The Levy Economics Institute of Bard College

Public Policy Brief

No. 81, 2005

BREAKING OUT OF THE DEFICIT TRAP

The Case Against the Fiscal Hawks

JAMES K. GALBRAITH

Public Policy Brief

BREAKING OUT OF THE DEFICIT TRAP

The Case Against the Fiscal Hawks

JAMES K. GALBRAITH

The Levy Economics Institute of Bard College, founded in 1986, is an autonomous research organization. It is nonpartisan, open to the examination of diverse points of view, and dedicated to public service.

The Institute is publishing this research with the conviction that it is a constructive and positive contribution to discussions and debates on relevant policy issues. Neither the Institute's Board of Governors nor its advisers necessarily endorse any proposal made by the authors.

The Institute believes in the potential for the study of economics to improve the human condition. Through scholarship and research it generates viable, effective public policy responses to important economic problems that profoundly affect the quality of life in the United States and abroad.

The present research agenda includes such issues as financial instability, poverty, employment, problems associated with the distribution of income and wealth, and international trade and competitiveness. In all its endeavors, the Institute places heavy emphasis on the values of personal freedom and justice.

Editor: Greg Hannsgen
Text Editor: Tim Yohn

The Public Policy Brief Series is a publication of The Levy Economics Institute of Bard College, Blithewood, PO Box 5000, Annandale-on-Hudson, NY 12504-5000. For information about the Levy Institute and to order Public Policy Briefs, call 845-758-7700 or 202-887-8464 (in Washington, D.C.), e-mail info@levy.org, or visit the Levy Institute website at www.levy.org.

The Public Policy Brief Series is produced by the Bard Publications Office.

ISSN 1063-5297
ISBN 1-931493-45-6

Contents

Preface 5
Dimitri B. Papadimitriou

Breaking Out of the Deficit Trap 7
James K. Galbraith

About the Author 26

Preface

For some time, Levy Institute scholars have been engaged with issues related to the current account, government, and private sector balances. We have argued that the existing imbalances in these accounts are unsustainable and will ultimately present a serious challenge to the performance of the U.S. economy.

Other scholars are also concerned, but for reasons that we do not share. They argue that the interest rate is determined by the supply and demand of saving. When the government reduces its saving, the total supply of saving falls, and the interest rate inevitably rises. The result, they say, is that interest-sensitive spending, and investment in particular, falls. Finally, these scholars say, less investment now necessarily implies less output in the future.

In this new brief, Senior Scholar James K. Galbraith evaluates a recent article by William G. Gale and Peter R. Orszag, two economists who regard this view of deficits as plausible. He forwards an alternative, Keynesian view. This alternative suggests that deficits can increase overall output, possibly enabling the government to spend more money without increasing the ratio of the debt to GDP. He casts doubt on the notion that the interest rate is determined by the supply and demand of saving, arguing that monetary policy plays a much larger role than Gale and Orszag allow for. Moreover, he writes, strong demand for goods and services is more important than the supply of capital in determining the pace of technological advance and the rate of growth of output per worker.

Though he is skeptical about Gale and Orszag's theoretical framework, Galbraith calls attention to some important econometric findings in their paper. Gale and Orszag calculate the effects of deficits on the interest rate. Consistent with Galbraith's view, monetary policy turns out to be a major determinant of long-term interest rates. When interest rates are

measured as the current cost of funds, Gale and Orszag find that deficits have no significant impact on interest rates.

Galbraith's theoretical view of interest rate determination, together with Gale and Orszag's empirical findings, constitutes a powerful rebuttal of the reflexively antideficit view. Recent economic history suggests that this rebuttal is plausible. The recent increase in the U.S. federal deficit has not yet resulted in high interest rates. Interest rates in Japan, where deficits have been very large, remain at rock-bottom levels.

The Levy Institute continues to believe that, together, unsustainable economic imbalances amount to one of the nation's most pressing issues, as we believe our *Strategic Analysis* series has documented. As Galbraith demonstrates, however, some observers are placing an undue emphasis on government deficit reduction, as if the government were the source of all that ails the economy. A more balanced approach would take into account the pernicious effects of excessive private debt and the need to devalue the dollar.

We believe that our readers, especially those who follow the *Strategic Analysis* series, will find this brief to be a helpful look at another facet of the complex and knotty deficits problem.

As always, I welcome your comments.

Dimitri B. Papadimitriou, *President*
June 2005

Breaking Out of the Deficit Trap

"*Reagan proved deficits don't matter.*"
Dick Cheney (quoted in Suskind 2004, p. 291)

Far be it from me, a card-carrying member of the Texas Left, to defend the moral character of Richard Cheney, the Apogee of Evil. But fiscal policy is not a matter of moral character. It is a matter of economic argument, of theory and evidence.

That being so, this essay reviews an influential recent paper, which outlines the widely accepted case for treating current and future budget deficits as our most urgent economic policy priority. The results are not pretty. To a large extent, my review shows that the paper's theoretical arguments are flawed, and the empirical evidence is inconclusive. Overall, the case for treating budget deficits, either current or prospective, as a deeply threatening phenomenon is surprisingly weak. But this weakness has been overlooked, owing perhaps to the great prestige of the many economists who have lent their support to these arguments, or perhaps to the deepest will, on the part of a convinced readership, to believe the conclusions.

