What is Fiscal Responsibility? Long-term Deficits, Generational Accounting, and Capital Budgeting

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Abstract

This article assesses three basic approaches to assessing the future effects of the government’s fiscal policies: traditional measures of the deficit, measures associated with Generational Accounting, and measures derived from applying Capital Budgeting to the federal accounts. I conclude that Capital Budgeting is the best of the three approaches and that Generational Accounting is the least helpful. Acknowledging that there might be some value in learning what we can from a variety of approaches to analyzing fiscal policy, I nevertheless conclude that Generational Accounting is actually a misleading or—at best—empty measure of future fiscal developments. The best approach to providing for the future is thus to apply careful cost-benefit analysis through old-fashioned Capital Budgeting to our spending and taxing decisions; but if political pressures prevent the adoption of a federal capital budget, we would be best served by continuing to use our current deficit measures, with some minor adjustments. Because we are attempting to peer into the future, any measure of the effects of fiscal policy will be imperfect. Choosing among those imperfect alternatives is the focus of this essay.
“What is Fiscal Responsibility? Long-term Deficits, Generational Accounting, and Capital Budgeting”

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Introduction

The decisions that we make today regarding taxes and government spending have profound effects not only on those of us living today, but on future generations as well. These effects arise for two reasons. First, our current taxing and spending decisions help to determine how the economy’s productive resources will be used now and in the future—whether, for example, a piece of land becomes the site for a casino, a day care center, or a cancer research institute. Second, the laws that we pass generally commit the government to courses of action that can last well into the future. While it is surely true that some laws that claim to set policy for years in advance do not really do so (such as tax policies passed in 2001 that purport to expire in 2010), others surely represent commitments from which the government would have some difficulty withdrawing.

These effects of taxing and spending policies—on the current uses of productive resources, as well as on the somewhat-credible commitments to future policies that they frequently represent—ought to be of concern to anyone whose time horizon extends past the current fiscal year. For those who care about the state of the world that we leave to future generations, the challenge is to find an analytical framework with which to predict the impact of current policy choices on future standards of living. Typically, these analytical frameworks are found in macroeconomic analysis of fiscal policy.

Macroeconomics does not, however, figure prominently in legal analysis. While the legal literature that relies on microeconomics has mushroomed over the last two
decades or so, macroeconomics has largely remained in the background. With the occasional exception, legal scholars have tended not to include in their analyses the aggregate economy within which microeconomic efficiency analysis operates. Certainly, some very good work has been done analyzing proposed constitutional amendments to constrain government spending or to limit tax increases; but these tend to be self-contained analyses—and they need not challenge the orthodox view that annual budget balancing is the essence of fiscal probity.

In public policy debates, of course, most analysts will acknowledge that some solutions are not “realistic” because they are too expensive. But what does it mean to be too expensive? That question, which lies at the heart of fiscal macroeconomics, is considerably more complex than it might first appear. Some items with very large price tags are not considered to be too expensive under certain circumstances. For some parents, a tuition bill exceeding $30,000 a year—while a source of frustration, to be sure—is not too expensive to send their bundle of joy to a high quality college or university.

When discussing public spending, however, the notion of “too expensive” can often take on a simple-minded tone. If it “increases the deficit,” it is often thought to be per se too expensive. Since every government program, by definition, increases the deficit above where it would otherwise be, only literally self-financing programs can pass muster under such a barren decision-making regime. For legal analysts, therefore, any

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1 Mark R. Kelman, Can Lawyers Save the Economy? Stan. L. Rev., 1993 (surveying recent macroeconomic literature, noting that many current models blame poor macroeconomic performance on incomplete contracting, and suggesting that lawyers can help to solve such problems)
2 See, for example, Nancy C. Staudt, Constitutional Politics and Balanced Budgets, 1998 U. Ill. L. Rev. 1105 (1998) (arguing that it is important to balance the budget, but a constitutional amendment is unnecessary because the budget balancers have won the political debate).
discussion of proposed changes in policies would have to proceed either from an agnostic fiscal viewpoint—“Whether this policy would still be desirable, after taking the deficit into account, is beyond the scope of this analysis”—or must explicitly make the claim that the proponent’s policy is “not too expensive.”

The latter argument appeared to become somewhat easier to make when federal deficits turned into surpluses in the late 1990s, and again when the aftermath of September 11, 2001 seemed to suspend all previous rules on spending.3 The basic arguments against deficit spending are unlikely ever to go away, though, because of the widely held belief that fiscal responsibility is synonymous with annually balanced budgets (or, more extremely, with zero public debt). Indeed, even in the face of a weakening economy and the threat of a double-dip recession, President George W. Bush decided to show his economic seriousness during his August 2002 economic summit in Waco, Texas by announcing that he would refuse to spend $5.1 billion that Congress had already approved for domestic security and the military.4 Explaining that decision, he declared: “More money spent in Washington means less money in the hands of American families and entrepreneurs, less money in the hands of risk takers and job creators.”5

Responding to the political focus on annual cash-flow deficits (and their many variations), in the early 1990’s the economist Laurence Kotlikoff and his frequent co-authors Alan J. Auerbach and Jagadeesh Gokhale developed a theory that was motivated

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3 See, for example, Richard W. Stevenson, Budget Deficit Is Said to Be $159 Billion, N.Y.Times, October 25, 2002, at A27 (“The return to red ink brought an end to the four-year period in which surpluses and the promise of more had left both parties almost giddy with the possibility of addressing the nation’s needs without painful tradeoffs.”)

4 Note that $5.1 billion is approximately one-fourth of one percent of the overall federal budget and less than 0.05% of annual U.S. GDP.

by understandable concerns about the long-term effects of federal fiscal commitments. Dubbed Generational Accounting, the resulting model—whatever its merits and shortcomings (discussed in some detail below)—would put an even greater constraint on legal analysts or anyone else who might propose a change in public policy. No longer would it be enough to prove that a policy would not increase the current deficit; Kotlikoff et al. would offer opponents of government activism an even more powerful trump card. Generational Accounting (hereinafter GA) requires not merely that there be enough money to pay for the program today, but it also requires that the program be “affordable” into the indefinite future, as measured by long-range budget forecasts. Adding a political (and somewhat emotional) slant to the discussion, GA’s proponents further suggest that anything that is not affordable in this way is a transfer to the (voting) living generations from (politically defenseless) unborn generations.

The basic notion behind generational accounting is quite simple—though such conceptual simplicity makes the intractable measurement problems discussed below all the more frustrating. If current spending and tax laws were to stay in effect in perpetuity, the flows of expenditures and revenues would vary depending on future economic growth, population changes, weather patterns, medical developments, etc. GA makes some very basic assumptions about the directions and magnitudes of the most important

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of those future trends, applies the accounting concept of net present value to bring all of
those projected future expenditures and revenues into current dollar terms, and then
computes the different lifetime net tax rates implied by those calculations for different
generations. Hence, Kotlikoff and his co-authors claim that GA measures whether
current generations are being “fair” to those that will follow.

_Tax Notes_—the periodical of record for tax practitioners, policymakers, and
academics—has carried at least eight articles that in some way deal with GA since 1991,
when the theory was first introduced. To date, the appearances of GA in the legal
literature has not been extensive, but this may be changing. Professor Daniel Shaviro of

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http://law.bepress.com/rutgersnewarklwps/art8
New York University Law School has written, in addition to a short article in *Tax Notes*, two books (and has finished a third) that to some degree would import GA into legal analyses of Social Security policy and Medicare policy—and possibly into all legal analysis of fiscal policy. Suggesting a long-term fiscal imbalance that makes “the current policy fiscally unsustainable,” Shaviro asserts that it is necessary to think about these issues through the lens of GA—and such an analysis, we learn, shows a grim future indeed, as described below.

The stakes in this debate, therefore, could hardly be higher. Anyone who wishes to write about Medicare or Social Security, and indeed anyone who might ever wish to suggest that the government should spend money on any project, might plausibly be forced to contend with the implications of GA.

If GA lived up to its billing, of course, it would simply be good policy to use it as a starting point for fiscal analysis. Unfortunately, GA is not a neutral analytical tool that is used dispassionately to assess the fiscal consequences of a government project. Instead, GA is based on highly contestable assumptions, arbitrary analytical choices, and manipulable policy projections that fatally compromise its analytical value.


