How well did the Social Security system do last year? According to government reports prepared for the general public, the Social Security trust funds showed a $163.1 billion net increase in assets in 2001 and reported accumulated reserves of over $1.2 trillion by year end. Unfortunately, these glowing reports are a cash-flow illusion. Were the finances of the Social Security system restated under principles of accrual accounting comparable to those that govern private pension plans and other long-term liabilities of the federal government, the Social Security trust funds would have had to report a $454.8 billion loss in 2001. Moreover, as of December 31, 2001, an accrual-based balance sheet of the Social Security system would have revealed an accumulated deficit of $12.2 trillion dollars, a shortfall nearly four times greater than the amount of federal debt outstanding to the public. In reality, the unfunded accrued liabilities of the Social Security system represent our Nation’s largest single financial obligation, an obligation that is growing by hundreds of billions of dollars each year.

In this Article, Professor Howell E. Jackson of Harvard Law School argues that, in addition to misrepresenting the magnitude of the Social Security system’s looming financial crisis, the current accounting system for Social Security distorts public debate over Social Security reform proposals and confuses the relationship between Social Security and rest of the federal budget. Were the financial statements of the Social Security system restated under generally accepted principles of accrual accounting, both the public and the Nation’s leaders would have a clearer picture of the true state of the system’s finances. In addition, accrual accounting would make it much more likely that the country and its leaders would begin a responsible and intelligible debate over competing proposals to reform the Social Security system.

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Accounting for Social Security and Its Reform

by
Howell E. Jackson

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Accounting for Social Security and Its Reform

by

Howell E. Jackson

This article proposes a change in the way we account for Social Security.

To the extent that prior academic work has considered the accounting treatment of Social Security, attention has been focused on the question of whether Social Security should be included in the unified federal budget. Even though Congress some years ago voted to exclude Social Security from federal budgetary aggregates, politicians routinely incorporate current Social Security cash-flow surpluses into their discussions of federal deficits and surpluses. So, as Social Security aficionados have known for years and as recent debate over Social Security reform has begun to inform the general public, federal surpluses in recent years and projected surpluses over the coming decade derive in substantial part from cash-flow surpluses from Social Security trust funds.

While there is much to criticize in this accounting anomaly and the political disingenuousness it facilitates, there is a much more serious flaw in our accounting for Social Security. Almost all public discussion of Social Security finances are based on reports the Social Security Board of Trustees prepare each year. The trustees reports are, in essence, statements of annual cash flows. While the Trustees’ annual reviews also includes long-term cash-flow projection, cash-flow accounts are inherently confusing, and distort public debate over Social Security reform in numerous ways. If the financial statements of the Social Security system were restated under principles of accrual accounting, the public would receive a much more accurate picture of the dire condition of Social Security finances and would be much better positioned to make an informed choice among competing reform
proposals.

Consider, for example, the reported financial performance of the Social Security trust funds last year. According to the trustees report, the combined Social Security trust funds ran a cash-flow surplus of $163 billion in 2001 and accumulated record levels of reserves, equal to $1.2 trillion in government bonds, by the end of the year. These financial facts, which are widely reported in the popular press and well known to political leaders, imply that the current financial position of the Social Security trust funds at the end of last year were quite good. While the Trustees’ longer-term projections suggest that Social Security will face serious problems several decades in the future, the short-term outlook is so favorable that there is little incentive for political leaders to explore the potentially painful choices that would be necessary to address the system’s problems through altering benefits or raising revenues.

If, however, the trust fund accounts were presented under a system of accrual accounting, public perceptions and political incentives would change dramatically. As explained below, if restated under a system of accrual accounting, the Social Security trust funds would have had to report a loss on the order of $455 billion for 2001 and comparable or even larger annual losses for much of the last decade. Were the Social Security trust funds required to prepare a balance sheet based on principles of accrual accounting, their financial statements with accrued liabilities of on the order of $13.4 trillion at the end of 2001 — that is, more than ten times the system’s current reserves of $1.2 trillion. In other words, as of December 31, 2001, the Social Security trust funds had a negative net worth of $12.2 trillion, or 120 percent of the country’s gross domestic product (GDP). If Social Security’s financial position were reported in this more accurate but distressingly unfavorable light, the political incentives to address the system’s difficulties would be greatly improved.

In addition, moving Social Security to an accrual-accounting system would greatly enhance the quality of debate over Social Security reform proposals. In a variety of ways, cash-flow accounting biases public debate over Social Security reform proposals,
encouraging politicians to obscure the extent of Social Security’s mounting liabilities and favoring certain kinds of reform, particularly those that offer increased benefits in the short term and delay the imposition of real savings until many years in the future. A new accrual-accounting system would clarify both the current status of Social Security’s finances and the relative merits of competing recommendations for reform.

This article is divided into three parts. In Part One, I present a critique of our current system of accounting for Social Security and advance my claim that accrual accounting offers a valuable alternative framework for evaluating the annual performance and overall solvency of the Social Security system. I focus first on the traditional accounting treatment of the Social Security trust funds and then consider the relationship between those trust funds and the overall federal budget. In both contexts I argue that current practices are inherently misleading and distort the debate over Social Security reform proposals in important ways.

In Part Two of the article, I present an alternative framework for Social Security accounting, one based on principles of accrual accounting. First, I sketch out the basic components of such an accounting system, including both balance sheets and income statements. Then I explore how such an alternative approach should be combined with other aspects of the federal budget in order to produce a more accurate and useful presentation of our public financial position. In Part Three, I explain how such an accrual-accounting system could positively influence the ongoing debate over Social Security reform, both in clarifying the nature of the choices being presented to the American public and also in improving the incentives for political leaders to adopt responsible reform proposals that promote the long-run stability of Social Security.

Part Four offers a postscript on normative baselines for my proposal and argues that my approach is more consistent with these baselines than is the current system of cash-flow accounting. As explained below, the essential problem of accounting for Social Security is that the government makes commitments to Social Security participants while they are
working and contributing payroll taxes and then must honor these commitments by making payments in the future, after the workers retire. In other governmental contexts — where there is a substantial temporal disconnect between commitment and payment — government accounts are increasingly expressed on an accrual basis. What I am proposing in this article is simply an extension of this trend to our most important social-insurance program. I am, moreover, not the first to explore this territory. Several years ago, the accounting oversight body responsible for developing generally accepted accounting practices for governmental entities adopted new rules that require social-insurance programs, such as Social Security, to disclose certain accrual-accounting elements similar to, though not nearly as extensive as, the ones I recommend in this paper. The logic underlying these reforms in government accounting support my proposals. Finally, I argue, when economists and other public policy analysts attempt to estimate the true value of Social Security obligations, they employ techniques of accrual accounting that are much more similar to the approach I recommend in this article than to the program’s current system of cash-flow accounting. In short, I believe that there is ample support for the proposition that accrual accounting is the way we should account for Social Security.
I. A Critique of Current Accounting System for Social Security

Social Security historically has employed a cash-flow method of accounting. In part, this presentation reflects the traditional operating philosophy of the program. For many years, Congress and the Social Security Administration ran the program on a pay-as-you-go basis. The lion’s share of annual revenues — raised primarily in the form of payroll taxes paid by workers and employees — were immediately transferred to current beneficiaries. As long as inflow was adequate to meet outflow, the system was considered to be in balance. Indeed, for many decades, if the inflow exceeded the promised benefits, Congress interpreted the cash-flow surpluses as a sign that benefits should be raised so as to make use of the system’s excess cash reserves.¹

While generally consistent with traditional federal government accounting practices,² cash-flow accounting leaves much to be desired in the context of public retirement programs such as Social Security. This Part briefly summarizes current accounting practices for the Social Security program and then explains how these practices distort public understanding of the program. I begin with the Social Security trust funds themselves and then turn to the relationship between the trust funds and the unified federal budget.

A. Analysis of Accounting for the Trust Funds

Since the Social Security program’s inception in the 1930s, Social Security revenues


² As described below, see infra pages 89-91, the federal budget is increasingly making use of accrual accounting for certain programs. And, indeed, the traditional presentation of Social Security finances of the trustees annual reports no longer complies with generally accepted accounting standards for government entities. See infra pages 91-96.
have been placed in “trust funds.” These trust funds have little in common with traditional trusts. Assets are not legally segregated for particular classes of beneficiaries, nor do Social Security trustees have any legal obligation to protect the interests of program participants. Rather, the trust funds are accounting entries in the federal budget to which Social Security contributions and certain other accruals and payments are attributed and from which Social Security benefits and certain other expenses are paid. The trust funds are, however, the principal vehicles through which politicians and the public analyze the program’s financial status and therefore provide a useful starting point for analysis of the program’s current accounting treatment.

1. Standard Presentation

Each year, the trustees of the Social Security system produce an annual report of the trust funds' financial condition. A cursory review of the trustees’ most recent report — for the calendar year ending December 31, 2001 — reveals two basic financial messages. In the short term, Social Security is doing quite well, but over the longer run, this program is on a course for financial ruin.

a. Short-Range Projections

According to the 2002 Trustees Report (as well as most other contemporaneous commentary), the short-range prospects of Social Security are good because the combined

---

3 The trust funds were not included in the original Social Security legislation of 1935 but were added four years later in 1939 amendments. See Eric M. Patashnik, Putting Trust in the US Budget 67-69 (2000) (explain that concerns over constitutional challenges prevent initial legislation from including trusts.)

4 See 42 U.S.C.A. § 401(c) (West Supp. 2002) (“A person serving on the Board of Trustees shall not be considered to be a fiduciary and shall not be personally liable for actions taken in such capacity with respect to the Trust Funds.”).

Old Age, Survivors, and Disability Insurance (OASDI) trust funds have over a trillion dollars of reserves deposited with the U.S. Treasury and are projected to take in more income than they put out in expenditures for at least the next decade. Table One is the sort of reassuring presentation that one finds in the opening pages of the most recent Trustees Report. It shows a rosy picture of current operations. The combined OASDI trust funds started the year with some $1,049.4 billion in assets deposited with the U.S. Treasury. Over

| Table One
| Summary of Trust Fund Operations in 2001 (billions) |
| (Source: Tables II.B1 and II.B3 of 2002 Trustees Report) |
| Trust Fund Assets (year end 2000) | $1,049.4 |
| Income During 2001: |
| Payroll Taxes: | $516.4 |
| Taxation on Benefits: | 12.7 |
| Interest on Assets | 72.9 |
| Total Income | $602.0 |
| Expenditures During 2001: |
| Benefit Payments: | $431.9 |
| Railroad Retirement | 3.3 |
| Administrative Expenses | 3.7 |
| Total Expenditures | $438.9 |
| Net Increase in Assets: | $163.1 |
| Trust Fund Assets (year end 2001) | $1,212.5 |

6 Throughout this paper, I will refer to the combined Old Age, Survivors and Disability Trust Funds. In fact, there are two separate trust funds – one for Old and Survivors Insurance and the other for Disability Insurance – and their individual financial status differs somewhat from that of the combined fund. For the purposes of my analysis, however, these differences are not significant.

7 2002 Trustees Report, supra note 5, at 5-6.
the course of the year, the funds took in $516.4 billion in payroll taxes (from a levy of 12.40 percent imposed on taxable wages up to $80,400 in 2001 and divided evenly into employee and employer shares of 6.20 percent each), another $12.7 billion in taxes on Social Security benefits, plus $72.9 billion from interest on trust fund assets deposited with the Treasury, for a combined income of $602.0 billion for the year. Charged against this inflow, as can be seen in Table One, was some $438.9 billion of expenditures, consisting almost entirely of benefit payments, resulting in a “net increase in assets” of $163.1 billion during the year and increasing the funds’ total assets to $1,212.5 billion at year end.

Another way that the trustees commonly describe the short-term favorable outlook for the Social Security system is by reference to a “trust fund ratio.” This statistic is the ratio between the trust funds’ total assets at the beginning of the year and the projected total expenditures over the course of the year. (On December 31, 2001, the trust fund ratio for the combined funds was 261 percent: total assets at the beginning of the year of $1,212.5 billion divided by total projected expenditures during the year of $465.2 billion.) In assessing the trust fund ratio, the trustees have set 100 percent as a minimum acceptable ratio on the theory that the funds’ total assets will be sufficient to meet the projected expenditures over the course of the year.
that, as long as the trust funds have at least a year’s worth of expenditures on hand, Congress would have time to respond to any unexpected short-term crisis in the system’s financing. In the extreme, as long as the trust fund ratio were 100 percent, the trust funds could receive no additional benefits for a year and still be able to pay benefits at current levels. Of course, at the end of the year, the funds would be totally depleted, but presumably by that time Congress would have responded to the crisis with legislative relief of some sort.

Measured in terms of trust fund ratios, the 2002 Trustees Report also shows a carefree short-term picture, as presented in Figure One. Based on the trustees’ intermediate or best-guess economic forecasts, this chart shows the trust fund ratio increasing from 239 percent at the end of 2001 to a high of 447 percent a decade later — that is, cash reserves equal to nearly four-and-a-half years of projected expenditures in 2011. In the trustees’ words,
“Because the trust fund ratio for the combined funds is estimated to remain above 100 percent under the intermediate assumptions, the combined funds meet the short-range test of financial adequacy.”13 Even under the pessimistic, high cost estimates, the trust funds were projected to remain above the 100 percent threshold throughout the coming decade.14

b. Long-Range Projections

When discussing the trust funds’ long-range prospects, the trustees reports become decidedly more pessimistic.15 Notwithstanding a much publicized bipartisan effort in the early 1980s to produce a permanent solution to the problem of Social Security, the trustees have for some time now been warning of serious dangers confronting the system in the next decade. The 2002 Trustees Report sounded the same alert:

A significant shift upward in the average age of the United States population in the decades ahead due to the aging of the baby-boom generation, expected continuing low fertility, and increasing life expectancy, will increase the cost of Social Security faster than its income under current law. Based on the Trustees’ best estimates, expenditures, which are now well below tax revenues, are expected to exceed tax revenues in 2017 . . . and throughout the remainder of the 75-year projection period. Assets in the Social Security combined trust funds are projected to be adequate to allow full payment of benefits, until becoming exhausted in 2041, 3 years later than was projected in last year’s report. At that time annual tax income to the trust funds is projected to equal about 73 percent of program costs. . . . By 2076, however, annual tax income is projected to be only about two-thirds as large.


14 See also 2002 Trustees Report, supra note 5, at 10.

15 2000 Trustees Report, supra note 12, at 3 (“On a combined basis, the OASDI program is not in ‘close actuarial balance’ over the next 75 years. In addition, the individual OASI and DI Trust Funds are not in close actuarial balance. These conclusions are the same as those shown in the 1999 Annual Report.”). See also 2002 Trustees Report, supra note 5, at 11-12.
as the annual cost of the [combined] program.\textsuperscript{16}

Based on these projected long-range shortfalls, the trustees regularly urge Congress and the President to revisit the issue of Social Security and make appropriate adjustments to forestall the looming crisis.\textsuperscript{17}

\begin{figure}
\centering
\includegraphics[width=\textwidth]{figure2}
\caption{Figure Two \hfil Long-Range Estimated Income and Cost Rates \hfil \footnotesize{\textit{(from Table IV.B1 of 2002 Trustees Report)}}}
\end{figure}

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{16} 2002 Trustees Report, supra note 5, at 18.
\item \textsuperscript{17} See 2000 Trustees Report, supra note 12, at 30-31 (“In view of the size of the financial shortfall in the OASDI program over the next 75 years, we again urge that the long-range deficits of both the OASI and DI Trust Funds be addressed in a timely way.”). See also The 2001 Annual Report of the Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds 14 (Mar. 19, 2001) [hereinafter 2001 Trustees Report] (“The trust fund deficits projected for the longer run should be addressed in a timely way to allow for gradual phasing in of any necessary changes and to provide advance notice so that workers can adjust their plans to take account of those changes.”); 2002 Trustees Report, supra note 5, at 18 (same language).
\end{itemize}
\end{footnotesize}
The 2002 Trustees Report includes several different accounting presentations to support their claims of long-range insolvency. One presentation, summarized in Figure Two, compares long-range estimated income rates to cost rates over the next seventy-five years (a period chosen because it includes the life expectancy of almost all current workers and retirees). Both rates are expressed as a percentage of taxable wages. The income rates rise fairly modestly over the period, as payroll taxes are not scheduled to increase beyond their current 12.40 percent of taxable payroll, and income generated by the taxation of Social Security benefits has only a modest effect on overall inflow. The system’s cost rates, in contrast, rise dramatically in the second and third decades of the century, surpassing income rates (under intermediate assumptions) by 2017 and generating an annual combined trust fund deficit of 6.35 percent of payroll by 2075.

The substantial imbalance between projected income and benefit rates lies at the heart of the long-range crisis facing the Social Security system. It is, however, a somewhat complicated phenomenon to comprehend, as it combines the short-range surplus that will accumulate between now and some time in the next decade with longer-term deficits. Admittedly, a quick review of charts such as Figure Two suggests that the long-term deficit

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18 For example, under the trustees’ intermediate projections, the combined income rate for OASDI funds increases by only 0.71 percent percentage points during the seventy-four-year period, from 12.70 percent of taxable wages in 2001 to 13.41 percent in 2075. See 2002 Trustees Report, supra note 5, at 48.

19 The Trustees Reports typically present three alternative cost estimates: high, low, and intermediate. Unless otherwise indicated, I will use the intermediate estimates, as these are the ones most commonly used in public discussions of Social Security. To the extent feasible, figures and tables will report all three estimates. For a discussion of the assumptions and methods underlying the actuarial estimates, see 2002 Trustees Report, supra note 5, at 75-124.
is, crudely speaking, bigger than the short-range surplus, but such eyeball assessments are unreliable, particularly when dealing with a period extending seventy-five years into the future. Moreover, a simple comparison of income and benefit rates does not take into account the current reserves of the combined trust funds (that is, the more than $1,212.5 billion in assets deposited with the Treasury as of December 31, 2001) or the interest that can be expected to accrue on these reserves. Recognizing that simply comparing cost and income rates yields an incomplete picture, the trustees report offers two different ways of conceptualizing the long-range imbalance of the combined OASDI trust funds.

\[\text{Table Two}
\]

Components of Summarized Income and Cost Rates
(from Table IV.B8 of 2002 Trustees Report)

<table>
<thead>
<tr>
<th>Valuation Period</th>
<th>Income Rate</th>
<th>Cost Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Payroll Tax</td>
<td>Disburse-</td>
</tr>
<tr>
<td></td>
<td>Taxation</td>
<td>ments</td>
</tr>
<tr>
<td></td>
<td>of Benefits</td>
<td>Balance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
</tr>
<tr>
<td>Intermediate:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25-years:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001-2025</td>
<td>12.39</td>
<td>0.48</td>
</tr>
<tr>
<td>50-years:</td>
<td>12.39</td>
<td>0.63</td>
</tr>
<tr>
<td>75-years:</td>
<td>12.39</td>
<td>0.70</td>
</tr>
<tr>
<td>Low Cost:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25-years:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001-2025</td>
<td>12.39</td>
<td>0.44</td>
</tr>
<tr>
<td>50-years:</td>
<td>12.39</td>
<td>0.55</td>
</tr>
<tr>
<td>75-years:</td>
<td>12.39</td>
<td>0.59</td>
</tr>
<tr>
<td>High Cost:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25-years:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001-2025</td>
<td>12.39</td>
<td>0.53</td>
</tr>
<tr>
<td>50-years:</td>
<td>12.39</td>
<td>0.73</td>
</tr>
<tr>
<td>75-years:</td>
<td>12.39</td>
<td>0.85</td>
</tr>
</tbody>
</table>

---

\[^{20}\text{In other words, the income rates reported in presentations such as Figure Two do not include income in the form of interest payments from the trust fund reserves. This interest does, however, figure into the annual report of trust fund activities summarized in Table One.}\]
The first, which is illustrated in Tables Two and Three, presents what are known as summarized income and cost rates. In essence, these summarized figures attempt to normalize projected costs and benefits over three time periods (the following twenty-five, fifty, and seventy-five years), generating what are, in effect, average income and cost rates for the three periods.\textsuperscript{21} The summarized presentations offer a more complete picture of income and expenses than do the simple comparisons of annual income and benefit rates discussed above. As can be seen from Table Two, these presentations include information not just about payroll tax and revenues from the taxation of benefits but also about the annualized value of the current trust fund reserves (spread over the relevant period) plus the cost of building up a final trust fund balance equal to 100 percent of benefits projected for the year following the end of the period.\textsuperscript{22}

The value of summarized revenue and cost rates is that they allow analysts to compare the relative magnitudes of various components of the trust funds’ long-term balance. These tables show, among other things, the relatively minor long-run significance of the trust funds’ current reserves of $1,212.5 billion.\textsuperscript{23} An analysis of the summarized components also confirms the accuracy of an eyeball assessment of Figure Two — the long-run deficits of the outyears substantially outweigh the funds’ near-term surpluses in all but

\textsuperscript{21} The summarized data reflect, not an arithmetic mean, but an average of the discounted value of various components over the relevant period. Thus, the summarized rates take into account the time-value of money as well as the projected accrued interest on trust fund reserves.

