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**Broader Budget Aggregates:  
Proposed Reform Legislation**

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“Accurate accounting has a practical purpose: to reveal the consequences of current practices and to clarify the nature of the choices we face.”<sup>1</sup> Many individuals view accounting merely as an exercise for academics, or at best a necessary but cumbersome tool to order one’s finances. Few observers, however, accurately recognize the extent to which an entity’s accounting system – a *procedural* issue – directly shapes the substantive outcomes of the entity’s budget decisions. It is the goal of this paper to analyze one aspect of the United States Government’s accounting procedures, namely, the degree to which the budget considers long-term financial commitments, and to evaluate proposed legislation that would modify the current system.

The United States budget currently operates under a cash-flow system, in which policy makers base their budget decisions upon statements of current and near-future revenues and expenditures. In other words, revenues are only accounted for when cash is received (or will be shortly), and expenditures are only accounted for as cash is paid (or will be shortly). For example, the federal deficit, a major indicator of the Government’s fiscal posture, merely represents a cash-flow measure of how Government spending outpaced revenue over a twelve month period of time. Policy makers typically consider revenue and spending legislation within the framework of a five- or ten-year budget “window”; that is, they measure the effects of budget decisions over a period of five or ten years.<sup>2</sup> Any effects beyond that time period – no matter how great – receive little-to-no attention during budget deliberations, and implicitly become an issue for future generations.

Yet many federal programs have long-term fiscal ramifications, and commit Government payments much farther into the future than the five- or ten-year horizon that current policy makers consider. Future Government obligations – or “fiscal exposures” as the Government Accountability Office (GAO) has termed them<sup>3</sup> – can be divided into two essential categories: (i) legally binding obligations, or “explicit liabilities,” and (ii) non-binding financial commitments,

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<sup>1</sup> Christopher DeMuth, *foreword to* JAGADEESH GOKHALE & KENT SMETTERS, *FISCAL AND GENERATIONAL IMBALANCES: NEW BUDGET MEASURES FOR NEW BUDGET PRIORITIES*, at vi (2003).

<sup>2</sup> See Elizabeth Garrett, *Accounting for the Federal Budget and Its Reform*, 41 *HARV. J. ON LEGIS.* 187, 189 (2004); Christopher J. Puckett, *Is the Experiment Over? The OMB’s Decision to Change the Game Through a Shortening of the Forecast*, 11 *GEO. J. POVERTY LAW & POL’Y* 169, 178 (2004).

<sup>3</sup> Government Accountability Office, *The Nation’s Long-Term Fiscal Challenge* (2005), available at <http://www.gao.gov/special.pubs/longterm/challenge.html>.

or “implied liabilities.”<sup>4</sup> Among the Government’s explicit liabilities are debt held by the public, accrued pensions and post-retirement health care currently owed to retired federal employees and military members, accrued obligations for Government insurance and guarantee policies, long-term leases, and un-adjudicated claims against the Government.<sup>5</sup> Together these liabilities total more than \$8.6 trillion, or roughly \$29,000 per capita.<sup>6</sup> The Government’s legally-binding obligations, however, “are only a subset of the Government’s financial responsibilities.”<sup>7</sup> The lion’s share of these implied liabilities consists of debt currently held by Government accounts (e.g. trust funds from which the Government has borrowed money to cover current spending), and future payments for entitlement programs such as Social Security, Medicare, and Medicaid.<sup>8</sup> Even though these programs are not liabilities in the traditional sense, in that Congress may *legally* alter or terminate any of these benefits at any time,<sup>9</sup> political pressure has historically been sufficient to classify these financial commitments as “implicit liabilities.” According to the executive Office of Management and Budget (OMB), “It would be misleading to leave out any of these programmatic commitments in projecting future claims on the Government or in calculating the Government’s long-run fiscal balance.”<sup>10</sup>

The current system of cash-flow accounting presents a somewhat dismal picture of the Government’s finances. After running a \$236 billion surplus in FY 2000, the Government’s financial position has deteriorated to the point that the deficit for FY 2004 topped \$412 billion, and the projected deficit for FY 2005 is expected to near \$368 billion.<sup>11</sup> Because the current budgetary estimates fail to consider long-term fiscal commitments, however, the long-run budgetary outlook looks even more bleak than today’s deficit implies. Impending demographic

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<sup>4</sup> OFFICE OF MANAGEMENT AND BUDGET, ANALYTICAL PERSPECTIVES 199 (2005).

<sup>5</sup> See Government Accountability Office, *The Nation’s Long-Term Fiscal Challenge* (2005), available at <http://www.gao.gov/special.pubs/longterm/challenge.html>.

<sup>6</sup> See ANALYTICAL PERSPECTIVES, *supra* note 4, at 206.

<sup>7</sup> *Id.* at 199.

<sup>8</sup> Indeed, the long-term, open-group deficit of Social Security, comprised of existing debt to the Social Security trust fund plus the net present value of future Social Security payments (i.e. payments – revenue), is estimated to be \$4 trillion over a seventy-five year horizon, and \$11.1 trillion over an infinite horizon. See Social Security Board of Trustees, *2005 Annual Report*, at 10-12 (April 5, 2005), available at <http://www.socialsecurity.gov/OACT/TR/TR05/tr05.pdf>. Further, under current law, federal spending on all entitlement programs is expected to exceed 21.2 percent of GDP by the year 2075. See ANALYTICAL PERSPECTIVES, *supra* note 4, at 209.

<sup>9</sup> See *Flemming v. Nestor*, 363 U.S. 603, 608 (1960).

<sup>10</sup> ANALYTICAL PERSPECTIVES, *supra* note 4, at 200.

<sup>11</sup> See Congressional Budget Office, *The Budget and Economic Outlook: Fiscal Years 2006 to 2015*, at xiv, 134 (2005).

changes, accruing deficits, and commitments to entitlement programs all suggest that in years ahead, federal outlays will substantially outweigh the amount of revenue collected (assuming tax rates remain relatively constant). Some analysts estimate the federal budget's fiscal gap to stand between 6.5 and 7.5 percent of GDP.<sup>12</sup> And one recent calculation found that, as of FY 2004, the federal budget faced a permanent fiscal imbalance of more than \$44.2 trillion.<sup>13</sup> These numbers are only exacerbated by the fact that, under the current five- or ten-year cash-flow accounting standard, legislators sometimes purposefully mask the long-term costs of favored revenue and spending proposals. One such "scoring game" involves offsetting revenue loss such that it occurs beyond the budget window, thereby "eliminating" the proposal's major effects on the budget.<sup>14</sup> Legislators may thus take credit for cutting taxes, while at the same time avoid the political fallout for causing increased deficit spending.

In order to combat the negative effects of cash-flow accounting, members of Congress have introduced a variety of legislative proposals to alter the federal accounting system. These measures span from piece-meal reforms, such as requiring the Government to fund federal deposit insurance programs on an accrual basis, to an overarching change to the cash-flow budgeting system. This proposed legislation, entitled the Honest Government Accounting Act of 2003, would supplement the current cash-flow system with a more exhaustive net present value accounting system. This convention would require present-value estimates of both the revenue and spending effects of proposed legislation, in order to give lawmakers a more accurate picture of the long-term financial obligations involved with their programmatic decisions. As this paper will demonstrate, the unifying thread to all of the proposed legislative reforms is the desire to reveal the long-term liabilities associated with federal spending programs (in particular, entitlement programs).

Section I of this paper describes the factual background of the various proposed legislative reforms and their implications for budget policy, the most comprehensive of which calls for a supplemental net present value federal accounting. Sections II and III then discuss the justifications and shortfalls associated with a present value accounting structure.

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<sup>12</sup> Congressional Budget Office, *Measures of the U.S. Government's Fiscal Position Under Current Law* (August 2004).

<sup>13</sup> See GOKHALE & SMETTERS, *supra* note 1, at 2.

<sup>14</sup> For a detailed discussion of this gimmick, see the discussion of Roth IRA's, *infra* § II(C)(2).

## I. FACTUAL BACKGROUND: ACCOUNTING REFORM PROPOSALS

In recent years, various pieces of legislation intended to reform all or part of the federal accounting system have been introduced in Congress, but none has met with much success or broad support. Of the six bills discussed in this section, not one has been reported out of committee, or even received a hearing. The reforms proposed by these bills fall into one of the following three distinct categories, each advocating a differing degree of change from current accounting policies: (a) creation of a Commission on Federal Budget Concepts that would evaluate and recommend budget reform procedures, (b) requirement that Congress provide accrual *funding* for federal insurance and federal retirement programs, and (c) requirement that the entire federal budget be presented in terms of net present value. Though the provisions of these bills range from small to sweeping changes in the Government's accounting practices, each would move the federal budget process in the direction of recognizing today the liabilities that the Government will have to pay out tomorrow.

### A. Commission on Federal Budget Concepts

In 2003, and again in 2005, Senators Voinovich and Feingold introduced the Truth in Budgeting and Social Security Protection Act, a provision of which would establish a "Commission on Federal Budget Concepts."<sup>15</sup> This Commission would be responsible to perform the following four activities to assist federal policy makers in analyzing and adopting budget procedures:<sup>16</sup>

- (A) Assess the merits of the "unified budget," as proposed in the 1967 Report of the President's Commission on Budget Concepts;
- (B) Evaluate the structure, concepts, classifications, and *bases of accounting* of the Federal budget [emphasis added];
- (C) Identify applicable "general accounting principles and practices in the private sector" (generally known as GAAP), and assess their value to the federal budget process; and
- (D) Recommend modifications to the current budget process that would "enhance the usefulness of the budget for public policy and financial planning."<sup>17</sup>

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<sup>15</sup> See Truth in Budgeting and Social Security Protection Act of 2005, S. 568, 109th Cong. Title IV (2005); Truth in Budgeting and Social Security Protection Act of 2003, S. 689, 108th Cong. Title IV (2003).

