is only true from an economic standpoint if such outcomes represent:

- ◆ A lack of spending restraint on the part of lawmakers.
- ◆ An indication of serious, structural problems in government programs, primarily entitlement or mandatory programs such as Social Security and Medicare.
- ◆ A forfeited opportunity to correct such structural problems.

However, many of the typical reasons put forward for maintaining surpluses or avoiding deficits are actually red herrings. For example, the typical argument that deficits or smaller surpluses will lead to increased interest rates is tentative, at best.

Figure 4 charts the 10-year Treasury Constant Maturity Rate and publicly held federal debt as a percentage of Gross Domestic Product (GDP) from 1953 through 2001. Over this period, the 10-year interest rate has ranged from a high of 13.9 percent in 1982 to a low

*Figure 4
Ten-Year Nominal Interest Rates and Publicly Held Debt as a Percentage of GDP
Fiscal Years 1953-2001*



Note: The underlying GDP figure for 2001 is an estimate
Sources: Office of Management and Budget; St. Louis Federal Reserve Bank; Tax Foundation calculations.

of 2.4 percent in 1954. On the other hand, debt as a percentage of GDP has ranged from a high of 59 percent in 1954 to a low of 23 percent in 1974. Overall there appears to be a negative correlation between 10-year interest rates and publicly held federal debt as a

In fact, a prudent level of publicly held federal debt may actually help keep long-term interest rates lower than otherwise would be the case.

percentage of GDP. Figure 5 demonstrates that no obvious relationship between interest rates and the level of publicly held debt emerges even when debt is compared to real interest rates instead of to nominal interest rates.

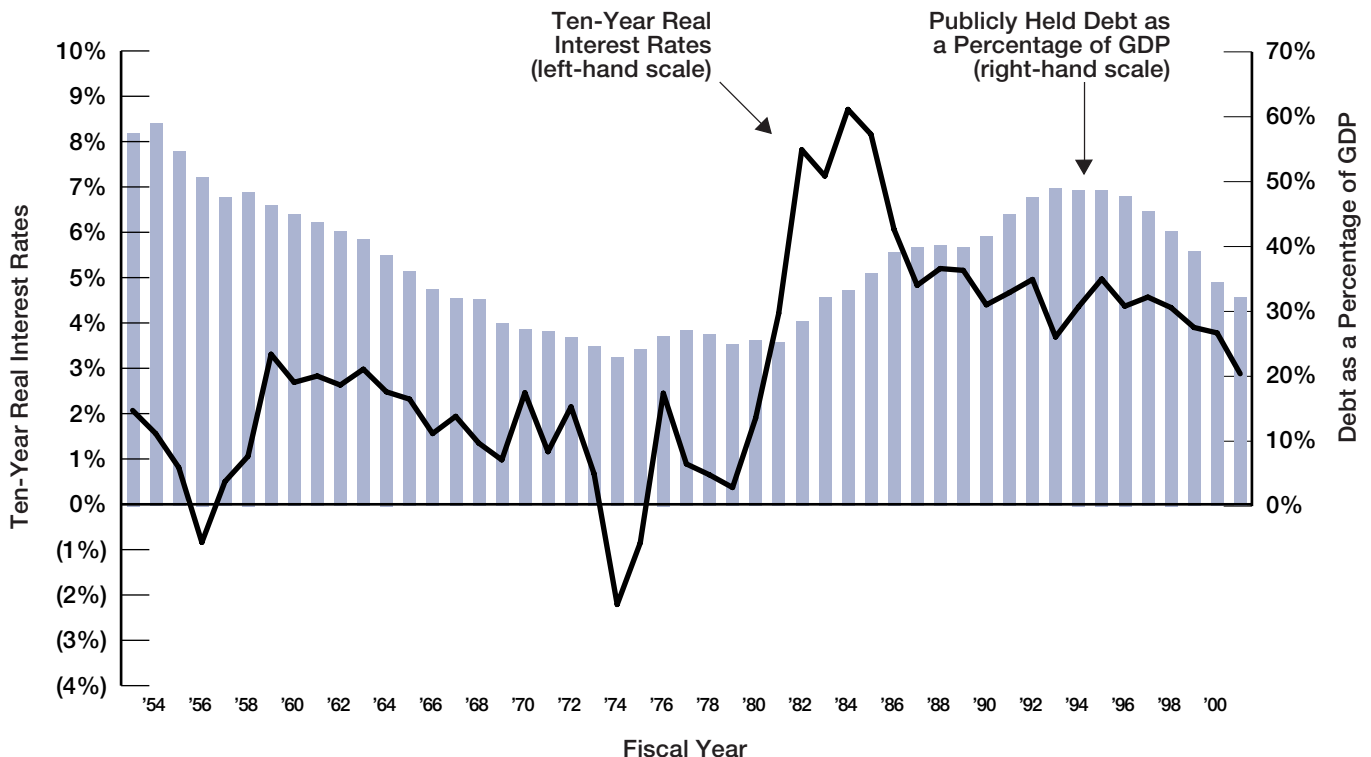
The argument for a positive correlation between government debt and interest rates