\textsuperscript{22} As discussed above, 100 percent of projected annual expenditures is the level of assets assumed to be required for short-range solvency.

\textsuperscript{23} For example, if one were to assume (under the intermediate-cost estimates) that the entire current reserves ($1,212.5 billion) would be amortized over the next twenty-five years, the reserves would be equivalent to be equivalent to an increase of 1.34 percent in payroll taxes, and, if adjustment were made for the 0.56 percent cost rate associated with building an adequately funded reserve at the end of the period, the increase would be only 0.78 percent. Over longer periods, the current trust reserves have even less significance.
the trustees’ low-cost estimates and do so by a considerable margin.

The statistic that encapsulates all of this information can be found in Table Three, showing summarized and combined income and cost rates. The table restates the total income and cost rates shown in Table Two and then indicates the difference between those two rates for each period of analysis. The figure that the arrow points to — minus 1.87 — is the one that policy analysts often employ as a shorthand measure of Social Security’s long-term problems. It reflects the difference between seventy-five-year revenue and costs rates under the trustees’ intermediate assumptions. This figure is often described as a measure of the amount that the payroll tax rate would have to be increased (starting today and continuing for the full seventy-five-year period of analysis) in order to bring the Social Security trust

---

**Table Three**

**Summarized and Combined Income and Cost Rates**

(from Table IV.B5 of 2002 Trustees Report)

<table>
<thead>
<tr>
<th>Valuation Period</th>
<th>Income Rate</th>
<th>Cost Rate</th>
<th>Combined Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Intermediate:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25-years:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001-2025</td>
<td>14.21</td>
<td>12.98</td>
<td>1.24</td>
</tr>
<tr>
<td>50-years:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001-2050</td>
<td>13.82</td>
<td>14.77</td>
<td>-0.95</td>
</tr>
<tr>
<td>75-years:</td>
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funds back into long-range balance. Typically, reform measures — ranging from reductions in benefits to increases in the taxation of Social Security benefits to gains from improving the yield on trust fund assets — are measured in terms of their effect on reducing or eliminating the current negative 1.87 combined rate.

According to standards of long-range “close” actuarial balance that the trustees have established, a 1.87 percent deficit in the combined rate for the seventy-five-year horizon is unacceptable. According to the trustees’ standards, the combined ratio for this period should be no greater than five percent of the summarized cost rate for the same period (that is, five percent of 15.59 percent, or 0.78 percent). The intuition underlying this standard is that over the long run the trust funds should be considered in actuarial balance only if projected revenues meet 95 percent of projected costs.

Another way of presenting the trust funds’ long-range solvency are charts showing the projected trust fund balances in future years. In essence, these charts reflect a continuation of those in Figure One, which was limited to ten years of trust fund ratios. Figure Three is an example of this sort of long-range presentation. This figure reveals that

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24 See 2002 Trustees Report, supra note 5, at 18 (“This deficit indicates that financial adequacy of the program for the next 75 years could be restored . . . if the Social Security payroll tax were immediately and permanently increased, from its current level of 12.4 percent (combined employee-employer shares) to 14.27 percent.”).


26 See 2002 Trustees Report, supra note 5, at 62-63. In their assessment of combined rates, the trustees actually use a sliding scale, under which combined rates must precisely match cost rates over a ten-year period (that is, over the short range) and are allowed to gradually deviate by up to 5.0 percent over the full seventy-five-year horizon.
(under intermediate estimates) the trust fund ratios will begin to decline in approximately 2016, will pass the trustees’ minimum prudent reserve level (100 percent of projected annual benefits) in the late 2030s, and will be entirely depleted of resources in 2041. At that point, if this scenario were to come to pass and no intervening legislation were enacted, the combined trust funds would have insufficient resources to honor the projected cost of all promised benefits. In fact, the funds’ projected income for that year (roughly 13.26 percent of taxable payroll) could cover less than three-quarters of projected benefits (roughly 17.77 percent of taxable payroll)\textsuperscript{28} By the end of the seventy-five years, the trust funds’ projected

\textsuperscript{27} See 2002 Trustees Report, supra note 5, at 57.

\textsuperscript{28} See Table IV.B1 of 2002 Trustees Report (projected cost and income rates for 2040). These ratios reflect the differences in projected income and benefit rates shown in Figure Two above (intermediate estimate).
coverage would be less than two-thirds of projected benefits (that is, 13.42 percent of taxable payroll in income versus 19.84 percent of taxable payroll in benefits.)

2. Criticisms of the Standard Presentation

While the information embodied in the trustees reports is well presented and of considerable value, there are certain limitations in the standard presentations featured in these reports. Put simply, the optimistic short-range projections are too optimistic, and the pessimistic long-range projections are also too optimistic. Moreover, in many respects, these presentations distort public debate over competing reform proposals.

a. Short-Range Projections

As explained above, the take-home message of the trustees’ short-range projections is that the next ten years look pretty good for the Social Security trust funds. To be sure, there is some truth to this message, at least in the sense that the trust fund reserves on deposit in the Treasury will grow during the coming decade. But this is a criterion of assessment based exclusively on an analysis of cash flow. It takes no account of changes in the system’s liabilities over the course of the year, either the liabilities that were liquidated over the course of the year (in the sense of benefit promises fulfilled) or the new liabilities generated (in the sense of new benefits promised). Indeed, the trustees reports have a somewhat curious attitude with respect to the system’s liabilities. Reading through reports, one is constantly warned that the primary problem facing the Social Security system is the retirement of the baby-boomer generation starting a decade or two in the future. At this point, the reports advise, the system will owe this generation a substantial level of benefits, which it will be unable to pay even after drawing down substantial reserves that will have accumulated over the intervening years. Thus, the short-range surplus will be overwhelmed by liabilities

29 Id. at 3.
But the dichotomy between short-range feast and long-range famine is inaccurate and misleading. The reason the Social Security system faces a long-term crisis is that it has accumulated substantial pension promises to current workers and retirees. What’s more, each year it promises to make additional pension payments to most current workers. When the 2002 Trustees Report suggests that 2001 was a good year for the Social Security system and emphasizes a $163.1 billion increase in the system’s assets in that year (see Table One), the data presented give no sense of how the growing cash surpluses compare to other aspects of the system’s operations during the year. To be sure, an astute reader might infer that all was not well with the system in that the report provides ample evidence that current surpluses will be insufficient to meet long-run benefit commitments. But it is all but impossible to determine from the 2002 Trustees Report whether these long-run problems are the consequence of promises made before 2001 (that is, promises made to current retirees and older workers) or a result of promises to be made to baby boomers and others at some point in the future. In short, the 2002 Trustees Report gives little sense of whether, all things considered, 2001 really was a good year for the Social Security trust funds.30

In making references to liabilities of the Social Security system, I recognize that the character of Social Security’s pension promises is complex and contestable. As a purely legal matter, Social Security benefits do not constitute binding obligations on the part of the federal government. (Box 1 summarizes the legal status of Social Security benefits.) And since Social Security beneficiaries have no constitutionally protected right to receive any particular level of Social Security benefit, it remains problematic to define how individual benefits accrue over time. In Part Three of this Article, I will present a more formal defense

30 For readers in suspense on this point, the answer is that 2002 was a very bad year for the system. An estimate of the system’s true profitability in 2002 is presented below in Part Two.
of my claim that financial statements of Social Security should reflect the gradual accrual of obligations over time. For current purposes, I will limit myself to highlighting the considerations that the current cash-flow approach entirely neglects.

To begin with, there is the statutory basis of Social Security. As structured under the Social Security Act, an individual’s Social Security benefits are based on the number of years the individual participates in the system, and grow larger as the individual worker makes contributions to the system. The amount of benefits paid out of the trust funds is largely a function of participants’ lifetime earnings — that is, workers earn Social Security benefits under statutory formulas based on the highest thirty-five years of wages over the course of their working careers. And, as explained below, when economists want to calculate the value of Social Security benefits, they routinely look to these statutory formulas to estimate how large a benefit a particular individual has accrued at a particular time. The trust funds’ financial statements, however, make no effort to quantify this gradual accretion of statutory entitlements for individual beneficiaries.

The trustees reports also do no reflect the political reality of the trust funds’ benefit structure. According to Social Security lore, President Roosevelt wanted Americans to think of themselves as having contributed to individual Social Security accounts — that is, accounts held in trust and funded through individual contributions — so as to create a sense of personal connection to the Social Security program and thereby increase public support for the system. If this was, in fact, President Roosevelt’s intention, history has seen his vision realized. Public opinion surveys confirm that older workers and retirees do feel a strong

31 See infra pages 102-07 (life cycle-savings and household wealth studies).

sense of entitlement for their Social Security benefits.33 Upon retirement, the elderly feel that the federal government has an obligation (that is, has incurred a liability) to pay Social Security benefits as promised. And, although it is difficult to say exactly when that obligation arises (that is, accrues), there is, I believe, a national consensus that somewhere between entry into the workforce and the age of retirement, workers and their families do accrue — politically, if not constitutionally — an undeniable and unassailable entitlement to receive Social Security benefits at approximately the levels indicated by the statutory structure under which they and their employers had paid Social Security taxes. The trustees’ projections make no effort to account for this accrual of politically sacrosanct obligations over the working life of participants.

Moreover, there is the analogy of private pension plans. Under generally accepted accounting principles (GAAP), private firms are not permitted to ignore retirement benefits promised to current workers. Whether pension or retiree health benefits, companies must accrue the costs of retiree benefits while employees are still in the workforce. The required rates of accrual are, moreover, not based simply on the legal entitlements of workers, but rather on the projected level of benefits that workers are actually expected to receive — often much higher amounts. The premise of this GAAP requirement is that retiree benefits should be recognized on corporate financial statements as soon as it is reasonably clear that the benefits will have to be paid. Even though it is widely recognized that Social Security benefits are politically and practically sacrosanct by the time workers near retirement — that is, the benefits will almost certainly be paid as promised — the trustees reports do not recognize any benefit obligations until the year of payment. In other words, the financial statements of Social Security omit the central feature of GAAP for private pensions.

Finally, one could look at the accountant’s own definition of the term liabilities: “Liabilities are probable future sacrifices of economic benefits arising from present obligations of a particular entity to transfer assets or provide services to other entities in the future as a result of past transactions.”\(^{34}\) This definition is intentionally expansive. The commitments need not be definite, so long as obligation are probable – “that which can reasonably be expected or believed on the basis of available evidence or logic but is neither certain nor proved.”\(^{35}\) Such commitments moreover need not be legally enforceable obligations; rather the term obligations as used in the definition of liabilities is broader, including duties which “one is bound to do by contract, promise, moral responsibility and so forth.”\(^{36}\) At the heart of my complaint about the trustees report is it fails to recognize substantial financial commitments that the trust funds will in all likelihood have to honor as a result of past contributions to the system.

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\(^{35}\) Id. n.21.

\(^{36}\) Id. n.22.
Box One

The Constitutional Status of Social Security Benefits

Once there was the question of whether Congress had the authority to reduce or eliminate Social Security benefits for individuals who had paid Social Security taxes under a statutory regimen that provided for a certain level of benefits. In particular, there was uncertainty as to whether Social Security participants had some form of property interest in Social Security benefits that, under the Fifth Amendment of the U.S. Constitution, could not be diminished without just compensation. In the case of Fleming v. Nestor, 363 U.S. 603 (1960), the Supreme Court ruled that “a person covered by the [Social Security] Act has no[]. . . . right in benefit payments as would make every [statutory] defeasance of ‘accrued’ interests violative of the Due Process Clause.” Id. at 611.

The Fleming case involved a Bulgarian immigrant named Ephram Nestor, who had arrived in the United States in 1913 and had paid Social Security taxes from 1936 until his retirement in 1955, at which point he was eligible for retirement benefits. Id. at 605. In 1954, however, Congress had amended the Social Security Act to deny retirement benefits to any beneficiary deported from the United States on the grounds of being or having been a member of the Communist party, and Nestor was deported on that basis in 1956.  Id. Nestor’s Social Security benefits were thereupon revoked, and he challenged the revocation as violating the Fifth Amendment.  Id. at 606.  Writing for a majority, Justice Harlan rejected Nestor’s claims, emphasizing that Congress’s having the flexibility to recalibrate Social Security benefits from time to time is a practical necessity and that the Social Security Act expressly reserves for Congress the right to “alter, amend or repeal any provision.”Id. at 611(quotting 42 U.S.C. § 1304).

Though occasionally criticized and distinguished in subsequent decisions, the core holding of Fleming v. Nestor retains vitality: Congress can reduce or eliminate accrued Social Security benefits without having to provide just compensation to participants and other beneficiaries whose entitlements are thereby diminished. Section 1104 of the Social Security Act still preserves this authority by providing that “the right to alter, amend or repeal any provision of this Act is hereby reserved to the Congress.”

The only significant constitutional protection afforded Social Security participants is that individualized decisions to reduce or eliminate benefits must be conducted in accordance with statutory standards and effected through procedures meeting the requirements of the Due Process Clause of the Fifth Amendment. For a review of the doctrine in this area, see Julie A. Nice & Louise G. Trubek, Cases and Materials on Poverty Law: Theory and Practice 284-374 (1997).
b. Long-Range Projections

Although the trustees’ long-range projections quite properly warn of a looming crisis, these projections are, in my view, also misleading and incomplete. Recall for a moment the basic message of this aspect of recent trustees reports: Over the next seventy-five years, the projected revenues of the trust funds will be insufficient to cover projected costs. The summary statistic for this fact is the 1.87 percent deficit (marked with the arrow in Table Three) for the trust funds’ combined rate, often called the system’s actuarial deficit. The usual interpretation of this statistic is that it is the amount by which payroll taxes would have to be raised over the seventy-five year period to bring the system into perfect balance. If one were to convert this tax into a present value number, it means that if the Social Security trust funds had received on December 31, 2001, a lump-sum contribution of roughly $3.6 trillion, the programs long-range problems would be solved.37 (To put this number in context, the total revenues of the United States in fiscal year 2001 were $1.99 trillion.)

Assume for a moment that the federal government were to raise this staggering sum through a special assessment of some sort. Would the long-range problems of Social Security be solved once and for all? The trustees’ long-range projections suggest that it would, but this is not true. The trust funds would begin to fall out of actuarial balance again the very next year. Consider the long-range estimated income and cost rates shown in Figure Two. In 2076, at the end of the long-range projection period, the revenues of the Social Security system and its income will be substantially out of balance. Even if we were to “solve” the

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37 I generated this number from data in Table Two. According to this table, the current balance in the trust funds ($1,212.5 billion) is equivalent to a 0.63 percent summarized income rate over the next seventy-five years. To generate another 1.87 percent of summarized income, which is the amount needed to erase the seventy-five-year combined deficit, the trust funds need a lump-sum contribution equal to 2.97 (1.87 divided by 0.63) times the current trust fund balance. The lump-sum contribution suggested in the text ($3,599 billion) is 2.97 times $1,212.5 billion. This figure is conceptually similar to the 75-Year open-group unfunded obligations of the Social Security system, which I describe below. See infra pages 51-53.
long-range Social Security problem defined in the 2002 Trustees Report, a new long-range problem requiring a similar solution would emerge in a decade or two.\textsuperscript{38} This defect in traditional Social Security accounting is sometimes referred to as the “cliff” problem.

The trustees’ long-range projections also suffer from the same defect as their short-range projections do in failing to account for the accrual of future obligations. As described earlier, the long-range projections are designed to take into account all benefits paid over the lifetimes of current workers and retirees.\textsuperscript{39} Thus, the long-range projections encompass the trust funds’ obligations to these individuals inasmuch as all of the obligations are liquidated over the seventy-five-year period. What the long-run projections fail to consider are the trust funds’ accrued liabilities to generations of workers who will receive benefits after this period. After seventy-five years, at the end of 2076, millions of workers and retirees will have substantial claims on the system, and the trust funds will have neither reserves to honor these claims nor revenue streams to support them. The reason that the actuarial deficit measure, large though it is, underestimates the true long-range shortfall of the system is that the measure fails to account for the future accrual of Social Security promises to individuals who have not yet entered the workforce but will have substantial claims on the system at the end of seventy-five years.\textsuperscript{40}

\textsuperscript{38} See Bush Commission Report, supra note 25, at 70. A good example of this phenomenon is the growth of the Social Security trust fund deficits in the years immediately following the 1983 reforms. At the beginning of this period, when the reforms had just been enacted, the system was in long-range balance, although the system quickly fell into long-range imbalance again. See Figure Five infra.

\textsuperscript{39} See supra page 24.

\textsuperscript{40} Admittedly, the long-range measures of actuarial balance do contemplate the accumulation of trust fund reserves at 100 percent of projected annual expenditures at the end of the period. However, this level of reserves does not ensure long-run solvency. After all, the trust funds currently have reserves in excess of 200 percent of annual expenditures, see supra pages 8-10, and the system is widely perceived to be on the edge of crisis.
In short, even an immediate injection of more than $3 trillion would not be enough to provide a permanent solution to the problems of Social Security.

c. Biases with Respect to Reform Proposals

The way the trustees reports present the financial problems of Social Security also significantly distorts the public debate over reform proposals. To begin with, the take-home message of these reports – short-range surplus/long-range deficits – invites politicians to postpone the difficult and politically charged problems of Social Security reform. The trustees’ repeated dichotomy between short and long-term prospects makes it look like the system is currently making some sort of profit – which it is not – and can safely be left alone until the real problems appear somewhere down the road. Experts in the field know this is not true and regularly warn that it will be much harder to solve the systems problem if the reform efforts are delayed. But the trustees reports undercut this warning by emphasizing the magnitude of the system’s short-term cash surpluses.