<sup>16</sup> It appears that the Commission would have jurisdiction similar to the policy-analysis responsibility allocated to the House and Senate Budget Committees under existing law. See 2 U.S.C. § 623 (2005)(a) ("The Committees on the Budget of the House of Representatives and the Senate shall study on a continuing basis proposals designed to improve and facilitate methods of congressional budgetmaking.").

<sup>17</sup> Truth in Budgeting and Social Security Protection Act of 2005, S. 568, 109th Cong. § 402(a)(1) (2005); Truth in Budgeting and Social Security Protection Act of 2003, S. 689, 108th Cong. § 402(a)(1) (2003).

In particular relation to long-term federal obligations, the Commission would be required to consider the following two questions: “Are there better ways than trust fund accounting to identify long-term liabilities? . . . Should accrual budgetary accounting be adopted for Federal retirement, military retirement, or Social Security and other entitlements?”<sup>18</sup> Although the Commission would have no authority in itself to alter current budget policy, it is noteworthy that at least two Senators want to analyze publicly the potential benefits of recognizing long-term fiscal commitments.

### **B. Accrual Funding of Particular Federal Programs**<sup>19</sup>

Two separate categories of legislative proposals would require Congress to accrue the expenses of particular programs annually, rather than merely appropriate funding for expenditures in the years in which they actually arise. The first of these requires accrual funding for federal insurance programs, and the second requires accrual funding for the pensions and post-retirement healthcare of retired federal employees. Whereas cash-flow accounting measures an entity’s finances in terms of *current* assets and liabilities, accrual accounting looks to long-term liabilities for a more accurate measure of financial performance. Under accrual accounting, “a liability is incurred . . . in the year in which all the events have occurred that establish the fact of the liability, the amount of the liability can be determined with reasonable accuracy, and economic performance has occurred with respect to the liability.”<sup>20</sup> In other words, accrual accounting recognizes liabilities as obligations incurred from *past* transactions, “regardless of when associated cash is actually received or paid.”<sup>21</sup> Under this system, an entity must account for a liability at the point when it can reasonably ascertain the extent of the liability. For purposes of the federal budget, a fiscal commitment such as those of Social Security and Medicare payments would be considered a liability at the time that future payments can be actuarially calculated.

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<sup>18</sup> Truth in Budgeting and Social Security Protection Act of 2005, S. 568, 109th Cong. § 402(a)(2)(I)-(J) (2005); Truth in Budgeting and Social Security Protection Act of 2003, S. 689, 108th Cong. § 402(a)(2)(I)-(J) (2003).

<sup>19</sup> For a thorough discussion of the costs and benefits of accrual accounting, including a historical survey of legislative proposals in the 1990s to implement accrual accounting for selected federal programs, see Cheryl D. Block, *Congress and Accounting Scandals: Is the Pot Calling the Kettle Black?*, 82 NEB. L. REV. 365 (2003).

<sup>20</sup> 26 C.F.R. § 1.446-1(c)(1)(ii)(A) (2005).

<sup>21</sup> General Accounting Office, *Accrual Budgeting: Experiences of Other Nations and Implications for the United States* 31 (2000).

## 1. Federal Insurance Programs

A provision of the Truth in Budgeting and Social Security Protection Act, as well as of the Family Budget Protection Act of 2004, would require the Government to accrue the costs of its various insurance programs.<sup>22</sup> Among the insurance programs that the Government currently oversees are bank and credit union deposit insurance, crop insurance, flood insurance, pension insurance, and federal employees' and veterans' life insurance.<sup>23</sup> As with private insurance policies, these programs require participants to pay premiums in exchange for insurance coverage. In distinction from private insurance, however, federal insurance program guarantees are backed by the public's tax dollars. Under the current system of cash-flow accounting, the Government recognizes the benefits of its insurance programs in the years in which it collects the associated premiums. In fact, current law requires the programs to transfer excess annual premiums into the general fund. The Government does not, however, account for the *costs* of its insurance obligations until claims are actually made upon the program. If the program's costs in a given fiscal year outweigh its benefits in that year, the Government merely subsidizes the program through an appropriation, which of course comes out of general revenues or borrowing. In this way, the "scoring procedures do not accurately reflect the long term federal liabilities" associated with the program.<sup>24</sup>

The Truth in Budgeting and Social Security Protection Act and the Family Budget Protection Act of 2004 would reform the asymmetry caused by cash-flow accounting, by implementing accrual accounting for federal insurance programs.<sup>25</sup> Specifically, the Acts would require Congress to appropriate funds annually based on the "risk-assumed cost" of a given program, with "risk-assumed cost" defined as "the net present value of cash flows to and from

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<sup>22</sup> See Truth in Budgeting and Social Security Protection Act of 2005, S. 568, 109th Cong. Title II (2005); Truth in Budgeting and Social Security Protection Act of 2003, S. 689, 108th Cong. Title II (2003); see also Family Budget Protection Act of 2004, S. 2752, 108th Cong. § 432 (2004).

<sup>23</sup> Martha Phillips, Testimony before the House Rules Committee (May 12, 1999), available at [http://www.concordcoalition.org/federal\\_budget/051299martha\\_budref\\_testimony.html](http://www.concordcoalition.org/federal_budget/051299martha_budref_testimony.html).

<sup>24</sup> *Id.*

<sup>25</sup> This provision would align accounting for federal *insurance* programs with the accrual-based federal budget accounting required under current law for federal *credit* programs. See Federal Credit Reform Act of 1990, Pub. L. No. 101-508 § 13201(a), 104 Stat. 1388-610 (1990) (codified at 2 U.S.C. 661 (2000)). According to OMB, the Federal Credit Reform Act required accrual accounting for federal credit and loan programs because "cash-flow accounting vastly minimized the extent of the government's financial obligations." See 2003 Office of Management and Budget, *Budget of the United States Government Fiscal Year 2004*, at 189-248 (2004). Interestingly, shortly after passage of the Credit Reform Act in 1990, many reformers – including some members of Congress – immediately called for the extension of accrual funding to federal insurance programs. As the existing legislative proposals demonstrate, however, such reform proposals have not been enacted to date.

the Government resulting from an insurance commitment . . . .”<sup>26</sup> These “cash flows” include expected claims paid, expected premiums received, expected recoveries from other parties, and other expected values of the program.<sup>27</sup> In other words, Congress would have to fully finance the expected liabilities of its insurance programs, with annual adjustments to tweak any errors in estimation. These Acts would thus prevent Congress from shifting present costs into the future, by spending today the insurance premiums it receives, and leaving it to tomorrow’s taxpayers to fund the Government’s obligations under the program. Interestingly, the Bills specifically require OMB, CBO, and GAO to advise Congress on an annual basis whether this accrual funding actually improves the federal budget process.<sup>28</sup> Without explicitly saying so in the legislation, the Bills’ sponsors apparently think this small measure of accrual accounting should normatively improve – and not just alter – the federal accounting system.

## 2. Federal Retirement Programs

In 2003 and in 2004, a contingent of Republican members of the Senate and House of Representatives introduced three different bills, each of which proposed identical language implementing accrual funding for retirement programs for federal employees – including both pensions and post-retirement healthcare benefits.<sup>29</sup> Each of these bills would require the Government to evaluate the long-term unfunded liabilities of its various employee retirement programs,<sup>30</sup> defining “unfunded liability” as the “present value of all future benefits payable from the Fund” minus the present value of future contributions to the Fund made on behalf of the

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<sup>26</sup> Truth in Budgeting and Social Security Protection Act of 2005, S. 568, 109th Cong. § 201(a) (2005); Truth in Budgeting and Social Security Protection Act of 2003, S. 689, 108th Cong. § 201(a) (2003).

<sup>27</sup> *Id.*

<sup>28</sup> *See id.* Additionally, OMB, CBO, and GAO must provide annual updates regarding the adequacy of their risk-assumed estimation models, and proposed revisions that would enhance their efficacy.

<sup>29</sup> *See* Family Budget Protection Act of 2004, S. 2752, 108th Cong. Title IV (2004) (entitling the accrual accounting section “Truth in Accounting”); Deficit Control Act of 2004, H.R. 3925, 108th Cong. Title IV (2004) (entitling the accrual accounting section “Truth in Accounting”); Budget Fraud Elimination Act of 2003, H.R. 180, 108th Cong. Title III (2003) (entitling the accrual accounting section “Budgeting and Managing for Results: Full Funding for Federal Retiree Costs”).

<sup>30</sup> Each bill lists the following six distinct federal employee retirement programs for which accrual funding would be required: Civil Service Retirement System, Central Intelligence Agency Retirement and Disability System, Foreign Service Retirement and Disability System, Public Health Service Commissioned Corps Retirement System, National Oceanic and Atmospheric Administration Commissioned Officer Corps Retirement System, and Coast Guard Military Retirement System. *See, e.g.*, Budget Fraud Elimination Act of 2003, H.R. 180, 108th Cong. § 301, 302, 303, 304, 305, 306 (2003).

employees.<sup>31</sup> After identifying the extent of its future exposure under its pension and post-retirement healthcare benefit programs, the Government would have to formulate a plan to liquidate – meaning finance – the unfunded liability.<sup>32</sup> Recognizing the short-term liquidity issues involved in switching from cash-flow to accrual accounting,<sup>33</sup> the bills each provide a forty-year window over which the Government must completely finance the future costs of the retirement programs.<sup>34</sup> This accrual accounting system would align the finances of federal retirement programs with those of the various private retirement and benefits plans, all of which are required under federal law to employ accrual accounting.<sup>35</sup>

### C. Honest Government Accounting Act of 2003

Though each of the previously mentioned categories of proposed legislation would move federal accounting in the direction of long-term cost recognition, each of them provides only a limited impetus toward true “reform” of federal accounting standards. While the Commission on Federal Budget Concepts would evaluate the possibility of a long-term approach, it could do nothing to implement its proposals. And while accrual funding of federal insurance and retirement programs would transform a piece of federal budgeting, it would take only a small bite out of the large apple of the existing cash-flow process. Further, such accrual funding merely mirrors practices already in place: current law requires accrual accounting for federal *credit* programs,<sup>36</sup> and private businesses currently finance their pension and benefit plans under accrual accounting schemes. Only one current proposal – the Honest Government Accounting

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<sup>31</sup> Budget Fraud Elimination Act of 2003, H.R. 180, 108th Cong. § 301(a)(1)(F) (2003). Each of the six retirement systems reformed by these bills has its own authorizing legislation; accordingly, each bill lists the exact amendments to be made to each governing statute in order fully to implement accrual accounting. For purposes of simplicity, only the changes to the first section (governing the Civil Service Retirement System) are cited in this paper.

