Out of Sample Tests of Fiscal Multipliers

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Literature Reviews of Note

Auerbach, Alan J. and William G. Gale. 2009. "[Activist Fiscal Policy to Stabilize Economic Activity](#).” *NBER Working Paper No. 15407*.
-Reviews academic research in light of the crisis.

Delong, J. Bradford and Laura D. Tyson. 2013. "[Discretionary Fiscal Policy as a Stabilization Policy Tool: What Do We Think Now That We Did Not Think in 2007?](#)" Working Paper. -
Reviews evidence that fiscal multipliers are greater during recessions.

Ramey, Valerie A. 2011a. "[Can Government Purchases Stimulate the Economy?](#)" *Journal of Economic Literature* **49 (3): 673-85.**
-Most recent and complete academic lit review on size of fiscal multiplier.

Notable Statements on the Size of the Multiplier and the Great Recession

Delong, J. Bradford, and Lawrence H. Summers. 2012. "[Fiscal Policy in a Depressed Economy](#)." *Brookings Papers on Economic Activity* **(Spring): 233-274.**
-Policy prescription by Delong and Summers, that stimulus packages will be self-financing.

Taylor, John B. 2009. "[The Lack of an Empirical Rationale for a Revival of Discretionary Fiscal Policy](#).” *American Economic Review: Papers and Proceedings* **99 (2): 550-55.**
-Taylor explains that the profession agreed that fiscal stimulus is not worth it, and that nothing has changed.

Notable Academic Papers and Reports on the Size of the Fiscal Multiplier

Acconia, Antonio, Giancarlo Corsetti, and Saverio Simonelli. 2013. "[Mafia and Public Spending: Evidence on the Fiscal Multiplier from a Quasi-Experiment](#).” *Center for Studies in Economics and Finance Working Paper no. 281*.

What is the purpose of the paper?

There is a law in Italy that mandates the dismissal of all elected officials if there is evidence of mafia infiltration. This leads to a fall in public spending by 20%, and it can be thought of as a natural experiment and a truly random shock to a local economy.

Does the paper directly estimate the fiscal multiplier?

It is estimated to be around 1.2, and perhaps as high as 1.8.

Is the estimate statistically significant?

Yes, across many different specifications. However, it should be noted that the results are statistically distinguishable from 0, not 1.

Does the paper itself perform an out of sample test?

No - this is a natural experiment, not an OS test.

Acemoglu, Daron, David Autor, David Dorn, Gordon H. Hanson, and Brendan Price. 2014. "Import Competition and the Great U.S. Employment Sag of the 2000s." *NBER Working Paper* No. 20395.

What is the purpose of the paper?

Argues that the continued inability of the economy to create net job growth is the result of the rapid rise in imports from China. Finds second order Keynesian effects spilling over into other industries.

Does the paper directly estimate the fiscal multiplier?

It is heavily implied to be greater than one.

Is the estimate statistically significant?

The estimates associated with it are.

Does the paper itself perform an out of sample test?

No.

Aiyagari, S. Rao, Lawrence J. Christiano, and Martin Eichenbaum. 1992. "The Output, Employment, and Interest Rate Effects of Government Consumption." *Journal of Monetary Economics* 30 (1): 73-86.

What is the purpose of the paper?

Provides theoretical model to justify fiscal stimulus in New Classical models, in principle.

Does the paper directly estimate the fiscal multiplier?

Under one specification, it calculates elasticities that imply 1.15.

Is the estimate statistically significant?

Yes, but it's not clear that it is against 1.

Does the paper itself perform an out of sample test?

No.

Alesina, Alberto. 2012. "[Fiscal Policy after the Great Recession](#)." *Atlantic Economic Journal* **40: 429-35.**

What is the purpose of the paper?

Alesina provides his summary of the state of fiscal multipliers in academia. The paper is short and written simply, but Alesina is not always clear since he oscillates between talking about multipliers and talking about the best vehicles for fiscal adjustments (i.e., getting government finances in line). He ultimately emphasizes how little economists really know about these topics in general.

Alesina, Alberto and Silvia Ardagna. 2009. "[Large Changes in Fiscal Policy: Taxes Versus Spending](#)." *NBER Working Paper No. 15438.*

What is the purpose of the paper?

They compare the results of what happened to growth following large changes in spending and large changes in taxes.

Does the paper directly estimate the fiscal multiplier?

"We cannot and do not compute the size of fiscal multipliers. We only compare the effects of different compositions of major fiscal changes."

Alesina, Alberto, Silvia Ardagna, Roberto Perotti, and Fabio Schiantarelli. 2002. "[Fiscal Policy, Profits, and Investment](#)." *American Economic Review* **92 (3): 571-89.**

What is the purpose of the paper?

It uses a panel of OECD countries to measure the effect of falls in government spending on profits and business investment.

Does the paper directly estimate the fiscal multiplier?

More or less – and it finds that increases in government spending causes a fall in investment, implying a multiplier less than one.

Is the estimate statistically significant?

Yes, but this is evidence against the fiscal multiplier being greater than 1.

Alesina, Alberto, Omar Barbiero, Carlo Favero, Francesco Giavazzi, and Matteo Paradisi. 2015. "Austerity in 2009-2013." *NBER Working Paper* no. 20827.

What is the purpose of this paper?

It argues that tax cuts were far more damaging to the economy during austerity than spending cuts were.

Does the paper directly estimate the fiscal multiplier?

What they find is that multipliers probably were not larger than normal during the crisis. This paper is also important, however, because they perform an out of sample test on their primary model, although its implications regarding the exact size of the multiplier are more ambiguous.

Alesina, Alberto and Veronica de Rugy. 2013. *Austerity: The Relative Effects of Tax Increases versus Spending Cuts*. Arlington, VA: The Mercatus Center.

What is the purpose of this paper?

It reviews the literature on the harm imposed by spending cuts versus tax increases. Concludes that tax increases are worse for fiscal consolidations.

Does the paper directly estimate the fiscal multiplier?

No.

Alesina, Alberto, Carlo Favero, and Francesco Giavazzi. 2012. "The Output Effects of Fiscal Consolidations." *NBER Working Paper No. 18336.*

What is the purpose of the paper?

Compares the effects of fiscal consolidation performed with tax increases versus spending cuts and finds spending cuts to be far better for the economy.

Alesina, Alberto, Roberto Perotti, and Jose Tavares. 1998. "The Political Economy of Fiscal Adjustments." *Brookings Papers on Economic Activity* 1998 No.1: 197-266.

What is the purpose of the paper?

Determines when cuts in government spending are successful and when they will lead to negative effects on the economy.

Does the paper directly estimate the fiscal multiplier?

Some of the numbers given on page 205 can be interpreted as multipliers, but they don't appear to be >1.

Is the estimate statistically significant?

No.

Does the paper itself perform an out of sample test?

No.

Almunia, Miguel, Agustin Benetrix, Barry Eichengreen, Kevin H. O'Rourke, and Gisela Rua. 2010. "From Great Depression to Great Credit Crisis: Similarities, Differences, and Lessons." *Economic Policy* **25 (62): 219-265.**

What is the purpose of the paper?

Estimate multiplier with SVAR and instrumental variables, emphasis on comparing what happened in the Great Depression and today.

Does the paper directly estimate the fiscal multiplier?

2.5

Is the estimate statistically significant?

Generally, no. In the first method of investigation, one standard deviation bands were used. In the second, statistical significance was only achieved with many qualifications.

Does the paper itself perform an out of sample test?

No.

Anderson, Leonall C. and Jerry J. Jordan. 1968. "Monetary and Fiscal Actions: A Test of Their Relative Importance in Economic Stabilization." *Federal Reserve Bank of St. Louis Review* **(April): 11-23.**

What is the purpose of the paper?

This is an early paper measuring the changes in GNP in response to changes in different measures of fiscal and monetary stimulus.

Does the paper directly estimate the fiscal multiplier?

Somewhat – it's testing various differences. The estimates for the fiscal measures are nearly always less than one in magnitude.

Is the estimate statistically significant?

They report some as significant at the 95th confidence level.

Does the paper itself perform an out of sample test?

No.

Aschauer, David A. 1985. "[Fiscal Policy and Aggregate Demand](.)." *American Economic Review* 75 (1): 117-127.

What is the purpose of the paper?

Add to the New Classical literature, in part responding Feldstein (1982)'s claim that Ricardian Equivalence is rejected by the empirical record.

Does the paper directly estimate the fiscal multiplier?

Its primary finding is that public expenditures reduce private consumer expenditures by 23-42%, and that the data fail to reject Ricardian Equivalence.

Aschauer, David A. 1993. "[Fiscal Policy and Aggregate Demand: Reply](.)." *American Economic Review* 83 (3): 667-9.

What is the purpose of the paper?

Responds to Graham (1993), arguing that Graham's findings do not change his results.

Auerbach, Alan J. and Yuriy Gorodnichenko. 2012. "[Measuring the Output Responses to Fiscal Policy](.)." *American Economic Journal: Economic Policy* 4(2): 1-27.

This paper was on the original list on the spreadsheet.

What is the purpose of the paper?

Measures larger fiscal multipliers during recessions and find that some kinds of fiscal stimulus are more effective than others.

Does the paper directly estimate the fiscal multiplier?

If performed during a recession, it measures the multiplier to be 2.5 over 20 quarters.

Is the estimate statistically significant?

Yes, and it rejects 1 at 90% level. See the lower middle graph in Figure 2 on page 7.

Does the paper itself perform an out of sample test?

No - SVAR with a new model and specification.

Auerbach, Alen and Yuriy Gordonichenko. 2013. "Fiscal Multipliers in Recession and Expansion." In *Fiscal Policy after the Financial Crisis*. **Chicago: University of Chicago Press.**

What is the purpose of the paper?

Extends Auerbach and Gordonichenko (2012).

Does the paper directly estimate the fiscal multiplier?

As high as 3.5.

Is the estimate statistically significant?

Yes, generally.

Does the paper itself perform an out of sample test?

No.

Auerbach, Alen and Yuriy Gordonichenko. 2014. "Fiscal Multipliers in Japan." *NBER Working Paper* no. **19911.**

What is the purpose of the paper?

Applies Auerbach and Gordonichenko (2013) to Japan.

Does the paper directly estimate the fiscal multiplier?

