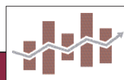


EPI BRIEFING PAPER

ECONOMIC POLICY INSTITUTE • APRIL 6, 2011 • BRIEFING PAPER #304

ABANDONING WHAT WORKS (AND MOST OTHER THINGS, TOO)

Expansionary fiscal policy is still the best tool for boosting jobs

BY JOSH BIVENS

If the policies in Washington matched the rhetoric about job creation, Americans could rest easy about the economy for the next couple of years. Advocates on every side of nearly all current debates make strong claims about whether a given policy will "create" or "destroy" jobs. Given these conflicting claims regarding identical policies, it is hardly surprising that Americans seem truly confused about what textbook economics *actually* predicts could lower today's too-high unemployment rate.

These predictions are surprisingly straightforward: Only policies that boost the overall demand for goods and services in the economy will significantly lower unemployment in the near-term. The best way to boost this demand is doing more of the effective parts of the American Recovery and Reinvestment Act (ARRA).

This reality is frustrating to most people—they want something new and different that can be invoked to solve the unemployment crisis. According to a *New York Times* magazine story from earlier this year, this frustration even extends to President Obama, who reportedly chastised his economic team at the end of 2010 for not bringing him newer and more exciting job-creation ideas.

Politically, this is understandable—the ARRA is not the most popular piece of legislation with a public that remains quite divided about its effectiveness.[1] But politics aside, the economics are clear: There are not many new and exciting policy levers that can be pulled by Congress and the president to solve today's unemployment crisis. Fortunately, the old (and presumably boring) policy levers could reduce unemployment much more quickly *if applied with enough force*.

TABLE OF CONTENTS

Far too early to declare "mission accomplished" 2
The key to jobs recovery: stabilization through fiscal support 3
How fiscal support helps create jobs by boosting purchasing power: ARRA as an example' 4
Fiscal stabilization without deficit spending: balanced-budget multipliers 8
Supports outside of fiscal policy 9
Conclusion 10

www.epi.org

If we do indeed ease up on efforts to boost demand and jobs after (or even before) the end of this fiscal year, then we will surely consign ourselves to years of unemployment that is higher than it has to be. This is not just a human tragedy (though it surely is that), but it is also a huge economic waste. If, for example, we could use fiscal policy to shave a percentage point off the unemployment rate forecasted by the Congressional Budget Office (CBO) each year between 2012 and 2015, we would cumulatively add roughly a trillion dollars to gross domestic product (GDP, a measure of all production and income in the U.S. economy) over those four years—or about $3,000 per man, woman and child in the United States.

This report argues the following:

- Unemployment remains so high more than a year and a half after the official end of the Great Recession because the shock to private-sector demand for goods and services resulting from the bursting housing bubble was so large.
- A return to pre-recession unemployment rates any time before 2016 is extremely unlikely absent some policy that fills the gap left by retreating private demand and spending.
- The most promising policy lever to fill the gap in demand and lower the unemployment rate over the near-term is expansionary fiscal policy.
- The growing consensus in Congress that spending must be cut in the near-term will significantly delay a full recovery.

This paper also provides a short discussion of other policies that could help address the unemployment problem but are also either underused or in danger of being prematurely abandoned.

The essential message of this report is straightforward: With the unemployment rate set to average over 9% for all of 2011, policymakers may be talking about jobs but are actually walking away far too soon from the only tools with realistic chances of solving a jobs crisis that will linger long beyond 2011.

Far too early to declare “mission accomplished”

What we now call the Great Recession officially ended in June 2009, but damage from its aftershocks continues. Employment (both overall and private) actually shrank for a full eight months after the recession’s official end, and as of February 2011 the unemployment rate was nearly double the rate that characterized the year just before the Great Recession hit. Adding the 7.5 million jobs lost between December 2007 and February 2011 to the 3.8 million jobs that the economy needed to create during this time to absorb new potential labor market entrants means that more than 11 million jobs are needed

TABLE 1

U.S. Great Recession compared to other recessions associated with financial crisis and global downturns

	Duration (in quarters)		Amplitude (in %)		
	Recession	*Recovery**	*Recession***	*Recovery****	*Expansion*****
IMF average for recessions associated with financial crises and global downturns	7.3	6.8	-4.8	2.8	2.9
U.S. Great Recession	6.0	6.0	-4.1	3.0	?

* Length until pre-recession output level is reached, in quarters.
** Output loss from peak to trough.
*** Output growth in the year following the trough.
**** Output growth after pre-recession peak is reached.

SOURCE: Terrones et al. (2009) and Bureau of Economic Analysis.

to return unemployment back to the 5.0% pre-recession rate. It would take roughly four years of annual economic growth averaging 5% or greater to achieve this needed level of job gains.

Unfortunately, the U.S. economy has grown at an average annualized rate of just 2.8% since the recession ended, and the historical evidence argues that this is the growth rate we should expect for quite some time. **Table 1** shows how the United States has fared since the onset of the Great Recession and compares it to recent findings from the International Monetary Fund (IMF) on other countries' recessions that have occurred in the midst of financial crises and global downturns.