<sup>32</sup> Budget Fraud Elimination Act of 2003, H.R. 180, 108th Cong. § 301(a)(3)(B) (2003).

<sup>33</sup> For example, for FY 2004, the federal government incurred \$68.7 billion in expected liabilities for civil service employee benefits (including both pension and healthcare benefits). See FINANCIAL MGMT. SERVICE, DEPT. OF THE TREASURY, 2004 FINANCIAL REPORT OF THE UNITED STATES GOVERNMENT 62 (2005). Under the current cash-flow system, these liabilities were not included on the federal budget, but were recognized as future liabilities by the Treasury Department in its annual Financial Report. See *id.* Under a system of accrual funding, however, Congress would be compelled to include this number in its annual budget.

<sup>34</sup> *Id.*

<sup>35</sup> See Financial Accounting Standards Board, *Employers' Accounting for Postretirement Benefits Other than Pensions*, Financial Accounting Standards No. 106, at 4 (1990) (requiring accrual accounting for post-retirement benefits, such as healthcare benefit programs); Financial Accounting Standards Board, *Employers' Accounting for Postretirement Benefits Other than Pensions*, Financial Accounting Standards No. 87 (1985) (reaffirming FASB's requirement of accrual accounting for pension plans).

<sup>36</sup> See Federal Credit Reform Act of 1990, Pub. L. No. 101-508 § 13201(a), 104 Stat. 1388-610 (1990) (codified at 2 U.S.C. § 661 (2000)), and related discussion, *supra* note 25.

Act of 2003 – would enact overarching, systemic changes to federal accounting standards.<sup>37</sup> In particular, this Act – sponsored only by Senator Joe Lieberman – contains three primary proposals to reform federal accounting: (i) requirements that policy makers consider the net present value of federal finances when making budget decisions, (ii) programs to elicit the advice of experts on budget policy, and (iii) provisions to control federal spending.

### 1. Net Present Value Accounting

The first, and most important, aspect of the Act would require Congress, in addition to its current cash-flow accounting, to consider calculations of the “net present value” of federal assets and liabilities – including *implied* liabilities – when making budget decisions.<sup>38</sup> According to the Act’s lengthy “Findings” section, the Government’s current cash-flow accounting methodologies are “misleading and inconsistent,” because they report accumulated federal *assets*, but fail to compare them with future financial *commitments*.<sup>39</sup> The resulting fiscal imbalance – the sum of debt held by the public and the net present value of future fiscal commitments – poses great danger to long-term fiscal policy. “The most appropriate way to assess Government finances is to calculate its net assets under current policies: The net present value of all prospective receipts minus the net present value of all prospective outlays and minus outstanding debt held by the public.”<sup>40</sup> Or, to assess the financial status of a particular entitlement spending program, the net present value is equal to the “present value of projected future social insurance entitlement benefits, minus the present of future dedicated receipts.”<sup>41</sup> In other words, “net present value” is equal to the amount that the government would have to invest today, in order to fully fund its future financial commitments.

“Net present value” accounting is similar to accrual accounting, but the two systems differ in one critical respect. Both net present value and accrual accounting recognize future promises of payment (e.g. Social Security benefits) as “implied liabilities.” But net present value accounting would also count estimated future *revenues* as “implied assets.”<sup>42</sup> Under accrual accounting, the “matching principle” requires that an item only be accounted as an “asset” when

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<sup>37</sup> Honest Government Accounting Act of 2003, S. 1915, 108th Cong. (2003).

<sup>38</sup> *Id.* § 3(a) (2003).

<sup>39</sup> *Id.* § 2(7) (2003).

<sup>40</sup> *Id.* § 2(10) (2003).

<sup>41</sup> *Id.* § 2(7) (2003).

<sup>42</sup> *Id.* § 2(10) (2003).

it has been earned in a *past* transaction.<sup>43</sup> Net present value accounting, however, would allow estimated *future* receipts to be considered “assets” for purposes of federal budgeting.<sup>44</sup> Though private actors would not be permitted to value such future receipts as assets, the Government would – and should – be able to do so, because its structure and objectives are different from those of private actors.<sup>45</sup> Most notably, the Government has the sovereign power to tax its population, and thus can much more reasonably determine its future revenues than can private actors.<sup>46</sup> Further, the fundamental principle behind the Government’s accounting practices is to ascertain whether current policies can be sustained into the future, not to turn profits as in the business world.<sup>47</sup> In other words, Government finances focus more on long-term liquidity than on a strict standard of solvency. Accordingly, the Government should be able to compare future revenues against future liabilities when enacting budget policy.

The difficulty with considering future receipts, however, is to determine *which* future receipts ought to be included in the calculation. To answer this question, net present value accounting poses three possible solutions. First, “closed-group, limited-horizon” accounting would consider only the obligations to and future revenues from *current* participants in a government program, within an extended but finite budget window (e.g. 75 years). Second, “open-group, limited-horizon” accounting would consider the future revenues of *all* participants in a government program (both current and future), but still within a finite budget window. For example, open-group accounting would offset the obligations due to future Medicare participants with the expected revenues from the individuals who would be paying into the system when those obligations are paid. Third, “open-group, infinite horizon” accounting considers all of the revenues and liabilities of a program, extending *forever*.

Under the Act, Congress would have access to net present value calculations for two broad categories, in four different formats. In general, the Act would require Congress to consider the net present value of both *overall* revenues and expenditures, as well as the values of *major* federal obligations (social insurance programs in particular). These calculations would be available to Congress in four distinct formats. First, net present value calculations must

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<sup>43</sup> See, e.g., 26 C.F.R. § 1.446-1(c)(1)(ii)(A) (2005).

<sup>44</sup> Honest Government Accounting Act of 2003, S. 1915, 108th Cong. § 2(10) (2003).

<sup>45</sup> See ANALYTICAL PERSPECTIVES, *supra* note 4, at 202.

<sup>46</sup> *Id.*

<sup>47</sup> *Id.*

accompany recommendations for changes in law included in the President's budget proposal, if the following two conditions are satisfied: (i) the proposals deal with legislation other than annual appropriations, and (ii) the proposal would decrease the current present value of federal finances by a factor greater than 0.25 percent.<sup>48</sup> Second, annual Budget Resolutions must include calculations of the impact of the resolution on the net present value of the Government's overall liabilities and commitments.<sup>49</sup> Third, the Social Security Trustees, in their annual report, must detail the present value of projected benefits to *current* participants in the Social Security and Medicare programs, minus the present value of projected revenues from *current* participants (the "closed-group" calculation discussed *supra*).<sup>50</sup> And fourth, the Treasury Secretary, in the annual Financial Report of the United States Government, must include the net present value calculations of both overall revenues and expenditures, as well as the net present value of all major liabilities and commitments, "including outstanding debt held by the public and all social insurance entitlements such as Social Security and Medicare."<sup>51</sup> Every present value calculation made under the Act must include both a 75-year and infinite time horizon.<sup>52</sup>

The Act also delineates the methodology for computing net present value. Analysts must subtract the projected revenues for each fiscal year from the projected expenditures for that year, and divide by a discount factor estimated to apply in that year. To compute present value over a 75-year or infinite horizon, the analyst must then calculate the sum of the present values for each year under consideration.<sup>53</sup> Each report must detail the discount rates and methodology employed, as well as specific demographic and economic assumptions used in the calculation.<sup>54</sup> Finally, the discount rates and other estimates must be consistent with those used by the Treasury Department and other agencies in their long-term financial calculations. For the reports on specific social insurance programs that have dedicated taxes, such as Social Security and Medicare, the revenues for that program include their dedicated taxes, participant premiums, and general revenue receipts from the taxation of benefits. Revenues do not, however, include

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<sup>48</sup> *Id.* § 6(a)(1) (2003).

<sup>49</sup> *Id.* § 7 (2003).

<sup>50</sup> *Id.* § 9 (2003). Under current practices, the Social Security and Medicare trustees calculate both the 75-year and infinite-horizon present values of their respective programs, though these numbers play no formal role in budget process. *Id.* § 2(11) (2003).

<sup>51</sup> *Id.* § 3(a) (2003).

<sup>52</sup> *Id.* § 3(a), 6(a)(1), 7, 9 (2003).

<sup>53</sup> *Id.* § 3(a) (2003).

