U.S. Fiscal Policy in a (Brief?) Era of Surpluses

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Introduction

The past several years of U.S. economic expansion have brought with them a marked change in the federal budget. As the economy slowly came out of its recession in the early 1990s, federal budget deficits hovered near 5 percent of GDP, despite the passage of legislation during the mid-80s and early '90s aimed at deficit reduction (Auerbach 1994). Since 1993, though, deficits have fallen sharply and unexpectedly. Figure 1 shows the federal surplus since fiscal year 1989, along with the forecasts for fiscal years 1993-1998 that were made in January 1993 by the Congressional Budget Office (1993). Contrary to predictions that deficits would continue to rise slowly over time from the fiscal year 1992 value of $290 billion, they began to fall in the next fiscal year and disappeared entirely in fiscal year 1998, when the budget surplus reached $70 billion. In light of the growing surplus, discussion of fiscal stringency has become more muted, with a tax cut passed into law in 1997 and another tax cut, passed by Congress in the summer of 1999, at this stage left in limbo by President Clinton's veto.

Still, there remains evident concern about the viability of the Social Security system, and a perhaps more inchoate sense of long-run fiscal disaster presented by the Medicare system. Policy makers appear to be in a quandary how to reconcile these short-run surpluses and longer-run problems, as the subject of debate oscillates between the topics of "saving Social Security" and of how large a "responsible" tax cut can be. Given the short-run nature of fiscal planning, tax cuts and the current budget situation have tended to take precedence in this discussion, with the result that little serious debate has occurred regarding the long-run fiscal changes that may be necessary.

This paper has several objectives. First, it reviews the recent improvement in the U.S fiscal picture and discusses the sources of this trend. It then considers the implications for the future, taking into account the past performance of budget forecasts as well as the changing composition of the federal budget. Next, it provides some estimates of the long-term fiscal imbalance still faced by the United States. Finally, it briefly discusses the various policy options available to address this imbalance.

The U.S. Federal Budget in the 1990s

Figure 1 graphs the U.S federal budget surplus for the period 1989-1999, along with the most recent CBO (1999b) projections for the budget surplus for the next ten fiscal years, 2000-2009. During the historical period, the deficit rose from $152 billion in 1989 to $290 billion in 1992 before beginning its recent fall. A part of this rise and fall is attributable to the business cycle surrounding the 1990-91 recession, as the standardized employment deficit (as estimated by CBO) rose only to only $232 billion in 1992. However, a considerable part of the improvement in the deficit since 1992 is attributable to other factors. This seems evident, given that the deficits forecast in January 1993 for fiscal years 1993 and beyond, also shown in the figure, already incorporated the forecast that the economy's growth out of recession would continue.

Part of the reason for the improved fiscal picture is the deficit reduction legislation passed during the summer of 1993. The impact of this and other legislation during the period 1993-99 is shown in Figure 2, which starts with the January 1993 surplus forecasts and adds to them the cumulative estimated effects of legislative and other policy changes that have occurred since then. As late as 1996, these changes appear to have explained a significant part of the improvement over original forecast.

However, since 1997, a growing part of the improvement must be attributable to other factors. Indeed, by 1999, *more than* all of the improvement from original forecast must be explained by factors other than policy changes, because the policy changes since January 1994 (when the initial forecast for fiscal year 1999 was reported) have been estimated to *reduce* the budget surplus. This gap is much larger than would be associated with normal cyclical variation. For example, in 1998, the cyclical boom then underway was estimated by CBO to have pushed the surplus $71 billion *above* its standardized or "full-employment" deficit of $1 billion. Yet the surplus was $298 higher than was forecast in January 1993, even after account has been taken of the $129 billion attributable to deficit-reduction policy.

What other factors might be at work? First, the view of what constitutes "full employment" has shifted, as unemployment rates substantially below 5 percent have now been sustained for a long period without any significant rise in the inflation rate. Thus, even though the economy is still deemed to be "above" its full employment level of output, that level itself has risen; that is, a larger share of the current surplus would be attributed to cyclical factors using the 1993 view of full employment. However, the CBO estimate of the natural rate of unemployment embodied in its estimate of the standardized employment surplus actually has not fallen much since 1993, only from 5.8 percent in 1993 to 5.6 percent in 1998 (CBO 1999a).

If one applies an Okun's Law coefficient of 2 to translate this into 0.4 percent higher implied real GDP, and assumes that revenues increase roughly in the same proportion, this implies that revenues are now about 0.4 percent higher – and the standardized employment deficit smaller by the same amount – because of the estimated

drop in the natural rate of unemployment. But, with revenues of about $1.8 trillion, this is barely $7 billion a year – quite small relative to the recent improvement in revenues.

The remaining element of the puzzle lies in what has happened in recent years to federal tax revenue and its components. As a share of GDP, federal tax collections have risen sharply in recent years, to 20.4 percent in fiscal year 1998 and an estimated 20.6 percent in fiscal year 1999 – the highest share since 1944, and the highest peacetime share ever. Essentially all of the recent rise in this fraction is attributable to the individual income tax. From 1994 to 1999 – a period during which the only important tax legislation was the tax cut passed in 1997 – federal taxes as a share of GDP have risen from 18.4 percent to 20.6 percent, while individual income taxes have risen from 7.9 percent to 10.0 percent.

Some of this rising tax share is attributable simply to the progressivity of the individual income tax. As *real* incomes rise, taxes as a share of income should rise as taxpayers' incomes face higher marginal tax rates, a consequence traditionally referred to as the "fiscal dividend."[1] In recent work (Auerbach and Feenberg 1999), a co-author and I found that the elasticity of individual income taxes with respect to real income is approximately 1.67, a historically high value for the United States. As real, average, before-tax family income rose by 12.2 percent between 1993 and 1998 (CBO 1999c), this elasticity predicts that individual income tax revenues should have grown by 12.2 x 1.67 = 20.4 percent, or from 7.9 percent of GDP to 8.5 percent of GDP – less than one-third the actual rise. The rest of the increase appears attributable to two factors: the rising share of income going to high-income individuals in higher marginal tax brackets, and

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[1] The emphasis here is on real income growth, because the U.S. tax system has, since the mid-1980s, been largely indexed for inflation-induced income increases.

the increase in capital gains realizations due to the stock market boom; as capital gains are not a component of GDP, this factor would explain why personal incomes, and personal income taxes, have grown so rapidly.

Table 1 shows what has happened to real family income since 1993. During this period of economic growth, families in all part of the income distribution have experienced a real increase in average family income. However, the rate of increase has been uneven, as families in the four lowest quintiles have experienced average real income growth ranging between 7.7 percent and 9.6 percent, while those in the top quintile have experienced average real income growth of 15.8 percent. Even within the top quintile, this growth has been uneven; as the lower portion of the table shows, those in the top decile and, even more, those in the top 5 and 1 percent of the income distribution have experienced quite rapid income growth.