While some of these references are merely *pro forma* (e.g., McCaffery, Garrett, Newman), and Kornhauser directly criticizes the theory, several of the articles (esp. Brody’s pieces and Forman’s article) actively endorse GA.


Shaviro, *supra* note 7, at 715.

Id. at 716 (“Perhaps the best tool for enhancing our understanding of who wins and loses from alternative reforms is generational accounting….”). Shaviro is not, however, explicitly wedded to GA to the exclusion of all else. Instead, he has suggested that we should use GA as well as other theories to learn as much as we can from a variety of approaches.
Understanding these limitations is essential for anyone who wishes to be able to respond to the suggestion that their favored policy is, in this much broader sense, “too expensive.”

The debate, therefore, is not over whether the future matters—that is, this is not a debate between the grasshoppers and the ants. Clearly, we must always think carefully about the future consequences of our fiscal policies. The question is *how* to think about the future—what we would like to bequeath to future generations and how best to deliver it.

This article assesses three basic approaches to assessing the future effects of the government’s fiscal policies: traditional measures of the deficit, measures associated with Generational Accounting, and measures derived from applying Capital Budgeting to the federal accounts. I conclude that Capital Budgeting is the best of the three approaches and that Generational Accounting is the least helpful. Acknowledging that there might be some value in learning what we can from a variety of approaches to analyzing fiscal policy, I nevertheless conclude that Generational Accounting is actually a misleading or—at best—empty measure of future fiscal developments. The best approach to providing for the future is thus to apply careful cost-benefit analysis through old-fashioned Capital Budgeting to our spending and taxing decisions; but if political pressures prevent the adoption of a federal capital budget, we would be best served by continuing to use our current deficit measures, with some minor adjustments.

Because we are attempting to peer into the future, any measure of the effects of fiscal policy will be imperfect. Choosing among those imperfect alternatives is the focus of this essay.
I. Traditional Fiscal Deficit Measures

Even the most casual observer of U.S. political debates cannot have missed the fact that our politicians are obsessed with “the deficit.” After decades in which Republicans regularly attacked Democrats for their spendthrift ways, Democrats delighted in turning the tables in the 1980s, as Ronald Reagan presided over the largest nominal peacetime deficits in American history. Undaunted, conservative Republicans insisted that they were the truly responsible fiscal custodians, culminating in the promise to balance the budget in 1994’s Contract With America.

Capitulating to the political heat generated by this headline-grabbing issue, former President Clinton agreed in 1995 that he, too, was committed to balancing the budget. When the budget moved from deficit, to balance, and then to surplus under his watch, Clinton never missed an opportunity to take credit for this “achievement.” With their own party’s leadership having abandoned them, even the most progressive members of the Democratic Party became committed budget balancers. Senator Russell Feingold, for example, eagerly points out that he opposed President Clinton’s proposed middle-class tax cut in the early 1990’s. “I was for deficit reduction.”

The politics of fiscal deficits can, therefore, change rapidly. In an early draft of this article, written in the late autumn of 2002, it was plausible to argue: “Officially,

14 Indeed, Clinton’s pre-1994 actions showed that he was strongly predisposed to the balanced-budget mantra, as he immediately jettisoned his post-election plans for long-term capital spending and instead pushed through a major tax increase. (For those who approve of tax progressivity, however, one can at least note that Clinton’s tax bill was top-loaded.)

15 Matthew Rothschild, The Progressive Interview: Russ Feingold, The Progressive, May 2002, at 31. Feingold’s reasoning is, at best, puzzling: “I think it’s a mistake from the point of view of our economy and also as far as gaining credibility with the American people if we don’t try to avoid deficits. Whatever organization you are with, whether it’s an environmental group, right-to-life group, Communist Party, you all are going to have to pay the bills. You establish credibility with people when you show them that whatever your ideology you will take care of their dollars in a businesslike way.” Id. Feingold thus confuses (among other things) government budgeting with personal budgeting.
therefore, there are no longer any major political voices in American politics that argue in favor of deficit spending.\textsuperscript{16,17} At that point, as the fiscal ink turned red again, a new consensus arose that the return to short-run deficits was not a serious problem—but that long term deficits represent a virtual “cancer” eating away at future prosperity.\textsuperscript{18} With the onset of the 2004 presidential campaign, of course, finger-pointing about the deficit has risen to a fevered pitch.

To some degree, this political obsession with annual deficits is quite surprising, because the economic arguments in favor of deficit spending in various circumstances are well known and, to a large extent, uncontroversial. While it is certainly possible to argue that, in spite of the economic case in favor of deficits in some circumstances, there is a stronger political case against them,\textsuperscript{19} it is at least worth remembering what the economic issues are.

A. Preliminary Matters

Economists differentiate between two types of variables: stock variables and flow variables. The difference between the two has to do with the passage of time. Stock variables can be measured at a moment in time, while flow variables are only meaningful

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\textsuperscript{16} Those who do oppose the orthodoxy are not necessarily at the liberal end of the spectrum. Former Congressman Jack Kemp was once the most prominent political advocate of so-called Supply Side Economics, which holds that low tax rates are much more important than balanced budgets in generating high economic growth rates. \cite
\textsuperscript{17} Neil H. Buchanan, \textit{Providing for Future Generations: Generational Accounting, Capital Budgeting, and Budget Deficits}, unpublished manuscript (on file with author), November 25, 2002, at 8 (footnote in original). \textit{Compare also} Prof. Staudt’s conclusion in 1998 that budget balancers had prevailed in the political debate. \textit{See} note 2, supra.
\textsuperscript{19} Alan S. Blinder, \textit{Is the National Debt Really—I Mean, Really—a Burden?} in James S. Rock, ed., Debt and the Twin Deficits Debate, 1991, at 209-25 (arguing that, even though the deficits of the 1980’s and early 1990’s were relatively minor, there could be no political peace unless everyone agreed to balance the budget).
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per unit of time. Thus, distance is a stock variable, while speed (miles per hour, for example) is a flow variable. In economics, common stock/flow distinctions include prices (stock) versus inflation (flow), and wealth (stock) versus income (flow).

1. Debt and Deficits

In government accounting, debt is a stock variable, because it measures the total amount of money at any given moment that a government owes its creditors. The deficit is a flow variable, measuring the net amount of new borrowing that the government has engaged in during the course of a year (or any other unit of time). Deficits are, properly measured, the change in debt as time passes.

Importantly, the total amount of federal government debt that exists at a given moment is also tautologically equal to the total number of dollars of Treasury securities in circulation at any moment. Since the federal government borrows money by selling Treasury Bills, Notes, and Bonds, the face value of those outstanding securities is equal to the National Debt.

Here, however, is one of the first places where reality and theory diverge. The different agencies of the federal government often hold each other’s debt instruments, so the net federal debt is lower than the number of bonds that have been issued but not redeemed. The difference is not trivial. While the infamous “National Debt Clock” (the ever-rising digital readout of the nation’s supposed indebtedness, expressed both in the aggregate and as “Your Family’s Share”) shows an outstanding federal debt of over $7.1 trillion in April 2004, just over $4 trillion of that total was held outside of the federal

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government’s own offices. 21 This was why the National Debt Clock did not initially decline when the federal government ran surpluses in the late twentieth century. Even though the government was extinguishing debt held by the public, the total number of bonds in existence was not going down, so “the national debt”—by that meaningless measure—was not shrinking.

2. Dollars vs. Percentages

The common practice of expressing debt and deficits in total dollars rather than as percentages of national income can also be highly misleading. Politicians in the late 1980s talked of “$200 billion deficits as far as the eye can see” as if that was an unimaginable calamity. In fact, given that nominal GDP doubles roughly every twelve years, $200 billion annual deficits would be trivial in relatively short order.