In a September 2004 paper—to be published later in 2005—entitled "Budget Deficits, National Saving, and Interest Rates," William G. Gale and Peter R. Orszag of the Brookings Institution and Tax Policy Center perform the heroic service of laying out the case in clear and comprehensive terms. As they summarize it, their argument holds that "sustained budget deficits reduce national saving and raise interest rates by economically and statistically significant quantities." Since this paper by two recognized authorities sets out to make the strongest case for a single-minded focus of policy on fiscal discipline, we may safely take it as the grand exemplar of the genre. If its arguments are refuted, then so are all of the others.

Does Anyone Remember a Fellow Named Keynes?

Gale and Orszag (hereafter referred to as GO) begin by identifying three "principal perspectives" or models of the effect of deficits on the macroeconomy. They are:

1. "The Ricardian equivalence hypothesis, [according to which] such deficits are fully offset by increases in private saving and have no effect on national saving, interest rates, exchange rates, future domestic production, or future national income."
2. "the small open economy view, [which] suggests that budget deficits reduce national saving, but that international capital inflows finance the entire reduction in national saving."
3. "the conventional view, [which] suggests that deficits reduce national saving and that the reduction in national saving is at least partly reflected in lower domestic investment."

The GO paper is a brief for the conventional view: that deficits raise interest rates, lower "national saving" and therefore national investment, and ultimately the capital stock and national income. But before assessing the theory and the evidence behind the case, there is an elementary question of scholarship. In the GO taxonomy of models, has anything been left out?

Well, something has been, for there is a fourth perspective. It is associated with the followers of a once-prominent British economist of the early 20th century, by the name of John Maynard Keynes. GO make no reference to Keynes in their paper.[1] Keynes's name does not appear in their references (although they find room, among the "K"s, for Lawrence Kudlow). Nor is there mention of any modern Keynesian economist. The late Robert Eisner, president of the American Economics Association in 1988, is not mentioned; nor is the late William Vickrey, president in 1992. Paul Davidson, editor of the *Journal of Post Keynesian Economics*, is not mentioned. The widely read and up-to-date papers of Wynne Godley and his coauthors (e.g., 2002, 2003, 2004) are neither mentioned nor cited. So far as GO are concerned, the Keynesians have been airbrushed from economics, much as Trotsky was from history in the Soviet Union. It is a scholarly lapse. And it is not innocent. It permits GO to proceed without

considering the most serious objections to their position, while focusing their fire on the absurd propositions of a frivolous theory.

As GO state, "the distinction between the first model [i.e., Ricardian equivalence] and the latter two is most fundamental"—that is, of those models they are willing to consider. What is Ricardian equivalence? It is the idea that a tax reduction, holding government spending constant, will be dealt with by the rational representative household as an event certain to be completely offset, in the future, by an increase in taxes equal to it and the meanwhile accrued interest. According to this proposition, with which Robert Barro has been beguiling the gullible for 30 years, the effects of budget deficits on spending are completely, immediately, and fully negated by the reaction of private savings. And this is not only for present budget deficits, created by reductions in current taxes, but also for deficit-creating tax cuts into the future—as they may be programmed by a tax-cutting Congress. According to this hypothesis, households, projecting over an infinite horizon, always know better. They always fully anticipate, and fully offset through increased savings, the ultimate increase in taxes that must inevitably come as the government eventually is forced to balance its accounts.

It is truly difficult to overstate the silliness of Ricardian equivalence as a starting point for a discussion of fiscal policy. GO acknowledge that "virtually no one claims that Ricardian equivalence is literally true. Rather, the controversy is over the extent to which Ricardian equivalence is a good approximation of the aggregative impact of fiscal policies." To bring this question into focus, GO investigate the obvious implication of the Ricardian hypothesis, that a cut in taxes will have no impact *whatever* on aggregate consumption expenditure. What they find, after a great many pages of detailed and careful work, is that, in the estimates they find most convincing, "a range of about 50 to 80 cents of every dollar in tax cuts is spent in the first year. This range . . . is inconsistent with the Ricardian prediction of a full offset from private savings and the difference . . . is economically important." So far, no one can disagree.

But GO go on to make the following theoretical argument: "An increase in the budget deficit reduces national saving unless it is fully offset by an increase in private saving. If national saving falls, then national investment and future national income must fall as well, all else equal.

In other words, *to the extent* that budget deficits reduce national saving, they reduce future national income" (emphasis added).

This is a simple, seemingly inexorable argument. But it is built on a very poor and shallow theory of economic output and of economic growth. And by GO's own account, as we shall see, there is little evidence that the mechanisms on which they rely to implement their syllogism in fact operate as advertised in the real world.

The underlying growth theory in the GO vision of the world holds, in essence, that the future size of the real GDP depends solely on the size of the real capital stock, which itself depends solely on the physical quantity of new capital investment. Full employment of labor is assumed. Thus the goal of good economic policy is to optimize the quantity of capital set aside from current consumption for the benefit of future production, and hence the future size of the GDP. The sole effect of a budget deficit, in this construction, is to shift resources from saving and investment to consumption. That is the relevance of the 50 to 80 percent estimates quoted above. In this way, budget deficits are per se injurious to future growth.

