There is an identity in macroeconomics. It says that in any given year private investment must equal the sum of private savings, corporate savings (retained earnings), and government savings (the government surplus, which is more likely negative, that is, a deficit),

\[ PI = PS + CS + GS \] (1)

In a global economy the quantities in the equation are global. This means the equation need not hold in a particular country, but it must hold in the world as a whole. For example, in recent years private investment in the US has been greater than the sum of private, corporate, and government savings in the US. This means the US has been importing savings from the rest of the world (by selling US securities to the rest of the world). But the equation always holds for the world as whole.

The quantities in the equation are not predetermined from year to year, and government actions affect them. The goal of government policy is to expand current and future incomes. When I analyze the auto bailout and the stimulus plan below, I judge them on whether they are likely to achieve this goal.

Government bailouts and stimulus plans seem attractive when there are idle resources – unemployment. Unfortunately, bailouts and stimulus plans are not a cure. The problem is simple: bailouts and stimulus plans are funded by issuing more government debt. (The money must come from somewhere!) The added debt absorbs savings that would otherwise go to private investment. In the end, despite the existence of idle resources, bailouts and stimulus plans do not add to current resources in use. They just move resources from one use to another. And bailouts and stimulus plans only enhance future incomes when the activities they favor are more productive than the activities they displace. I come back to these fundamental points several times below.

**A Bailout of the Auto Industry**

The bailout of the auto industry is a good place to cut one’s teeth on the effects of government action.

Most politicians favor the auto bailout. They fear that if the big three automakers fail, millions of jobs will be lost. Many people have pointed out that U.S. bankruptcy law makes this outcome unlikely. When a big company goes into (Chapter 11) bankruptcy, it is not liquidated. Instead, the company continues to operate, while reorganizing under court supervision.
There is, however, an important point, never mentioned by those in favor or those against a bailout. I phrase it in terms of the equation above. Bailouts of auto firms will be financed with government debt. The government deficit gets larger; that is, government savings, GS, become more negative. If private and other corporate savers do not save more in response to additional government debt, the auto bailout displaces productive investments elsewhere. If private and other corporate savers do save more in response to additional government debt, private consumption must go down by the same amount. This lost consumption and investment, and the incomes they would create, are the big costs of a bailout.

The real question posed by the auto bailout is then clear. Will the benefits, in terms of higher current and future incomes in the auto industry, fully offset the incomes lost as a result of the lost consumption and investment that the bailouts displace?

We are all moved by the visible prospect of lost jobs in the auto industry. We tend to forget the unnamed people who lose jobs or don’t get jobs, the businesses that close or the new businesses that don’t start, because the bailout displaces productive activities elsewhere.

**The Sad Logic of a Fiscal Stimulus**

In a “fiscal stimulus,” the government borrows and spends the money on investment projects or gives it away as transfer payments to people or states. The hope is that government spending will put people to work, either directly on government investment projects or indirectly through the consumption and savings decisions of the recipients of government spending. The current stimulus plan adds up to about $750 billion. Will it work?

Unfortunately, there is a fly in the ointment. Like the auto bailout, government infrastructure investments must be financed -- more government debt. The new government debt absorbs private and corporate savings, which means private investment goes down by the same amount.

Government infrastructure investments benefit the economy if they are more productive than the private projects they displace. Some government investments are in principle productive. The government is the natural candidate to undertake investments that have widespread positive spillovers (what economists call externalities). For example, a good national road system increases the efficiency of almost all business and consumption activities. Because all the benefits of a good road system are difficult for a private entity to capture without creating inefficiencies (toll or EZ Pay booths on every corner), the government is the natural entity to make decisions about road building and other investments that have widespread spillovers.

Like all government actions, however, government investments are prone to inefficiency. To survive, private entities must invest in projects that generate more wealth than they cost. Public investments face no such survival threat. Even good government investment projects can become wealth burners because their implementation is captured by interest groups (for example, minority or
gender set asides, or insisting on unionized labor). Moreover, a $750 billion stimulus package will draw a feeding frenzy by public (state and local) and private interest groups, to pressure for their favored projects, which might not otherwise meet the market test. If the interest groups win, the country will be poorer, and future incomes will be lower.

But we're talking about future benefits. “Stimulus” spending must be financed, which means it displaces other current uses of the same funds, and so does not help the economy today. If you want to build roads or do other investment projects, defend them by standard cost/benefit calculations. And don’t use the misleading “s” word.

