The Limits of Fiscal Policy

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In late 2008 and early 2009, there was a serious deterioration in the US economic outlook. The National Bureau of Economic Research, the widely regarded official arbiter of business cycle dates, announced on December 1, 2008 that the economy had peaked or entered a recession in December 2007. Subsequently, comparisons of performance and the outlook degenerated into comparisons with the Great Depression of the 1930s, suggesting that the recession is the worst since the 1930s. This recession should be called the superlative recession because discussions invariably refer to the most dismal performance since the Great Depression: the decline in stock prices is the worst, the decline in employment is the worst, the fall in output is the worst, the rise in the unemployment rate is the worst, the banking system crisis is the worst, or any number of other "worsts" since the depression.[1]

These superlative comparisons are off base, but they seem to have succeeded in reversing 70 years of history on economic policy and economic thought. Policymakers suddenly rediscovered policy responses from the depression and advocated, after the fact, by Keynesian economists. With the benefit of time, depression era policies had been seen as complete failures that extended and worsened the depression (see Shlaes 2008 or Cole and Ohanian 2004, for examples). A long delayed monetary policy easing, beginning in a large one-time expansion of the monetary base in September–October 2008, has offered new possibilities for an end to the deepening recession, but its continuation remains in doubt because it is the result of a shift in policy procedures more than of a shift in policy. More troublesome is that massive fiscal policy programs have become central to the policy debate, despite three large failed fiscal responses over the past year and a strong consensus in the policy community that such efforts are not likely to be effective. A change of leadership has focused efforts on increasing federal spending in ways and to an extent not seen in many years. On 17 February, 2009 President Obama signed the American Recovery and Reinvestment Act of 2009, increasing spending and cutting taxes by a total of 787 billion US dollars.[2] One European leader has called this the "road to hell," and others have been reluctant to join in a policy of coordinated fiscal expansion.

The superlative recession

Unemployment is the most important benchmark of the business cycle for most people, and it has been used as an indicator of the severity of the 2008–09 recession. There have been ten previous recessions since the end of World War II and eight of them did not last as long as the current one has. So far, this is one of the longer recessions since the Great Depression. The two post-war recessions that lasted longer were from November 1973 to March 1975 and from July 1981 to November 1982, both 16 months in length. For the current recession to last longer, it would have to end in May 2009 or after. Some forecasts indicate that this is likely, while others suggest that the recession ended in March or April 2009. It is possible that this recession could be the longest since the Great Depression, but the comparison would likely be very weak because that recession lasted 43 months, from August 1929 to March 1933, and had incomparable consequences, including a rise in the unemployment rate to about 25 percent.

The main indicator of recession, however, is real GDP. In the United States real GDP remained higher than at the cycle peak after three quarters of the recession and then fell sharply in late 2008 and early 2009. With the 3.8 percent rate of decline in the fourth quarter of 2008, real GDP was down by only 0.2 percent over the first four quarters of the recession, a relatively weak recession. After one year, real GDP is usually down by more than that. A further 6.1 percent rate of decline in the first quarter of 2009 left real GDP down 2.4 percent over the five quar-

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[1] See Tatom (2009). This article draws heavily upon the earlier article.

[2] All references and data for the Obama stimulus plan are based on Congressional Budget Office (CBO 2009).

ters of recession, smaller than in both the 1973–75 and 1981–82 recessions.

Figure 1 shows real GDP growth on a year-over-year basis since 1948. In five of the ten past recessions, real GDP declined for a year by more than 2 percent and in two others it declined by more than one percent. The 0.2 percent decline for four quarters registered in the last quarter of 2008 is smaller than in eight of the last ten recessions.

For the worst two of the ten previous postwar recessions, the declines over the five quarters were 3.1 percent in 1974–75 and 2.6 percent in 1981–82. In the 2008–09 recession the comparable figure is 2.4 percent. To reach a 3.1 percent decline, real GDP will have to fall rapidly in the second quarter of 2009, and this would also extend the latest recession to six quarters, longer than the two other longest and deepest recessions since in the postwar period. To reach a decline of 3.1 percent or more, surpassing all postwar recessions, real GDP would have to decline at a 2.8 percent annual rate in the second quarter of 2009. Of course a longer recession that included some historically record levels could extend the current recession into record breaking territory.

If this recession turns out to be the worst in the postwar period, it would not be too surprising. Tatom (2008a) shows that the energy price shock in the first half of 2008 was far and away the largest since World War II and perhaps ever in US history. The worst two recessions in postwar history were associated with huge energy prices shocks as well, but they were not subsequently reversed in the same way as the 2008 shock. Nor were they associated with such a large shock to the growth rate of monetary measures as occurred with the tight monetary policy from 2006 to the third quarter of 2008; monetary policy is assessed here using the growth rate of the monetary base. The official view focuses on the federal funds rate (Bernanke 2009). Fortunately, this shock has also reversed sharply, at least temporarily, suggesting that an economic recovery may have been set in motion already.