So far, the U.S. experience unfortunately has been in line with this historical precedent. If this pace of growth continues, then it will provide little to no downward pressure on the unemployment rate.

However, as hard as it is to believe, there is some good news about the U.S. economy's current predicament—the reason for the currently high unemployment rate is a collapse in *demand* for goods and services from U.S. households and businesses, not a collapse in our ability to *supply* these goods and services. Essentially, the bursting of the housing bubble erased trillions of dollars of wealth from household balance sheets and left construction companies with a massive unsold inventory. The pullback in consumer spending (households spent less because they were much less wealthy than before the bubble burst) and construction (companies stopped building because even their existing inventory could not be sold) then cascaded throughout the rest of the economy. Business stopped investing in new factories—since they were producing more than they could sell with existing capacity, they didn't need to invest in more capacity. Lastly, the chaos in financial markets sparked by the bursting bubble provided an extra spur to businesses and households to hoard liquid assets, and possibly blocked plans by those rare businesses and households that wanted to expand spending during this time by denying them needed credit. In short, the burst housing bubble led to sharp reductions in private-sector spending by households and business.

That the Great Recession was caused by a severe shock to demand is important. American workers didn't lose their skills in 2007; American factories didn't become obsolete that month; and American managers didn't forget how to organize production. There is in fact no evidence that there has been any disruption in our ability to supply goods and services, only in the private sector's ability to demand them.[2]

The key to jobs recovery: stabilization through fiscal support

The key to *stabilizing* an economy that has been hit by a negative demand shock is for policymakers to provide a countervailing positive spur to demand with the policy levers available to them. While there are aspects of the Great Recession that have made this sort of demand-stabilization harder than usual, the most obvious policy failure is that the most effective tool for stabilization—fiscal support provided through increased government spending, investments, and transfer payments—is in clear danger of being prematurely abandoned by policymakers.[3]

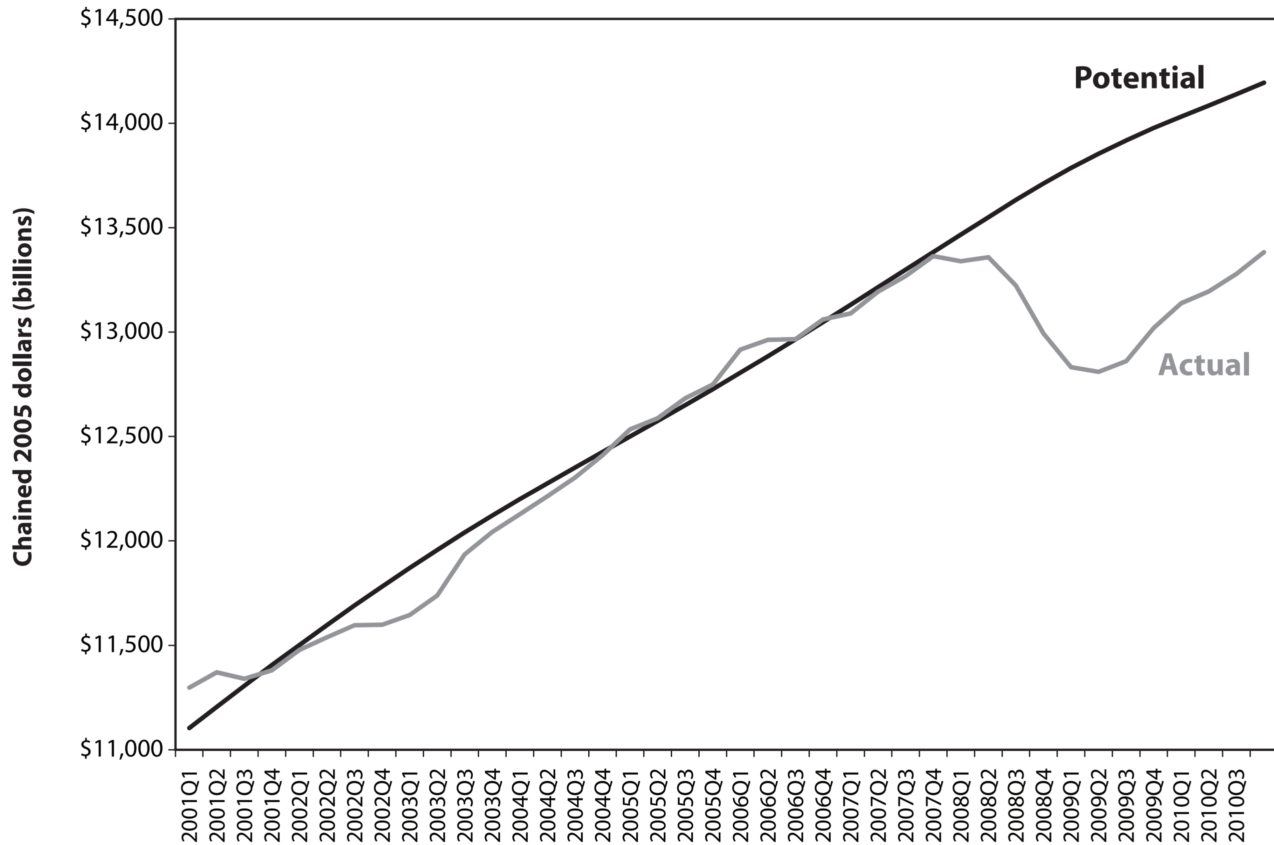
The goal of stabilization policy is easy to explain: it is pushing the economy back toward its potential level of income generation. As long as resources are fully employed (i.e., factories are fully utilized and unemployment rates are low enough to provide all willing workers with jobs without too long a delay), the growth rate of this potential level of income is largely defined by growth in productivity and the labor force—in other words, how much the economy can generate in an hour's worth of work combined with what share of our population chooses to work. Stabilization policy aims to ensure that all the economy's resources are fully employed at each point in time.