1.81-2.23 over full sample, but closer to one since 1985.

Is the estimate statistically significant?

Yes

Does the paper itself perform an out of sample test?

It runs a very complete set of robustness checks but no OS test.

Bachmann, Rudiger and Eric Sims. 2012. "Confidence and the Transmission Mechanism of Government Spending Shocks." *Journal of Monetary Economics* 59: 235-49.

What is the purpose of the paper?

Studies how confidence may play a role in impacting the size of the multiplier using a few VAR methods.

Does the paper directly estimate the fiscal multiplier?

0.84-3.35, depending on specification and timing.

Is the estimate statistically significant?

No, one standard error confidence bands are used.

Does the paper itself perform an out of sample test?

No.

Ball, R.J. 1963. "The Significance of Simultaneous Methods of Parameter Estimation in Econometric Models." *Applied Statistics* 12 (1): 14-25.

What is the purpose of the paper?

Applies simultaneous equation methods to estimating the multiplier.

Does the paper directly estimate the fiscal multiplier?

Yes, between 1.07 and 1.44 depending on which specific method of estimation is performed.

Is the estimate statistically significant?

Not reported. Strangely emphasizes goodness-of-fit over significance.

Does the paper itself perform an out of sample test?

No – this is about applying this particular method to the question.

Barro, Robert. 1981. "Output Effects of Government Purchases." *Journal of Political Economy* 89 (6).

What is the purpose of the paper?

Use defense spending to distinguish between the effects of temporary and permanent changes in government spending.

Does the paper directly estimate the fiscal multiplier?

<1.

Barro, Robert J. and Charles J. Redlick. 2011. "[Macroeconomic Effects from Government Purchases and Taxes](.)." *Quarterly Journal of Economics* **126: 51-102.**

What is the purpose of the paper?

Uses US data to estimate the multiplier and to combat claims of much higher multipliers. Very similar to Nekarda and Ramey (2011), while incorporating elements from Romer and Romer (2010).

Does the paper directly estimate the fiscal multiplier?

0.4-0.5 on impact and peaking at 0.6-0.7.

Is the estimate statistically significant?

For some points in time/specifications, it is statistically significant against 0 at up to 99%; other times it is insignificant.

Does the paper itself perform an out of sample test?

No – it is better thought of as Barro restating his position in light of recent advances in the field.

Baxter, Marianne and Robert G. King. 1993. "[Fiscal Policy in General Equilibrium](.)." *American Economic Review* **83 (3): 315-34.**

What is the purpose of the paper?

Argues theoretically that there may exist and "'amplification effect' of endogenous capital supply means that it is possible for the long-run multiplier to exceed 1," contra the work of Barro (1989) and Aschauer (1988).

Does the paper directly estimate the fiscal multiplier?

The benchmark parameterization is 1.16, but this is not an empirical test. Some parameterizations lead to very high multipliers.

Beetsma, Roel and Massimo Giuliodori. 2011. "[The Effects of Government Purchases Shocks: Review and Estimates for the EU](.)." *The Economic Journal* **121 (February): 4-32.**

What is the purpose of the paper?

Review theory and evidence regarding government spending and output, performs their own estimates, and find that the effect is smaller for open economies. Uses SVAR.

Does the paper directly estimate the fiscal multiplier?

Yes, for most specifications, ~1.15 on impact and ~1.50 at its height.

Is the estimate statistically significant?

Yes, this paper does a *much* better job establishing statistical significance than other papers using SVAR. It doesn't give all the data needed to test against a multiplier of 1.0, but eyeballing some of the graphs make it look at least plausible.

Does the paper itself perform an out of sample test?

Better version of SVAR applied to EU, but not OS test.

Beetsma, Roel, Frank Klassan, and Massimo Giuliodori. 2008. "[The Effects of Public Spending Shocks on Trade Balances and Budget Deficits in the European Union](#)." *Journal of the European Economic Association* **6 (2-3): 414-23.**

What is the purpose of the paper?

Separate exports and imports into two distinct variables instead of just trade balance/GDP. Apply to EU data.

Does the paper directly estimate the fiscal multiplier?

1.2 on impact, 1.6 total.

Is the estimate statistically significant?

Yes, at 95%.

Does the paper itself perform an out of sample test?

New model intended to shed light on international econ issues. It does split up the sample in a few ways, but not in a way that I would characterize as an OS test.

Belinga, Vincent and Constant Lonkeng Ngouana. 2015. "[(Not) Dancing Together: Monetary Policy Stance and the Government Spending Multiplier](#)." *IMF Working Paper* **15/114**

What is the purpose of the paper?

It estimates the size of the government spending multiplier conditional on how accommodative monetary policy.

Does the paper directly estimate the fiscal multiplier?

Yes, it negative or as high as five depending on the time horizon, monetary policy, and whether the government spending was anticipated. One point estimate is 2.07

Is the estimate statistically significant?

Yes.

Does the paper itself perform an out of sample test?

No.

Benetrix, Agustin S. and Philip R. Lane. 2009. "[The Impact of Fiscal Shocks on the Irish Economy](link)." *The Economic and Social Review* 40 (4): 407-34.

What is the purpose of the paper?

Use SVAR to measure the effect of fiscal shocks in Ireland. Data is annual 1970-2006.

Does the paper directly estimate the fiscal multiplier?

The article dances around the issue. It claims there is a positive fiscal multiplier for government investment and certain types of government consumption. It explicitly calculates the "multiplier" effect between a fiscal shock and a change in the real exchange rate, but leaves the other calculations unstated.

Is the estimate statistically significant?

No.

Does the paper itself perform an out of sample test?

No – it's a new version of SVAR.

Benigro, Pierpaolo, Gauti B. Eggertsson, and Federica Romei. 2014. "[Dynamic Debt Deleveraging and Optimal Monetary Policy](link)." *NBER Working Paper* no. 20556.

What is the purpose of the paper?

Theoretical paper on the optimal monetary policy when the zero lower bound is hit.

Does the paper directly estimate the fiscal multiplier?

No, but it argues that the multiplier could be anywhere from ~0 to 1.63 depending on how it is financed.

Bergman, U. Michael and Michael M. Hutchison. 2010. "Expansionary Fiscal Contractions: Reevaluating the Danish Case." *International Economic Journal* **24 (1): 71-93.**

What is the purpose of the paper?

It tests the expansionary fiscal contraction hypothesis – that large fiscal contractions do not cause massive falls in expenditures – using data from Denmark.

Does the paper directly estimate the fiscal multiplier?

It provides impulse response functions with implicit multipliers, but it does not explicitly report the multiplier.

Is the estimate statistically significant?

It's ambiguous because it uses one standard deviation bands, but it does not appear to be so.

Does the paper itself perform an out of sample test?

No.

Bilbiie, Florin O., Andre Meier, and Gernot J. Mueller. 2008. "What Accounts for the Changes in U.S. Fiscal Policy Transmission." *Journal of Money, Banking, and Credit* **40 (7).**

What is the purpose of the paper?

They use a DSGE model to explain why the multiplier is smaller 1983-2004 than it was 1957-1979.

Does the paper directly estimate the fiscal multiplier?

Yes, depending on your interpretation, it is 1.71-4.50 for the early period and 0.94-2.38 in the modern era. See pages 1451-52.

Is the estimate statistically significant?

Yes, barely. It draws 90th percentile confidence bars and it just barely rejects 0 in the more modern period.

Does the paper itself perform an out of sample test?

No.

Bilbiie, Florin O., Tommaso Monacelli, and Roberto Perotti. 2014. "Is Government Spending at the Zero Lower Bound Desirable?" *NBER Working Paper* **no. 20687.**

What is the purpose of the paper?

It shows theoretically that government spending may not be welfare-enhancing when spending does not directly provide utility. The authors go on to say this may be an argument for tax cuts as a countercyclical policy.

Blanchard, Olivier J. and Daniel Leigh. 2013. "Effects of Fiscal Policy in Deep Recessions: Simple and Hopefully Credible Empirical Evidence." *American Economic Review: Papers and Proceedings* **103 (3): 117-20.**

What is the purpose of the paper?

"This paper investigates the relation between growth forecast errors and planned fiscal consolidation during the crisis. Under rational expectations, fiscal consolidation forecasts should be unrelated to subsequent growth forecast errors. If, on the other hand, forecasters underestimate fiscal multipliers, there should be a negative relation between fiscal consolidation forecasts and subsequent growth forecast errors. This is what we find."

Does the paper directly estimate the fiscal multiplier?

>1.

Is the estimate statistically significant?

Yes.

Does the paper itself perform an out of sample test?

Yes, they do one and it fails, but they explain it away: "Conversely, when we repeat the analysis for the group of 14 (non-European) emerging market economies for which forecasts of the structural fiscal balance made in early 2010 are available, we find no evidence that forecasters underestimated fiscal multipliers. This is consistent with the conditions leading to larger-than-normal fiscal multipliers being currently less relevant for these economies."

Blanchard, Olivier and Roberto Perotti. 2002. "An Empirical Characterization of the Dynamic Effects of Changes in Government Spending and Taxes on Output." *Quarterly Journal of Economics* **117 (4): 1329-**

68.

What is the purpose of the paper?

Foundational paper applying SVAR to measure the fiscal multiplier in the US.

Does the paper directly estimate the fiscal multiplier?

For spending, 0.90-1.29 at peak.

Is the estimate statistically significant?

At 90% confidence it rejects 0.

Does the paper itself perform an out of sample test?

No - this is arguably the first paper to use SVAR for this purpose.

Brown, E. Cary. 1956. "Fiscal Policy in the 'Thirties: A Reappraisal." *American Economic Review* 46 (5): 857-879.

What is the purpose of the paper?

It teases out positive effects from fiscal policy shocks without explicitly quantifying the multiplier. It says the results are not inconsistent with a multiplier of 2. The paper is still cited but there isn't anything methodologically interesting about it.

Burnside, Craig, Martin Eichenbaum, and Jonas D.M. Fischer. 2004. "Fiscal Shocks and Their Consequences." *Journal of Economic Theory* 115: 89-117.

What is the purpose of the paper?

Whether observed responses in hours worked and real wages to a fiscal policy shock can be accounted for by a neoclassical model with distortionary (not lump sum) taxes. Under certain assumptions it may, but it doesn't fit the data very well. Continues research of Ramey and Shapiro (1998)

Does the paper directly estimate the fiscal multiplier?

