A DIALOGUE ABOUT THE 1990s

What Have We Learned from the Disappearance of the Deficits?

Benjamin Friedman

The rate of unemployment fell further than anticipated, says the author, but budget surpluses did not deter economic growth. Why not?

OBERT Eisner was a forceful and tireless advocate for the kind of economics and, more important, the kind of economic policy that he thought right. In his mind the two were largely the same. To Bob, the point of economic theory and empirical analysis was to further the ability to shape public policy in the interest of the working men and women who compose the vast majority of the nation's citizens. Economics that did not somehow bear on practical questions of public policy was at best suspect and more likely irrelevant. At the same time, economic policy initiatives that lacked firm underpinnings in theory and evidence

BENJAMIN FRIEDMAN is William Joseph Maier Professor of Political Economy, Harvard University. This paper was written for the session "In Memoriam: Robert Eisner" at the annual meeting of the American Economic Association, January 2000. The author is grateful to Jamie Horr for research assistance and to the Harvard Program for Financial Research for research support.

were likely to prove at least misguided and possibly counterproductive. The commitment and integrity that Bob brought to his work on economics and economic policy—indeed, the sometimes surprising ferocity from such a gentle man—should stand as a model for serious scholars in our discipline.

That said, I disagreed with Bob Eisner on a significant matter of both economics and economic policy. The issue on which we differed was how to regard the historically large budget deficits that the U.S. government ran in the 1980s and for some years into the 1990s, and what, as a matter of public policy, to do about them. Earlier, in the mid-1970s, we had both argued that the deficits the government ran in the immediate post-OPEC years need not be cause for concern. In his pioneering work with Paul Pieper, Bob showed that under a proper accounting, crucially including allowance for the implications of the rapid price inflation of that time, the deficits the government was then running were not so large after all and might even be surpluses. I focused instead on the country's available unused economic resources, arguing that below full employment the much discussed "crowding out" of investment attributed to the effects of government borrowing might even be "crowding in." But by the mid-1980s inflation had slowed, and the American economy had returned to conventional full-employment benchmarks. At that point our respective views on the deficit question diverged.

The end of the 1990s is an appropriate time to review these issues (in Bob's absence, sadly) for two reasons. First, as remarkable as the deficits of the 1980s and early 1990s were, their disappearance since then and the emergence instead of sizable surpluses have constituted an even more remarkable fiscal phenomenon. Second, the Commerce Department has just completed a major revision of the U.S. national income and product accounts (NIPA), including changes in the saving and investment concepts that are central to any debate over how government budget im-

balances affect economic activity. The object of this article is therefore both to review and to extend the "deficit debate," looking once again at the experience of the American economy under large deficits but also considering the new developments that have emerged as the deficit has disappeared.

Deficits into Surpluses and the Fin de Siècle Expansion

On at least one question, Bob Eisner has been proved right and most of the rest of the American economics profession wrong. Perhaps the easiest way to reconcile Bob's ready acceptance of the Reagan-era deficits with the opposition of so many economists who, in other respects, thought as he did is to say that they (we) assumed the American economy was fully employed and he did not. In one sense—perhaps the most important sense—it is to Bob's credit that he was never satisfied to consider a measured unemployment rate of, say, 6 percent as "full employment." In his view, that meant accepting the inevitability of some 6 million men and women (today it would be more) failing to find work, a situation that he found morally repugnant. If the 6.1 percent unemployment that the United States maintained on average during 1985-90, for example, had been known to have been well above the corresponding "full employment" rate, then many economists who viewed the deficits of that time with alarm would have had a more benign prospect.

The question at issue here is not, of course, how many potential workers one should want to see jobless, but rather how to think about the role of macroeconomic policy. If "full-employment unemployment" (or, in the more precise phase coined by Franco Modigliani, the "non-accelerating inflation rate of unemployment" [NAIRU]) was 6 percent, as Robert Gordon and many others maintained, then further stimulating aggregate demand for goods and services by any means—fiscal, monetary, whatever would only have led to renewed inflation. The laudable goal of putting more willing Americans to work was therefore a task for labor market reforms, or training programs to enhance workers' skills, or perhaps basic education, but in any case not stimulative macroeconomic policy. Further, with the economy's resources already fully employed, either government spending programs or tax cuts that spurred consumption necessarily drew resources away from some other application—such as domestic investment or production for export—or else forced higher imports, and more probably did both. By contrast, if full-employment unemployment were well below 6 percent, increased government spending and reduced taxes that spurred demand and thereby created jobs would not have been inflationary. And fiscal stimulus need not have crowded out investment, and might even have crowded in some.