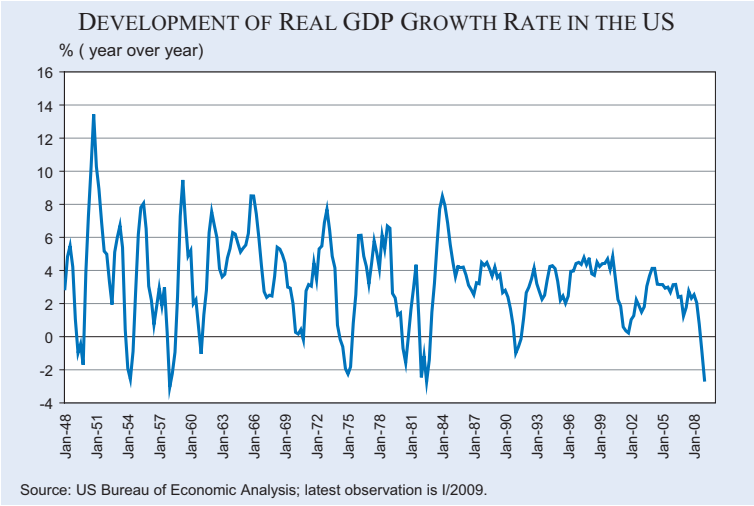
In any event, comparisons to the Great Depression are over the top. According to annual data prepared by Robert Gordon, over the four years from 1929 to 1933, real GDP fell 45.2 percent, or at a 14.1 percent annual rate. After the first three quarters of the current recession, real GDP was higher than at the peak, though it did decline at a 6.2 percent annual rate over the next two quarters. By the end of the full five-quarter period, real GDP fell 2.4 percent, which is smaller than in the previous five quarter recessions in 1973–75, – 3.1 percent, or 1981–82, – 2.6 percent. If the recession trough occurs after the first quarter of 2009, the recession will be the longest since the four year recession in 1929–33 and it is possible, though not likely, that it will be the deepest recession in the postwar period.

The flawed fiscal response

A new round of fiscal policy stimulus has taken center stage in policy discussions, in part because of the widely-accepted, but false, notion that monetary policy became impotent when the Fed lowered the federal funds rate target to a zero-to-0.25-percent range on 16 December 2008. The general outlines of the policy were presented in a speech by then President-elect Obama on 8 January 2009. In the end, the bill cost 787 billion US dollars and included a temporary tax reduction and a large increase in spending.[3]

There has been a major swing back to Keynesian fiscal policy

Figure 1



Source: US Bureau of Economic Analysis; latest observation is I/2009.

[3] There was official discussion of an added Obama administration proposal that would have permanently cut taxes for 95 percent of taxpayers building on the 2009–2010 tax cut, but that proposal was dropped from congressional plans in April 2009. In any event, the tax cut did not alter marginal tax rates and was a fixed rebate on wage payments spread over each year's periodic payments.

ideas in the United States and elsewhere and not because of new evidence that it has become more effective or timely than in the past. Sure, Milton Friedman (1966) did say "in one sense, we are all Keynesians now"; but the remainder of his statement was "in another, nobody is any longer a Keynesian". In recent months only the first clause has been noted, despite the dominance of Friedman's view of Keynesianism over more than 40 intervening years. The shift appears motivated by two forces: fear that failure to enact a massive bill will damage public confidence and, second, a desire to pull all of the social spending plans of a new administration into one large front-loaded program, independent of the effects of any particular components of spending on aggregate demand or on employment. This is unfortunate, given the massive spending programs of the past year that have proven to be ineffective in stimulating spending, largely by design and for long-known reasons. These include the tax cut program passed in spring 2008 (168 billion US dollars), the summer 2008 housing refinancing and stimulus program (300 billion US dollars), the bank bailout program passed in September 2008 (700 billion US dollars) and the 2009 American Economic Recovery and Reinvestment Act (787 billion US dollars).

Fiscal stimulus in the face of recession has generally not been successful in the postwar period. The principal exception was the 2001 Bush tax cut, which began on the campaign trail in 2000 as a policy to boost long-term growth, but in view of the late-2000 anticipated recession, became an anti-recession permanent cut in individual tax rates. For most discretionary fiscal policy changes, especially tax policy, the implementation lag has been long enough that any anti-recession stimulus did not come into effect until after recessions were over. Moreover, many of these tax cuts fail to have any effect on GDP because they are lump-sum payments and do not alter marginal tax rates.