It is implied in a graph and is approximately 1, but the point estimate is never clearly stated.

Is the estimate statistically significant?

At 95%.

Does the paper itself perform an out of sample test?

No.

Burriel, Pablo, Francisco de Castro, Daniel Garrote, Esther Gordo, Joan Paredes, and Javier J. Perez. 2010. "Fiscal Policy Shocks in the Euro Area and the US: An Empirical Assessment." *Fiscal Studies* **31 (2): 251-85.**

What is the purpose of the paper?

Use SVAR to investigate the effects of fiscal policy with then-new quarterly data for the Euro area (from Paredes, Pedregal, and Perez 2009). Replicates with US data in same time period.

Does the paper directly estimate the fiscal multiplier?

Yes. For EMU, 0.75 on impact, peaking at 0.87. For US, 0.76, peaking at 0.91. See page 277, table five, for full results.

Is the estimate statistically significant?

No - "the asterisks indicate significance within the one-standard-deviation bandwidth."

Does the paper itself perform an out of sample test?

No – this data has been used before.

Caldara, Dario and Christophe Kamps. 2008. "What Are The Effects of Fiscal Policy Shocks? A VARBased Comparative Analysis." *European Central Bank Working Paper Series No. 877.*

What is the purpose of the paper?

The authors note the lack of agreement of the quantitative and qualitative effects of fiscal policy shocks among papers employing VAR. They argue that if differences in specification are controlled for, all models provide qualitatively and quantitatively similar results for a number of outcome variables. Most relevantly, they claim this is true about the effect of fiscal policy shocks on real GDP.

Does the paper directly estimate the fiscal multiplier?

It is implied, but not stated. For most specifications, it is about 1.5. See the third row of graphs in Figure 2.

Is the estimate statistically significant?

Some of the estimates *might* be statistically significant. The bands they draw around the median estimate are not the correct ones, so one cannot say for sure. But at most they are statistically distinguishable from 0, not 1. It is interesting to see these results applied to all four of the major empirical methodologies. See figure 2 on page 35.

Does the paper itself perform an out of sample test?

No – the most it does is to compare several different existent SVAR models.

Carmino, Gerald and Robert P. Inman. 2013. "[Macro Fiscal Policy in Economic Unions: States as Agents](#)." *NBER Working Paper No. 19559.*

What is the purpose of the paper?

Discusses ARRA stimulus in the context of fiscal policy in the EU. Squares Cogan et. al. (2010)'s result that most stimulus was saved by the states with fiscal multipliers greater than 1.

Does the paper directly estimate the fiscal multiplier?

Transfers to state and local governments: .5-.8; direct welfare aid 1.6-2.3; project aid 0-1.0.

Is the estimate statistically significant?

Those on welfare are statistically significant, which are the key multipliers for the argument of the paper.

Does the paper itself perform an out of sample test?

No.

Cavallo, Michele. 2005. "[Government Employment Expenditure and the Effects of Fiscal Policy Shocks](#)." *Federal Reserve Bank of San Francisco Working Paper No. 2005-16.*

What is the purpose of the paper?

It argues that empirical analysis of fiscal policy shocks is more straightforward when after disaggregating government spending.

Does the paper directly estimate the fiscal multiplier?

It is not the point of the paper, but it provides a few impulse response functions which are in line with standard results.

Is the estimate statistically significant?

For some specifications it borders on the 95th confidence interval of significance.

Does the paper itself perform an out of sample test?

No.

Chahrour, Ryan, Stephanie Schmitt-Grohé, and Martin Uribe. 2012. "A Model-Based Evaluation of the Debate on the Size of the Tax Multiplier." *American Economic Journal: Economic Policy* 42(2): 28-45.

What is the purpose of the paper?

Uses DSGE to try to determine why Blanchard-Perotti and Romer-Romer methodologies estimate such different tax multipliers. Concludes it may be small sample size but more likely differences in methods of identification.

Chen, Yvonne. 2008. "Assessing the Effects of Monetary and Fiscal Shocks: The Polish Experience." *International Research Journal of Finance and Economics* 17: 49-56.

What is the purpose of the paper?

Study the effects of monetary and fiscal policy in Poland.

Does the paper directly estimate the fiscal multiplier?

The regression coefficient of (G-T)/Y is -0.003.

Is the estimate statistically significant?

Yes, p=0.027.

Does the paper itself perform an out of sample test?

No - it's new data, but also a new regression and model.

Chodorov-Reich, Gabriel, Laura Feiveson, Zachary Liscow, and William Gui Woolston. 2012. "Does State Fiscal Relief During Recessions Increase Employment? Evidence from the American Recovery and Reinvestment Act." *American Economic Journal: Economic Policy* 4 (3): 118-45.

What is the purpose of the paper?

Use pre-recession Medicaid spending levels as an instrument for ARRA aid.

Does the paper directly estimate the fiscal multiplier?

No – but they estimate that $100,000 of "marginal state fiscal relief" increases total employment by 3.8 job years, 3.2 of which is outside government, health, and education.

Is the estimate statistically significant?

Yes, the p-value associated with 3.8 is 0.018 and the p-value associated with 3.2 is 0.010

Does the paper itself perform an out of sample test?

No – it uses instruments to make spending exogenous, but is not an OS test.

Christiano, Lawrence, Martin Eichenbaum, and Sergio Rebelo. 2011. "When is the Government Spending Multiplier Large?" *Journal of Political Economy* **119 (1): 78-121.**

What is the purpose of the paper?

Claims that when the Taylor Rule is "operative," the multiplier is probably very small, but when it is not, the multiplier may be quite large. Applies Altig et al.'s (2011) DSGE model to this end.

Does the paper directly estimate the fiscal multiplier?

It feeds parameter values into the model showing a multiplier of 2.3.

Does the paper itself perform an out of sample test?

No, to the extent to which the model is tested, it is fed data from the crisis and its "performance" is reported.

Cimadomo, Jacopo and Agnes Benassy-Quere. 2012. "Changing Patterns of Fiscal Policy Multipliers in Germany, the UK, and the US." *Journal of Macroeconomics* **34: 845-73.**

What is the purpose of the paper?

Apply VAR to Germany, UK, and US quarterly data 1971-2009 to analyze how the magnitude of the fiscal multiplier has changed over time.

Does the paper directly estimate the fiscal multiplier?

In Germany, on impact multiplier for tax shocks is 0.69; for spending is 0.46. In UK, they are 0.12 and 0.28. In the U.S., ~0 and 1.30.

Is the estimate statistically significant?

Some of these effects are significant at the 90th confidence level. Most are not. The 1.30 in the US does not reject 1, or at least it does not appear to do so graphically. See Figure 3, page 855.

Does the paper itself perform an out of sample test?

It is an SVAR replication, not an OS test.

Clemens, Jeffrey and Stephen Miran. 2012. "Fiscal Policy Multipliers on Subnational Government Spending." *American Economic Journal: Economic Policy* 4 (2): 46-68.

What is the purpose of the paper?

Use "windfall" financing of subnational projects, taking advantage of balanced budget rules, to identify natural experiments.

Does the paper directly estimate the fiscal multiplier?

The authors summarize their results as 0.4 on impact and overall that it is less than 1. Ramey (2011a) summarizes the results as "0.3 to 3.0, depending on specification. Standard errors are large."

Is the estimate statistically significant?

No. Under most specifications, cannot reject a null of 0 or 1.

Does the paper itself perform an out of sample test?

No, it is a natural experiment, not an OS test.

Cloyne, James. 2013. "Discretionary Tax Changes and the Macroeconomy: New Narrative Evidence from the United Kingdom." *American Economic Review* 103(4): 1507-28.

What is the purpose of the paper?

Replicated Romer and Romer (2010) in UK.

Does the paper directly estimate the fiscal multiplier?

0.6 on impact and 2.5 over three years.

Is the estimate statistically significant?

Yes, at 95%.

Does the paper itself perform an out of sample test?

Replication of Romer and Romer with new data, but not OS test.

Coenen, Gunther, Christopher J. Erceg, Charles Freedman, Davide Furceri, Michael Kumhof, Rene Lalonde, Douglas Laxton, Jesper Linde, Annabelle Mourougane, Dirk Muir, Susanna Mursula, Carlos de Resende, John Roberts, Werner Roeger, Stephen Snudden, Mathias Trabandt, and Jan In't Veld. 2012. "Effects of Fiscal Stimulus in Structural Models." *American Economic Journal: Macroeconomics* 4(1): 22-68.

What is the purpose of the paper?

Claims that seven standard DSGE models all give large multipliers under the correct conditions.

Does the paper directly estimate the fiscal multiplier?

Headline is 1-1.5.

Is the estimate statistically significant?

These numbers were arrived at via simulations, not empirical tests.

Does the paper itself perform an out of sample test?

No.

Cogan, John F., Tobias Cwik, John B. Taylor, and Volker Wieland. 2010. "[New Keynesian versus Old Keynesian Government Spending Multipliers]." *Journal of Economic Dynamics & Control* 34: 281-95.

What is the purpose of the paper?

Lays out scholarly reasons why the approach of Christina Romer and the Obama administration is inconsistent with the modern Keynesian understanding of the fiscal multiplier. Advocates Smets and Wouters (2007) as a more reasonable theoretical basis for estimating of the outcome of a planned fiscal stimulus.

Does the paper directly estimate the fiscal multiplier?

Their model implies a multiplier of 0.63 as applied to ARRA.

Cohen, Lauren, Joshua Coval, and Christopher Malloy. 2011. "[Do Powerful Politicians Cause Corporate Downsizing?]" *Journal of Political Economy* 119 (6): 1015-60.

What is the purpose of the paper?

It applies a clever method of measuring crowding out – when a state representative achieves chairmanship status, earmarks and thus public investment greatly increases in that state.

Does the paper directly estimate the fiscal multiplier?

They are not stated directly. But a "spending shock" will lead to 5.2% decline in GDP, 4.8% decline in employment, and 5.8% decline in personal income. Firm level data, which is really the centerpiece of the paper, shows that the increase in federal funding, which averages 40-50% increase in share of congressional earmark spending, leads to 9-10% increase in share of state-level government transfers,

a 24 percent increase in share of government procurement contracts, a fall in private capital expenditures by 8-15%, a reduction in R&D by 7-12%, increase payout by 4-13%, diminish employment growth by 3-15%, and diminish sales growth by "up to 15 percent."