<sup>54</sup> *Id.*

annual appropriations, because the purpose of the present value analysis is to determine the level of the fiscal imbalance that Congress must cover with discretionary appropriations.<sup>55</sup>

## 2. Advice from Budget Experts

The second broad reform category included in the Act involves specific programs for policy makers to elicit the advice and expertise of others in making decisions regarding budget policy. The Act would create a Commission on Long-Term Government Liabilities and Commitments, which would be tasked with recommending to Congress and the President reforms that would reduce the long-term fiscal imbalance.<sup>56</sup> The Act would also require the Treasury Secretary to notify Congress of the utility of doing present value calculations for specific tax expenditures “that defer tax liability or cause long-term revenue effects that are not captured in a cash flow estimate over five or ten years.”<sup>57</sup> In other words, the Treasury must weigh the benefits of preventing budgetary “backloading games” against the costs of doing the present value analysis.

## 3. Spending Control Mechanisms

The Act’s third and final major category involves spending-control provisions. The Act would reinstate the Pay-As-You-Go (PAYGO) rules of Gramm-Rudman-Hollings, enforceable by a point of order, with one exception.<sup>58</sup> PAYGO requirements would not apply in any fiscal year in which a declaration of war is in effect.<sup>59</sup> Finally, the Act would extend the Senate’s “Byrd Rule” into statutory budget procedure. Under this Rule, a point of order lies against any Reconciliation Bill – or any other expedited Congressional procedure – that would increase the deficit or reduce the surplus.<sup>60</sup> The stated goal of these provisions is to reduce the present value of the Government’s long-term liabilities to a level less than 1.25 percent of future payrolls.<sup>61</sup>

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<sup>55</sup> *Id.*

<sup>56</sup> *Id.* § 5(b) (2003).

<sup>57</sup> *Id.* § 10(a) (2003).

<sup>58</sup> *Id.* § 12 (2003).

<sup>59</sup> *Id.* § 12(b)(5) (2003).

<sup>60</sup> *Id.* § 11 (2003).

<sup>61</sup> *Id.* § 2(20) (2003).

## II. JUSTIFICATIONS FOR NET PRESENT VALUE and ACCRUAL ACCOUNTING

Cash-flow budgeting contains numerous inherent defects, the most prominent of which is its inability to recognize long-term implicit liabilities. Yet Congress continues to employ this flawed system “[d]espite general agreement that accrual methods of accounting more accurately reflect financial income . . .”<sup>62</sup> In contrast to this quagmire, proposals to employ net present value and accrual accounting appear to have three primary beneficial effects. First, they would establish a mechanism to account for long-term and implied liabilities, enabling policy makers to understand the effects of their current decisions. Second, and stemming from the public recognition of the Government’s unfunded liabilities, present value accounting would facilitate the transparency necessary to a functioning political process. Third, this accounting system would eliminate some of the scorekeeping games embraced by policymakers under cash-flow accounting.

### A. Accounting for Long-Term and Implied Liabilities

Perhaps the primary justification for present value accounting is its unique ability to account for long-term financial obligations of the Government. Whereas current cash-flow measures place the federal debt around \$4.3 trillion,<sup>63</sup> recent calculations of the “fiscal gap” – the level of unfunded future liabilities if current policies remain constant – find the Government in a \$44.2 trillion deficit on an infinite horizon.<sup>64</sup> This measure calculates to roughly 6.5% of the present value of future GDP, and at least 16.6% of the present value of all future payrolls.<sup>65</sup> Accordingly, in order to close this gap immediately, Congress would have to permanently raise payroll taxes to a rate of 31.9% – more than double their current rates of 15.3%.<sup>66</sup> Alternately, Congress could borrow \$44.2 trillion (an impossible task given that current GDP remains around \$11 trillion), cut entitlement benefits by 45% permanently, or slash *all* discretionary spending. While each of these options presents difficult questions, and perhaps the only plausible answer

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<sup>62</sup> Cheryl D. Block, *supra* note 19, at 405.

<sup>63</sup> See Congressional Budget Office, *Budget and Economic Outlook: Fiscal Years 2006 to 2015*, at xiv (2005).

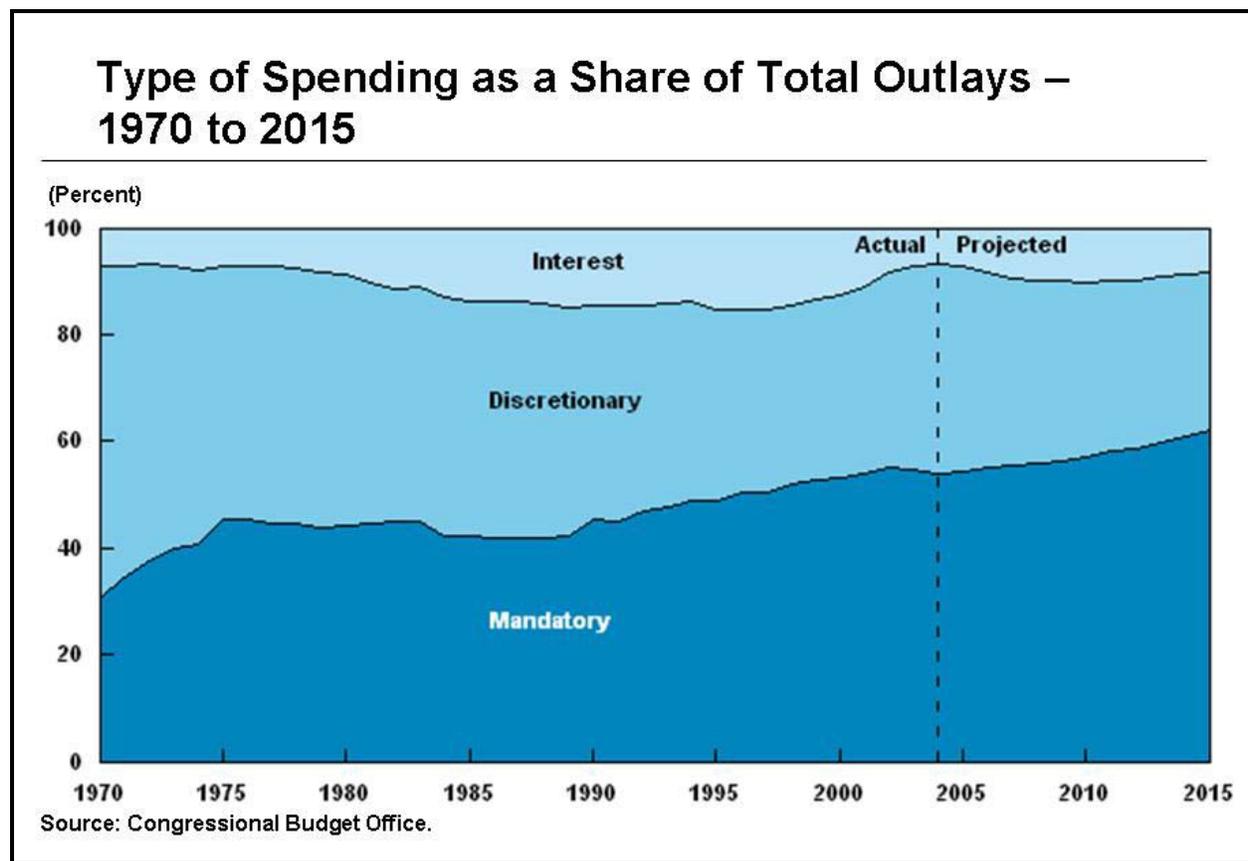
<sup>64</sup> See GOKHALE & SMETTERS, *supra* note 1, at 2. This study was completed before the enactment of the Medicare Modernization Act of 2004, which created Medicare Part D, the prescription drug benefit. Accordingly, this measure of \$44.2 trillion likely understates the current fiscal gap. Incredibly, another recent study places the fiscal gap at \$85.5 trillion on an infinite horizon. See Alan J. Auerbach, et al., *Sources of the Long-Term Fiscal Gap*, 103 TAX NOTES 1049 (2004), available at <http://www.brookings.edu/views/articles/gale/20040524.pdf>.

<sup>65</sup> *Id.* at 34.

<sup>66</sup> *Id.* at 5.

contains a combination of multiple options, only present value or accrual accounting can reveal the long-term unfunded obligations that the Government has created.

In the past, cash-flow accounting may have been a sufficient measure of federal finances, because discretionary spending occupied the majority of federal spending. When Congress handles most spending through annual appropriations, it may make sense for the accounting system to reflect cash flows because federal obligations would be accruing in roughly the same time period as the receipts that paid for them. In recent years, however, mandatory spending on entitlement programs has captured the lion’s share of the federal budget, and projections expect this share to continue to grow (see Figure 1). Accordingly, with so much spending based on implied promises that will not become payable for years to come, cash-flow measures of accounting fail to recognize tremendous future liabilities that may eventually dominate the national economy.



According to many scholars, the driving force behind the large fiscal gap is the “Generational Imbalance,” the amount of the fiscal imbalance caused by past and current generations. In broad brush strokes, the Generational Imbalance results from the aging of the

population of the United States.<sup>67</sup> In the years beyond 2015, “the aging of the baby-boom generation, combined with rising health care costs, will cause a historic shift in the United States’ fiscal situation. Over the next 30 years, the number of people age 65 or older will double, while the number of adults under age 65 will increase by less than 15 percent.”<sup>68</sup> Analysts are nearly unanimous in noting that, absent changes to current policy, spending on Social Security, Medicare, and Medicaid entitlements will drive increasingly “large, persistent, and ultimately unsustainable federal deficits and debt as the baby boom generation retires.”<sup>69</sup> In particular, Social Security spending is expected to grow from 4.2 percent of GDP in 2004, to 6.1 percent by 2030, to 6.4 percent by 2079.<sup>70</sup> At the same time, the Social Security surpluses of recent years are expected to become net operating deficits, as revenue credited to Social Security is expected to remain around the current level of 5.0 percent of GDP.<sup>71</sup> Current projections estimate that, as of 2017, annual costs of Social Security will exceed income from dedicated payroll taxes, and by 2041, the combined surplus of the program will be exhausted.<sup>72</sup> Similarly, rising healthcare costs – which have historically outpaced the growth of the economy by 2.5 percentage points<sup>73</sup> – will drive up the costs of Medicare and Medicaid. Conservative estimates (those of the Medicare trustees) calculate that the costs of the two programs will grow from 4.2 percent of GDP in 2004, to 8.4 percent by 2030.<sup>74</sup> CBO’s estimates place the level of 2030 spending at 11.5 percent of GDP.<sup>75</sup>

In his study of the issue of Social Security, Prof. Howell Jackson explicitly advocates that the program move from cash-flow accounting to accrual accounting.<sup>76</sup> Jackson argues that

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<sup>67</sup> See Alan Greenspan, Remarks, August 27, 2004, available at <http://www.federalreserve.gov/boarddocs/speeches/2004/20040827/default.htm>. Rather than attempt to reform the system by raising payroll taxes – with their resulting reduction in work supply and therefore smaller tax base – Greenspan advocates keeping more workers in the system by creating incentives to extend the average working life. For example, he would increase the minimum age for receiving full retirement benefits. *Id.*

<sup>68</sup> Congressional Budget Office, *The Budget and Economic Outlook: Fiscal Years 2006 to 2015*, at 10 (2005).