But, since they merely shift resources from investment to consumption, it also follows inexorably that in the GO model—apart from the escape clause "all else equal," which GO never explore—*budget deficits also have no effect on current GDP.*

This is where the Keynesian begins to see red. Do GO and the advocates of what they call the "conventional model" really believe that tax cuts which are (as they say) 50 to 80 percent spent in the first year have *no* effect on *current GDP?* Here is the situation as GO imagine it. First, as they say in their opening paragraphs, they assume that government spending is held constant; thus "G," which is a direct component of GDP, is unaffected. Now add a mean estimate of 65 cents of new consumption spending to the income stream, per dollar of tax cut. By the universally accepted rules of national income accounting, this is an additional 65 cents of new gross domestic income. So far, no argument is possible: GDP must have risen by 65 cents. For there to be no net increase in GDP, something else must fall. We can rule out a cut in gross exports; there is no mechanism to reduce foreign orders for domestic goods. And while a rise in consumption will certainly be offset to some extent by a rise in imports, GO do not claim that the offset works on a penny-for-penny basis.

Radical Crowding Out and Extreme Monetarism

The remaining possibility is that the rise in consumption engenders an exactly offsetting fall in gross private business investment, as indeed GO state explicitly in the passage quoted. This is a proposition of 100 percent crowding out, embedded in an assumed world of permanent full employment and full-capacity production.

Are GO saying, for instance, that the 2001 Bush tax cuts *caused* the slump in investment that occurred in that year? Well, yes, it turns out that they must be saying that—or something extremely similar. (It is true, of course, that the investment slump started in the early months of 2001, under the former, high tax, high-saving regime, and the tax cuts came in at the end. Are you troubled by this? Well then, perhaps the *expectation* of tax cuts caused the slump in investment. . . .) GO do not, of course, go this far explicitly. But so long as one does not allow for the level of income to fluctuate in response to falling aggregate demand, one cannot otherwise explain the 2001 recession. Therefore such an inference, weird though it is, is clearly implied in their theory.

Indeed, when GO consider the effect of their "adjusted baseline" deficit projections—basically the Congressional Budget Office (CBO) budget baseline rendered somewhat more credible by allowing for certain actions Congress is highly likely to take—they come close to an explicit—and, as we shall see, even more extreme—statement of their GDP determinism. For the effect of these adjustments is to raise the projected unified budget deficit from a trend downward toward zero by 2014 under the CBO baseline to 1.4 percent of GDP, and then upward again to 3.6 percent of GDP if in addition the 2001 and 2003 tax cuts are made permanent, as the President would like. GO write of this scenario: "One way to gauge the implications of the adjusted unified baseline is to examine the implied ratio of public debt to GDP. . . . Under the adjusted baseline, the debt-GDP ratio would rise steadily throughout the decade and by 2014 would equal 55 percent, well above the most recent high of 49 percent in 1992 and the highest level since 1955. The debt-GDP ratio would continue to rise thereafter." A footnote goes on to suggest that under these conditions the debt-GDP ratio would rise to 139 percent of GDP in 2030, 505 percent in 2060, and 942 percent in 2080.

What is the estimate of nominal GDP used to calculate this debt-GDP ratio? Evidently, *it is exactly the same nominal GDP* forecast that was used to calculate the debt-GDP ratio under the CBO's original baseline forecast, under which deficits decline nearly to zero by 2014. In other words, GO explicitly postulate that a fiscal shift of 3.5 percentage points of GDP—roughly $420 billion in today's terms, every year into the indefinite future—has not a pennyworth of stimulative effect on GDP. And moreover, this postulate is not limited to the idea that real GDP is governed by the real capital stock. In addition to that, it holds that deficits on this scale *also have no effects on inflation.* By the mean of their own estimates, GO hold that deficits equal to 3.5 percent of GDP on average would generate new nominal consumption spending of 2.3 percent of GDP every year. This is spending that by accounting definition ($Y = C + I + G + X - M$)[2] enters directly, by addition, into the calculation of nominal GDP. Yet GO hold that this injection has no *net* effect on nominal GDP.

This is truly an improbable view.

To repeat: The national debt is a financial stock, a nominal number. The debt-GDP ratio is a ratio of nominal numbers. If nominal GDP rises—whether the cause be real growth or inflation—the debt-GDP ratio will fall, *all else being equal.* GO deny the very possibility that *nominal* GDP can rise. By doing so, they have slipped into their doctrine at this point a monetarism so extreme that they nowhere see fit to acknowledge its presence in their theory.[3]

To repeat again: There is evidently *no scope* in the GO theory for fluctuations of aggregate effective demand. Nor can GO account for changes in unemployment, apart from shocks to the capital stock (or, perhaps, unemployment interpreted as voluntary fluctuations in the supply of labor by the strange lights of real business-cycle theory, though GO do not discuss this). The GO theory is one in which production is governed by the existing capital stock, *come what may*. Inflation is governed by money creation, *come what may*. Under their theory, the Great Depression, seen as a demand shock, never occurred. Nor did any of the postwar recessions, including that of 2001. These events too have been airbrushed from history.

