

RAPID DEFICIT REDUCTION

THE FAST PATH TO SLOW GROWTH

By Dean Baker

*"[Deficit reduction] is by far the most potent stimulus that I can imagine."*¹

Alan Greenspan. Federal Reserve Board Chairman

The latest economic statistics indicate that the U.S. economy is still experiencing weak growth and generating relatively few jobs over two years after the official start of the recovery from the 1990-91 recession. Even after the fairly strong May 1993 employment report, payroll jobs have just barely edged past the pre-recession peak of June 1990.² As a remedy for this slow growth, Republican leaders, Ross Perot, and many conservative Democrats have advanced an economic program based on drastic deficit reduction. They have argued that deficit reduction accomplished by spending cuts will somehow provide more stimulus than deficit reduction brought about by tax increases.

While there is considerable political support behind this coalition, their position is at odds with the prevailing view within the economics profession. Economists generally agree about the effect of deficit reduction, especially during a period of weak growth like the present:

- Deficit reduction will have a *contractionary* impact on the economy, at least in the short run (three to four years). The reason for this impact, most economists would agree, is that deficit reduction lowers effective demand, which slows economic growth and impedes job creation.

- Spending cuts and tax increases are virtually identical in the way in which they affect the economy in the short run. Both pull money out of the economy and slow economic growth. There may be some differences in the long run insofar as government spending was in the form of productive investment (for example, cutting back on airport construction will reduce our future capacity for air traffic), but the immediate effect of these two forms of deficit reduction is virtually the same -- slower economic growth.

In light of these views, which are widely held among economists, it is difficult to understand some of the plans recently put forward in political discussions. For **example**, a group of Republican members of Congress advanced a proposal for “economic stimulus” which they claimed would create 800,000 jobs. The plan called for coupling \$36 billion worth of tax breaks with \$45 billion of spending cuts, leading to a net reduction in the deficit of \$9 billion. Whatever merits this plan has as a deficit reduction package, it has nothing to do with economic stimulus. In fact, the plan’s impact is clearly contractionary, meaning that it would create fewer jobs and less economic growth. Like many others around Washington, DC, the Republican proponents of this plan apparently believe that deficit reduction stimulates the economy.

Economists can find grounds for debating the long-run impact, and therefore the desirability, of deficit reduction. There is little ambiguity about its short-run impact, however. This paper details the precise way in which cutting the deficit affects the economy in the short run so that the impact of proposals such as the Republican “stimulus package” will be clearly understood.

Policymakers should be aware of the wide degree of agreement among economists concerning the following points:

- The impact of deficit reduction on investment is slow, indirect, and uncertain. The impact of deficit reduction on interest rates may be limited, and there is solid evidence that lower interest rates have only a minimal impact on increasing investment. Furthermore, during a period of slow growth such as the present, any further dampening of growth brought about by deficit reduction may constrict investment more than any fall in interest rates expands investment.

- Deficit reduction cannot, on net, stimulate the economy by lowering interest rates. The extent to which lower interest rates can stimulate demand in the near term is very limited.
- The impact of deficit reduction on U.S. exports will depend both on the extent to which exchange rates respond to changes in interest rates, and the extent to which trade flows adjust to changes in exchange rates. Most evidence indicates that exchange rates respond slowly and erratically to changes in interest rates, and that trade flows only respond to changes in exchange rates with a lag of two to three years. Our ability to increase U.S. exports will also depend in part on the economic condition of our trading partners. At a time like the present, when most of the industrialized world is mired in recession, it will be extremely difficult for the US. to achieve any significant increase in exports.

The Short-Term Impact of Deficit Reduction

Deficit reduction, whether brought about by spending cuts or tax increases, is supposed to help the economy by freeing up resources for investment or exports. This freeing up of resources can be beneficial in the long run for the economy because more investment should lead to higher productivity and more rapid wage growth. Higher exports are desirable in the long run because they reduce our foreign debt, and therefore the interest that will have to be paid out to foreigners in the future. Both of these benefits are long run in the sense that the positive effect will be felt sometime down the road, either by ourselves or by future generations.

The short-term effect of deficit reduction (its impact over the next three to four years), is not beneficial to the economy. Deficit reduction means either cutting government spending or raising taxes, or both. In the short run, these policies are clearly contractionary. They lead to lower economic growth, less job creation, and more unemployment.