The trustees’ principal measure of long-range actuarial deficit – the negative 1.87 percent of total payroll highlighted in Table Three – introduces another more subtle but equally pernicious bias in reform debates. This bias is best illustrated by reference to a report of the Social Security Advisory Council released in early 1997.\textsuperscript{41} The Advisory Council Report included three different ways of solving the financial problems of Social Security, each proposal supported by a different coalition of council members. The criterion for each solution was that it eliminate the (then-estimated) 2.19 percent actuarial deficit over the seventy-five-year long-range projection period. What the Council Report reveals is the extent to which this measure of actuarial deficit encourages reformers to backload their solutions. All of the Council’s proposals included elements that increased short-term costs for the trust funds, and one of the groups proposed a series of reforms that would

\footnote{41 See 1994-1996 Advisory Council Report, supra note 25.}
substantially increase the trust funds’ deficits for the next few decades, only to recoup these losses with new (and unspecified) tax increases starting far in the future.\textsuperscript{42} Nevertheless, even this reform proposal met the criterion of eliminating the combined rate deficit. In the extreme, one could imagine “solving” the combined deficit problem through a single lump-sum contribution several decades down the road. Narrowly speaking, this would be an acceptable solution.\textsuperscript{43} One of the unfortunate consequences of focusing on long-range actuarial deficits is that doing so encourages this sort of irresponsible recommendation.

President Bush’s Social Security Commission faced the flipped side of the same problem.\textsuperscript{44} A key component of the Bush Commission’s proposals was a reduction in Social Security benefits to offset voluntary contributions to individual retirement accounts. Under cash-flow accounting, payments into the privatized accounts constitute an immediate diminution in trust fund resources and an immediate expense. The reduction in benefits associated with these contributions, however, are not reflected until the benefits were actually due to be paid. Typically these benefits will not be payable until many years in the future, and often times outside of the seventy-five year estimation period. Accordingly, under cash-flow accounting, the fiscal benefits of the Bush Commission’s proposal were substantially understated. And cash-flow effects greatly complicate public discussions of the relative merits of the Bush Commission’s approach.

As explained in some detail in Part Four of this article, an accrual system of

\textsuperscript{42} See id. At 30-33 (Option III).

\textsuperscript{43} To be fair, the trustees’ standard for long-range actuarial balance also requires that certain standards be met for interim periods beginning ten years from the beginning of the period of analysis. See supra note 26. Under these more complex requirements, a lump-sum future payment would not suffice. Reform proposals, however, routinely are evaluated solely in terms of their effect on seventy-five-year actuarial deficit, confirming my basic point that the seventy-five-year projection tends to become the dominant measure of long-range solvency.

\textsuperscript{44} See Bush Commission Report, supra note 25.
accounting would provide a much fairer picture of the current financial posture of Social Security and would also facilitate a much better discussion of the relative merits of various reform proposals.

B. Consolidation within the Federal Budget Process

I turn now from the financial status of the trust funds to the relationship between trust fund accounting and the larger federal budget. This section reviews the manner in which the finances of the trust funds are currently integrated into other federal budgetary accounts. After reviewing current practices, I offer several criticisms of the present approach and then discuss their distorting effect on public debate of Social Security reform.

1. Current Approach to Consolidating Social Security Trust Funds

Several different federal agencies routinely prepare information on the federal budget. For purposes of exposition, I focus here on the presentations of the Congressional Budget Office (CBO), but a similar analysis would follow if I were to substitute the work of the executive branch’s Office of Management and Budget (OMB) or the independent General Accounting Office (GAO), both of which also produce budgetary information.45

To introduce the subject, consider the opening paragraphs and accompanying summary table (reproduced in slightly altered form below in Table Four) from an August 1998 CBO report, which was issued when the federal government was just beginning to report the surpluses of the late 1990s.46


46 Several times a year, the CBO prepares reports of this sort for the Senate and House Committees on the Budget. The principal report comes in January, and updates are issued periodically throughout the year.
The Congressional Budget Office (CBO) projects that the federal budget for fiscal year 1998 will record a total surplus of $63 billion, or 0.8 percent of gross domestic product (GDP). If current policies remain unchanged, the surplus is expected to rise to $80 billion in 1999 and reach $251 billion (nearly 2 percent of GDP) by 2008 (See Summary Table 1.) Excluding the surplus in Social Security and the net outlays of the Postal Service (both of which are legally classified as off-budget), the CBO’s new projections show an on-budget deficit of $41 billion in 1998, which gives way to surpluses in 2002 and in 2005 through 2008.

The budget outlook has improved significantly in the past six months. Unexpectedly strong revenue collections by the Treasury in the first 10 months of fiscal year 1998 are the major reason that CBO has gone from projecting a small deficit last January to estimating a surplus of $63 billion today. . . .

This artfully drafted prose encapsulates a common approach to discussing budgetary aggregates in Washington, D.C.

The first sentence provides the report’s bottom line: the federal government was projected to run up a $63 billion surplus in fiscal year 1998. This figure — $63 billion — was repeated in the report’s second paragraph and has been restated on numerous other occasions throughout the report and was picked up in numerous press accounts heralding what has been widely reported as the first federal budgetary surplus since 1969. Most readers could, therefore, be excused for not lingering over the third sentence of the opening paragraph, in which the report notes a distinction between off-budget surpluses and on-budget deficits for the year. What that convoluted construction explains is that certain sources of revenue — that is, those associated with Social Security and the U.S. Postal

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48 Ultimately, the total surplus for Fiscal 1998 was $69 billion. See Budget of the United States: Historical Tables: Fiscal Year 2003, at 22 (Table 1.1) (2002) (available at http://www.whitehouse.gov/omb/budget/fy2003/pdf/hist.pdf), [hereinafter FY2003 Historical Tables].

49 See CBO August 1998 Update, supra note 47, at xiii, xviii, 3.
Service — are “legally classified as off-budget,” meaning that Congress has voted to exclude these items from budget aggregates. The sentence further informs that if those were so excluded, something called the “on-line budget” would show a deficit for 1998 and four of the five following years. This on-line budget was projected to eventually reach a surplus on the order of $60 billion, but not until ten years into the future, in 2008.

The first summary table of the CBO August 1998 Update Report, reproduced in abbreviated form in Table Four, delivers much the same message. Although the table also includes information about off-budget and on-budget deficits, the top and most visible line of the table highlights the good news of total-budget surpluses stretching out through the first decade of the following century.

Apart from the political appeal of trumpeting budgetary surpluses, total-budget figures are undoubtedly useful statistics to compile. Several dozen pages into its analysis, the CBO August 1998 Update explains the importance of this budgetary measure, its relationship to the amount of government debt held by the public:

The Congressional Budget Office projects that total federal revenues will exceed total government expenditures by $63 billion in 1998, the first surplus in the total budget since 1969. During the period since the last surplus — 1970 through 1997 — spending outstripped tax receipts by a cumulative $3.4 trillion. The government financed those deficits by borrowing from private credit markets, driving up federal debt held by the public from $278 billion at the end of 1969 to nearly $3.8 trillion at the end of 1997.

Under current laws and policies, and providing that the economy performs as CBO assumes, the excess of total federal revenues over total outlays is estimated to grow over the next years, rising from $80 billion in 1999 to $251 billion in 2008. If these projected surpluses are actually realized, past borrowings from the public will be partially repaid, and the debt held by the public will fall to $2.3 trillion by the end


51 See infra pages 37-43 (exploring problems with this formulation).
of 2008. As a percentage of gross domestic product, the decline in debt held by the
public will be even more dramatic, plummeting from 47 percent in 1997 to 18
percent in 2008 (See Figure [Four]). Such a reduction in borrowing by the
Department of the Treasury will release resources for private investment, thereby
enhancing productivity and economic growth.

Total government inflows and outflows include the Social Security trust funds
— Old-Age and Survivors Insurance and Disability Insurance — which have their
own earmarked sources of revenue. Currently, income flowing into those funds
excludes outlays for benefits and program administration. The trust funds surpluses
have, by law, been invested in interest bearing government securities, and that

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<td>On-Budget Deficit (-) or Surplus</td>
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<td>(Excluding Social Security and Postal Service)</td>
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**Memorandum:**

**Off-Budget Surplus**

| Social Security | 81 | 105 | 117 | 126 | 130 | 138 | 146 . . . 186 |
| Postal Service | a | a | a | a | 1 | 0 | 0 . . . 0 |

**Total**

| 81 | 104 | 117 | 125 | 131 | 138 | 146 . . . 186 |

a Less than $500 million

Source: Congressional Budget Office, The Economic and Budget Outlook: An Update at x, 35 (Aug. 1998) (Summary Table 1 & Table 2-1. The Budget Outlook Under Current Policies).

interest is part of the funds’ income. Those investments have, in turn, reduced the
need to borrow from the public to finance other programs.52

The compilation of and emphasis on total-budget aggregates is thus justified on the
grounds that it represents the net amount that the federal government must borrow from (in

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52 CBO August 1998 Update, supra note 40, at 33.
years of deficits) and can repay to (in years of surplus) the general public. Under this logic, Social Security trust fund surpluses are properly included in this aggregate because these funds reduce the government’s need to obtain funds from the private sector, both decreasing the government’s net borrowing and “freeing up” financial resources for other investments.53

Since 1998, the overall budgetary picture of the United States has followed a tortuous path, first improving further through 1999 and 2000 and then, starting in 2001, deteriorating significantly.54 In certain respects budget officials have become somewhat more circumspect in their casual combination of Social Security trust fund surpluses and those of the on-budget accounts.55 However, confusion and obfuscation still abounds. The repeated and often incoherent references to Social Security lockboxes in the 2000 presidential campaigns are striking illustrations of this confusion,56 but even current publications of budgetary agencies include many of the problems noted above. Consider the opening two paragraphs of the CBO’s January 2001 report on the federal budget:

In the absence of significant legislative changes and assuming the economy follows the path described in this report, the Congressional Budget Office (CBO) projects that the total surplus will reach $281 billion in 2001. Such surpluses are projected to rise in the future, approaching $889 billion in 2011 and accumulating to $5.6 million over the 2002-2011 period. That total is about $1 trillion higher than

53 It was for reasons of this sort that a presidential commission under President Johnson recommended that Social Security be brought on-budget. See Report of the President’s Commission on Budget Concepts 26-27 (Oct. 1967).

54 As it turned out, the total federal surplus was $124 billion in fiscal year 1999; $236 billion in fiscal year 2000, and $127 billion in fiscal year 2001. See FY 2003 Historical Tables, supra note 41, at 22 (Table 1.1).

55 For an interesting discussion of efforts to clarify the distinction between on-budget and off-budget surpluses during the final years of the Clinton administration, see Douglas W. Elmendorf, Jeffrey B. Liebman, and David W. Wilcox, Fiscal Policy and Social Security Policy During the 1990's (July 2001).

56 For a discussion of the lockbox debate, see infra pages 39-41 & n.66.
the cumulative surplus projected for 2001 through 2010 in CBO’s July 2000 report. About $600 billion of the $1 trillion is due simply to shifting the 10-year horizon out one year, to 2011, and dropping 2001 from the total. The remaining $441 billion results mostly from changes in the economic forecast, which are offset in part by the cost of legislation enacted since CBO’s previous report.

Perhaps more important to some policymakers, the on-budget surplus (which excludes the spending and revenues of Social Security and the Postal Service) is anticipated to equal $125 billion in 2001 — a nearly $40 billion increase from its level in 2000. The on-budget surplus will continue growing over the 10-year period, CBO projects, exceeding $550 billion in 2011 and totaling over $3.1 trillion between 2002 and 2011.57

While the report’s second paragraph notes that there is another measure of surplus — the on-budget surplus — that may be more important for “some” policy makers, the figure that made its way into newspaper headlines and factored heavily in ensuring political debate over the Bush administration’s tax cuts was the total surplus” of $5.6 trillion projected over the following ten years. In this report, as in earlier CBO documents, Postal Service finances are described in tandem with Social Security surplus, perpetuating the illusion that these programs are somehow comparable in their budgetary impact.

With the reemergence of budgetary shortfalls, the CBO’s January 2002 report has a very different tone, but its treatment of Social Security surpluses remains essentially the same as in previous years. Reproduced below are the opening paragraphs and an accompanying summary table (Table Five) from the January 2002 CBO report:

The economic recession and recent laws have combined to sharply reduce the budget surplus projected a year ago. In January 2001, the Congressional Budget Office (CBO) projected that under the laws and policies then in force, the federal government would run surpluses in fiscal years 2002 through 2011 totaling $5.6 trillion. In CBO’s new projections, that cumulative surplus has fallen to $1.6 trillion—a drop of $4 trillion . . . .

About 60 percent of that decline results from legislation — primarily the tax

cuts enacted in June and additional discretionary spending — and from its effect on the cost of paying interest on the federal debt. Changes in the economic outlook and various technical revisions since last January account for the other 40 percent of that decline.

For both 2002 and 2003, CBO now projects that, instead of surpluses, the total budget will show small deficits, if current policies remain the same and the economy follows the path that CBO is forecasting. In 2001, by contrast, the federal government ran a surplus of $127 billion . . . .

The deficit projected for this year [2002] — $21 billion — represents a change of more than $300 billion from last January’s projection. Over 70 percent of that reduction results from the weak economy and related technical factors, which have considerably lowered the revenues for this year and next.

For the current 10-year projection period, 2003 through 2012, CBO estimates a total surplus of nearly $2.3 trillion. However, almost half of that total comes from the surpluses projected for 2011 and 2012 — the last two years of the projection period and thus the most uncertain. The surpluses for those years also reflect the scheduled expiration in December 2010 of the tax cuts enacted last June.

In CBO’s new baseline, the off-budget accounts (which reflect the spending and revenues of Social Security and the Postal Service) run surpluses throughout the projection period. In the on-budget accounts, by contrast, surpluses do not reemerge until 2010.58

In many respects, the January 2002 report is even more misleading than prior reports. Whereas prior reports were precise, even in summary statements, to speak in terms of “total” surpluses or deficits (which in turn were decomposed into on-budget and off-budget components), the January 2002 report is more casual in its terminology, referring simply to “the budget surplus” in its opening sentence. While knowledgeable readers could undoubtedly recognize that this reference is to the total-budget surplus of prior reports (see Table Five for details), less-informed audiences could easily miss this point. Indeed, when

the introductory paragraphs do turn to the off-budget component of the total-budget picture, the presentation is particularly convoluted. The text explains that off-budget surpluses run throughout the period but that on-budget surpluses do not “reemerge” until 2010, three years before the end of ten-year projection. Again, the astute might infer that the on-budget accounts must therefore be in deficit before 2010. But what the report doesn’t say — and what many readers would likely find salient — is that without Social Security cash-flow surpluses, the on-budget deficits for 2003 and 2004 were projected to be in the range of $180 to $190 billion.59 This information is contained in tables appearing elsewhere in the 2002

Table Five
The CBO Budget Outlook in January 2002
(By Fiscal Year, in Billions of Dollars)

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>On-Budget Surplus or Deficit (-)</td>
<td>-33</td>
<td>-181</td>
<td>-193</td>
<td>-141</td>
<td>-23</td>
<td>4</td>
<td>131</td>
<td>319</td>
<td>-242</td>
</tr>
<tr>
<td>Off Budget Surplus *</td>
<td>161</td>
<td>160</td>
<td>178</td>
<td>195</td>
<td>274</td>
<td>290</td>
<td>307</td>
<td>322</td>
<td>2,505</td>
</tr>
<tr>
<td>Total Surplus or Deficit (-)</td>
<td>127</td>
<td>-21</td>
<td>-14</td>
<td>54</td>
<td>250</td>
<td>294</td>
<td>439</td>
<td>641</td>
<td>2,263</td>
</tr>
</tbody>
</table>

Memorandum:

| Social Security Surplus | 163  | 163  | 179  | 195  | 274  | 290  | 307  | 322  | 2,505     |
| Postal Service Outlays | 2    | 3    | 1    | a    | 0    | 0    | 0    | 0    | a         |
| Total Surplus or Deficit (-) as a percentage of GDP | 1.3  | -0.2 | -0.1 | 0.5  | 1.7  | 1.9  | 2.7  | 3.7  | 1.6       |

a. Less than $500 million

* Off Budget surpluses comprise surpluses in the Social Security trust funds as well as the net cash flow of the Postal Service


59 Subsequent estimates by the OMB have substantially lowered projections for 2002 and 2003 on-budget deficits to negative $322 billion and negative $282 billion, respectively. See 2002 Mid-Session Review, supra note 38, at 44. The OMB report also buries these numbers in the back of its analysis, speaking almost exclusively of much lower total deficits, negative $154 projected for 2002 and $109 billion projected for 2003. Id. at 1. See also CBO, An Economic and Budget Update
report (summarized in Table Five) but does not factor into the introductory paragraphs.

2. Criticisms of Standard Presentation

While one cannot gainsay the importance of Treasury Department officials’ knowing exactly how many government bonds are to be sold to the public at any given time, my claim is that presentations of the sort outlined above fall somewhere between needlessly confusing and intentionally deceptive. More important, the summary statistic highlighted in these reports — the total-budget surplus or deficit — is not, in my view, the most salient number for the CBO or other government agencies to present to the general public as the best measures of the government’s overall operations over the course of the year. At a minimum it would be preferable if the accounting agencies were to emphasize what the CBO refers to as the “on-budget” aggregates. My preference, however, would be for them to report budgetary aggregates in an altogether different way.

a. Misleading Features of the Standard Presentation

A threshold complaint about the CBO presentation of budgetary aggregates is that it is arguably inconsistent with federal law. Several times in the 1980s and again in 1990, Congress, with some fanfare, voted to move Social Security off-budget, and from time to time, politicians point to this fact with pride.60 The CBO alludes in its report of August 1998 to this fact when it mentions parenthetically that the trust funds are legally required to be off-budget. Throughout the report, however, it speaks almost exclusively in terms of total-budget figures, which consolidate off-budget accounts. At a minimum, this approach seems


unfaithful to congressional intent.\textsuperscript{61}

To make matters worse, the CBO further obscures the significance of trust fund surpluses through a misleading aggregation of another off-budget entity — the Postal Service — with the Social Security trust funds. A reader of these references to the Postal Service might reasonably infer that, since the CBO gives both entities the same degree of prominence, both entities must make roughly comparable contributions to the total-budget aggregates. The memorandum items set forth in Tables Four and Five above — information typically not included in CBO’s own summary tables — reveals that the Postal Service has no meaningful effect on budgetary surpluses.\textsuperscript{62} Someone predisposed to skepticism about the motives of government officials might conclude that the CBO’s references to the Postal Service surpluses were included only to obfuscate the one truly material off-budget entry — the Social Security trust funds.

\textbf{b. Familiar Criticisms of Relying on Total-Budget Aggregates}

I will now turn to more substantive complaints regarding the decision of the CBO and other government accounting agencies to rely on total-budget aggregates that consolidate Social Security’s cash-flow surpluses as the principal summary statistic measuring the government’s overall operations for any given year.

\textsuperscript{61} Congress’s own record in this regard is hardly exemplary. Back in the 1960s, Social Security was added to the unified federal budget in response to recommendations from the President’s Commission on Budget Concepts (1967). Through the 1980s, when public concern over mounting federal deficits led to the passage of the Gramm-Rudman-Hollings Act, Social Security surpluses were included in budgetary aggregates, although Social Security expenditures were largely exempt from the act’s automatic sequestration procedures. In 1990, with the passage of the Budget Enforcement Act, Social Security was officially moved off-budget. Deficit targets were, however, statutorily adjusted downward (that is, higher total-budget deficits were permitted) in recognition of the fact that the movement of Social Security off-budget would otherwise impose increased pressure for on-budget accounts. See generally Koitz, supra, note 57.