The importance of this uneven growth for federal income taxes is immediately evident from the last two columns of the table, which give the corresponding effective tax rates for each income class in 1993 and 1999. The sharp shift in income toward those in higher brackets explains the explosion of individual income tax receipts during mid- to late-1990s. Indeed, it is interesting to note by comparing the last two columns of the table that average tax rates have actually *fallen* over this period for each of the bottom four quintiles – all but the top 20 percent of the income distribution – even as income taxes have risen sharply as a share of GDP. Even among those in the top quintile, the tax rate has risen only modestly since 1993. Thus, although it was a central focus of recent arguments in favor of a tax cut, the rise in the tax-to-GDP ratio is not reflected in the tax

burdens of individual families, and so does not, in itself, constitute a particularly compelling argument for a tax reduction.

The Budget in the Coming Decade

As Figure 1 shows, the recent growth in the federal surplus is projected to continue throughout the coming decade. Even if this growth occurs, though, it will be attributable to a number of factors that, because of their nature and patterns over time, have implications both for short-run policy and long-run prospects. Therefore, it is useful to decompose this growing surplus into its different components.

Figure 3 repeats the surplus projections for the decade 1999-2009 from Figure 1, along with two modified versions of the surplus. The first alternative is the "on-budget" surplus that excludes accumulations of the Social Security trust fund.[2] These trust fund accumulations are currently running at about 1.2 percent of GDP, roughly equally distributed between trust fund interest and cash flow surpluses of Social Security taxes in excess of benefits, and are projected to rise to 1.8 percent of GDP by 2009. Many argue that it is misleading to include the Social Security surplus in the overall budget surplus calculation, because this surplus is being intentionally accumulated for the purpose of paying future Social Security benefits, an associated implicit liability that is not included in the overall budget. Indeed, as I argue below, the appropriate treatment is not simply to leave out the Social Security surplus, but rather to take account of these implicit liabilities. However, it is useful to note here how important these Social Security

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[2] This measure also excludes the U.S. postal service budget surplus, which is negligible by comparison.

surpluses are as a component of the overall, or "unified" budget surplus; in the

projections, the on-budget surplus does not become positive until fiscal year 2000.

While much has been made of the appropriate treatment of the Social Security

surplus, far less attention has been paid to the fact that the on-budget surplus, though it

excludes Social Security, still contains the accumulations of other trust funds, those of

Medicare part A (HI) and the civilian and military retirement systems. Any argument for

excluding the Social Security surplus applies to these trust fund accumulations as well,

and excluding them from the on-budget surplus yields the final series in Figure 3. This

"modified" on-budget surplus actually becomes positive only in fiscal year 2002. The

total amount contributed to on-budget surpluses by these trust fund accumulations during

the period 2000-2009 is $505 billion – more than half the cumulative on-budget projected

surplus of $996 billion.

Thus, a significant share of the projected cumulative surpluses of $2,895 billion

over the next decade – all but about one-sixth the total – represent trust fund

accumulations being set aside (and, indeed, inadequate for the purpose) to cover

accumulating liabilities that are *excluded* from the budget. What remains – just $491

billion over the ten years – is far more modest surplus that arises only in fiscal year 2002.

But even this modest surplus depends on tenuous assumptions about other elements of

the budget.

One of the keys to recent budget success, and a cornerstone of the forecast of

growing surpluses, is the decline in discretionary spending, in real terms and, in some

years, in nominal terms as well. The recent decline in discretionary spending – the

components of the federal budget other than interest and entitlement programs like

Medicare and Social Security – is truly striking. Figure 4 shows total federal discretionary spending as a share of GDP since 1980. Throughout the early- and mid-1980s, discretionary spending hovered at around 10 percent of GDP, with the composition changing during the Reagan years toward defense spending (also shown in the figure) and away from non-defense domestic and international uses. Since then, coincident with the fall of the Soviet Union, U.S. defense spending has dropped sharply and with it total discretionary spending, as non-defense spending failed to recover as a share of GDP from the Reagan administration cuts. By fiscal year 1998, discretionary spending stood at just 6.6 percent of GDP, a decline of roughly a third as a share of GDP since the 1980s. Were discretionary spending still 10 percent of GDP, it would have been $285 billion higher in fiscal year 1998 than it actually was. Thus, in a simple accounting sense, we can attribute the elimination of large deficits and the appearance of the current budget surplus to the decline in discretionary spending.

But also note that, in spite of this considerable drop since the 1980s, projections are that discretionary spending will *continue* to fall as a share of GDP, actually falling slightly in *nominal* terms during the period 1999-2002 (to comply with the spending caps in the Deficit Control Act), and remaining constant in real terms thereafter. By fiscal year 2009, this would leave discretionary spending at just 5.0 percent of GDP. These assumptions may be unrealistic, a point brought home during the past session of Congress by the resort to "emergency" discretionary spending measures (not subject to the spending caps) and President Clinton's budget proposal for increases in discretionary spending.

From an historical perspective, the levels of discretionary spending projected are nearly unprecedented. For example, suppose that international spending (currently 0.2 percent of GDP) were eliminated entirely and that the remaining components of discretionary spending, defense and domestic non-defense spending, were each allocated 2.5 percent of GDP in 2009. For domestic spending, this would be the lowest percentage since 1962. For defense, it would be the lowest percentage since before World War II.

Yet, changing the discretionary spending trajectory to one reflecting perhaps more realistic spending levels would have huge effects on future budget outcomes. Table 2, taken from Auerbach and Gale (1999), reports the results of making alternative assumptions about changes in discretionary spending over the next decade, accounting not only for the direct effect of the change in discretionary outlays but also for the associated change in debt service.[3] Holding discretionary spending at its current level of GDP – that is, sustaining the reductions of the past two decades but going no further – would cost over $1.3 trillion over the next 10 years. Just holding discretionary spending constant in real terms from 1999 to 2009 would cost $556 billion relative to baseline. That is, more than half of the cumulative ten-year on-budget surplus from 2000 through 2009 is based on the assumption that real discretionary spending will fall. Together with the trust fund accumulations considered above, this more than accounts for the total cumulative on-budget surplus being projected for the next decade.

Thus, there is no surplus to "spend," even over the next decade, if one excludes trust fund accumulations and projects a more realistic path for discretionary spending. But even this modified scenario may be overly optimistic, for it incorporates the

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[3] To account for the added net interest costs of reductions in the surplus relative to baseline, we use the 3-month Treasury bill rate (CBO 1999b, p. 18).

assumption that the sharp rise in income tax revenues that has occurred during the 1990s will largely be sustained. The individual income tax share of GDP is projected at 9.9 percent in fiscal year 2009, essentially its current, historically high percentage. Recall that the recent rise reflects three factors: real growth, a shift in the income distribution, and the surge in capital gains realizations. Even with continued growth, it is unclear whether the income distribution will maintain its current shape, or how long capital gains realizations will continue to flow from the recent surge in asset values.