<sup>69</sup> See Government Accountability Office, *The Nation’s Long-Term Fiscal Challenge* (2005), available at <http://www.gao.gov/special.pubs/longterm/challenge.html>.

<sup>70</sup> Social Security Board of Trustees, *2005 Annual Report*, at 11 (April 5, 2005), available at <http://www.socialsecurity.gov/OACT/TR/TR05/tr05.pdf>.

<sup>71</sup> Congressional Budget office, *The Budget and Economic Outlook: Fiscal Years 2006 to 2015*, at 10 (2005).

<sup>72</sup> Social Security Board of Trustees, *2005 Annual Report*, at 2.

<sup>73</sup> Congressional Budget office, *The Budget and Economic Outlook: Fiscal Years 2006 to 2015*, at 10 (2005).

<sup>74</sup> Technical Review Panel on the Medicare Trustees Reports, *Review of Assumptions and Methods of the Medicare Trustees’ Financial Projections* (2000).

<sup>75</sup> Congressional Budget office, *The Budget and Economic Outlook: Fiscal Years 2006 to 2015*, at 10 (2005).

<sup>76</sup> See Howell E. Jackson, *Accounting for Social Security and Its Reform*, 41 HARV. J. ON LEGIS. 59 (2004).

accrual accounting enables onlookers to compare apples-to-apples, because all expenditures are expressed in present value terms. This ability to see the entire costs of the program encapsulated in one number in turn has two primary benefits: (i) it clarifies the financial status of the program over the long term, and (ii) it facilitates meaningful comparison with reform proposals.<sup>77</sup> After all, it only makes sense to compare options that are expressed in a common metric. Seizing upon Jackson's work, Elizabeth Garrett has argued that present value accounting should not be applied to Social Security alone, but to accounting for *all* tax expenditures, because more information regarding the status of a program can have "real effects" on budget policy.<sup>78</sup> Even Peter Diamond and Peter Orszag, who oppose moving the budget to an accrual accounting system, can acknowledge that "cash flows give a better picture of short-run macroeconomic effects, whereas accrual measures give a better picture of the change in long-run positions."<sup>79</sup>

### **B. Compelling Policymakers to Act Now**

A second justification for net present value accounting, related to the idea that only this system can recognize long-term cost obligations, holds that shedding light on the nation's long-run finances will compel Congress to act now to rectify problems that will not surface until later. As Jackson argues, such transparency is essential to efficient operation of political accountability in specific – and democratic institutions in general.<sup>80</sup> Citing Jackson's Social Security argument, ex-Congressman Joseph DioGuardi advocates accrual accounting for all government financial reporting and for the budget process, primarily to foster debate and protect the institution of public choice.<sup>81</sup> This reliance on democratic theory hails back two hundred years to Thomas Jefferson, who, as President of the United States, wrote to his Treasury Secretary: "We might hope to see the finances of the Union as clear and intelligible as a merchant's books, so that every member of Congress, and every man of any mind in the Union, should be able to comprehend them, to investigate abuses, and consequently to control them."<sup>82</sup> As history

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<sup>77</sup> *Id.*

<sup>78</sup> See Elizabeth Garrett, *supra* note 2, at 189.

<sup>79</sup> Peter A. Diamond & Peter R. Orszag, *Accrual Accounting for Social Security*, 41 HARV. J. ON LEGIS. 173, 181 (2004).

<sup>80</sup> See Jackson, *supra* note 76, at 67.

<sup>81</sup> Joseph J. DioGuardi, *Federal Accounting Reform Urgency*, Wash. Times, Nov. 2, 2003, at B03. Rep. DioGuardi's claim to fame is that he was the first practicing CPA elected to Congress (in 1984).

<sup>82</sup> Thomas Jefferson, letter to Secretary of the Treasury Albert Gallatin, April 1, 1802.

demonstrates, only when policy makers are forced to acknowledge the liabilities they create will they take the steps necessary to combat their harmful effects.

### **C. Preventing Some Scorekeeping Games**

The third broad justification for present value and accrual accounting schemes is that they may eliminate some of the scorekeeping games that policy makers employ to make legislation appear less costly than it is in reality. Under traditional cash-flow accounting, legislators can utilize at least five distinct tools to manipulate the scorekeeping system: (i) directed scorekeeping, (ii) advance appropriations, (iii) alteration of the budget window or the back-loading of expenditures outside the budget window, (iv) favorable shifts between mandatory and discretionary budget enforcement rules, and (v) classifying discretionary expenditures as “emergency” and thus outside the spending caps. Among the reformers who have expressed disgust at this ability to maneuver deceptively through the budget enforcement rules is ex-Representative Joseph DioGuardi, who has commented that “the biggest culprit in the systematic deception of the American people is a method of accounting based merely on the easily manipulated timing and flow of cash receipts and disbursements.”<sup>83</sup> To be certain, an accounting scheme that embraces long-term financial commitments could not eliminate directed scorekeeping, shifts between mandatory and discretionary enforcement rules, or favorably classifying spending as “emergency.” This scheme would, however, deter the two most common scorekeeping games: advance appropriations and budget window altering.

#### **1. Eliminates the Advantage of Advance Appropriations**

Advance appropriations entail appropriating budget authority in one year, but not making the funds available for outlay until the following fiscal year. Under the Scorekeeping Guidelines published by OMB, “[a]dvance appropriations of budget authority are scored as new budget authority in the fiscal year in which the funds become available for obligation, not the year in which the budget authority was enacted.”<sup>84</sup> Accordingly, advance appropriations enable Congress to “have its cake and eat it too,” because Congressmen can claim political credit for favorable spending programs directed at their constituents, while simultaneously maneuvering

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<sup>83</sup> Joseph J. DioGuardi, *Federal Accounting Reform Urgency*, Wash. Times, Nov. 2, 2003, at B03.

<sup>84</sup> Office of Management and Budget, *Scorekeeping Guidelines*, OMB Circular No. A-11, Appendix A-2, at para. 7 (2004).

around one fiscal year's spending caps by shifting the accounting for that spending to the following year.<sup>85</sup> Advance appropriations are currently so common that, by FY 2000, they had reached \$23.4 billion, or roughly 3.8 % of that year's \$615 billion discretionary spending appropriations.<sup>86</sup> Where other enforcement tools have failed, present value accounting would undercut the incentives behind advance appropriations. Because this accounting scheme takes into account the present value of *all* known future expenditures, it will highlight costs of advance appropriations in the year in which they are enacted. Accordingly, by bringing advance appropriations within the gambit of budget enforcement rules, present value accounting would effectively eliminate the advantage of advance appropriations.

## 2. Prevents Budget Window Games

The other most common scorekeeping gimmick involves gaming the budget window. Under a cash-flow accounting standard, CBO and OMB employ five- and ten-year budget windows when scoring particular spending or revenue proposals.<sup>87</sup> The "heavy" version of window gaming involves explicit Congressional alteration of the window for a particular piece of legislation. Though this method is very uncommon, "light" window gaming – back-loading expenditures (whether outlays or tax expenditures) outside the window – occurs on a regular basis. For example, the creation of the Roth IRA in the 1990s reveals a prime case of back-loaded revenue loss. The Roth IRA differs from a traditional IRA in that contributions are taxable in the year of contribution, as opposed to being taxed at the point of withdrawal.<sup>88</sup> In exchange, future withdrawals are tax-exempt. Accordingly, Roth IRAs provide up-front revenue gains to the Government, at least when compared with traditional IRAs – but they have larger long-term losses because the Government does not recognize any revenues on the flip side of the transaction. As of their enactment, the Joint Committee on Taxation estimated the ten-year loss from Roth IRAs to top \$20 billion, as opposed to a mere \$ 1.8 billion loss during their first five years of existence.

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<sup>85</sup> See L.R. Jones & K.J. Euske, *Strategic Misrepresentation in Budgeting*, 1 J. PUB. ADMIN. RESEARCH & THEORY 437, 445-47 (1991).

<sup>86</sup> ANALYTICAL PERSPECTIVES, *supra* note 4, at 237.

<sup>87</sup> See Garrett, *supra* note 2, at 189; Puckett, *supra* note 2, at 178,

<sup>88</sup> See 26 U.S.C. § 408 (2000).