In the U.S., deficits as a percentage of GDP peaked in the mid-1980s at roughly 6%, and the publicly-held debt peaked at around the same time at 60% of GDP. This was, of course, only the recent peak and was not even close to the 125% debt level reached at the end of World War II, when we wisely spent enormous sums of borrowed money to finance the war against the Axis powers. This ratio had steadily fallen to the point where it was below 50% by the early 1980’s, and then rose for over a decade before falling again in the late 1990’s and early in the new century. The current return to deficit spending finds projected deficits at about 4.2% of GDP in 2004 ($477 billion), and the federal debt at 38.2% ($4,385 billion). 22

22 Congressional Budget Office, CBO’s Current Budget Projections (March Baseline Projections), March 2004.
3. Federal vs. State and Local

A third measurement issue carries more direct implications for policy debates. Typically, commentators separate the federal debt and deficit from the state and local fiscal positions. Since the state and local sector tended until very recently to run aggregate operating surpluses, the decision to exclude the state and local sector when discussing the “government” deficit and debt naturally made the situation look worse—while the current situation of chronic state deficits is ignored by federal measures of borrowing. Foreign economists view this practice as nothing less than bizarre, because the macroeconomic consequences of debt and deficits surely do not depend on the hierarchical level of the government entity that is doing the borrowing.23

In addition to being logically incoherent, this practice has perverse policy affects as well. When national politicians view their job as reducing the federal deficit or debt, they are tempted either to ignore the consequences of their decisions on lower levels of government or even deliberately to shift spending requirements downward.24

B. Cash-Flow Deficit Measures

While the issues discussed briefly above have important implications for discussing the status of fiscal policy in the United States, the discussion that follows attempts to follow the current norms in describing deficit measures. Even within the

23 Wynne Godley, Seven Unsustainable Processes: Medium-Term Prospects and Policies for the United States and the World. Special Report: The Levy Economics Institute (revised Oct. 5, 2000), at 2 (“In the United States the public discussion of fiscal policy concentrates almost exclusively on the operations of the federal government. Yet state and local governments account for about a third of all public expenditure and taxes; moreover, their budgets are generally in surplus so that these authorities are now in substantial credit . . . . In what follows, government inflows and outflows--and debts--will always refer to the operations of the "general government" (the combined federal, state, and local governments).”)
federal-only measures, however, there are significant disagreements about what is the true measure of fiscal policy.

1. On-Budget and Off-Budget

Even if one looks only at the federal government, the annual deficit is more manipulable than it might seem. A spending program can exist in a netherworld outside of the official budget simply by act of Congress. There need be no economic rationale for the decision. The 1991 Gulf War was carried off budget, for example, and the current operations in Iraq are being funded by emergency appropriations. By far the biggest off-budget item, of course, is the Social Security system. The current surplus in that system (approximately $161 billion in 2004, or 1.4% of GDP) makes the total deficit smaller than the on-budget deficit ($638 billion, or 5.6% of GDP), but when Social Security starts to run deficits after the next decade or so, the on-budget deficit will be smaller than the total deficit.\footnote{All estimates in this paragraph are from Congressional Budget Office, CBO’s Current Budget Projections (March Baseline Projections), March 2004.}

The debate about whether the Social Security Trust Fund has any meaning is, of course, an important factor in determining whether the on-budget or total deficit is the proper measure. Because I conclude that the total deficit is the better of the two, in that it measures the amount of money that the federal government is draining from the financial markets in a given year, I will focus on that measure of the deficit and possible ways to improve it.\footnote{For a persuasive argument that the Social Security system should not be seen as an individualized benefit plan but rather as a redistributive fiscal program, see Deborah A. Geier, \textit{Integrating the Federal Tax Burden on Labor Income}, 98 Tax Notes 563, 574 (Jan. 27, 2003) (citing generally Patricia E. Dilley, \textit{Taking Public Rights Private: The Rhetoric and Reality of Social Security Privatization}, 41 B.C. L. Rev. 975 (2000)).}

\footnotetext[25]{All estimates in this paragraph are from Congressional Budget Office, CBO’s Current Budget Projections (March Baseline Projections), March 2004.}
2. Cyclical Adjustment

For macroeconomists, one of the most important measurement issues in deficit accounting is adjustment of the deficit for changes in the health of the economy. When the business cycle turns, tax receipts and government expenditures naturally change along with the GDP. Recessions bring lower revenues and higher expenditures, and boom times do the opposite. When comparing deficits at two points in time, therefore, it is important to ask, “What would the deficit be today if the economy were fully healthy?”

What is means to be “fully healthy” is, of course, a matter of contention. Nevertheless, there is a widely-accepted measure of the cyclically-adjusted deficit known as the Standardized-Budget Deficit, computed by determining the flows of revenues and expenditures if the unemployment rate were at its trend rate. In 2003, because of the lingering effects of the recession, the unadjusted total deficit was $375 billion (3.4% of GDP), while the Standardized-Budget Deficit was $313 billion (2.8% of GDP).27

Failing to adjust the deficit for cyclical effects leads to two problems. First, it confuses cause and effect. Improvements in the economy cause decreases in the non-adjusted deficit; but decreases in the cyclically-adjusted deficit (all else constant) cause the economy to decline. Second, and far more importantly, it causes perverse policy moves, as a worsening economy causes the deficit to rise, and attempts to reduce the deficit with further cuts in spending (and perhaps increases in taxes) will only further weaken the economy. President Bush’s symbolic refusal to spend money that Congress had allocated, noted above, clearly demonstrates this perversity.28

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28 See notes 3-5, supra, and associated text.
Nor is this failure to comprehend simple macroeconomics confined to the United States. The Japanese economy went into its first of several severe downturns in 1989. By 1996, with the domestic economy still in deep trouble, Japanese policymakers relied on more budget-cutting and tax increases to improve the economy—the macroeconomic equivalent of “bleeding” a patient to restore her to health. Yet policymakers there and elsewhere remained puzzled by their patients’ continued ill health. 29 “[M]any economists believe that Japan’s long stagnation in the 1990s largely reflected timid policymakers unwilling to boldly use the levers of fiscal and monetary policy.” 30

The practical consequences of failing to adjust for the business cycle are especially severe for state and local governments, most of which operate under (modified) balanced budget requirements. 31 When the economy is strong (which means that, by definition, workers are scarce because their prospects are so good in the private sector), states flush with money compete with prosperous companies for workers and other economic resources. Roads are torn up and re-built precisely when the disruption from such projects is the most damaging, as the overburdened highways are filled with vehicles carrying the evidence of economic prosperity. Then, when the economy

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29 “Exasperation as Tight Budgets Don't Deliver Growth...” Nomura Securities Research Report, August, 1996 (“Low inflation and trimming of fiscal deficits have always been regarded as a foolproof recipe for economic growth. However, that conventional wisdom has been turned upside down in the past few years, as politicians in developed economies have grown exasperated by the failure of high growth to materialize despite their belt tightening efforts. Average real GDP growth in the major industrialized nations was 4.0-4.5% in the 1970s, and 3.0-3.5% in the 1980s- but in the 1990s many believe the figure will be a meager 2.0%)”


31 See discussion in “Capital Budgeting,” below.
weakens, states see their tax revenues decline, lay off workers, and leave highways in disrepair. It would be difficult to design a more perverse system.\textsuperscript{32}

3. Unfunded Liabilities

The closest one comes in the traditional deficit debates to the central issues of long-term budgeting (which are the focus of Generational Accounting) is the discussion of “unfunded liabilities.” The basic idea is that government projects that involve spending in the future can be thought of as liabilities that must be accounted for when looking forward. This sensible observation, though, can only be useful inasmuch as projects have dedicated financing. If a high school is built with proceeds from a bond sale, for example, the liability is funded if the school district commits the funds in future budgets to cover the bond payments. Otherwise, the project is unfunded.

Since most government programs are not financed through dedicated funds, of course, virtually any project could be called an unfunded liability. The Interior Department, the Army Corps of Engineers, etc., are all unfunded, and they will continue to be so for as long as they last. Hence, as appealing as the idea is, making the unfunded liabilities concept operational is daunting at best. Estimates of unfunded liabilities are also highly responsive to changes in the law, and their size can dwarf the rest of the budget. The estimate of unfunded liabilities in the Social Security system after the change in withholding taxes in the early 1980’s, for example, swung from several trillion dollars in unfunded liability to several trillion dollars in unfunded surplus.\textsuperscript{33} Generational Accounting is arguably an improvement on the arbitrary nature of these estimates, as I

\textsuperscript{32}This is not to say that highways are the be-all and end-all of economic spending. In this analysis, they are simply the most intuitive example of public spending on infrastructure.

