

WHY THE FISCAL MULTIPLIER IS ROUGHLY ZERO*

Fiscal policy doesn't work when the central bank stabilises aggregate demand, says **Scott Sumner**

Many observers have been perplexed by the slow recovery from the 2008 recession. In the United States, Congress passed a nearly \$800 billion stimulus in early 2009—yet growth remained sluggish. More recently, a shift towards fiscal austerity does not seem to have noticeably slowed the rate of economic growth.¹ This seems to go against the textbook Keynesian model, which says fiscal stimulus has a multiplier effect on GDP; however, we shouldn't be surprised that fiscal policy seems less effective than anticipated. As we'll see, fiscal policy ineffectiveness is one by-product of modern central banking, with its focus on inflation targeting.

The traditional 'multiplier' approach to fiscal policy is based on John Maynard Keynes' observation that consumers usually spend a large share of any increase in their income.² Government spending programs and tax cuts put dollars directly into the pockets of consumers, regardless of how effective they are on a cost-benefit basis. If consumers spend 80% of their extra take-home pay on goods and services, then other workers and firms will earn additional income. A portion of that income boost will also be spent, leading to a multiplier effect, whereby total aggregate demand rises by more than the initial government stimulus. The multiplier represents the ratio of the total increase in spending to the initial increase in government spending.

Conservative critics of fiscal stimulus often point out that the extra dollars must come from

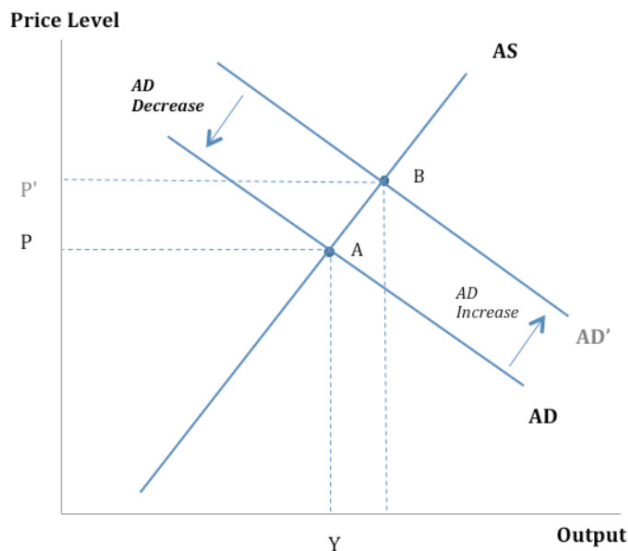
somewhere.³ If the government borrows funds to boost spending, then interest rates might rise, which would crowd out private investment expenditures on consumer durables, new homes, and business ventures. Although crowding out can reduce the effectiveness of fiscal stimulus, Keynesians correctly note that when interest rates are zero, it is unlikely that additional government borrowing will be fully offset by declining private investment, especially if the central bank holds rates close to zero.⁴

Why has the effect of fiscal stimulus been so meagre in recent years? After all, interest rates in the United States have been close to zero since the end of 2008. The most likely explanation is monetary offset, a concept built into modern central bank policy but poorly understood. We can visualise monetary offset with the Keynesian aggregate supply and demand diagram used in introductory economics textbooks. If fiscal stimulus works, it's by shifting the aggregate demand (AD) curve to the right. This tends to raise both prices and output as the economy moves from point A to point B, although in the very long run, only prices are affected.



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Now let's assume that the central bank is targeting inflation at 2%. If fiscal stimulus shifts the AD curve to the right, then prices will tend to rise. The central bank then must adopt a more contractionary monetary policy to prevent inflation from exceeding their 2% target. The contractionary monetary policy shifts AD back to the left, offsetting the effect of the fiscal stimulus. This is called monetary offset.

By the 1990s this process was pretty well understood, which is why even many of the so-called New Keynesian economists began to lose interest in fiscal policy as a stabilisation tool.⁵ Instead, the focus shifted to central bank policy, and elaborate rules were devised to assist the central bank in steering the economy towards low inflation and stable growth. Perhaps the most famous was the Taylor Rule, which called for central banks to adjust interest rates to keep inflation near 2% and output close to potential output.⁶

If the central bank is steering the economy or, more precisely, nominal aggregates, such as inflation and nominal GDP, then fiscal policy would be unable to impact aggregate demand. As an analogy, imagine a child attempting to turn the steering wheel of a car. The parent might respond by gripping the wheel even tighter, offsetting the push of the child. Even though the child's actions would initially change the direction of the car, *ceteris paribus*, the parent will push back with equal force and correct this turn to keep the car on the road.