The Bush tax rebates in 2008 came early in the recession, but like other temporary tax cuts failed to stimulate the economy because it did not change consumers' estimates of life-cycle or permanent income. The 2009 Obama tax cut is larger, 800 US dollars for a joint return instead of 600 US dollars. It excludes joint filers earning more than 150,000 US dollars, just as the 2008 Bush tax cut did. The Obama cut is built into withholding tax reductions over nine month and 12 month periods, respectively, with the view that a small periodic payment might stimulate spending more than a lump sum rebate each year for two years. Initially, the two year rebate was linked to a proposal for a permanent tax cut after 2010, but that was eliminated in congressional planning at about the same time as the tax cut began (April 2009). A larger dose of an ineffective tax cut is not likely to be any more successful. It remains to be seen whether the small periodic adjustments to payroll withholding will make any difference, but the economic theory indicating the ineffectiveness of a temporary tax cut holds as much for the Obama rebate as it does for the Bush rebate. The Obama tax cut fits the mold of earlier tax-based efforts to avoid recession – it is likely to have been too late, beginning at the end or after the end of the recession.

The overall fiscal plan also fits the US history of discretionary fiscal policy coming too late. Of the total stimulus of 787 billion US dollars, only 23.5 percent, or 185 billion US dollars even comes within 2009. Over 75 percent comes in 2010 and virtually all of it comes after the second quarter of 2009 when the recession is expected to be over. This has fostered concern that the Obama stimulus plan was not a stimulus plan at all, but the beginning of a longer term strategy to reorient the economy to a larger public sector. The 185 billion US dollars of 2009 stimulus (120 billion US dollars of spending and 65 billion US dollars of tax rebates) is only 1.3 percent of GDP, hardly enough to affect GDP appreciably, even under the most extreme Keynesian textbook assumptions.

Another issue for fiscal policy is the effectiveness of discretionary versus endogenous policy. Van den Nord (2000) shows that built-in stabilizers are much more important or sizable in Europe than they are in the United States. This is a critical factor in accounting for Europe's greater reluctance to rely on discretionary fiscal policy stimulus than in the United States. Fiscal policy has a better reputation for effectiveness in Europe than in the United States, but a greater reliance on endogenous policy has rendered discretionary policy less attractive. Taylor (2000) argues that the relative magnitude of such stabilizers has declined in magnitude in the United States. He also indicates that discretionary policy has shown little consistent response over time. He concludes that discretionary fiscal policy should be used for longer term issues and that rule based automatic stabilizers should become more important in providing systemic and predictable rules. He does not include issues of effectiveness raised below, however.

Multiplier estimates and direct substitution

Economists sometimes discuss the effects of spending on the aggregate demand for goods and services or real GDP in terms of "the spending multiplier", especially in the most elementary textbooks and around the halls of governments. For example, they might evaluate spending and tax multipliers to assess whether spending or tax changes affect aggregate demand or to compare the relative size of their effects. The spending multiplier indicates how much real GDP would be expected to rise per one dollar rise in spending. Policymakers also like to discuss employment multipliers: how much total employment rises per dollar rise in government expenditures. Forty years ago (November 1968), Andersen and Jordan produced one of the most provocative tests of monetary and fiscal policy effectiveness ever published. They found that fiscal spending has no effect on GDP beyond a few quarters. This implies that the multiplier after one year is zero, so that the new government spending is fully offset by reduced private spending. In short, fiscal spending policy is impotent within a short time.

Mankiw (2008), following a more Keynesian modeling tradition, argues that the spending multiplier is one, so that government spending has no effect on private sector spending and the effect on GDP is simply due to the larger government component of spending. He suggests that a consensus estimate is a multiplier of 1.4, so that each dollar of government spending would raise the government component by one dollar and boost private sector spending by another 0.4 US dollars. Some proponents of road building believe that such spending can have a multiplier closer to 3, a classic mix of bad economics, bad measurement and political exploitation of an admittedly simplistic pedagogy from elementary textbooks. Mankiw (2008) also notes work by the new Chair of the President's Council of Economics Advisers, Christina Romer, and David Romer (2007), showing that the tax multiplier is much larger, so that a tax cut of a given size is a much more effective stimulus than the same size government spending increase.