Similar to its effect on advance appropriations, net present value accounting would undermine the incentives to engage in budget window games. Because this system of accounting recognizes future expenditures beyond the normal, finite budget windows, it prevents lawmakers from avoiding budget enforcement merely by altering the *timing* of payments. Present value accounting thus eliminates the dichotomy between actual expenditures and expenditures accounted for in the scoring process. Further, at least one legislative proposal would strengthen accrual accounting against budget window games, by establishing a point of order against back-loaded expenditures that exceed a threshold amount.<sup>89</sup> Under the Truth in Budgeting and Social Security Protection Act, CBO must, in conjunction with its scoring reports to the Congressional Budget Committees, prepare reports that estimate whether years 11-20 of an expenditure (as measured by discounted cash flows) will exceed year 1-10 by a degree of 150% or higher.<sup>90</sup> If the expenditure is sufficiently back-loaded, any member of Congress would be able to raise a point of order and shut down consideration of the measure.

### III. SHORTFALLS IN NET PRESENT VALUE ACCOUNTING

#### A. Accuracy Problems

The benefits of adopting a present value accounting structure with an infinite horizon budget window are clear – it would force lawmakers to consider the long-term consequences of fiscal policy. Since long-term budget projections are subject to immense uncertainty, however, a great question exists as to the accuracy with which financial analysts can predict fiscal consequences over a long-term (or infinite) horizon. Measuring the budgetary effects of a program or group of programs far into the future is subject to a variety of assumptions about economic conditions and demographic trends, all of which profoundly affect government revenue and outlays. When analysts calculate present-value measures, they must first predict the cash commitments of a particular program or group of programs in the future. Next, they must discount the aggregate value of that spending over a specific time period to produce one number. However, the further into the future that the analyst attempts to measure the present value of money, the more assumptions she must make about uncertain factors and circumstances. One common present-value measure is the fiscal imbalance of the United States budget over an

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<sup>89</sup> See Garrett, *supra* note 2, at 191-92.

<sup>90</sup> See Truth in Budgeting and Social Security Protection Act of 2005, S. 568, 109th Cong. § 107 (2005); Truth in Budgeting and Social Security Protection Act of 2003, S. 689, 108th Cong. § 107 (2003).

infinite horizon. As will become evident in this section, however, different assumptions about the appropriate discount rate or future economic conditions will lead to vastly different estimates of the net present value of the fiscal imbalance.

Estimations of the long-term fiscal gap faced by the United States are especially sensitive to different assumptions about inflation and interest rates, productivity growth, expansion of GDP, and how quickly health care costs will rise. The present value of the fiscal imbalance represents the fiscal shortfalls of all federal programs relative to the present value of GDP. If GDP grows faster or slower than expected, government revenue and outlays, and resultantly the nation's long-term fiscal imbalance, will be profoundly affected. For example, the number of people on food stamps or unemployment insurance fluctuates with the economy. An extended period of low economic growth would be substantially more expensive for such programs. On the other hand, periods of high GDP growth, as was the case in the late 1990s, could make the long-term budget outlook much less ominous.

One reason budget projections are difficult revolves around the time value of money; that is, a dollar today is less valuable in the future. Uncertainty regarding the expected rate of inflation is a primary factor that makes an amount of money worth more to people today than in the future. A discount rate makes certain assumptions about the expected rate of inflation. Thus, if inflation turns out differently than what was expected, either higher or lower, the accuracy of resulting present value estimations will be substantially diminished. Expected rates of inflation are usually based on historical performance, but history is rarely an accurate predictor of future circumstances. Consider, for instance, a person taking out a mortgage in 1960. At that time, the interest rate on a 30-year mortgage was about 6 percent. This rate was based on a low expected rate of inflation, because over the previous decade inflation had averaged only about 2.5 percent. The creditor, therefore, expected a real return of around 3.5 percent. Nevertheless, the United States experienced double-digit inflation during the 1970s, and the average inflation rate over that 30 year period was 5 percent. Thus, the creditor's real return after inflation would have been only about 1 percent.<sup>91</sup> Were budget estimators in the position of the lending institution in the 1960s, they would have grossly underestimated the degree of federal liabilities, because they would have been assuming a lower-than-actual rate of inflation.

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<sup>91</sup> See N. GREGORY MANKIW, *MACROECONOMICS* 178 (2000).

Interest rates, which often move with inflation, also affect the value of money in the future, and thus influence assumptions regarding an appropriate discount rate. An individual investing a dollar today expects to earn interest, so that his investment will accumulate real worth over time. Assuming a 3 percent interest rate, for example, a dollar a year from now is worth only ninety-seven cents today. Just as with long-term inflation, however, many uncertainties arise when trying to estimate long-term interest rates.

**Table 12-5. SENSITIVITY OF THE BUDGET TO ECONOMIC ASSUMPTIONS**  
(In billions of dollars)

Budget effect	2005	2006	2007	2008	2009	2010	Total of Effects, 2005-2010
<b>Real Growth and Employment</b>							
Budgetary effects of 1 percent lower real GDP growth:							
(1) For calendar year 2005 only: <sup>1</sup>							
Receipts .....	-10.2	-21.8	-24.3	-25.6	-27.0	-28.4	-137.2
Outlays .....	2.8	8.1	8.8	10.6	12.5	14.7	57.4
Increase in deficit (-) .....	-13.0	-29.8	-33.0	-36.2	-39.5	-43.1	-194.6
(2) Sustained during 2005-2010, with no change in unemployment:							
Receipts .....	-10.4	-34.0	-62.9	-94.5	-129.0	-166.3	-497.1
Outlays .....	*	0.5	2.1	5.0	9.3	15.3	32.2
Increase in deficit (-) .....	-10.4	-34.5	-65.0	-99.5	-138.4	-181.6	-529.3
<b>Inflation and Interest Rates</b>							
Budgetary effects of 1 percentage point higher rate of:							
(3) Inflation and interest rates during calendar year 2005 only:							
Receipts .....	-10.0	28.4	37.1	24.7	26.0	27.4	133.6
Outlays .....	11.0	19.1	17.5	16.3	15.7	15.5	95.2
Decrease in deficit (+) .....	-21.0	9.3	19.6	8.3	10.3	11.9	38.4
(4) Inflation and interest rates, sustained during 2005-2010:							
Receipts .....	-10.0	22.7	67.2	100.7	136.0	175.1	491.7
Outlays .....	11.4	34.5	56.9	76.8	95.0	113.3	387.8
Decrease in deficit (+) .....	-21.4	-11.8	10.4	24.0	41.0	61.8	103.9
(5) Interest rates only, sustained during 2005-2010:							
Receipts .....	-20.5	-11.4	6.3	11.8	16.0	20.9	23.1
Outlays .....	8.8	24.3	37.0	46.0	53.3	60.1	229.5
Increase in deficit (-) .....	-29.3	-35.7	-30.7	-34.1	-37.3	-39.2	-206.4
(6) Inflation only, sustained during 2005-2010:							
Receipts .....	10.5	34.0	60.8	88.6	119.7	153.8	467.4
Outlays .....	2.7	10.5	20.5	32.0	43.7	56.2	165.5
Decrease in deficit (+) .....	7.8	23.6	40.3	56.6	76.0	97.6	301.9
<b>Interest Cost of Higher Federal Borrowing</b>							
(7) Outlay effect of \$100 billion increase in borrowing in 2005 .....							
	1.3	3.5	4.2	4.7	5.0	5.4	24.2

\* \$50 million or less.  
<sup>1</sup> The unemployment rate is assumed to be 0.5 percentage point higher per 1.0 percent shortfall in the level of real GDP.

The ability of budget analysts accurately to predict the behavior of economic indicators seventy-five years or more into the future also raises important questions about the feasibility of present value accounting. Calculations by OMB, as shown in the table above, illustrate that budget projections are highly sensitive, not only to different assumptions about inflation and

interest rates, but also to unemployment and GDP growth.<sup>92</sup> OMB's numbers show that even five-year budget projections can vary significantly based on different economic assumptions. For example, a mere change of one percentage point in inflation, interest rates, and real GDP growth over five years can have the effect of reducing the projected deficit by \$302 billion, or increasing the projected deficit by \$529 billion. This \$831 billion dollar variance in budgetary estimates over a five-year period would only be compounded when expanded to a seventy-five year or infinite budget horizon.

Assumptions about the cost increases associated with the government's health care programs are even more critical for predicting the fiscal gap than expectations of GDP growth. The amount by which federal spending on Medicare and Medicaid must increase in the future relative to GDP is a substantial source of budgetary uncertainty. For example, CBO's long-term budget projections for these two programs reveal large variation in alternative paths. According to these estimates, total federal spending for Medicare and Medicaid in 2050 could range anywhere from 6.4 percent of GDP to 21 percent (or more), up from 3.9 percent of GDP in 2003.<sup>93</sup> Not only are the future costs of Medicare highly uncertain, but as the largest source of potential growth in the federal budget, any measure of the government's long-term fiscal imbalance is particularly sensitive to Medicare increases. This effect may be largely attributable to the fact that the premiums paid by recipients only cover 25 percent of the Part B benefits.<sup>94</sup> Accordingly, of the long-term fiscal gap of 6.5 percent of GDP calculated by Gokhale and Smetters, 5.4 percent is attributable to spending increases in Medicare.<sup>95</sup> Further, the costs of Medicare are particularly difficult to predict because expenses are largely driven by increased costs of medical care, which have risen faster than inflation over the past forty years.<sup>96</sup>

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<sup>92</sup> See ANALYTICAL PERSPECTIVES, *supra* note 4, at 197.

<sup>93</sup> See Congressional Budget Office, *Measures of the U.S. Government's Fiscal Position Under Current Law* (August 2004).

<sup>94</sup> See *id.* at 2.

<sup>95</sup> See GOKHALE & SMETTERS, *supra* note 1, at 2.