The Fetish of the Real Capital Stock

A second and perhaps more subtle problem with the GO theory lies in their total reliance on growth of the capital stock to explain growth in real (inflation-adjusted) output. In effect, they hold that the marginal efficiency of investment is invariant: that every dollar of new investment is as good as every other. Except insofar as one might like to consume *something* today, future GDP can always be enhanced by shifting resources from consumption to investment.

The difficulty here is twofold. First, it is not true that future real GDP is always enhanced by more investment. Investment can be excessive, pointless, unproductive, a complete waste. So it was in the declining days of the USSR, when investment rates of 40 percent or more of total product added nothing, or possibly less than nothing, to usable output. And lest one immediately respond with the predictable slur on central planning, the same point exactly can be made about investment under free-market capitalism, for instance at the peak of the dot-com boom. In the early 2000s, according to press reports, 98 percent of newly laid fiber-optic cable lay dark and unused. That is a record that would have embarrassed any central planner in Budapest, let alone Moscow, in the 1950s.

Second, it is not true that GDP growth relies mainly on new capital investment. This is not true even in the most orthodox, most conventional, most upstanding, and most neoclassical formulations of growth theory. It is not true, even in the holy of holies, the Solow growth model. As every first-year graduate student knows, the precise contribution of Robert Solow's work was to establish that capital accumulation cannot and does not account for the greatest part of real income growth in the modern capitalist world. What does? The "Solow residual" of course—sometimes referred to, tautologically, as "technical change."

For instance, while the rise in real GDP of the late 1990s owed much to a rise in new gross capital formation, it also reflected a broad rise in the rate of productivity growth, which is to say to higher output achieved from each working American. Economists purport to be puzzled by the exact causes of the rise in productivity growth, but in this period they are not especially hard to find. The Verdoorn law (known to Keynesians) predicts rising productivity in the upswing toward full employment. It is entirely consistent with that law, that businesses should seek more

efficient use of scarce labor, with existing capital, when employment becomes full and labor becomes relatively scarce. There is every good reason to believe that just this did occur in the late 1990s, at which time the supposed nonaccelerating-inflation rate of unemployment famously collapsed. Indeed, inflation stayed completely under control even though wages rose, especially for low-income workers (see Galbraith 1998).

Summing Up So Far

The Keynesian rejoinder to the GO theoretical vision can be summarized in three points:

1. It is not possible to stimulate nominal GDP through fiscal policy without experiencing *some* actual expansion of nominal GDP. The expansion may be real in part, inflationary in part. The inflation, if it occurs, may be undesirable. But whatever the division between real and price change, the resulting ratio of debt-GDP will be smaller than would be the case had no stimulus occurred. This is a mathematical fact, which obviates GO's debt-GDP projections.
2. The economy does not normally operate at full employment and capacity, and some growth of *real* GDP is therefore a *characteristic* response to fiscal stimulus. Such growth raises the potential for accumulation of capital goods and durable goods, and hence the possibility of a higher living standard in future years. This is a good thing, whatever the effect of deficits on the consumption-investment *balance* may be. It is even possible, in principle, to have a lower *investment share of GDP* and more *actual investment* at the same time.
3. When demand for real output exerts pressure on the supply of labor, induced productivity growth tends to occur. This raises living standards now and in all future years, whether or not there is any increase in net investment or capital formation.[4] On theoretical grounds alone, therefore, the fears GO express about future budget deficits are plainly overstated. This is because they rigorously ignore the Keynesian effects on total output. But such effects cannot be ignored. On the contrary, they are central to any serious understanding of the effects of budget deficits on the economy.

Will Our Creditors Do Us In?

We next turn briefly to the international aspects of this question. GO distinguish between two cases: one where the "flow of capital from overseas is infinitely elastic" and a second case where it is not. In the first case, budget deficits are fully offset by capital inflow at the unchanged interest rate. However, GO argue: "Since the domestic capital stock remains the same, domestic output (Gross Domestic Product) is constant. Americans' claim to that output, however, declines because the increased borrowing from abroad must be repaid in the future. In other words . . . future Gross National Product declines even though Gross Domestic Product is constant." Here, GO make the distinction between, on the one hand, goods and services produced by American capital and labor in the United States and abroad, and, on the other, goods and services produced within U.S. borders.

But it is not true that today's imports necessarily imply tomorrow's exports. Yes, foreigners acquire dollar assets. But if in future they happen to want more U.S. exports, those assets are almost completely irrelevant to that demand. The rich regions especially, such as Europe and Japan, do not need dollars to buy U.S. goods, and their accumulation of dollars today does not imply larger purchases of U.S. products later on. They may, of course, some day decide to sell their dollars for other currencies, including their own. But then, the dollar will merely be devalued. This reduces, after the fact, the value of all dollar holdings, until the selling stops. Such action does not constitute "repayment." To the contrary, the largest losses would be felt by those who held the largest hoards. And even if foreigners do decide to buy U.S. products eventually, such sales do *not* necessarily imply any fall in future real GNP. With stronger demand from exports, real GDP (and GNP) will grow, partly through productivity growth induced by full employment. If so, dollar assets can later be exchanged for exports from that larger GNP, and the U.S. will not be worse off for having deferred payment on today's imports and today's high living standard.

