REPORTING ON FEDERAL FISCAL SUSTAINABILITY IN THE UNITED STATES

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This paper presents a brief description of fiscal sustainability and government budget accounting issues – as they are being hotly debated in the United States. The debate is proceeding in the context of two projects underway at the Federal Accounting Standards Advisory Board (FASAB). One of these projects concerns the accounting of expenditures of U.S. social insurance programs – focusing on when program benefits should be "recognized" and reported as federal liabilities. The second project involves estimating and reporting on the entire federal government's financial condition, taking account of all projected expenditures and revenues under "current laws." The two projects are clearly related because estimates show that prospectively, an overwhelming share of U.S. federal fiscal imbalances are attributable to three major social insurance and welfare programs – Medicare, Medicaid, and Social Security.

1 Introduction

Like many European nations, the United States is also facing significant challenges in accommodating large and growing expenditures on social insurance programs – Medicare, which provides health care benefits to the elderly and Social Security, which provides consumption support to retirees. Expenditures on Medicaid, a collection of state-operated programs to provide health care goods and services to the poor, are also projected to grow rapidly. Medicaid receives considerable federal financial support and is cited by many analysts as an important contributor to future fiscal challenges at the federal level. Expenditures on these three programs today amount to 8.1 percent of GDP, or 45 percent of total federal spending. However, if current laws and policies were continued, these three programs would take up about 70 percent of federal spending by the year 2080.

A prerequisite for reforming federal tax and spending policies to deal with future budgetary pressures from social insurance programs, it is necessary to first reform federal budget accounting and incorporate fiscal sustainability as an objective in the budget-making process. The Federal Accounting Standards Advisory Board (FASAB) is charged with setting accounting standards for the Financial Report of the United States. In doing so it sets the accounting standards, reporting framework, and content of the report to satisfy several key objectives – one of which is to report on the overall sustainability of federal government-wide fiscal policies.

FASAB agency was established in 1990 to develop accounting and reporting principles for the federal government. Its principal founding entities are the U.S. Departments of the Treasury, the Office of Management and Budget, and the Comptroller General's Office of the United States, which, along with the Congressional Budget Office finance FASAB's operations. FASAB is also recognized as the board that issues generally accepted accounting principles (GAAP) for the U.S. federal government entities.

FASAB's basic objective is to satisfy "the information needs of the public" when developing financial reporting principles for federal entities. That encompasses the financial and budgetary

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information needs of congressional oversight groups, executive agencies, and other users of such information. To facilitate the development of accounting and reporting principles in line with such needs, it holds open meetings and hearings and solicits public feedback on "exposure drafts" of proposed "statements" of federal financial accounting concepts and standards. The culmination of this process is the issuance of a Statement of Federal Financial and Accounting Standard (SFFAS). The recommendations are non-binding, but have been fully adopted by concerned federal agencies.

In light of the dire fiscal situation facing the United States, FASAB should be highly commended for implementing projects on social insurance liability recognition and setting standards for reporting on federal government-wide fiscal sustainability. Impending budget pressures from outstanding social insurance commitments will add financial pressure on other government operations. Information on the federal government's prospective financial condition, especially on the sustainability of current policies, must be a key element in fiscal policy reform discussions. Therefore, it is very important to develop sound fiscal sustainability measures and report them "front and center" in the government's Financial Report--in a manner that is policy relevant and easy to communicate.

2 Objectives of federal financial reporting

Earlier FASAB documents cite several objectives of financial accounting for the federal government:

- to examine the efficiency of public service provision (by examining operating costs),
- to assess whether the government's financial position has improved or worsened (by examining its net-asset position),
- to manage finances for ensuring the continuity of public service provision (by examining fiscal sustainability).

These objectives suggest that information on the government's financial condition should capture the results from past outcomes and policies and provide information on future sustainability. However, a key question that must be posed is what is the entity or object whose sustainability is to be measured? The usual answer is "the (federal) government" but that answer is not correct or appropriate. The government must be considered to *always* be sustainable, at least in principle.¹ To actualize that principle, the government would undertake whatever policies are necessary *in the future* to ensure its own sustainability. This implies that the government's sustainability must be taken as given when all necessary *future policy changes* that must be implemented are included in the calculus of defining (the government's) sustainability. This is labeled *ex-post* sustainability.