\textsuperscript{62} Cf. CBO August 1998 Update, supra note 47, at 33-34 (acknowledging minor role of Postal Service surpluses).
i. Proper Characterization of Trust Fund Reserves

For those who follow federal budgetary policy closely, there is a familiar complaint about the consolidation of Social Security surpluses with on-line budget accounts.\(^{63}\) While the trust funds are statutorily required to invest their surplus reserves in government securities, the funds are not available to finance general federal expenditures in the same sense that income tax revenues or proceeds from the issuance of Treasury bonds are. Social Security reserves are earmarked for the payment of Social Security benefits.\(^{64}\) And, if one thinks back to the manner in which the Social Security trustees account for these reserves in their annual reports, these funds have already been factored into the long-range estimates for trust fund revenues.\(^{65}\) The Social Security surpluses have, in essence, already been allocated for a particular use — one with a high degree of political support. In light of this reality, the critique runs, it invites misunderstanding for the CBO to trumpet a budgetary aggregate that absorbs the trust funds’ current surpluses — and it invites politicians to behave as if they had an extra several hundred billion extra dollars to spend. Indeed, the Clinton administration appears to have fallen into precisely this trap in the late 1990s, when it called for total-budget

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\(^{63}\) See Alan J. Auberbach et al., The Budget Output and Options for Fiscal Policy, 91 Tax Notes 1639, 1639 (June 10, 2002). See also Wall St. J., Feb. 2, 1999, at A9 (“The [FY 2000 proposed] budget reiterates Mr. Clinton’s pledge to devote 62 percent of the budget surplus over the next 15 years to bolstering Social Security. But that is less definitive than it sounds. Most of the budget surplus already comes from the payroll taxes that fund Social Security payments. The administration is counting the same money twice, many critics charge.”); Outlook, Wall St. J., Dec. 7, 1998, at A1 (“For the next few years, the surplus exists only because Social Security is collecting more taxes than it’s paying in benefits; the rest of the federal budget isn’t projected to go into the black until 2002.”).

\(^{64}\) Insert Citation. See Stith at note 145 (references to Reagan administration.) Also check GRH reports in Budgetary law annotations. Include discussion of other kinds of trust funds.

\(^{65}\) See Table Two, supra, where, under intermediate estimates, current trust fund balances contribute a summarized revenue rate of 0.54 percent of taxable payroll over the next seventy-five years.
surpluses to be used to solve the problems of the Social Security system. And, of course, the 2000 presidential campaign devolved into dueling lockbox proposals over this issue that became fodder for late-night-television comedy routines.

In essence, this critique rests on a challenge to the way in which the federal government currently classifies the ownership of trust fund assets. The premise of a unified federal budget – that is a budget that turns on total-budget aggregates – is that intragovernmental transactions should be consolidated in order to get a complete picture of the government’s cash flows and hence of its financing needs. Critics of current practices dispute this premise, arguing that Social Security trust fund reserves are fundamentally

66 See Elmendorf et al., supra note 55, at 43 (discussing internal debate within Clinton Administration on this point.)

67 The lockbox concept was never clearly defined. Often, the term seemed to refer to the allocation of Social Security surpluses to the trust funds. At other points, the term seemed to be used to refer to the allocation of a portion of on-budget surpluses to the Social Security trust funds. Exactly how this second formulation was to have been implemented is unclear. Conceivably, retired public debt could have been allocated to the trust funds. Or, to similar effect, general revenues could be directed to the trust funds and then used to purchase government bonds in the secondary market. However, before any lockbox concept could be implemented, the unified surplus disappeared, and references to lockboxes have largely fallen out of the public debate. See Douglas W. Elmendorf & Jeffery B. Liebman, Social Security Reform and National Savings in an Era of Budget Surpluses, 2 Brookings Papers on Economic Activity 11-18 (2000). See also Rudolph G. Penner, et al., Saving the Surplus to Save Social Security: What Does It Mean? (Oct. 1999) (Urban Institute Briefing Series No. 7).

68 See Report of the President’s Commission on Budget Concepts (Oct. 1967). In a unified budget, intragovernmental transactions are consolidated. When this approach is applied, the critical question is whether a particular entity should be characterized as governmental or nongovernmental. The notion that the Social Security trust funds should be classified as governmental is not altogether implausible. As mentioned above, the trusts are an accounting fiction managed by a group of six trustees, four of whom are ex officio government officials and two of whom are public representatives appointed by the President and confirmed by the Senate. The putative beneficiaries of the trust funds are current and future participants and their family members. But the legal right of these beneficiaries to trust assets are not robust, particularly with respect to prospective changes in benefit formulas and rates of taxation. See supra page 6. It is for this reason that supporters of consolidation of Social Security surpluses can credibly assert that the trust funds should be considered governmental agencies.
different from the accounts of other departments maintained with the Treasury and even from other kinds of federal trust-fund accounts, such as the government’s highway trust reserves (which are deposited with the Treasury pending passage of appropriation bills and distributed periodically to the states and other recipients). Critics of the consolidated approach regard the government’s obligation to pay Social Security benefits as among the most substantial of our government’s commitments, even if they are not legally enforceable. For this reason, critics would regard obligations to the Social Security trust funds as equivalent, for accounting purposes, to debt held by the general public and thus not properly consolidated with other intergovernmental transfers.

The implications of this critique – which is familiar in budget policy circles – is that on-budget aggregates should replace total-budget aggregates as the principal measure of fiscal balance.

ii. The Economic Realities of Social Security

One can also criticize reliance on total-budget aggregates as inconsistent with the economic realities of Social Security. A fair reading of the CBO reports described above and similar publications reveals that the decision to include Social Security surpluses in budgetary aggregates is not simply based on a formal classification of the trust funds as governmental entities but also reflects a desire to present a complete picture of the government’s financial obligations and the net effect of governmental borrowing from capital markets. But is it really accurate to view the transactions between the trust funds and the rest of the federal government in a year like 2001 as reducing the government’s borrowing or

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69 See supra pages 20-21 (discussion of public consensus as to the inviolability of Social Security retirement benefits).

70 Note that “debt held by the public” is the standard against which government accounting officials measure aggregate borrowings of the federal government in charts such as Figure Four. As currently used, this formulation does not include assets held in the Social Security trust funds.
.enhancing the availability of capital to other borrowers?

Consider the consequences of the $163.7 billion net increase in trust fund assets deposited with the Treasury in 2001.\textsuperscript{71} The Treasury is required to repay these funds, with interest, just as it would have to pay back interest and principal on securities issued directly into the capital markets. As discussed above, the trustees of the Social Security system are counting on their accumulated surpluses and the interest payments thereon to provide for some 4.6 percent of the trust funds’ summarized income rates over the following seventy-five years.\textsuperscript{72} If the trustees were to distribute the entire accumulated reserves of $1.2 trillion to currently covered workers and retirees and make an offsetting deduction in the benefits of these individuals, there would be no change in the financial status of the trust funds (although the funds’ liquidity would be entirely eliminated). This distribution would, however, unambiguously transform Treasury fund obligations to the trust funds into debt held by the public, suggesting that, as a practical matter, Social Security trust fund assets deposited in the Treasury are functionally equivalent to debt held by the public.\textsuperscript{73}

It is also a debatable point whether the current operations of the Social Security system should be understood to increase the availability of capital for other forms of investment. For some time, economists have theorized that pay-as-you-go public pension systems such as Social Security might actually reduce the supply of capital, as individuals

\textsuperscript{71} See supra Table Two.

\textsuperscript{72} See supra Figure Two (under intermediate assumptions over the seventy-five year period, the beginning fund balance accounts for summarized income rate equal to 0.63 percent of payroll as compared with a total summarized income rate of 13.72 percent of payroll).

\textsuperscript{73} To be sure, one could resist this point by arguing, once again, that obligations to the trust funds are different from other government securities because the government has the legal right to reduce the amount of Social Security benefits or increase the amount of Social Security payroll taxes, thereby eliminating the need for the Treasury to honor its obligations to the fund. In my view, this is a dubious point, given the magnitude of changes necessary to obviate the trust funds’ need for current reserves and projected operating surpluses over the coming decade.
reduce their private savings for retirement in anticipation of receiving benefits promised from their public pensions. There is a growing body of theoretical and empirical literature estimating the actual value of the retirement income of Social Security benefits and measuring the effect of these benefits on other types of individual savings.\(^\text{74}\) While the results of this research are not without ambiguities, the weight of current evidence does seem to come down on the side that Social Security promises depress somewhat private savings rates.\(^\text{75}\) If true, this phenomenon is at odds with the opinion expressed in the CBO’s August 1998 report that Social Security’s current operations should be understood as “releas[ing] resources for private investment, thereby enhancing productivity and economic growth.”\(^\text{76}\)

c. A Deeper Critique

While I am sympathetic with the familiar criticisms of total-budget aggregates outlined above, I also believe that the proponents of these criticisms have not pursued the criticisms to their logical conclusions. Generally speaking, the issue has been framed as whether or not annual Social Security operating surpluses should be consolidated with the

\(^{74}\) For a summary of this literature, see CBO Memorandum, Social Security and Private Savings: A Review of the Empirical Evidence (July 1998).

\(^{75}\) Id., at 3 (“Cross-section research suggests that Social Security reduces the private wealth held by people.”).

\(^{76}\) See supra text accompanying note 45. A few more words about the relationship between pre-funding and Social Security’s negative effect on savings may be in order here. My basic point in the text is that the promises that Social Security makes to U.S. workers each year diminishes other forms of savings to some degree. Having a portion of the Social Security system’s new commitments funded each year (through the purchase of government securities) to some degree offsets the system’s negative effect on savings. So the net effect of Social Security on national savings would require a comparison of the extent of pre-funding and the size of the system’s negative impact on savings each year. My assumption is that, since the annual accrual of obligations of the system are so much larger than the annual increase in its funding, the negative effects would likely outweigh the positive effects of pre-funding, but this is simply a conjecture, which is subject to empirical validation or rebuttal. Even without such further inquiry, however, my basic point — that gross increases in funding overstate the net savings effect — remains valid.
rest of the government’s operating budget. The sole remedy sought by critics of current practices is the removal of these off-budget surpluses from budgetary aggregates. For a variety of reasons, this response strikes me as incomplete and unsatisfactory.

Consider for a moment a year in which both the on-budget aggregates and the Social Security trust funds are in perfect balance. In such a year, would it be correct to conceptualize the federal government’s overall financial posture as being in equipoise with respect to the Social Security system? Clearly, the trust funds would have made no net deposits with the Treasury in such a year. However, it is equally clear that the amount of pension benefits implicitly promised by the Social Security system might have increased in the course of this year. Even though the level of the trust fund reserves may not have increased, covered workers and their families could have accrued additional benefits from the system. If one thinks back to the reasons why critics object to total-budget aggregates, their arguments turn on the special nature of Social Security benefits, not on the contractual arrangements governing trust fund deposits with the Treasury. In a year in which trust fund balances do not increase, the value of the Social Security system’s “sacred obligations to the American people” might well grow. Simply moving the trust funds off-budget fails to reflect this basic truth. Those who want federal budget aggregates to faithfully reflect the special nature of Social Security’s obligations must do more than move the trust funds off-budget. They must support an accounting system that does a much better job at estimating the size and growth of the system’s actual obligations.

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77 As revealed in Figure Two, the revenue and cost rates of the trust funds are expected to be in balance at some point during the next decade. On-budget accounts are currently projected to be in rough balance in 2011. See CBO August 2002 Update, supra note 47, at 2.

78 As will be explored in Part III, this was the case during the late 1980s and early 1990s, when the size of the trust funds were relatively stable, and, absent intervening legislation, it will likely again be the case several decades into this century, when trust fund balances stabilize for a few years before declining precipitously.
Similarly, to the extent that one is looking to federal budgetary aggregates to get a better sense of the net effect of government operations on capital markets, simple off-budget accounting treatment for Social Security is inadequate. Consider again a year in which the trust funds and the federal budget are in perfect balance. The net sale of government securities to the capital markets would be zero for this year. What is the overall effect of government activities, including operation of the Social Security system, on private capital markets? If, as is assumed in the preceding paragraph, covered workers and retirees continue to accrue pension benefits from the Social Security system, economic theory predicts that there will continue to be some sort of offsetting reduction in retirement savings that these individuals would otherwise make. In the extreme, if there were a one-for-one reduction in other savings, for each dollar of newly accrued Social Security benefits, there would be a dollar reduction in private savings.\footnote{Of course, the actual effect is unlikely to be this strong. In a 1974 study, Martin Feldstein estimated the reduction in private savings to be on the order of 30 to 50 percent of Social Security benefits. See Martin Feldstein, Social Security, Induced Retirement and Aggregate Capital Accumulation, 82 J. Pol. Econ. 905 (1974). However, the direction of the effect, not its magnitude, is what is important here. See also infra pages 103-04 (review of the life-cycle literature). For a recent review and critique of related literature on the overall impact of private pensions on overall savings, see William G. Gale, The Effects of Pension on Household Wealth: A Reevaluation of Theory and Evidence, 106 J. Political Econ. 706 (1999).}

In short, simple off-budget treatment of Social Security obscures two important and related effects. Properly constructed budgetary aggregates cannot ignore changes in the overall financial status of the Social Security system — in either its assets or its liabilities. Increases in the system’s liabilities — not increases in its cash reserves — necessitate (in a practical, if not a legal sense) future expenditures of federal resources, in much the same way as the issuance of government securities does. Similarly, increases in the system’s liabilities (i.e., its promised benefits) are what make private individuals change their savings patterns and thereby reduce funds available for other forms of investment. In short, the only way that budgetary aggregates can reflect these factors is by relying on a measure that encompasses the accrual of Social Security liabilities.
d. Biases for Reform Proposals

Beyond the failure of current budget presentations to incorporate a complete picture of the financial effect of the Social Security system, the current primacy of total-budget aggregates distorts public debate over Social Security reforms in numerous ways.

i. Perverse Budgetary Incentives for Social Security Reforms

To begin with, the time horizon for federal budgetary politics is much shorter than the seventy-five-year perspective that the trustees of Social Security consider in their annual reports. Typically, budgetary calculations look out only five or ten years, so the effect of reform proposals over this horizon is the most salient for budgetary politics. Accordingly, reform initiatives that trade short-range cash surpluses for growth in long-range growth in expenditures are favored in budget-driven compromises. Illustrations of this phenomenon are manifold in the budget wars of the past fifteen years, and they can be seen in the last major reforms of the Social Security system, which were enacted in 1983.80 These reforms featured significant increases in various revenue sources but relatively modest changes in benefit structures. The current operating surpluses in the trust fund accounts — with the concomitant favorable effect on the total-budget aggregates — are a direct consequence of the 1983 reforms. Though they have been widely praised as a miracle of bipartisan cooperation,81 they laid the foundations for the pending crisis in Social Security solvency, encouraging the public’s confidence in the rising level of the trust-fund reserves while obscuring the ineluctable mushrooming of the system’s accrued obligations.

To make the same point in slightly more abstract terms, consider the desirability of


81 See Light, supra note 1.
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doubling the size of the Social Security system immediately. Having worked their way through my discussion of the long-range deficit problems of the Social Security system, most readers, I assume, would readily agree that doubling benefits and payroll taxes would be a very dubious choice for the federal government. But such a move would, if viewed through the lense of total-budget aggregates, generate the positive outcome of increasing the current total-budget surplus. An accounting convention that rewards such a reform is, in my view, dangerously misleading.82

ii. Distorting Effects from Reforms that Change Trust Fund Operations

A separate problem with total-budget aggregates is that they generate substantial budgetary consequences for relatively modest reforms in the operation of the trust funds. The perceived budgetary consequences of certain reform as so great, in fact, that some proposals are summarily rejected as politically infeasible or at least bear excessively high (apparent) budgetary costs.

A good example is a proposal to invest some portion of trust fund assets in the stock market. There is much to be said for and against such a reform, but the merits of the idea are not what concern me here. Under a total-budget approach, moving trust fund assets into the stock market has a significant budgetary cost. If the trust funds were to move $500 billion into the capital markets over the next five years — a not implausible figure — the full amount would be deducted from total-budget aggregates, as these funds would no longer be

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82 This example is not entirely fanciful. A common reform proposal is to expand Social Security coverage to include either certain exempt state and local employees or larger groups of immigrants. See, e.g., Bush Commission Report, supra note 25. Such reforms generate immediate improvements in cash flow (now reflected in total-budget surpluses), but they impose offsetting liabilities that are not recognized within relevant budgetary time-frames and that may even not be fully reflected in the seventy-five-year long-range horizon of the trustees annual reports.
invested in intragovernment accounts. The accounting effect would be to exacerbate total-budget deficits over the five-year-period, clearly a distorting effect in that the wealth of the trust funds would not be diminished and, from a macroeconomic perspective, the transaction is largely a wash, albeit one with potential distributional consequences.

A similar kind of distortion could follow from changes in the structure of the trust funds themselves. Suppose that Congress were to decide that the Social Security program should be more independent from the executive branch so as to ensure, for example, that the collection of trust fund taxes or the investment of trust fund assets not be used to manipulate budgetary aggregates. If management of trust assets were moved to truly independent trusts bound by traditional trust principles, the trusts could well lose governmental status for budget-scoring purposes, with the result that the trusts are entirely off-budget entities even for purposes of budgetary aggregates. Because this change in classification would remove Social Security’s cash flow surpluses from total-budget aggregates, there would be a large

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83 A similar budgetary effect would occur if trust fund assets were transferred to individual accounts. See CBO Memorandum, Budgetary Treatment of Personal Retirement Accounts (Mar. 2000).

84 There is something of a cottage industry in articles by economists discussing the macroeconomic effects of moving Social Security reserves into the stock markets. The Treasury Department would have to issue new government securities to replace whatever funds were withdrawn for this purpose, but, as a first approximation, an equivalent amount of private capital would be freed up by the sale of equity securities to the fund. In theory, these freed-up funds would be available for investment in the new government securities that the Treasury Department would be issuing. For an overview of the economic efforts of stock market investments, see Peter A. Diamond, The Economics of Social Security Reform, in Framing the Social Security Debate: Values, Politics, and Economics (1998) (R. Douglas Arnold, et al. eds.).

85 Such a scenario is not entirely far-fetched. In a budgetary controversy a few years ago, when Congress’s failure to increase the limit on the national debt was seen to give the legislative branch a tactical advantage over the executive, the Secretary of the Treasury delayed investments of other trust funds in government securities in order to keep the debt within legal limitations and thereby diminished the bargaining power of Congress. Increasing the independence of the Social Security trust funds is one way to prevent such behavior with respect to Social Security reserves in the future.
apparent cost to the reform that has little bearing to its actual significance.

### iii. Generating Reform Proposals with Ulterior Motives

Another problem with total-budget aggregates is their tendency to generate reform proposals designed primarily to have effects on other parts of the budget. Perhaps the best example of this phenomenon is former Senator Moynihan’s perennial suggestion that Social Security trust fund taxes be cut to eliminate their distorting effect on total-budget aggregates.\(^{86}\) Moynihan, who was one of Congress’s leading experts on Social Security and a strong supporter of the benefits it affords, perceived other members of Congress as using the Social Security surplus — as reflected in total-budget aggregates — as a vehicle for cutting income taxes. In Moynihan’s view, this behavior of his congressional colleagues was using a regressive payroll tax as a substitute for a progressive income tax. While his first-order preference would have been, I think, to move to off-budget treatment for Social Security and to keep payroll taxes and income taxes at their then current levels, he perceived this solution to be politically impossible. So, if forced to choose a tax cut, he preferred a cut in Social Security taxes over one in income taxes, notwithstanding the deleterious effect on the system’s long-range solvency.\(^{87}\) Whatever one thinks of the wisdom of Senator Moynihan’s political judgments, his strategy is revealing in how clearly it revealed the twisted effect of our current reliance on total-budget aggregates as the principle measure of fiscal balance.