The discussion below reexamines the 1980s from the perspective of just these questions. But it is worth recognizing at the outset that unemployment in the United States has now fallen to levels far below what not long ago most economists other than Bob Eisner thought, with high confidence, would prove inflationary. The widely cited 1997 paper by Douglas Staiger, James Stock, and Mark Watson, for example, concluded by highlighting economists' empirical ignorance about the level of NAIRU, arguing in effect that it could lie anywhere within a 3 percentage point range. But that range was 5–8 percent of the labor force. Yet the U.S. unemployment rate moved to 4.9 percent in 1997, 4.5 percent in 1998, and 4.2 percent in 1999, and as yet there has been no visible acceleration in any major recognized price index.

As many economists have now argued (for example, Robert Gordon and Lawrence Katz), this highly welcome development of the middle to late 1990s need not be inconsistent with the more pessimistic *macro*economic view of a decade and more ago. Under that view it would take *micro*economic changes to push full-employment unemployment lower, and many such changes have

in fact occurred. The rapidly expanding literature of this subject has pointed to such developments as the growing role of temporary employment agencies, the new fungibility of the set of basic skills centered on using a personal computer keyboard, the rising U.S. prison population, the declining power of trade unions, the eroding real level of the legal minimum wage, and so on. Evaluating these and other potential explanations for the happy economic results of the late 1990s lies beyond the scope of this paper. But the fact remains that by now unemployment has for some years remained well below what used to be conventionally accepted full-employment benchmarks, with no sign of greater inflation. Bob Eisner would surely not have been surprised.

By contrast, what would have surprised Bob Eisner—and this goes to the heart of the argument over the role of government budget imbalances—is that the rapid economic growth that has brought unemployment to this low level has occurred not only without a fiscal deficit but with a growing surplus in the U.S. government's consolidated accounts. A constant theme in Bob's writing on this subject was the claim that fiscal deficits were not only not harmful but actually necessary to achieve full employment. In effect, his view was that no successful and lasting economic expansion could occur without positive fiscal stimulus. Implicitly, and sometimes explicitly, this view amounted to rejecting the efficacy of monetary policy with respect to real economic activity. In contrast to the conventional notion that there are two forms of potential macroeconomic policy stimulus, fiscal and monetary, either of which can be sufficient to spur an underemployed economy to full employment, Bob in effect thought that for this purpose only fiscal policy mattered. The evidence of the middle to late 1990s has plainly run the other way.

The turnaround in the U.S. government's fiscal position in the 1990s has been perhaps the most remarkable shift in fiscal policy observed in this country's history, apart from the immediate con-

sequences of major wars. In the 1992 fiscal year, the government's unified *deficit* was \$290 billion, or 4.7 percent of U.S. gross domestic product (GDP). In fiscal 1999 the government ran a unified *surplus* of \$123 billion, or 1.4 percent of GDP. Calculated by the Congressional Budget Office on a standardized employment basis, to eliminate the endogenous effects of recession and recovery on both taxes and spending, the budget moved from a deficit equal to 3.0 percent of potential GDP in 1992 to an even balance in 1999. Moreover—and this is the main point—through the course of this fiscal turnaround the American economy's real growth averaged a robust 3.7 percent per annum over the seven years 1993–99.

How about investment, the particular focus of so much of the debate over the impact of fiscal imbalances in the 1980s? Here, too, the evidence is broadly consistent with the view that connects deficits at full employment (although, again, what is full employment in the 1990s?) with crowding out of domestic investment and the elimination of full-employment deficits with a relaxation of constraints on investment.

Contrary to the fears repeatedly voiced by critics of the 1990 and 1993 tax increases that were a significant part of the 1990s fiscal turnaround (for example, Martin Feldstein), business fixed investment has grown *more* rapidly than any other major component of U.S. aggregate demand. From 1993 through 1999, real investment in plant and equipment expanded on average by an astonishing 9.8 percent per annum, compared to 3.7 percent for real GDP overall. So much for the idea that modestly higher marginal tax rates on upper-income individuals would so blunt incentives as to throttle investment.