Robert Barro (2009) has long argued that government spending has an average multiplier of zero in peacetime years, though he finds some evidence that in wartime the spending multiplier could be as large as 0.8, because not all of the new military spending is offset by reduced private sector spending. Woodward and Hall (2009) indicate that the wartime spending multiplier is one. The current wartime experience does not compare with the two world wars or the Korean War, in terms of the risks to wealth and permanent income or in terms of the size of the boost in military spending. In this decade, there was a war-related surge in federal spending of less than one percent of GDP several years ago, hardly comparable to the surge, for example, in World War II. At that time, federal outlays rose from 9.4 percent of GDP on average in 1935–40 to 12 percent in 1941, 24.3 percent in 1942 and 43.6 percent in 1943 and 1944. Even the latest US fiscal stimulus for the first year or two, or indeed for the next ten years, is trivial in comparison to those earlier wartime surges in spending. The important point is not the relative size of the spending increase, however, it is the absence of a threat to permanent income such as that posed by the world wars.

Tatom (1991) uses a private sector production function to assess whether government infrastructure capital formation (non-defense) boosts private sector productivity and output and finds that there is no effect. Straub (2009) as well as Ford and Poret (1991) have also found that there is no effect of public infrastructure on private sector output in cross country studies. This might suggest that public sector infrastructure spending has a multiplier of one, or that real GDP rises only by the amount of the government spending, as suggested by Woodward and Hall. However, David Alan Aschauer (1989) shows that private sector investment spending declines dollar-for-dollar with an increase in public sector spending. Two implications of this are that private sector output is reduced due to the decline in the private sector capital that occurs when public sector capital increases, so that real GDP is unaffected by public infrastructure spending or the spending multiplier is zero. The former effect is referred to as "direct crowding out" as the rate of return to private sector capital formation is diminished by an increase in public sector capital formation. The implications of this research are that government spending usually is not effective in stimulating aggregate demand and boosting total employment.[4] Output and employment are simply moved around from the private to the public sector, with no effect, or perhaps negative effects, on the overall productivity of the nation's resources.

[4] See Tatom (2006) for a fuller treatment of the implications of direct substitution and the permanent income hypothesis for fiscal policy. Reynolds (2009) cites five other studies that support small or even negative multipliers for government spending. The strongest fiscal stimulus likely comes from permanent reductions in tax rates and government spending.

Gramlich (1994) provides a summary of the debate over infrastructure spending, though he is more sanguine, like Aschauer, about the productivity enhancing effects of infrastructure spending.

The consensus of economists, at least until recently, is that fiscal spending policy is weak, at best, and usually too poorly timed to be useful for short-term effects on economic policy, but that tax cuts, again usually suffering from poor timing, can be effective when they are permanent and tied to income and income tax rates, or when they are temporary or permanent *and* if they provide immediate incentives for spending, such as an investment tax credit. Fortunately monetary policy is very powerful and does not suffer from the implementation lag that fiscal policy does. The current spending package and tax cuts suffer from the worst problems of fiscal policy. The spending increases focus on a collection of infrastructure spending and other programs that are chosen for political reasons and, at best, on the basis of an erroneous expectation for their potential effects on output and employment. Even the best efforts would not have much or any effect, however, since government spending has a weak track record as a fiscal stimulus policy.

Some analysts have suggested other policies that would likely work if they could be implemented in a timely way. One is a proposal by Susan Woodward and Robert Hall that temporary state sales tax elimination, financed by federal transfer payments to states, would provide strong incentive to boost private sector spending quickly. Like an investment tax credit or any other temporary spending subsidy, it would only be available for spenders and only for the immediate future when the spending is desired, unlike an income or wage tax cut that provides no direct incentive to spend, especially if temporary. Unfortunately, as noted, there are few incentives to spend in the recovery and reinvestment plan. Part of the business tax cut is only available for businesses that do more investment spending and some spending programs are contingent on new spending before a future deadline, so that the incentive is to spend now and not later. Getting the spending going apparently will require more than this, however. The Congressional Budge Office (2009) estimates that the roll out of the new spending will be too slow to have much effect in 2009, even if one assumes that it can be effective in stimulating aggregate demand.

Conclusion

Unfortunately, policymakers emboldened by a renewed interest in Keynesian counter-cyclical fiscal policy are ignoring evidence on what works and what doesn't. They are also ignoring the negative effects that expected recovery has on financial markets and the cost of capital, as well as the effects of higher expected future taxes. There is also risk to the new Administration's plans. The last major initiative to "Rebuild America" was at the beginning of the Clinton Administration when the unemployment rate was about the same as in December 2008. That program failed to pass because of similar questions about its necessity and effectiveness; its failure to pass was also a major setback for the rest of the Clinton Administration's initial plans for spending and for first term. The Obama fiscal policy will offer a strong test of the effectiveness of such a program. In the best case scenario, seldom-mentioned monetary policy may provide the stimulus that many newly minted Keynesians believe will come from fiscal stimulus.

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