

# A Hidden Fiscal Crisis

**A noted U.S. economist says debt figures seriously understate long-term budget problems in the United States**

*Laurence J. Kotlikoff*

**E**VEN as the United States experiences continuing fallout from a terrible financial crisis, a more alarming fiscal problem looms. The world's largest economy faces a daunting combination of high and rising costs for health care and pension benefits and constrained sources of revenue that will put enormous pressure on its fiscal soundness.

So far, the markets seem to be focusing on U.S. official government debt relative to its gross domestic product (GDP). That number stands at 60 percent, roughly half that, say, of beleaguered Greece. Consequently, the financial wolves are circling Greece, not the United States—driving up yields on Greek securities and driving down yields on U.S. treasury securities.

But the debt-to-GDP ratio is not a useful guide to a country's true fiscal position. Because of something economists call the *labeling problem*, every dollar a government takes in and pays out can be labeled in an economically arbitrary manner. So what is reported as the size of a deficit or surplus is independent of a country's actual underlying fiscal policy (see box).

## All in a name

For example, take payroll taxes targeted to pay future pension and health care benefits in the United States. These receipts, now labeled taxes, could just as well be labeled borrowing. And the future benefits could be called repayment (with interest) on

this borrowing (minus a future tax if the benefits fall short of principal plus interest). This alternative—but no less natural—language describes the same underlying reality: taxes are much lower and the projected 2010 deficit is 15 percent, not 9 percent, of GDP.

The Chilean pension “reform” of the early 1980s illustrates the arbitrary nature of fiscal labels. The reform funneled receipts, which had been called payroll taxes, into private pension funds, which the government then borrowed to cover pension payments. The same money was still flowing from workers to retirees, but was called borrowing.

If the standard debt-to-GDP ratio fails to measure a country's long-term fiscal prospects, what does? The answer is the *fiscal gap*, whose value is the same no matter which labeling convention a country adopts. The size of the U.S. fiscal gap, as recently measured by the IMF (IMF, 2010) indicates that the United States is in terrible fiscal shape.

The fiscal gap measures how close a government is to satisfying its *inter-temporal budget constraint*. That constraint requires that the present value

of government payments—the purchase of goods and services, transfer payments, and principal and interest payments on officially reported debt—not exceed the present value of its receipts, such as taxes and interest earned on government assets. In other words, a government's spending over the long term should not exceed the revenue it receives.

The fiscal gap is the difference between the present value of government payments and receipts. It measures the extent to which current policy violates the government's intertemporal budget. If the intertemporal budget constraint is not satisfied, current policy is unsustainable. And if the present value of payments far exceeds the present value of receipts, major and immediate policy changes are needed to prevent future generations from experiencing a much different, and less pleasant, fiscal and economic environment than today's generations. Short-term fiscal policy cannot be assessed independently from long-term policy, because labeling can make the short-run fiscal policy appear to be anything labelers like. Moreover, fiscal policy is a zero sum game being played across all current and future generations. Bills not paid by current generations will, of necessity, have to be covered by future generations.

## A large fiscal gap

How large is the U.S. fiscal gap? According to the recent IMF report, “The U.S. fiscal gap associated with today's federal fis-

cal policy is huge for plausible discount rates,” which are rates applied to future receipts or payments to determine their present value. “Closing the fiscal gap requires a permanent annual fiscal adjustment equal to about 14 percent of U.S. GDP.”

Data from the U.S. Congressional Budget Office (CBO) long-term alternative fiscal scenario confirm the IMF’s findings. Based on the CBO data, closing the fiscal gap requires an annual fiscal adjustment of roughly 12 percent of GDP. This is based on a 3 percent real discount rate. Using a 6 percent real discount rate lowers this figure to about 8 percent of GDP. The comparable figures for Greece are slightly lower than those for the United States, according to unpublished calculations by Stephan Moog, Christian Hagist, and Bernd Raffelheuschen of the University of Freiburg.

