R E V E N U E A N D T A X P O L I C Y B R I E F

CBO

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Where Did the Revenues Go?

Spring 2002 brought an "April surprise" of a type that had not been seen for roughly a decade: federal revenues substantially lower than expected, a reversal of the pattern that characterized the late 1990s. Even though the current fiscal year is nearly over, revenue forecasters have substantially revised their expectations of how much fiscal year (FY) 2002 revenues will be as a consequence of April, May, and June receipts. A fiscal year that began with a forecast of a budget in approximate balance now faces a deficit of $157 billion, $103 billion of which results from revenues that are lower for reasons other than the effects of legislation. That latest revision comes on top of downward revisions from last August and January. This revenue and tax policy brief reviews what forecasters currently know about the recent falloff in receipts and the likely implications for projections of revenues in years beyond fiscal 2002.

How Big a Drop?

In its most recent projection of a budget baseline in March, the Congressional Budget Office (CBO) forecast FY 2002 receipts of $2,006 billion, or 19.3 percent of gross domestic product (GDP).[1] Since then, the Congress passed a stimulus bill that is estimated to reduce FY 2002 revenues by $43 billion, mostly in corporate income tax receipts.[2] But with the effects of legislation taken into account, receipts have run significantly below CBO's winter projection: withholding (both individual and payroll tax) and estimated individual income tax payments since March are running $9 billion less than expected; final payments in April and May were $41 billion less than expected; refunds for the season were $28 billion higher; corporate receipts are running $20 billion less than expected; and other tax sources are showing modest shortfalls. Thus, revenue collections since March, aside from the effects of legislation, point to a level of FY 2002 receipts that is $103 billion lower than CBO's last projection (*see Table 1*).

Table 1.

Fiscal Year 2002 Revenues Projected in March and in August

(In billions of dollars)

	March Baseline[a]	August Baseline	Change
All Withholding[b] and Estimated Individual Payments	1,550	1,541	-9
Final Individual Payments	159	118	-41
Individual Refunds	-151	-179	-28
All Corporate Taxes	166	146	-20
All Other Receipts	239	234	-5
Total	**1,964**	**1,860**	**-103**

Source: Congressional Budget Office.

a. Includes effects of subsequent legislation.

b. Includes payroll taxes.

That decline continued a pattern that began after January 2001. At that time, CBO forecast receipts of $2,236 billion for FY 2002, or about 20.5 percent of GDP (*see Table 2*). In its August 2001 update, CBO lowered the projection of FY 2002 revenues to $2,134 billion, or 19.9 percent of GDP. Part of that revision stemmed from the Economic Growth and Tax Relief Reconciliation Act (EGTRRA), enacted in June 2001, but much came from lower projections of economic activity and changes in CBO's assessment of how much revenues that activity would generate. By March 2002, CBO had reduced the estimate further, to $2,006 billion, again because of projected changes in economic activity and the revenues that would be yielded. The result was a total reduction of $230 billion in FY 2002 receipts from the January 2001 baseline to that of March 2002—only $32 billion of which was due to legislation. The $103 billion reduction (net of $43 billion from legislation) indicated by collections since March is on top of those earlier reductions.

1. Congressional Budget Office, *An Analysis of the President's Budgetary Proposals for Fiscal Year 2003* (March 2002).

2. Job Creation and Worker Assistance Act of 2002, P.L. 107-147.

Table 2.

CBO's Baseline Projections of Fiscal Year 2002 Receipts

(In billions of dollars)

	Projected Receipts	As a Percentage of GDP
January 2001 Baseline Estimate	2,236	20.5
Effects of		
Economic changes	-44	
Technical changes	-27	
Legislation	-31	
August 2001 Baseline Estimate	2,134	19.9
Effects of		
Economic changes	-81	
Technical changes	-46	
Legislation	-1	
March 2002 Baseline Estimate	2,006	19.3
Effects of		
Economic changes	0	
Technical changes	-104	
Legislation	-43	
August 2002 Baseline Estimate	1,860	18.0
Memorandum:		
Total revisions due to		
Economic changes	-125	
Technical changes	-177	
Legislation	-75	
Total Change from January 2001 to August 2002	-376	

Source: Congressional Budget Office.