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\(^{87}\) Id.
Part II  An Accrual Accounting System for Social Security

But what would an accrual accounting system for Social Security look like? In this part, I attempt to sketch out an answer to this question. I begin by reviewing several financial measures that the Office of the Chief Actuary of the Social Security Administration has developed and that contain elements of accrual accounting. After explaining how these measures incorporate elements of accrual accounting, I present a more complete system of accrual accounting, including rough estimates of what such a system of accounts would have looked like for the calendar year ending December 31, 2001.

A. Alternative Measures of Accrued Liabilities in Current Use

In Part One of this article, I reviewed the standard presentations of Social Security finances, which periodically appear in the trustees reports and various publications of federal budgetary agencies. While these presentations frame – and, I claim, distort – the public debate over Social Security, additional information about the system’s financial position is available to academic researchers and public policy analysts. This additional information is summarized below and, as I explain, can be used to sketch out a rough picture what accrual-based financial statements for Social Security would have looked like over the past few years. That I have been able to make such a sketch is not inconsistent with my prior claim that cash-flow accounting frames current public debate in this field. The accrual-accounting statements that I outline below are wholly foreign to current discussion of Social Security finances and, if widely adopted, would radically reorient our national understanding of the financial posture of the program.

88 I am extremely grateful to the Office of the Chief Actuary and, in particular, Stephen Gross, the Chief Actuary of the Social Security Administration, for making this information available to me.
1. Open-Group Unfunded Obligations

Within the Social Security Administration, the most commonly used financial measure of the system’s overall solvency is a statistic known as open-group unfunded obligations, or more simply open-group liability.\(^{89}\) This is an estimate of the amount by which the system’s projected commitments over some period of time — typically 75 or 100

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\(^{89}\) For a more complete description of open group unfunded obligations as well as the other measures of accrued liability discussed in this section, see Stephen C. Goss, Measuring Solvency in the Social Security System 16, 31-33 in Prospects for Social Security Reform (Olivia S. Mitchell, et al., eds. 1999).
years — exceed its projected resources. The estimate is typically expressed in current dollars and is, in essence, the net present value of projected revenues over the relevant period plus the current trust fund balances minus the net present value of all benefits to be paid over the same period. As of December 31, 2001, the system’s open group unfunded obligations were negative $3.3 trillion.

The open-group liability is the amount of money the system would need to raise today in order to be able to meet its obligations over the period of analysis. Thus it is closely related to the trust fund actuarial deficits discussed above. The actuarial deficit (negative 1.87 percent of payroll as of year-end 2001) is the amount by which payroll taxes would have to be increased over the next seventy-five years in order for the system to meet its projected obligations. The open-group liability is the net present value of these additional taxes. Figure Four reports the open group obligations over the past few decades. Notice that around 1983, the open group unfunded liability fell to zero. This is because, after the 1983 reforms, the system was projected to meet its obligation for the relevant period of reference: seventy-five years. After 1983, the open group unfunded liability began to grow. This is a direct consequence of the cliff effect mentioned earlier. After 1983, as the period of analysis includes an increasing number of years in the mid-twenty-first century – when costs will substantially exceed inflows – the system’s open-group liability increases.

Imbedded in the open-group unfunded obligations is an element of accrual accounting. It includes the net present value of all pension promises accrued to date. However, the measure is blurred by a number of other components that relate to future cash flows and accruals. To begin with, open-group unfunded obligations include on the positive side of the equation all projected revenues for the period of analysis. This is consistent with the traditional logic of Social Security finances — that future generations pay for these system’s pension promises to current workers and retirees — but it is inconsistent with

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90 See supra pages 24-25.
standards of accrual accounting under generally accepted accounting principle, which take no account of future revenues. Further complicating interpretation of the open-group liability measure is that it includes benefit payments based on contributions and workforce participation that have not yet occurred – that is, benefits that will accrue in the future. Over the course of the period of analysis, many of the projected payments will be made to workers who are not yet in the workforce, and even a portion of the payments to current workers will be based on years of work that have not yet occurred. So, on both the revenue and the expenditure side, the open-group liability is more inclusive than would be measure of accrued liability of the sort required for private pension plans under GAAP.

2. Closed-Group Transition Cost

A more limited measure of the system’s accrued liabilities is known as the closed-group transition cost or closed-group liability. This measure estimates the system’s net obligations to current participants and beneficiaries over seventy-five or one-hundred year horizons. The measure assumes that no new participants are allowed to enter the system but that current participants continue in the system under the current rules for the rest of their lives and the lives of their beneficiaries. In other words, the system’s closed-group liability represents what the net obligations due under the current system would be if the system were closed to new entrants. This measure would be particularly appropriate if one were trying to evaluate the solvency of a system under which all current participants were to be grandfathered into the existing system and all new workers were to be steered into a new system. Closed group liability is the net present value of future contributions that existing participants will make to the system plus the current reserves in the trust funds minus the net present value of all payments to be made to current participants and their beneficiaries.

Figure Five shows estimates of the closed group liability (along with the open group unfunded obligations) of the Social Security system over the past few decades. As of December 31, 2001, the system’s closed group unfunded obligation was $10.1 trillion. This
is how much money the federal government would have to raise today to finance fully a grandfathered Social Security system for existing workers. Notice how much larger this figure is than the open group liability: $10.1 trillion versus $3.3 trillion. What this difference reflects is that new workers will be making a net contribution of more than $6 trillion on a net present value basis to the Social Security system over the next seventy-five years: their future contributions will substantially exceed their benefits payments over the next seventy-five years. Of course, at the end of this period, many of these workers will be at or near retirement and will have tremendously large pension commitments due to them. But the inclusion of their net contributions in the open-group unfunded obligations measure explains why this measure is so much lower than the closed-group transition cost.

The closed-group liability begins to approach an estimate of the Social Security
system’s current accrued liabilities. Many of the projected payments reflected in this measure have already accrued. For current retirees, all projected payments have accrued to date, and for workers near retirement age, most projected payments have accrued. On the other hand, as the closed-group liability includes future benefits to all current workers — including teenagers with summer jobs — most of whose projected benefits derive from work yet to be done. Moreover, the closed-group liability takes into account all projected revenues associated with current participants. Neither these not-yet-accrued benefits nor the not-yet-contributed revenues would be factored into a traditional system of accrual accounting.

3. Maximum Transition Cost

A third and final measure of the system’s current liabilities is a statistic known as the maximum transition cost. What this measure reflects is the amount that the federal government would have to pay if the Social Security system were to be shut down at the point of measurement. The maximum transition cost reveals how much money it would take beyond the amounts currently held in the trust fund reserves to pay all future payments of participants and beneficiaries accrued to date. In policy debates, this measure is sometimes described as the cost of completely shutting down the Social Security system. The measure is sometimes rejected as irrelevant to public discussion of Social Security finances because it is widely agreed that there is no political support for entirely ending Social Security. For my purposes, however, the maximum transition cost is a most useful statistic because it is quite similar to the measures of accrued liabilities that GAAP requires of private pensions. The maximum transition cost makes no allowance for future revenues nor does it consider benefits that would accrue in the future. It simply represents the difference between the total value of Social Security benefits that have accrued to date and the current level of trust fund reserves.

Figure Six shows the maximum transition costs over the past few years. As of
December 31, 2001, the Social Security administration estimated the maximum transition cost to be $12.16 trillion. Notice that it is several trillion dollars more than the closed-group transition cost on the same date. This difference reflects the fact that the current system is, at least as a financial matter, a bad deal to current participants. The net present value of what they will pay in over the rest of their lives is projected to be about $2 trillion greater than the additional benefits they will earn as a result of their future participation in the system.  

Figure Six

Maximum Transition Cost: 1995 to 2001
(Billions of Dollars)

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91 Estimates of the rate of return for current participants are often expressed in positive returns — such as 1.2 percent. However, since the appropriate discount rate for valuing future benefits is greater than these rates of return, the net present value of current participants’ contributions is negative.
Although it is not typically used for this purpose, the maximum transition cost is a good estimate of the Social Security system’s bottom line under an accrual-accounting system. Under the current statutory formula, the promises that the system has made to date exceed its reserves by $12 trillion. If the United States were subject to GAAP for private companies, this is roughly what it would have to report on its consolidated balance sheet as its unfunded pension liability.  

4. A Comment on the Availability of Alternative Measures

In the next section, I will explain how one can approximate a complete system of accrual accounting from the alternative measures of solvency described above along with additional information about the finances of the Social Security system available from other public sources. That this information is available (albeit not widely discussed) is important. First, it shows that the Social Security Administration would face no computational problems in recasting its financial statement on the basis of accrual accounting. The basic work is already being done, and the Office of the Chief Actuary regularly releases these alternative measures of Social Security solvency to academics and public policy analysts. Some of these alternative measures are even published in a few government reports, such as statistical appendices to the federal budget, although they are not featured (or, often, even mentioned) in publications on Social Security financing intended for public distribution, most notably

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92 In fact, the maximum transition cost would probably larger if were calculated in precisely the same manner as comparable estimates of accrued liabilities for private pension plans. The Office of the Chief Actuary assumes that benefits accrue over a 40-year period in calculating this statistic. See Goss, supra note 86, at 34. This is a longer period than the 35-year period under which benefits accrue under the Social Security Act. See supra page 20. It is also longer than comparable periods of accrual for purposes of private pension plans. See Dan M. McGill & Donald S. Grubbs, Fundamentals of Private Pension 239-64 (6th ed. 1989). Shorter periods of accrual tend to raise the net present value of accrued liabilities.
Thus, there is no question that the government is capable of estimating the accrued liabilities of the Social Security system, and the Office of the Chief Actuary even has developed a methodology for making these estimates. The only question is whether financial statements based on principles of accrual accounting would be a more useful tool of public policy analysis than the current cash-flow statements are. In the next section of this Part, I present such a system of accrual accounts and explain why I think these accounts present a clearer picture of the financial position of the Social Security system and are a much better tool for evaluating proposals for Social Security reform.

B. A Complete Accrual Accounting System for Social Security

The bare bones of an accrual accounting system for Social Security are
straightforward. They should, at a minimum, include an annual balance sheet and an income statement. The maximum transition-cost figures described above make it possible to approximate what these statements would be like for calendar year 2001. One can also use the rough financial statements to give a flavor of how a Social Security systems presented under accrual accounting might be integrated with other governmental accounts.

1. A Social Security Balance Sheet

Reverse-engineering a balance sheet for Social Security is relatively simple. The system’s only material assets are the reserves of the trust funds, which at year end 2001 equaled about $1.2 trillion. We know from the maximum transition-cost calculation described above that the system current accrued deficit is $12.2 trillion. Under the fundamental accounting equation, an entity’s accrued deficit equals its assets minus its total liabilities. So the system’s accrued liabilities as of December 31, 2001, must have equaled about $13.4 trillion.

Figure Seven illustrates the system’s balance sheet as of December 31, 2001, with one slight embellishment. I have segmented the liabilities into classes based on the age cohort of the participants with which the liabilities are associated. Based on information reported in the Social Security Administration’s own annual report (as opposed to the trustees annual reports discussed above), I have been able to estimate that about one-third of the system’s current liabilities or roughly $4.5 trillion of claims represent accrued obligations to participants at or above the age of 62, that age at which Social Security retirement benefits are generally available. In other words, the Social Security system owes current retirees about four times more in benefits measured in present value terms than the system now holds in reserves. The remaining accrued liabilities – roughly $8.9 trillion in

95 See SSA FY 2001 Performance and Financial Report 91 (estimating the actuarial present value of estimated benefits for participants 62 years of age and over to be $4,255 billion as of January 1, 2001, which was 33.5 percent of the system’s total accrued liabilities at the time: $12,756 billion).
accrued claims—consist of obligations to younger participants. A full-blown system of accrual accounting could easily distinguish among other classes of claimants, for example, separating out accrued liabilities by generational cohorts.96

Once we have a measure of the system’s current unfunded liability, a natural question to ask is where the system’s solvency has improved or worsened over the past decade as the Trustees have been reporting cash flow surpluses and, indeed, the trust funds’ net assets have been increasing. The answer to this question is that the trust funds’ financial posture has been worsening markedly, if one uses as a measure the trust fund’s unfunded liability. To get a sense of this change, consider Figure Eight, which maps out the growth of the system’s

96 As explained infra pages 78-79, these distinction could be useful in explaining the differing impacts of various reform proposals.
unfunded liabilities of the Social Security trust funds over the past two decades.\footnote{The Office of the Chief Actuary has reported these figures only back to December 31, 1995. Prior levels of unfunded liability are estimated based on the closed group transition costs, which are available back to December 31, 1978. Over the past seven years, the maximum transition cost (the basis for my estimates of unfunded accrued liabilities) averaged 118 percent of closed group costs. I use this same ratio to estimate unfunded accrued liabilities for the years 1980 through 1994.} As a result of the reforms of 1983, unfunded accrued liabilities dipped down to an estimated $4.6 trillion on December 31, 1983. Since then, however, the level of the system’s unfunded accrued liabilities has been growing consistently, surpassing the $10 trillion mark on December 31, 1998, and reaching $12.2 trillion at year-end 2001. In other words, the unfunded accrued liabilities have increased by nearly $8 trillion in the last seventeen years.

To put this chart in context, think back to my prior discussion of the 2002 Trustees
2. Income Statement

It is also possible to construct an accrual-based income statement for the Social Security system for the past year. Under accrual accounting, an entity’s income during a period is equal to the difference between its net worth at the beginning of the period and its net worth at the end of the period (adjusting for dividends and capital contributions, which are not at issue here). We know the Social Security system’s net worth at the end of 2001 — negative $12.2 trillion, its maximum transition cost. And we also know the system’s net worth a year earlier — negative $11.7 trillion. Thus, simple accounting logic dictates that the system lost some $454.8 billion during the year.

With this estimate of the system’s annual loss for the 2001 calendar year, one can construct a rough approximation of the system’s income statement as well. See Table Six below. The system’s revenues for the year are known and consist of payroll taxes ($516.4 billion), tax receipts ($12.7 billion) and the yield on assets in the trust fund ($72.9 billion), for total revenues of $568.4 billion. Estimating the system’s expenses on an accrual basis is a bit more complex but possible. Two expenses of the system are known: the

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98 See 2002 Trustees Report, supra note 5, at 3.

99 Id. However, the actuarial deficit is a good deal lower than it was in the mid 1990's when the Advisory Council issued its reform proposals. See supra pages 26-27 (noting the 2.12 percent actuarial deficit used to measure reform proposals at that time).
The other expenses consist principally of annual contributions to another pension system, one for retired railway workers. However, since the system lost $454.8 billion in 2001, it must have incurred some $1,049.8 billion in additional expenses during the year. Conceptually, we know that these expenses must be divided principally between the net accrual of new pension promises and the accrued interest on previously accrued pension promises. Since the amount of pension promises that were outstanding at the beginning of 2001 and the amount of pension promises that were liquidated in the course of the year are known, it is possible to estimate the interest cost of the Social Security system at $750.6 billion.

100 The other expenses consist principally of annual contributions to another pension system, one for retired railway workers.

101 The $454.8 billion in annual loss is explained above as the amount by which the system’s maximum transition cost (or net deficit) increased in 2001. This implies that the system’s expenses must have exceeded its revenues by $454.8. Total revenues have been calculated above to be $602.0 billion. This means that total expenses were $1,056.8 billion (the difference between positive $602.0 and negative $454.8). So far, I have only identified $7.0 billion in expenses in 2001 ($3.7 billion plus $3.3 billion). Therefore, $1,049.8 billion of expenses remain to be identified.

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Table Six

Income Statement for Trust Funds (est.)
(Jan 1, 2001 through Dec. 31, 2001)

<table>
<thead>
<tr>
<th>Revenues</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Payroll Taxes [known]</td>
<td>$516.4 billion</td>
</tr>
<tr>
<td>Income from Taxation [known]</td>
<td>$12.7 billion</td>
</tr>
<tr>
<td>Interest on Trust Fund Assets [known]</td>
<td>$72.9 billion</td>
</tr>
<tr>
<td></td>
<td>$602.0 billion</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Expenses</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative Expenses [known]</td>
<td>($3.7 billion)</td>
</tr>
<tr>
<td>Other Costs [known]</td>
<td>($3.3 billion)</td>
</tr>
<tr>
<td>Interest Charge [derived]</td>
<td>($750.6 billion)</td>
</tr>
<tr>
<td>Net Accrual of Liabilities [derived]</td>
<td>($299.2 billion)</td>
</tr>
<tr>
<td></td>
<td>($1,056.8 billion)</td>
</tr>
</tbody>
</table>

| Profit (Loss) for 2001 [known]                | ($454.8 billion) |
At the beginning of 2001, the trust funds had $12,756 billion of total accrued liabilities ($1049 billion of which were supported with cash reserves and the remaining $11,707 billion of which were unfunded liabilities). According to the 2002 Trustees Report, $432 billion in benefits were paid during the course of 2001, implying that $12,325 billion of the accrued liabilities remained outstanding. A 6.09 percent interest rate — the ultimate valuation interest rate utilized in the estimates of Office of the Chief Actuary — suggests an interest charge of $750.6 billion for the year.

Using the same methodology, I have also constructed a series of income statements for the trust funds for the past five years. These statements appear below in Table Seven.

### Table Seven

**Estimated Income Statement for Trust Funds**  
Five Years: 1997 to 2001  
(billions of dollars)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Income from Taxation</td>
<td>$7.9</td>
<td>$9.7</td>
<td>$11.6</td>
<td>$12.3</td>
<td>$12.7</td>
</tr>
<tr>
<td>Interest on Trust Fund Assets</td>
<td>$4.6</td>
<td>$4.4</td>
<td>$4.3</td>
<td>$4.9</td>
<td>$7.9</td>
</tr>
<tr>
<td>Other</td>
<td>$0.0</td>
<td>$0.0</td>
<td>$0.0</td>
<td>$(0.3)</td>
<td>$0.0</td>
</tr>
<tr>
<td>Total Revenues</td>
<td>$46.4</td>
<td>$46.9</td>
<td>$50.6</td>
<td>$56.8</td>
<td>$62.5</td>
</tr>
<tr>
<td>Expenses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administrative Expenses</td>
<td>$(3.4)</td>
<td>$(3.5)</td>
<td>$(3.3)</td>
<td>$(3.8)</td>
<td>$(3.7)</td>
</tr>
<tr>
<td>Other Costs</td>
<td>$(3.7)</td>
<td>$(3.9)</td>
<td>$(3.8)</td>
<td>$(3.7)</td>
<td>$(3.3)</td>
</tr>
<tr>
<td>Interest Charge on Previously Accrued Liabilities</td>
<td>$(517.5)</td>
<td>$(626.8)</td>
<td>$(749.9)</td>
<td>$(743.0)</td>
<td>$(750.6)</td>
</tr>
<tr>
<td>Net Accrual of New Liabilities</td>
<td>$(505.0)</td>
<td>$(553.3)</td>
<td>$(556.1)</td>
<td>$(513.2)</td>
<td>$(429.2)</td>
</tr>
<tr>
<td>Total Expenses</td>
<td>$(543.7)</td>
<td>$(647.6)</td>
<td>$(718.8)</td>
<td>$(745.5)</td>
<td>$(756.8)</td>
</tr>
<tr>
<td>Net Profit (Loss)</td>
<td>$(766.0)</td>
<td>$(465.4)</td>
<td>$(859.2)</td>
<td>$(877.1)</td>
<td>$(464.6)</td>
</tr>
</tbody>
</table>

This series of statements reveals that the $454.8 billion loss in 2001 was not an anomaly.