<sup>96</sup> *Id.*

### Sensitivity of Fiscal Imbalance Measures to Different Discount Rates and Growth Assumptions

(Percentage of the present value of GDP)

	Fiscal Imbalance Under							
	Midrange Assumptions		Alternative Discount Rates <sup>a</sup>		Alternative GDP Growth Rates per Capita <sup>b</sup>		Alternative Growth Rates of Health Care Outlays per Capita <sup>c</sup>	
	Billions of 2002 Dollars	Percentage of GDP	High	Low	High	Low	High	Low
Social Security	7,204	1.0	0.9	1.2	1.2	0.9	1.0	1.0
Medicare <sup>d</sup>	37,590	5.4	4.9	6.0	6.7	4.5	7.3	3.9
All Other Federal Programs	<u>676</u>	<u>0.1</u>	<u>0.1</u>	<u>0.1</u>	<u>-2.3</u>	<u>1.7</u>	<u>1.0</u>	<u>-0.6</u>
<b>Total Fiscal Imbalance</b>	<b>45,470</b>	<b>6.5</b>	<b>5.9</b>	<b>7.3</b>	<b>5.7</b>	<b>7.1</b>	<b>9.4</b>	<b>4.3</b>

Source: Congressional Budget Office based on Jagadeesh Gokhale and Kent Smetters, *Fiscal and Generational Imbalances: New Budget Measures for New Budget Priorities* (Washington, D.C.: AEI Press, 2003), Table 5, p. 39; and unpublished data supplied by Jagadeesh Gokhale.

Note: The present value of GDP over an infinite horizon was \$699.07 trillion in 2003, according to Gokhale and Smetters.

a. The midrange assumption for the discount rate was 3.6 percent, the high assumption was 3.9 percent, and the low assumption was 3.3 percent.

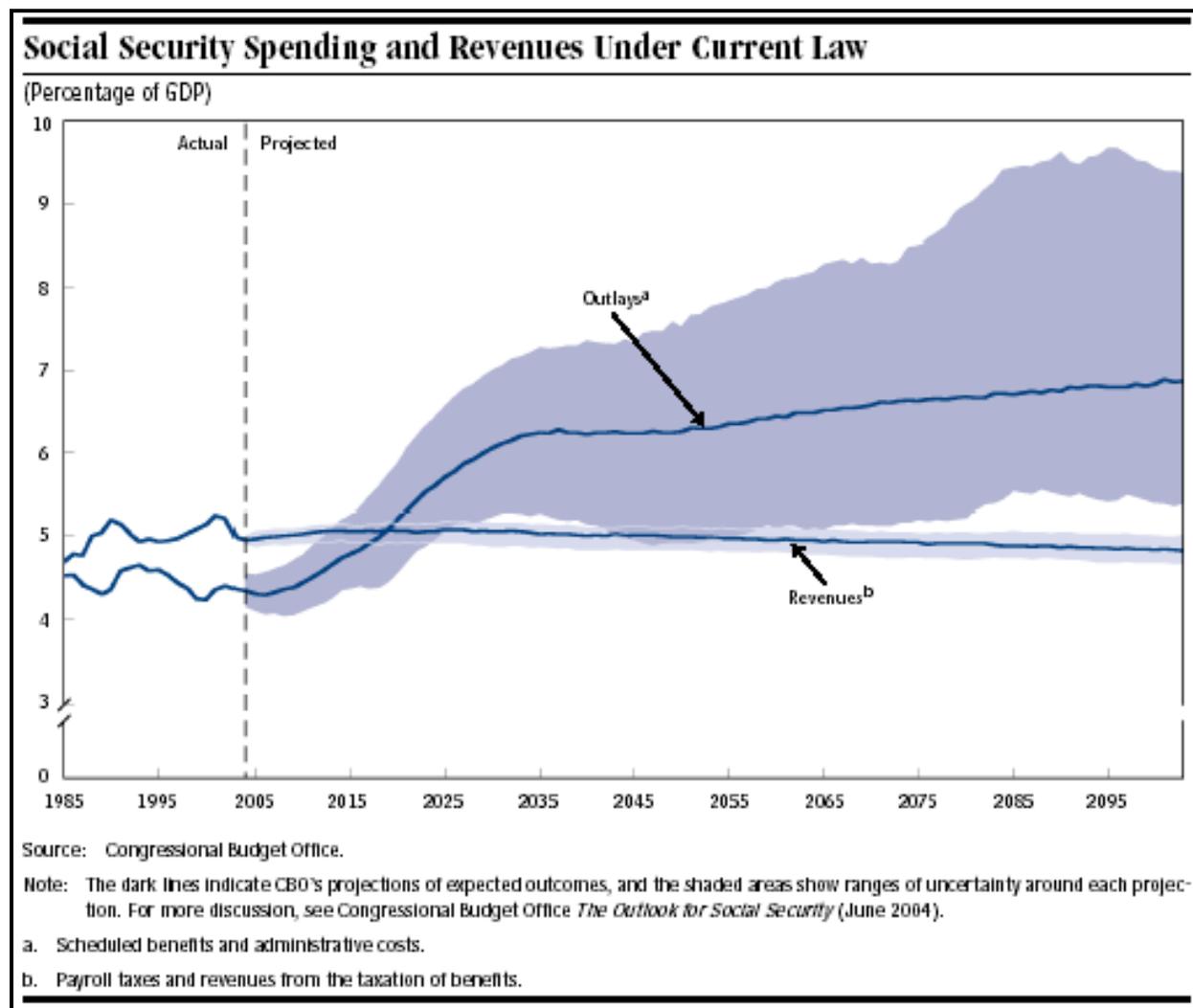
b. The midrange assumption for GDP growth per capita was 1.7 percent, the high assumption was 2.2 percent, and the low assumption was 1.2 percent.

c. The midrange assumption for the "excess" growth of health care outlays per capita (the difference between the annual growth of outlays for Medicare and Medicaid per capita and the annual growth of GDP per capita) was 1.0 percent, the high assumption was 1.5 percent, and the low assumption was 0.5 percent.

d. Based on current policy in 2003 and the policies proposed in the President's 2004 budget request, including the Administration's plan for a Medicare prescription drug benefit.

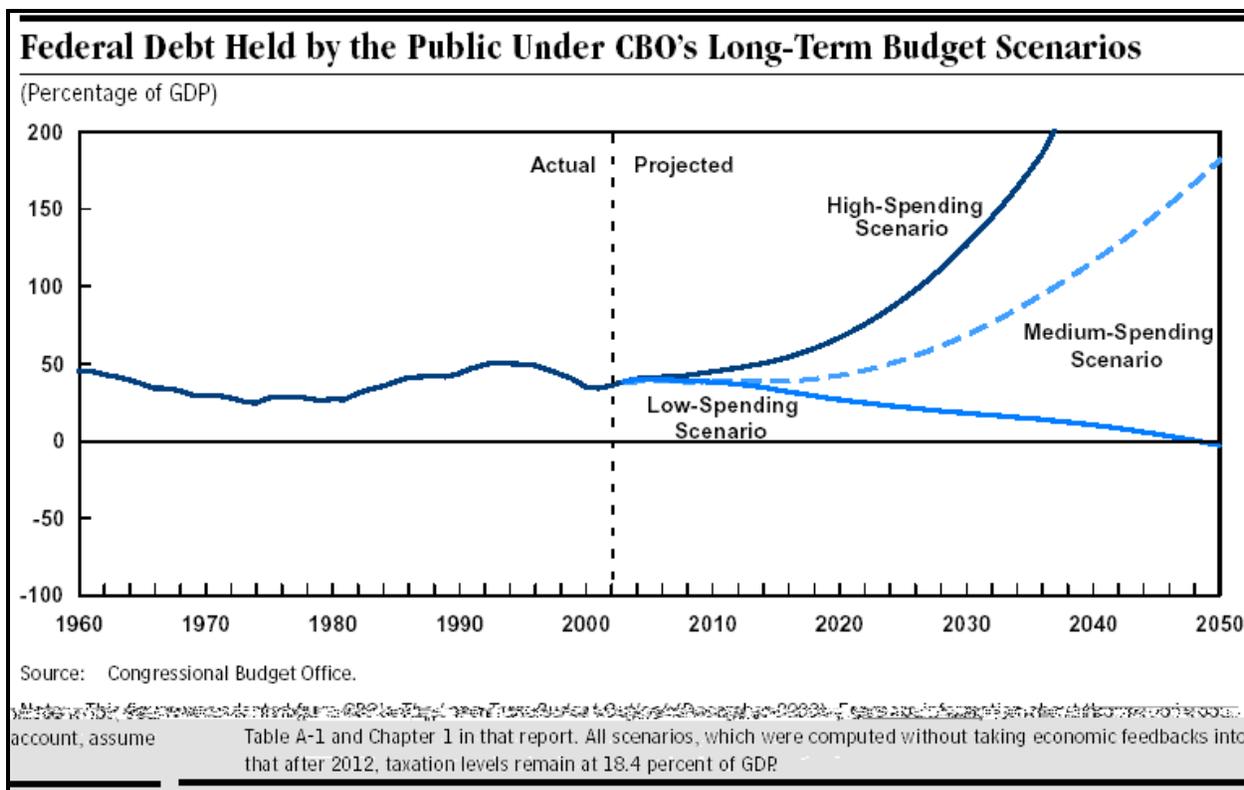
Different assumptions about Medicare outlays, the appropriate discount rate, and future economic conditions greatly alter the estimation of the Government's impending fiscal imbalance. Table 2 shows how alternative assumptions about the discount rate, GDP growth, and health care outlays alter the outcome of the Gokhale-Smetters study. The two columns to the left show the authors' conclusion, that the U.S. faces a long-term fiscal imbalance of around 6.5 percent of the present value of GDP. The two columns immediately to the right demonstrate that varying the discount rate by 0.3 percent in either direction results in a fiscal gap ranging between 5.9 and 7.3 percent of GDP. Further, an assumption that GDP growth per capita is either 0.5 percent higher or lower than the Gokhale-Smetters assumption results in a fiscal imbalance that ranges between 5.9 and 7.1 percent of GDP. Finally, an assumption that health care outlays are 0.5 percent higher or lower than the Gokhale-Smetters midpoint results in a

fiscal gap range between 4.3 and 9.4 percent of the present value of GDP – demonstrating that the fiscal gap is particularly sensitive to assumptions about increases in health care outlays.<sup>97</sup>



Such large variance in the future fiscal position of the U.S. raises important questions about the accuracy of long-term budget projections. Consider, for instance, the Social Security system. Although more predictable and less dramatic than the cost increases associated with Medicare, Social Security represents another substantial source of future spending growth. Depending on the assumptions made about demographic trends and future economic conditions, however, projected costs can widely vary. Figure 3 shows CBO's projected revenues and outlays for Social Security. The large shaded areas indicate the wide range of uncertainty associated with the future costs of the program.