Is the estimate statistically significant?

The state level data is spotty and often insignificant. The firm level data, however, is mostly *** significant.

Does the paper itself perform an out of sample test?

Study designed to get around endogeneity, not OS test.

Corbi, Raphael, Elias Papaioannou, and Paolo Surico. 2014. "Federal Transfer Multipliers. Quasi-Experimental Evidence from Brazil." *NBER Working Paper* no. 20751.

What is the purpose of the paper?

It uses a discontinuity to measure the effect of transfers on economic activity.

Does the paper directly estimate the fiscal multiplier?

1.4-1.8

Is the estimate statistically significant?

Yes.

Does the paper itself perform an out of sample test?

No, although it does a number of robustness checks in the online appendix.

Corsetti, Giancarlo, Andre Meier, and Gernot J. Muller. 2012. "What Determines Government Spending Multipliers?" *Economic Policy* 27 (72): 521-65.

What is the purpose of the paper?

Establishes a "spending rule" and measures shocks from that standard. Estimates multipliers with respect to that in a panel of OECD, and finds evidence suggesting the value of the multiplier differs depending on a number of factors, and may be very large during fiscal crises. The method is similar to, but not identical with, SVAR.

Does the paper directly estimate the fiscal multiplier?

Around 0.7 overall, but conditional on financial crisis, the point estimation is over 2.

Is the estimate statistically significant?

It might be barely significant – it is hard to tell from the chart. It draws one standard deviation bands around the point estimate. See Figure 4, Page 551.

Does the paper itself perform an out of sample test?

No – it uses a new variation of VAR with data that is already well-studied.

Corsetti, Giancarlo and Gernot J. Muller. 2006. "Twin Deficits: Squaring Theory, Evidence and Common Sense." *Economic Policy* (October): 597-638.

What is the purpose of the paper?

Works with an early version of Kim and Roubini (2008). Primary empirical finding is that fiscal deficits are more likely to be paired with trade deficits if the economy is open and the fiscal deficit is persistent.

Does the paper directly estimate the fiscal multiplier?

.53, see page 628.

Is the estimate statistically significant?

No - the confidence interval used is a single standard deviation.

Does the paper itself perform an out of sample test?

No, it is a new international econ SVAR model, not an OS test.

De Castro, Francisco. 2006. "The Macroeconomic Effects of Fiscal Policy in Spain." *Applied Economics* 38: 913-24.

What is the purpose of the paper?

Apply SVAR to Spain.

Does the paper directly estimate the fiscal multiplier?

1.14 cumulative effect in the baseline model after four quarters.

Is the estimate statistically significant?

It uses one standard deviation confidence intervals graphically. It certainly doesn't reject a multiplier of 1.

Does the paper itself perform an out of sample test?

It is a SVAR replication, not an OS test.

Devereux, Michael B. 2010. "Fiscal Deficits, Debt, and Monetary Policy in a Liquidity Trap." *Federal Reserve Bank of Dallas Globalization and Monetary Policy Institute Working Paper No. 44*.

What is the purpose of the paper?

Theory paper. However, it makes a number of novel points, such as that tax cuts may be very effective at the lower bound, and the paper is getting cited within the literature even at the working paper stage.

* Dupor, Bill and Rong Li. 2013. "The 2009 Recovery Act and the Expected Inflation Channel of Government Spending. *Federal Reserve Bank of St. Louis Working Paper No.* 2013-026A.

What is the purpose of the paper?

Shows that the theoretical mechanism by which New Keynesian models are supposed to have a positive effect is through greater inflationary expectations, and that the stimulus had no effect on inflationary expectations.

Edelberg, Wendy, Martin Eichenbaum, and Jonas D. M. Fisher. 1999. "Understanding the Effects of a Shock to Government Purchases." *Review of Economic Dynamics* 2: 166-206.

What is the purpose of the paper?

Improves on Ramey and Shapiro (1998) while supporting neoclassical models' evaluations of the empirical record on movements of various macroeconomic variables.

Does the paper directly estimate the fiscal multiplier?

It is implied graphically, but they do not directly say what they believe what the fiscal multiplier is.

Is the estimate statistically significant?

On one set of graph they do not show confidence intervals. On another, they draw the 68th percentile confidence intervals.

Does the paper itself perform an out of sample test?

No, it is an alternative model of US data.

Eggertsson, Gauti B. 2008. "[Great Expectations and the End of the Depression](#)." *American Economic Review* 98 (4): 1476-1516.

What is the purpose of the paper?

It argues that FDR ended the Great Depression via the expectations channel, using a DSGE model to do so. The empirical evidence is scant, but this paper comes up as evidence of the power of fiscal policy in a depressed economy.

Eggertsson, Gauti B. and Paul Krugman. 2012. "[Debt, Deleveraging, and the Liquidity Trap: A FisherMinsky-Koo Approach](#)." *Quarterly Journal of Economics* 127 (3): 1469-1513.

What is the purpose of the paper?

Theory paper – this is where Krugman presents his upwards sloping aggregate demand curve.

Enders, Zeno, Gernot J. Muller, and Almuth Scholl. 2011. "[How Do Fiscal and Technology Shocks Affect Real Exchange Rates? New Evidence for the United States.](#)" *Journal of International Economics* 83: 53-69.

What is the purpose of the paper?

Use SVAR to determine the relationship between fiscal and technology shocks and various international trade variables. Takes the sign restriction (Mountford and Uhlig 2009) approach to identification. To answer these questions, it works off a model of US and an amalgamation of other countries to represent the rest of the world.

Does the paper directly estimate the fiscal multiplier?

No.

Is the estimate statistically significant?

This paper is most notable in that its estimate for the fiscal multiplier in the baseline model is statistically significant at the 99% level, even though they don't actually say what it is. In the later VAR that actually incorporates the international variables they care about, the effect of government spending on output no longer has the same statistical power.

Does the paper itself perform an out of sample test?

No, it applies a new model to well-known data.

Evans, Michael K. 1966. "[Multiplier Analysis of a Post-war Quarterly U.S. Model and a Comparison with Several Other Models](.)." *The Review of Economic Studies* (33) 4: 337-60.

What is the purpose of the paper?

Estimate the multiplier using post-war data. Very outdated methodology.

Does the paper directly estimate the fiscal multiplier?

Yes, depends on time horizon and whether it is increased spending or a tax cut. Tends to be high estimates, 1.8-4.

Is the estimate statistically significant?

Not reported.

Does the paper itself perform an out of sample test?

No, it compares results with several other then-prominent models, but no OS test.

Evans, Michael K. 1969. "[Reconstruction and Estimation of the Balanced Budget Multiplier](.)." *Review of Economics and Statistics* 51 (1): 14-25.

What is the purpose of the paper?

This paper is on the balanced budget multiplier, not the fiscal multiplier. But Ramey (2011a) in her JEL lit reviewed said of it, "The Michael K. Evans (1969) paper is representative of the discussion of fiscal multipliers in the heyday of traditional Keynesianism and the big econometric models." But the paper doesn't deal with deficits.

The paper itself emphasizes realism, contrasting itself to other papers which make more unrealistic simplifications.

Does the paper directly estimate the fiscal multiplier?

Ramey (2011a) summarizes their results as all models showing a multiplier >2. I'm not sure how if this paper is about the balanced budget multiplier.

Is the estimate statistically significant?

No.

Does the paper itself perform an out of sample test?

No.

Fahri, Emmanuel and Ivan Werning. 2012. "Fiscal Multipliers: Liquidity Traps and Currency Unions." *MIT Department of Economics Working Paper No. 12-23.*

What is the purpose of the paper?

Theory paper. Examines whether the fiscal multiplier will still be greater than one for a currency union.

Does the paper directly estimate the fiscal multiplier?

Yes, with parameterizations and not empirical estimations, however. A liquidity trap leads to a multiplier greater than one. However, for currency unions it will be less than one unless special conditions hold.

Fatas, Antonio and Ilian Mihov. 2001. "The Effects of Fiscal Policy on Consumption and Employment: Theory and Evidence." *CEPR Discussion Paper No. 2760.*

What is the purpose of the paper?

This is one of the foundational papers applying SVAR to questions about fiscal shocks. US data.

Does the paper directly estimate the fiscal multiplier?

Greater than 1. Note that it is confusingly phrased within the paper.

Is the estimate statistically significant?

One standard deviation bars are used.

Does the paper itself perform an out of sample test?

No. This was one of the first papers in the literature applying SVAR to fiscal policy.

Fazzari, Stephen M., James Morley, and Irina Panovska. 2013. "State-Dependent Effects of Fiscal Policy." *Australian School of Business Working Paper No. 2012 ECON 27A.*

What is the purpose of the paper?

Apply a threshold version of SVAR to US economy to measure a different fiscal multiplier in times of unemployment.

Does the paper directly estimate the fiscal multiplier?

1.6 during recessions.

Is the estimate statistically significant?

Significant against 0 at 90%.

Does the paper itself perform an out of sample test?

No, this is well-known data with a new model.

Fishback, Price V. and Valentina Kachanovskaya. 2010. "In Search of the Multiplier for Federal Spending in the States During the New Deal." *National Bureau of Economic Research Working Paper No. 16561.*

What is the purpose of the paper?

Use state-level data during from the Great Depression to measure the fiscal multiplier using SVAR.

Does the paper directly estimate the fiscal multiplier?

Yes, 1.1.

Is the estimate statistically significant?

Yes, against 0.

Does the paper itself perform an out of sample test?

No.

Fishback, Price and Valentina Kachanovskaya. 2015. "The Multiplier for Federal Spending in the States During the Great Depression." *Journal of Economic History* 75 (1): 125-62.

What is the purpose of the paper?

It estimates state-level multipliers from data in the Great Depression.

Does the paper directly estimate the fiscal multiplier?

Yes, 0.40-0.96.

Is the estimate statistically significant?

It statistically differs from zero but not from one.

Does the paper itself perform an out of sample test?

No.

Fisher, Jonas D.M. and Ryan Peters. 2010. "[Using Stock Returns to Identify Government Spending Shocks](#)." *The Economic Journal* 120 (May): 414-36.