Figure A makes the point visually. The smooth line shows estimates of *potential* gross domestic product (GDP)—what GDP *would* be if all resources were employed. The smooth slope indicates that this potential changes only with changes in productivity and labor force growth, and these influences tend to change quite gradually, or at least not rapidly enough to cause the economy to begin contracting as it does during recessions.

Figure A's dotted line that darts above and, recently, very far below the potential line is actual GDP. What is striking during the Great Recession is the very large gap between potential and actual GDP—this represents all the goods and services that are not being produced because there are twice as many unemployed workers today than

FIGURE A

Potential GDP and actual GDP, real dollars, 2001Q1 - 2010Q3



SOURCE: Congressional Budget Office and Bureau of Economic Analysis.

at the end of 2007. Erasing (or at least shrinking) this "output gap" between potential and actual GDP should be the goal of macroeconomic policymakers during recessions.

It should be noted that another branch of economic policymaking concerns itself (usefully) with changing the slope of the potential GDP line, essentially using policy to increase the rate of potential growth in the economy. This is important—this potential growth provides the ceiling on how fast average living standards can rise in the economy. But in recessions and other times with large output gaps, this ceiling is nowhere near binding. So, many policies that may be good for increasing the growth rate of potential output (say investing in early childhood education) will only help close the output gap in the near-term if they are financed in a particular way, which is the focus of the next section.

How fiscal support helps create jobs by boosting purchasing power: ARRA as an example

Fiscal policy constitutes the decisions made jointly by Congress and the president about the size and composition of government spending and taxes. The most basic explanation of how this fiscal support helped stabilize the U.S. economy since 2007 is that when private spending sharply declined in the wake of the bursting housing bubble, rising government spending and tax cuts were used to inject purchasing power into the economy. This government

spending helped keep the output gap, which rose as private spending collapsed, from growing even larger.

To make this a bit more concrete, start with the accounting identity that defines actual GDP:

$$GDP = Consumption + Investment + Govt.\ spending + (Exports - Imports)$$

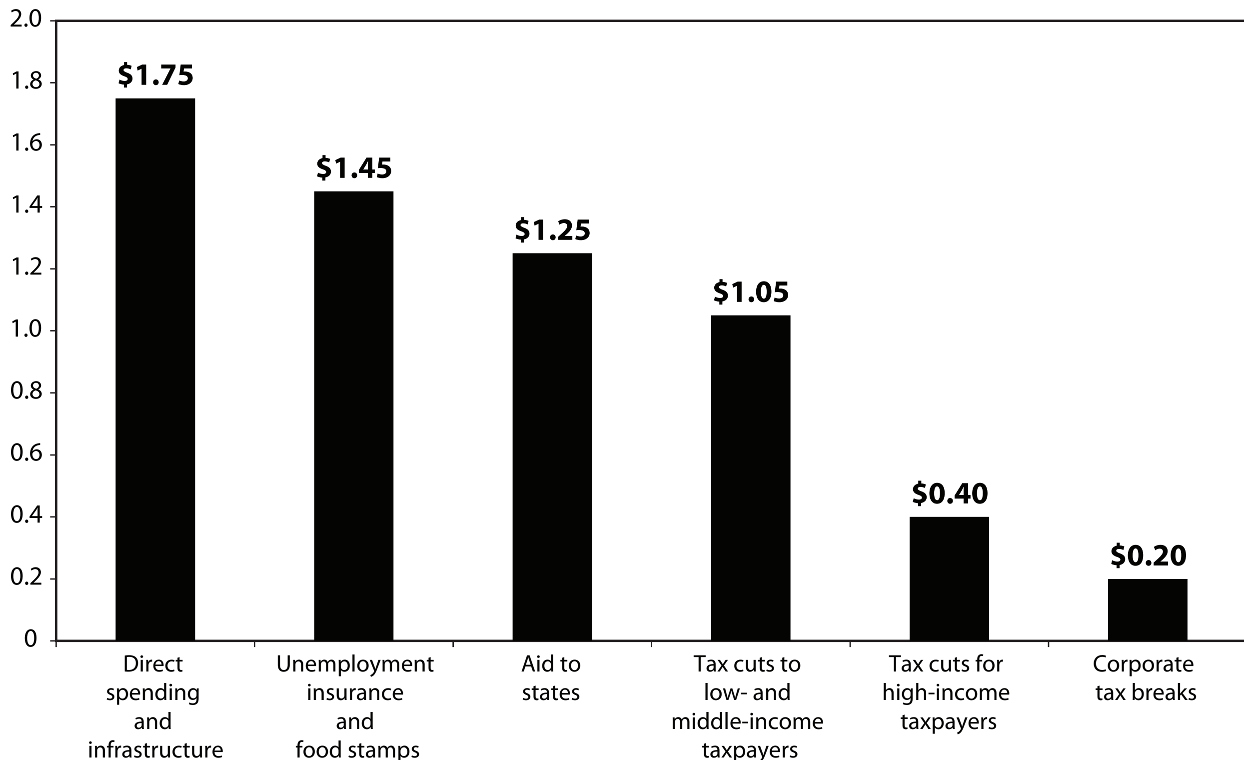
This identity simply expresses GDP as the sum of its components. Increasing government purchases hence directly increases GDP, all else equal. So the parts of the ARRA that were direct government spending to, say, repair roads and bridges or retrofit government buildings for efficiency directly added to GDP—workers were directly hired and paid salaries, and intermediate goods (asphalt and trucks and concrete) were purchased from suppliers, which in turn spurred more hires.