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102 At the beginning of 2001, the trust funds had $12,756 billion of total accrued liabilities ($1049 billion of which were supported with cash reserves and the remaining $11,707 billion of which were unfunded liabilities). According to the 2002 Trustees Report, $432 billion in benefits were paid during the course of 2001, implying that $12,325 billion of the accrued liabilities remained outstanding. A 6.09 percent interest rate — the ultimate valuation interest rate utilized in the estimates of Office of the Chief Actuary — suggests an interest charge of $750.6 billion for the year.

103 This figure represents the difference between the amount of expenses, derived above in note 101, minus the $ 750.6 billion in interest charge derived in the preceding footnote. As a residual category, this net accrual of liabilities incorporates a number of factors (such as changes in a variety of technical estimates) and thus can fluctuate considerably from year to year. A better estimate of the annual rate of accrual of net liabilities can be obtained by averaging the net accruals over a number of years. See Table Seven below (presenting five years of income statements.)
Indeed, when this loss is compared to the system’s results for the past half decade, the 2001 performance was a relatively good year. On average, the Social Security system lost $687.1 billion a year between 1997 and 2001 on an accrual accounting basis.

C. Accrual Accounting and the Unified Federal Budget

A separate and important question is how Social Security finances should be factored into the unified budget of the United States. Two basic approaches are possible, both of which would have important implications for budgetary politics. The first is a fully consolidated approach, the second fully unconsolidated. Throughout this section, I use the terms fully consolidated and fully unconsolidated to describe these two alternatives and to distinguish them from the total-budget and on-budget aggregates that are currently used when Social Security cash-flow surpluses are combined with or kept separate from on-budget accounts. As will be evident, my consolidated and unconsolidated approaches represent more radical alternatives than do total-budget and on-budget aggregates. They also, I believe, offer more accurate presentations of the true impact of Social Security on public finances.

1. Full Consolidation within the Federal Budget

One approach to combine accrual-based Social Security with the broader federal budget is to require full consolidation. Under this technique, the profit or loss of the Social Security system each year would be included in the unified budget. For 2001, under this approach, Social Security would have put a $454 billion drag on the unified budget (as opposed to the $160 billion positive effect under current cash-flow accounting). Thus restated, the consolidated federal deficit for the year would have been on the order of negative $490 billion (rather than $127 billion total-budget surplus as reported). While this $600-billion-plus deterioration in results is jarring, it is an accurate reflection of the amount by which the federal government’s express promises to public debt holders and implicit unfunded promises to Social Security beneficiaries increased over the course of the year. To
give readers a sense of the magnitude of this change, I present in Table Eight restated budgetary aggregates for the federal government over the past five years with Social Security operations reported on a fully-consolidated accrual basis.

<table>
<thead>
<tr>
<th>Table Eight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restated Annual Budgets With Fully Consolidated Trust Funds</td>
</tr>
<tr>
<td>Five Years: 1997 through 2001</td>
</tr>
<tr>
<td>(By Fiscal Year, in Billions of Dollars)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>On-Budget Surplus or</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deficit (-)</td>
<td>-103.4</td>
<td>-30.0</td>
<td>1.8</td>
<td>86.6</td>
<td>-33.4</td>
<td>-78.4</td>
</tr>
<tr>
<td>Social Security Profit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>or Loss (-)</td>
<td>-789.0</td>
<td>-659.4</td>
<td>-659.2</td>
<td>-877.1</td>
<td>-454.8</td>
<td>-3,439.5</td>
</tr>
<tr>
<td>Postal Service Outlays</td>
<td>a.</td>
<td>0.2</td>
<td>-1.0</td>
<td>-2.0</td>
<td>-2.3</td>
<td>-5.1</td>
</tr>
<tr>
<td>Total Surplus or</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deficit (-)</td>
<td>892.4</td>
<td>689.2</td>
<td>658.4</td>
<td>792.5</td>
<td>490.5</td>
<td>3,523.0</td>
</tr>
<tr>
<td>Total Surplus or Deficit (-) as a percentage of GDP</td>
<td>-10.9%</td>
<td>-8.0%</td>
<td>-7.2%</td>
<td>-8.1%</td>
<td>-4.8%</td>
<td>n.a.</td>
</tr>
</tbody>
</table>

a. Less than $500 million


Once the liabilities of the Social Security system are restated on an accrual basis, comparing these obligations to other types of federal obligations, such as federal debt outstanding to the general public, it is possible Figure Ten presents such a fully consolidated view of federal obligations. This figure reveals two important points. First, the magnitude of Social Security’s accrued liabilities is much greater than federal debt outstanding to the general public ($13.4 trillion versus $3.3 trillion as of December 31, 2001). Second, the growth in accrued liabilities of Social Security over the past two decades greatly surpassed increases in publicly held debt during the 1980s and 1990s, and also more than offset the small reductions in public debt outstanding over the past few years, when the
on-budget accounts were in surplus.

2. An Unconsolidated Approach to Social Security Accounting

Politicians, undoubtedly, would find full budgetary consolidation of Social Security under the terms proposed in the preceding section an extremely unpalatable option. And, indeed, there could be real costs in terms of explaining to the public why the levels of reported federal deficits are so much higher than previously reported. Accordingly, a more plausible and, in many respects, preferable solution would be to use a fully unconsolidated approach. Treating Social Security as an unconsolidated entity is, in a sense, an extension of the off-budget treatment that the system purportedly, but only episodically, enjoys today.104

104 See supra pages 37-43 & accompanying notes (discussing off-budget status of trust funds).
The unconsolidated treatment of the trust funds would have a number of additional advantages for the political debate over Social Security and its reform, and I will turn to these advantages in the final part of this article. For now, however, let me sketch out the details of how this fully unconsolidated treatment would work.

i. Budgetary Aggregates. To begin with, if Social Security trust funds were to be treated on a fully unconsolidated basis, the annual operations of the trust funds would not be included in the federal budgetary aggregates. This is similar to the Clinton administration’s efforts in 1999 and 2000 to focus attention on what is conventionally referred to as on-budget figures.105 However, there would be substantially less incentive for politicians to revert to using consolidated budgetary aggregates, because as described above, the effect of consolidation would be to substantially detract from on-line reports.

ii. Interest Payments and Other General Revenue Contributions. Under an unconsolidated approach, transactions between Social Security and other federal budget accounts would be treated in the same way as transactions between the federal government and unrelated third parties. As a result, all payments to the Social Security trust funds, including interest payments on federal bonds held by Social Security plus any contributions to Social Security from general revenues, would count as expenses of the federal government in the year they were paid.106

iii. Measures of Public Debt Outstanding. Another important change that would flow from a fully unconsolidated presentation of Social Security finances would be that bonds held by the trust funds would be included in the calculation of total federal debt.

105 See Elmendorf et al., supra note 55.

106 An open question is how income taxes currently allocated to the Social Security trust funds should be treated. As described above, the trust funds’ revenues include a portion of the income taxes imposed on certain Social Security benefits. Although these payments are not typically characterized as the allocation of general revenues to the trust funds, that is, arguably, what they are.
When the Social Security was first included in the unified budget in the late 1960s, the commission recommending the change contemplated that debt issued to the trust funds would be reported in an aggregate measure of gross federal debt. See President’s Commission on Budget Concepts 85 (1967). Over time, public accounting has focused nearly exclusively on federal debt held by the general public, see, e.g., CBO January 2002 Outlook, supra note 58, at xv (Summary Table 2), and has rarely given measures of gross federal debt much prominence.

iv. Separate Financial Statements for Trust Funds. Finally, the Social Security

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trust funds would maintain their own separate financial statements — both balance sheets and income statements prepared on the basis of accrual accounting described above. Additional cash-flow summaries of the sort currently included in the Trustees’ annual report would appear as supplementary information, as would seventy-five-year projections, sensitivity analyses, and related disclosures about demographic and economic assumptions. An important element of these financial statements would be the prominent inclusion of the system’s unfunded accrued liabilities. As explained below, monitoring these unfunded liabilities and their relationship to other forms of public debt as well as to the overall economy would have important benefits for public debate over Social Security and its reform.

Figure Eleven portrays the size of the Social Security’s unfunded obligations as compared with other forms of public debt over the past two decades. Figure Eleven reports
those obligations in billions of dollars. Throughout the period, the unfunded accrued obligations of the Social Security trust funds are much larger than traditional forms of federal debt. (See Figure Eleven). For example, the unfunded accrued liabilities of the Social Security trust funds at year-end 2001 were over $12 trillion, while the total amount of public debt held by both the trust funds and the general public was less than $4.5 trillion.
III. Accrual Accounting and Social Security Reform

In addition to clarifying the true financial posture of Social Security and its relationship to the overall federal budget, financial statements based on principles of accrual accounting could greatly enhance the quality of public debate over Social Security reform proposals. In this Part I summarize the potential impact of accrual accounting on Social Security reform.

A. Clarifying the Scope of the Crisis in Social Security Finances

1. Debunking the Debilitating Myth of Current Surpluses

Perhaps the most important impact of restating the financial posture of Social Security on the basis of accrual accounting would be to alert the general public to the true financial posture of the program. Reports of annual losses on the order of $500 billion or more would have a dramatically different impact on public debate than have recent trustees’ reports heralding annual cash flow surpluses of hundreds of billions of dollars and locating the time of the trust funds’ difficulties several decades in the future. In addition, publicizing the mounting level of unfunded accrued liabilities — in excess of $12 trillion — would likely have a profound effect on public discourse, stiffening the resolve of politicians to address the system’s problems expeditiously and the willingness of the general public to accept at least some modicum of pain in reform proposals.

2. Focusing Public Attention on Unfunded Accrued Liabilities

A further advantage of highlighting the size of Social Security’s unfunded accrued liabilities is the possibility that we would then be able to begin a sensible national debate over the appropriate level of these obligations. While economists often speak in terms of the appropriate level of federal debt relative to the size of the economy, similar discussions about
the appropriate levels of other kinds of governmental obligations, particularly public pension obligations, at least in the United States, are rare. One of the lessons of the foregoing analysis is that unfunded accrued Social Security obligations are commitments that public fisc will be expected to shoulder in the coming years — that is, they are obligations passed on to future taxpayers. And, as portrayed above in Figure Eleven, the Social Security systems’ unfunded obligations are much large than public debt outstanding to the public.

Presumably, economists and other experts on public finance could offer some guidance as to whether the absolute level and recent growth of these obligations are appropriate. Indeed, one might even hope that experts could agree on a range of acceptable ratios of overall public obligations to the size of the economy. Just as most experts agree that

108 As discussed below, economists do, however, routinely estimate and criticize the unfunded pension obligations of other countries. See infra pages 97-102.
the optimal level of traditional debt for a national government is not zero, so too — I imagine — the experts might agree that some degree of unfunded accrued public pension obligations is also appropriate. But, before the discussion can begin, there must be public recognition of the size of current obligations. Only then can we begin to discuss whether the current ratio of overall public obligations to GDP — currently averaging about 165 — is desirable.

Figure Twelve shows the relationship between total federal obligations (including unfunded Social Security obligations) and gross domestic product over the past twenty years. What this figure reveals is that there has been considerable variation in these ratios. They were at their highest in the early 1980s, before the 1983 reforms imposed considerable cuts in accrued obligations. Since then the combined level of federal obligations has fluctuated in the range of 150 to 200 percent of GDP. A critical question that we, as a country, need to consider is what this ratio should be. If it could be agreed, for example, the ratio of these obligations to GDP should generally be no more than 100 percent, we could then turn our attention to how that reduction can be accomplished.109

3. Calibrating General Revenue Contributions

Once Social Security’s unfunded accrued liabilities are accepted as an accurate and appropriate measure of the system’s fiscal crisis, we can begin a sensible national discussion of how the problem should be resolved. Quite conceivably, the traditional solutions of increased payroll taxes and reduced benefit will prove inadequate to address a shortfall of the size we have allowed to emerge. Accordingly, it may prove necessary for us to commit some amount of general revenues to restore solvency to the system and provide transitional relief while other aspects of a reform package are implemented. By focusing debate on the system’s accrued unfunded liabilities, one could imagine a variety of formulations to

109 While this article contains relatively little good news about Social Security finances, Figure Twelve is an exception. The ratio of unfunded accrued liabilities to GDP has been relatively constant over the past few years. Even modestly effective reform proposals could reduce the ratio over time, particularly if the overall economy starts to grow again.
determine how large such a general revenue contribution should be. For example, if a reform proposal set out to reduce the unfunded accrued liabilities to fifty percent of their current level (as measured as a percentage of GDP) within a twenty-year period, then we might think of one third of this improvement being achieved through benefit reductions, a third through payroll-tax increases (perhaps allocated to individual accounts), and a third through general revenue contributions. The percentages are not important. What’s critical is that the accrued unfunded liabilities measure offers a yardstick that can be used to define and assess different ways of solving the system’s financial needs in the years ahead.

B. Enhancing the Quality of Public Debate

Once the trust funds’ financial condition is restated on an accrual-accounting basis, the quality of public debate over Social Security reform proposals could improve substantially. As explained above, much of the confusion over reform proposals arises because we currently focus on assessing these proposals in the context of an inherently confusing cash-flow accounting system. Moreover, the seventy-five-year actuarial deficit figure (1.87 percent of payroll) is a highly problematic metric for comparing competing proposals and one that invites deception and illusion.

To begin with, accrual accounting will suggest a different way of characterizing the crisis in Social Security finances: the large size of the system’s unfunded accrued obligations as a percentage of the national economy. The solution to this problem will be to reduce the imbalance over some period of time — say, twenty or thirty years— to some agreed upon level. There are only two ways in which this reduction could occur: (1) through a reduction in the level of liabilities accrued to date; or (2) through a reduction in the losses that the system incurs in future years. The first of these could be accomplished through a statutory reduction in benefit formulas of the sort that were implemented in 1983, and the effect of which would be a one time reduction in accrued liabilities. The second kind of reduction would be reflected in the system’s financial performance over time. It could take the form
of either increased revenues (e.g., more payroll taxes, higher returns on fund assets, or greater contributions from general revenue) or through reduced expenses (a reduction in the future accrual of benefits). Viewed through the lens of accrual accounting, reform proposals would necessarily be evaluated on how well they addressed the problem of Social Security’s unfunded liabilities on these two dimensions.

In my view, this altered perspective would offer a number of clear benefits for the discussion of reform proposals:

1. **Exposing Short-Range Cash-Flow Effects**

   One certain advantage of accrual accounting is that it would expose the limitations of reform proposals that rely principally on short-range cash-flow effects. For example, on a cash-flow basis, bringing new participants into the Social Security system always has a positive cash-flow effect in the short term because the new participants initially pay large amounts of taxes and receive few benefits. On an accrual-accounting basis (and in terms of economic reality), the gains from such proposals are typically much smaller and may in fact be negative, depending on the composition of the new entrants and the kinds of benefits they will enjoy. For example, pools of new low-income workers that can detract from the system’s solvency in the long term, even though their participation might have a positive cash-flow effect in the short term.

2. **Recognizing the Value of Reforms with Future Cash-Flow Effects**

   Conversely, some reform proposals have a positive economic effect on the trust funds solvency, but their benefits are understated in the current accounting system because their cash-flow effects occur in the future, even beyond the seventy-five-year long-range perspective. A good example of this phenomenon can be found in the proposals of the

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110 What this approach implies is a set of pro forma financial statements for the Social Security system against which various reform proposals would be measured.
President’s Commission on Social Security Reform. A principal feature of the Commission’s proposals was the imposition of an offset in traditional Social Security benefits for contributions made to individual accounts. Under accrual accounting, such offsets would reduce trust fund losses in the year of the contributions, whereas under traditional Social Security accounting, they would not be recognized until far into the future. As a result of this anomaly, the true benefits of the Commission’s proposals for trust fund solvency were substantially understated.

3. Identifying Back-loaded Reform Proposals

Another way in which accrual accounting would improve the quality of debate over reform proposals is by unmasking reform proposals that are substantially back loaded. A good case in point is one of the reform options that the 1996 Advisory Council proposed. While the proposal purported to eliminate the long-range actuarial deficit (then estimated at 2.12 percent of payroll), the elimination was largely accomplished through an unspecified new tax to be imposed several decades in the future. If this proposal were evaluated through the lens of accrued accounting and pro forma income statements for the near term, it would be readily apparent that the proposal did nothing of economic significance for the system’s unfunded liabilities for the foreseeable future.

4. Flagging Reform Proposals that Expand Accrued Liabilities

A similar defect of reform proposals is their tendency to couple benefit enhancements with other elements that address the system’s solvency. Examples include improved benefits for elderly widows and various efforts to increase the level of benefits for participants who have had lower wages. While there is much to recommend these proposals on the merits and while the ultimate solution to the problems of Social Security will almost certainly include a combination of sticks and carrots, our current accounting system makes it, in my view, too easy to slip in these often-expensive improvements because the yardstick for evaluating reform proposals is their long-range impact on cash-flow solvency. An accrual-accounting
system would highlight that such proposals — at least when applied on a retroactive basis — increase the accrued liabilities of the system, sometimes markedly. An advantage of accrual accounting is that it would reflect the true costs of such reforms and facilitate a more informed debate on their merits.

5. Eliminating the Cliff Effect

A further advantage of accrual accounting (and its emphasis on unfunded accrual liabilities) is that it would eliminate the cliff effect, which plagues reform proposals evaluated solely on the basis of the actuarial deficit. (The cliff effect arises because the trust funds’ tax base is much lower than projected expenditures at the end of the seventy-five-year projection period.) As explained early, a reform proposal can eliminate the seventy-five-year actuarial deficit for the current measurement period, only to have insolvency return to the system a few years later, as the period of analysis shifts forward to include additional years of cash-flow imbalance. Proposals that bring the unfunded liabilities of the Social Security system to a sustainable ratio to the GDP will be much more likely to achieve long-range balance than will proposals that only eliminate the seventy-five-year actuarial deficit.

C. Altering the Optics of Reform Proposals

In addition to the direct benefits of accrual accounting described above, this mode of analysis could, I believe, bring a number of additional, albeit somewhat more subjective benefits to reform debates.

1. Distinguishing Accrued Rights of the Elderly and Other Participants

An essential element of accrual accounting would be the recognition of benefits that participants have accrued to date. As explained above, these liabilities would be recognized on an annual basis on the system’s income statement and reflected on the system’s balance sheet at the end of each year. In a sense, accrued benefits are privileged over benefits that
accrue in the future. Arguably, if accrued benefits were presented in this way, long-term participants in the system — particularly retirees and near retirees — might be persuaded that their interests would not be adversely affected by reform proposals. One could imagine policy analysts (or politicians) using Social Security balance sheets as a tool for persuading nervous constituencies that their expectations for retirement income will not be compromised. In other words, analysts would be able to distinguish between the fully accrued rights of retirees and the only-partially-accrued rights of other participants. The elision of the interests of these two groups, in my view, often complicates current discussion of reform proposals. Accrual accounting offers a possible path out of this quagmire.