In the case of a cut in spending, workers that used to be employed by the government are thrown out of work and must look for new employment. Suppliers of materials to the government, such as tanks or schoolbooks, also lay off workers when the government reduces its spending for their products. There is also a

secondary, or multiplier effect, that results from the falloff in consumption from the workers that lose their jobs. In the wake of being laid off, workers cut back spending. This change in their spending patterns causes a decrease in the demand for goods such as cars, computers, and clothes. Faced with this shrinking market demand, the producers of these goods lay off workers. The effect of the initial cut in spending on this second group of workers is called the multiplier effect.

The effect is essentially the same for a tax increase. Higher taxes reduce the money that individuals have available to spend, leading them to reduce their consumption expenditures. This leads to layoffs which again have the same sort of secondary multiplier effect discussed above.

In both cases the immediate impact of deficit reduction is to reduce demand in the economy and to throw people out of work. This is what is meant by saying that deficit reduction, "frees up resources." Workers who might have been otherwise employed producing goods for the government or private consumption are out of work and are now available to work in the production of either investment goods (factories, machinery, etc.) or exports. This may be desirable if the economy is really resource constrained, in the sense of being at full employment. This would mean that the only way to get more workers in the investment goods or export sectors would be by taking workers away from producing consumption goods or working for the government. However, there is nothing that automatically creates new jobs for these workers in producing exports or investment goods, nor is there any guarantee that these sectors will even expand at all in response to deficit reduction, particularly when the economy is in a weak condition, as it is at present. This means that the workers displaced because of cuts in government spending or tax increases may simply find themselves unemployed.

In the logic of Washington policy circles it has somehow become accepted wisdom that tax increases are more harmful to job creation and economic growth than spending cuts. For example, in arguing against the BTU tax (a tax based on energy consumption), the National Taxpayers Union claimed that the \$30 billion tax would cost 463,031 jobs. They argued that deficit reduction should be accomplished by spending cuts instead. If anything, a comparable reduction in spending would lead to even larger job losses. For example, it is generally estimated that \$1 billion in highway spending creates approximately 20,000 jobs.

This means that a reduction of \$30 billion in highway spending would cost roughly 600,000 jobs directly, and another 300,000 jobs indirectly through the multiplier impact.³ On the face of it, losing 900,000 jobs as a result of spending cuts looks worse than losing 463,031 jobs due to tax increases.⁴

Can Lower Interest Rates Offset Deficit Reduction's Contractionary Impact?

It is frequently claimed that the economy can be spared the pain of deficit reduction by lower interest rates which will prompt increases in investment and the demand for exports. Along with laying off workers, a lower deficit leads to less government borrowing, and therefore less demand for borrowing in general. This causes interest rates to fall, making it cheaper for firms and individuals in the private sector to borrow. This can cause firms to increase investment and make individuals more likely to buy homes or borrow to finance other consumption expenditures. It should also make foreigners less interested in holding US financial assets, which will cause the dollar to fall. This second effect should make U.S. exports cheaper for foreigners, and therefore increase our sales abroad.

Unfortunately, both these channels for increasing demand are weak and slow acting. The contractionary effects of deficit reduction, on the other hand, will be felt immediately. To refute the conventional wisdom, we need to understand why the impact of interest rates is slow to act on the components of demand: investment, exports, and consumption.

Investment

In the case of investment, the interest rate is only one factor of many that firms consider when undertaking investment. The full effect of deficit reduction on investment will depend on its effect on all the factors that are relevant to investment. The most important consideration for firms in their decision to invest is the degree to which demand for their product is growing. No one will build a new factory or expand an existing one when they are already operating well below their capacity. Studies have repeatedly shown that the rate of growth of demand is the most important factor determining the amount of investment that firms undertake.⁵

Another very important factor in the investment decision is the cash flow of firms. Most investment is financed out of firms' retained earnings, since it is generally far easier for firms to use this source of financing than to get bank loans or go into private credit markets. In virtually all econometric studies, cash flow and sales growth have been shown to be far more important than interest rates in promoting investment. Unfortunately, deficit reduction, by initially slowing the economy, will actually reduce both sales growth and cash flow (lower sales means reduced profits, and therefore lower cash flow). It is likely that the negative impact of sales growth and cash flow will more than offset any positive impetus from lower interest rates.