The workers hired with increases in government spending then likely took their new paychecks and went to restaurants, bought clothes for their kids, or bought new appliances. All of these things then would show up as increases in consumption spending that would not have appeared absent ARRA. Businesses seeing customers coming through their doors had an impetus to expand their capacity (or at least fill in the capacity eroded by depreciation), which increased GDP through increased investment spending relative to a scenario in which there had been no ARRA.

Additionally, much of the Recovery Act increased consumer spending more directly by providing direct transfers (unemployment insurance, food stamps, Medicaid) or tax cuts to households, cushioning the fall to their personal disposable income that would have occurred as private-sector income generation collapsed (see **Figure B** below).

FIGURE B

What is the most effective stimulus?
"Bang-for-buck" multipliers*



* Measures total increase in economic activity associated with a $1 increase in the deficit.

SOURCE: Congressional Budget Office.

The most effective fiscal support requires deficit increases

Importantly, spending increases or tax cuts are most effective at closing the output gap (raising actual GDP to its full potential level) when they are financed by debt—i.e., when they are allowed to increase the budget deficit. The reason is fairly intuitive: If the government increased government spending on roads and bridges, the boost this provided to GDP would be at least partially offset if it was financed by *increasing* taxes that would, by definition, lower disposable income and presumably private consumption spending. We will discuss below how very strategic policymakers could provide fiscal support that was *deficit neutral*, But such strategies would in fact never be as effective as financing fiscal support with debt.

Admittedly, increasing *public* debt to cushion the economic shock caused by excessive run-up and subsequent unwinding of private debt just sounds wrong to many, but it is not. It is, in fact, basic economics, and is by far the most effective way to keep unemployment from rising while the private sector pays down enough of its own debt to feel comfortable spending again.

One testament that this is uncontroversial economics is that essentially no professional economist criticized the increase in the budget deficit that arose before the passage of the ARRA. Arguments that policymakers should have kept the budget deficit from rising between January 2008 and February 2009 just were not made at the time. The deficit rose in that period because incomes and thus tax collections fall during recessions and safety net programs pay out more as joblessness and underemployment rise. These declines in tax payments and increases in safety net spending kept households' *disposable* incomes (incomes post-tax and transfer payments) from falling as far as private-sector incomes *writ large*. In short, the *mechanical* rise in the deficit in the early stages of the recession was hence a powerful buffer against the shock of the bursting housing bubble, and is a key reason why a second Depression did not occur.

That shock to private sector incomes, however, was enormou—larger than the shock that sent the U.S. economy into the Great Depression. The ARRA represented the correct assessment by policymakers that the shock absorption provided by the purely mechanical rise in the deficit wasn't going to be large enough to generate a quick recovery.

The debt-financed fiscal policy actions (active in the case of the ARRA and passive in the case of automatic stabilizers) clearly worked to cushion the economic blow. A consensus of economic forecasters, public and private, agree that the ARRA created or saved between 2 to nearly 4 million jobs relative to a baseline without the ARRA (see **Figure C**). And the purely automatic increases in unemployment insurance that occurred even before ARRA created or saved 325,000 jobs.[5]