As this discussion of discretionary spending and taxes suggests, there is considerable uncertainty associated with budget forecasts. In a recent study, I calculated the average forecast errors of revenue prediction during the period 1986-1999 by the Congressional Budget Office (CBO), the Office of Management and Budget (OMB), and Data Resources, Inc. (DRI), based on forecasts made just over four and one-half years before the beginning of each fiscal year – until recently, the longest-term forecasts made by CBO and OMB. For example, the initial forecast for fiscal year 1999, the fiscal year just ended, was made in January 1994. The results of my calculations, scaled by trend revenues, are shown in Table 3. The first and second panels show the average errors during the periods before and after January 1993, respectively. As discussed above, this was roughly the date at which deficits began their recent disappearance.

The last column in the table indicates that, over the full sample period, all three agencies' forecast errors have roughly averaged out – none of the three average mean forecast errors is particularly large in absolute value. While OMB's and DRI's forecasts were, on average, slightly too optimistic (their average revisions to revenue were downward), CBO was slightly too pessimistic (its average revision was upward).

However, these overall averages mask quite different performances over the earlier and later sub-sample periods, as all three agencies vastly overpredicted revenues during the period before 1993 and have vastly underpredicted revenues since then. All of the average errors during these two periods are in the range of 8 to15 percent in absolute value, which corresponds, at current revenue levels, to an error range of roughly $150 billion to $275 billion dollars per fiscal year, just for the revenue side of the budget.

These fluctuations confirm just how difficult it has been to predict revenues even a few years into the future. It is, of course, impossible to know whether current predictions will continue the recent pattern of being too pessimistic, or resume the earlier pattern of being too optimistic. But it is clear that the implications of policies proposed for adoption should be considered under the broad range of possible budget outcomes, not just the current point estimates. Indeed, given risk-aversion on the part of households, one can argue that policy should be more conservative (i.e., less disposed toward deficit creation) because the uncertainty exists. As future deficits will be larger precisely if the economy performs less well than is expected, the costs of extra taxes or reduced public spending must be borne in precisely those states of nature when resources have their highest value.

In summary, the recent decline and disappearance of federal deficits may be traced to two distinct trends, the decline in discretionary spending since the 1980s and the more recent surge in individual tax revenues. Current forecasts assume that the first of these trends will continue, and that the second will not be reversed, a set of assumptions that may prove optimistic and that, in any event, is hard to adopt with any degree of certainty based on past forecasting performance.

The Budget in the Longer Run

As mentioned above, the decline in discretionary spending since the 1980s is enough to explain why the deficit has disappeared. But the surge in tax revenues during just the past five years is nearly of the same magnitude. If individual tax revenues in 1999 were at their 1994 share of GDP, they would be nearly $200 billion lower than they actually are. Thus, we are able to explain "too much" of the decline in the deficit, having two factors that each can account for the decline on its own.

The resolution of this apparent inconsistency, of course, is that the remaining major component of the budget not yet considered – entitlement spending – has gone in the other direction. It is this component that makes the long-run budget situation more precarious than that of the short term. Even with the growth projected for these programs over the next decade is impressive. Figure 5 presents the most recent projections for the three largest federal entitlement programs, Social Security, Medicare, and Medicaid[4]. Together, these programs currently account for almost three-quarters of all mandatory spending, and nearly half of the total federal budget, excluding interest, a figure that is projected to rise to nearly 60 percent by fiscal year 2009! Indeed, by that year, spending on just Medicare and Medicaid alone is projected to exceed the entire amount of discretionary spending. Thus, as we look forward from the next decade, the issue of fiscal balance depends to a very great extent on the growth rate of these three programs which, at the end of this decade, are projected to absorb 1.7 percent of GDP more than they do today.

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[4] Medicaid also includes expenditures by states, but this figure includes only the federal portion.

However, it is over the longer term that these programs present their most serious challenge to the budget, as the baby boom generation retires. Figure 6 shows the most recent CBO long-term projections[5] for the same three programs, starting from their 2009 values in Table 5 and going through 2070. Clearly, such projections are subject to even more uncertainty than the very uncertain projections considered already, but they do provide our best estimate of where expenditures are headed for each of these programs.

Figure 6 indicates that Social Security, which has received perhaps the most attention in recent years as a long-run problem, will continue to grow rapidly as a share of GDP during the second and third decade of the next century, as more and more members of the large baby-boom cohort retire. Thereafter, though, Social Security's growth is expected to moderate. On the other hand, Medicare expenditures will grow even more rapidly early in the period and continue to grow thereafter, passing Social Security as the largest entitlement program in about 35 years. The explanation is that there are two factors propelling Medicare's growth: the aging of the population, which is what drives Social Security, but also the growth of health care spending per capita. Indeed, the Medicare projections may be somewhat "optimistic" in that they assume that spending per Medicare enrollee slows gradually between now and 2020 to the point that it grows only at the rate of wages thereafter.

By the end of the period shown in Figure 6, these three programs – Medicare, Social Security and Medicaid – are projected to absorb 16.5 percent of GDP – roughly the share of today's *entire* federal budget, excluding interest. This fact alone should be

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[5] These unpublished projections were produced in early 1999, and were kindly provided by John Sturrock of CBO.

enough to illustrate that current policy, as represented in this figure, is not sustainable over the long run. However, it is useful to quantify the magnitude of this imbalance.

To do so, I begin with the recent CBO long-term forecast through 2070, some elements of which have just been discussed. This forecast begins with the assumptions embodied in CBO's July, 1999, ten-year budget forecast (CBO 1999).[6] After the ten-year horizon, Social Security and Medicare expenditures are assumed to follow the intermediate projections of the trustees, adjusted for differences between the economic forecasts of CBO and the Social Security Administration. Medicaid is projected using the same basic approach as that used for Medicare, incorporating the same assumption that the growth rate of aggregate medical spending per enrollee slows gradually to match that of average wages by 2020.

Discretionary spending, federal consumption of goods and services, and all other government programs, with the exception of net interest, are assumed to grow with GDP. After 2009, tax revenues are held constant as a share of GDP, except for supplementary medical insurance premiums collected for Medicare, which are assumed to grow relative to GDP in line with the rise in the share of the population covered by Medicare.