If monetary offset was well understood by the 1990s, why was there so much support for fiscal stimulus in the recent recession? It seems that many economists wrongly assumed that the normal monetary offset model no longer held, due to three misconceptions:

1. In early 2009, many economists wrongly assumed that the Fed was out of ammunition, leaving monetary policy adrift—or passive.⁷
2. Some economists have told me that the Fed would never attempt to sabotage fiscal stimulus because the Fed also wanted to see a robust recovery.
3. Fed officials like Ben Bernanke occasionally spoke out against fiscal austerity, making monetary offset seem even less likely.⁸

By now we know that central banks are not out of policy options when rates fall to zero.⁹ And, in a sense, this never should have been in doubt. When Japanese interest rates hit zero in the late 1990s, Ben Bernanke (then an academic) dismissed arguments that policy is ineffective at the zero bound.¹⁰ So did Milton Friedman.¹¹ The best-selling monetary economics textbook of 2010, written by former Fed official Frederic Mishkin, noted that monetary policy remains 'highly effective' when short-term rates fall close to zero.¹² We've recently seen the Bank of Japan engineer a sharp depreciation of the yen, despite near zero interest rates. This contradicts Keynesian 'liquidity trap' models, which suggest that central banks are unable to depreciate their currencies once short-term rates fall to zero. It's safe to say that the 'out of ammunition' view of monetary ineffectiveness has been thoroughly discredited.

The other two objections to monetary offset are harder to dismiss. The Fed has been disappointed by the pace of recovery and wishes that aggregate demand had risen at a faster pace over the past five years. This remains the central reason why most Keynesians continue to favour fiscal stimulus. But on closer inspection, it seems quite likely that the Fed has been sabotaging fiscal stimulus (and offsetting recent austerity), perhaps without even realising it.

To see why monetary offset continues to be operative, consider the sorts of statements

continually made by Fed officials. We never hear them explicitly say they'll sabotage fiscal stimulus, but we do hear them say they will calibrate the level of monetary stimulus to the health of the economy. For instance, the recent Evans Rule commits the Fed to hold interest rates close to zero until unemployment falls to 6.5%, or core inflation rises above 2.5%.¹³ Because fiscal stimulus would presumably make this happen sooner, it would also, *ipso facto*, cause the Fed to raise interest rates sooner than otherwise. Thus, fiscal stimulus would lead to tighter money over time. Of course, that doesn't necessarily fully offset the effects of fiscal stimulus, but it's an explicit admission by the Fed that if the fiscal authorities do more, they will do less.

An even better example occurred in late 2012, when the Fed took several steps to make monetary policy more expansionary, including adoption of the Evans Rule and additional quantitative easing (QE), or injections of bank reserves through bond purchases. Why did the Fed take such bold steps? Some Fed officials pointed to the looming fiscal cliff, which was widely expected to lead to steep tax increases. A possible spending sequester was also lurking in the background. Fed officials were determined to do enough stimulus to keep the recovery going, despite headwinds from both fiscal austerity and recession in Europe.

And so far it looks like they've succeeded. Job growth during the first six months of 2013 was running at more than 200,000 new jobs per month, which is actually faster than the pace of 2012. That's not to say that a much sharper drop in government spending wouldn't have some impact on measured GDP; after all, the Fed's policy initiative was calibrated to reflect the sort of fiscal austerity they expected in late 2012. Much greater austerity would have a short-term effect on growth, but over longer periods of time, the Fed sets the agenda. The Fed's ability to produce almost unlimited amounts of fiat money, without running up large budget deficits, ultimately makes monetary policy much more powerful than fiscal policy.

Because Fed officials continue to stress the risks of excessive austerity, the monetary offset argument seems counterintuitive to many economists. Many

will ask, 'Surely you don't think Ben Bernanke would offset fiscal stimulus?' But this isn't really asking the right question. The question that should be asked is, 'Will Ben Bernanke do what is necessary to keep nominal spending on a path consistent with low inflation and stable growth?' which is roughly the Fed's mandate. (Actually, the mandate speaks of inflation and employment, but jobs and growth are closely linked.) The real question is whether the central bank will do its job, regardless of what is happening on the fiscal front.

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When viewed this way, estimates of fiscal multipliers become little more than forecasts of central bank incompetence. If the Fed is doing its job, then it will offset fiscal policy shocks and keep nominal spending growing at the desired level. Bernanke would deny engaging in explicit monetary offset, as the term seems to imply something close to sabotage. But what if he were asked, 'Mr Bernanke, will the Fed do what it can to prevent fiscal austerity from leading to mass unemployment?' Would he answer 'no'?

Another debate revolves around the Fed's willingness to engage in unconventional monetary stimulus. They do seem somewhat uncomfortable with doing large amounts of QE. In my view, this is the best argument against monetary offset. The Fed might be afraid to use these more extreme measures to offset fiscal austerity, even if they'd be willing to use conventional tools (such as cuts in short-term interest rates) if those were still available.

And yet we continue to hear Fed officials talk of cutting back on QE as the economy strengthens. This implies they will do more QE under conditions of austerity than if fiscal policy were more expansionary. Perhaps without even fully understanding their role in this complex policy game, the Fed has acted very much like a central bank that was determined to keep the recovery proceeding at a steady pace but would back off whenever inflation or growth seemed to be

accelerating. That policy stance almost inevitably leads to monetary offset and largely explains why the recovery continues at a modest pace, despite an increase in fiscal austerity during 2013.