The set of future policy options that could or must be implemented depend on current policies and economic outcomes resulting from them. Consider three alternative cases. In the first, policymakers pay no attention to the sustainability implications of current policies and continue them for a long time. Government expenditures grow larger, deficits and debt levels escalate causing low private saving and investment, confidence in the country's currency declines and output and revenue growth stagnate, eventually forcing a "default" by the government on its contractual debt and non-contractual entitlement commitments. Such defaults are part of the "future

¹ History suggests that no government is everlasting and one may conjecture that the current U.S. government would eventually be replaced by an extra-constitutional regime. However, that possibility cannot be admitted when making economic and financial estimates for managing and controlling government operations over time to promote its continuity.

policies" that must be followed to ensure that the government continues to operate – albeit with a considerable loss of reputation and poor borrowing ability.

In the second case, policymakers are aware of the sustainability implications of current policies, but choose not to adopt pro-active policy reforms. Instead, future government operations are maintained by increasing taxes as necessary to pay for growing expenditure commitments. Increasing taxes depresses private incentives to save, invest, acquire human capital, and work. As a result, the economy stagnates. Again, the government remains operational but the nation's economic performance suffers.

A third alternative may be to take full account of sustainability reports and announce well in advance cuts in future government social insurance payments. This limits future debt accumulation and the government's obligations are met without much increase in taxes. Low taxes stimulate private economic incentives and productivity growth. The resulting revenue growth helps to avoid drastic cuts in the government's social insurance programs and to maintain non-social-insurance operations. In this case the government not only continues to operate, but remains fiscally sound and the economy prospers.

All alternatives constitute policy paths wherein the government is sustainable in that they "resolve" of the government's outstanding commitments. But only in the last case, wherein policymakers take sustainability information into account to constrain government consumption does it become possible to preserve a robust economy. This shows that the primary usefulness of fiscal sustainability information is to enable pro-active fiscal management and stewardship of government operations to the benefit of the private economy – by avoiding excessive government redistribution from investment toward consumption, in the process destroying private productive incentives through high taxes.

Thus, the appropriate object of the sustainability discussion is not "the government" but its current laws and policies. If those are projected to be sustainable, communication of those projections would help to align private expectations around stable policies, and a stable policy environment promotes economic growth. On the other hand, if current policies are not sustainable, measuring and reporting how far current policies are from being fiscally sustainable creates pressure to announce a specific policy path to restore sustainability. This, again, helps to set up private expectations and helps private entities to optimally adjust their economic behavior and maximize the economy's performance. A pro-active management of the government's policy path, however, requires forward-looking information on the future evolution of the government's finances under current policies. Hence, the need to develop forward-looking fiscal measures to report on the future consequences of current policies and policy alternatives as an integral part of reporting on the government's financial condition. Satisfying FASAB's third objective requires focusing on how (far from) sustainable current fiscal policy is.²

A few observations on the importance of focusing on current policies:

• doing nothing (no change from current policy) is always available as a default policy option. Indeed, in the context of social insurance programs, the public appears to support systems wherein the policy (tax and benefit schedules) remains stable for long periods of time to ensure fair treatment across generations;

² "Current policy" could be characterized in many alternative ways such as "current law" policies, "current services" (defined in terms of aggregate constant real or nominal expenditures or in per capita terms, with or without productivity growth) or "current practices". The term "current policy" is used as a generic representation of whichever specific alternative is appropriate or preferred by the reader.

- any policy change for achieving fiscal sustainability must start from current policy, so that particular policy is always a common reference point for every alternative policy. Assessing whether an alternative policy would be better requires first knowing how good or bad the current one is under a forward-looking perspective;
- measuring how far current policy is from fiscal sustainability informs about how large future policy adjustments must be (cumulatively) to meet the government's commitments under existing policies.

3 Content of sustainability measures

Sustainability of current laws and policies means that those policies could be continued *forever*, not just for the next 25, 50, or 75 years. This sustainability condition would be met if the government's multi-year budget constraint were balanced under the continuation of current policies in perpetuity.^{3,4} This constraint implies that the government must pay for everything that it spends today and in the future. The definition of the sustainability of current policy is that the government would be able to do so if that policy is maintained. This could be labeled *ex-ante* sustainability.⁵

Given the earlier discussion about the *ex-post* sustainability of the government, and in order to keep the definition of sustainability clear and precise, future policy changes already scheduled via specific laws should be included under the rubric of "current laws and policies" and policy changes not yet enacted should be excluded no matter how likely they are to be implemented.

FASAB's third objective of financial reporting – to manage federal finances to ensure the government's continuity – provides the motivation for additional information apart from reporting an overall fiscal sustainability measure. Financial management for continuity of government requires the ability to generate information on the feasibility of alternative adjustments and the tradeoffs involved in implementing them. That means, sustainability measures should be displayed as the sizes of alternative policy changes needed to move to a sustainable fiscal policy and financial reporting should be able to easily communicate the trade-offs involved under alternative ways of moving from the current policy to a sustainable one.