\textsuperscript{33}Social Security Trustees, cited in Buchanan, \textit{infra} note \underline{__}.
discuss below; but GA’s other shortcomings ultimately make it an unappealing alternative.

4. Extended Budget Projections

All of the budget measures discussed above are measured in annual terms. It is possible, of course, to use a different arbitrary time period in such an analysis. During the Clinton Administration, it became common to provide ten-year projections of budgets, to allow policymakers to look into the relatively foreseeable future and determine whether a budget or tax measure was likely to become more or less manageable over time. The current Bush Administration has discontinued the ten-year projections in favor of five-year projections, a move that has generated suspicion that the full costs of their policy proposals are “back-loaded.” It is, of course, possible to back-load even on a ten-year horizon.

The arbitrary nature of these cutoffs is, as discussed in the next section, a strong argument in favor of adopting an infinite-horizon model along the lines of Generational Accounting. Nevertheless, because of the critical problems in lengthening the time horizon, the ten-year projections are probably the best compromise available. This point will be taken up below.

C. Effects on Consumption and Investment

The payoff for making these adjustments to the measurement of the fiscal deficit comes in analyzing the effects of current deficits on the use of society’s productive resources (labor, machinery, factories, land, etc.). If the government hires resources to build or produce goods and services, and if those resources would have been used to...
produce something of value to private citizens, then the government has “crowded out” private activity. If the government crowds out private consumption, then there is at worst no effect on future generations, because private consumption would not have benefited future generations in any case. In such a situation, the government can make future generations better off if it replaces private consumption with public investment, or it can simply substitute one kind of consumption for another—leaving future generations unaffected.

The serious concern, of course, is that the government will not crowd out private consumption but will, instead, crowd out private investment. If the government wastes money that would have gone toward private investment in productive equipment, for example, then the future standard of living of the country is compromised. In fact, even if the government invests resources in productive assets, it can still make matters worse if the assets it crowds out would have been more productive than the government’s investment projects. What is often forgotten, however, is the other possibility—that the government might crowd out a private investment project with a public investment project that is even more productive. Rather than building a strip mall, for example, resources might be used to build a children’s hospital.34

While there is no precise way to know the exact nature of these tradeoffs, the fundamental question could not be more important: What effect will the government’s decisions today have on the economy’s productive capacity—and thus the real standard of living—tomorrow? It is here that our concern for future generations should be

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34 Although the discussion here focuses on spending projects, taxing decisions can be analyzed in precisely the same fashion. Every aspect of the tax code has the potential to change consumption decisions into investment decisions, investments into consumption, less productive investments into more productive investments, etc.
concentrated. Using annual accounts (even properly measured accounts), however, will still arguably not capture the full effects of our taxing and spending decisions.

In summary, if we are to improve public discussion of the government’s fiscal situation, the least radical alternative would be to adopt a cyclically-adjusted deficit (preferably for the entire government sector, though that appears unlikely). Such a measure, while still imperfect, would allow policymakers to focus on the possible crowding out caused by its annual fiscal policies. Longer-term forecasts would still be valuable in many instances. While imperfect, such measures provide policymakers with useful guidance in looking past the current fiscal year.

II. Fiscal Gaps and Generational Accounting

The structure of Generational Accounting is built upon some very appealing foundational arguments. First, as noted above, deficit accounting is arbitrary, because there is nothing special about a year as the unit of analysis. Indeed, arbitrarily aiming to balance annual books can introduce its own set of bizarre games. After taking office in 2001, the second Bush administration changed the national accounts such that some corporate tax revenues would be credited in October 2001 rather than in September of that year. Because the federal government’s fiscal year runs from October 1 through September 30, this move reduced the (then-projected) surplus for fiscal 2001 and increased it for fiscal 2002.

35 Some states use biennial budgeting, which is no more nor less arbitrary than annual budgeting.
This gamesmanship came to light after the 2001 tax cut was passed, when it appeared that the on-budget surplus might actually slip into deficit for the first time in several years. Democrats were quick to accuse the new administration of fiscal irresponsibility, and the administration quickly assured everyone that the on-budget surplus would still be $8 billion. 36

Second, even without any such political games, there is no good analytical reason to assess government programs on an annual basis. Projects that last longer than a year should be analyzed in their relevant time frame. Surely, a year is far too short a time in which to measure meaningfully the impact on the economy of the vast majority of government programs and tax policies.

Of course, once one realizes that a year is arbitrary, one must also recognize that there is no non-arbitrary alternative. The infinite future is out there, and perhaps the best way to proceed is to use the simple financial concept of net present value discounting to bring all future receipts and expenditures into one current estimate. This approach has an added benefit, in that it avoids the issue of whether a program has a dedicated financing mechanism. While it arguably makes sense to compare the long-term planned expenditures and expected receipts for something like the highway trust fund, the majority of government programs can only meaningfully be assessed in the aggregate, because the FBI (for example) is not supported by its own tax regime.

36 In a $10 trillion economy with a $2 trillion budget, the idea that we can predict an $8 billion surplus—less than one half of one percent of spending—stretches credulity. Such a small number is little more than rounding error.
A. Computing the Accounts

1. The Fiscal Gap

The fundamental analytical achievement of the generational accounting framework is its attempt to compute an aggregate, discounted federal\textsuperscript{37} deficit or surplus into the infinite future. Estimates generated using a GA framework have been included in federal budget documents,\textsuperscript{38} and Professor Kotlikoff has provided a great deal of input to the work of the Congressional Budget Office.

The basic logic of GA is quite simple. Imagine that current law remains unchanged indefinitely. What are the likely paths of government spending and tax receipts, given expected trends in population, economic growth, etc.? Given those likely paths, what is the aggregate gap between spending and tax revenues into the infinite future? Taking the analysis one step further, it is then theoretically possible to estimate the net amount of money that an individual will pay in taxes to their government over their lifetime.

The appeal of moving to long-term budget calculations loses its luster rather quickly, however, in the face of the complexity of long term budget estimation. Consider the inputs necessary to generate a GA estimate. Tax receipts for each future year must be calculated on the basis of estimates of the number of taxpayers, their gross incomes, their deductions (and exclusions and exemptions), and their tax rates. Only the last of these numbers is written into law (and highly variable law at that), whereas the others depend

\textsuperscript{37} Note, though, that this is still only a federal calculation. If one were to adopt GA as the preferred accounting framework, it would surely be desirable to extend it to the entire government sector.

on long-term estimates of birth rates, death rates, net immigration rates, productivity
growth rates, homeownership rates, trends in medical insurance coverage by the private
sector, and on and on.

Certainly, some long-term estimates can be quite reliable. Birth and death rates
change rather slowly, so projecting the number of native-born Americans likely to be
living in thirty or forty years is not much of a stretch. On the other hand, other estimates
are notoriously volatile. The CBO has changed its estimates of annual deficits, for
example, by as much as 100% over the space of several months. Even longer-term
forecasts, which are plausibly less prone to temporary blips, are more prone to
cumulative error.39 Indeed, even history is unstable, as the “New Economy’s”
performance in the 1990’s has been substantially written down.

By far the most important forecast that goes into the generational accounts’
calculations is the time path of labor productivity growth.40 The Trustees of the Social
Security Administration produces four estimates of this path: the pessimistic scenario, the
mid-range scenarios (two paths that differ only slightly) and the so-called “rosy
scenario.” The Trustees (and GA) tend to default to the mid-range scenarios, choosing
the “moderate” path between pessimism and optimism. On that basis, the long-term
forecasts for the Social Security Trust Fund turn negative in the aggregate in less than
forty years, and the Social Security system runs an annual deficit in less than twenty

39 The pioneering economic forecaster Otto Eckstein, founder of Data Resources, Inc. (now
DRI/McGraw-Hill) once said to his graduate students: “You can believe our quarterly forecasts rounded to
a full percentage point (e.g., 4.3% growth forecasts mean that growth will be somewhere in the
neighborhood of 4% in the next quarter). You can believe the sign of our annual forecasts. And you
should just ignore our five-year projections.”

