For some months, there has been an intense debate over the appropriate fiscal stance going forward. Does economic weakness require more fiscal stimulus? Are large budget deficits holding back growth? Is it possible for fiscal consolidation—the latest preferred term for deficit reduction—to be expansionary? What follows is a selection of analyses and commentaries underlying the debate.
Is Government Spending Stimulative?

The principal economic agencies of the U.S. government continue to argue that the fiscal stimulus enacted in 2009 worked largely as planned, a view endorsed by mainstream economists such as Mark Zandi of Moody’s Analytics. This view is not universal. Economist John Taylor, for example, is among the most prominent critics; he argues that the evidence supporting stimulus is weak.

The U.S. Congressional View

CBO has estimated the law’s impact on employment and economic output using evidence about the effects of previous similar policies on the economy and using various mathematical models that represent the workings of the economy. On that basis, CBO estimates that in the first quarter of calendar year 2010, ARRA’s policies:

“Raised the level of real (inflation-adjusted) gross domestic product (GDP) by between 1.7 percent and 4.2 percent, lowered the unemployment rate by between 0.7 percentage points and 1.5 percentage points, increased the number of people employed by between 1.2 million and 2.8 million, and increased the number of full-time-equivalent (FTE) jobs by 1.8 million to 4.1 million compared with what those amounts would have been otherwise. (Increases in FTE jobs include shifts from part-time to full-time work or overtime and are thus generally larger than increases in the number of employed workers.)

“The effects of ARRA on output and employment are expected to increase further during calendar year 2010 but then diminish in 2011 and fade away by the end of 2012.”


The White House View

Following implementation of the ARRA [2009 Obama fiscal stimulus], the trajectory of the economy changed materially toward moderating output decline and job loss. Real GDP began rising in the third quarter of 2009 and payroll employment began to grow in the first quarter of 2010.

“The two CEA methods of estimating the impact of the fiscal stimulus suggest that the ARRA has raised the level of GDP as of the first quarter of 2010, relative to what it otherwise would have been, by between 2.5 and 2.9 percent. These estimates are very similar to those of a wide range of other analysts.

Fiscal stimulus has raised the level of GDP relative to what it otherwise would have been, by between 2.5 and 2.9 percent.

The economy has made enormous progress since early 2009. A year and half ago the global financial system was on the brink of collapse and the economy was engulfed in the Great Recession, the worst downturn since the Great Depression. Real GDP was plunging at an annual rate of more than 6 percent, and monthly job losses were averaging close to 750,000. Today, the financial system is operating much more normally, real GDP is advancing at a nearly 3 percent pace, and monthly job growth—including temporary hiring for the 2010 census—is nearly 125,000.

“That the Great Recession gave way to recovery as quickly as it did is largely due to the unprecedented monetary and fiscal policy response. The range of efforts by the Federal Reserve, the Bush and Obama administrations, and Congress is stunning. The effectiveness of any individual aspect of the policy response is debatable, but there is no debate that, in total, the response was very effective. If policymakers had not responded as aggressively and quickly, the financial system would arguably still be unsettled, the economy still in a downturn, and the costs to taxpayers would be measurably greater. […]

“Critics who argue that the ARRA failed since it did not keep unemployment below 8 percent, as the Obama administration projected it would when lobbying to get the legislation through Congress, are wrong. Unemployment was already above 8 percent in February 2009, when the legislation was passed; administration economists did not know that at the time, because of lags in the data and the rapid rise in unemployment that was occurring. They, like most private forecasters, including Moody’s Analytics, misjudged how serious the downturn had already become. If anything, this suggests the stimulus provided in the ARRA was not large enough.”

—Mark Zandi, testimony before the House Budget Committee, July 1, 2010

“The worst downturn since the Great Depression.” Right, a crowd at New York’s American Union Bank during a bank run early in the Great Depression. The bank opened in 1917 and went out of business on June 30, 1931.