What is the purpose of the paper?

Use excess returns of large US military contractors to identify spending shocks.

Does the paper directly estimate the fiscal multiplier?

Officially, it estimates it at 1.5 over five years. "Five years" is abnormal in the literature and the result is pumped up by that. If only looking at the on-impact part of the multiplier, it would be less than one.

Is the estimate statistically significant?

The result is reported as significant at 95%.

Does the paper itself perform an out of sample test?

No – it is a study designed to address endogeneity, not OS test.

Fromm, Gary and Lawrence R. Klein. 1973. "[A Comparison of Eleven Econometric Models of the United States](#)." *American Economic Review* 63 (2): 385-93.

What is the purpose of the paper?

It compares the performance of several models. Finds that there is agreement among all except one model that the multiplier is around 2. This is a meta-analysis of various models, not an out-of-sample test or even really a novel calculation.

Gali, Jordi, Javier Valles, and J. David Lopez-Salido. 2007. "[Understanding the Effects of Government Spending on Consumption](#)." *Journal of the European Economic Association* 5 (1): 227-70.

What is the purpose of the paper?

This is *primarily* a theory paper which seeks to explain why consumption tends to rise in response to increases in government spending, which is a stylized fact that contradicts traditional models. Compare to Linneman and Schabert (2004).

Does the paper directly estimate the fiscal multiplier?

While reviewing the empirical literature, the authors make their own estimation of the fiscal multiplier using VAR. They estimate on-impact of 0.78 and total effect of 1.74. See page 232.

Is the estimate statistically significant?

Ambiguous – they do not report any statistics beyond drawing a 1 s.d. confidence interval. In Hall (2009), he cites this paper and its standard error - I do not know where he got that data from.

Does the paper itself perform an out of sample test?

No.

Giordano, Raffaelo, Sandro Momigliano, Stefano Neri, Roberto Perotti. 2007. "The Effects of Fiscal Policy in Italy: Evidence from a VAR model." *European Journal of Political Economy* 23: 707-33.

What is the purpose of the paper?

Applies SVAR to a 1982-2004 dataset in Italy.

Does the paper directly estimate the fiscal multiplier?

Yes, though they phrase it awkwardly. If government expenditures increase by one percentage point of *private* GDP, private GDP will increase by about 0.6. That implies a fiscal multiplier >1.

Is the estimate statistically significant?

It looks that way, but it is difficult to tell formally. See Figure 7 on page 722 and Figure 12 on page 726. Note in the latter that it is a statistically significant increase in *private* GDP, so this is testing it against a multiplier of 1, not zero, or at least something close to that.

Does the paper itself perform an out of sample test?

Near replication of SVAR analysis, but not an OS test. Also makes some adjustments to model, because of the limits of Italian data.

Gordon, Robert J. and Robert Krenn. 2013. "The End of the Great Depression 1939-41: Fiscal Multipliers, Capacity Constraints, and Policy Contributions." *NBER Working Paper No. 16380*.

What is the purpose of the paper?

Claims that previous research is flawed because fiscal stimulus really matters when there is low factor utilization. Looks at historical instance where this was the case to extrapolate what the fiscal multiplier is during a severe recession.

Does the paper directly estimate the fiscal multiplier?

2.5.

Is the estimate statistically significant?

I can find no reference to statistical significance for this estimate.

Does the paper itself perform an out of sample test?

No.

Graham, Fred C. 1993. "Fiscal Policy and Aggregate Demand: Comment." *American Economic Review* 83 (3): 659-66.

What is the purpose of the paper?

Argues that Aschauer (1985)'s analysis is incorrect, upon the inclusion of disposable income and disaggregated measures of government spending.

Guajardo, Jaime, Daniel Leigh, and Andrea Pescatori. 2011. "Expansionary Austerity: New International Evidence." *IMF Working Paper 11/158*.

What is the purpose of the paper?

Using methodology similar to Romer and Romer (2010), it estimates the effect of austerity on output in OECD countries.

Does the paper directly estimate the fiscal multiplier?

It estimates that 1% of fiscal consolidation, as traditionally defined, as leading to -0.62% effect on output after two years. However, if defined as a change in the cyclically-adjusted primary balance, it has an effect of +0.29% after two years. This may imply that spending multiplier is negative. Though the authors do not emphasize this conclusion and argue it is statistically biased.

The effects when looking at "large" fiscal consolidations are closer to 0.

Is the estimate statistically significant?

The estimate for the first has a t-stat of -3.82 and the latter has a t-stat of 3.69.

Does the paper itself perform an out of sample test?

No, it is a replication of Romer and Romer methodology to new area.

Guo, Jang-Ting, Anca-Ioana Sirbu, and Mark Weder. 2015. "News about Aggregate Demand and the Business Cycle." *Journal of Monetary Economics* 72: 83-96.

What is the purpose of this paper?

A theoretical model centering on expectations driven by news about consumption demand or government spending.

Does the paper directly estimate the fiscal multiplier?

No.

Hall, Robert E. 1986. "[The Role of Consumption in Economic Fluctuations](#)." In *The American Business Cycle : Continuity and Change*, **ed. Roger J Gordon, 237-55. Chicago and London: University of Chicago Press.**

What is the purpose of the paper?

Follows Barro in using military purchases to estimate the size of the fiscal multiplier.

Does the paper directly estimate the fiscal multiplier?

0.62-0.85

Hall, Robert E. 2009. "[By How Much Does GDP Rise If The Government Buys More Output?](#)" *Brookings Papers on Economic Activity* **(Fall): 183-231.**

What is the purpose of the paper?

Posits that, while a lot of research suggests that the fiscal multiplier is 0.7-1.0, it may be much higher when at the lower bound. Emphasizes purchases, not spending.

Does the paper directly estimate the fiscal multiplier?

It shows that one can get a multiplier of 1.7 using a fairly reasonable theoretical model and parameter values.

Hooker, Mark A. and Michael M. Knetter. 1997. "[The Effects of Military Spending on Economic Activity: Evidence from State Procurement Spending](#)." *Journal of Money, Credit, and Banking* **29 (3): 400-21.**

What is the purpose of the paper?

Determines the state-level effect of military spending on employment growth.

Does the paper directly estimate the fiscal multiplier?

Almost – Ramey (2011a) summarizes the result as "Elasticity of nonfarm payroll employment to real military contracts per capita is 1.8; decreases in military spending have larger effects than decreases."

Is the estimate statistically significant?

For most specifications, it is **.

Does the paper itself perform an out of sample test?

Study addresses endogeneity, not OS test.

Ilzetzki, Ethan, Enrique G. Mendoza, Carlos A. Vegh. 2013. "How big (small?) are fiscal multipliers?" *Journal of Monetary Economics* 60: 239-54.

What is the purpose of the paper?

It uses a new dataset, with 44 different countries, to estimate what determines the size of the fiscal multiplier across countries. Follows Blanchard and Perotti (2002) by using SVAR.

Does the paper directly estimate the fiscal multiplier?

Yes: for developed countries, 0.39 short run, 0.66 in the long run.

Is the estimate statistically significant?

Yes, but barely. Explicit p-values are not provided. Graphically they show the 90th percentile confidence interval, and they mention some of their results are significant at the 95th percentile.

Does the paper itself perform an out of sample test?

No.

International Monetary Fund. 2014 "Is It Time for an Infrastructure Push? The Macroeconomic Effects of Public Investment." *IMF World Economic Outlook, October 2014: Legacies, Clouds, and Uncertainties*, ch. 3.

What is the purpose of the paper?

Argues when timing is right and when it is performed efficiently, public investment can increase output without increasing debt-to-GDP ratio.

Does the paper directly estimate the fiscal multiplier?

0.4 in the short run and 1.5 in the long run in the baseline specification.

Is the estimate statistically significant?

Yes.

Does the paper itself perform an out of sample test?

No, although it does reproduce several methodologies for investigating the size of the multiplier.

Jalil, Andrew J. 2012. "[Comparing Tax and Spending Multipliers: It's All About Controlling for Monetary Policy](#)." Working Paper.

What is the purpose of the paper?

Applies narrative approach, and finds that tax increases have much higher multiplier than spending multiplier. The author stresses, however, that this applies to healthy economies more than to economies in a depression.

Does the paper directly estimate the fiscal multiplier?

Near zero.

Is the estimate statistically significant?

No.

Does the paper itself perform an out of sample test?

No.

* Jorda, Oscar and Alan M. Taylor. 2013. "[The Time For Austerity: Estimating the Average Treatment Effect of Fiscal Policy](#)." *NBER Working Paper No.* 19414.

What is the purpose of the paper?

Use propensity score matching to evaluate the "expansionary austerity" hypothesis.

Does the paper directly estimate the fiscal multiplier?

Greater than 2 for most specifications.

Is the estimate statistically significant?

For most specifications.

Does the paper itself perform an out of sample test?

It at least plays some lip service to it. See Section 11.

Kim, Soyoung and Nouriel Roubini. 2008. "[Twin Deficit or Twin Divergence? Fiscal Policy, Current Account, and Real Exchange Rate in the US](#)." *Journal of International Economics* **74**: 362-83.

What is the purpose of the paper?

Use SVAR to disentangle the relationship between the current account and fiscal deficits. Even though the fiscal multiplier isn't an essential aspect of the paper, it is treated as an important contribution to the modern literature on the fiscal multiplier.

Does the paper directly estimate the fiscal multiplier?

On impact it is 0.53 and peaks a little over 1.

Is the estimate statistically significant?

Compared to zero, but not compared to 1. This study is more highly powered than most.

Does the paper itself perform an out of sample test?

No, it is a new international econ model with existent data.

Kirchner, Marcus, Jacopo Cimadomo, and Sebastian Hauptmeier. 2010. "[Transmission of Government Spending Shocks in the Euro Area: Time Variation and Driving Forces](#)." *Tinbergen Institute Discussion Paper*.

What is the purpose of the paper?

Uses SVAR to investigate changes in the outcomes of macroeconomic spending shocks over time in the Euro area. Explains why some of these changes may have taken place. This is the first paper to use Bayesian time-varying parameters to help answer these questions.

Does the paper directly estimate the fiscal multiplier?