typically runs like this: increased federal debt crowds out private sector debt. In order to raise the capital necessary to carry out investments, private companies must offer higher rates of return on their debt in the presence of federally issued debt than in the absence of federally issued debt. These higher interest rates spill over into other areas of the capital markets including mortgage rates, credit card interest rates, and eventually even stock prices. In essence, the argument is that increased federal debt increases demand for scarce savings and therefore increases the price of savings.

There are several problems with this line of reasoning in the current context:

(1) The crowding-out theory is based on the premise that changes in federal debt have a significant impact on the overall level of total outstanding debt. But according to the Federal Reserve Board, total domestic, credit market debt outstanding as of September 31, 2001, was \$28.9 trillion. The total tax relief in 2001 and 2002 provided by EGTRRA is \$112

Figure 5
Ten-Year Real Interest Rates and Publicly Held Debt as a Percentage of GDP
Fiscal Years 1953-2001



Note: The underlying GDP figure for 2001 is an estimate

Sources: Office of Management and Budget; St. Louis Federal Reserve Bank; Tax Foundation calculations.

billion, or 0.4 percent of total outstanding domestic debt. Moreover, this does not account for the availability of trillions of dollars

While publicly held debt may not affect interest rates, intragovernmental debt almost certainly does. It is rising rapidly due to Social Security and Medicare, and the uncertainty over how elected officials may face up to this unfunded federal liability will definitely change market interest rates.