Further, the rise in the American economy's gross investment rate implied by this sharp difference in the respective growth rates of investment and GDP in the middle to late 1990s also carried over to *net* investment, which presumably matters more for en-

hancing productivity and therefore long-run economic expansion. The lowest rate of net investment in plant and equipment (as a share of GDP) recorded in the nearly four decades spanned by the Commerce Department's revised data series—just 1.5 percent—occurred in 1992. To be sure, the investment rate usually drops during and immediately after business recessions, and the 1990–91 recession was no exception in this regard. But as Figure 1 shows, the decline in investment experienced even in the wake of recessions far more severe than that of 1990–91 never approached such a low level. In 1975 and 1976 net investment declined to 3.1 percent of GDP. In 1983 the low point was 3.0 percent. It is difficult to avoid the inference that the far larger full-employment deficit that the government ran before, during, and after the 1990–91 recession was at least partly responsible for the record-low net investment rate.

More important, as Figure 1 also makes clear, net investment as a share of GDP has recovered sharply since 1991 as the deficit has disappeared. Indeed, by 1998 net investment had risen to 4.0 percent of GDP, identical to the 1961–80 average. And when net investment data for 1999 become available, they will probably show yet a further increase. (Gross investment in plant and equipment in 1999 was 13.7 percent of GDP, versus 12.6 percent in 1998, and it would be unusual for capital consumption to have increased this sharply relative to GDP in just one year.)

Some Puzzles Posed by the Expansion

The co-movements among budget deficits or surpluses, overall economic growth, and growth in both gross and net investment during the 1990s have been broadly consistent with the basic relationships to which critics of the Reagan deficits pointed. Even so, the experience of the 1990s raises several interesting puzzles

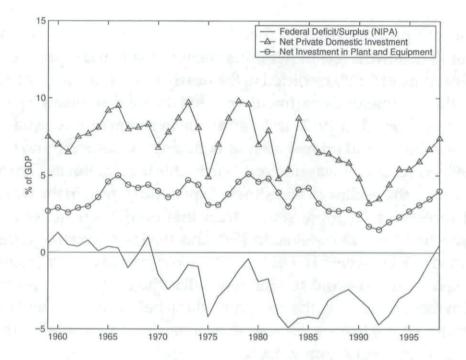


Figure 1. Federal Deficit/Surplus and Net Investment, 1959-98

that should preclude any tendency toward complacency among macroeconomists.

First, most of the concerns expressed over the outsized deficits of the Reagan-Bush era reflected the belief not only that large deficits at full employment crowd out investment but also that investments in factories, machinery, office equipment, and the like—that is, increments to the economy's stock of physical capital—are an important ingredient in productivity growth. And yes, at a broad-brush level, the rapid expansion of investment in the 1990s has gone along with a welcome increase in America's productivity growth. Productivity advanced especially rapidly during the second half of the decade: in the nonfarm business sector, 2.6 percent per annum on average during 1996–99.

But the growth of employment during the economic expansion of the 1990s has also been unusually rapid, so much so that real physical capital per worker has declined. According to the Com-

merce Department's latest capital stock data—which, perhaps importantly, do not yet reflect the latest benchmark revisions of the NIPA investment data—the amount of capital for each worker in the economy's nonfarm business sector peaked at \$82,600 (measured in 1997 dollars) in 1992. The capital-labor ratio then fell in each of the next three years, reaching \$81,100 in 1995. Small increases since then have brought the amount of capital for each worker back only to \$81,900 in 1997 (capital stock data for 1998 or 1999 are not yet available at the time of writing). Yet this period of nonincreasing capital intensity has seen the best productivity performance in years.