Suppose the stimulus plan takes the form of lower taxes, another proposal of the incoming administration. Alas, we can’t get something for nothing this way either. If the government doesn’t also spend less, lower tax receipts must be financed dollar for dollar by more government borrowing. The government gives with one hand but takes them back with the other, with no net effect on current incomes.

The details of the effects of lower taxes depend on how the public uses the proceeds. If taxpayers understand that lower taxes now are exactly offset by the current market value of the future tax liabilities implied by the current increase in government debt, they may simply save the proceeds from the tax windfall. Private savings then substitute for the fall in public savings due to the government debt issue, and there is no effect on private investment or economic activity more generally. (This is what Robert Barro dubbed Ricardian Equivalence.)

Suppose the recipients of the tax reduction from the stimulus don’t know about Ricardian Equivalence, and they use the windfall to buy consumption goods. Does this increase economic activity? The answer is again no. The composition of economic activity changes, but the total is unchanged. Private consumption goes up by the amount of the new government debt issues, but private investment goes down by the same amount.

I must shade my arguments a bit (but just a bit). Remember that the (investment equals savings) equation above holds for the global economy but not necessarily for an individual country. If we can get foreigners to buy the additional debt to finance bailouts and a stimulus, we can have additional government spending without reducing private spending. This is how we have financed government deficits for at least the last eight years, so perhaps we can do it for another year or so, and on a grand scale. At the moment, however, most countries are deep into their own bailout-stimulus games. More important, this “cure,” if available, is temporary. When foreigners transfer savings to us now in exchange for our government bonds, they take back the resources plus interest later. If the government expenditures generate less wealth than they cost, the wealth loss is borne by future taxpayers, when the government debt is repaid.

A common counter to my arguments about why stimulus plans don’t work is to claim that the current situation is different. Specifically, the investment equal savings equation doesn’t work because savers currently prefer to invest in low risk assets like government bonds rather than in potentially
productive but more risky private investment projects. In other words, there is a “flight to quality.” Sorry, but this is a fallacy. A flight to quality does raise the prices of less risky assets and lower the prices of more risky assets. But when new savings are used to buy government bonds, the people who sold the bonds must do something with the proceeds. In the end, the new savings have to work their way through to new private investment, and equation (1) always holds.

The Bottom Line

The general message bears repeating. Even when there are lots of idle workers, government bailouts and stimulus plans are not likely to add to employment. The reason is that bailouts and stimulus plans must be financed. The additional government debt means that existing current resources just move from one use to another, from private investment to government investment or from investment to consumption, with no effect on total current resources in the system or on total employment. And stimulus plans only enhance future incomes when they move current resources from less productive private uses to more productive government uses – a daunting challenge, to say the least.

Bailouts and Stimulus Plans – Addendum 1/16/09

There has been lots of response to my little essay on bailouts and stimulus plans. I will only comment on the negative ones that I think have merit and are overlooked in my original paper.

First, however, I want to restate my argument in simple terms.

1. Bailouts and stimulus plans must be financed.
2. If the financing takes the form of additional government debt, the added debt displaces other uses of the funds.
3. Thus, stimulus plans only enhance incomes when they move resources from less productive to more productive uses.

Are any of these statements incorrect?

The size of the stimulus plan increases every day, currently to more than $800 billion (which president-elect Obama calls a down payment). Finding productive uses becomes an ever more daunting challenge.

To date there is just one valid negative comment on my essay, from J. Bradford DeLong, and I think his point is actually consistent with my argument,

He accuses me of not understanding that private investment includes inventory investment, and some inventory investment may be involuntary, the result of a general decline in demand. I am aware of the point, and I think he is right that government expenditures can, in whole or in part, reverse this bad investment by giving people funds to buy up the unwanted inventories. I think possibilities like this are covered by a statement that appears a couple of times in my essay,

“And bailouts and stimulus plans only enhance future incomes when the activities they favor are more productive than the activities they displace.”

Inventory investments that turn bad are just an example of an unproductive private use of resources, and perhaps I should have used this example in my essay. I just didn’t think it’s a big enough deal. The relevant numbers are provided by the Department of Commerce,

http://www.census.gov/mtis/www/mtis_current.html

Inventories rise during 2008, but if I’m reading the numbers correctly, the total increase from November 2007 to November 2008 is only about $47 billion. There is, of course, no guarantee that all of this is a bad investment. Even if it is, and even in the unlikely case that a dollar of stimulus reduces unwanted inventories by a dollar, we would have to find $753 billion of other unproductive private activities to justify an $800 billion stimulus.