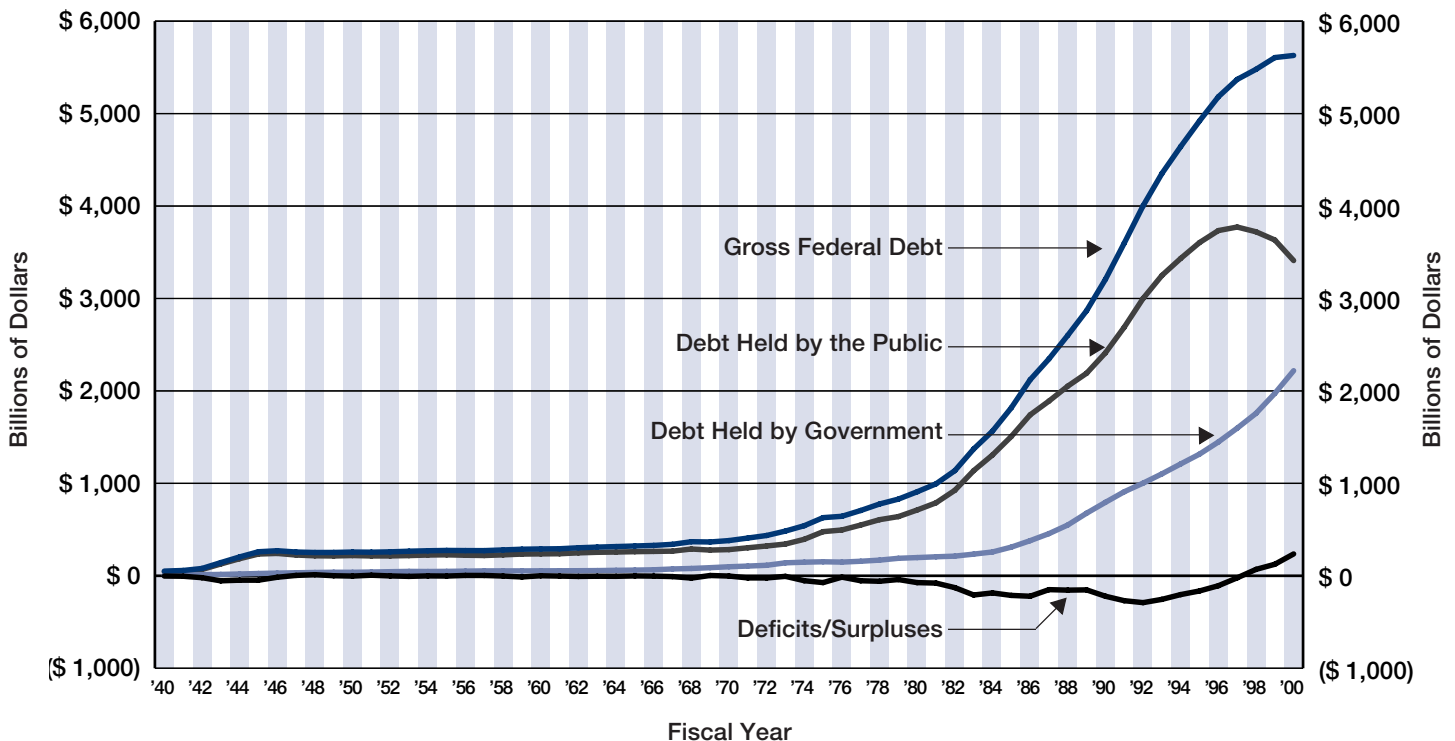
in internationally issued debt. By most any measure it is difficult to argue that such a relatively small change in supply will affect

prices, in this case interest rates.

(2) The crowding-out theory assumes that federally issued debt is a direct substitute for privately issued debt. But federal government debt is very different from other forms of debt in key aspects. Federal debt is considered by investors to be risk-free. Therefore, many investors use federal debt as a hedge against riskier forms of debt. In this case, federal and private debt are complements. Reducing the stock of federal debt may actually increase the price of private debt because investors will require a higher rate of return in the absence of the safe hedge provided by federal government debt.

(3) The crowding-out theory typically considers only publicly held debt, not gross debt. The U.S. Department of the Treasury reported on January 8, 2002 that intragovernmental debt totaled \$2.5 trillion. As Figure 6 makes clear, while publicly held debt has declined since 1997, intragovernmental debt continues to increase rapidly due primarily to the fiscal structure of several entitlement

Figure 6
Federal Debt Breakdown
Fiscal Years 1940-2000
(\$Billions)



Sources: Office of Management and Budget; U.S. Department of the Treasury.

programs, most notably Social Security and Medicare. Intragovernmental debt does not affect aggregate demand for debt and therefore is overlooked by the crowding-out theory. However, intragovernmental debt is important because a large portion of it represents an unfunded liability faced by the

Tax policy should be based upon sound principles of taxation rather than arbitrary budget windows, fiscal projections with 50 percent margins of error, and tenuous economic theories.

federal government. It is always uncertain how elected officials will face this unfunded liability. Possible courses of action include printing more money, increasing taxes, changing the nature of the liability through law, or issuing actual debt to cover the liability. The uncertainty of these options will certainly have an impact on market interest rates, and as the aggregate level of intragovernmental debt holdings increases, so too will uncertainty and its likely impact on market interest rates.

Conclusion

The CBO recently released its updated projection of the current fiscal year's federal budget surplus/deficit. Saddled with the task of predicting the unpredictable, CBO is now projecting a small deficit for fiscal year 2002,

The primary purpose of taxes is to raise revenue, not to micromanage the economy with subsidies and penalties.

contrasting sharply with its projection last January that the federal government would run a \$313 billion surplus.