One popular interpretation of these facts would be that in the "new economy" physical capital matters less than either human capital or the stock of knowledge that is embodied in neither machines nor labor. An alternative interpretation would point out that different vintages of physical capital embody different technologies, and go on to emphasize the role of rapidly expanding gross investment in increasing the intensity of up-to-date capital even as rapidly expanding labor input is eroding the intensity of older capital. Evaluating these and other possible explanations for these particular facts lies beyond the scope of this article. But the fact of rapid productivity growth in the face of a declining overall capital-labor ratio (at least on the currently available capital stock data) is a flag of caution against too readily concluding that all of the events of the 1990s have affirmed the assumptions underlying the standard argument against large deficits in the 1980s.

Second, the decline of private saving in the 1990s raises anew the question of whether, as suggested long ago by David Ricardo and forcefully articulated in modern times by Robert Barro, individuals take account of the implications of government borrowing for future debt service obligations and hence future taxes, and adjust their own consumption—saving behavTable 1

260101

U.S. Net Saving-Investment Balance, 1960-98.

7.11	1961–70	1971–80	1981–90	1991–98
Total net investment	11.0%	9.6%	6.0%	5.1%
Private domestic	8.0	8.1	6.4	5.2
Plant and equipment	3.9	4.1	3.4	2.6
Residential construction	3.1	3.4	2.6	2.2
Inventory accumulation	1.0	0.7	0.4	0.5
Government	2.4	1.2	1.4	1.0
Federal	0.4	(0.1)	0.4	0.1
State and local	2.0	1.3	0.9	1.0
Net foreign	0.6	0.2	(1.7)	(1.2)
Total net saving	10.6%	8.6%	5.6%	4.8%
Private	9.7	9.8	8.8	7.0
Personal	5.9	6.9	6.5	4.5
Corporate	3.8	2.9	2.3	2.5
Government	1.0	(1.2)	(3.2)	(2.3)
Federal	0.1	(1.9)	(3.5)	(2.5)
State and local	0.9	0.6	0.3	0.2

Sources: National Income and Product Accounts (revised 1999); Survey of Current Business, December 1999, and Bureau of Economic Analysis Web site, www.bea.doc.gov.

Notes: Data shown as percentages of gross domestic product.

Total saving and total investment differ because of statistical discrepancy. Detail may not add to totals because of rounding.

ior in response. As Table 1 and Figure 2 show, in the 1980s U.S. private saving rates did not rise on average and even fell somewhat, thereby contradicting the Barro-Ricardo prediction of what would happen in response to the widening budget deficit. But the continued and much sharper decline of private saving in the 1990s, as government dissaving has given way to government saving, is consistent with the Barro-Ricardo equivalence proposition. And if this proposition is correct, then swings in the government budget due to tax changes need not

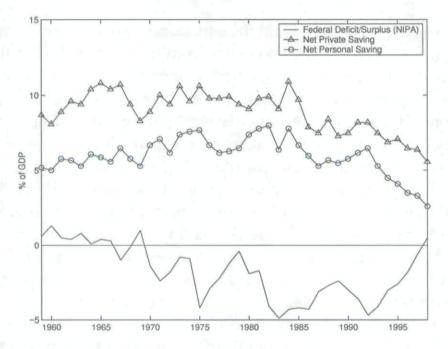


Figure 2. Federal Deficit/Surplus and Net Saving, 1959-98

affect the economy's saving—investment balance at all (they might do so if marginal tax rates changed, but that is a different matter), and budget swings due to changes in government spending would matter but in a different way.

It is far too soon to embrace such a conclusion. Private saving moves in response to many forces apart from government saving or dissaving, whether the Barro-Ricardo proposition is true or not. Indeed, much of the literature on this subject over the past decade and more has been devoted to parsing out the effects of such other influences in the 1980s, to see if Ricardo equivalence might have been at work after all. (A concise but fair summary of the answer is no.) Especially for the period since private saving began its most precipitous decline, in 1993, the obvious influence at which to point is capital gains. Not only have equity prices risen extraordinarily during these years, but under the Commerce Department's new measurement concepts all such gains—even those distributed in cash by mutual funds, which most sharehold-

ers probably see as indistinguishable from cash dividends—are excluded from income and hence from saving as well. But this situation also represents a challenge for new research in the field.