One paragraph later, GO extend their embrace of the myth of creditor power, quoting Truman (2001) on the possibility that foreign investors may demand a "higher risk premium" on dollar assets, and Friedman (1988) on the proposition that "world power and influence have historically accrued to creditor countries." But these comments are rooted in a

world that no longer exists. Under the gold standard, yes, having the gold meant making the rules. But still better was to own the gold mines! Nowadays, the very fact that the world community chooses to hold the dollar means that the United States now operates, on Constitution Avenue in Washington, D.C., the equivalent of an inexhaustible gold mine. Foreigners accumulate those dollars (just as India and China in the 19th century served as "sinks for gold"). They can, in principle, sell them. But they cannot drive the dollar's price down too far without gravely endangering their own competitiveness, wrecking their own industries, and devaluing their portfolios, as the Europeans, Japanese, and Chinese know well. This limits their leverage over our interest rates. Nor can they escape from the dollar, so long as no other source of demand presents itself for their goods, and so long as no other source of liquid reserves is being supplied in the aggregate, for instance by the European Central Bank—a gold mine that refuses to open for business. Truly, exorbitant privilege is a wonderful thing.

Deficits and Interest Rates: What Theory Are We Using Here?

We now turn to GO's principal claim, which rests on their third model, the second that they consider plausible, under which the supply of foreign capital is not potentially infinite at the going interest rate. In this formulation, budget deficits suppress investment by raising real interest rates here at home. The question is, by how much? And what is the applicability of the GO estimates to the current actual situation of the United States?

This economist read with some astonishment GO's presentation of their theory of the linkage between budget deficits and interest rates. It is done entirely in real terms, and the calculation of the interest rate effect is entirely in terms of an effect on the "marginal product of capital." This is a slippery concept that implies that there is such a thing as the output due to an additional unit of capital, whatever that is. In their key illustration, GO write: "Suppose that one-quarter of the decline in public saving is offset by an increase in private saving . . . [then] the budget deficit rises to 3.5 percent of output, private savings rises to 20.25 percent of output, and the national savings rate declines to 16.75 percent. Given the reduction in national saving, output per capita in the new steady state is reduced

by 1.9 percent. The marginal product of capital is 54 basis points higher. If we assume that the change in the government borrowing rate is equal to the change in the marginal product of capital, the implication is that the increase in the unified budget deficit raises the interest rate by 54 basis points."

This is enough to make the skin of any Cambridge-bred economist crawl. Not only have Keynes, Keynesians, recession, and inflation been airbrushed from history, so too have the capital controversies, whose force was once conceded by no less a neoclassical than Paul Samuelson (1966). It is in no way legitimate to derive an interest rate from a marginal-product-of-capital calculation. The aggregate capital stock is not a homogeneous mass of physical substance (a pure fund, corn, or "leets" as Joan Robinson called it) with a physical "marginal product." It is a complex mass of physical machinery and process goods, only measurable as a valuation in financial terms. That valuation depends partly on an exogenous rate of interest. Further, as the rate of interest rises or declines, choices of technique within this complex mass of equipment are prone to change in erratic ways—owing to different time patterns in the life of particular elements of the stock, and to the varying profitability of alternative techniques at different rates of interest. Thus there is no consistent relationship between the "capital intensity" of production in the aggregate and the interest rate. It is certainly wrong to claim that a reduction in physical quantities of capital is coherently associated with a rise in the rate of interest.[5]

For those for whom the above is too complex, arcane, and obscure to grasp, and who do not have a copy of Harcourt (1972) handy, it may be enough to point out that, in the GO theory of the interest rate, there is no financial market at all. Banks play no role. There is no clear theoretical distinction between short and long-term interest rates, no theory of the yield curve. Nor is there any central bank. Alan Greenspan does not exist in this model. Or perhaps it is better to say, he is a mirage, an apparition, a humbug, a wizard of Oz. Believe that, and truly you can believe anything.

I do not offer these points to disparage the econometric skill GO present in this paper, both in their calculations of the effect of tax reductions on consumption at the margin and in their review of estimates of the empirical effect of projected deficits on interest rates. Econometrics is clearly their strength. Equally clearly, economic theory is not. But the econometrics makes sense only if it can be embedded in and is consistent

with a well-framed theoretical worldview. And GO embed good estimates in indefensible theory.

Having said that, a Keynesian has no trouble accepting GO's estimates of the marginal effect of tax reduction on consumption, for their estimates of a 50 to 80 percent marginal propensity to consume in the first year pose no problem for the Keynesian theory. The idea that budget deficits might modestly raise interest rates is not troubling to a Keynesian either. Such an event could be part, in particular, of the Federal Reserve's response function. In the standard mainstream Keynesian model, the IS–LM diagram, (as GO acknowledge) the interest rate will normally rise in response to an expansionary fiscal policy. However, except in a single, extreme case, nominal output will normally rise in the face of expansionary fiscal policy—and usually real output gains will be part of that. GO in effect impose this extreme assumption on any thinking through of their propositions in terms of textbook Keynesianism, and there is no justification for that.

Do Deficits Increase Interest Rates? What the Regressions Showed

We turn now to the GO interest-rate regressions. Here the question is whether, after taking account of suitable control variables, one can discern a stable empirical relationship between rising deficits or federal debt and some measure of the interest rate. Since the focus is on effects of deficits in future time, obviously a measure of the long-term interest rate must be used. Two preliminary issues present themselves: whether the control variables are correctly specified, and whether the measure of interest rates is correctly chosen. With these taken care of, the final question must be: how large is the effect GO find, and how conclusive is their finding as to its existence?