Mark Zandi
Chief Economist, Moody’s Analytics
A Counterview

Unfortunately, most attempts to answer the question ‘What was the impact of the fiscal stimulus?’ are still based on economic models in which the answer is built-in, and was built-in well before the stimulus package was enacted. Frequently the same economic models that said, a year and half ago, that the impact would be large are now used to show that the impact is in fact large. In other words these assessments are not based on the actual experience with the stimulus. I think this has confused public discourse. […]

“My analysis of the government spending part of the stimulus suggests that it had little to do with the turnaround in economic activity. Indeed the swings in economic growth from positive to negative during the recession and again to positive during the recovery (including the slowdown to 2.7 percent growth rate of real GDP in the first quarter) provides evidence that changes in government spending had at best a very small contribution to the recovery. Most of the recovery has been due to investment—including inventory investment, which was positive in the first quarter after declining for all of last year—and has little to do with discretionary stimulus packages. […]

One could argue that government spending might have declined by a larger amount without the stimulus because the stimulus package prevented state and local governments from cutting spending. More research is needed to determine what would have happened in the counterfactual of ‘no discretionary stimulus,’ but in the meantime these data at least suggest that the recovery and the slowdown have been due to changes in investment not government purchases.

Fiscal policy should avoid further debt-increasing stimulus packages.

“The combination of the unsustainable debt projections…and the little if any impact of the stimulus packages…has clear policy implications: Fiscal policy should avoid further debt-increasing stimulus packages which do little to stimulate employment or GDP. Fiscal policy should focus on reducing the deficit and the growth of the debt-to-GDP ratio. Reforming existing entitlement programs to hold their growth down and limiting the creation of additional entitlement programs are essential.”

— John Taylor, testimony before the House Budget Committee, July 1, 2010
Would Cutting Deficits Be Stimulative?

In contrast to the American view that fiscal stimulus worked and that more may be justified, the growing European view is that fiscal consolidation can be stimulative and may be a better approach going forward. Nobel Prize-winning economist Paul Krugman is the leading critic of this idea.

The starting point for the argument in favor of the stimulative effect of fiscal consolidation starts with an economic theory called “Ricardian equivalence.” It was first put forward in 1974 by Harvard economist Robert Barro. He argued that budget deficits are not expansionary because people implicitly discount the higher taxes that will be necessary to pay off the additional debt. This theory became known as Ricardian equivalence after classical economist David Ricardo.

A Case for Ricardian Equivalence

“[I]n the standard Keynesian economic model] the substitution of a budget deficit for current taxation leads to an expansion of aggregate consumer demand. In other words, desired saving rises by less than the tax cut, so that desired national saving declines….

“The Ricardian modification to the standard analysis begins with the observation that, for a given path of government spending, a deficit-financed cut in current taxes leads to higher future taxes that have the same present value as the initial cut…. Hence, holding fixed the path of government expenditures and non-tax revenues, a cut in today’s taxes must be matched by a corresponding increase in the present value of future taxes…. "In this sense, budget deficits and taxation have equivalent effects on the economy—hence the term, ‘Ricardian equivalence theorem.’ To put the equivalence another way, a decrease in the government’s saving (that is, a current budget deficit) leads to an offsetting increase in desired private saving, and hence to no change in desired national saving….

“The Ricardian approach to budget deficits amounts to the statement that the government’s fiscal impact is summarized by the present value of its expenditures. Given this present value, rearrangements of the timing of taxes—as implied by budget deficits—have no first-order effect on the economy.”

It follows that if budget deficits are not expansionary, then deficit reductions are not necessarily contractionary. Economists Francesco Giavazzi and Marco Pagano were among the first to argue that fiscal contractions could in fact be expansionary. Here is how they first explained their theory.

The European View

“We started this paper by asking whether the European exercise in fiscal rectitude in the 1980s sheds any light on two contending views about the effects of a fiscal contraction: the Keynesian view, that focuses on its direct effects on aggregate demand, and the ‘expectations’ view—also known in Europe as the German view—that stresses the role of current changes in taxes or government spending as signals of possible future changes. We have learned that there are cases in which the German view has a serious claim to empirical relevance. The Danish experience shows that cuts in government spending can be associated with increases in consumption even after controlling for wealth and income, and even in the presence of a substantial increase in current taxes….