Time to renew, not abandon, expansionary fiscal policy

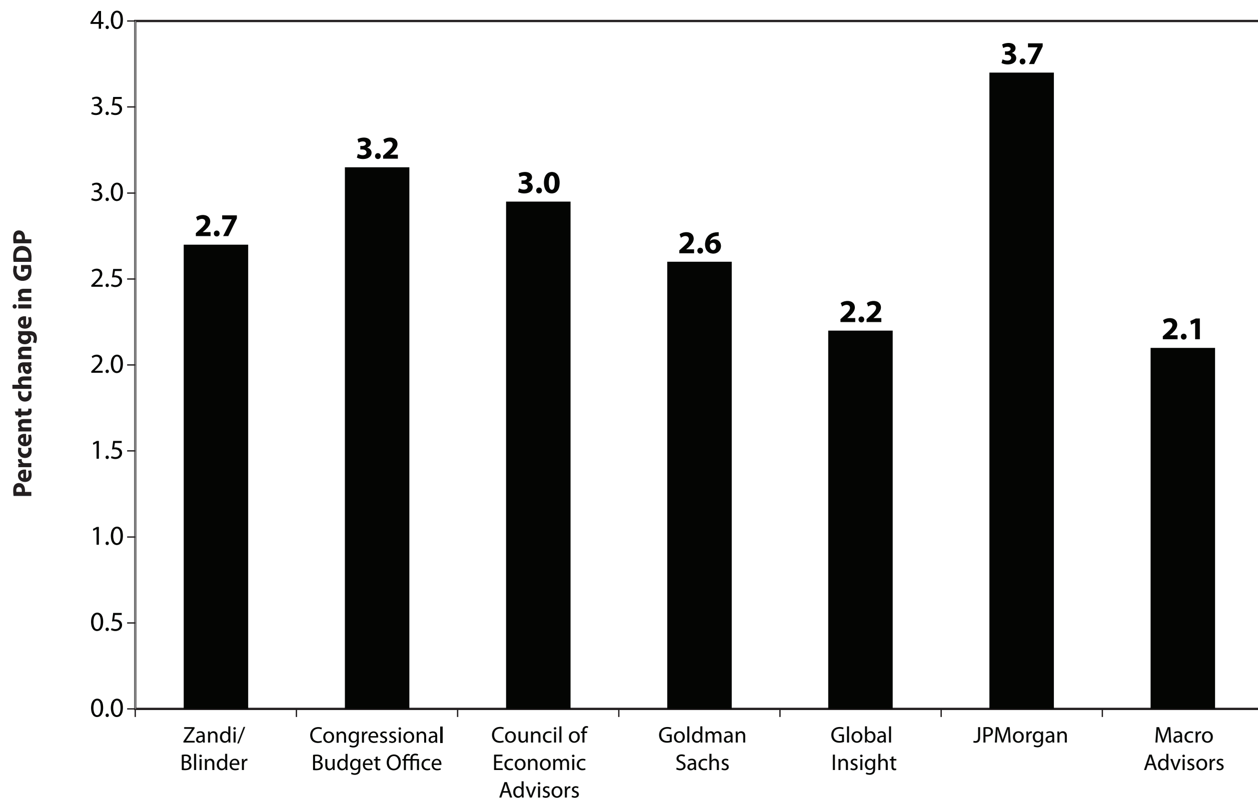
The U.S. economy is unquestionably richer today because of ARRA, but because many of its provisions have already been spent, it will provide no further boost to growth in the future. Yet unemployment is forecast to average 9.4% for 2011 and not return to (near) pre-recession levels until 2016. Facing this reality of elevated joblessness and no further boost from ARRA, the Obama administration made concessions to GOP representatives in Congress that extended tax cuts for high-income households in exchange for more fiscal support in 2011, with the centerpieces being a one-year payroll tax cut that will add roughly $120 billion to the economy in 2011 and a one-year extension of unemployment insurance that will provide another $100 billion.[6]

This tax-cut deal would clearly have resulted in a lower unemployment rate than was previously forecast for 2011 had it stood, but the 111th Congress is already floating proposals to cut spending that would effectively claw back some of this fiscal support.[7] Republicans in the House of Representatives, for example, are pushing for a $61 billion cut in spending for the rest of fiscal 2011. A range of independent estimates (including EPI's) argues that such spending cuts would yield job losses of between 400,000 and 800,000 by the end of the 2011 fiscal year.[8]

The end-game on spending has yet to come, but it seems clear that expansionary fiscal policy is in danger of being abandoned, as even the Obama administration is not fighting for it to continue past 2011. The administration has preemptively committed to a non-security

FIGURE C

Contribution of Recovery Act to GDP by the second quarter of 2010



SOURCE: Data from sources listed above.

discretionary spending freeze over the next five years, which means embracing a strategy of fiscal *contraction* over the very near term.

In short, it seems clear that the political will to use expansionary fiscal policy as a tool to stabilize a listing economy has been exhausted. Deficit reduction now dominates the debate. It is crucial to note that there is no *economic* imperative for such deficit reduction. The costs of government borrowing, for example, remain extraordinarily low today, reflecting the fact that the much-feared bond markets either choose not to or (more likely) cannot impose any sanctions on the U.S. government for borrowing. And unless interest rates rise rapidly (which they show no sign of doing), the fear that rising budget deficits will "crowd-out" private-sector activity rather than simply add to it has no basis.[9]

It should also be noted that this near-complete lack of crowding-out is what makes the multiple independent estimates of job loss resulting from proposed spending cuts so close to one another. During normal times, when unemployment is not historically high, the boost to jobs stemming from increased government spending may be offset with some degree of crowding-out of private-sector spending. The net outcome of these two competing influences can be tricky to calculate. But when there is no private-sector crowding-out, calculations of the jobs impact of government spending are quite easy to calculate—and this is why estimates made by different economists are currently clustering around a tight range of numbers.