Third, and somewhat apart from the gross mechanics of the economy's saving-investment balance, the growing role of equity inflows in the financing of American business in the 1990s raises once again the old question of whether interest rates are a useful guide to the influence of fiscal and monetary policies on investment. The simplest way of explaining the market mechanism by which aggregate saving and aggregate investment are brought into equality—the version of the story that, in one form or other, appears in most macroeconomics textbooks-centers on the negative interest elasticity of investment. Years ago, however, James Tobin showed that interest rates need not be decisive in this context if investment relies on equity finance and debt and equity instruments have different risk properties so that asset holders regard them as imperfect substitutes.

The American investment boom of the 1990s has occurred in the presence of a disappearing federal government deficit but also at a time of historically high real interest rates. During 1993-99 long-term Treasury bond yields averaged 4.66 percent above the average percentage increase in the GDP chained price index, and the corresponding differential for Baa corporate bonds was 6.11 percent. For high-grade debt instruments, these are high real returns by U.S. postwar standards. (At the time of writing, the stated real yield on inflation-protected long-term Treasury bonds was 4.28 percent.) But especially in sectors of the economy that are driven by new technology, the 1990s have also seen a surge in new stock offerings as well as an enormous flourishing of America's venture capital industry. Has Tobin's three-asset model finally become essential for understanding the U.S. economy's investment process?

A Look Back at the 1980s with the Newly Revised NIPA Data

In light of the Commerce Department's just-completed benchmark revisions of the U.S. national income and product accounts, it is also worthwhile to look once again at the basic magnitudes at issue in the 1980s deficit debate. Do previous conclusions on the major questions at issue still hold up? In short, yes.

As the decade averages presented in Table 1 show, all forms of U.S. net private domestic investment fell as a share of GDP in the 1980s compared to the 1960s and 1970s: net investment in plant and equipment, net residential construction, and accumulation of business inventories. Moreover, as is clear from Figure 1, especially for plant and equipment the decline in the investment rate continued throughout the decade, so that comparing the 1980s average to the 1970s average far understates the magnitude of the decline during this period. Even leaving aside the recession year 1990, the 2.7 percent net investment rate for both 1987 and 1988, and just 2.8 percent in 1989, were at that time the lowest levels recorded in more than a quarter century. (Similarly, comparing the 1990s average with that of the 1980s completely misses the sharp revival that began in 1993.) The Commerce Department's various redefinitions of capital and investment-for example, including computer software—slightly raised the average investment rate in each decade, but did not alter the basic conclusion that net investment shrank as a share of GDP as the deficit widened. Nor was it true that Americans invested less in factories and machinery because they were investing more in housing for a growing population. The share of GDP devoted to net residential construction declined as well in the 1980s.

Next, a useful point frequently made by Bob Eisner is that private investment is not the only kind of potentially productive capital formation. The highways, airports, seaports, and research laboratories built and maintained directly by government are also

part of the nation's capital stock. As some economists have argued (David Aschauer, for example), there is evidence showing that for the United States, at the margin, publicly provided capital may be just as effective in enhancing the economy's productivity as that provided by the private sector. Bob often made this point by asking (rhetorically) what harm is done, even if deficit financing does crowd out private investment, if the purpose of the deficit is to finance public investment.

A decade ago the national income and product accounts did not include government investment as an expenditure category distinct from other government spending. Newer data do, and so it is now straightforward to address this issue in ways that were not then possible. As Figure 3 shows, the share of GDP devoted to net investment by the federal government did rise during the 1980s. But that increase was small compared to the decline in the U.S. net private investment rate—see again Figure 1—and it was especially small compared to the enlargement of the federal deficit. The increase in federal investment was hardly the main story of how the Reagan deficits occurred. (Moreover, as Treasury expenditure data showed at the time, much of the physical capital formation that the federal government undertook in the 1980s was for defense installations. The share of federal spending that went into gross nondefense capital formation declined.)