“We have also found that part of the expansionary effects of the fiscal contractions analyzed here must be attributed to the concomitant monetary disinflation, which in these countries operated via the switch to fixed exchange rates with a low-inflation currency (the German mark), and the liberalization of capital flows. This produced a sharp fall of nominal interest rates; in the presence of inflation inertia, the latter translated into a corresponding drop of real rates and a rise in aggregate demand.”


Francesco Giavazzi
Professor of Economics, Bocconi University

Marco Pagano
Professor of Economics, University of Naples Federico II
Lessons from History

“T
de conventional wisdom about the political economy of fiscal adjustments goes more or less as follows. Deficit reduction policies cause recessions which (in addition to the direct political costs of tax increases and spending cuts) create political problems for incumbent governments. The latter therefore see fiscal adjustments as the kiss of death. They postpone them and when they implement them then they pay at the polls. In fact many governments do the opposite, namely, they try to increase deficits to win elections. Thus we should expect more fiscally “loose” governments to stay in office, namely, they try to increase deficits to win elections. This view, which is a combination of textbook Keynesianism with ‘conventional’ notions of naive voters’ behavior, is largely imprecise, to say the least. If it were true, we would face a dark near future. We would observe governments postponing hard medicines and when they eventually come in the form of tight fiscal policies, they will induce recessions and political losses of good incumbents. We would then have a sort of so called W recovery associated with political turmoil with losses for fiscally responsible governments.

Fortunately, the accumulated evidence paints a different picture. First of all, not all fiscal adjustments cause recessions. Many even sharp reductions of budget deficits have been accompanied and immediately followed by sustained growth rather than recessions even in the very short run. These are the adjustments which have occurred on the spending side and have been large, credible and decisive. Second and this is most likely a consequence of the first point, it is far from automatic that governments which have reduced deficits have been routinely not reappointed. Governments which have initiated thorough and successful fiscal adjustment policies have not systematically suffered at the polls. This has been especially the case when the electorate has perceived the sense of urgency of a crisis or in some cases in the presence of an external commitment. On the contrary fiscally loose governments have suffered losses at the polls.

“Fiscal adjustments, even large ones, which reduce budget deficits, can be successful in reducing relatively quickly debt over GDP ratios without causing recessions. Fiscal adjustments based upon spending cuts are those with, by far, the highest chance of success. Politicians are typically reluctant and often delay the adoption of restrictive fiscal policies making the adjustment even more costly.”

How the ECB Sees Things

“Fiscal consolidation may to some extent entail costs in terms of lower economic growth in the short run. Any such ‘Keynesian’ short-term costs may, however, be rather limited under certain circumstances, as suggested by the literature. The circumstances which help to reduce the short-term costs include when: (i) the fiscal starting position is particularly precarious and thus confidence in the sustainability of public finances is rather low; (ii) fiscal consolidation is pursued in a credible and consistent manner, in particular as part of a comprehensive reform strategy; (iii) the composition of fiscal adjustment is of ‘high quality’ (e.g., focused on reforms that improve the longer-term sustainability of public finances); (iv) economic adjustment is not impeded by nominal rigidities; (v) the share of consumers discounting the future effects of fiscal retrenchment (i.e., so called ‘Ricardian’ consumers) is high; (vi) the openness of the economy is high; and (vii) the short-run impact of tighter fiscal policy is offset by a depreciation of the exchange rate and/or by a more expansionary monetary policy.

