## Driving in LA with a Map of NY

## --Why Traditional Fiscal Accounting Is Content-Free

by

## Laurence J. Kotlikoff

Professor of Economics, Boston University Research Associate, The National Bureau of Economic Research

Address to the

International Federation of Accountants World Accountancy Forum

**December 4, 2007** 

It's an exceptional honor to address this IFAC World Accountancy Forum on government, the accountancy profession, and the public trust. I speak at a time of great financial turbulence and economic uncertainty, much of which reflects failures of accounting, if not specific failures of accountants. The subprime lending crisis reminds us yet again that financial markets are extremely fragile and can easily lose their moorings when investments certified as highly safe turn out to be extremely risky. No accounting is perfect, and no accounting will deliver economic certainty and financial tranquility. But we play a very dangerous game when we rate junk bonds as triple A, rubber stamp Enron-type bookkeeping, and blithely ignore national insolvencies.

The "we" here includes economists, analysts, actuaries, regulators, credit raters, bankers, financial journalists, and, yes, accountants. Given our training and professional certifications, we are all fiduciaries, either explicit or implicit, when it comes to overseeing the finances of business and government. The world relies on us to keep financial score on a completely honest basis and to blow very loud whistles when we see financial malfeasance, no matter its source.

A good analogy here are EMS workers. They may be off duty, even on vacation, but when they witness an accident, they're professionally and morally obligated to intervene and provide medical care. They are responsible to help the public for two good reasons. They can help, and they are the only ones with the ability to help.

All of us here today are in that same boat. We are all EFS workers – emergency financial services workers. But unlike EMS workers, our role is to intervene before our patient -- the economy – has a heart attack.

For my part, I've spent close to two decades trying to blow the whistle on the U.S. government's out-of-control long-term finances. My strategy has been twofold. First, I've pointed out that the government's existing fiscal accounting is content-free from the perspective of economic theory. Second, I've proposed an alternative method of fiscal accounting, called generational accounting, which has real economic content.

The goals of generational accounting are to understand whether fiscal policy is sustainable and, if it's not, how much more today's and tomorrow's children will have to pay to achieve sustainability. Generational accounting also seeks to understand generational incidence -- how changes in policy affect different generations. These are well posed economic questions and all well posed economic questions lend themselves to empirical analysis, including that done by accountants.

This new form of fiscal accounting, whether implemented on a cohort-specific basis or presented in the condensed form as present-value fiscal gap accounting, has been conducted in some 40 countries around the world by finance ministries, treasuries, central banks, the IMF, the World Bank, and academics. The analyses suggest that many relatively young and quite poor countries, like Mexico and Brazil, are in much better long-term fiscal shape than older countries like the U.S.

In the case of the U.S., recent fiscal gap accounting by economists Jagadeesh Gokhale and Kent Smetters suggests that upwards of \$70 trillion separates projected future federal spending from projected future federal receipts when measured in present value. This fiscal gap is enormous and indicates that our nation is, quite literally, facing bankruptcy.

Bankruptcy is a strong term. In a business context it means future earnings that don't cover costs. It also means defaulting on creditors. In a government context bankruptcy means future receipts that don't cover future expenditures. It also means defaulting on creditors – all those expecting to receive government healthcare, pension, welfare, and other benefits as well as all those expecting to be employed by the government. Government bankruptcy also means jacking up tax rates and printing money to "pay" for what the government spends.

If anyone thinks the U.S. is immune from fiscal meltdown and high inflation, if not hyperinflation, she should think again. Too many countries, big and small, rich and poor, have learned that, sooner or later, their fiscal profligacy comes at a very heavy price.

There are increasing signs that Uncle Sam is driving our economy in the wrong direction and that the rest of the world is taking notice. Our nation's national saving rate is now running below 3 percent. In 1960 it was close to 13 percent. Our incredibly low saving rate has lead to an incredibly high current account deficit, which has led to an incredibly low value of the dollar.

So why is our saving rate so low? Well the counterpart of saving too little is consuming too much. As a share of national income, the federal government is consuming at roughly twice the rate it did a decade ago. But the main explanation for the decline in U.S. saving is not Uncle Sam's spending. It's the spending -- the consumption -- of households. And among households the group whose consumption has been rising most rapidly is the elderly. Since 1960 average consumption per oldster has roughly doubled relative to average consumption per youngster.

Who's paying for this growth in the consumption of oldsters? The answer, in large part, is Uncle Sam. Take Medicare and Medicaid benefits, the vast majority of which go to the elderly. Every year that Uncle Sam allows these benefits to grow much more rapidly than the economy – and we are talking about virtually each one of the past 60 years – the government directly expands the consumption of the elderly. Uncle Sam has also been cutting taxes on the elderly, which has also permitted them to consume a lot more.

So the picture provided by generational accounting of Uncle Sam taking ever resources from young savers and giving them to old spenders is showing up in the level of consumption of the elderly, in the rate of U.S. national saving, in our current account deficit, and in the value of the dollar.