Third, the Commerce Department's various conceptual redefinitions of the relevant income and saving data—most importantly, the inclusion in personal income of additions to state and local government employees' retirement funds—now make the 1980s decline in net personal saving, and therefore in overall net private saving, look more modest than it did before. In the revised data, personal saving is consistently greater in every year, but the difference is not uniform across time. The old data showed net personal saving as a percentage of GDP rising from 5.3 percent on average in the 1960s to 5.8 percent in the 1970s, and then

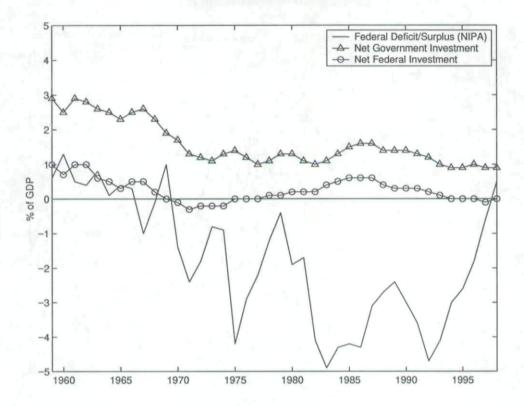


Figure 3. Federal Deficit/Surplus and Net Government Investment, 1959-98

falling to just 4.8 percent in the 1980s. By contrast, as Table 1 shows, according to the new data, net personal saving rose from 5.9 percent of GDP on average in the 1960s to 6.9 percent in the 1970s and then fell, but only to 6.5 percent, in the 1980s. Although the relevance of both corporate and state-local government pension accumulations to personal saving behavior is well known in the literature, for those who prefer to look simply at the personaving data alone, the contradiction of the Barro-Ricardo equivalence proposition in the 1980s, while still apparent, is now less sharp. (The new data show a slightly greater drop in net corporate saving from the 1970s to the 1980s, and so the difference that the revision makes for private saving overall is slightly less than for personal saving alone.)

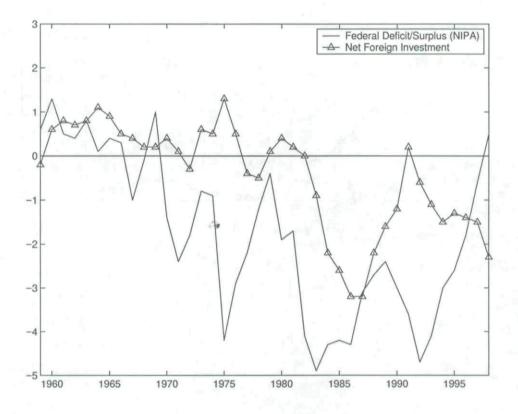


Figure 4. Federal Deficit/Surplus and Net Foreign Investment, 1959-98

Finally, nothing in the new data revisions has affected the conclusion that a major part of the "crowding out" caused by the Reagan-era deficits appeared in the economy's international sector. One of the biggest surprises of the 1980s for many economists was the extent to which, as Figure 4 shows, the American economy was able to cushion the federal deficit's absorption of domestic U.S. saving by drawing on saving done by foreigners, as the United States switched from a capital-exporting country to a capital importer—in other words, from positive to negative net foreign investment. Viewed from a real rather than financial perspective, what happened was that the U.S. economy ran a trade deficit and thereby turned to foreign production to allow it to consume and invest in excess of what it could produce domestically; hence, on net, borrowing from the rest of the world rather

than lending to it. In the process, America quickly went from the world's largest creditor country to the world's largest debtor.

One of the most interesting developments of the late 1990s, as Figure 4 also shows, is the reappearance of a large negative net foreign investment balance just as the federal deficit has given way to a surplus. While the 1980s showed that the U.S. economy is sufficiently open that under some circumstances a budget deficit can crowd out the foreign sector too, the 1990s has put firmly to rest any naive version of the "twin deficits" view of the effects of government imbalances.

Conclusions

The facts change from one decade to the next—that is part of what makes economics so endlessly fascinating—but many of the questions that economists put to those facts remain. They do so both because the analytical issues that these questions involve are interesting in themselves and also because they bear on perennial matters of public policy import. Bob Eisner knew that. He would have enjoyed debating the issues that the new developments of the 1990s, and the new view of the 1980s provided by revised data, have thrown up to us. I suspect that he would have disagreed with part, maybe even much, of what I have written in this article. I am sorry he is not here to say so.

Note

1. Douglas Staiger, James Stock, and Mark Watson, "How Precise Are Estimates of the Natural Rate of Unemployment?" in *Reducing Inflation: Motivation and Strategy*, ed. Christina D. Romer and David H. Romer (Chicago: University of Chicago Press, 1997).

Copyright of Challenge is the property of M.E. Sharpe Inc. and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.