Using these assumptions, I update calculations based on a methodology developed in Auerbach (1994) and applied there and in Auerbach (1997). The technique solves for the "fiscal gap" – the size of the permanent increase in taxes or reductions in non-interest expenditures (as a constant share of GDP) that would be required to satisfy

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[6] Because CBO has not yet issued long-term forecasts consistent with the July, 1999 budget forecast, I update the long-term CBO forecast from earlier in the year in following manner. For years through 2009, I incorporate the projected changes in revenues and outlays (excluding debt service) between the two forecasts. For years after 2009 (for which no updated CBO projections are presently available) I assume that the changes in revenue and non-interest outlays are equal as a share of GDP to the changes projected for 2009.

the constraint that the current national debt equal the present value of future primary

surpluses. (The primary surplus is revenues minus all expenditures other than net

interest.) This change, denoted Δ, satisfies the equation:

$$(1) \qquad B_{1999} = \sum_{s=1999}^{\infty}(1+r)^{-(s+1-1999)}(S_s^p + \Delta \cdot GDP_s)$$

where B_{1999} is the current value of the national debt, r is the government's nominal

discount rate, GDP_s is the level of nominal GDP in year s, and S_s^p is the primary surplus

in year s absent the change in policy. The government constraint in (1) is implied by the

assumption that the debt-GDP ratio cannot grow forever without bound. It would also

follow from the assumption that the debt-to-GDP ratio eventually (i.e., as time s

approaches infinity) converges to its current value.[7,8]

Estimates based on (1) take macroeconomic projections as given. They do not

account for the macroeconomic effects of policy changes, although policy changes of the

magnitude being considered could have a major impact. On the other hand, the

underlying macroeconomic projections of economic growth, interest rates, and other

variables are not consistent with the eventual explosive growth in the national debt

implied by the baseline fiscal projections. That is, the macroeconomic projections

presume that the budget imbalance will be solved, but they do not incorporate any of the

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[7] CBO undertakes a similar calculation by measuring the size of the immediate and permanent revenue increase or spending cut that would be necessary to result in a debt-to-GDP ratio in 2070 equal to today's ratio. The cutoff at 2070 is arbitrary, however, and understates the magnitude of the long-term problem. This is because the primary deficits in years after 2070 are projected to be larger than those of the typical year between now and 2070. Thus, including such years, which provides a more accurate and complete picture of the situation, also makes this situation appear worse.

[8] The calculation based on expression (1) also requires a long-term discount factor (r) and a long-term GDP growth rate. For these, I use those constructed for a similar purpose by the Social Security Trustees, taken from their 1999 report (Table III.B.1).

potential disincentive effects of the policy changes, for example the impact of potentially high marginal tax rates. Thus, the estimates given below may well understate the difficulty of achieving intertemporal budget balance.

Table 4, taken from Auerbach and Gale (1999), reports estimates of long-run fiscal gaps under different scenarios. The first row reports the gap under baseline assumptions, with no change in policy. The 1.30 percent in this row means that a permanent and immediate tax increase or spending cut of 1.3 percent of GDP would be required to maintain long-term fiscal balance – roughly $120 billion at current GDP levels. That estimate, however, depends crucially on the assumption that real discretionary spending is reduced as projected in the budget forecast. If discretionary spending were held constant at its 1999 level relative to GDP, the long-term fiscal gap would rise to over 3 percent, as noted in the table's second row. In a sense, the true gap is this latter number, with discretionary spending cuts presently projected to account for just under 60 percent of the necessary adjustment.

The remaining four rows in the table list the values of the long-run gap under four alternative policy scenarios. The first of these, in the table's third row, assumes enactment of the tax cut agreed to in conference by the House and Senate this summer, and ultimately vetoed by President Clinton.[9] Had the changes included in this legislation been adopted, the long-run gap would have nearly doubled. Indeed, given that the tax cut was specified through the year 2009, it might make sense to express the long-run gap under the assumption that no further action would be taken until fiscal year 2010. This

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[9] Because the legislation did not specify any changes after fiscal year 2009, the simulation takes the changes for the last full fiscal year specified and assumes them to be constant, relative to GDP, in the fiscal years after 2009.

delay, of course, would make the eventual adjustment larger on an annual basis, as the next row of the table shows.

The final two rows of the table present the results of a similar set of exercises for the proposals put forward in President Clinton's fiscal year 2000 budget, presented to Congress in early 1999. This budget proposed a series of tax changes, including some tax increases but, overall, a net tax decrease, coupled with a range of increased spending. As the table shows, this plan, too, would have worsened the long-run gap, although by less than the Congressional plan.

The results of these calculations are sobering, given how much improved the current fiscal picture is relative to its condition just a few years ago. The long-run forecast, even assuming continued strength in federal tax revenues and a continuing decline in discretionary spending – each of which is subject to considerable debate – still embodies a large imbalance. To eliminate this imbalance would require significant further cuts in government spending or increases in tax revenues – budget tightening totally at odds with the proposals put forward this year by both parties and both branches of government.

Budget Options for Long-Term Balance

The United States faces a long-term fiscal imbalance, in spite of its current budget surplus. Further cuts in discretionary spending beyond those in the forecast seem implausible. Tax increases are possible, having been introduced as recently as 1993. However, the most recent tax legislation passed into law was the "Taxpayer Relief Act" of 1997, which reduced taxes, and the recent disagreement between Congress and President Clinton was not about whether to raise taxes or to lower them, but rather about

how large a tax cut would be "responsible." What options remain if the United States is to address its fiscal imbalance?

Recent debate has focused on Social Security, with the president offering, as part of his budget earlier this year, a plan to shore up the Social Security system. However, most of the added funding for the system under the president's plan came through transfers from general revenues which, though it might help the Social Security system in isolation, would do absolutely nothing with respect to the government's overall imbalance. The remainder of the president's plan involved investing a portion of the Social Security Trust fund in corporate equities, a plan that, whatever its other benefits, would raise the expected yield on the trust fund assets while also raising their riskiness. Without taking proper account of this increase in risk, the estimated improvement in the system's fiscal balance represents a considerable overstatement.

Other plans for Social Security would go further, partially or fully privatizing the system. Many advocates of such an approach have stressed the more favorable rate of return available to investors in private securities. However, such analysis ignores the fact that Social Security's current low return reflects not only the safe assets in which trust fund assets are invested, but also the fact that today's contributions must help to pay off the pre-existing, unfunded liabilities to generations already in the Social Security system. Without investing in riskier securities or reneging on these accrued benefits, it is logically impossible to improve the overall rate of return on future Social Security contributions.

Thus, the only way to improve the prospects for Social Security *and* the overall budget in a risk-adjusted sense is to raise Social Security taxes or cut Social Security benefits, a conclusion that should hardly be surprising. But, though Social Security does

face funding problems in the future, the more serious problem rests with the government financed health programs – Medicare and Medicaid – which, unlike Social Security, do not even pretend to have adequate funding through payroll taxes. By my estimates, it would take a permanent, immediate reduction of 16 percent of all Medicare and Medicaid spending to close the long-term fiscal gap of 1.30 percent of GDP. However, this assumes that the projected discretionary spending cuts take place. If they don't, and discretionary spending maintains its 1999 share of GDP, then the needed cut in medical spending would rise to 39 percent – a seemingly implausible reduction, particularly given that the projections already assume a slowing of health care expenditure growth over time.