Even insofar as lower interest rates do lead to increased investment, they will not do so immediately. When interest rates fall, some firms will undertake more investment than they would have otherwise. This takes a significant period of time as firms have to both recognize that additional investment might be profitable and construct and implement plans for additional investment. According to most econometric models, it takes about two years for the bulk of the impact of lower interest rates on investment. This means that whatever increase in investment actually does take place will occur long after deficit reduction has contracted the economy.

Further, recent estimates show that the effect of lower interest rates on investment is so slight as to be of almost no consequence to total output. In the most extensive study to date of the investment patterns of individual firms, Steven Fazzari of Washington University concluded that a decline in real interest rates of 200 basis points (i.e., a drop in the real interest rate from 4 percent to 2 percent) would increase investment by just over 5.0 percent or approximately \$25 billion dollars.⁶ Even this effect would only be felt after a two-year lag (Fazzari 1993). In another recent study, Barry Bosworth of the Brookings Institution had a comparable estimate of the impact of the real interest rate (Bosworth 1993). He calculated that -0.06 was the elasticity of investment with respect to the real interest rate. This means that the investment rates will change at only 6 percent of the rate that interest rates change (Bosworth 1993, p. 87).⁷ Based on this estimate, the fall in long-term interest rates since their recent high point in November 1992 would generate less than \$10 billion of additional investment. (The

rate on thirty-year government bonds fell from a high of 7.7 percent in November 1992 to 6.7 percent in July 1993.) This estimated \$10 billion of additional investment will not go very far to offset the \$140 billion in annual deficit reduction targeted in the Clinton plan. These estimates of the impact of real interest rates on investment are similar to those calculated in many other studies over the last three decades. Economists have generally found the effect to be small or nonexistent.

The fact that investment is so unresponsive to interest rate changes means that deficit reduction cannot be seen as a reasonable strategy to promote investment and productivity growth. Whatever claims may be made about the merits of lower deficits, there is no reason to think that they will have any significant impact in terms of increasing the productivity of the workforce. It will be necessary to find other policies to accomplish this result.

The Response of Exports to Deficit Reduction

The prospect of a significant deficit-induced stimulus coming from export growth looks even less likely. Although interest rates have fallen significantly in recent months, the dollar has actually risen in value against most major currencies.' It has only fallen significantly against the Japanese yen. In the past, much larger drops in the value of the dollar relative to the yen have had only a minimal impact on the U.S. trade deficit with Japan. There is little reason to believe the situation will be any different now. Furthermore, Japan, along with most of the world is mired in its own economic slump. This means that demand for all products, including U.S. exports, is likely to be growing slowly, if at all. The most recent figures in this area are very discouraging. The International Monetary Fund (IMF) recently cut in half its estimate of world growth for 1993-94. Germany is now forecasting that its economy will actually shrink by 2 percent this year. Anyone expecting an export boom to stimulate the U.S. economy in the near future is clearly looking in the wrong direction.⁹

Of course, even insofar as a lower dollar can stimulate exports, it is doing so in part by reducing the nation's living standards. A fall in the dollar makes imports more expensive and therefore harder to purchase. Domestically produced goods that compete with imports will also rise in price to some extent, leading to a further decline in individuals' purchasing power.

The Impact on Consumption

A last possible source of demand induced by a fall in interest rates is through increased consumption. Although this provides no direct long-term benefits to the economy, if consumers increase their consumption as a result of lower borrowing costs, or reduced mortgage payments, then there will be a short-term boost to the economy. However, the effects here also are likely to be very limited. It is important to realize that for every borrower paying less interest or getting a cheaper mortgage, there is a lender receiving less investment income. Although borrowers on average may be somewhat poorer and therefore might spend a somewhat higher percentage of their available income, their increased spending will still be largely offset by decreased spending by lenders. Therefore, any net increase in spending through this route is likely to be small.

Furthermore, it is important to remember that interest rates had already fallen significantly during the summer of 1992. Many homeowners refinanced their mortgages before rates began to rise again in the fall. These homeowners are not going to be refinancing again just because interest rates fall to a slightly lower level. Also, as long as people remain fearful about losing their jobs, they will be reluctant to take on large amounts of additional debt in the form of mortgages or car loans. Although recently consumer debt has fallen slightly, it is still near record levels as a percentage of disposable income. Savings also remains at a historically low level. Consumer confidence is also at a very low level and is likely to remain low as long as job creation is weak and people's future employment prospects are unclear. For all of these reasons, it is unlikely that lower interest rates will lead to any surge in consumer spending.