The drop in projected FY 2002 revenues represents a sharp reduction from the level in FY 2001. Total FY 2002 receipts are now projected at $1,860 billion, $131 billion lower than in FY 2001. And since EGTRRA provided for a delay in corporate income tax payments that shifted about $23 billion from FY 2001 to FY 2002, the reduction is more meaningfully measured as $177 billion.

The $51 billion fall in corporate receipts (adjusted for the shift) from $174 billion in FY 2001 to $123 billion in FY 2002 amounts to a decline from 24.6 percent of corporate book profits to 20.2 percent, mostly due to the recent stimulus bill. But the $126 billion drop in individual tax collections, from $994 billion in FY 2001 to $868 billion in FY 2002 (from 13.6 percent to 11.7 percent of taxable personal income), was almost entirely due to causes unrelated to legislation.

More Than the Recession

The most obvious explanation for what happened to receipts is the recession, which has reduced the level of economic activity—the main determinant of tax collections. Although CBO incorporated effects of an economic slowdown in its baseline as early as January 2001, its projections did not reflect the effects of a recession until the January 2002 baseline, after the seriousness of the downturn had become evident. Since then—although indications are that the economy has begun recovering—the recession's effects on receipts still linger.

But changes in overall economic activity are not the only reason why projections of receipts change. Not all revenues are directly linked to the movement of overall economic activity. Some tax sources depend significantly on the behavior of asset prices. They also depend on the division of income between taxable and nontaxable forms. And they are influenced by how income growth is distributed. Hence, a fall in overall income need not yield a proportionate fall in receipts. Receipts can fall, or rise, much faster than overall economic activity does.

CBO commonly distinguishes between those changes in receipts that result from changes in overall economic activity ("economic changes") and those that result from changes in how much that level of activity is expected to generate in receipts ("technical changes"). Under that formal accounting distinction, the changed outlook for overall economic activity accounted for $125 billion of the $230 billion reduction in CBO's projections of FY 2002 receipts from its January 2001 baseline to its one in March 2002. Another $73 billion of the reduction was due to changes in projections of items not directly linked to overall economic activity, such as the effects of capital gains, revisions in assumptions about how projected income growth was distributed across taxpayers paying different marginal rates, and the observed behavior of current tax collections. The reduction since March 2002, however, has been overwhelmingly because of technical changes, amounting to $104 billion, with economic revisions leaving the projection basically unchanged.

Interpreting Collections

While models may generate projections of receipts from the current level of economic activity, collections data from the Treasury show how much is actually coming in

Table 3.

Revenue Collections by Source, Fiscal Years 2001 and 2002

(In billions of dollars)

	Fiscal Year 2001	Fiscal Year 2002[a]	Change
Individual Income Taxes			
Withheld	793	758	-35
Nonwithheld	383	289	-94
Refunds	-182	-179	3
Subtotal	**994**	**868**	**-126**
Corporate Income Taxes[b]	174	123	-51
Social Insurance Taxes	694	702	8
All Other Taxes	152	144	-8
Total	**2,014**	**1,837**	**-177**

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

a. Projected

b. For the purposes of the comparison in this table, $23 billion in corporate taxes that were shifted from fiscal year 2001 to fiscal year 2002 under the Economic Growth and Tax Relief Reconciliation Act have been shifted back.

(*see Table 3*). The seasonal regularities of the inflow of revenues provide a basis for estimating likely receipts for the year in progress independently of projections of how the economy is doing. If past patterns are a reliable guide, collections data for FY 2002 indicate a revenue take that is another $146 billion lower than projected in March, $43 billion of which is attributable to the recent economic stimulus legislation.

But *why* those receipts are low is another question entirely. To answer that question requires data from individual tax returns, which are not processed until after the receipts are counted. So the detail needed to determine the source of a shortfall is not available for some time after the level of receipts is known. Many returns—especially those of high-income taxpayers, from whom much of the revenues is drawn—are not filed until much later in the year because of filing extensions. A full picture of the income on which people pay taxes, therefore, is often not available until a year to a year and a half after the events that generate them.

There are, nevertheless, some indications of the source of a revenue shortfall from the form of payment in which the taxes are received. Lagging withholding usually reflects slowing overall economic activity, because withholding largely depends on wages. Then, during the spring, especially in April and early May as a consequence of the tax-filing season, the Treasury receives payments for the balance of taxes due, and it pays out refunds of overpayments of withholding and estimated taxes. Those final settlements often reflect unusual changes in taxable income—such as capital gains—that may bear no direct relation to GDP.