None of our options are painless, and no single approach seems capable of dealing with the problem alone. It seems likely, then, that the burden will be reduced through some combination of policies, including further cuts in discretionary spending, though probably not as large as those being projected, and some reductions in health care spending and Social Security as well. These measures, together, may not prove enough, if tax revenues fail to maintain their current robust share of GDP, either through economic changes or the intervention of short-sighted politicians. But the budget constraint will remain in force, whatever the wishes of politicians, so the question is not whether long-term budget balance will be achieved, but rather when, and at whose expense.

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Figure 1. U.S. Federal Budget Surplus, 1989-2009

July 1999 Projection

January 1993 Projection

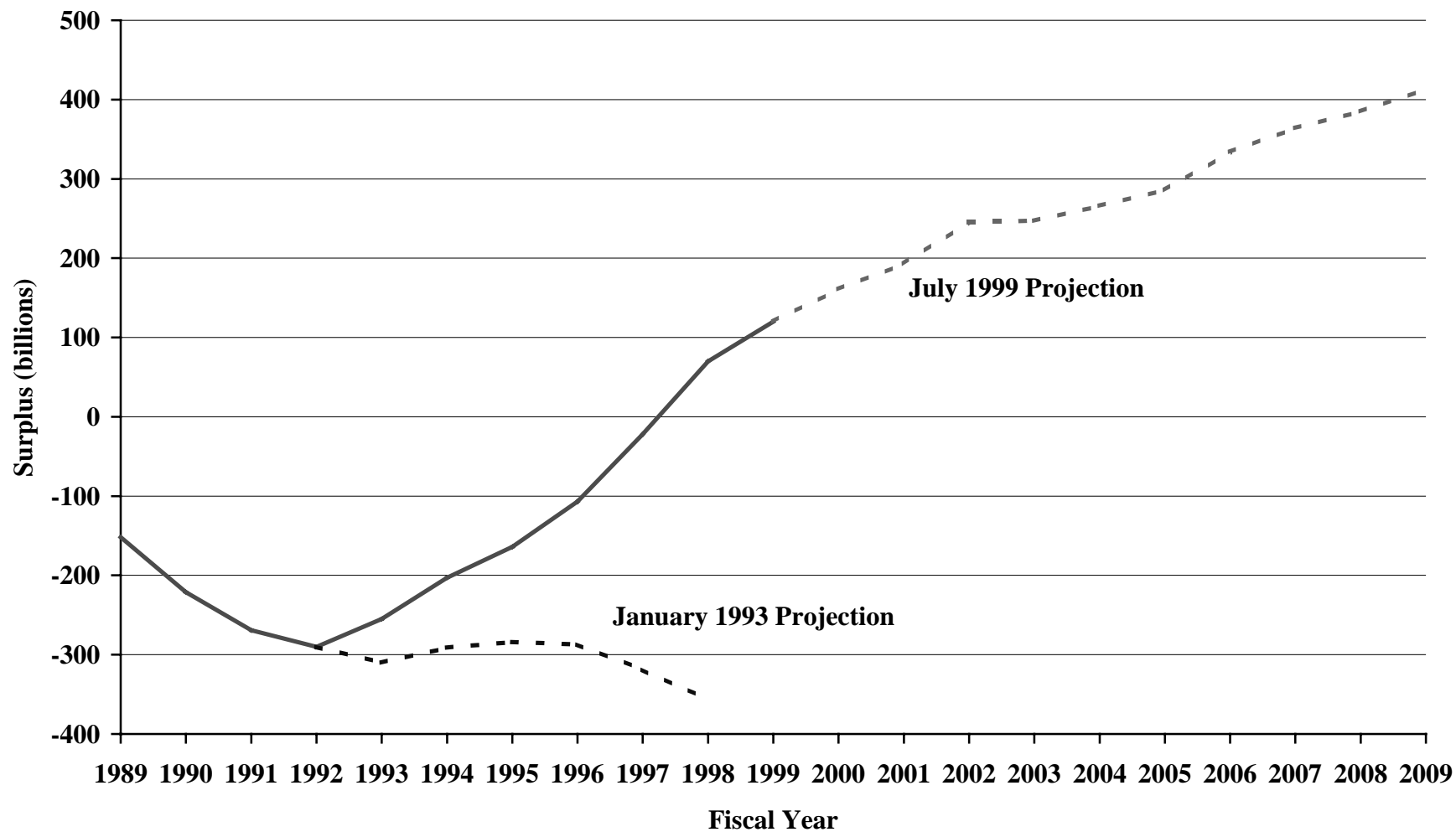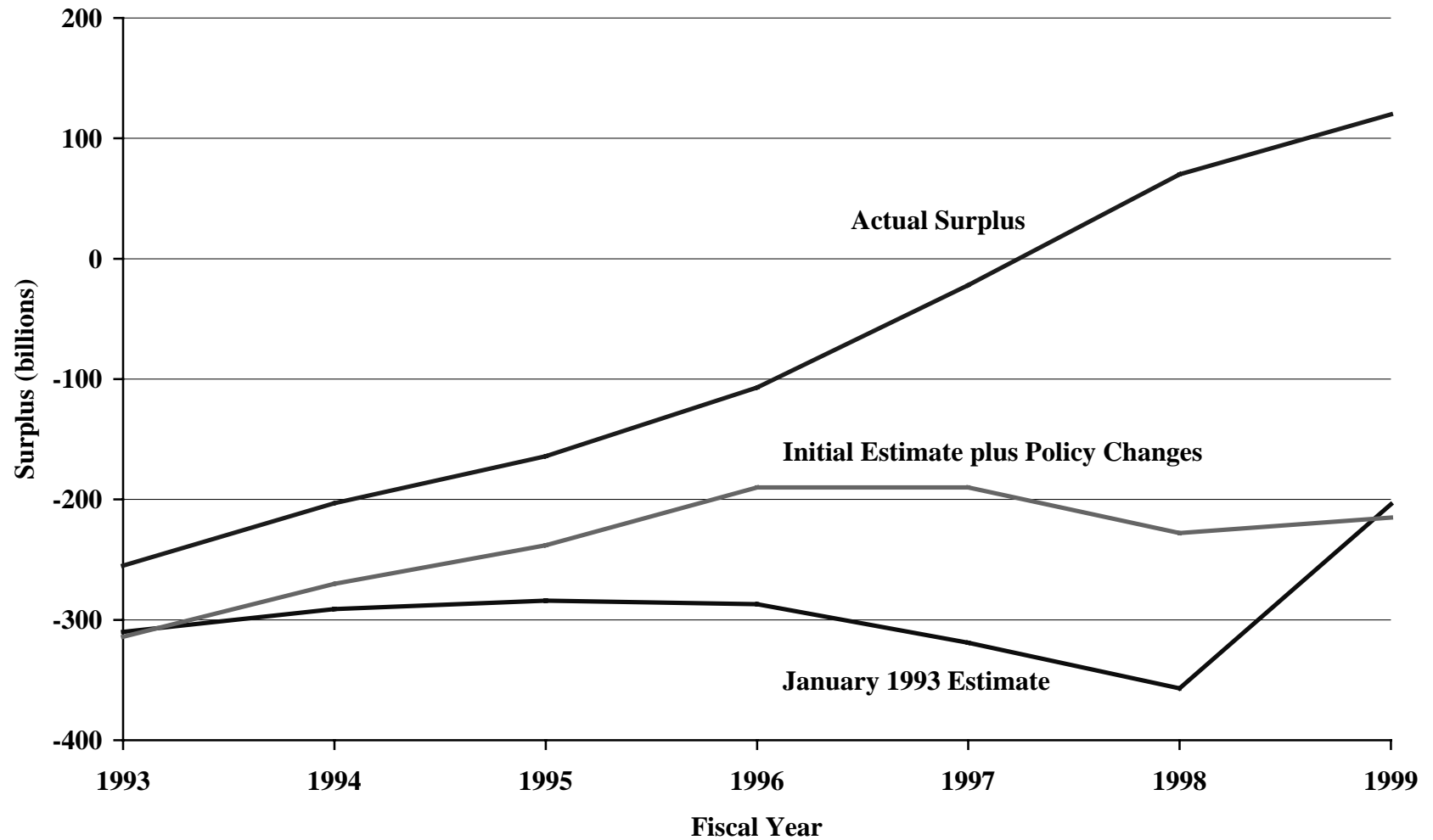Surplus (billions)