4 Definition of sustainability

According to FASAB's definition, fiscal sustainability is obtained when "future budgetary resources will likely be sufficient to sustain public services and to meet obligations as they come due". Although not explicitly stated, the general consensus favors measurement of resource adequacy, as defined under current laws and policies. But two aspects in the definition are controversial. First, although there is a general consensus to measure public services in terms of real dollars per capita (including growth over time at a historically supported rate of productivity

³ Some analysts maintain that the government is not subject to a budget constraint at all, which is consistent with the presumption that the government need not ever repay its debt. If that were the operating assumption by all market participants, nobody would be willing to lend money to the government. More to the point, there would be no need to analyze the sustainability of public finances.

⁴ The government's intertemporal budget constraint provides the starting point for analyzing the sustainability of current policies. Indeed, the definition of policy sustainability emerges naturally from this constraint. For additional discussion, see "Unfunded Obligation Measures for EU Countries" by Jagadeesh Gokhale, in *Fiscal Indicators for EU Budgetary Surveillance*, Conference Volume of the Directorate General for Economic and Financial Affairs of the Member States, European Commission, Palgrave, Brussels, 2007, available at: http://ec.europa.eu/economy_finance/events/2006/events_workshop_220906_en.htm

⁵ Remember that *ex post* sustainability includes consideration of future policy changes, whereas *ex ante* sustainability is predicated on maintaining current policy throughout the future.

growth) there is little consensus about how to define current laws and policies and the projection horizon to adopt.

4.1 Definition of current policies

Several distinct cases can be identified with regard to the definition of current policies. An extreme case concerns spending that is annually appropriated according to the priorities set by lawmakers each year. In this case there is no "current policy" on spending, for example, on items such as defense, infrastructure investments and so on. The usual practice in this case is to project future expenditures so that today's spending per capita grows at the economy's historical average rate of growth – usually the sum of population and productivity growth rates.

A second case concerns programs where current laws on spending and taxes may be defined quite precisely, but projections show that future revenues would not be sufficient to cover expenditures. The Social Security program, wherein benefits are paid for exclusively out of earmarked payroll taxes and the Trust Fund is not permitted to borrow from private capital markets, is a case in point. A problem seems to arise if no current laws specify how to deal with the contingency of future shortfalls – whether to reduce benefits to fit within available revenues or to increase revenues to meet benefit commitments under current laws. However, this concern is misplaced because the objective is to display the future budget implications of continuing current policies. As long as current policies on spending and revenues are known, the implied unfunded obligation can be calculated. It is important not to impute hypothetical future policies to eliminate future revenue shortfalls because that would defeat the purpose of reporting on the sustainability of current policies.

A third and interesting case arises if current policies require future spending reductions but in actual fact, lawmakers repeatedly postpone its application. The Medicare program's rules on physicians' reimbursement rates are a case in point. Although the law requires that growth in their reimbursement rates should not exceed average inflation in medical care services, implementing such a rule would imply physicians' reimbursement rates for services to Medicare patients would be reduced relative to private-pay patients and the willingness of doctors to accept the former patients would be eroded. As a result, Congress revises physicians' payment rates each year to remain in line with rates in the private health care market. Although applying current law in this case would reduce Medicare's projected shortfall, the repeated precedent of rate revisions suggests that "current policy" deviates systematically from current laws. In such cases, applying current policies rather than current laws appears more appropriate when estimating the program's future unfunded obligations.

4.2 Projection horizon

With respect to the projection horizon, other government agencies, notably the Social Security Administration (SSA) and the Center for Medicare and Medicaid Services (CMS) are already reporting infinite horizon estimates of those program's future obligations. The federal government's Financial Report issued by the Department of Treasury also includes infinite-horizon liabilities as supplementary information. There are good reasons for promoting the infinite horizon measures – moving them from the supplementary information section to the "front and center" of the report–as discussed below. As noted in the Financial Report itself:

"...a 75-year projection is not a complete representation of all future financial flows through the infinite horizon. For example, when calculating unfunded

obligations, a 75-year horizon includes revenue from some future workers but only a fraction of their future benefits. In order to provide a complete estimate of the long-run unfunded obligations of the programs, estimates should be extended to the infinite horizon".⁶

Thus, it is desirable to report the "open group cost" measure which adds existing debt and the present value of future government expenditures and subtracts the present value of future government receipts to obtain the present value of projected shortfalls that must somehow be covered through future policy changes.