40 Other variables are obviously important, but less so. Choosing an interest rate for the net present
value calculation is essential, for example, and has a highly significant impact on the overall calculations.
See Haveman, supra note 33, at 103-04.
years. Similarly, GA relies on these estimates to show that the entire government (including Medicare, which is important because it is a large source of the long-term deficits in these calculations) faces an increasingly unbalanced set of books as we move into the future.

The picture is far less grim than these calculations suggest, however. The “rosy” scenario is, in fact, hardly pie-in-the-sky. Indeed, its projections of long-term changes in productivity growth are rather moderate compared to the last half-century of U.S. performance. Indeed, the rates of growth projected in the mid-range scenarios are below the average of most decades in the twentieth century other than the Great Depression years of the 1930’s. Yet, even with those pessimistic assumptions, only a tiny improvement in productivity growth would wipe out the long-range deficits in the Trustees’ accounts for Social Security.

A recent calculation of this Fiscal Gap, using the most current version of the Generational Accounting methodology, has been provided by Gokhale and Smetters. Admiringly transparent in its description of how the calculations were derived, this study estimates a Fiscal Gap of $44.2 trillion, of which $7 trillion is attributable to Social Security, $36.6 trillion is attributable to Medicare (split roughly equally between Part A and Part B), and only $0.5 trillion is attributable to the rest of the federal government. Gokhale and Smetters provide a range of scenarios under which the Fiscal Gap could be

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41 Cite and numbers.
43 While the discussion of the mechanics of their estimates is clear, it is hardly dispassionate. Words like “drastic” permeate the discussion, which (given the study’s conclusions) perhaps understandably presents an urgent (even alarmist) tone.
44 Id. at 3. (Gokhale and Smetters prefer the term Fiscal Imbalance, but I will use the more common Fiscal Gap.) This is a midpoint estimate. The lower bound is $29 trillion, while the higher bound—under still quite conservative assumptions—is $64 trillion. Id. at 6.
erased, suggesting as their most likely choice an immediate and permanent 16.6% increase in wage taxes.\textsuperscript{45} Updated estimates based on the same model (crucially including the just-passed Medicare drug benefit) show the Fiscal Gap to have reached approximately $70 trillion. In the discussion below, however, I will focus on the Gokhale and Smetters estimates from 2003, in part because of their clarity, and in part because the analysis will show that the exact numbers provided by such studies are ultimately not helpful in fiscal analysis.\textsuperscript{46}

\section{2. Lifetime Net Tax Rates}

Although it is analytically separable from the long-term budgeting calculation, the “generational” part of Generational Accounting is where its political impact becomes most potent. Kotlikoff suggests that it is possible to move from the “What if we did nothing?” question to compare the treatment of different generations based on their lifetime receipts of government benefits and their lifetime tax payments. Using the same method described above, it is possible to choose arbitrary cutoff dates for different generations and then to calculate their “lifetime net tax rates,” i.e., the net present value of their lifetime tax payments minus the net present value of their lifetime government-paid benefits.

Seeming to confirm the suspicion that a large population cohort in a democracy could distort the benefit system in its favor (especially in a democracy in which the young are less likely to vote), Kotlikoff made national headlines when he announced in

\textsuperscript{45}\textit{Id.} at 6.

1993 that the lifetime net tax rate of younger generations would be 71%, whereas the rate for Baby Boomers would be 35%, and the rate for current retirees was 21%. A few years later, the numbers became even more dramatic, when the 71% figure was increased to 84%.

B. Weaknesses in Generational Accounting

As appealing as the basic foundations of GA might be, however, the theory does not deliver what it promises. Far from being a neutral tool for dispassionate evaluation by policymakers, the generational accounting model makes the fiscal horizon look far worse than it will probably be, and these results have colored the policy debate for the worse. Moreover, the claim that GA calculations can act as a default early-warning system is at best overdrawn. It is simply not possible to define a clean baseline. Finally, the economic assumptions on which GA is based are too fragile to use for meaningful policy analysis.

1. Paying Down the Debt

The source of the huge differences between generations noted above is quite peculiar. The generational accounts assume that, as of the date that an account is calculated, there are two groups of citizens: the generations that are already born and the one that is about to be born. Then, the accounts compute the taxes that the already-born

47 Kotlikoff, supra note 4 (“Deficit Delusion”).
48 Cohen, supra note 6, cites this higher figure, as does Shaviro, supra note 8, at 716. On the other hand, when Kotlikoff recently recalculated his generational accounts and found that the 84% rate for future generations had fallen to 35.81% (cited in Shaviro, supra note 12, at 150), the “good” news was not met with fanfare. (The incredible precision of those estimates is a separate issue.)
49 This means, of course, that the political audience for these estimates, the younger non-voters, was in fact not included in the group that is supposed to be paying nearly all of their lifetime income in net taxes.
will pay minus the direct cash benefits that they will receive (which are in part known, because some taxes and expenditures are already history), under the current tax and spending regimes.

The soon-to-be-born are, however, treated differently. For them, lifetime taxes include not just those that they would be forced to pay under current law, but also taxes sufficient to pay down the entire national debt (accumulated before they were born) during their lifetimes. There is no good reason to assume that the entire national debt will or must be paid in that time, but that is the assumption that drove the dramatic 84% result.

On its own, of course, this assumption cannot help but make things look much worse for the new generation. With an entire lifetime of work ahead of them, and with the government unable to borrow money, they must pay for their own benefits as well as those of their parents and grandparents. The older generations, meanwhile, had a good ride, and they are allowed to continue that ride even while their heirs are paying for the difference.

The generational impact of current fiscal policy, however, is better viewed through the more traditional crowding-out lens. Current deficits are likely to decrease future growth in GDP, which makes future generations worse off than they otherwise would be. The inter-generational comparisons are becoming less relevant as the generations that benefited from the expansion of Social Security and Medicare die off.

50 Haveman, supra note __, at 100.
51 Id. at n.5 (“In effect, there are two implicit fiscal regimes in place during the future years when both members of current generations and members of future generations are living.”)
52 Since the government’s bondholders tend to be older (especially indirectly through retirement funds), this also skews the inter-generational comparison as income is redistributed upward.
Moving forward, the real question is reduced to the now-versus-later question that has always been the central focus of budgetary analysis. We cannot know whether any single future generation will be called upon to pay down the debt; but we can say that any decision that raises deficits at one point in time is likely to cumulatively lower future GDP.

2. Benefits Not Counted in a Generation’s Accounts

The calculation of any particular generation’s lifetime net tax rate also excludes many of the indirect benefits provided by governments—indeed, the very benefits for which governments are traditionally thought to exist. The only benefits that go into the GA calculation are those that are paid in cash. The benefits from cleaner air, pleasant parks, medical research and development, lower crime, etc. are not a benefit. Taxes pay for them, but they are a net cost of government in the GA calculations.53

It is not clear a priori how this fault in the generational accounts would affect inter-generational comparisons. Indeed, it is imaginable that these benefits are so diffuse that they benefit every citizen equally. It is also possible, though, that some of these benefits are disproportionately shared. The cost of educating the Baby Boomers was borne by our parents, yet all future generations will benefit from it.

Leaving that very open question aside, though, the fact that the GA calculations of lifetime net tax rates are skewed upward is important simply because it skews the political response. If the members of Gen X are told that their net tax rate is 84%, while that of their parents is 35%, they are likely to have two responses: 1) Our generation is

53 It is, of course, always possible to adjust the GA calculations to take these non-cash benefits into account. To the extent that this can be done, GA begins to resemble capital budgeting—which is all to the better. See below.
being cheated, and 2) All generations are being cheated! After all, while 35% is better than 84%, paying more than a third of your lifetime earnings to a government that (according to this model) does not do anything useful with the money is pretty upsetting.

If, on the other hand, the numbers were 8.4% and 3.5%, the magnitude of the inter-generational backlash would be muted (since outrage is likely to be at least partly based on the magnitude of the difference as well as the proportional comparison), and the anti-government reaction might not even register politically.

In other words, the effects on society of this widely-quoted statistic go beyond the simple, modest claim that GA is just a diagnostic tool. It is a political tool, and its affects are predictable.

3. Demographic Trends

The most important demographic phenomenon facing the U.S. and other Western countries is the Baby Boom and the subsequent dramatic decline in birth rates after 1964. While this phenomenon will end within a few decades, at least some parts of the long-term GA deficit are not going to be solved simply by the death of the Boomers.