What would it take to raise 8 percent, let alone 12 or 14 percent, of GDP? In 2009, federal personal income taxes totaled 7.4 percent of GDP in the United States. To achieve present value fiscal balance would require a change in the present value of the government’s net cash flow equivalent to at least an immediate and permanent doubling of income taxes.

The CBO forecast actually is more pessimistic than the IMF’s. That’s because the CBO already builds in a 50 percent increase in personal income tax payments as a share of GDP. In addition, the CBO assumes that growth in the benefit levels of Medicare and Medicaid—government programs that provide health care to the elderly and poor, respectively—will fall by about one-third in the short term and two-thirds in the long term. Moreover, both CBO scenarios are implausible.

### What’s in a name?

The labeling problem attached to government deficits is a matter of theory, not simply practice. Consider the equations of any economic model with rational agents—that is, agents who pay no attention to language and instead make decisions based on fundamentals. Whether these equations are talked about by French, English, or Chinese speakers will not affect the model’s behavior, which is dictated by the math.

Attaching particular fiscal labels to a model’s variables is simply a matter of choosing an internally consistent language to discuss the equations. But each internally consistent labeling choice produces a different measure of *the debt* and its changes over time—*the deficit*.

In a recent paper, Jerry Green and I referred to the labeling problem as “the general relativity of fiscal language,” to emphasize that in economics, as in physics, certain concepts aren’t well defined (see Green and Kotlikoff, 2009). Time and distance aren’t well defined in physics, and government debt and the deficit aren’t well defined in economics. Nor for that matter are taxes, transfer payments, private net wealth, disposable income, private savings, and personal savings.

All deficit accounting, then, is inherently arbitrary. Substituting one set of arbitrary fiscal labels for another will not tell us anything worth knowing if we continue to act as if government debt measures a fiscal fundamental rather than what it really does: reflect our nomenclature.

Take the CBO’s projected rise in income taxes relative to GDP. This projection reflects primarily the automatic increase in taxes that occurs because the income tax is indexed to prices, not real wages, and the CBO assumes no adjustment for real wage growth in the graduated tax brackets. Under this projection, as real wages rise, workers move into higher income-tax brackets. It seems politically unlikely that the U.S. Congress would allow this to continue for even a decade, which is what the CBO assumes.

Spending projections appear optimistic too. There is no concrete policy in place to keep a lid on growth in Medicare and Medicaid benefit levels. Since 1970, real federal spending per person on Medicare and Medicaid has grown at an average annual rate of 6.4 percent, whereas real per capita GDP has grown at an annual rate of only 1.8 percent. The CBO assumes a significant slowdown in the nondemographic component of this differential. Given the 40-year failure to control growth in Medicare and Medicaid benefits per beneficiary, the CBO’s assumption seems optimistic.

Moreover, there is a significant possibility that employer-based health insurance will unravel, which is not envisaged in the CBO projections. The new health care reform law passed this year includes large subsidies for low-income workers who seek to buy insurance coverage under a health insurance exchange, and imposes relatively minor penalties on employers who stop offering coverage. The availability of Medicare has effectively eliminated private provision of basic health insurance coverage for the elderly. Given the mix of incentives for employers and low-income employees, we should expect the same ultimate result for low-income workers.

Were the CBO to forecast without its strong assumptions, the U.S. fiscal gap in relationship to GDP would be substantially larger than that of Greece—and of most, if not all, the advanced economies that are members of the Organization for Economic Cooperation and Development. And unlike in Greece, where the government has just publicly debated and legislated major, if still insufficient, fiscal reforms, the CBO’s assumptions about how things will evolve have yet to be publicly discussed or, indeed, even contemplated in U.S. political discourse.

### Social security

The government-sponsored pay-as-you-go retirement plan, Social Security, is also a major contributor to the overall U.S. fiscal gap. Social Security trustees estimate that when calculated to infinity (the infinite horizon) the retirement system’s fiscal gap is now \$16.1 trillion—an estimate more than 2 trillion dollars higher than the 2008 projection—largely because of the recession.