When incorporating the Bayesian time varying parameters, the point estimate of the on-impact multiplier is 0.55. The paper is unique because across specifications, the effect of the multiplier diminishes rapidly – though this may be as a consequence of how they are reporting their results.

Is the estimate statistically significant?

68th percent level confidence bands are used.

There are many other estimates more centrally related to the paper's topic that have far more power. They contrast sharply with the more "traditional" aspects of the paper and may be of interest, but it has little to do with out of sample tests.

Does the paper itself perform an out of sample test?

No. Note that is uses the same data as Burriel et. al. (2009).

Kraay, Aart. 2012. "[How Large is the Government Spending Multiplier? Evidence from World Bank Lending](#)." *Quarterly Journal of Economics* 127: 829-87.

What is the purpose of the paper?

Use World Bank disbursements as an instrument for government spending in 29 low income countries.

Does the paper directly estimate the fiscal multiplier?

0.5.

Is the estimate statistically significant?

It borders on being statistically different from 0.

Does the paper itself perform an out of sample test?

No, it addresses endogeneity, not OS test.

Kuttner, Kenneth N. and Adam S. Posen. 2002. "[Fiscal Policy Effectiveness in Japan](#)." *Journal of the Japanese and International Economies* 16: 536-58.

What is the purpose of the paper?

Apply SVAR to Japan 1976-99.

Does the paper directly estimate the fiscal multiplier?

2.0.

Is the estimate statistically significant?

At 90% it rejects 0.

Does the paper itself perform an out of sample test?

Replication of Blanchard and Perotti using Japanese data. Not OS test.

Leduc, Sylvain and Daniel Wilson. 2012. "Highway Grants: Roads to Prosperity?" FRBSF Economic Letter 2012-35.

What is the purpose of the paper?

Ostensibly uses the results of their working paper on highway grants to fiscal multipliers for Federal highway grant money. The connection between their academic research and this popularization is tenuous at best. The working paper, which I looked through, offers interesting evidence against Cogan and Taylor, but I don't see its immediate relevance for the value of the spending multiplier.

Does the paper directly estimate the fiscal multiplier?

Around 2, after ten years.

Is the estimate statistically significant?

On impact it is, but the impulse-response function is weird and it wouldn't surprise me if the overall multiplier were insignificant.

Does the paper itself perform an out of sample test?

No.

Leeper, Eric M., Todd B. Walker, and Shin-Chun S. Yang. 2010. "Government Investment and Fiscal Stimulus." *Journal of Monetary Economics* 57: 1000-12.

What is the purpose of the paper?

Argues that the productivity and other aspects of government investment are very important for determining the size of the multiplier.

Does the paper directly estimate the fiscal multiplier?

Depending on the productivity of government investment, from around 0.4 to 1.1.

Is the estimate statistically significant?

Yes.

Does the paper itself perform an out of sample test?

No.

Leigh, Daniel, Pete Devries, Charles Freedman, Jaime Guajardo, Douglas Laxton, and Andrea Pescatori. 2010. "Will It Hurt? Macroeconomic Effects of Fiscal Consolidation." In *World Economic Outlook: Recovery, Risk, and Rebalancing*, **93-124. Washington, DC: International Monetary Fund.**

What is the purpose of the paper?

Examines the effects of austerity on economies in recessions.

Does the paper directly estimate the fiscal multiplier?

One percentage point of austerity will lead to a 0.5 percentage point fall in Real GDP.

Is the estimate statistically significant?

The result *might* **be statistically significant – one standard deviation bands are drawn – but they would reject the multiplier of 0, not 1. See pages 98-99.**

Does the paper itself perform an out of sample test?

Summary/re-parameterization using well-known data.

Linneman, Ludger and Andreas Schabert. 2003. "Fiscal Policy in the New Neoclassical Synthesis." *Journal of Money, Credit, and Banking* **6: 911-29.**

What is the purpose of the paper?

Theoretically derives the possibility of the fiscal multiplier within the neoclassical framework.

Linneman, Ludger and Andreas Schabert. 2004. "Can Fiscal Spending Stimulate Private Consumption?" *Economics Letters* **82: 173-79.**

What is the purpose of the paper?

It theoretically reconciles why increased government spending may increase consumption, which is an empirical finding that does not sit comfortably with earlier models. This does not estimate the multiplier, but is considered part of the modern literature.

Liu, Ta-Cheung. 1963. "An Exploratory Quarterly Econometric Model of Effective Demand in the Postwar U.S. Economy." *Econometrica* **31 (3).**

What is the purpose of the paper?

Use a crude aggregate model (author's words) to answer certain questions about monetary and fiscal policy.

Does the paper directly estimate the fiscal multiplier?

2.25

Is the estimate statistically significant?

Not given.

Does the paper itself perform an out of sample test?

No.

Marcellino, Massimiliano. 2006. "[Some stylized facts on non-systematic fiscal policy in the Euro area](#)."*Journal of Macroeconomics* **28: 461-79.**

What is the purpose of the paper?

Disaggregates various aspects of fiscal policy of four EU countries. Finds differences in how they impact macroeconomic outcomes. Follows Mountford and Uhlig (2002).

Does the paper directly estimate the fiscal multiplier?

Not directly. One of their graphs is of fiscal policy's effect on the output gap, however.

Is the estimate statistically significant?

Of the many relationships they estimate, most statistically are insignificant and they differ from country to country.

Does the paper itself perform an out of sample test?

Not OS test, but near-replication of Mountford and Uhlig with some modifications.

Michaillat, Pascal. 2012. "[Fiscal Multipliers over the Business Cycle](#)." *CEP Discussion Paper No. 1115.*

What is the purpose of the paper?

It creates and justifies a model showing that the fiscal multiplier will be much larger during recessions.

Does the paper directly estimate the fiscal multiplier?

It calibrates its model to data. For most specifications, it is less than 1 when the unemployment rate is less than 6%. All specifications show the multiplier to be greater than 1 when the unemployment rate is 9%.

Is the estimate statistically significant?

N/A

Does the paper itself perform an out of sample test?

No.

Mittnik, Stefan and Willi Semmler. 2012. "Regime Dependence of the Fiscal Multiplier." *Journal of Economic Behavior and Organization* **83: 502-22.**

What is the purpose of the paper?

Claims that existing methodologies for estimating fiscal multipliers are incorrect since they fail to consider the timing of demand shocks.

Does the paper directly estimate the fiscal multiplier?

It's implicit in the paper but not clear. It looks like at peak it is almost 2.

Is the estimate statistically significant?

Confidence intervals are only drawn sporadically, and when they are they are one standard deviation.

Does the paper itself perform an out of sample test?

No, this is a new model and U.S. data.

Monacelli, Tommaso, Roberto Perotti, and Antonella Trigari. 2010. "Unemployment Fiscal Multipliers." *Journal of Monetary Economics* **57: 531-53.**

What is the purpose of the paper?

Updates Perotti's work in light of ARRA and better incorporate search and friction theoretical models into their research.

Does the paper directly estimate the fiscal multiplier?

1.2, within 1 year.

Is the estimate statistically significant?

It borders on ** significance against 0.

Does the paper itself perform an out of sample test?

No.

Morishima, Michio and Mitsuo Saito. 1964. "A Dynamic Analysis of the American Economy, 19021952." *International Economic Review* 5 (2): 125-64.

What is the purpose of the paper?

Create a Keynesian model using data from the US economy.

Does the paper directly estimate the fiscal multiplier?

It conflates private and public investment, and uses total investment as the basis for the multiplier, not government spending. The multipliers they calculate are not constant; they are functions of other parameters implicit in their model. Generally, they are greater than 1.

Is the estimate statistically significant?

Such statistics are not given.

Does the paper itself perform an out of sample test?

The paper claims it is "tolerably effective" at predicting 1953-1960, but that is a very limited test.

Mountford, Andrew and Harald Uhlig. 2009. "What are the Effects of Fiscal Policy Shocks?" *Journal of Applied Econometrics* 24: 960-992.

What is the purpose of the paper?

Applies Uhlig (2005)'s method of identification for VAR to estimate the fiscal multiplier.

Does the paper directly estimate the fiscal multiplier?

Yes – as high as five, but it varies depending on time window and whether it is one via tax cuts or deficit spending

Is the estimate statistically significant?

See Table V on page 985. It unfortunately uses the 16th and 84th percentile confidence intervals.

Does the paper itself perform an out of sample test?

No - extension of earlier model.

Nakamura, Emi and Jon Steinsson. 2011. "Fiscal Stimulus in a Monetary Union: Evidence from U.S. Regions." *NBER Working Paper No. 17391*.

This paper is also conditionally accepted at *American Economic Review*.

What is the purpose of the paper?

Estimate the fiscal multiplier by looking at variations in US regions in military procurement spending. This is meant to address the question of fiscal stimulus and open/closed economies.

Does the paper directly estimate the fiscal multiplier?

1.5

Is the estimate statistically significant?

Yes.

Does the paper itself perform an out of sample test?

Study that addresses endogeneity, not OS test.

Nekarda, Christopher J. and Valerie A. Ramey. 2011. "Industry Evidence on the Effects of Government Spending." *American Economic Journal: Macroeconomics* 3 (January): 36-59.

What is the purpose of the paper?

It constructs a new data set out of industry-level data matched with government spending in those industries.

Does the paper directly estimate the fiscal multiplier?

The paper is difficult to summarize. One estimate is 0.23.

Is the estimate statistically significant?

Yes, ***.

Does the paper itself perform an out of sample test?

No. Note that to the extent that government spending does increase output, it doesn't follow the theoretical channels fiscal stimulus is supposed to follow – wage increases and less markup. That is one of the major findings of the paper.

Neri, Stefano. 2001. "Assessing the Effects of Monetary and Fiscal Policy." *Banca D'Italia Temi di discussione No. 425.*

What is the purpose of the paper?

Apply SVAR to US data to disentangle the effects of monetary and fiscal policy.

Does the paper directly estimate the fiscal multiplier?

It is implied but not stated. It isn't clear whether or not it is >1.

Is the estimate statistically significant?

It isn't clear as it is presented.

Does the paper itself perform an out of sample test?

No.

Nitsch, Thomas O. 1972. "A Further Adjustment in a Test of the Relative Importance of Monetary and Fiscal Actions in Economic Stabilization." *Nebraska Journal of Economic and Business* **11 (1): 11-24.**

What is the purpose of the paper?