Fiscal Year

Figure 2. Changes in the Surplus Since January 1993

Note: Initial Estimate for fiscal year 1999 from January 1994.
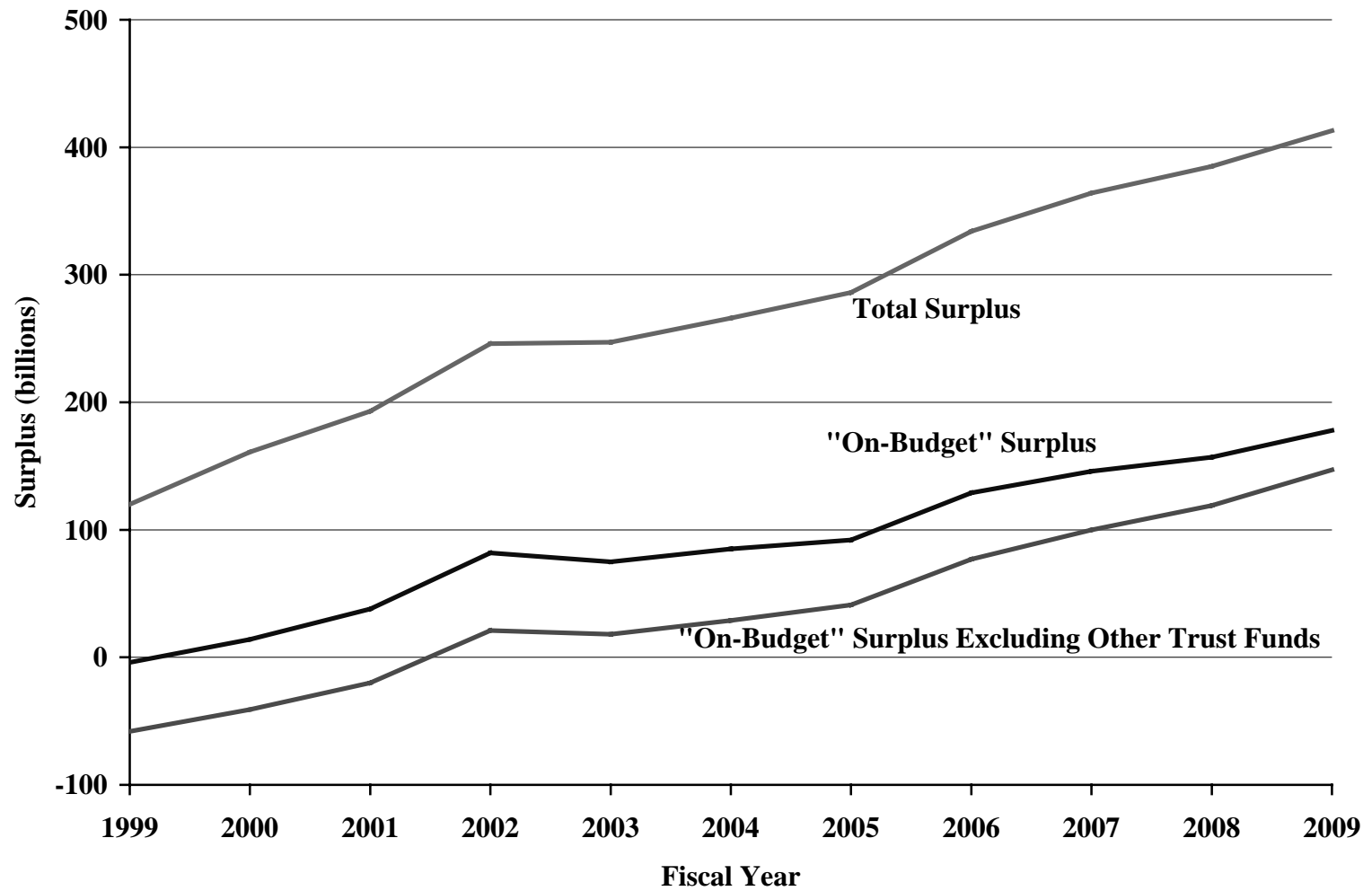
Figure 3. The Projected Surplus, 1999-2009
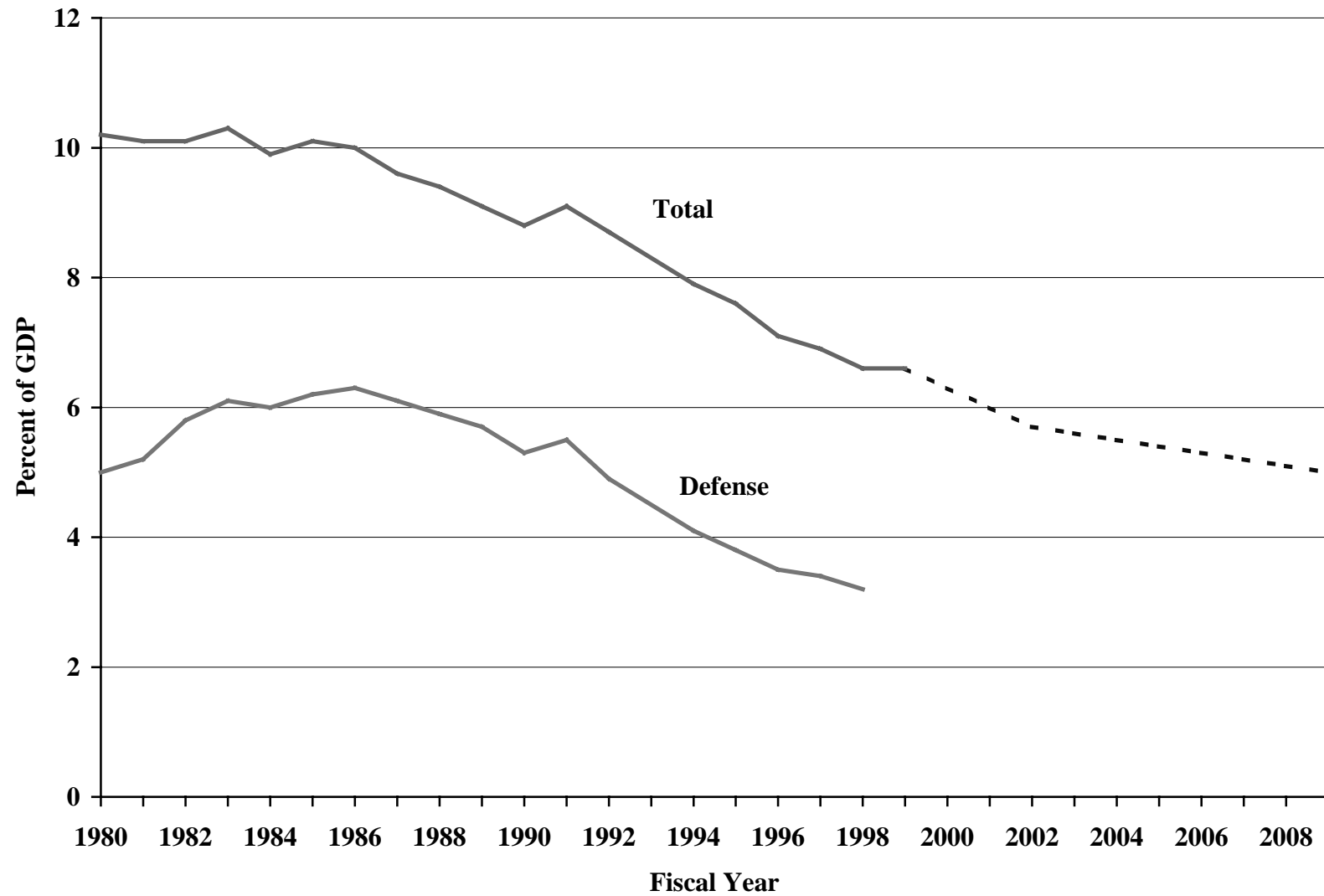
Figure 4. Discretionary Spending as a Percent of GDP