The long run is very long and highly uncertain. If we are serious about assessing the current value of the government’s intertemporal budget, we must properly discount (adjust for future inflation) the government’s uncertain net cash flows using the appropriate risk-adjusted discount factors (see Lucas and McDonald, 2006; Geanakoplos and Zeldes, 2007; and Blocker, Kotlikoff, and Ross, 2008). Because economists don’t know how to make proper risk-adjusted calculations

of future net cash flows, they measure infinite-horizon fiscal gaps using various discount rates.

Unfortunately, in the case of the United States, applying even a high discount rate does not change the underlying message that America's fiscal gap is massive. It is so massive that closing it appears impossible without immediate and radical reforms to its health care, tax, and Social Security systems as well as military and other discretionary spending cuts.

### Taking stock

How did the United States reach its current state of what could effectively be considered bankruptcy? It spent six decades transferring ever more resources from the young to the elderly, under a variety of different programs described with a variety of labels. Many policies across many administrations from Eisenhower's to Obama's—cutting taxes, growing Social Security, enacting Medicare and Medicaid, spending to combat recession, and financing wars—added to the nation's financial problems.

That is not to say that the policies financed were not worthwhile. Many were. But each left the fiscal gap larger than it had been and redistributed massive sums from future generations to current generations.

The implied lifetime net tax burden on America's children, if they are forced to cover the fiscal gap on their own, is far beyond their capacity to pay.

The United States is hardly alone. Europe and Japan are also reaching the tipping point thanks to decades-long policies of passing the generational buck (see "The Long Run Is Near," in this issue of *F&D*). And China, with its own rapidly aging population, is increasingly following the Western model of taking from the young and giving to the old (see "Building a Social Safety Net," also in this issue).

But the U.S. situation may be worse than that of other advanced economies—not because of demographics, but because it has been less able to control growth in the benefit levels of government health care programs. Federal Medicare and Medicaid spending that grows for 40 years at a rate that is 4.6 percentage points higher than per capita GDP growth is a prescription for a fiscal nightmare—especially given the impending retirement of baby boomers and the potential for subsidies to lower-income people who buy insurance policies on health exchanges to become another huge unfunded health care entitlement.

### Meltdown?

The potential for the U.S. fiscal crisis to kick off a global financial meltdown is significant. The market is now betting against small countries, which appear fiscally weakest. But appearances, when based on official debt numbers, are misleading.

Once the world catches on to the true extent of U.S. fiscal insolvency, the ability of the United States to continue to finance its government borrowing could come to a halt. If, when, and how fast are the operative questions. The United States is not Greece—or any other country, for that matter. Because it issues the world's reserve currency, it undoubtedly will be able to borrow longer and at lower rates than

most countries. But at some point that exorbitant privilege (as former French President Valéry Giscard d'Estaing called it nearly five decades ago, when he was finance minister) is bound to end.

What will happen then? One possibility, of course, is that the U.S. government will have come to grips with its fiscal problems.

Another is that the government will print enormous quantities of money to cover its bills—with concomitant high inflation, declining confidence in banks and money market funds, and a serious test for deposit insurance. This scenario is extreme, but not improbable. Countries that cannot pay their bills end up making money by printing money. And because the United States has explicitly or implicitly pledged to cover so many private sector financial liabilities—from bank deposits, to money market funds, to bank debt, to corporate bonds, to recreational vehicle loans—it has created a situation of *multiple equilibria*.