Despite the clear consensus based on textbook macroeconomics that near-term fiscal contraction will lead to

higher unemployment rates, some recently have tried to argue the opposite, positing that a rapid *decrease* in the budget deficit could actually be good for stabilization. Surprisingly, although in no way supported by the clear economics of the current situation, this idea seems to have somehow won the political day, as at least some members of both parties in Congress have proposed escalating spending cuts undertaken in the name of balancing the budget.

There is, however, no plausible mechanism for a rapid *decrease* in the deficit in the next few years (particularly decreases spurred by spending cuts) to help stabilize the economy. Past instances of rapid fiscal contraction actually aiding overall growth have almost without exception been undertaken in very different circumstances than what the U.S. economy faces today. Specifically, these so-called "expansionary contractions" have happened when: (a) countries were already growing strongly in the period before the fiscal contraction took effect; (b) interest rates were very high and deficit reductions had room to reduce them; and/or (c) nations matched the fiscal contraction with large exchange-rate depreciations and boosted exports.[10] Simply put, none of these apply to or are in the offing for the U.S. economy.

FISCAL STABILIZATION WITHOUT DEFICIT SPENDING: BALANCED-BUDGET MULTIPLIERS

Using fiscal policy to shrink large output gaps and fight high unemployment is, as noted earlier, most effective when debt financed. The reason is straightforward—if one is trying to spur demand for goods and services by, say, paying out more in unemployment benefits to cash-strapped jobless households, one shouldn't neutralize this new demand by extinguishing it somewhere else (e.g., cutting food stamps or raising taxes). And since debt incurred during recessions doesn't do the economy any damage (especially if monetary policy is working in tandem with fiscal policy, as will be explained in the next section), keeping fiscal policy as effective as possible means increasing the federal deficit to accommodate it.

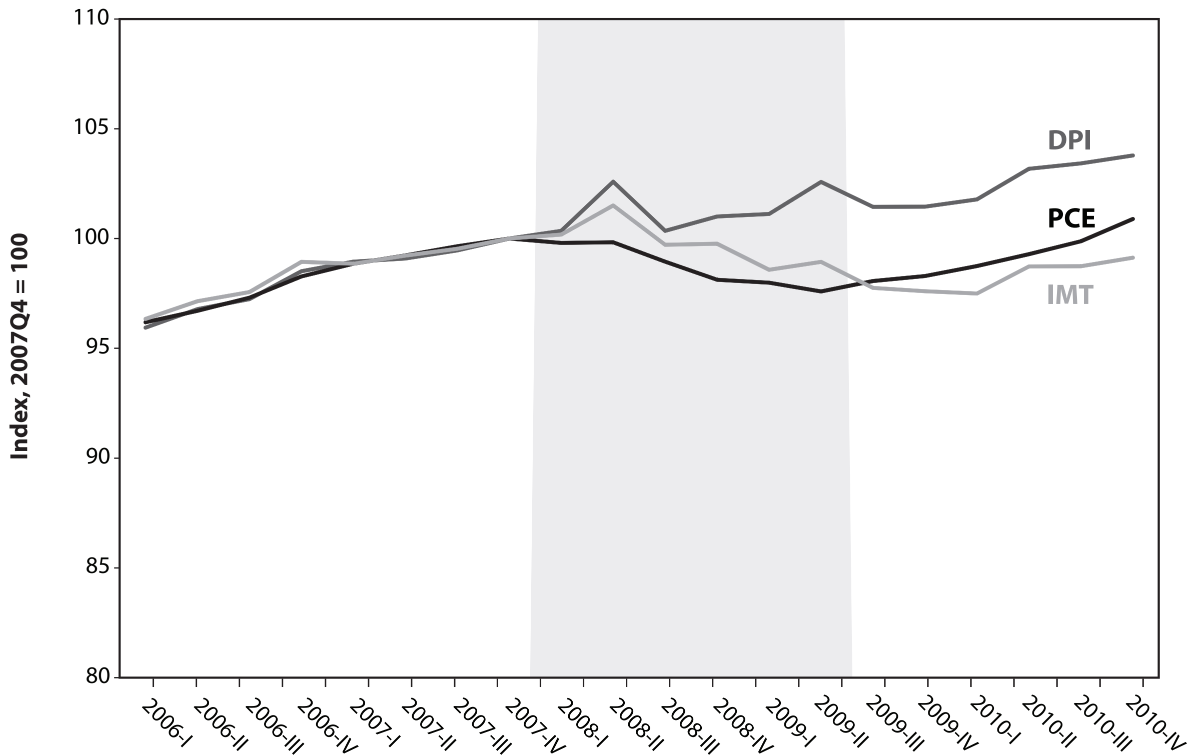
However, if policymakers persist in thinking (against all economic evidence) that smaller budget deficits are desirable in the near-term, economic stabilization could still be achieved by providing fiscal support to the economy that was "deficit-neutral." It is well known that there is a hierarchy of proposals aimed at fiscal stabilization—see **Figure D** for a representative ranking. This ranking is driven mostly by how quickly the first-round recipients of stimulus funds re-spend them into the economy. Unemployed workers receiving benefits spend these very quickly: They are by definition cash-strapped and not building up savings. Very affluent families receiving tax cuts, on the other hand, could well be expected to save this money, tucking it away out of circulation, making such tax cuts ineffective as stimulus.