GO's controls include variables for recession[6] and measures of defense spending, oil prices, and the equity premium, as well as a variable covering Federal Reserve purchases or sales of Treasury securities, which they treat as a measure of monetary policy. They find that their measure of monetary policy has an "economically significant and statistically precise" effect on current long-term interest rates. This is again reassuring to a Keynesian. But it is destructive to GO's argument about deficits and interest rates. It suggests, against the view clearly stated in GO's own theory, that *in principle* Federal Reserve action could completely offset the effect of rising

deficits on interest rates. That the Federal Reserve chooses not to do so is, therefore, merely a matter of debatable policy choice. GO do not make much of this point, preferring to distract attention from it by noting that Federal Reserve policy does not appear to affect *forward* long-term interest rates. But if monetary policy can offset the effects of deficits on actual interest rates, it can clearly—in principle, anyway—prevent any harm of deficits to investment.

The difficulties of the monetary policy control variable do not stop there. For the idea that the Federal Reserve affects the interest rate mainly or even substantially by buying and selling Treasury securities is just a textbook caricature, and it has been visibly out of line with actual Federal Reserve practice for many years. In reality, the Federal Reserve sets the short-term interest rate (the overnight rate on federal funds) in a much simpler way: by announcing it. When the announcement is made, the rate changes, before any purchases or sales of securities need to occur. And often enough, few or none need occur to make the change effective.

That being so, one should ask: What if the short-term interest rate entered directly into the determination of the long-term interest rate? (It is clear from any casual examination of the data that the two series are strongly related, though not perfectly so.) Such a reformulation of the basics of interest rate determination would have two effects on the GO argument. Theoretically, it would knock away any reason to believe in a connection running from deficits through the rate of national saving, the capital stock, and the marginal productivity of capital to the long-term interest rate. It would instead assert (again, with Keynes) that the principal force over long-term interest rates is the current and expected future path of short-term interest rates, variables entirely determined by interaction of Federal Reserve policy and the psychology of financial markets (inter alia, liquidity preference). In that case, future deficits could affect long-term interest rates only for one reason: the belief, however irrational it may be, of financial market participants that they will have such an effect. In medicine, this would be called a psychosomatic disorder.

The second preliminary issue concerns the specification of the relevant long-term interest rate. GO choose two variants: the actual current 10-year interest rate, and a calculation that they call the "forward 10-year interest rate," which is not an actual forward rate but rather something

calculated from the zero-coupon yield curve, taking the average of one-year rates expected from five to 14 years out. The forward rate is thus a projection of what the 10-year rate will be five years from now. The current 10-year rate is an actual cost of borrowing. The forward rate is nearly a pure reflection of market sentiment, with little to no practical importance for the cost of funds to the government or the interest rate charged on private borrowing.

This distinction becomes important when one looks at the empirical results, where we discover a wide range of estimates of the effect of deficits on interest rates. Thus, GO highlight the finding that: "An increase in the projected unified deficit equal to 1 percent of GDP raises the forward long-term real interest rate by 29 basis points. An increase in the projected primary deficit of 1 percent of GDP is associated with a larger impact on the forward long-term rate: 40 basis points." They go on to note that various control variables have little effect on these estimates, while allowing the projected federal debt to enter the equation raises the effect to 40–67 basis points, per percent of GDP.

However, when one goes on to examine the effect of GO's model on actual 10-year interest rates, the picture changes: "With only fiscal variables entered or only fiscal and recession variables entered, the coefficients on the fiscal variables tend to be somewhat smaller than when the forward long-term interest rate is used . . . but are still statistically significant. . . . *The coefficients become smaller and statistically insignificant when the additional control variables are included.* The coefficient on primary deficits falls to 17 basis points" (emphasis added).

Moreover: "When real current rates are used and both projected debt and primary deficit variables are included . . . the estimated coefficient on the primary deficit variables increases to over 50 basis points in the specifications that include only fiscal variables or only fiscal and recession variables, *but disappears when all control variables are included.* The results are similar when nominal rates are used and when both debt and deficit variables are entered simultaneously" (emphasis added).

In other words, projected deficits appear to exercise an influence on a constructed measure of the 10-year interest rate five years into the future. But so far as actual current long-term interest rates are concerned, there are no consistent results. When control variables that GO themselves chose

are entered into the equation, the effect of projected deficits on actual interest rates disappears. Moreover, despite the extremely scary future debt-to-GDP numbers built into their projections, GO never find that these numbers have any effect on real or nominal interest rates, when projected deficits are also included.[7]

And How Much Would Higher Interest Rates Really Cost?

At this point GO plunge to their conclusions, which involve a fast calculation based on their "preferred" estimates, of the effect of a 3.5 percent of GDP budget deficit, as compared to budget balance, from now through 2015. They find that this raises the forward interest rate by a mean estimate of one percentage point (80 to 120 basis points). They then argue that this will reduce national assets by 20 to 30 percent of GDP "compared to their level if we balance the unified budget over the next decade." Finally, they argue that this effect will reduce national income by 1 to 2 percent.