The relation between the form of tax payment and the underlying source of taxable income is only suggestive, however. Individual taxpayers are subject to different marginal tax rates, so even tax liability on wage and salary income does not change proportionately with income; changes in the distribution of income growth across taxpayer groups can make receipts grow faster or more slowly than total wages or GDP. And taxpayers often adjust their wage withholding for changes in other forms of income in addition to paying estimated taxes as the year goes by. Hence, changes in withholding can be unrelated to wages, and final payments and refunds can reflect changes in wage patterns. Consequently, definitively identifying what kinds of payments are related to what kinds of liability is impossible. And the percentage of liability paid during the year relative to that paid in tax-filing season can vary from year to year, significantly altering what can be expected in final settlements.

Withholding payments in the second half of FY 2001 and early FY 2002 indicated a level of receipts that was lower than what would have been expected from contemporaneous measures of overall income. At that time, CBO forecasters interpreted the payments data as indicating that wage and salary income was lower than suggested by the data then available. CBO incorporated that information in its January and March 2002 revenue projections. Indeed, the Bureau of Economic Analysis' recent revision of its national income and product accounts indicates a level of wages and salaries roughly consistent with the withholding data that CBO incorporated into its revenue projection of January 2002. Since March, continuing weakness in withholding, as well as the shortfall in corporate receipts, may also be associated with slightly lower than expected wage income and lower corporate profits. Hence, more of the explanation for why receipts have come in low rests with the overall behavior of the economy than indicated by the breakout of economic and technical changes outlined above.

But the shortfall in net final settlements likely comes from other causes. Without detailed tax return information, the best conjecture of where the revenues went in FY 2002 is where they came from in the mid- to late 1990s, when income tax receipts in particular grew much faster than GDP did.

The Usual Suspects

The first likely factor is capital gains income. Realizations of capital gains are not part of national income or GDP. But they are taxable income to individuals and corporations. Consequently, they can grow more rapidly or fall more precipitously than national income, resulting in changes in revenue proportionately greater or smaller than changes in overall economic activity. CBO's analysis indicates that rapid growth of capital gains realizations explains about 30 percent of the growth in individual income tax receipts relative to GDP from 1995 to 1999, so they may be playing a major role in the decline in FY 2002 receipts.

When projecting gains receipts in its January 2002 and March 2002 baselines, CBO already had good estimates of the calendar year 2001 level of the stock market and GDP —big influences on the level of gains realizations that would help determine final tax liability payments in April 2002. As a result, the March baseline, in comparison to the baseline of January 2001, projected a 23 percent decline in realizations and a $27 billion decrease in gains receipts. But because realizations are so volatile, the decline may be greater than econometric analyses of past behavior would suggest. Distributions of capital gains from mutual funds were down in calendar year 2001—reportedly by about 80 percent. Total gains realizations differ from those in mutual funds: stocks are the principal component of mutual funds, but only about half of total taxable gains come from stocks, with the rest coming from other capital assets, such as real estate. As a consequence, total gains would likely have fallen less than gains in mutual funds. Thus, while realizations almost certainly explain some of the FY 2002 shortfall, they very likely do not account for all of it.

A second likely factor is the slower growth of very high incomes in comparison to that of overall income. Those incomes are taxed at the highest rates and produce a disproportionate amount of income tax revenues. From 1995 to 1999, very rapid growth in very high incomes accounted for about 16 percent of the growth in the revenues in excess of GDP. A reversal could very well reduce receipts by a significant amount.

In addition, enough changes occurred this year—including the tax cut, the recession, and the drop in the stock market—to have altered the usual division of tax liability between withholding and estimated payments on the one hand and final payments and refunds on the other. In the 2001 tax year, the ratio of refunds to withholding departed from its previous, relatively stable, pattern. The larger-than-usual role played by final payments and refunds may mean that taxpayers were surprised by economic developments in 2001 and continued to withhold higher-than-necessary amounts. That overwithholding could have been simply the consequence of lower capital gains realizations; but it could also have been because earnings weakened over the course of calendar year 2001, and taxpayers paid withholding at a higher marginal rate than would have been the case had their earnings been steady throughout. In either case, the overwithholding suggests that shortfalls in receipts from two different years could have been bunched into a single year's collections, making the reduction look more ominous than it really was.