There are additional reasons to favor the infinite horizon as opposed to finite 75-year sustainability measures. First, the criticism by some analysts who point to the uncertainty involved in making projections for the distant future appears to miss the point that these are projections under current policies and not forecasts of future outcomes. Second, it is impossible to determine clearly where to draw the line. Third, the current practice of making projections of Social Security and Medicare over the next 75 years leaves out not just a small fraction but well more than 50 percent of the total infinite horizon fiscal imbalance according to official projections. Fourth, excluding the deficits for year 76 and later implicitly imputes a deficit of zero for those years. Always assuming a deficit of zero probably introduces a larger error in summary measures in comparison to including the "best guess" estimate. And, fifth, because the summary infinite horizon fiscal imbalance because all future dollars are placed on a comparable basis with today's dollars.

Another important criticism of infinite horizon measures is that infinite horizon estimates are highly sensitive to discount rate assumptions and the wide variation in the estimates implies considerable imprecision and uncertainty. However, the lesson from financial management advice given to households, corporations, and public sector agencies is not to ignore future uncertainty but to proactively insure against it. Two sources of uncertainty are relevant in public financial management: (a) uncertainty about future economic and demographic outcomes and (b) uncertainty about future policies. As noted above, however, fiscal imbalance measures exclude consideration of future policy changes no matter how likely they are. Uncertainty about future demographics is considerably smaller and stems mostly from uncertain fertility rates. The most reasonable procedure is not to ignore that uncertainty but to provide sensitivity information under alternative demographic projections.

Yet another criticism concerns the considerable sensitivity of fiscal imbalance estimates to variations in discount rates: However, such variation suggests that neglecting post-year-75 shortfalls is more, not less, erroneous: The sensitivity of the infinite horizon fiscal imbalance estimate to changes in the assumed discount rate would be greater the larger are annual shortfalls accruing in year 76 and beyond. A large increase (decrease) of the infinite-horizon estimate to a decrease (increase) in the assumed discount rate indicates larger fiscal shortfalls beyond the 75-year horizon under the baseline discount rate. If larger sensitivity leads us to ignore such long-term imbalances, it would be diametrically opposed to the standard and correct response – to ignore insignificant shortfalls but take account of significant ones.

Finally, although dollar summary imbalances calculated in perpetuity may be highly sensitive to discount rate assumptions, their ratio to GDP or a tax base (say, payroll taxes in the

⁶ Department of the Treasury (2004), p. 88.

case of Social Security) would be less sensitive. That's because both the numerator and denominator of such ratios change in the same direction in response to changes in discount rates.

A further question is whether, notwithstanding the above arguments, a finite 75-year projection horizon is sufficiently long for judging the sustainability of current laws and policies. However, as many analysts have observed, summary fiscal sustainability measures should always be evaluated through relative comparisons. For example, present discounted value measures of future shortfalls should be compared to present values of income measures such as GDP or tax bases such as total payrolls. That valid approach could also be used to decide whether 75 years is a sufficiently long projection horizon. Social insurance programs – the major source of existing fiscal imbalance in the U.S. are long-term programs expected to last well beyond the next 75 years – indeed, like the government, are expected to last forever, in principle. Limiting projections to just 75 years for such programs means including the taxes paid during that time but ignoring the "valid expectations" of benefits created thereby which fall outside the 75 years. In that case, a 75-year horizon would seriously misrepresent the extent to which current laws and policies are unsustainable.

Finally, some analysts claim that shortfalls beyond the 75-year horizon are irrelevant for policy decisions today. This claim is easily countered: Indeed, some proposed reforms have been constrained by the 75 year projection horizon and recent studies have shown that short-horizon summary measures could provide misleading information regarding the impact of changes in underlying assumptions. For example, based on the 75-year summary actuarial deficit measure one would incorrectly conclude that U.S. Social Security's financial condition would improve if future wage growth occurred faster than assumed under the Social Security Administration's baseline projections.^{7,8}

The foregoing arguments and counter-arguments do not imply that the temporal sequences of deficit accruals over finite horizons have no place in financial reports. It would make little sense to report that a program is financially sustainable if, based on underlying assumptions and projections, large explicit debt accrues in the short or medium terms but are offset by large budget surpluses over the long term. Early deficits may be so large as to provoke debt default and the longer-term surpluses may never be realized.

In summary, the case for supplementing current 5- and 10-year cash-flow projections for general-government operations, and 75-year summary measures for social insurance programs, with infinite horizon fiscal sustainability measures. Indeed, the latter should be accorded a primary position and should be supplemented with information on the temporal sequence of deficit accruals in fiscal sustainability reporting – reversing the current practice.⁹

5 Policy sustainability and economic stewardship

Social insurance programs mainly (but not exclusively) involve intergenerational transfers – taxing younger workers to finance retiree benefits. In light of FASAB's definition of fiscal

⁷ See "Wage Growth and the Measurement of Social Security's Financial Condition" by Andrew Biggs and Jagadeesh Gokhale, forthcoming (2007) in *Government Spending on the Elderly*, conference volume, Levy Institute of Bard College, Palgrave, New York, available at: http://www.levy.org/modules/calendar/files/Conf_April28_papers/Gokhale-paper.pdf

⁸ Other traditional, short-horizon measures such as the Trust Fund exhaustion date (when the Social Security trust fund is fully depleted), "cross-over" date (when expenditures begin exceeding tax revenues) and so on, also may consistently misrepresent the change in Social Security's financial condition when compared to changes in the infinite horizon fiscal imbalance measure.