Several points can be made in summary critique of these estimates. First, they apply only to the forward and not to the actual interest rate. They have no relevance for the current borrowing cost of the federal government or the private sector. Second, by GO's own estimates, the effects on those costs could be as low as zero. In other words, *it is their conclusion that nothing definite can be said* about the effect of their most-likely deficit scenario on the actual course of real or nominal long-term interest rates.

Suppose that the threat of higher interest rates in the future were, in fact, to be taken seriously on this evidence. Can one really believe that a one percentage point increase in the 10-year rate five years from now will reduce "assets owned by Americans . . . by roughly 20 to 30 percent of GDP"? This claim amounts to saying that the difference between present levels of the 10-year interest rate—4.5 percent—and the levels five years ago—6.5 percent—would have been sufficient if fully foreseen to engender a 40 to 60 percent *growth* in "assets owned by Americans" relative to GDP (whatever that means exactly) over a decade's time! No greater endorsement of the Bush policies could be hoped for.

But the claim is preposterous. GO's calculation of the effect of deficits on savings and asset ownership is transparently done by a pure act of arithmetic. Plainly, they did it by subtracting two-thirds of the projected

deficits from private investment, and compounding for 10 years. This has nothing do with the channel of effect through the interest rate, which is manifestly far too narrow to carry the force of their argument.

The present 10-year interest rate is under 5 percent, or around 2 to 3 percent in real terms. Currently, private investment as a share of GDP is at 16.9 percent—about a point *higher* than its long-term historical average going back to 1950. Can anyone believe that present deficits are causing an investment shortage? Can anyone believe that a rise in the interest rate of one percentage point five years hence would be a disaster from which private businesses could not recover their financial footing—despite the fact that just five years ago they were borrowing furiously at much higher rates? Can one therefore seriously believe, *on this evidence*, that present or future budget deficits are the calamity that this paper, and other prominent voices, including the International Monetary Fund and the leadership of the Democratic Party, make them out to be?

Finally, consider the implicit trade-off facing a politician. Under the GO argument, a political leader can choose a preferred combination of budget deficits and interest rate increases for the decade ahead. By the GO calculations, the terms of the choice allow for a policy of giving away to voters, in tax reductions or spending increases, over 400 billion dollars of benefits every year—almost the size of the defense budget! In the worst case, the cost of doing so is a *projected* increase in the 10-year interest rate, five years ahead, of one percentage point. What sane politician, not blinded by the fatuities of Wall Street and the modern press corps, wouldn't take this bargain? Can anyone blame the current Republican leadership—shrewd businessmen if nothing else—for grabbing it and refusing to let go?

Conclusion

In effect—though not in intent—GO have proved that deficits don't matter—at least not on the scale presently projected. Their theory to the contrary doesn't hold, and their econometric work does not support their case, though it is consistent with a Keynesian view whose existence they decline to acknowledge. If this is the best scientific argument of which the antideficit camp is capable, the entire position is in deep trouble. And those who oppose the drift of America under Cheney and Bush *ought* to

stop hiding behind platitudes of public finance. They ought to be looking for a bolder, more substantial, more coherent economic program, one that addresses real problems—such as jobs, health care, energy, global warming, and the risks and costs of war.

A Final Word

"*If all this causes headaches for those nostalgic for the old time parables of neoclassical writing, we must remind ourselves that scholars are not born to live an easy existence. We must respect, and appraise, the facts of life.*" Paul A. Samuelson (1966, p. 583).

Notes

1. The word "Keynesian" does occur, on page 18, in a statement that is misleading. GO state that the "pure Keynesian benchmark" for the expenditure out of a tax cut in the first year "would be close to 100 percent." In fact no Keynesian believes this. The Keynesian benchmark is that the rise in spending from any increase in disposable income will be governed by the *marginal* propensity to consume, which in all Keynesian analysis is presupposed to be considerably less than 100 percent.
2. National income equals consumption plus investment plus government spending plus exports minus imports.
3. One may reply, with some truth, that this procedure has been standard practice for many years in budget documents, both of the OMB and the CBO, and that to do otherwise would create many difficulties for consistent budget planning. But we are talking here of economics. What is established and good for the convenience of budget planners cannot be decisive in the logic of economic thought.
4. One more doubtful piece of the GO analysis concerns their acceptance of long-term estimates of projected medical costs, which are forecast to exceed the growth rate of GDP by a percentage point per year indefinitely. Naturally this leads to a growing share of health care costs in GDP. But it is very improbable that this will occur in fact, for the simple reason that society won't sit still indefinitely while medical costs rise to absorb the whole of national income. To paraphrase a comment by Dean Baker, at some point it would pay us to send all of

our seniors to France for the socialized medical care, and to buy them villas on the Riviera with the savings.

5. These points, though almost universally forgotten by the mainstream of the neoclassical economists, are entirely uncontroversial in the literature, and the willful return to the John Bates Clark or Cobb-Douglas formulation of interest rate theory may be likened to a reversion to "intelligent design" in biology, except that it has occurred without objection from those who should know better. This author, however, spent too many weeks in graduate school grappling with these points to give up on them now.
6. It is unclear why they consider a recession dummy legitimate under a theoretical framework that precludes recessions, but we may pass on that point.
7. Boskin (2004) makes a similar point about the unrealism of these numbers.