Improves on Anderson and Jordan (1968)'s investigation of the same question.

Does the paper directly estimate the fiscal multiplier?

Yes, in most specifications, it is less than 1.

Is the estimate statistically significant?

No. See tables 1 and 2 on pages 19 and 21, respectively. The fiscal multiplier is denoted as A2-bar and A3-bar.

Does the paper itself perform an out of sample test?

No, it is an extension of the previous paper and uses much of the same data.

Owyang, Michael T., Valerie A. Ramey, and Sarah Zubairy. 2013. "Are Government Spending Multipliers Greater During Periods of Slack? Evidence from 20th Century Historical Data." *American Economic Review* **103(2): 129–34.**

What is the purpose of the paper?

Apply Ramey and Shapiro (1998)'s earlier narrative/news methods to newly constructed data going back to 1890 in the US and 1921 in Canada.

Does the paper directly estimate the fiscal multiplier?

0.7-0.9

Is the estimate statistically significant?

Not reported.

Does the paper itself perform an out of sample test?

No.

Pereira, Manuel C. 2008. "[Empirical Evidence on the Stabilizing Role of Fiscal and Monetary Policies in the US](#)." *MPRA Paper No. 19675.*

What is the purpose of the paper?

Use SVAR and counterfactual simulations to discuss the effects of monetary and fiscal policy.

Does the paper directly estimate the fiscal multiplier?

1.3 on impact and a total of 2.0 before 1980; no more than 1.0 after 1980.

Is the estimate statistically significant?

The author claims that the first is and the second is barely non-significant. The paper is ambiguous, but it looks like that is one standard deviation.

Does the paper itself perform an out of sample test?

No, old data set and new model.

Pereira, Manuel C. and Arthur S. Lopes. 2010. "[Time-Varying Fiscal Policy in the U.S.](#)" *Banco de Portugal Estudes e Documentos de Trabalho No. 21|2010.*

What is the purpose of the paper?

It combines SVAR with Bayesian estimation to determine how the multiplier has changed in the US over time.

Does the paper directly estimate the fiscal multiplier?

Most recent years are 0.25-0.9 depending on time frame.

Is the estimate statistically significant?

No – in most specifications, it doesn't even reject 0 with the one standard deviation bands.

Does the paper itself perform an out of sample test?

No.

Perotti, Roberto. 2005. "[Estimating the Effects of Fiscal Policy in OECD Countries]." *Center for Economic and Policy Research Discussion Paper No. 4842*.

What is the purpose of the paper?

Extends on Blanchard and Perotti (2002)'s landmark paper on fiscal multipliers and SVAR.

Does the paper directly estimate the fiscal multiplier?

Yes. There are many different estimates for before and after 1980 (a standard structural breakpoint), and amongst Australia, Canada, West Germany, UK, and US. His own estimate pre-1980 is 1.29 for the US and 0.36 after, in a 1 year time window, with other estimates tending to be lower. Although, some estimates tend to be very high and it is difficult to summarize all of the results succinctly.

Is the estimate statistically significant?

The errors bars used are only a single standard deviation.

Does the paper itself perform an out of sample test?

No – it replicates analysis for several countries, but does not go beyond that.

The original spreadsheet says that this is an OS test of Fatas and Mihov (2001), but for this reason I don't believe it is the case – Perotti explicitly contrasts his model and methodology with theirs.

Perotti, Roberto. 2007. "[In Search of the Transmission Mechanism of Fiscal Policy]." In *NBER Macroeconomics Annual 2007, Volume 22*. **Chicago: University of Chicago Press.**

What is the purpose of the paper?

It provides detailed rationales for rejecting the work of Ramey, in doing so arguing that the fiscal multiplier is clearly greater than 1.

Does the paper directly estimate the fiscal multiplier?

It is estimated for USA, and then replicated for Australia, Canada, and the UK. In most cases, it is >1. See Table 6. This paper is nonetheless cited as evidence of a fiscal multiplier greater than 1.

Is the estimate statistically significant?

Perotti draws one standard deviation confidence intervals. However, Hall (2009) when reviewing the literature provides standard errors for Perotti's data that would imply statistical significance.

Does the paper itself perform an out of sample test?

Replication of Blanchard and Perotti (and some of Ramey 2011b), but not OS test.

Roberto, Perotti. 2014. "[Defense Spending is Contractionary, Civilian Spending is Expansionary](#)." *NBER Working Paper No.* **20179.**

What is the purpose of the paper?

Response to Ramey (2011b). It argues that the reason why incorporating news expectations raise questions regarding the worthiness of SVAR is that defense spending is contractionary, and that the standard SVAR approach agrees with the result. However, SVAR for other spending is expansionary.

Does the paper directly estimate the fiscal multiplier?

~1.1

Is the estimate statistically significant?

** against 0.

Does the paper itself perform an out of sample test?

No.

Ramey, Valerie A. 2011b. "[Identifying Government Spending Shocks: It's All About the Timing](#)." *Quarterly Journal of Economics* **126 (1).**

What is the purpose of the paper?

Argues that the news regarding defense spending Granger-cause the shocks observed in standard SVAR, implying SVAR is a faulty approach. Constructs a data set using news variables in the US from 1939-2008.

Does the paper directly estimate the fiscal multiplier?

0.6-1.2

Is the estimate statistically significant?

**** against 0.**

Does the paper itself perform an out of sample test?

Performs many important statistical tests relevant to literature, but not an OS test.

This paper is notable because it points out that there is no justification for the frequent use of the 68% confidence bands.

Ramey, Valerie A. 2012. "Government Spending and Private Activity." *NBER Working Paper No. 17787*.

What is the purpose of the paper?

Shows that higher government spending is associated with lower private activity, implying that the fiscal multiplier is less than one.

Does the paper directly estimate the fiscal multiplier?

0.5

Is the estimate statistically significant?

Depending on your interpretation of the work, it may statistically reject a multiplier of >1 at 95%.

Does the paper itself perform an out of sample test?

No.

Ramey, Valerie A. and Matthew D. Shapiro. 1998. "Costly capital reallocation and the effects of government spending." *Carnegie-Rochester Conference Series on Public Policy* 48: 145-94.

What is the purpose of the paper?

Compares the effects of government spending on the military versus other types of spending after building a two-sector model. Follows Hamilton (1985).

Does the paper directly estimate the fiscal multiplier?

Only provides evidence graphically – see "Private Output" graph in Figure 2A.

Is the estimate statistically significant?

A "military buildup" dummy variable is used in a "narrative" sense that is statistically significant in specific but in unclear ways – see page 179. Significance of the multiplier itself is not discussed.

Does the paper itself perform an out of sample test?

No, this is a new methodology, and though it would be followed by several other papers.

Ramey, Valerie A. and Sarah Zubairy. 2013. "[Government Spending Multipliers in Good Times and in Bad: Evidence from U.S. Historical Data](#)." Working Paper.

What is the purpose of the paper?

Explores evidence of higher multipliers during times of slack or interest rates at the zero bound. Extension of earlier 2013 paper. Also offers some new criticisms of alternative methodologies.

Does the paper directly estimate the fiscal multiplier?

Yes – 0.7-1.1.

Is the estimate statistically significant?

Sometimes.

Does the paper itself perform an out of sample test?

No.

Ravn, Morten O., Stephanie Schmitt-Grohe, and Martin Uribe. 2007. "[Explaining the Effects of Government Spending Shocks on Consumption and the Real Exchange Rate](#)." *NBER Working Paper No. 13328.*

What is the purpose of the paper?

Apply SVAR to US, UK, Canada, and Australia to examine the effect of government spending on consumption and exchange rates.

Does the paper directly estimate the fiscal multiplier?

They report it untraditionally as a one percentage increase government spending instead of a one percentage point increase in government spending as a percentage of the economy. They translate the on impact multiplier into the traditional reporting as 0.52. The peak cumulative multiplier may be around 2, but that's a guess.

Is the estimate statistically significant?

The paper provides two standard deviation confidence intervals and it cannot reject 0.

Does the paper itself perform an out of sample test?

No.

Ravnik, Rafael and Ivan Zilic. 2011. "[The Use of SVAR Analysis in Determining the Effects of Fiscal Shocks in Croatia](#)." *Financial Theory and Practice* **35 (1): 25-58.**

What is the purpose of the paper?

Apply SVAR to Croatia. Uses industrial production as proxy for GDP.

Does the paper directly estimate the fiscal multiplier?

Roughly 0.

Is the estimate statistically significant?

No.

Does the paper itself perform an out of sample test?

SVAR with new data and approach, not OS test.

Riera-Crichton, Daniel, Carlos A. Vegh, and Guillermo Vuletin. 2012. "[Tax Multipliers: Pitfalls in Measurement and Identification](#)." *NBER Working Paper No. 18497***.**

Received Revise and Resubmit at *Journal of Monetary Economics***.**

What is the purpose of the paper?

**Compares Romer and Romer (2010) with SVAR in dataset of 14 countries. The dataset does not include
US, as in Romer and Romer, but it does include UK, as does Cloyne (2013)**

Does the paper directly estimate the fiscal multiplier?

Tax rate increases are contractionary, but a multiplier based on cyclically-adjusted revenues may have no effect or even be expansionary.

Is the estimate statistically significant?

They use a large number of specifications. Some are, and some are not.

Does the paper itself perform an out of sample test?

No.

Riera-Crichton, Daniel, Carlos A. Vegh, and Guillermo Vuletin. 2014. "Procyclical and Countercyclical Fiscal Multipliers: Evidence from OECD Countries." *NBER Working Paper* no. 20533.

What is the purpose of the paper?

It argues that not accounting for the trajectory of government spending during recessions biases estimates of the multiplier downwards.

Does the paper directly estimate the fiscal multiplier?

Yes, 1.3-3.1, depending on the state of the economy.

Is the estimate statistically significant?

Yes.

Does the paper itself perform an out of sample test?

No.

Romer, Christina D. and Jared Bernstein. 2009. "The Job Impact of the American Recovery and Reinvestment Plan."

What is the purpose of the paper?

This is the document explaining what the Obama administration believed would be the economic effects of the ARRA.

Does the paper directly estimate the fiscal multiplier?