⁹ For a detailed discussion of the merits of alternative fiscal sustainability measures, see Gokhale (2007), *ibid*.

sustainability, one possible reason that "<u>future</u> budgetary resources will likely be <u>in</u>sufficient to sustain public services and meet obligations as they come due" is that current policies result in excess spending (transfers) on current generations.

The traditional way to track excess spending is by looking at cash-flow deficits or net operating costs. However, given that social insurance programs incorporate intergenerational transfers, it is possible to engage in "excess spending" without such spending being reflected in cash-flow operating cost charts or tables or, equally, in infinite-horizon fiscal imbalance measures. Hence, the fiscal treatment of different cohorts or generations is an important dimension of measuring sustainability of current policies and should also be included along with overall fiscal imbalances and the temporal sequence of such imbalances in government fiscal reports.

One such measures shows whether social insurance policies to date result in large net transfers to past and current generations. Such excess social insurance expenditures on current generations and the expectation that generous benefits would continue to be provided for many additional years could have several economic effects. First, the evidence shows that current generations – the beneficiaries of excess social insurance benefits relative to their past payroll taxes – would mostly consume those benefits and net national saving would be reduced. Second, the evidence shows that recipients of generous retirement and health benefits would work less by retiring earlier. Both effects would directly lead to smaller output arising from a smaller national capital stock and work effort, and lower living standards. Second, the excess payments to current generations would have to be paid for by imposing higher taxes on future generations – causing further growth reducing effects by reducing their incentives to work.

The key point is that such excess spending on current generations may not be reflected in traditional cash-flow net operating cost measures. Similarly, such redistributive effects of current laws and policies may not be captured by (finite or infinite horizon) fiscal imbalance measures. But tracking such policies is important from the perspective of government economic management. The simplest way to report such intergenerational redistributive effects, therefore, is to capture the impact of current social insurance laws and policies on the net excess benefits of participants to date – that is, past and current generations, which is provided by the closed group cost measure calculated for major social insurance programs. This measure is defined similarly as the open-group measure but applied only to living and past generations transactions with the government (including future transactions). A large closed group – or generational imbalance-value also potentially promotes low saving and work effort by current generations (implicitly at the expense of future ones) is unlikely to be consistent with a proper management of government finances or economic stewardship, making it relevant for the FASAB's third objective listed earlier.

6 An executive summary table

This section outlines one potential reporting framework that would address all objectives of sustainability reporting listed earlier. The first two sections of Table 1 addresses the first two objectives by summarizing current net federal government operating costs and the government's balance sheet position. Table 1 is in constant 2007 dollars whereas Table 2 shows current stocks and flows as a percent of GDP and shows present valued items as a percent of the present value of GDP.

In Tables 1 and 2, the third section is titled "future implications of current policies" summarizes information pertaining to the third objective of measuring fiscal sustainability – by