One could exploit this hierarchy to guide decision-making by, say, increasing food stamps and infrastructure spending (both of which have very high impact on the economy) and offsetting these by raising corporate taxes or enacting a financial transactions tax by an equivalent amount (both of which have very little immediate impact on the economy). Again, this would be less effective than using debt financing to increase food stamps or infrastructure spending because the benefit is partially offset by reduced activity stemming from the tax increases—but this offset is, indeed, only partial. This sort of strategic targeting of spending and tax changes meant to maximize stabilization properties while not adding to the nation's overall debt is essentially trying to construct what economists sometimes call a "balanced-budget multiplier."

continued on page 9

FIGURE D

Disposable personal income (DPI), income minus transfers (IMT), and consumption spending (PCE) in the Great Recession



SOURCE: EPI analysis of Bureau of Economic Analysis data.

continued from page 8

However, pointing out the *economic* possibility of using balanced-budget multipliers does not solve the biggest impediments to undertaking more fiscal support: politics and ideology. The mania for cutting spending in the near-term is clearly *not* actually driven by fears of rising deficits, per se. Evidence of this can be seen in the fact that proposed spending cuts (which *reduce* the deficit) are more often than not matched with proposed *tax* cuts (which *increase* the deficit). Given that a plan to use balanced-budget multipliers is clearly less effective *economically* than traditional fiscal stimulus and appears to be no more politically viable, it is difficult to see much of a role for this kind of strategic fiscal policy in coming years.

Supports outside of fiscal policy

While it is clearly bad news for a rapid recovery that *fiscal* policy looks set to become much less expansionary in the near-term, the prognosis is even worse after considering other plausible policy levers that could be used to address unemployment.

Monetary policy

Monetary policy—which mostly concerns the Federal Reserve's ability to lower interest rates to spur borrowing and spending by businesses and households—has been used very aggressively (and appropriately) to spur growth in recent years. However, the Fed has recently been under

severe attack from those arguing that its actions will spur inflation in the near-term. This argument is clearly wrong (see Bivens, 2011, for an overview of why); in fact, the Fed has not done enough since the beginning of the Great Recession to solve the problem of deficient demand.[11] Despite this, how much longer the Fed will stay supportive of growth policies in the face of the concerns of inflation-phobes is an open question.

These criticisms of the Fed's actions in recent years are particularly ironic because they tend to be leveled by the same people who criticize expansionary fiscal policy on the grounds that it adds to the federal debt. By buying new debt issued to finance fiscal support, the Fed has actually kept some of this fiscal support from adding to the national debt. One would have hoped that this action addressed the concerns of those worried that more fiscal support to the economy would lead to high debt burdens for the U.S. government in the future—if the Fed owns the newly created debt that provides fiscal support, interest on this debt would be paid to the Fed and recycled back to the U.S. Treasury.

Exchange rate policy

Exchange-rate policy—aiding the needed adjustment of international exchange rates to close the U.S. trade deficit and boost net exports—has not been tried, and there is no evidence that the policymakers in charge at the Treasury Department are going to use this option.

The key problem keeping the dollar from moving to a more competitive level is that the United States' major trading partners (primarily China) manage the value of their currency to increase the competitiveness of their own exports. The Chinese monetary authority has managed this by buying more than $2 trillion in dollar-denominated assets over the past decade; this boosts the global demand for dollars and keeps the value of the U.S. dollar too high for U.S. exports and import-competing industries to be competitive in world markets. This inflated dollar, in turn, leads the United States to run chronic trade deficits.

It is clear that someday in the future the United States will have to run smaller trade deficits and the dollar will have to move to a more competitive level. Given that this movement of the dollar—if it occurs in the next year or two—will actually aid the recovery from the Great Recession, now would be the best time to engineer this movement. And to be clear, all complexities aside, it would not be hard for the Obama administration by itself, to make this happen. The fact that the administration has not simply means that yet another tool to spur recovery has largely been left in the toolbox over the past couple of years.

Spreading the lost hours of work

The last category of policies to push down the unemployment rate entail spreading the decline in hours of work demanded by employers over more people. There are two policy levers often mentioned that could do this: proposals to encourage work-sharing or short-time hours, and proposals to temporarily allow early entry into Social Security and Medicare for workers over age 60 who wish to move up their retirement.

Work-sharing would essentially encourage employers to cut back on average hours per employee (say by subsidizing this cutback), hence allowing new labor demand to be met by increasing actual headcount on payrolls rather than by increasing hours worked by incumbent employees. Given that unemployment is a head-count measure, work-sharing would reduce measured unemployment. Early retirements would decrease the labor supply while holding labor demand fixed, thereby allowing the unemployment rate to fall as well.

There is much to recommend these policies, especially when the political will does not seem to exist for the expansionary policies that would increase the demand for total hours of work.