What role does this leave for fiscal policy? What would an effective fiscal stimulus look like? It turns out that fiscal policy could play a role, but only through supply-side channels. Return to the AS/AD diagram discussed above. If policymakers were able to increase aggregate supply, then the Fed would be under no pressure to offset the effects with tighter monetary policy. That's because supply-side tax cuts actually tend to lower the inflation rates and raise growth. A good example is a cut in the employer side of the payroll tax, which would encourage hiring but would not boost wages or prices. Indeed, the cost of labour from the firm's perspective would decline, whereas workers would see no change in take-home pay. Some economists believe that cuts in taxes on investment income might also boost aggregate supply.

Policy is most effective if each part of the government focuses on what it does best. That means the Fed should focus on stable monetary conditions. Elsewhere, I've argued that this can best be achieved by targeting a stable growth path for nominal GDP.¹⁴ By committing to a policy of stable spending growth, the Fed can shape market expectations in a way that would lessen the volatility created by its current policies. This would result in less aggressive policies from the Fed in the long run. Meanwhile, the fiscal authorities should focus on the supply side of the economy, creating an environment where the private sector can flourish. Attempts to jumpstart the economy with demand-side fiscal stimulus merely cause the government to pile up more debt, with any growth effects being offset by the Fed.

Endnotes

1 Note that taxes rose sharply in 2013, whereas government spending is more ambiguous, with declines in military and discretionary spending offset by increases in transfers. The May 2013 CBO Report made the following estimates of government spending: 'Outlays for the first eight months of fiscal year 2013 were slightly greater than what the federal government spent during the same period last year. That increase stemmed in part from shifts in the timing of certain payments, mostly because scheduled payment dates fell on a weekend. (Some spending for

defense, Medicare, and veterans' programs was affected.) Without those timing shifts, CBO estimates, total spending would have declined by \$46 billion (or 2 percent).' Congressional Budget Office (CBO), *Monthly Budget Review for May 2013* (Washington, DC: 7 June 2013), www.cbo.gov/publication/44320. Also note that the sequester took effect in the spring of 2013, so it didn't have much impact on spending for the period from October 2012 through May 2013.

- 2 John Maynard Keynes, *The General Theory of Employment, Interest, and Money* (New York: Harcourt, Brace & World, Inc. 1964).
- 3 John H. Cochrane, 'Fiscal Stimulus, Fiscal Inflation, or Fiscal Fallacies?' working paper (Chicago: University of Chicago, 27 February 2009).
- 4 See Sylvain Leduc, *Fighting Downturns with Fiscal Policy*, Federal Reserve Bank of San Francisco Economic Letter (San Francisco: 19 June 2009).
- 5 For example, see Lawrence Christiano, Martin Eichenbaum, and Sergio Rebelo, 'When is the Government Spending Multiplier Large?' *Journal of Political Economy* 119:1 (2011); Eric Leeper, Nora Traum, and Todd B. Walker, 'Clearing Up the Fiscal Multiplier Morass,' NBER Working Paper 17444 (Cambridge, Massachusetts: National Bureau of Economic Research, 2011); David Romer, 'What Have We Learned About Fiscal Policy from the Crisis?' paper delivered at the IMF Conference on Macro and Growth Policies in the Wake of the Crisis (March 2011); Michael Woodford, 'Simple Analytics of the Government Expenditure Multiplier,' *American Economic Journal: Macroeconomics* 3:1 (2011).
- 6 John B. Taylor, 'Discretion versus Policy Rules in Practice,' Carnegie-Rochester Conference Series on Public Policy 39 (1993), www.stanford.edu/~johntayl/Papers/Discretion.pdf.
- 7 For example, see Brad DeLong, 'Only Four Ways Out,' *The Economist's Voice* 6:2 (2009).
- 8 Matt Berman and Niraj Chokshi, 'Ben Bernanke Has Some Gentle Suggestions for Congress,' *National Journal* (17 July 2013).
- 9 For example, see James Bullard, 'Death of a Theory,' *St. Louis Fed Review* 94:2 (March/April 2012).
- 10 For example, see Ben Bernanke, 'Japanese Monetary Policy: A Case of Self-Induced Paralysis?' working paper (Princeton University, 1999).
- 11 Milton Friedman, 'Reviving Japan,' *Hoover Digest* 2 (1998).
- 12 Frederic Mishkin, *The Economics of Money, Banking and Financial Markets*, 9th ed. (Boston: Addison Wesley, 2010), 611.
- 13 See Annalyn Kurtz, 'Federal Reserve Official Aims for 6.5% Unemployment,' *CNNMoney* (27 November 2012), <http://money.cnn.com/2012/11/27/news/economy/charles-evans-federal-reserve/index.html>.
- 14 Scott Sumner, 'The Case for Nominal GDP Targeting' (Arlington, Virginia: Mercatus Research, Mercatus Center at George Mason University, 23 October 2012), <http://mercatus.org/publication/case-nominal-gdp-targeting>.