2. Differentiating Prospective and Retroactive Effects

A related point is the capacity of accrual accounting to offer a new way to differentiate between the retrospective and prospective effects of reform proposals. Given the way we typically think about Social Security, changes usually apply to both previously accrued and to-be-accrued benefits. For example, the 1983 change in retirement age applied to covered workers both for benefits accrued before 1983 and for those that would accrue thereafter. Similarly, enhancements in benefit provisions, for example, linkage of benefit increases to productivity improvements in the 1970s, also apply both retroactively and prospectively. In my view, one of the advantages of accrual accounting is that it offers reformers more options in the way they structure changes to the system. The availability of more options may be critical to the development of a politically viable reform package.

i. The Possibility of Prospective Benefit Cuts. Consider if benefit cuts were imposed, not on an all-or-nothing basis, but rather only on benefits that would accrue

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111 For private pension plans, federal statutes prohibit the elimination of all accrued interest in pensions and thus also privileges accrued benefits over benefits that will accrue in the future.

112 The effect did not go into effect for many years after 1983, but once it went into effect for a particular age cohort, the change applied to all of that cohort’s benefits.
in the future. For example, imagine that, rather than switching over fully to cost-of-living
indexation of initial benefit levels, a reform proposal were structured to preserve the existing
productivity-adjusted formulas for accrued benefits and cost-of-living indexing for benefits
that accrue in this future. Such a reform package could be characterized as honoring existing
commitments (and expectations) while still offering immediate improvements in the system’s
financial posture through the reduction of the rate of accrual of benefits in all future years.
This strikes me as both preferable to and more equitable than the current practice of imposing
benefit cuts with effective dates that are postponed for years (or even decades) but then
imposed on a fully retroactive basis.

ii. More Modest Methods of Enhancing Benefits. A similar point could be
made about benefit enhancements. Accrual accounting would invite benefit improvements
to be imposed only with respect to benefits accrued in the future. This option would allow
politicians a way to address the significant weaknesses in the Social Security system without
imposing on it the substantial costs of fully retroactive application.

3. Changing Expectations of the General Public

The general point that runs through all of these examples is that accrual accounting
offers a way to change the expectations of the general public in a subtle, but important way.
Through a complicated combination of factors, American workers have been encouraged to
think of themselves as being entitled to the level of retirement benefits authorized under
current law, even though their retirement may not occur for many years or even many
decades. The implicit understanding seems to be that, as long as participants make their
payroll-tax contributions as currently structured, they are entitled to receive their benefits as
scheduled. The current system of Social Security accounting reinforces this understanding,
because it is designed to measure the balance between projected benefits and projected taxes.
This linkage is even more apparent in the personal statements that the Social Security
Administration sends out to all participants, estimating their projected level of future benefits
on the assumption that they maintain their current level of employment until retirement. Lobbyists and politicians regularly defend this understanding by opposing any change in promised levels of benefits. Accrual accounting offers a different perspective on Social Security benefits. It privileges a subset of benefits — those that have already accrued — and invites participants to ratchet downward their sense of entitlement from projected benefits to benefits accrued to date.

D. Accrual Accounting and Individual Accounts

The reforms proposed in this article could also affect the policy debate surrounding the creation of individual accounts in a number of ways, although the overall direction of the effects are ambiguous.

1. Posing the Problem of Transition Costs

Perhaps the most significant effect would be to make the magnitude of unfunded accrued liabilities of the trust funds more prominent. Some proponents of individual accounts emphasize the higher returns that participants could realize on these accounts without addressing the question of how the unfunded liabilities of the current system would be addressed. Indeed, one of the problems of the public debate over individual accounts is the difficulty of comparing rates of the return under traditional Social Security, which address a portion of the system’s unfunded accrued liabilities, and rates of return on individual account proposals, which leave the question of unfunded transition costs unresolved. If individual account plans were vetted through the screen of accrual accounting, the issue of accrued unfunded liabilities would be unavoidable.

2. Eliminating Budgetary Anomalies

A further effect of accrual accounting would be to eliminate a number of budgetary accounting anomalies that can cast individual account proposals (and certain other reforms) in an unfavorable light. Under current accounting rules, funds transferred to individual
accounts are treated as expenditures, as are investments of trust fund assets in any sort of financial asset other than government bonds. These conventions mean that the creation of individual accounts and proposals to invest trust funds assets in the stock market all give rise to the appearance of budgetary costs. Given current budgetary imperatives, these anomalies make it difficult for politicians to adopt such reforms, regardless of their substantive merit. If the Social Security trust funds were accounted for on the fully unconsolidated basis I outlined above, anomalies of this sort would disappear. Neither the creation of individual accounts nor the transfer of trust fund assets into the stock market would have a budgetary effect.

3. Comparing Traditional Benefits and Individual Accounts

A final benefit of accrual accounting would be the enhancement of the comparability of traditional Social Security retirement benefits and individual accounts. A problem in the current debate over individual accounts is the difficulty that both experts and the general public face when comparing the relatively merits of these two benefit structures. Individual accounts are usually valued in terms of the current amount of assets in a particular individual’s account. Traditional benefits, in contrast, are typically described as future payments, often made on a monthly basis, beginning at a point in the future (for example, the participant’s 65 birthday) and continuing for the remainder of the combined lives of the participant and the participant’s spouse with various adjustments for inflation as well as spousal and survivors’ benefits. To a large degree, proponents of individual accounts are asking the public to accept the first kind of benefit as a substitute for the second. Comparing these two is extraordinarily difficult. But, if we began to evaluate Social Security benefits on an accrued basis, restating the benefits of individuals in a similar manner — that is, the net present value of expected benefits for each individual — would be a fairly simple step. The widespread disclosure of such individual restatements — perhaps as part of the annual statements sent to each participant — could greatly improve the public’s understanding of traditional Social Security benefits and rationalize public debate over the relative merits of
113 To be sure, there is considerable uncertainty whether changes in budgetary targets actually affect budgetary decisions, and simply focusing attention on on-budget aggregates does not mean that the political branches will keep these budgetary accounts in balance. However, the moving from total budgetary aggregates to on-budget aggregates should tend to reduce (if not eliminate) on federal deficits.

E. Social Security Reform, the Federal Fisc, and National Savings

Adopting a system of accrual accounting for Social Security and implementing this system on a fully unconsolidated basis as outlined above could also have important benefits for federal budgetary politics and, by implication, for national savings. To be sure, the gains to be had in this area are highly speculative, but I think there are good reasons to believe that the impact would be positive.

1. Budgetary Effects of Fully Unconsolidated Treatment

An initial impact of moving the Social Security trust funds to a fully unconsolidated basis would be to shift the attention of politicians and analysts to what is now referred to as the on-budget surplus or deficit. Unlike the current budgetary treatment, which encourages politicians to resort to total-budget aggregates (eliding on-budget and off-budget accounts), my proposed reforms would discourage combination of annual trust fund results because, as explained above, on an accrual-accounting basis the trust funds experience substantial annual losses. By keeping national attention on on-budget aggregates, my proposal would increase the likelihood that the on-budget accounts remain in or near balance. In effect, this would mean that cash-flow surpluses on Social Security trust funds would be used to decrease the amount of public debt held by the general public and thereby increase national savings.

2. Budgetary Effects of General Revenue Contributions

My proposals would also untangle the budgetary confusions that surround proposals

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113 To be sure, there is considerable uncertainty whether changes in budgetary targets actually affect budgetary decisions, and simply focusing attention on on-budget aggregates does not mean that the political branches will keep these budgetary accounts in balance. However, the moving from total budgetary aggregates to on-budget aggregates should tend to reduce (if not eliminate) on federal deficits.
to allocate additional general revenues to the Social Security system. As explained above, one of the great confusions of the lockbox debates of 1999 and 2000 was the question of how to characterize and account for general revenues committed to Social Security. Under my proposals, their accounting would be quite simple. Any contribution to the trust funds would be treated as an on-budget expense in the year the contribution was made. Were on-budget accounts otherwise in balance for that year, the contribution would move the on-budget accounts into deficit. So, if Congress wished to make such a contribution without borrowing additional funds from the general public, new general revenues would need to be raised or other expenses reduced. This treatment would, in my view, impose appropriate discipline on the federal budget process, and discourage the federal government from honoring its commitments to Social Security simply through the issuance of new debt to the general public.114

3. Tracking Gross Public Debt and Unfunded Trust Fund Liabilities

A final advantage of my proposal is that it would encourage the presentation of a more nearly accurate picture of the overall size of federal obligations. To begin with, the approach would highlight the gross amount of public debt — that is, the combination of debt held by the general public and debt held by the trust funds. In my view, this figure would be a more accurate representation of the debt burden that taxpayers will have to shoulder in the future and therefore the one that politicians and analysts should monitor. Of course, accrual accounting would also highlight the unfunded trust fund obligations of the Social Security system, another form of public obligation passed on to future generations and one with significant implications for overall national savings. Bringing these combined measures of

114 From the perspective of the trust funds, these contributions would count as revenues in the year in which they were contributed. They could then be invested in government bonds or other financial assets. As explained above, because the trust funds would be on a fully unconsolidated basis, the choice of investments would not have budgetary implications for the unified federal budget.
F. Substantive Implications of Accrual Accounting

Some readers will no doubt be curious about the substantive implications of restating Social Security finances on the basis of accrual accounting. My view is that the impact here is ambiguous. Consider, for example, the hot button issue of privatization. Defenders of traditional Social Security benefits recoil from estimates of the system’s accrued liabilities out of fear that reports of unfunded obligations in excess of $10 trillion would weaken political support for the system. On the other hand, supporters of privatization resist references to accrued liabilities because they would highlight the transition costs of moving to a fully privatized Social Security system. It is not clear to me which of these groups would fare better under an accrual-accounting system, but I am confident that the general public would be in a better position to evaluate the merits of the traditional system as compared with those of a system of privatized accounts if the comparison were made in terms of accrual accounting.

Another important substantive dimension of Social Security is the system’s role in redistributing wealth from rich to poor and from young to old. How might accrual accounting influence this redistribution? Some fear that accrual accounting would more clearly expose Social Security’s redistributive elements. After all, if we went to a complete system of accrual accounting and participant benefits were reported annually on an accrual basis, then the relationship between a participant’s annual taxes and his or her accrued benefits would be entirely clear to each participant. Each participant would then see the net expected tax (or net expected subsidy) of his or her annual participation in Social Security. Conceivably, such information would diminish public support for Social Security and its redistributive role. However, I am not so sure. Recent studies suggest that many younger workers believe that they will never receive any Social Security benefits. Presumably, these
participants think that they get no benefit from their annual Social Security contributions. A fully implemented system of accrual accounting would reveal to these individuals that their annual contributions are generating real expected benefits in terms of retirement security (as well as life insurance and disability benefits). Perhaps for these individuals, accrual accounting would increase support for the system.

Finally, objections to accrual accounting on the basis of substantive concerns are, in the end, deeply undemocratic. Such objections reduce to arguments that we should not present the finances of the Social Security system in the most realistic manner because the general public would react badly. The moral weakness of such claims aside, intentional obfuscation cannot be the right way to build sustained public support for our most important social insurance program.
IV. Postscript on Normative Baselines for Social Security Accounting

The accrual-accounting proposal outlined in this Article generates surprisingly impassioned responses in some circles. The source of this passion is not always clear. Sometimes, the criticism seems to be based on an intuition that cash-flow accounting is the only appropriate method for recording government programs. Other times, defenders of the status quo stress that Social Security is a social insurance program and assert that this characterization constitutes a complete explanation of current accounting practices. In this postscript, I respond to these reactions, and explain why my recommendations are consistent with recent trends in government accounting, including recent reforms in federal accounting standards for social insurance programs.

Others argue that the pay-as-you-go nature of the Social Security system justifies the system’s current accounting treatment. I do not regard this claim as particularly strong. To begin with, the Social Security system is no longer operating on a purely pay-as-you-go basis. The combined trust funds are now pre-funded to the tune of $1.2 trillion and the level of pre-funding will continue to grow for a number of years. More important, the central problem with Social Security finances is that, even with this substantial amount of pre-funding, the system is promising benefits that will not be sustainable from projected revenues in the future. In other words, without substantial reforms, the system’s projected level of pay-as-you-go financing will be inadequate to meet projected benefits. A central component of my argument is that our current accounting system does a relatively poor job of flagging the system’s mounting imbalances. Given demographic trends, the pay-as-you-go aspect of Social Security financing is more a cause of the system’s problems than a justification of its current accounting practices.

A separate, but equally insubstantial, objection is that accrual accounting is appropriate only for fully funded public pension systems. Nothing about accrual accounting necessitates any particular level of pre-funding. Indeed, my assumption is that Social Security would likely remain substantially underfunded on an accrual-accounting basis. My only argument is that we should keep careful track of the level of under-funding. Accrual accounting is uniquely suited to provide the sort of monitoring that is necessary to do so.
I then present several additional normative perspectives that support my claim that accrual accounting is the most nearly accurate way to present the finances of the Social Security system. First, I review how the problem of unfunded public pension plans is generally discussed in the international context. As explained below, when multinational organizations, such as the International Monetary Fund (IMF), and other analysts examine the financial posture of public pension programs in other countries, they generally speak in terms of accrued liabilities as well as the sort of long-term cash-flow projections that dominate the trustees reports. While various measures of accrued liabilities are employed, accrual accounting is the principal metric against which the solvency of public pension schemes is tested. Second, I offer a brief sketch of how public policy analysts value Social Security benefits in a variety of other academic settings. When trying to assess the economic impact of Social Security, economists regularly use a form of accrual accounting to estimate the value of benefits. If these experts believe that accrual accounting is the best way to estimate the value of participants’ benefits in Social Security, then, in my view, it follows that accrual accounting is also the best way to estimate the liabilities associated with the obligations of the trust funds to pay those benefits.\footnote{In another paper, I described the accounting treatment of the closest analogy to Social Security in the private realm: defined-benefit pension plans. See Howell Jackson, A Comparison of Social Security Benefits and Private Pension Plans (Sept. 3, 2002) (draft on file with author). As explained in that paper, the structure of private pension benefits are more similar to that of traditional Social Security benefits than is often appreciated, and the accounting rules for private pension plans offer a good model for fleshing out the accrual-accounting proposal I have advocated here.}

A. Accrual Accounting and the Federal Government

Although cash-flow accounting is the norm in the federal budget, the notion that elements of accrual accounting might be grafted onto federal accounting standards is not
new, and examples of accrual accounting in current federal budgeting and accounting standards are increasingly common.

1. Accrual Accounting in General

One prominent illustration of accrual accounting in the federal budget is the Federal Credit Reform Act of 1990 (FCRA), which established accrual accounting for a wide range of federal programs, including loan and credit-guarantee programs. With the passage of the FCRA, Congress recognized that, for some kinds of government programs, cash-flow accounting offers a misleading picture of true government costs. For example, with a loan program, cash outflows in the year the loans are made tend to overstate the cost to the federal government because many loans will be repaid in future years. Conversely, guarantee programs may have no cash outflows in the year a guarantee is made (or even positive cash flows, if a guarantee fee is charged), even though the issuance of a guarantee can represent a significant liability for the government because payments may have to be made in the future when the guarantee comes due. The FCRA requires the government to recognize the expected cost of government credit programs in the year in which the obligations are incurred. Thus, the FCRA mandates accrual, as opposed to cash-flow, accounting for an important segment of the federal budget.

Federal insurance programs, such as deposit insurance or flood insurance, are expressly exempted from the coverage of the FCRA. Nevertheless, the accounting challenges of public insurance programs are quite similar to those of credit programs. When

117 For example, the 1967 presidential commission on budget concepts — the same group that initially recommended that Social Security be brought on-budget — also advocated introducing accrual accounting techniques to certain governmental operations. See Report of the President’s Commission on Budget Concepts ch. 4 (Oct. 1967).

underwriting insurance, the government receives payments in the current period in exchange for a commitment to shoulder costs in the future. Accrual accounting is a natural way in which to account for these obligations as they arise. As a result, over the past twelve years, a number of government studies have called for the extension of accrual-accounting concepts to this area. For example, in a 1997 report, the GAO explored the extension of accrual-accounting treatments to federal insurance programs (such as federal deposit insurance and other insurance programs run by the federal government, but not Social Security) and generally endorsed such an expansion, with the caveats that, in many areas, the development of accrual-accounting systems would be complex and that, as an initial matter, supplemental reporting of risk estimates should be undertaken.\textsuperscript{119} Representatives of the GAO recently reiterated their support for this expansion of accrual account,\textsuperscript{120} and a proposal to account for the retirement benefits of federal employees on an accrual accounting basis is currently being debated in Washington.\textsuperscript{121}

Clearly, accrual accounting is not inherently inappropriate for government programs.\textsuperscript{122}


\textsuperscript{121} See Congressional Budget Office, The President’s Proposal to Accrue Retirement Costs for Federal Employees (June 2002).

\textsuperscript{122} The federal government’s adoption of accrual-accounting methods is part of a broader trend toward accrual accounting in governments around the world. See International Federation of Accountants, Guidelines for Government Financial Reporting: Exposure Draft (July 1998) (IFAC Public Sector Committee). As discussed in the IFAC report, accrual accounting is an increasingly prominent alternative form of presentation for public accounting systems with numerous advantages over traditional cash-flow accounting. Over the past decade or two, accounting reforms in New Zealand, the United Kingdom, and Australia have incorporated elements of accrual accounting into their governmental financial statements, some of which extend to public pension systems. See General Accounting
2. Accrual Accounting for Social Insurance

As a social insurance program, Social Security has typically been excluded from past proposals for accrual accounting within the federal government. However, an analogous initiative among government accountants has addressed the accounting statements for social insurance. This initiative came from the Federal Accounting Standards Advisory Board (FASB) — the board responsible for developing generally accepted accounting practices for federal entities. In the mid-1990s, FASAB began an extensive review of the appropriate accounting treatment of social insurance, paying particular attention to Social Security, the federal government’s largest social insurance program. The process included a series of exposure drafts and public comments, culminating in the August 1999 statement on Statement on Social Insurance, which established important new standards of disclosure for social insurance programs, including Social Security.

Although little known outside of government accounting circles, the FASAB Statement on Social Insurance represents an extensive and sophisticated consideration of the special problems of accounting for social insurance. While some participants in the FASAB process opposed any use of accrual accounting in financial statements for social insurance programs, others argued for reforms that are quite similar in spirit to, albeit less extensive than, my own proposal. In particular, one camp advocated that the Social Security
The Board summarized the arguments as follows:

[Proponents] argue that social insurance programs possess certain characteristics that, taken together, cause the criteria for recognizing a liability to be met long before payments are due and payable. Those characteristics are:

1. The contributory nature of the program (i.e., benefits are predicated to some extent on prior payments),
2. Time in covered employment,
3. Government sponsorship, and
4. Specific accounting entity (e.g., the trust fund) and long-range financing.

. . . These characteristics, in conjunction with the historical experience and political climate affecting these programs, create obligations and societal expectations that make the outflow of resources highly probable — far more than 50 percent. Therefore, an accounting liability should be recognized at an earlier point than when payments are due and payable; and the liability should be based on long-term or actuarial estimates of future payments.