“Expectation effects could also in theory more than offset the short-run contractionary impact on growth of fiscal consolidations (the so-called non-Keynesian fiscal effects). The hypothesis of expansionary fiscal contractions posits that consumers anticipate benefits arising from fiscal consolidations for their permanent income and consequently increase private consumption. However, if the reduction in government expenditure is small and temporary, or not credible, private consumption may not respond positively to the fiscal cutback. Non-Keynesian effects may also be associated with tax increases at high levels of government indebtedness. This kind of argument is based on the ‘expectational view of fiscal policy.’ For instance, if the fiscal consolidation appears to the public as a credible attempt to reduce public sector borrowing requirements, there may be an induced positive wealth effect, leading to an increase in private consumption. Furthermore, the reduction of government borrowing requirements diminishes the risk premium associated with government debt issuance, which reduces real interest rates and allows the ‘crowding-in’ of private investment. […]

“Overall, the longer-run benefits of fiscal consolidation are largely undisputed. They consist, notably, of a reduction in governments’ financing needs leading both to lower long-term interest rates (owing to lower demand and declining risk premia) and the freeing up of revenues to finance more productive expenditure or growth-enhancing tax cuts. More leeway is then also created to allow the automatic fiscal stabilizers to operate when required.

“Past experience suggests that creating significant primary surpluses through fiscal consolidation will be pivotal to reducing the very high debt ratios for many euro area countries and thereby limiting their dampening impact on output growth. Moreover, case studies conducted for Belgium, Ireland, Spain, the Netherlands and Finland found that fiscal consolidations based on expenditure reforms were the most likely to promote output growth, especially when combined with structural reforms. Overall, it appears that expenditure-based fiscal consolidations are more successful and have more beneficial effects on long-run economic growth than revenue-based ones. With tax burdens already high, the scope for revenue-based consolidation may be limited as many euro area countries may already be close to their revenue-maximizing levels of taxation, i.e., the peaks of their Laffer curves.”

Countering the European View

“It’s really amazing to see how quickly the notion that contractionary fiscal policy is actually expansionary is spreading. As I noted yesterday, the Panglossian view has now become official doctrine at the ECB.

“So what does this view rest on? Partly on vague ideas about credibility and confidence; but largely on the supposed lessons of experience, of countries that saw economic expansion after major austerity programs.

“Yet if you look at these cases, every one turns out to involve key elements that make it useless as a precedent for our current situation.

“Here’s a list of fiscal [supposed] turnarounds…

“Canada 1994–1998: Fiscal contraction took place as a strong recovery was already underway, as exports were booming, and as the Bank of Canada was cutting interest rates. […]

“Denmark 1982–86: Yes, private spending rose—mainly thanks to a 10-percentage-point drop in long-term interest rates, hard to manage when rates in major economies are currently 2–3 percent.

“Finland 1992–2000: Yes, you can have sharp fiscal contraction with an expanding economy if you also see a swing toward current account surplus of more than 12 percent of GDP. So if everyone in the world can move into massive trade surplus, we’ll all be fine.

“Ireland 1987–89: Been there, done that. Let’s all devalue! Also, an interest rate story something like Denmark’s.


“So every one of these stories says that you can have fiscal contraction without depressing the economy IF the depressing effects are offset by huge moves into trade surplus and/or sharp declines in interest rates. Since the world as a whole can’t move into surplus, and since major economies already have very low interest rates, none of this is relevant to our current situation.

“Yet these cases are being cited as reasons not to worry as austerity becomes the rule…”

But Krugman Should Consider This

When President Barack Obama took office on January 20, 2009, the U.S. economy had been in recession for over a year, and the prospects for a quick recovery appeared bleak. The Federal Reserve had already lowered interest rates to zero, which implied that monetary policy was unlikely to provide further stimulus. Thus, the Administration, along with many economists and pundits, turned to the other key pillar of stabilization policy: fiscal stimulus.

The fiscal approach was immediately controversial, however, for two main reasons. First, academic economists have come to regard fiscal policy as less suitable than monetary policy for stabilization purposes, principally because monetary policy can act quickly, whereas fiscal policy can suffer significant delays in adoption, implementation, and impact. Second, the U.S. was already facing a dismal long-term fiscal outlook because of programs like Medicare, Medicaid, Social Security, the wars in Iraq and Afghanistan, and the TARP bailout. This outlook made some economists wary of new measures that would increase the deficit, even if only temporarily. Yet the Administration apparently concluded that it had no alternative given the state of the economy, so it plowed ahead with a fiscal stimulus.