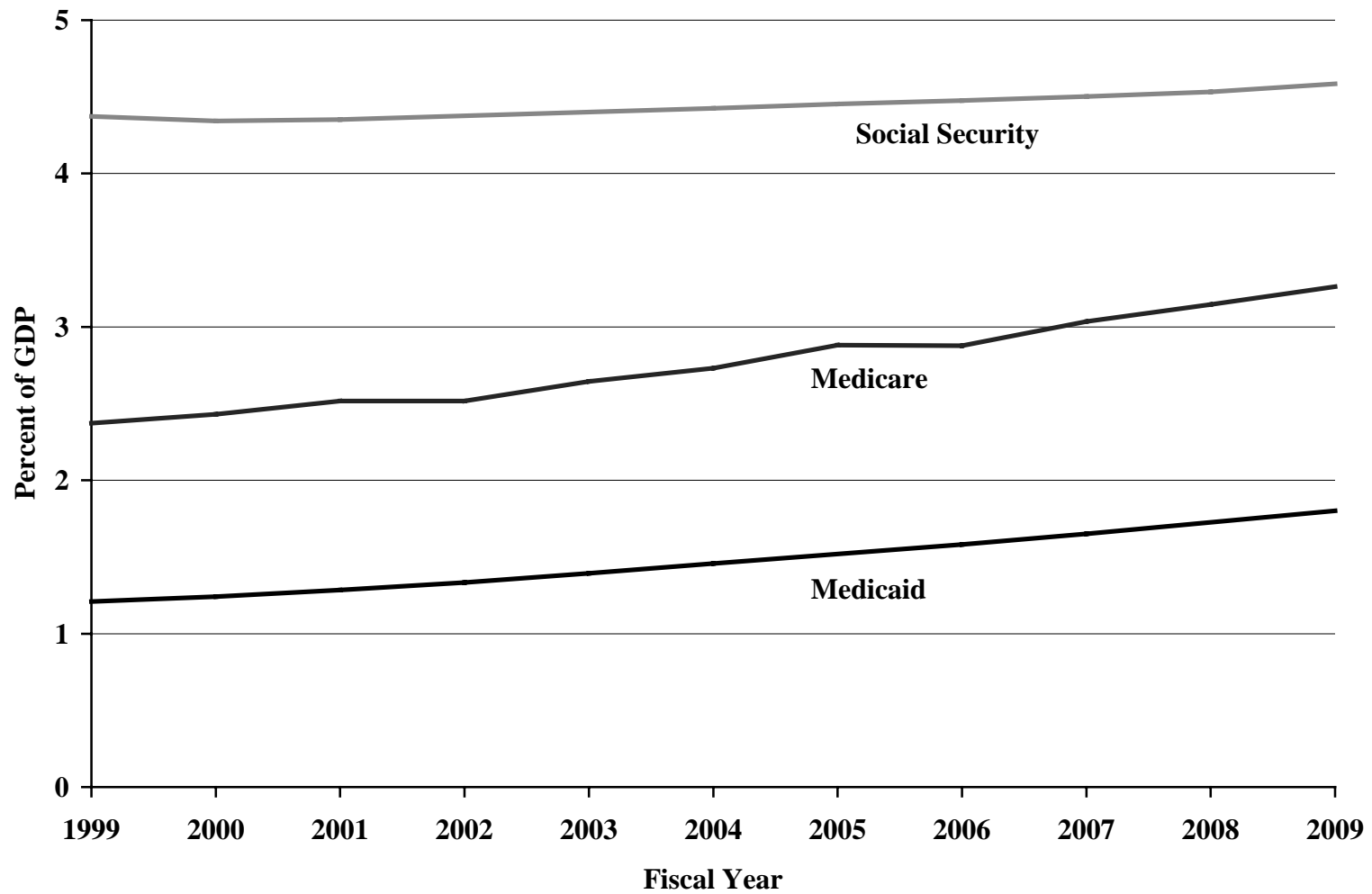# Figure 5. Entitlements as a Percent of GDP, 1999-2009