What Do the Models Show?

The fact that investment is only loosely linked to deficit reduction and that the short-term effect of deficit reduction is contractionary is recognized by virtually all economists and incorporated into most serious macroeconomic forecasts. Robert Reischauer, the director of the Congressional Budget Office, has repeatedly stated that eliminating the deficit over a five-to-ten-year period will slow growth by about 0.5 percent per year (Congressional Budget Office 1993, pp. 79-80). This

growth slowdown would mean that the economy would generate about 500,000 fewer jobs each year. DRI/McGraw Hill recently ran a projection showing that moving to a balanced budget by the year 2001 would lead to an average reduction in growth of 0.4 percent per year, and about 450,000 fewer jobs per year than in the baseline scenario (DRI/McGraw Hill 1993). WEFA (Wharton Econometrics) recently estimated that moving to a balanced budget over 3.5 years would slow growth by an average of 2 percent per year, and would lead to approximately 3.4 million fewer jobs being created over the period (The WEFA Group 1992). The University of Michigan's model projected that the Clinton deficit reduction package would lead to a fall in gross domestic product (GDP) of about 0.3 percent by 1995 leading to 250,000 fewer jobs, even with a considerable positive impulse from his now dead stimulus package (RSQE 1993).

Forecasts of the Impact of Deficit Reduction

<u>Model</u>	<u>Number of Years in Plan</u>	<u>Amount of Annual Deficit Reduction in Final Year (in billions)</u>	<u>Average Change per year in GDP Growth from Baseline</u>	<u>Total Change in Job Growth from Baseline (in millions)</u>
DRI	4.0	\$160	-0.4%	-1.8
WEFA	3.5	281	-2.0	-3.4
CBO	5.0	320	-0.5	-2.5
Michigan	2.0	56	-0.3	-0.25
Fair	3.0	140	-0.6	-1.35
EPI	3.0	140	-0.6	-1.4

Source: Congressional Budget Office 1993, pp. 79-80; DRI/McGraw Hill 1993; The WEFA Group 1992; RSQE 1993; Fair 1993; and author's calculations.

The table on the previous page gives some of the estimates from major macroeconomic models of the impact of various deficit reduction packages.” As can be seen, these models all clearly indicate that the short-term impact of deficit reduction is slower economic growth and fewer jobs. While it is conceivable that in the long term, deficit reduction will lead to lower interest rates which will induce higher investment and net exports, this effect is uncertain and far in the future at best. During the period over which we can make reasonable forecasts, the impact of rapid deficit reduction is obviously negative. Reasonable projections of increases in investment and net exports do not come close to offsetting the contractionary impact of spending cuts or tax increases.

Conclusion

In short, there is a great danger from excessive deficit reduction in the current weak state of the economy. While lower deficits may in general be desirable, reducing the deficit at a time when the economy is already stagnating is almost guaranteed to worsen the economic situation. In the near term, the impact will be to lower growth and raise unemployment. Any positive effects will not be felt for some time. It is entirely possible, if not likely, that the damage done to the economy by weakening demand, with the resulting downturn in investment, may never be offset by any subsequent increase in investment brought on by lower interest rates.

Any effort to lower the deficit must be carefully calibrated to the current state of the economy. When the economy is strong and near full employment, it will be able to withstand the contractionary impact of deficit reductions without a significant falloff in growth and job creation. This is not the case at present. Currently, the economy is barely sputtering out of a recession, and employment levels have been stagnant for three years. It is extremely dangerous to attempt to craft a deficit reduction package that ignores the current state of the economy and the certain contractionary impact of deficit reduction in exchange for a vague hope of good things to come.