Table 1

Line #	Item	Past	Current	Projections							
		2007	2008	2009	2010	2011	2012	2013			
CURRENT OPERATING COSTS (constant 2007 dollars)											
1	Earned Program Revenues	77	78	62	61	61	62	63			
2	Taxes and Other Revenues	1,487	1,566	1,595	1,653	1,695	1,759	1,834			
3	Net Receipts (line 1 plus line 2)	1,564	1,488	1,533	1,592	1,634	1,697	1,771			
4	Gross Operating Costs (includes interest)	1,674	1,575	1,568	1,607	1,562	1,625	1,574			
5	Net Operating Costs (line 4 minus line 3)	110	87	35	15	-72	-72	-197			
FINANCIAL BALANCE SHEET (constant 2007 dollars)											
7	Total Assets	2,534	2,717	2,906	3,102	3,298	3,512	3,714			
8	Total Liabilities	7,926	8,218	8,494	8,723	8,936	9,077	9,208			
6	Net Financial Assets (end-of-year; line7 minus line 8)	-5,391	-5,501	-5,588	-5,621	-5,638	-5,566	-5,493			
		- 3	- ,	- 1	- >	- ,	- 3	- ,			
FUTURE IMPLICATIONS OF CURRENT POLICIES (constant 2007 dollars) ¹											
9	Enters Not Donafite of Dest and Living Generations ³	Social S	ecurity:	14 759	15 324	15 915	16 524	17 147			
10	Future Net Denemis of Past and Living Ociciations	2 182	2 339	2 503	2 677	2 860	3 042	3 223			
10	Closed Crown Cost (line 9 minus line 10)	11 /00	11 979	12 256	12 647	12 055	12 /97	12 023			
11	Closed Group Cost (line 9 minus line 10)	2 429	2 400	2 526	12,047	13,055	13,402	2 744			
12	Future Net Benefits of Future Generations	-5,458	-3,488	-5,550	-5,383	-5,050	-3,089	-5,/44			
15	Open Group Cost: (line 11 plus line 12) ²	8,001	8,390	8,720	9,062	9,420	9,793	10,180			
		Medi	care:					27.004			
14	Future Net Benefits of Past and Living Generations'	28,372	29,707	31,069	32,487	33,955	35,502	37,094			
15	Trust Fund Value	352	379	403	425	438	470	491			
16	Closed Group Cost (line 14 minus line 15)	28,020	29,329	30,667	32,062	33,517	35,033	36,603			
17	Future Net Benefits of Future Generations	40,021	41,079	42,122	43,181	44,268	45,379	46,514			
18	Open Group Cost: (line 16 plus line 17) ²	68,041	70,407	72,788	75,243	77,784	80,412	83,116			
	Re	st of Federa	l Governme	ent:				_			
19	Net Financial Assets (line 6)	-5,391	-5,501	-5,588	-5,621	-5,638	-5,566	-5,493			
20	Debt Held By Social Security Trust Funds (line 10)	2,182	2,339	2,503	2,677	2,860	3,042	3,223			
21	Debt Held By Medicare Trust Funds (line 15)	352	379	403	425	438	470	491			
22	Present Value of Annual Expenditures (excluding interest)	100,308	102,584	104,842	107,170	109,581	112,086	114,627			
23	Present Value of Costs (sum of lines 19 through 22)	108,234	110,803	113,336	115,893	118,517	121,163	123,835			
24	Present Value of Revenues	117,789	120,621	123,405	126,216	129,097	132,013	134,949			
25	Open Group Cost	-9,555	-9,818	-10,069	-10,323	-10,580	-10,850	-11,115			
	(line 23 minus line 19 and minus line 24) ²			<u> </u>							
26	Total Open Group Cost (sum of lines 13, 18, and 25)	66,547	68,979	71,439	73,982	76,624	79,355	82,181			

Federal Financial Condition – Summary

1 Refers to present value of future dollar flows using a discount rate of x percent. All estimates are for calendar/fiscal years in constant ² Calculated in perpetuity.
³ Living generations include those aged 15 and older.
⁴ Future generations include those aged 14 and younger and unborn generations.

reporting open- and closed-group cost measures.¹⁰ The sustainability and stewardship information is composed of three parts – relating to Social Security, Medicare, and the Rest of Federal Government respectively. Information in the sustainability section is shown for the current year as well as for a few future years to indicate the implications of continuing current policies. The tables include estimates for the United States federal government estimated from information provided by the Office of Management and Budget.

The bottom lines in both tables show that current U.S. policies are far from sustainable. The current-year (2008) open group cost equals \$66.0 trillion, which equals 6.7 percent of the present value of GDP calculated in perpetuity. That is, the immediate and permanent policy change to restore fiscal sustainability would have to involve 6.7 percent of all future GDP – either by way of spending cuts or tax increases.

The sustainability and stewardship section shows the open group cost estimates for the two major social insurance programs – Social Security and Medicare – and decomposes those open-group costs into two inter-generational components. The closed-group liability represents net transfers to past and living generations. It is decomposed further into (a) future net transfers to living generations and (b) past net transfers to past and living generations as embodied in the program's trust fund. The closed group costs shown as a ratio (see above) provides information about how much of future resources (present value of GDP) would be required to extinguish excess benefit commitments to past and existing participants. Table 1 indicates that as of 2008, this amount equals 1.2 percent for Social security, and 2.8 percent for Medicare.

Net transfers to future generations under current policies are identified separately. Future generations' net Social Security benefits are negative, at -0.3 percent, of the present value of GDP. For Medicare, however, the corresponding amount equals 4.0 percent – suggesting that a large part of the fiscal imbalance (open group cost) arises on account of health care commitments implicit under current policies to future generations. It is important to emphasize that these estimates are very conservative – they assume that future excess growth in health care costs per capita compared to growth in GDP per capita would be much smaller (just 1 percent per year) than historical evidence indicates (2.2 percent per year).