Deciding to adopt a fiscal stimulus, however, did not resolve all of the issues. The other question was what combination of tax cuts and expenditure increases to include in the stimulus package. Strict Keynesian theory holds that any tax cut or spending increase can stimulate the economy, even if the tax cut is badly designed and even if the increased spending is for worthless junk. If this perspective is right, quibbling about the exact composition of the package is neither necessary nor fruitful.

I argue here, however, that the structure of a fiscal stimulus is crucially important and that the package Congress adopted was far from ideal, regardless of the merits of the Keynesian model. Whether counter-cyclical fiscal policy is beneficial is a more difficult question, but it is not the critical issue if a stimulus package is properly designed. In fact, the Administration could have created a package that stimulated the economy in the short term while improving economic performance in the long term. This package, moreover, would have been immune to criticism from Republicans. The stimulus adopted was a missed opportunity of colossal proportions.

That the Administration and Congress chose the particular stimulus adopted suggests that stimulating the economy was not their only objective. Instead, the Administration used the recession and the financial crisis to redistribute resources to favored interest groups (unions, the green lobby, and public education) and to increase the size and scope of government. This redistribution does not make every element of the package indefensible, but even the components with a plausible justification were designed in the least productive and most redistributionist way possible. […]

“The standard Keynesian defense of fiscal stimulus fails to recognize that attempts to stimulate might exacerbate recessions or have negative long-term implications, even if the Keynesian model is essentially correct. The lower taxes and higher spending required by the Keynesian approach mean increased taxes at some future date, assuming the government balances its budget on average. This higher taxation implies more distortions from taxation and therefore lower productivity. The stimulus approach generates uncertainty about which programs the government will support, and this uncertainty can impede private productive activity. The realization that government is handing out pots of money generates rent seeking and other unproductive behavior, leading to crony capitalism (for example, a semi-nationalized auto industry). Finally, a belief that government can moderate or eliminate recessions can encourage excessive risk taking and thereby generate instability. Before adopting a fiscal stimulus, therefore, it is imperative to consider the evidence for the Keynesian model’s validity. As it turns out, the empirical support for the Keynesian view is far from compelling.

“The Administration should have endorsed a stimulus package based on a repeal of the corporate income tax and reductions in employment taxes. This policy would have accomplished its stated goals, and the budgetary implications would have been less negative than those of the package ultimately adopted because this alternative plan would have enhanced rather than detracted from economic efficiency.”


The empirical support for the Keynesian view is far from compelling.
“F or decades, the economics profession had been moving away from Keynes, but when the recession hit, no one had much of a viable alternative to Keynesian countercyclical spending. We’ve had a $787 billion recovery act—a great burst of Keynesian activity—and unemployment remains [high].

Does that mean that recovery spending was a waste or just that we didn’t do enough of it? Is public spending just crowding out private employment? Or is each public employee spending more on private goods, thereby creating an employment multiplier? We don’t really know.

Little clarity comes from state-level data either. The chart below shows a plot of the change in unemployment between January 2009 and March 2010 on per capita Federal Recovery Act funds received in each state. This relationship is negative and almost statistically significant at the 5 percent level, which lends a bit of support to the view that the recovery spending reduced unemployment. But that negative relationship is driven entirely by three states with very few people—Alaska and the Dakotas. If I weight by population, or eliminate those three states, or even control for state unemployment as of January 2009, there is no longer any significant relationship between spending and change in unemployment. I’m not suggesting that spending did or didn’t reduce unemployment; I am asserting that we can’t tell anything with any degree of certainty.

To add more complexity to the mix, even if we found that recovery funds did significantly reduce unemployment, that wouldn’t necessarily justify their cost. If you hire thousands of people on make-work jobs, then you are wasting their time. That cost needs to be weighed against the benefits of countering the recession. […]

“The fundamental problem with acquiring certainty about Keynesian intervention is that anti-recessionary spending is just not very amenable to clean, compelling empirical evaluation. Recessions aren’t that common, and there are too many moving parts. Times change, so it isn’t obvious that the lessons of the 1930s—not that we can agree on those, either—are applicable today.