Endnotes

1. As quoted in the February 15, 1993 *Wall Street Journal* by Wessel and Vogel, p. A1.
2. The number of wage and salary workers counted in the Bureau of Labor Statistics (BLS) household survey is still below its pre-recession peak, 106,777 in May 1993 vs. 106,862 in June 1990.
3. Economists generally estimate the multiplier effect to be roughly half of the original effect
4. There can be some distinction between tax increases and spending cuts based on their incentive effects. The existence and size of the incentive effect will depend on the type of tax or spending change. For example, a consumption tax, like the proposed Btu tax, may discourage energy use and to some extent consumption in general. If the spending that is cut is something like the earned income tax credit, which provides low-income people more incentive to work, then it may lead to a slight falloff in labor supply. However, virtually all studies have shown that any incentive effect of a tax increase or spending cut will be swamped by the resulting change in demand.
5. For an excellent overview of the evidence comparing the impact of interest rates and demand growth on investment see Chirinko (1991). Also, a new paper by Steven Fazzari provides very compelling evidence based on the behavior of individual firms that sales growth and cash flow are far more important than interest rates in promoting investment (Fazzari 1993).
6. It is important to remember that it is the *real* interest rate that matters for investment. This is the difference between the nominal interest and the expected rate of inflation. Insofar as nominal interest rates decline simply as a result of a lower expected rate of inflation there should be no effect at all on investment. Many analysts have concluded that lower expectations of inflation were the major factor behind the recent fall in long-term interest rates.
7. It is worth noting that even this limited effect was not statistically significant in Bosworth's study, meaning that it is entirely possible that the actual effect of investment is zero, and that it was only by random chance that the data indicated a connection between the two.
8. The fact that the decline in U.S. interest rates has not led to a fall of the dollar against most currencies should not be surprising. It is generally recognized that speculative factors can cause large movements in currency prices over the short term. For example, Barry Bosworth argues that it often takes one year or longer for changes in fundamental factors such as interest rates to have an impact on exchange rates (Bosworth 1993, p. 132).
9. As with investment and interest rates, there is also a long lag between when there is a change in exchange rates and a change in exports. Barry Bosworth recently estimated that the full effect is not felt until three years after the change in exchange rates (Bosworth 1993, pp. 157, 160). It is important to remember that it will generally

be over a year before the exchange rate will have fully responded to a change in interest rates, leading to a total lag in excess of four years.

10. The table is constructed from estimates made at various points over the last year of different deficit reduction proposals. In the case of the Congressional Budget Office (CBO) estimates, the job loss number was imputed from the GDP growth estimate instead of being calculated directly. All the calculations for deficit reduction figures refer to changes in the structural deficit, that is, the change from the baseline in legislated taxes or spending. The actual amount of deficit reduction will be somewhat less, since the fall in GDP growth brought about by these deficit reduction packages will increase the deficit.

Bibliography

Bosworth, Barry P. *Savings and Investment in a Global Economy*. Washington, DC: The Brookings Institution, 1993.

Chirinko, Robert S. "Business Fixed Investment Spending: A Critical Survey of Modeling Strategies, Empirical Results and Policy Implications." Mimeo. Chicago, IL: University of Chicago, 1991.

Congressional Budget Office of the United States Congress. *The Economic and Budget Outlook: Fiscal Years 1994-1998*. Washington, DC: U.S. Government Printing Office, 1993.

DRI/McGraw Hill. Forecasts for the Competitive Policy Council. Cambridge, MA: DRI/McGraw Hill, 1993.

Fair, Ray. *FAIRMODEL. No. 2*. Fair-Parke program. Southborough, MA: MACRO Incorporated, 1993.

Fazzari, Steven. *Investment and U.S. Fiscal Policy in the 1990s*. Washington, DC: Economic Policy Institute, 1993.

Joint Economic Committee of the United States Congress. *The 1993 Joint Economic Report*. Washington, DC: U.S. Government Printing Office, 1993.

Research Seminar in Quantative Economics. *The U.S. Economic Outlook for 1993-94*, Prepared by Saul H. Hymans, Joan P. Crary, and Janet C. Wolfe. Research Seminar in Quantative Economics of the University of Michigan Ann Arbor, MI, March 12, 1993.

The WEFA Group. "Macroeconomic Effects of Balancing the Federal Budget by Fiscal Year 1995." Prepared for the American Federation of State, County, and Municipal Employees, AFL-CIO. By Kurt Karl and Jim McCune. Bala Cynwyd, PA: 1992.

Wessel, David and Thomas T. Vogel, Jr. "Market Watcher: Arcane World of Bonds is Guide and Beacon to a Populist President." *Wall Street Journal*, February 25, 1993, p. A1.