Id. ¶ 79.
imposing a form of accrual accounting on social insurance programs and those who advocated no change from current practice. The final FASAB Statement on Social Insurance mandates that financial statements of government insurance programs include an elaborate system of supplementary information, known as Required Supplementary Stewardship Information (RSSI), which includes specific disclosures about the actuarial value of future benefits as well as a substantial amount of additional material about program sustainability. With respect to Social Security, FASAB rules require disclosure of the actuarial present value of all future benefits payable to participants eligible to receive retirement benefits (those 62 years of age or older). The Social Security RSSI also must include separate disclosures of the actuarial present value of future benefits to be paid and taxes to be received from those currently in the system (those age 15 to 61 years) and those not yet in the system but projected to join the system over the next seventy-five years. Taken together, these numbers sum to what was described above as the open-group liability of the system, and with the component line-item entries, users can calculate a number quite similar to the closed-group liability measure.\footnote{127}

As the FASAB establishes generally accepted accounting standards for government entities, its statement on social insurance is binding on the Social Security Administration. And, indeed, if one consults the annual financial statements of the Social Security Administration — as opposed to the trustees annual reports — one can find the supplementary statements of net present values of benefits clearly disclosed.\footnote{128} For example, the most recent report estimates the present value of benefits payable to participants age 62 years or older to have been $4.3 trillion as of January 2, 2001.\footnote{129} (Curiously, budgetary

\footnote{127} The closed-group liability number for purposes of SAFFAS No. 17 is based on a 75-year projection, as opposed to the 100-year projection that the Office of the Chief Actuary typically uses.


\footnote{129} See id. at 91.
presentations of the OBM, though purporting to comply with FASAB standards, do not include RSSI information for Social Security or net present values of benefits and taxes.\textsuperscript{130})

While the FASAB Statement on Social Insurance clearly does not go as far as the reforms I propose, its provisions indicate that applying accrual accounting concepts to Social Security is not an entirely heretical idea. In the debate leading up to the adoption of the statement, industry experts made arguments similar to the ones I am advancing in this Article.\textsuperscript{131} And, the FASAB has recently embarked on a new rule-making process that would move the location of supplementary information about actuarial net present values of future benefits to an earlier section of financial statements, further emphasizing their importance.\textsuperscript{132} Reading between the lines, one senses that the Board’s unwillingness to advance reforms even closer to my own is dictated more by political resistance in Washington than by a conviction that a more nearly complete system of accrual accounting for Social Security would not be appropriate.

More important for purposes of my argument is that the FASAB statement is based on a normative vision of the purpose of governmental accounting practices that is quite

\textsuperscript{130} See, e.g., Office of Management and Budget, Analytical Perspectives: Fiscal Year 2003, at 32-33 (2002).

\textsuperscript{131} A key difference between my proposals and the most analogous proposals advocated in the development of the FASAB statement is my recommendation that a distinction be made between benefits accrued to date and benefits that will accrue in the future. While the FASAB approach employs an accrued-liability concept for participants who are already eligible for retirement, it uses a net present value computation for future benefits and payments for other participants — in effect, lumping accrued benefits with those to be accrued in the future and then deducting future taxes from those amounts. As explained above, see supra pages 79-80, I think that there are a number of advantages for distinguishing accrued benefits from those that will accrue in the future. Among other things, this distinction reflects the great moral obligation of the government to honor accrued benefits. In addition, it removes some of the uncertainty that complicates projections based on future benefit accruals and tax receipts, factors that must be worked into the FASAB measures of net present values.

\textsuperscript{132} See FASAB, Reclassification of Stewardship Responsibilities and Eliminating the Current Services Assessment (Feb. 19. 2002) (exposure draft).
similar to my own. Drawing on its prior concept release on the Objectives of Federal Financial Reporting, the Board emphasized the relevance of Objective No. 3 for the financial statements of governmental entities underwriting social insurance:

Federal financial reporting should assist report users in assessing the impact on the country of the government’s operations and investments for the period and how, as a result, the government’s and the nation’s financial condition has changed and may change in the future.\footnote{See FASAB, Statement on Social Insurance ¶ 7 (Aug. 1999).}

The Board elaborates:

. . . [F]ederal financial reporting should provide information that helps the reader to determine

- whether the government’s financial position improved or deteriorated over the period;
- whether future budgetary resources will likely be sufficient to sustain public services and to meet obligations as they come due; and
- whether the government’s operations contributed to the nation’s current and future well-being.\footnote{Id.}

The weight of my argument in the main body of this article is that the current accounting presentation of Social Security does a very poor job on these dimensions and that my proposed alternative approach would represent a substantial improvement. In particular, the current financial statements of the trust funds do a very bad job of explaining whether the system’s financial position improved or deteriorated during a particular year.\footnote{See supra page 19 (describing how difficult it is to determine from the 2002 Trustees Report whether 2001 was a good or bad year for the system).} Moreover, the absence of any measure of the system’s accrued liabilities makes it quite difficult to tell whether our budgetary resources will be able to sustain the current level of promised
In conclusion, Social Security’s status as a social insurance program is not a strong argument against reflecting the system’s mounting liabilities in its financial statements. Indeed, under generally accepted accounting standards for federal entities, these liabilities must currently be reported in supplementary notes, and a number of commentators have argued (correctly, I think) that these liabilities should also be reflected on the balance sheets of social insurance programs. In other words, the experts on government accounting have adopted an accounting standard that is substantially different from the one that the trustees follow in their annual reports and that dominates public debate over Social Security financing. Clearly, there is strong intellectual support within the accounting community for the kinds of reforms I am proposing in this Article.

B. The Estimate of Public Pension Plan Obligations in Other Contexts

Another way to approach the question of how the obligations of the Social Security system should best be estimated is to consider how the issue is addressed in other context. As explained below, public policy analysts — principally economists — often need to calculate the size of public-pension-plan obligations. In this section, I review two prominent illustrations. The first is the public-finance literature dealing with the size of public-pension-plan obligations in various countries, often, but not exclusively, developing countries. The second context is a separate set of economic writings in which economists attempt to value Social Security benefits of workers, typically either to assess the impact of Social Security on other forms of savings or to present a full picture of household wealth. In both contexts, the standard approach is to estimate the present value of benefits to be paid in the future. Sometimes the calculation presents a net-present-value figure that includes both accrued and to-be-accrued benefits minus taxes to be paid. Increasingly, however, analysts are employing

136 See supra pages 24-28 (discussing inadequacies of trustees’ measures of long-term solvency).
a benefits-accrued-to-date formulation similar to the one that I propose that the Social Security system be required to adopt for its financial statements.

While these analogies are not directly related to financial accounting or government budgetary issues, the methodologies employed in these other areas are relevant to my arguments. In all of the following examples, analysts are trying to estimate the economic reality of public pension obligations — whether in terms of the obligation they impose on the public fisc or in terms of the amount of value they add to individual wealth. In these contexts, analysts invariably resort to net-present-value calculations, often limited to benefits accrued to date. Within the literature, these measures have emerged as the most appropriate way to value Social Security obligations. That our traditional system of accounting for Social Security financing entirely neglects comparable measures is noteworthy and, in my view, deeply troubling.

1. Measures of National Public-Pension-Plan Obligations

Over the past decade, as the crisis of Social Security financing has emerged as a major issue of public policy in the United States, a similar debate has emerged in a number of other countries, where the problem of unfunded public pension plans (and often the private-pension-plan system) is even more severe than our own. Many countries with the most seriously underfunded pension plans are in the developing world; however, other industrialized nations are not devoid of serious deficits. Since the mid-1990s, a number of economists have written about the problem of underfunded public pension plans and have offered a variety of ways to address distressed systems, ranging from privatization to more incremental solutions. For my purposes, what is important about this literature is not the specific reforms advocated but, rather, the manner in which analysts quantify the magnitude of underfunded pension obligations in various countries and then present cross-country comparisons of pension under-funding.

For many years, the leading article on this subject was one written by two economists
with the International Monetary Fund – Sheetal K. Chand and Albert Jaeger. Their 1996 working paper proposed techniques for estimating the public-pension-plan liabilities and then applied the technique to the public systems of eight industrialized nations, including the United States.\textsuperscript{137} The approach begins with a measure of accrued pension obligations for all pensioners and current workers.\textsuperscript{138} These accrued liabilities, in Chang and Jaeger’s terminology, constitute “recognition bonds” — the amount it would cost a government to terminate its public pension program (analogous to the Social Security system’s maximum termination liability discussed above).\textsuperscript{139} The Chand and Jaeger framework continues by adding benefits that will accrue in the future (to generate a “gross pension liability” figure) and then netting off projected contributions (to generate a “net pension liability” figure analogous to the open-group liability number discussed above). The balance of the Chand and Jaeger analysis relies principally on the net-pension-liability figure to evaluate various reform proposals.

As a seminal work on public pension financing, the Chand and Jaeger paper is an important precedent for evaluating the appropriateness of the traditional approach to Social Security financial statements. While elements of the Chand and Jaeger framework overlap with aspects of long-range financing estimations included in the annual trustees reports, their organizing principles are strikingly different. Chand and Jaegers’ approach is squarely grounded in present value calculations of future benefits, and it begins with a measure of the net present value of benefits accrued to date of the sort that I am proposing. Subsequent studies of public pension systems routinely adopt a similar perspective.\textsuperscript{140} Traditional Social

\begin{footnotesize}
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\item\textsuperscript{138} Id. at 36 (Appendix I).
\item\textsuperscript{139} Id.
\item\textsuperscript{140} A good example of this literature is Robert Holzman, Financing the Transition to Multi-Pillar (1998) (World Bank Social Protection Discussion Paper No. 9809) (estimating the implicit
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Security financial statements, however, are wholly devoid of net present value calculations.

Another important aspect of the public-finance literature on unfunded pension obligations is the practice of comparing the size of these liabilities to the GDP of particular countries and then making explicit comparisons of this ratio with the ratio of traditional public debt to GDP. For example, in the Chand and Jaeger paper, the level of accrued liabilities of the U.S. Social Security system is reported as 108.3 percent of GDP in 1990 (31.7 percent representing obligations to retirees and 76.6 percent representing accrued obligations to workers).141 Elsewhere, the paper aggregates the U.S. government’s net public pension plan obligations in 1990 (25.7 percent of GDP) with its other public debt (63.3 percent of GDP) to come up with a “combined” net debt liability (89.0 percent of GDP). Other writers in the literature use a similar approach.142

principal advantages of recognizing the actual present value of unfunded public pension obligations is that doing so facilitates comparisons of this sort and, presumably, better informed discussions of public policy. With our traditional approach to Social Security accounting, such comparisons are extremely difficult. The failure of our system to report net public pension liabilities as a percentage of GDP is, at a minimum, curious since when analysts want to compare the financial status of the public pension countries to that of the United States, this is the measure typically employed.

Within the community of public economists, the principal issue of analytical disagreement is not whether a country’s unfunded pension liability should be measured on a present-value basis but rather it is which kind of present value measure should be used. As explained above, the initial Chand and Jaeger paper utilized a net-pension-liability measure, decomposed into accrued and to-be-accrued components. This is reminiscent of the RSSI data that FASAB requires, but it more sharply distinguishes accrued obligations to current workers and is substantially more informative than the single open-group liability figure that U.S. officials tend to report when required to estimate Social Security’s unfunded obligations.\textsuperscript{143} Within the community of policy analysts, however, there are those who think that the Chand and Jaeger net-pension-liability measure should be dropped as the principal summary statistic for measuring a country’s unfunded public pension obligations and replaced with a figure that estimates the country’s unfunded accrued obligations to date — that is, the measure of accrued public pension liability that I propose.

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\textsuperscript{143} See supra page 51-53 (describing open-group liability).
A forceful advocate of this view is the U.K.’s Richard Disney, who writes about the measures of pension liabilities in the context of the European Union, where the debt burden of member states is an important issue.\textsuperscript{144} He summarizes his argument as follows:

European governments should move from an \textit{ad hoc} combination of cash flow accounting and projected liabilities in measuring the sustainability of pension schemes to a proper accrual basis, as is now taking place in other components of the government budget\ldots On an accrual basis, the budgetary report should provide a calculation of the change in accrued pension liabilities as a result of the government’s receipt of pension contributions, net of pension payments, during the budget period. This should be supplemented by, but not confused with, additional analyses including actuarial confirmation that, at current contribution rates, \textit{current} pension expenditure is indeed covered by current contribution receipts, and by actuarial projections of future liabilities with, perhaps, some calculation of the contribution rates required to finance these prospective liabilities.

By cumulating accrued liabilities up to the end of the current accounting period, the government would also arrive at the measure of the implicit or current accrued liabilities of the pension scheme. This measure is not the same as the prospective liability arising from the continuation of the pension scheme into the future. An attraction of providing a measure of implicit “debt” along these lines is that it provides an exact measure of the current termination liability of the existing unfunded scheme. One reason why governments are so reluctant to consider greater pre-funding of pensions, especially if it involves a greater degree of private provision, is that funded reforms of this type make implicit debt explicit.\ldots\textsuperscript{145}

The views expressed in this excerpt closely track my own, particularly in their recognition that the failure to expressly acknowledge the magnitude of accrued pension obligations biases consideration of certain reform proposals, such as pre-funded individual accounts.\textsuperscript{146}


\textsuperscript{145} Id. at 102.

\textsuperscript{146} In more recent work, many other economists are using measures of accrued liabilities as the appropriate estimate of implicit pension debt. See, e.g., Yan Wang, et al., supra note 142, at 9 (“\textit{Implicit pension debt (IPD)} refers to the benefit promises a pension scheme makes to workers and
In short, the financial statements of the Social Security trust funds deviate from emerging international standards for the evaluation of the solvency of public pension plans. In addition, an important camp in these debates, epitomized by Disney, advocates solvency measures strikingly similar to the ones I propose.

2. Economic Estimates of the Value of Social Security Benefits

Yet another way to estimate the extent of Social Security obligations is to consider the value of benefits due to participants. After all, every liability of the Social Security system reflects an asset of a participant or beneficiary. If the system truly had no outstanding liabilities — the fiction upon which the financial statements of the system now rest — then the interests of participants and beneficiaries must have no true value. But this is clearly not the case. As a matter of political reality, we know that Americans have a strong sense of entitlement to their Social Security benefits. More important, when economists model consumer behavior, they routinely classify Social Security benefits as assets and estimate their value based on the present value of expected benefits. If the economists are right that Social Security benefits are best characterized as financial assets of individual participants, then the obligations of the Social Security system to honor those benefits are best characterized as liabilities of the system.

Examples of economic valuations of Social Security benefits for individuals abound, so I will simply summarize some prominent examples. In all cases, the goal of the analyst was to estimate the true economic effect of retirement benefits. In all cases, some sort of discounted-value technique was employed, typically using projections based on actual or assumed contributions to the Social Security system. (Not included below are other
economic studies that also use discounted cash-flow analyses to estimate the unfunded liability of the Social Security system or to calculate the implicit rate of return on Social Security contributions.\textsuperscript{147)

i.) Life Cycle Savings Literature. A familiar illustration of this approach to valuing Social Security benefits is a series of papers in which economists attempt to estimate the effect of Social Security benefits on individual savings. As mentioned earlier, many economists believe that public pension programs such as Social Security reduce other forms of savings\textsuperscript{148} and a number of economists have done empirical work exploring the relationship between Social Security benefits and savings. In a recent survey of literature on the subject, the CBO described the basic research methodology for the largest group of these studies:

Most studies begin by estimating the total value of Social Security benefits that a person is expected to claim less the taxes to be paid, adjust for the length of time before the benefits will be received (or taxes paid) and the probability that the recipient will survive – the “present value” of benefits minus taxes. That sum is referred to as Social Security wealth. Then, using regression analysis, a researcher tests whether the private wealth held by people is related to their Social Security wealth, controlling for other factors such as age and income.\textsuperscript{149}


\textsuperscript{148}See supra pages 44-45.

\textsuperscript{149}See CBO Memorandum, Social Security and Private Saving: A Review of Empirical Evidence 10 (July 1998) (reviewing 30 empirical studies of the effects of Social Security on
This approach is telling. When trying to estimate the significance of Social Security for individual behavior, economists routinely invoke discounted cash flow analyses to estimate Social Security wealth of individual recipients. What their regression models are doing is to explore the relationship between this asset – Social Security wealth – and other forms of private savings.

If one were to analogize this methodology to my earlier discussion of Social Security’s unfunded obligations, the approach used in these studies is conceptually similar to the close-group-liability measure. The study is limited to current participants in the system, and combines the present value of accrued and to-be-accrued benefits and then deducts the present value of to-be-contributed pay-roll taxes. If one were to aggregate this measure of Social Security wealth over all current participants and beneficiaries – that is current worker, retirees, and their beneficiaries – one should in theory generate a level of assets equal to the trust funds’ closed-group liability ($10.1 trillion as of December 31, 2001). If, as this literature implies, Social Security wealth is an appropriate way to estimate the value of Social Security benefits to current participants and beneficiaries, then why isn’t a comparable methodology appropriate for the liabilities of the Social Security trust funds?

ii.) Household Wealth Literature. A separate body of economic literature explores the composition of individual wealth in the United States. A prominent example of this literature is the 1992 Health and Retirement Study of a nationally representative sample of households, which includes considerable information on Social Security benefits. The

150 See supra pages 53-55.

study presents several different valuations of Social Security wealth of study participants. All of the study’s valuations represent the present value of expected Social Security benefits discounted by an appropriate interest rate and adjusted for the life expectancies of beneficiaries. The study’s first valuation technique limits itself to the present value of benefits that individuals have accrued as of the date of the study.152 Two subsequent estimates represent the value of the participants total projected benefits – either to the age of 62 or the individuals normal retirement age.

When economists want to explore the wealth of individual households – for example, to consider variation in wealth across income levels – they routinely rely on data sources such as the 1992 Health and Retirement Study and they routinely include measures of Social Security wealth as important components of overall household wealth. Typically, researchers take one of two approaches to estimate the value of Social Security wealth:

First, some economists use a measure of Social Security wealth that is similar to the one used in the life-cycle savings literature – that is a measure based on the present value of accrued and to-be-accrued benefits minus the present value of to-be-paid payroll taxes. As explained above this approach is analytically similar to the closed-group liability figure.153 It includes within the definition of Social Security wealth the present value of accrued benefits plus the net present value of benefits expected to accrue in the future and payroll taxes to be paid in the future.154

A second approach, is to estimate Social Security wealth based solely on

152 Id. at 345-50.


154 In the Kennickell and Sunden paper, only employee contributions are deducted (as opposed to combined employer and employee contributions. See id. at 9 n.11.
These surveys on household wealth are noteworthy in two respects. First, they demonstrate that economists clearly regard Social Security benefits as financial assets that are appropriate combined with other assets, such as private pensions, bank accounting, and home ownership. Second, the technique these economists use to value Social Security benefits is highly comparable to the valuation techniques I recommend for valuing Social Security trust funds liabilities. Indeed, the second approach described above is, for all intents, the same method that I advocate.

A review of these and many other economic studies\(^{157}\) reveal that it is common


\(^{156}\) See id. at 162 (table 2).

\(^{157}\) There are numerous other cases where economists quantity Social Security benefits in a similar manner. For example, studies that explore the effect of Social Security on retirement decisions often quantify the effect of Social Security by estimating the amount by which the accrued value of Social Security benefits increase over the course of a year See, e.g., Courtney Coile & Jonathan Gruber, Social Security and Retirement 14 (2000) (Center for Retirement Research Working Paper 2000-11) (“We initially follow the literature and focus on accrual, the change in [Social Security Wealth] resulting from an additional year of work.”).

practice for economists to attribute real economic value to Social Security benefits and to use net present value techniques to estimate those values. Again, the question for defenders of current Social Security accounting practices is to explain why similar techniques are not used to estimate the liabilities of the Social Security trust funds.