In multiple equilibria, an economy can flip from one position to another, seemingly at random. Consider an unlikely and extreme possibility, but one that would have devastating implications for the real economy:

A minor trade dispute between the United States and China could make some people think that other people are going to sell U.S. treasury bonds. That belief, coupled with major concern about inflation, could lead to a sell-off of government bonds that causes the public to withdraw their bank deposits and buy durable goods (which will retain their value). The run on the banks could trigger a run on money market funds and insurance company reserves (as policy holders cash in the surrender value of their policies). In a short period of time, the Federal Reserve would have to print trillions of dollars to cover its explicit and implicit guarantees. All that new money could produce strong inflation, perhaps hyperinflation. Even though at the outset there might have been no serious inflation problem, the self-fulfilling aspects of multiple equilibria can take over and cause this outcome. Deposit insurance would be little help in preventing bank runs because it covers the nominal value of deposits and does not guarantee the purchasing power of those funds—which would be sharply eroded by heavy inflation.

There are other less apocalyptic, perhaps more plausible, but still quite unpleasant, scenarios that could result from multiple equilibria.

### Getting to economic safety

The news isn't all bad: it is not too late to fix the interconnected U.S. fiscal and financial problems. Let me briefly outline four proposals (see Kotlikoff, 2010) that together would contain costs and raise revenue:

- Require all incorporated financial intermediaries (including banks, insurance companies, and hedge funds) to operate strictly as mutual fund companies that take in and invest money in return for ownership shares. Share values depend on investments, with only cash mutual funds backed to the buck. That way, no mutual fund would ever fail, which would avoid all the attendant costs. Bank runs,

including those triggered by fiscal problems, would be a thing of the past. A single regulator—the Federal Financial Authority—would oversee full disclosure, verification, and rating of the mutual fund securities. This financial fix makes Wall Street safe for Main Street and limits the potential for financial meltdown.

- Give every American an annual voucher whose value depends on the recipient's preexisting medical conditions. Recipients would buy a basic health plan sold by insurers who cannot turn anyone down. What's covered by the basic plan is determined by an independent panel of doctors subject to a budget constraint—the cost of all vouchers cannot exceed 10 percent of GDP.

- Establish government-sponsored personal retirement accounts, with government-matched contributions for the poor and unemployed and those with disabilities to allow the system to be as progressive as possible. All contributions would be invested in a global index fund, so all participants receive the same rate of return. The government guarantees a zero real return on contributions (that is, no losses). Between ages 57 and 67, a worker's balances would gradually be swapped for inflation-indexed annuities sold by the government.

- Replace federal personal, corporate, payroll, estate, and gift taxes with an 18 percent tax on *all consumption*, including the housing services homeowners consume (imputed rent). A monthly per person rebate would assure progressivity.

These proposals would go a long way toward eliminating America's fiscal gap, ensuring financial stability, and giving the country the confidence to get back to work. ■

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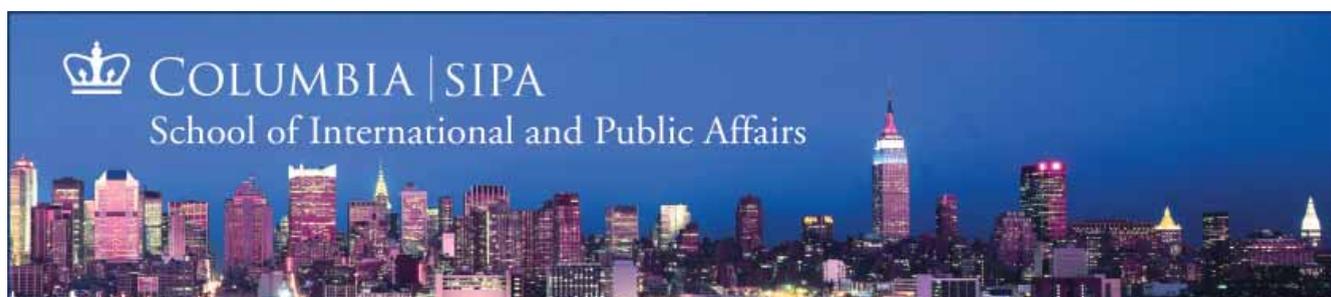
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