Social Security

Medicare

Medicaid

Y-axis: Percent of GDP

X-axis: Fiscal Year

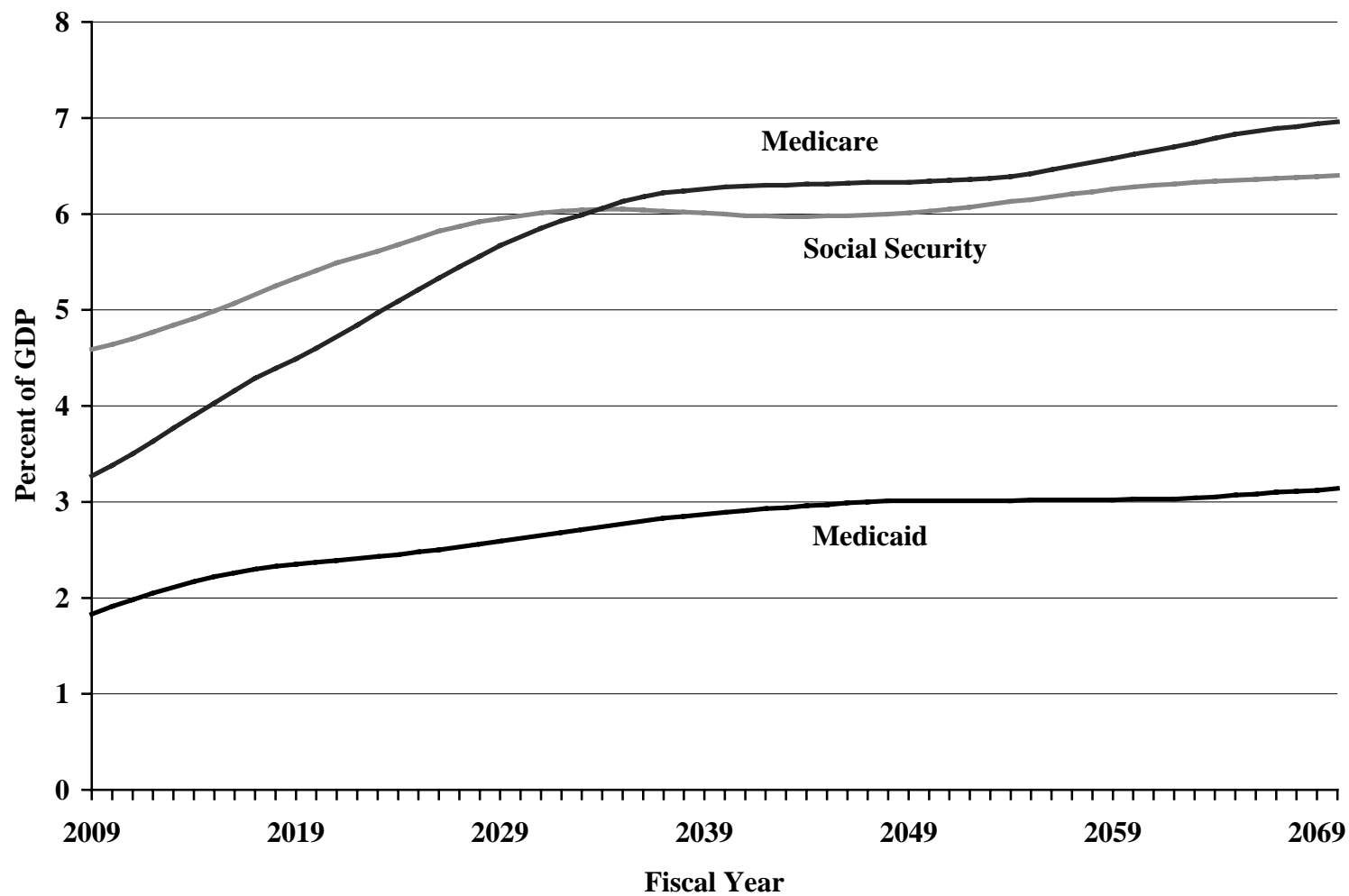**Figure 6. Entitlements as a Percent of GDP, 2009-2070**

Table 1. Pre-Tax Income Growth and Effective Tax Rates

Families (by income group)	Percent Increase in Real Pre-Tax Income, 1993-99	Effective Income Tax Rate, 1993	Effective Income Tax Rate, 1999
Lowest Quintile	7.7	-3.4	-6.8
Second Quintile	8.2	1.8	0.9
Third Quintile	9.6	5.9	5.4
Fourth Quintile	8.2	8.5	8.4
Highest Quintile	15.8	15.5	16.1
Top 10 Percent	19.0	17.4	18.0
Top 5 Percent	22.7	19.3	19.6
Top 1 Percent	23.1	22.8	22.2

Source: CBO (1999c), Table 1

Table 2. Ten-Year Costs of Changes in Discretionary Spending

Policy 1999-2002	2002-2009	Discretionary Spending in 2009, (percent of GDP)	Cost Relative to Baseline[*] (billions of dollars)
Nominal DS Declines	Real DS Constant	4.99	----
Nominal DS Constant	Real DS Constant	5.04	43
Real DS Constant	Real DS Constant	5.43	566
Maintain % of GDP	Maintain % of GDP	6.49	1,343

[*]Includes added debt service costs to higher outstanding public debt

Source: Auerbach and Gale (1999)

Table 3. Average Forecast Revisions, 1986-1999

(percent of trend revenue)

Pre-Clinton Period (1986-93)			Clinton Period (1993-99)			Total		
OMB	CBO	DRI	OMB	CBO	DRI	OMB	CBO	DRI
-9.23	-10.48	-12.17	8.32	14.81	11.61	-1.40	0.80	-1.47

Source: Auerbach (1999)

Table 4. Estimates of the Long-Term Fiscal Imbalance

Details	Fiscal Gap (% of GDP)
Baseline	1.30
Discretionary Spending Constant at 1999 share of GDP	3.17
Congressional Conference Agreement	2.47
Congressional Conference Agreement delay adjustment until 2010	2.98
Clinton Plan	1.83
Clinton Plan delay adjustment until 2010	2.21

Source: Auerbach and Gale (1999)