The more important trend is the general increase in life expectancies over the long term. Indeed, given long-term trends in health, even after the 75-year window, the paths of receipts and expenditures continue to diverge, as an increasingly large non-working aged population consumes more of the economy’s resources, largely through the health care system.

If this is accurate, it would mean that the focus should not be on the effects of the Baby Boomers but on reining in our seemingly insatiable appetites for medical care.
While that might be a wise policy on its own, however, the GA framework does not provide a compelling reason to adopt such limits.

For example, Shaviro cites research indicating that healthcare expenditures on the elderly will continue to rise significantly relative to GDP. This, however, assumes that health care spending on an aging population will show the same trends as current health care expenditures. For example, if the typical 75-year-old today consumes $X of health care, and if there will be twice as many living 75-year-olds in 50 years, then it would appear that health care spending would have to double in the future. This assumes, in turn, that even though life expectancies will rise, elder health at specific ages will not improve.

We know, however, that a large fraction of the money spent on health care is spent at the very end of life—heroic, life-prolonging procedures that add a few weeks or months to the lives of chronically ill patients. If those chronically ill patients do not become chronically ill until twenty years later in life, however, there is no reason why overall health care spending must rise—even if we fail to change the way we deal with end-of-life decisions.

This is not to say that it is impossible to imagine a future with higher health care expenditures. It does indicate, however, just how difficult it is to rely on estimates of health-related spending decades in the future.

The calculations in Gokhale and Smetters, on the other hand, are based on a much simpler assumption, that medical care will grow for the next 75 years at a rate one percentage point faster than the growth rate of GDP, then falloff the ensuing 20 years...

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54 Shaviro, supra note __, at 152.
to grow at a rate equal to GDP growth. These assumptions mirror those made by the Medicare Trustees.\textsuperscript{55} The significance of these assumptions is considered below.

\section*{C. The Policy Imperatives}

The policy regime that GA calls for is clear: Fiscal contraction, austerity, and pain. The positive spin is that the pain can be “shared.” Two somewhat inconsistent norms are offered in designing policies to redress the long-term imbalances.

\subsection*{1. The Norm of Generational Equality}

The most obvious norm, which Kotlikoff explicitly relies upon, is simple generational equality.\textsuperscript{56} Every generation should pay a lifetime net tax rate no higher than the last. Other than symmetry, there is no apparent philosophical imperative behind this norm. Indeed, since the whole notion of lifetime net tax rates tells us nothing about real living standards (net of those tax rates), there is no obvious reason to be concerned about lifetime net tax rates \textit{per se}.

\subsection*{2. The Norm of Shared Sacrifice}

Recognizing this, Shaviro argues for the norm not of equal tax rates but of shared sacrifice. “With respect to generational distribution, once the members of a given age cohort have died, they can no longer be asked to share in the pain of tax increases or benefit reductions.”\textsuperscript{57} In other words, it is important to take the benefits away from the old people now because they are alive now. While there are certainly colorable (but

\footnotesize
\begin{itemize}
\item[Gokhale and Smetters, supra note \__] at 23.
\item See Diamond, \textit{supra} note \__ at 1.
\item Shaviro, \textit{supra} note \__, at 155.
\end{itemize}
highly debatable) arguments that the elderly over-consume, the current elderly also have a strong argument that they earned it.

D. Generational Accounting Without Generations?

Populist appeal aside, the importance of the GA approach should not be underestimated. Kotlikoff and his co-authors argue that they have created a meaningful baseline, allowing us to assess the effects of any proposed government policy over the long run, and potentially comparing that affect on different age groups. If these claims were true, then it would be important for everyone to send their policy proposals through the GA machine. If the results of such an analysis turned out negative, the policy would be presumed harmful until proven beneficial.

On the other hand, it is also possible to take the generations out of generational accounting, by simply stopping after we compute the Fiscal Gap. We can look at long-term trends and calculate long-term tax revenues and government spending assuming a continuation of current policies. If this calculation shows a deficit, then it is a warning: Unless something is changed, the government will have to cut spending or raise taxes on future generations. While we might still choose to do nothing, the argument continues, at least GA gives us a fair number to work from.

1. Another Baseline Problem

The supposed agnosticism behind GA calculations thus rests on the idea that they are warnings, not predictions. Indeed, if GA is used as its proponents suggest, we enable

See Cohen, supra note __.

Even Haveman, supra note __, despite offering a withering criticism of GA, allows that this “base case” analysis can provide useful information. Id. at 100, 110.
ourselves to make “tough but sensible” choices now to prevent the disaster that surely awaits us if we fail to act.\textsuperscript{60} In fact, though, the theory is not agnostic, and its proponents’ call to action rests on weak assumptions.

The underlying question is one of default. Once the cross-generational comparisons are set aside, GA claims to ask, in essence: “If we were to change absolutely nothing, and if we can believe the forecasts on which our estimates are based, are our current fiscal policies allowing living generations to steal economic resources from their grandchildren and their grandchildren’s grandchildren?” But it does not stop there. If the answer to that question is yes, then the argument is that we must act now. Why now? Because our current path is unsustainable, and delay is only going to allow matters to get worse.\textsuperscript{61} Sacrifice today means sowing a greater harvest tomorrow.

While this logic surely appeals to our Puritan roots, it is misleading. We should only enact new policies now if we believe that we will not change policies along the way for other reasons. By way of analogy, consider the argument (known as “bracket creep”) that tax rates in the 1970’s would have led to an ever-higher percentage of GDP being collected by the IRS, because inflation was pushing everyone inexorably into the highest tax brackets. If that argument had been coupled with a call to raise government spending immediately, because we can count on ever-higher revenues in the future, then surely that would have been foolish. Everyone knew that Congress would pass regular tax cuts to undo the effects of bracket creep; so even if no one anticipated the indexing of brackets to

\textsuperscript{60} Shaviro, \textit{supra} note \_, at 716 (arguing that politicians should “openly face[e] today painful choices that ultimately will have to be faced anyway.”)

\textsuperscript{61} \textit{Id.} (arguing that we should act “sooner rather than later”). \textit{See also} Gokhale and Smetters at 3.
inflation in the 1981 tax bill, certainly no one thought that everyone would end up in the 70% tax bracket when inflation had made even a street-sweeper “rich.”

Similarly, the GA call to action loses much of its appeal when we realize that this “interesting calculation” is based on some extremely arbitrary economic forecasts combined with the arbitrary assumption that only a few things are set in stone. Consider the current path of tax rates. Current tax law is in a bizarre state, because of the ten-year reversion feature of the 2001 tax bill. The estate tax is set to decline, disappear, and reappear. The 28% tax bracket declines to 25% and then returns to 28% (with similar moves in the other brackets, and some brackets merging into others only to reappear in 2011). No one expects the reversion to happen. The House in 2002 passed, on partisan lines, a bill to make the 2001 cuts permanent—although no one viewed that action as anything more than election year posturing. Even with the current one-party dominance of the federal government increasing the likelihood of tax cuts, it is not clear what form those cuts will take.

With the _status quo ante_ not a serious possibility, and the _status quo post_ unlikely ever to become the status quo at all, how can one even formulate a call to action on the basis of a GA calculation? In addition, current projections assume that the Alternative Minimum Tax (which is not indexed to inflation) will remain in place, even though it will

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62 There are, of course, strong political economy arguments for indexing the tax code rather than relying on _ad hoc_ corrections; but those are beside the point here.

63 See Haveman, _supra_ note __, at 99 n.4.

64 Because of a self-imposed super-majority voting requirement in the Senate, bills that would reduce tax revenues beyond ten years from the effective date of a bill require sixty votes to pass. Lacking sufficient votes, the Senate made all provisions of the 2001 tax act void in 2011.
almost surely be altered or repealed when it begins to affect large sections of the middle class. 65

Carrying this over to the demographic argument is potentially even more devastating to the GA position. If the time paths of revenues and expenditures do not come back together after the death of the Baby Boom generation because of the trends in life expectancies, then surely it is important to forecast how those longer life expectancies will change both individual behavior and government policy. As people live longer, they will naturally use more economic resources, including medical care. (They might also produce more economic resources.) Based on current law in which retirement ages are rising to 67 and then staying put, GA estimates would have us believe that in 75 years—assuming that all of the other forecasts over that time span are true—we will have a nation of impressively healthy septuagenarians (and older) living off of the sweat of a relatively tiny population of younger workers.