Such a drastic change in the fiscal outlook is nothing new. As this paper has highlighted, fiscal forecasting is fraught with difficulties not the least of which is predicting the economic outlook of the country ten years into the future. Margins of error of 50 percent or greater and swings in deficit/sur-

plus projections of hundreds of billions of dollars are par for the course.

What then should be the basis for tax reform if not fiscal forecasts? The answer is tax policy should be based upon sound principles of taxation rather than arbitrary budget windows, fiscal projections with 50 percent margins of error, and tenuous economic theories. A principled approach has the added benefit of inherently avoiding unnecessary complexity in the tax code such as the 108 mid-course adjustments included in EGTRRA.

The Tax Foundation, which as a nonpartisan, nonprofit organization has monitored fiscal policy since 1937 has established six fundamental principles that should be the touchstones for all tax policy. These principles have their roots in standard economic theory dating back at least to Adam Smith and enjoy widespread support throughout the economic profession.

- ◆ *Well Informed Citizenry.* People must know who and what is being taxed and how tax legislation is enacted.
- ◆ *Simplicity.* Complexity makes accurate tax compliance needlessly expensive and punitive.
- ◆ *Stability.* Frequent change lessens citizen understanding of the tax code and complicates long-range financial planning.
- ◆ *No Retroactivity.* Taxpayers must have confidence in the law as it exists entering into a transaction.
- ◆ *Neutrality.* The primary purpose of taxes is to raise revenue, not to micromanage the economy with subsidies and penalties. The tax system should favor neither consumption nor saving and investment.
- ◆ *Promote Economic Growth.* The U.S. tax system should not impede the free flow of goods, services, and capital, domestically or internationally.

Notes

¹ *The Budget and Economic Outlook: An Update*, Congressional Budget Office, August 2001, p. 14.

² These estimates of the percentage of total adjustments attributable to legislative changes, economic changes, and technical changes are largely in line with a table published by CBO in January 2000. That table looked at CBO's January 1990, 1993, and 1997 baseline projections compared with actual deficits or surpluses. The table reported that 30 percent of the total absolute difference between the projections made in 1990 and actual deficits in 1990 through 1995 was attributable to legislative changes,

26 percent to economic changes, and 44 percent to technical corrections. Thirty seven percent of the total absolute difference between the projections made in 1993 and actual deficits in 1993 through 1998 was attributable to legislative changes, 23 percent to

just as well be used for spending programs or other tax initiatives, in which case additional debt service savings would not be realized.

⁴ Martin Feldstein, "How Big Should Government Be?," *National Tax Journal*, Volume 50, No. 2, June 1997, pp. 197-213. See also,

The details of EGTRRA are exceedingly complex, not for any specific policy reason but because of lawmakers' reliance on fiscal forecasts and artificial budget windows. There are 108 occurrences of phase-ins, phase-outs, changes in rates, scale-ups, scale-downs. Most amazingly, because of the unnecessary but increasing reliance on fiscal forecasts, the entire bill sunsets after 2010.

economic changes, and 40 percent to technical corrections. Only eight percent of the total absolute difference between the projections made in 1997 and actual deficits in 1997 through 1999 was attributable to legislative changes while 38 percent was attributable to economic changes and 55 percent to technical corrections.

³ The Democratic Caucus's estimate is based on another suspect underlying assumption. It includes within its "cost" of the tax cut the increased interest expenses assumed to materialize since this money is unavailable to pay down additional publicly held debt. It is uncertain, even unlikely, that these funds would be dedicated to debt reduction. They could

Martin Feldstein and Daniel Greenberg, "Higher Tax Rates with Little Revenue Gain: an Empirical Analysis of the Clinton Tax Plan," *Tax Notes* 58 No. 12 (March 22, 1993) pp. 1653-1657. A more recent study, which made use of WEFA, Inc.'s Mark 11 U.S. Macro Model projected the macroeconomic feedback effects of President Bush's original tax relief plan to be 33.4 percent. See, D. Mark Wilson and William W. Beach, "The Economic Impact of President Bush's Tax Relief Plan," CDA01-01 Rev. The Heritage Foundation, April 27, 2001. ■



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