Noticeably absent from this list of likely causes are stock options and bonuses, because bonuses are a form of wage income, and most options are included in wage income measures when exercised. They also reduce taxable corporate profits at the same time that they increase taxable wage income. Nevertheless, options and bonuses may play a role in the distributional effect just described. To the extent that they accrue primarily to people with very high income, their rise and fall can affect the receipts-to-GDP ratio. The lower the proportion of income coming from bonuses and options of high-income individuals, the lower the receipts from a given level of wages and salaries. And because options income is typically withheld below the top marginal tax rate, it can disproportionately affect April payments when taxpayers settle up on their liability. Some early evidence suggests that options income may have fallen by 50 percent in calendar year 2001, in contrast to the 30 percent decline built into CBO's projections.

Why Was the Drop in Revenues a Surprise?

There is still the question of why the decline in receipts was unexpected. Of course, all projections are subject to uncertainty—a point that CBO emphasizes when it releases its baseline. But CBO's January 2001 *The Budget and Economic Outlook* showed the likely course of receipts in the event of a recession similar to the one in 1990-1991.[3] Actual receipts, even allowing for the effects of legislation, are substantially weaker than shown in that recession scenario.

Part of the reason is that the recession was worse than it at first appeared. Revised income data from the Bureau of Economic Analysis suggest a sharper drop than previously believed. The types of income subject to the highest effective tax rates—wages and salaries and corporate profits—slipped substantially in the current downturn. Measured in terms of those two components of the tax base, the downturn proved to be deeper and longer than that in CBO's scenario based on the 1990-1991 recession, and that was still believed to be the case in March 2002 (*see Figure 1*).

But that is not the only reason. The level of the tax base was implicitly reflected in CBO's January and March 2002 projections on the basis of collections data. Much of the revision since March apparently relates to capital gains, income distribution, and other factors that influence the amount of taxes yielded by a given level of overall income. Those factors were not part of CBO's recession scenario. When the downturn occurred, they were layered on top of the recession's effects.

What Does the Shortfall Mean for the Future?

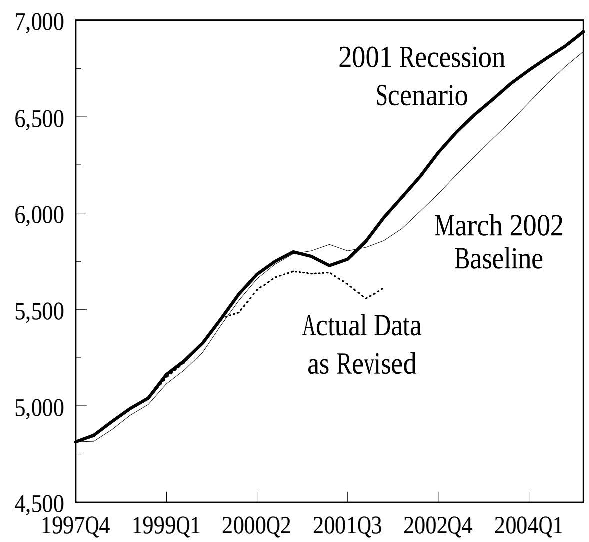
While the effects of the current receipts for this year's budget are now fairly clear, their implications for receipts over 10 years are unclear. To the extent that the shortfall reflects overall economic activity, receipts will recover as the economy does. But to the extent that it reflects other causes, the outlook is much more uncertain. First, just how the shortfall breaks down among the various likely causes (including capital gains, income distribution, and the timing of payments) is not yet known. Second, even knowing what the causes are, it is difficult to know how a shortfall created by any one of them will persist or wane over the next decade.

The past provides very little guide. On the one hand, it may be that much of the upswing in receipts in the 1990s was an aberration, and therefore the current shortfall is a return to some kind of normalcy. On the other hand, much of what was seen in the 1990s may have been a shift to a new situation that has only been temporarily set back. Or neither possibility may apply: the relationship between receipts and GDP may be affected by factors that ebb and flow with other phenomena, such as the movement of the stock market, which can just as easily experience another upswing as not.

Figure 1.

Tax Base

(In billions of dollars)



Sources: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.

Note: For this figure, the tax base is defined as corporate book profits plus wages and salaries.

3. Congressional Budget Office, *The Budget and Economic Outlook: Fiscal Years 2002-2011* (January 2001), pp. 97-103.

Note: Numbers in the tables may not add up to totals because of rounding.

Related CBO Publication: *Monthly Budget Review* (August 9, 2002).

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