Why make the assumption that the retirement age (effective if not statutory) will remain fixed as the population inevitably ages healthfully? Boredom alone is likely to lead to a changed politics of retirement. While an advocate of GA can always claim that their calculations can tell us what happens if retirement ages do not change, that is a far cry from justifying the argument that we need to cut benefits and raise taxes today on Medicare beneficiaries in order to bring the long-term budget into balance.

Indeed, Gokhale and Smetters do allow themselves to make a single departure from their blanket assumption that policy is set in stone. Separate from the “bracket creep” caused by inflation, real economic growth can cause “real bracket creep,” whereby

increases in real income cause every taxpayer’s income ultimately to rise to the highest bracket. Gokhale and Smetters quite reasonably view this is absurd and thus assume that the brackets will be adjusted over time to prevent this from happening. This, of course, makes the estimated Fiscal Gap look worse; but more importantly, it raises the question of why this is the only concession to reality that is allowed in the estimates going forward.

2. The Fiscal Gap and the Annual Deficit

The absolute size of the estimated Fiscal Gap is important for another reason. “[T]he [Fiscal Gap] grows by about $1.6 trillion per year to $54 trillion by just 2008 unless corrective policies are implemented before then. This rapid annual increment is also about ten times as large as the official annual deficit reported for fiscal year 2002.”66 This suggests that the “true” deficit is not measured accurately by the annual cash-flow deficit but by the change in the Fiscal Gap from year to year. Because that annual change, in the absence of policy enactments, is simply equal to the previous year’s Fiscal Gap times the assumed annual interest rate, this annual quasi-deficit measure will be much smaller if we allow the forecasts in the Fiscal Gap to include changes in retirement ages, health care cost trends, etc. If the estimated Fiscal Gap were only $15 trillion, in other words, the annual quasi-deficit would be just over $500 billion, whereas a Fiscal Gap of $88 trillion would imply an annual quasi-deficit of $3.2 trillion. The annual changes depend completely on the accuracy of the aggregate estimate.

66 Gokhale and Smetters, at 3.
3. Making the Fiscal Gap Disappear

Even if it were possible to agree on the likely future path of policy decisions, the Fiscal Gap can be manipulated simply by enacting policies which will take effect in the future. If, instead of Gokhale and Smetters’s suggested immediate increase in wage taxes of 16.6%, Congress enacted an increase in wage taxes that started at 0.1% in twenty years and rose to some level well in excess of 16.6% twenty years later, the Fiscal Gap would immediately become zero. Cynics would argue that this is non-credible, and they would have a point. As enacted policy, however, such a law would make the Fiscal Gap equal to zero, by definition. The annual quasi-deficit would then also equal zero. While nothing would have changed, these fiscal measures would show nothing amiss. It is true that there would still be a relative burdening of future generations, but not one that has changed because of the adoption of the new law.

4. How Far Into the Future?

Finally, Gokhale and Smetters use an infinite horizon rather than the 75-year horizon that is the norm in such analyses. As they point out, their model predicts a Social Security gap of $1.6 trillion, compared to an infinite-horizon gap of $7 trillion, while the 75-year Medicare gap is $15.1 trillion, compared to the $36.6 trillion in their infinite-horizon model. In other words, over sixty percent of the Fiscal Gap occurs from 2078 through infinity.

Given that the bulk of the estimated Fiscal Gap, both pre- and post-2078, is caused by the Medicare growth assumption, it is probably more accurate to describe any

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67 Gokhale and Smetters, at 34.
long-term fiscal crisis as a health care crisis. If the cost of medical care continues to grow in future decades at rates exceeding the growth rate of GDP, then certainly a policy intervention will become necessary. Prescribing policy initiatives for current lawmakers on the basis of such broad assumptions (even if those assumptions are arguably “conservative” by recent historical standards) borders on being arbitrary.

In short, the Generational Accounts are not a useful guide for policy, because they are based on highly unreliable forecasts (and those forecasts are unnecessarily pessimistic), they ignore the likely path of political decisions, and they are far too easy to manipulate. Moreover, they cannot meaningfully compare the relationships among generations in how they share the cost of running the federal government, at least in a way that is different from the standard crowding-out approach. While the exercise of measuring Fiscal Gaps is based on a reasonable desire to see what we might be getting ourselves into, the mechanisms for such long-term forecasts are simply too crude to add meaningfully to our arsenal of policy choices.

Paul R. Krugman, Social Security Scare, The New York Times, Mar. 5, 2004, at A23 (“The projected rise in Medicare expenses is mainly driven not by demography, but by the rising cost of medical care, which in turn mainly reflects medical progress, which allows doctors to treat a wider range of conditions.”)

Arguably, the lesson to be drawn from an exercise like that of Gokhale and Smetters is that the news is good, i.e., outside of the more general question of how to handle health care costs (both inside and outside of Medicare), we do not apparently face significant long-term budget problems. If so, then the exercise is worthwhile in a negative sense. Still, there are less favorable assumptions that could make the Fiscal Gap calculation look worse, and those assumptions are subject to all of the uncertainties described here. If Fiscal Gap calculations are to be but one piece of information among, therefore, they at least should not be given the prominence that Gokhale and Smetters would give them.
III. Capital Budgeting

If Generational Accounts were the only available method of making decisions about long-term fiscal policy, then it might be valuable to try to nail down some reasonable (though still arbitrary) long-term budget projections. In fact, though, it is not necessary to look at generational accounts at all in assessing the impacts of spending decisions.

A. Capital Budgeting

For legal and policy analysts, the most important issue in assessing any government policy is not the effect of the policy on the deficit (properly measured) but rather the question of whether the policy is “worth it.” This can only be understood from the perspective of capital budgeting.

1. Definitions

A capital budgeting system separates expenditures into two categories, operational and capital. The operating budget accounts for the purchase of goods and services whose full benefits are enjoyed during the year in which they are made. The capital budget accounts for items whose benefits are longer-lasting.70 One rough estimate of the fraction of federal spending that can be categorized as capital expenditures is 25%.71

70 Many capital projects are likely to bring with them the requirement of at least a minimal level of maintenance expenditures. Depreciation on the existing capital stock and maintenance expenditures are thus netted out of the capital account.
71 See, for example, Neil H. Buchanan, Debt, Deficits, and Fiscal Policy Three Essays, Ph.D. dissertation, Harvard University, 1996, and citations therein.
Far from being an innovation, capital budgets are the norm virtually everywhere but in the federal government. Publicly held corporations must separate operating and capital expenditures, by accounting convention. Indeed, most “profitable” corporations would not be viewed as profitable if they were prevented from segregating their capital expenditures, since even the most profitable corporations borrow money every year (that is, they run “deficits”).

Similarly, as noted above, state and local governments overwhelmingly use capital budgeting. The oft-noted fact that most U.S. state governments operate under balanced budget requirements is, indeed, not what it seems, because a state can still borrow money for capital spending even if it does not have the tax revenue to pay for it.72

It is odd, therefore, that the federal government would not use capital budgeting. The arguments against adopting capital budgeting are prudential, asserting that it is simply not wise to trust Congress with such a powerful tool for justifying deficit spending. With a capital budget available, the argument goes, any silly expenditure can be slipped into the federal budget and camouflaged as capital spending. The entire process, this argument continues, is open to abuse and gamesmanship.73 Indeed, former President Clinton drew fire from the nation’s English teachers when he attempted to describe some spending policies as investments. “[Clinton] captured third place in the 1993 Doublespeak Award, administered by the National Council of Teachers of English,

72 Note that, even with a capital budget, the perversity of failing to cyclically adjust remains. If a state is required to equate actual tax receipts with actual expenditures, balance will become deficit when the economy goes South—and the downward spiral will continue as long as the state’s politicians are required to balance their non-cyclically adjusted operating budget.

73 See, for example, Karen Pennar, Beware of Accounting Magic Tricks, Mr. Clinton, Business Week, January 18, 1993, 55.
for . . . his insistence on ‘using the word “investment” as a substitute for the word “spending” in his rhetoric on economic policy.’”