References

Boskin, M. J. 2004. "Sense and Nonsense About Federal Deficits and Debt." *The Economists' Voice* 1:2. www.bepress.com/ev/vol1/iss2/

Eisner, R. 1997. *The Great Deficit Scares: The Federal Budget, Trade, and Social Security.* New York: The Century Foundation.

Friedman, B. 1988. *Day of Reckoning: The Consequences of American Economic Policy under Reagan and After.* New York: Random House.

Galbraith, J. 1998. *Created Unequal: The Crisis in American Pay.* New York: Free Press.

Gale, W. G., and P. R. Orszag. 2005. "Budget Deficits, National Saving, and Interest Rates." *Brookings Papers on Economic Activity,* forthcoming.

Godley, W. 2003. *The U.S. Economy: A Changing Strategic Predicament.* Strategic Analysis. Annandale-on-Hudson, N.Y.: The Levy Economics Institute.

Godley, W., and A. Izurieta. 2002. *Strategic Prospects and Policies for The U.S. Economy.* Strategic Analysis. Annandale-on-Hudson, N.Y.: The Levy Economics Institute.

Godley, W., A. Izurieta, and G. Zezza. 2004. *Prospects and Policies for the U.S. Economy: Why Net Exports Must Now Be the Motor for U.S.*

Growth. Strategic Analysis. Annandale-on-Hudson, N.Y.: The Levy Economics Institute.

Harcourt, G. C. 1972. *Some Cambridge Controversies in the Theory of Capital.* Cambridge: Cambridge University Press.

Keynes, J. M. 1936. *The General Theory of Employment Interest and Money.* London: Macmillan.

Samuelson, P. A. 1966. "A Summing Up." *Quarterly Journal of Economics* 80:4: 568–584.

Suskind, R. 2004. *The Price of Loyalty: George W. Bush, the White House, and the Education of Paul O'Neill.* New York: Simon and Schuster.

Truman, E. M. 2001. *The International Implications of Paying Down the Debt.* Public Policy Brief No. 01-7. Washington, D.C. Institute for International Economics.

About the Author

James K. Galbraith holds the Lloyd M. Bentsen, Jr. Chair in Government/Business Relations at the LBJ School of Public Affairs, the University of Texas at Austin, and is a senior scholar with the Levy Institute. He thanks Warren Mosler for comments on a draft and Peter Orszag for clarifying several points in the GO paper.

Public Policy Brief Series

The full text of the Public Policy Brief and Public Policy Brief Highlights series can be downloaded from the Levy Institute website, www.levy.org. The site also includes a complete list and short summaries of all the titles in the Public Policy Brief series.

To order a copy, call 845-758-7700 or 202-887-8464 (in Washington, D.C.), fax 845-758-1149, e-mail info@levy.org, or write to The Levy Economics Institute of Bard College, Blithewood, PO Box 5000, Annandale-on-Hudson, NY 12504-5000.

Breaking Out of the Deficit Trap
The Case Against the Fiscal Hawks
JAMES K. GALBRAITH
No. 81, 2005 (Highlights, No. 81A)

The Fed and the New Monetary Consensus
The Case for Rate Hikes, Part Two
L. RANDALL WRAY
No. 80, 2004 (Highlights, No. 80A)

The Case for Rate Hikes
Did the Fed Prematurely Raise Rates?
L. RANDALL WRAY
No. 79, 2004 (Highlights, No. 79A)

The War on Poverty after 40 Years
A Minskyan Assessment
STEPHANIE A. BELL and L. RANDALL WRAY
No. 78, 2004 (Highlights, No. 78A)

The Sustainability of Economic Recovery in the United States
The Risks to Consumption and Investment
PHILIP ARESTIS and ELIAS KARAKITSOS
No. 77, 2004 (Highlights, No. 77A)

Asset Poverty in the United States
Its Persistence in an Expansionary Economy
ASENA CANER and EDWARD N. WOLFF
No. 76, 2004 (Highlights, No. 76A)

Is Financial Globalization Truly Global?
New Institutions for an Inclusive Capital Market
PHILIP ARESTIS and SANTONU BASU
No. 75, 2003 (Highlights, No. 75A)

Understanding Deflation
Treating the Disease, Not the Symptoms
L. RANDALL WRAY and DIMITRI B. PAPADIMITRIOU
No. 74, 2003 (Highlights, No. 74A)

Asset and Debt Deflation in the United States
How Far Can Equity Prices Fall?
PHILIP ARESTIS and ELIAS KARAKITSOS
No. 73, 2003 (Highlights, No. 73A)

What Is the American Model Really About?
Soft Budgets and the Keynesian Devolution
JAMES K. GALBRAITH
No. 72, 2003 (Highlights, No. 72A)

Can Monetary Policy Affect the Real Economy?
The Dubious Effectiveness of Interest Rate Policy
PHILIP ARESTIS and MALCOLM SAWYER
No. 71, 2003 (Highlights, No. 71A)

The Levy Economics Institute of Bard College
Blithewood
PO Box 5000
Annandale-on-Hudson, NY 12504-5000

Address Service Requested

NONPROFIT ORGANIZATION
U.S. POSTAGE PAID
BARD COLLEGE