Conclusion

Frustrations with the current state of the economy, while understandable, have led many to prematurely lose interest in those policy levers that actually have the most promise to spur a quicker recovery. In fact, the rejection of the effectiveness of these traditional policy levers has almost graduated into conventional wisdom, largely based on a rhetorical bipartisan agreement over recent decades that federal budget deficits are always and everywhere bad.

This is a disastrous state of affairs. It means that we are simply walking away from what are clearly the most realistic policies that could have a real effect in driving the

unemployment rate back down to acceptable levels more quickly: more fiscal support.

Advocating that policymakers simply undertake more of what already has been done is, admittedly, not new and exciting. It is, however, what would work. Abandoning this strategy prematurely is akin to firefighters simply walking away from a burning building with water remaining in their pumper trucks, based on the reasoning that "we already dumped a lot of water on it, but it's still burning… so the water must not be helping."

That fiscal support is the most effective way to reduce the unemployment rate quickly does not, of course, mean that no other policies should be enacted or discussed in the coming years. For example, there are useful ways to spread the pain of the slow recovery—measures to increase work sharing or reduce average working hours could both provide downward pressure on unemployment as well as spread the burden of less overall work across a wider population.

However, policies currently under debate that run directly counter to these suggestions (say, recent proposals to radically cut federal spending or arguments that the Fed should pull back on the monetary support it is providing to the economy out of an unfounded fear of sparking inflation) will, without doubt, put *upward* pressure on the unemployment rate in coming years.

In policymaking circles, the gap between what is possible to do in combating high unemployment and what seems likely to happen is dismayingly large. Fiscal policy (after the boost negotiated in 2011 between the president and Congress) looks set to become a drag, not a support to growth after this year. Even the boost provided in 2011 by the tax-cut deal negotiated in the lame-duck session of the last Congress may be significantly eroded before the end of the year. Monetary policy is under a sustained attack from those who think the Fed should be fighting an inflationary spike that is so far completely imaginary. And exchange-rate policy has never been tried, even as the Obama administration makes strong rhetorical claims about using exports to support economic recovery.

The next few years will be a very useful reminder of the importance of policy choices: You get the economy you design. Unfortunately, the economy we are designing through policy inaction today is one that will see high rates of unemployment for years to come.

Endnotes

1. A CNN poll from March 11, 2011 found that 28% of those polled responded that the ARRA "helped" the economy, while 21% responded that it "hurt" the economy, and 49% responded that it "made no difference." http://www.pollingreport.com/budget.htm

2. Note that *demand* here is defined the economists' way—the desire backed by purchasing power. Nobody doubts that the desire for goods and services still exist in American households and businesses—what is lacking is the purchasing power, which has largely been erased as home prices collapsed.

3. In particular, the fact that short-term interest rates controlled by the Federal Reserve have been stuck at zero since nearly halfway through the recession is an impediment to allowing interest cuts by themselves to serve as the main recession-fighting tool.

4. Note that actual GDP can rise above potential GDP for periods. Potential GDP is best thought of as the amount of national income that could be produced without sparking a rise in inflation. When actual GDP exceeds potential GDP for extended periods, the consensus among economists (which may be right or wrong for any given historical episode) is that it will lead to a build-up in inflationary pressures.

5. See Bivens (2011) for a fuller overview of expert opinion on the effects of the ARRA.

6. See Zandi (2010) for full break-down of the tax cut deal.

7. See Fieldhouse (2011) for the details of the rapid about-face on fiscal support in 2011.

8. Goldman-Sachs, Moody's Economy.com, and EPI.

9. This is an important point—the channel through which rising budget deficits can theoretically crowd-out private sector spending is solely through rising interest rates—for more on this see Bivens (2010).

10. See a recent report from the International Monetary Fund (IMF 2010) for exhaustive evidence that fiscal contractions are indeed contractionary.

11. See Gagnon (2009) for why the Fed needs to provide more monetary support to the economy.

References

Bivens, Josh. 2010. *Budgeting For Recovery—The Need to Increase the Federal Deficit to Revive a Weak Economy.* EPI Briefing Paper. Washington, D.C.: Economic Policy Institute.

Bivens, Josh. 2011. *The Stimulus: Two Years Later.* Testimony provided to the Committee for Government Oversight, U.S. House of Representatives, Feb. 16.

Council of Economic Advisors. 2010. "The Economic Impact of the American Recovery and Reinvestment Act of 2009." Fourth quarterly report.

Fieldhouse, Andrew. 2011. "Budgeting Tradeoffs," a commentary, Washington, D.C.: Economic Policy Institute, March 8.

Gagnon, Joseph. 2009. *The World Needs Further Monetary Ease—Not an Early Exit.* Policy Brief. Washington, D.C.: Peterson Institute for International Economics.

Terrones, Marco E., Alasdair Scott, and Prakesh Kannan. 2009. "Chapter 3: From Recession to Recovery: How Soon and How Strong?" *World Economic Outlook.* Washington, D.C.: International Monetary Fund, World Economic Outlook.

Zandi, Mark. 2010. "U.S. Macro Outlook: Compromise Boosts Stimulus." Moody's Analytics Economy.com, Dec. 10.