<sup>97</sup> See *id.*



Finally, one must also be contemplating whether judgments about Government spending *today* accurately reflect actual expenditures in the *future*. An infinite horizon assumes that current law remains steady into the future. Yet it may be somewhat unrealistic to suppose that levels of Government spending this year give an accurate picture of the levels of spending necessary seventy-five years from now. Spending priorities, of course, are determined each year through the appropriations process, and these decisions are difficult to foresee. Therefore, long-term projections about future spending must incorporate certain assumptions about the path of future spending needs. As shown in Figure 4, the long-term fiscal position of the federal government can vary greatly depending on different spending scenarios. OMB's long-term projections of federal spending estimate that spending will increase with inflation and nominal GDP.<sup>98</sup> As some academics have suggested, baseline spending estimates should at least anticipate that federal spending will increase with population growth or real, per capita GDP growth.<sup>99</sup>

<sup>98</sup> See Congressional Budget Office, *Measures of the U.S. Government's Fiscal Position Under Current Law* (August 2004).

<sup>99</sup> See Alan Auerbach, William Gale & Peter Orszag, *Sources of the Long-Term Fiscal Gap*, TAX NOTES (May 24, 2004).

The idea of accurate long-term budget projections looks even more dismal in comparison with previous *one-year* budget estimates. Over the nineteen fiscal years from 1982 to 2004, estimates of the federal deficit or surplus erred by an average margin of \$100 billion annually.<sup>100</sup> Further, budget estimators appear to have systematically underestimated budget *deficits* – subtracting positive differences (when the budget did better than expected) from negative differences (when the budget did worse than expected) yields an average annual \$30 billion underestimation of budget deficits.<sup>101</sup> Given this poor background in one-year budget estimates, it is highly likely that estimates into the distant future will be even less predictable and more erroneous.

As this section has demonstrated, predicting the levels of future spending is a very sensitive practice. The tremendous uncertainty inherent in these calculations may render a present value budgetary structure unfeasible.

### **B. Manipulating Accrual Measures**

As mentioned previously, finite budget windows can induce lawmakers to employ gimmicks that understate the relative costs of certain pieces of legislation. For instance, legislators have circumvented PAYGO restrictions by delaying spending to occur beyond the measured budget window, or speeding-up the revenue receipts so they fall within the window.<sup>102</sup> Switching to an infinite horizon, net present value accounting structure would prevent many instances of budgetary gaming, by forcing lawmakers to consider the long-term fiscal ramifications of proposed legislation. On the other hand, given how much infinite horizon estimations can vary based on different assumptions, such a system may open up a host of new opportunities for budgetary gimmicks, both “innocent” and “purposeful.”<sup>103</sup>

Determining the long-term fiscal consequences of government programs requires a set of assumptions about future policies and economic conditions, and such assumptions require judgment and justification. For example, Gokhale and Smetters use one set of assumptions and

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<sup>100</sup> See ANALYTICAL PERSPECTIVES, *supra* note 4, at 366 (listing the “absolute average” of the differences between projected and actual deficits and surpluses).

<sup>101</sup> *Id.*

<sup>102</sup> Garrett, *supra* note 2, at 190.

<sup>103</sup> See generally Block, *supra* note 19, at 411, 413 (discussing the relative merits of accrual accounting – including the immense uncertainty inherent in predictions of future financial circumstances – and advocating that Congress impose accrual accounting upon itself in more areas than it has).

conclude that the long-term budget gap is about 6.5 percent of the present value of GDP. Using a different set of judgements, however, Auerbach, Gale, and Orszag estimate the gap at over 7 percent.<sup>104</sup> The authors of both studies use exhaustive detail to justify their particular set of assumptions, each believing they employ more accurate numbers. If the federal government were to switch to an accrual or present value accounting structure, policy makers would have to decide which set of assumptions best describes the fiscal ramifications of a particular policy over a long-term horizon. The wide range of outcomes resulting from different sets of assumptions not only begs the question of whether or not analysts can accurately estimate fiscal consequences in the long-term, but also suggests that policymakers could purposefully “game” the wide range of estimates to advance a particular political agenda. Diamond and Orszag have written that “accrual measures are easy to manipulate [because they] are extremely sensitive to assumptions about the future. Seemingly small and reasonable changes in assumptions about the future manifest themselves as large changes in accruals. If these measures were the focal point for evaluating the budget, there would inevitably be pressures in some budgetary conditions to shade the projections in a manner that makes the outlook look better.”<sup>105</sup>

There is thus some danger that politicians could develop new forms of budget gaming, choosing to be selective about which set of assumptions they use in order to make a particular policy appear more or less expensive than under another set of assumptions. In the current debate over reforming Social Security, for instance, politicians on both sides of the issue cite different numbers (all within the CBO range shown in the chart on page 24) to argue that the problem is more or less urgent. Similarly, if the entire federal budget were governed by accounting rules that required long-term projections, there would be many opportunities for debate over which numbers or range of numbers to use when scoring the long-term costs of a program. Some policymakers, for instance, might insist that a tax reduction would spur economic growth and increase government revenue in the long-term, while others would undoubtedly contend that a tax cut should be scored as a long-term revenue loss. And the generic requirement of Senator Lieberman’s Honest Government Accounting Act requiring that analysts’ discount rates be “consistent” with those used by other agencies would do little to constrain such posturing. Without any quantitative measure of “consistency,” proponents and

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<sup>104</sup> See Alan Auerbach, William Gale & Peter Orszag, *Reassessing the Fiscal Gap: The Role of Tax-Deferred Saving*, TAX NOTES (July 28, 2003).

<sup>105</sup> See Diamond & Orszag, *supra* note 79, at 182.

opponents of a measure could both make good-faith arguments that their measures were “consistent” within a generally-acceptable framework – despite the fact that their estimates provide widely divergent results.

### **C. Manipulating Accrual Outcomes**

In addition to manipulating accrual measures, Diamond and Orszag point out that if present value accounting were the norm throughout the federal budget, different presentations of accrual outcomes could make certain programs or policies appear to be undeservedly responsible for the government’s long-term fiscal gap. For example, under the manner in which Gokhale and Smetters present their findings (see table on page 23), the Social Security and Medicare entitlements appear to represent almost the entirety of the Government’s long-term fiscal shortfall. Were the table pictured differently, however, other liabilities – such as President Bush’s tax cuts – could appear to be the primary problem. The challenge, as suggested by Diamond and Orszag, is to present accrual outcomes in such a way that a particular program or liability is not being unduly “picked on.”<sup>106</sup> Instead of merely singling out entitlements, they argue that accrual accounting techniques should compare present value deficits against *all* Government liabilities.

### **D. Shifting Implied Debt “Targets”**

A fourth inherent danger of a net present value accounting program is that, in itself, such accounting provides no logical means by which to measure *appropriate* fiscal posture. Even if, despite the critiques mentioned previously, long-term cost recognition can accurately describe the condition of the Government’s finances, such recognition reveals no intuitive prognosis by which to govern policymaking. Without a natural “target” for spending levels, politicians will likely find it much easier to shift the target debt/deficit level than to make difficult spending decisions. For example, if policy makers establish an artificial “target” that unfunded liabilities not exceed 3.0% of GDP, it will be easier to change the target to 3.2% of GDP than to cut

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<sup>106</sup> See *id.*

spending or raise taxes.<sup>107</sup> As a brief review of the historical raising of the debt ceiling indicates, this hypothesis appears to have a firm grounding in reality.

## CONCLUSION

Perhaps the recent expiration of Gramm-Rudman-Hollings' PAYGO provisions came at just the right time. If Congressional leaders are going to have to enact some budget control mechanisms, they may be willing to consider "radical" proposals such as net present value accounting.<sup>108</sup> On the one hand, the potential upside of present value and accrual accounting over the current cash-flow system appear immense. As many reformers have argued, "The adoption of . . . [an] accrual-based approach to the entire federal budget, would be an important first step toward achieving greater sanity and realism in our public policy debate. The replacement of cash-flow accounting by accrual accounting is long overdue, and can no longer be reasonably or honestly argued against."<sup>109</sup> On the other hand, the uncertainty built into the estimation processes of accrual accounting, as well as the remaining opportunities for scorekeeping gaming, would not necessarily provide a more accurate system to evaluate federal finances. As with many issues, the decision will be left to policy makers.

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<sup>107</sup> *Id.* (noting that politicians generally find it "easier to shift the target than to enact the changes necessary to reach a given target").

<sup>108</sup> See Garrett, *supra* note 2, at 198 (commenting that the expiration of the past budget framework may open the door to new systems of governmental accounting).

<sup>109</sup> Daniel N. Shaviro, *Accrual Accounting and the Fiscal Gap*, 41 HARV. J. ON LEGIS. 209, 214 (2004).

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