Generational accounting has provided a good guide to what has happened and provides a good guide to what will happen. To be sure, generational accounting has its challenges and limitations. The greatest of these is knowing how to present-value highly uncertain government receipts and payments. Steve Ross, a professor of finance and economics at MIT, and I are using arbitrage pricing theory to show how future government receipts and payments should be valued in the

present given their risk. Our preliminary findings suggest the U.S. may be in worse fiscal shape than conventional generational accounting reveals.

Although I foresee significant near-term methodological improvements to generational accounting, skeptics will always correctly claim that the future is unknowable and argue that traditional short-term fiscal budgeting, i.e., deficit accounting, while imperfect, is at least based on reliable numbers.

My main task today is to disabuse you of this notion. In fact, we can't learn anything whatsoever from short-term deficit accounting for the simple reason that what we measure as the deficit depends on how we label government receipts and payments. And this choice of labeling/language is not pinned down by economic theory.

Take a simple economy in which the government takes an amount H each period from the young. What should we call the H? Should we call it a tax of H? Or should we call it a tax of 50H less a loan back to the young of 49H. Or should we call it borrowing of H? Or should we call it borrowing of 2000H less a transfer payment to the young of 1999H? The equations in our economic models don't tell us which words to use. Nor, for that matter, do they tell us whether to discuss their implications using French or English. As long as our choice of fiscal labels/language is consistent, so that we don't misstate the true nature of the lifetime budgets facing each household, we're free to use whatever words we like and announce whatever size deficit we choose.

Take, as an example, 30 year-old Joe who hands the government \$3,000 this year and, to keep things simple, gets nothing back in the future in exchange. We could label this as a current "tax payment." Alternatively, we could call this a \$3,000 loan from Joe to the government and also say that in 2020 Joe will receive repayment of this loan with interest, but that in that year Joe will also face a tax equal to the \$3,000 plus accumulated interest. Regardless of the words, Joe hands over \$3K this year and gets nothing back in the future in exchange. But if one uses the second set of words rather than the first, this year's official deficit is \$3,000 larger.

This example may seem too simple to be relevant to our real word in which there are cash constraints, distortionary taxes, all manner of uncertainties, asymmetric information, time-inconsistent policy, etc. But as shown in a recent paper with Harvard professor Jerry Green entitled, "On the General Relativity of Fiscal Language," the labeling problem is generic to economic models no matter what one includes in the models provided the agents in the model and the institutions they establish are rational. Rational here requires that the choices agents make and the institutions they establish not be fooled by or predicated on language.

Jerry Green and I used the term "general relativity" not to suggest we are budding (actually graying) Einsteins, but because there is a parallel between the measurement of deficits in economics and the measurement of time and distance in physics. Einstein showed that how one measures time and distance depends on one's physical frame of reference — one's labeling system if you will. Each frame of reference entails a different measurement of time and distance. So there is no absolute measurement of time or distance on which one can count. But Einstein also showed that while absolute time and distance are, in his words, "an illusion," theoretical

physics needs neither notion to proceed about its business, namely understanding physical reality.

Economic theory tells us that the deficit too is an illusion, actually a delusion, which is the term I used back in 1986 in a *Public Interest* article entitled "Deficit Delusion." As I argued there and have repeated ever since, each dollar the federal government takes in or hands out can be labeled differently and each set of labels will produce a different measure of this year's deficit.

If we want the deficit to be \$1.6 trillion this year rather than \$160 billion, all we need do is use the right set of labels. If we want the deficit this year to be negative, say a \$5 trillion surplus, again, there are words that will deliver that result. Indeed, economic theory tells us that independent of the actual fiscal policies they are running, governments can chose words to report any time path of deficits or surpluses they'd like. It also tells us that the government has no claim to higher language – its choice of words is no more economic than yours or mine. One can fill up volumes upon volumes of books with alternative time series of the U.S. federal deficit, each based on a different choice of labels, and see that the one marked "official" has no claim to distinction.

In short, when it comes to traditional fiscal accounting, we are living in Hans Christian Anderson's world of the Emperor's New Clothes. The emperor is naked, everyone knows or should know he's naked, but everyone (with the exception of one young child) claims he's beautifully dressed. Everyone's lying to himself and everyone else for one and only one reason – he's done so in the past.

Economists are the worst offenders here. It's their theory, and they should know better. But there's no sign that the majority of academic economists, let alone business economists, will change their ways anytime soon. Indeed, I'm surely on firm ground in asserting that none of the business economists working for any of the top 500 companies in the country would dare acknowledge publicly that the federal deficit is a number in search of a concept.

If economists won't blow the whistle, who will? My hope rests with you accountants. It's up to you to take the lead in endorsing meaningful fiscal measurement and discarding senseless tabulation. The stakes are too high for a country like the U.S. to be focusing on a trifling \$160 billion "official" deficit when the nation's fiscal gap – a measure which is label free and actually tells us where we stand -- is increasing by over \$2 trillion per year.

Yes generational accounting has its draw backs, but it attempts to answer well posed economic questions. Deficit accounting, in contrast, does not answer any economic question. And using it to steer our fiscal affairs makes no more sense than driving in Los Angeles with a map of New York.