The closed group measure is not shown for the rest-of-government section of the table because allocating the benefits of public goods expenditures across living and future generations is not feasible without making strong assumptions about how benefits from discretionary spending such as defense and infrastructure development are distributed across them.

In Tables 1 and 2, interrelationships between the three parts are shown explicitly. First, Net assets to the public on the rest of government account are those from the financial balance sheet. Second, intra-governmental debt holdings and obligations (trust funds) are explicitly accounted for – Trust funds (assets on the social insurance programs) are indicated as (intra-governmental) liabilities on the Rest-of-Government account. The Rest-of-Government section includes the balance between projected resources and projected costs, where projected resources include existing net assets and projected revenues; projected costs include projected rest-of-government outlays and intra-governmental liabilities to Social Security and Medicare.

The sum of the Open Group liabilities for Social Security, Medicare, and Rest-of-Government sections indicates the overall financial implications of maintaining current policies unchanged. A positive value indicates the amount of additional present value of resources

¹⁰ The title "future implications of current policies" is selected to steer clear of the semantic and unproductive debate about whether the items shown are to hard "liabilities" or soft "obligations".

Table 2

Federal Financial Condition – Summary (percent of annual GDP or percent of present value of GDP)

Line #	Item	Past	Current	Projections						
		2007	2008	2009	2010	2011	2012	2013		
CURRENT OPERATING COSTS (constant 2007 dollars)										
1	Earned Program Revenues	0.6	0.6	0.4	0.4	0.4	0.4	0.4		
2	Taxes and Other Revenues	11.1	11.3	11.2	11.3	11.3	11.4	11.6		
3	Net Receipts (line 1 plus line 2)	11.6	10.7	10.8	10.9	10.9	11	11.2		
4	Gross Operating Costs	12.5	11.4	11	11	10.4	10.5	9.9		
5	Net Operating Costs (line 4 minus line 3)	0.8	0.6	0.2	0.1	-0.5	-0.5	-1.2		
FINANCIAL BALANCE SHEET (constant 2007 dollars)										
7	Total Assets (includes intra-governmental trust funds)	18.9	19.6	20.4	21.2	21.9	22.7	23.4		
8	Total Liabilities	59	59.3	59.6	59.6	59.4	58.7	58		
6	Net Financial Assets (End-of-year)	-40.1	-39.7	-39.2	-38.4	-37.5	-36	-34.6		
FUTURE IMPLICATIONS OF CURRENT POLICIES (constant 2007 dollars) ¹										
Social Security:										
9	Future Net Benefits of Past and Living Generations ³	1.4	1.4	1.4	1.4	1.4	1.5	1.5		
10	Trust Fund Value	0.2	-0.2	-0.2	-0.2	-0.3	-0.3	-0.3		
11	Closed Group Cost (line 9 minus line 10)	1.1	1.2	1.2	1.2	1.2	1.2	1.2		
12	Future Net Benefits of Future Generations	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3		
13	Open Group Cost: (line 11 plus line 12) ²	0.8	0.8	0.8	0.8	0.9	0.9	0.9		
		Medic	are:							
14	Future Net Benefits of Past and Living Generations ³	2.8	2.9	2.9	3	3.1	3.1	3.2		
15	Trust Fund Value	0	0	0	0	0	0	0		
16	Closed Group Cost (line 14 minus line 15)	2.8	2.8	2.9	3	3	3.1	3.2		
17	Future Net Benefits of Future Generations	4	4	4	4	4	4	4		
18	Open Group Cost: (line 16 plus line 17) ²	6.8	6.8	6.9	7	7	7.1	7.2		
	Res	t of Federal	Governmen	t:						
19	Net Financial Assets (line 6)	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5		
20	Debt Held By Social Security Trust Funds (line 10)	0.2	-0.2	-0.2	-0.2	-0.3	-0.3	-0.3		
21	Debt Held By Medicare Trust Funds (line 15)	0	0	0	0	0	0	0		
22	Present Value of Annual Expenditures (excluding interest)	10	9.9	9.9	9.9	9.9	9.9	9.9		
23	Present Value of Costs (sum of lines 19 through 22)	10.8	10.7	10.7	10.7	10.7	10.7	10.7		
24	Present Value of Revenues	11.7	-11.7	-11.7	-11.7	-11.7	-11.7	-11.7		
25	Open Group Cost (line 23 minus line 19 and minus line 24) ²	-0.9	-1	-1	-1	-1	-1	-1		
26	Total Open Group Cost (sum of lines 13, 18, and 25)	6.6	6.7	6.8	6.8	6.9	7	7.1		

¹ Refers to present value of future dollar flows using a discount rate of *x* percent. All estimates are for calendar/fiscal years in constant 2008 dollars.
² Calculated in perpetuity.
³ Living generations include those aged 15 and older.
⁴ Future generations include those aged 14 and younger and unborn generations.