While it is certainly possible to over-use the word “investment,” the English teachers simply had their accounting wrong. The choice is not between spending and investment, but between investment spending and consumption spending. If we view government as having to choose between the two, then our goal should not be to prevent politicians from using the term “investment,” but rather to ensure that they use it correctly.

2. Using Capital Accounts

While it hardly stretches the imagination to suspect that members of Congress do not always act in accordance with pure economic theory, it is simply not true that a capital budgeting process is an open cookie jar. Accounting standards have been promulgated and are taught in every business school in the country. States and corporations do, of course, sometimes play at the edges of these rules, but the rules can and do constrain behavior.

Moreover, the current federal system effectively treats all expenditures as if they were operating expenditures. While it is possible to adopt a capital budget and then to implement it incorrectly, not to implement it literally guarantees that the government’s budget is measured incorrectly. It also leads to poor policy choices. If the only goal is to balance the budget, cutting projects with valuable long-term payoffs looks just as good as


75 The reader is encouraged to provide her own joke regarding Enron, WorldCom, Tyco, etc. here.
cutting pure pork. And it is even “desirable” to sell public assets at a loss, since any revenue received reduces the annual deficit.

Separating investment from consumption, therefore, has at least two desirable effects. First, it would prevent policymakers from cutting programs that are likely to provide long-term benefits to the economy. For example, to prove their fiscal responsibility, the leadership of the House of Representatives is intent on cutting funding for mass transit, because they “see transportation projects as one of the first ways to cut back the budget and reduce the deficit.”

While it is plausible that some transportation projects would not provide long-term payoffs, others surely would. In future research, I will explore the administrative machinery that might be put in place to allow policymakers to engage in reasonably fact-based inquiries into the likely payoffs of various spending projects—without providing room for budget mischief. For present purposes, the assertion is simply that there are some projects that would qualify as capital spending and that it would be wise to fund them even from borrowed funds. At the very least, it remains to be proved that the political gamesmanship that would exist under a system of capital budgeting would necessarily be worse for the economy than our current system.

The second advantage of adopting a capital budget for the federal government is that it would penetrate the category commonly known as “pork-barrel” spending. The operative definition currently seems to be that pork is anything that directly benefits a specific legislator’s constituents. For example, Senator Robert Byrd (D., W. Va.),

probably describes himself as the “prince of pork” for his ability to direct federal projects into his home state. Among his successes:

> There are two Robert C. Byrd United States Courthouses, four Robert C. Byrd stretches of highway, freeway, expressway and drive, and a Robert C. Byrd Bridge. And two Robert C. Byrd Interchanges to reach these valuable amenities. There is the Robert C. Byrd Lifelong Learning Center, the Robert C. Byrd Hardwood Technology Center, the Robert C. Byrd Health and Wellness Center, and the Robert C. Byrd Institute for Advanced Flexible Manufacturing.\textsuperscript{77}

Again, while it is possible that each of those items is actually wasteful, at least their titles bear the earmarks of projects which state governments classify as capital spending projects. Going beyond that superficial level to identify the valuable projects would be an important benefit of adopting a capital budget.

**B. Beyond Capital Budgeting**

Clearly, this goes beyond simply arguing in favor of adopting a system of capital budgeting. It also suggests that even balancing an operating budget is not sufficient. Balancing the operating account, sometimes called the Golden Rule of Budgeting,\textsuperscript{78} actually allows the government to waste resources if it is able to raise the taxes to do so. This should be unacceptable. Instead, the government’s decisions should always be driven by considerations of whether those decisions are helpful to the current and future health of the economy.


Dealing with Medicare is a good example. As Shaviro notes, many Medicare expenditures are likely to improve the health of seniors. This might then plausibly reduce the net cost of health care even as life spans lengthen. If so, then we might not wish to cut Medicare benefits today on the basis of our concern for future generations. At the very least, as noted above, a more careful analysis of the nature of long-term health care trends is necessary.

C. Back to Small Decisions

An unexpected benefit of piecemeal capital budgeting is that we would not be forced to rely on aggregate macroeconomic forecasts of the sort required by Generational Accounting. Case-by-case analysis actually makes more sense than aggregate analysis in this framework, because it is possible to say that a specific policy (such as funding early-childhood nutrition programs) is likely to achieve certain goals over time (or not), based on a much more manageable economic forecast. Being wrong about one policy need not cause us to be wrong when estimating the effects of other policies.

IV. What Does it Mean to Be Fair to Future Generations?

The unspoken assumption in all of this discussion, not just of capital accounting but of generational accounting as well, is that the government should never make decisions that would reduce economic growth in the future. Even if one completely agrees that the measurement problems discussed above must be addressed, and that there should be a capital budget, one is still proceeding from the assumption that the bad decision is the one that would reduce the total capital stock that current generations bequeath to the future.
A. How Much is Enough?

It is possible, as noted earlier, that even a decision by the government to consume economic resources rather than to invest them will not harm future economic prospects. This will happen if the resources that the government purchases for its use would have been used to produce private consumption rather than private investment. Conceptually, if the government throws a wild party by hiring the people who would have worked at a privately-funded wild party, then future generations are unaffected. It is only if the government’s party is (indirectly) staffed by computer programmers and construction workers that the future productive capacity of the economy is reduced.

This, however, still leaves open the question of why we must maximize the capital stock that we pass on to our heirs. Given that economic growth is generally on an upward trend, why is it necessary to give our wealthy grandchildren even greater wealth? The bipartisan (within the economics profession as well as among politicians) silence on this question is notable, to say the least. While there have been preliminary attempts to estimate how much capital should be produced for future generations, the unspoken assumption is quite blunt: We cannot do anything to reduce the capital stock that we bequeath to our children and grandchildren. Perhaps it is time to question that assumption more aggressively. (Moreover, although the subject for a different essay, it is equally important to account for the “intergenerational unfairness” created by problems such as environmental damage.)

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B. The Real Inter-Generational Issues

The very language of intergenerational transfer is, therefore, potentially misleading. Indeed, it is not possible to “pass the bill to future generations” for our current spending. When the government uses economic resources, the rest of the economy currently cannot use those resources. (This, of course, assumes that those resources were going to be used at all. Given the prolonged slack in the global economy, even that assumption is often contestable.) That means that we pay for what we do, in the fundamental sense of opportunity cost.

Future generations are, of course, affected by these decisions, too. If, as discussed earlier, the government’s decisions are likely to decrease the net capital stock that is passed on to future generations, then their output will be lower than it would otherwise be. Therefore, the best approach is to think about how the government is using current resources. If it is investing them, then future generations will benefit. If it is consuming them (or simply wasting them), then they will not.

Even more fundamentally, it is not at all obvious that cutting benefits to seniors today will hurt only seniors. When the elderly lose benefits, they can turn to their children to make up the difference. Even if they do not do so directly, they can consume more of their estate than they otherwise would have, thus reducing the wealth of their children. This incidence question indicates just how difficult it is to measure meaningfully the impact on different generations of our fiscal policies.
V. Conclusion

The traditional debate about budget deficits witnessed a divergence between the economic analysis, which saw that deficits are poorly measured in the U.S. and argued that certain deficits are beneficial for the economy, and the political view that every deficit is evidence of moral failure. This unusual stalemate is currently on hold, as the brief era of surpluses gave way to the (hopefully even more brief) era of terror, leading to a decreased emphasis on fiscal orthodoxy.

In addition, an alternative approach to budgeting, Generational Accounting, has emerged. Designed to correct some of the weaknesses of annual budgeting, GA purports to provide an “early-warning system” to allow us to correct our long-term fiscal imbalances before it is too late. Unfortunately, this theory is based on highly contestable assumptions, makes questionable analytical choices, and is inherently incapable of providing the useful baseline that its proponents promise.

Instead, a modified system of capital accounting should be used to guide economic policy. This would emphasize case-by-case analysis, allowing legal analysts to compare the likely costs and benefits of policy proposals while keeping a clear eye on the importance of government investment in our future prosperity. If political concerns about the potential abuse of capital budgeting prevent the federal government from adopting an explicit capital budget, the best response would be to continue to rely on the current (admittedly imperfect) budget measures, which at least provide some useful guidance regarding the immediate effects of our fiscal policies.