Table 3

Federal Financial Condition – Net Cost Accrual by Future Period (billions of constant 2007 dollars)

Line	Open-group Net Costs	Time Horizon in Years ¹							
		5	10	25	50	75	All		
1	Social Security	-2,810	-3,083	-2,429	-419	1,452	8,390		
2	Medicare	541	1,626	6,642	17,699	29,642	70,407		
3	Rest-of-Federal Government	7,166	5,584	1,201	-4,046	-6,731	-9,818		
4	Total Federal Government	4,897	4,126	5,415	13,233	24,363	68,979		
	Memo: Present Value of GDP	80,326	143,896	312,326	527,817	680,154	1,032,358		

¹ Shown for calendar years.

Table 4

Federal Financial Condition – Net Cost Accrual by Future Period
(percent of the present value of GDP over corresponding horizon)

Line	Open-group Net Costs	Time Horizon in Years ¹							
		5	10	25	50	75	All		
1	Social Security	-3.5	-2.1	-0.8	-0.1	0.2	0.8		
2	Medicare	0.7	1.1	2.1	3.4	4.4	6.8		
3	Rest-of-Federal Government	8.9	3.9	0.4	-0.8	-1.0	-1.0		
4	Total Federal Government	6.1	2.9	1.7	2.5	3.6	6.7		

¹ Shown for calendar years.

that would be needed in order to balance the government's multi-year budget. The most important information about sustainability is shown in the last line of Table 2 – which shows the overall open group cost as a percentage of the present value of GDP. The sequence of percentage cost over the years shows that the share of future GDP that must be devoted to resolving the fiscal imbalance built into current policies grows larger over time. This "cost of delay" information is a crucial element of sustainability reporting. It shows the trade-off involved in engaging in corrective policies immediately versus putting off the decision for a few additional years.

The fact that the open group cost as a percentage of the present value of GDP grows over time is no accident. It occurs because the numerator of the expression grows at the (assumed) long-term interest rate while the denominator grows at a slower rate of population plus productivity growth. Note that the 2008 open group cost equals 6.7 percent of the present value of GDP – which is appears to be small. However, relative to major historical policy initiatives, it is an extremely large number. For example the Medicare Prescription drug program enacted in 2003 – considered to be the largest expansion of Medicare since 1965 – accounts for just 2 percent of the present value of GDP.

Tables 3 and 4 summarize information about the temporal sequence of open group imbalances. They show short-horizon open-group imbalances (net of existing assets) for Social Security, Medicare and the Rest of Federal Government. These tables guard against the possibility that a balanced infinite horizon liability is composed of large explicit debt accruals over the short and medium term and large surpluses over the long term. Such information is relevant for gauging the viability of current policies from the perspective of financial markets. As such, they would also indicate the viability of reforms that require the creation of large explicit debt in the short run, offset by large surpluses in the long term. However, it must be noted that these tables should be used cautiously to judge financial market viability of proposed policy changes – reforms that involve higher short-term explicit debt may be economically desirable if most of the increase in short-term debt results from an exchange of explicit for implicit debt, perhaps also involving a reduction in the total fiscal imbalance (implicit plus explicit debt or open-group cost).

These two tables – reported in terms of both constant dollars and ratios to the present values of GDP – provide an integrated view of the government's current net operating costs, current net asset position, sustainability of current policies, and intergenerational economic stewardship implications. Implicit in the development and reporting of such sustainability measures would be the ability to score the impact of alternative policy reforms in these terms. Their impact on the estimates would provide insights into several types of tradeoffs involved in alternative policy adjustments. For example, reform proposals could be evaluated according to whether they move the overall fiscal policy mix toward or away from sustainability, whether they imposes net additional costs on current and/or future generations, whether they require a large accumulation of explicit debt over the short, medium, and long horizon, and how the "costs of waiting" evolve under the new set of fiscal policies.

7 Conclusion

Reporting on the government's financial condition requires an integrated analysis of current operational costs, current net asset position, and the future implications of current policies to inform fiscal policy management over time. The earlier discussion leads to a recommendation to prominently report total (government-wide) future actuarial net costs and the temporal sequence of their accumulation as shown in Tables 1 and 2. Table 1's open group estimates should be based on budget projections through perpetuity. The two tables should constitute the main focus of the Executive Summary in the government's financial report and the information they contain should be discussed in a non-technical narrative along with supplementary tables and charts. The tables' estimates should be reported in terms of both present value dollars and as ratios to GDP (or the wage base). The chief virtue of such reporting is a strict adherence to an integrated analytical framework useful for assessing the sustainability of current government policies.