It derived a government spending fiscal multiplier of 1.55 and a tax cut fiscal multiplier of 0.98. In their words, "For the output effects of the recovery package, we started by averaging the multipliers for increases in government spending and tax cuts from a leading private forecasting firm and the Federal Reserve's FRB/US model." They don't much beyond that and some tweeking.

Romer, Christina D. and David H. Romer. 2010. "The Macroeconomic Effects of Tax Changes: Estimates Based on a New Measure of Fiscal Shocks." *American Economic Review* 100 (3): 763-801.

What is the purpose of the paper?

Use the narrative method to show that exogenous increases in tax rates are highly contractionary.

Does the paper directly estimate the fiscal multiplier?

It estimates that an "exogenous" tax increase of 1% reduces GDP by 3% over the following three years. Note that they believe this methodology isolates the effect on aggregate demand, as opposed to other channels.

Is the estimate statistically significant?

** or *** depending on exact specification.

Does the paper itself perform an out of sample test?

No, this is a new approach altogether.

Rotemberg, Julio J. and Michael Woodford. 1992. "Oligopolistic Pricing and the Effects of Aggregate Demand on Economic Activity." *Journal of Political Economy* 100 (6): 1153-1207.

What is the purpose of the paper?

The authors compare the empirical performance of a New Keynesian DGE model featuring oligopolistic pricing against one with a competitive model. This addresses studies that use military spending, which tend to show a multiplier less than 1.

Does the paper directly estimate the fiscal multiplier?

The model with oligopolistic pricing implies a multiplier of 1.25

Is the estimate statistically significant?

This isn't really how the testing is performed.

Does the paper itself perform an out of sample test?

It is better thought of an attempt at falsifying Barro's line of research.

Serrato, Juan Carlos Suarez and Phillippe Wingender. 2011. "Estimating Local Fiscal Multipliers." Manuscript.

This paper received a revise and resubmit from *Econometrica*.

What is the purpose of the paper?

Many Federal spending programs allocate by population. Every ten years there is a discontinuity in spending allocations as the census is performed. They use this fact as an instrument.

Does the paper directly estimate the fiscal multiplier?

1.88

Is the estimate statistically significant?

Yes, **.

Does the paper itself perform an out of sample test?

Study designed to get around endogeneity, not OS test.

Shoag, Daniel. 2013. "[Using State Pension Shocks to Estimate Fiscal Multipliers Since the Great Recession](#)." *American Economy Review: Papers & Proceedings* **103 (3): 121-24.**

What is the purpose of the paper?

Estimate the fiscal multiplier with data since 2008.

Does the paper directly estimate the fiscal multiplier?

1.43

Is the estimate statistically significant?

Yes, **.

Does the paper itself perform an out of sample test?

No – new approach, even if with mostly out-of-sample data.

Sims, Eric and Jonathan Wolff. 2014. "[The Output and Welfare Effects of Fiscal Shocks Over the Business Cycle](#)." *NBER Working Paper* **no. 19749.**

What is the purpose of the paper?

DSGE model incorporating both output and welfare multipliers, outlining effects of stimulus on each.

Does the paper directly estimate the fiscal multiplier?

Baseline estimate is 1.21

Is the estimate statistically significant?

This is how the model was parameterized.

Does the paper itself perform an out of sample test?

In many ways (enough to be worth looking at), it picks up on Smets and Wouters, but from what I can tell it does not perform the same test.

Smets, Frank and Rafael Wouters. 2007. "[Shocks and Frictions in US Business Cycles: A Bayesian DSGE Approach](#)." *American Economic Review* **97 (3): 586-606.**

What is the purpose of the paper?

Create a Bayesian DSGE model to study the US economy. This paper would later become the basis for other studies of fiscal multipliers.

Does the paper directly estimate the fiscal multiplier?

It is implied in a graph but not stated.

Is the estimate statistically significant?

For the multiplier no, but that's not the point of the paper.

Does the paper itself perform an out of sample test?

It performs an out-of-sample forecast against other models. Note, however, that this is more about testing the strengths of the approach as opposed to a specific test of the multiplier.

Smith, Paul E. 1967. "[Money Supply and Demand: A Cobweb?](#)" *International Economics Review* **8 (1): 1-12.**

What is the purpose of the paper?

Puts money in IS-LM and uses it to forecast.

Does the paper directly estimate the fiscal multiplier?

0.19-0.30, but this is *only* on impact. The overall effect may still be greater than 1, but the paper does not say so.

Is the estimate statistically significant?

The statistical significance of this result is not stated explicitly.

Does the paper itself perform an out of sample test?

Yes, it does, and it doesn't obviously fail. It is a fairly small, limited set of data it forecasts, however.

Stevans, Lonnie K. and David N. Sessions. 2010. "Calculating and Interpreting Multipliers in the Presence of Non-Stationary Time Series: The Case of US Federal Infrastructure Spending." *American Journal of Social and Management Sciences* **1 (1): 24-38.**

What is the purpose of the paper?

Uses a corrected version of VAR to measure the effect of infrastructure spending.

Does the paper directly estimate the fiscal multiplier?

3.33

Is the estimate statistically significant?

Yes. It is also significantly greater than 1.

Does the paper itself perform an out of sample test?

No.

Suits, Daniel B. 1962. "Forecasting and Analysis with an Econometric Model." *American Economic Review* **52 (1): 104-32.**

What is the purpose of the paper?

Present a model of the US economy and use it to forecast.

Does the paper directly estimate the fiscal multiplier?

1.3 on impact and 1.6 at peak.

Is the estimate statistically significant?

Not reported.

Does the paper itself perform an out of sample test?

No.

Sumner, Scott. 2013. "Why the Fiscal Multiplier is Roughly Zero." *Mercatus on Policy*. **Arlington, VA: The Mercatus Center.**

What is the purpose of the paper?

Argues for the existence of the monetary offset – the fiscal multiplier is only a measure of central bank incompetence, since the central bank should adjust its behavior in response to anything the fiscal authority tries to accomplish.

Does the paper directly estimate the fiscal multiplier?

No.

Swanson, Eric T. and John C. Williams. 2014. "[Measuring the Effects of the Zero Lower Bound on Medium- and Longer-Term Interest Rates](#)." *NBER Working Paper* No. 20486.

What is the purpose of the paper?

It uses the sensitivity of yields on Treasury securities to news to determine at which times markets expect interest rates to stay at zero for an extended period of time. The recent literature on large fiscal multipliers is generally contingent on this expectation. This condition only held beginning in late 2011.

Tagkalakis, Athanasios. 2008. "[The Effects of Fiscal Policy on Consumption in Recessions and Expansions](#)." *Journal of Public Economics* 92: 1486-1508.

What is the purpose of the paper?

It estimates the effect of government spending shocks on consumption in bad times and good times.

Does the paper directly estimate the fiscal multiplier?

It estimates a consumption multiplier, which implies the fiscal multiplier. In most specifications, it is around 3 during bad times.

Is the estimate statistically significant?

Yes, *** significant. But I'm not sure how well it deals with endogeneity.

Does the paper itself perform an out of sample test?

No, but note its connection with Perotti (1999).

Vegh, Carlos and Guillermo Vuletin. 2014. "[The Road to Redemption: Policy Response to Crises in Latin America](#)." *NBER Working Paper* no. 20675.

What is the purpose of the paper?

It shows that, over time, policy in Latin America has become more countercyclical, and that the countercyclicality is associated with briefer durations of crises.

Does the paper directly estimate the fiscal multiplier?

It implies it is likely greater than 1.

Turrini, Alessandro, Werner Roeger, and Istvan P. Szekely. 2012. "Banking Crises, Output Loss, and Fiscal Policy." *CESifo Economic Studies* 58 (1): 181-219.

What is the purpose of the paper?

It looks at the interaction between banking crises and fiscal policy, and finds that they have a greater impact when there is a crisis, but not for modern Keynesian reasons.

Does the paper directly estimate the fiscal multiplier?

They have a variable they claim is analogous to the fiscal multiplier, but it is interacted with so many other variables that I don't feel comfortable citing any one number.

Is the estimate statistically significant?

Some of the results are *** significant, some aren't at all. I also question the quality of the empirical work being performed in this paper.

Does the paper itself perform an out of sample test?

No - it is a new model.

Wang, Xin and Yi Wen. 2013. "Is Government Spending a Free Lunch? Evidence from China." *Federal Reserve Bank of St. Louis Working Paper Series No. 2013-013A.*

What is the purpose of the paper?

Test the fiscal multiplier in historical data in China.

Does the paper directly estimate the fiscal multiplier?

Yes, at least 2.

Is the estimate statistically significant?

No.

Does the paper itself perform an out of sample test?

Near-replication of Blanchard and Perotti, but not OS. Structure of model is also a bit different – it uses spatial panel method to account for regional analysis.

Wilson, Daniel J. 2012. "[Fiscal Spending Jobs Multipliers: Evidence from the 2009 American Recovery and Reinvestment Act](#)." *American Economic Journal: Economic Policy* **4 (4): 251-82.**

What is the purpose of the paper?

Exploit that certain funds were allocated via formula to identify truly exogenous changes in spending.

Does the paper directly estimate the fiscal multiplier?

No, it estimates a "jobs" multiplier that implies that it is greater than one.

Is the estimate statistically significant?

Yes, under most specifications.

Does the paper itself perform an out of sample test?

Study designed to get around endogeneity, not OS test.

Woodford, Michael. 2011. "[Simple Analytics of the Government Expenditure Multiplier](#)." *American Economic Journal: Macroeconomics* **3: 1-35.**

What is the purpose of the paper?

This paper probably presents the best modern theoretical treatment for why the fiscal multiplier may be greater than 1.

Wren-Lewis, Simon. 2000. "[The Limits to Discretionary Fiscal Stabilization Policy](#)." *Oxford Review of Economic Policy* **16 (4): 92-105.**

What is the purpose of the paper?

This is a very broad paper on Wren-Lewis's opinion on fiscal policy.

Does the paper directly estimate the fiscal multiplier?

~0.8

Is the estimate statistically significant?

No.

Does the paper itself perform an out of sample test?

No.

Zandi, Mark. 2011. "[Global Policy Prescriptions: How Another Recession Can Be Avoided](.)." *Moody Economic and Consumer Analytics.*

What is the purpose of the paper?

Provide suggestions for effective economic policy in 2011.

Does the paper directly estimate the fiscal multiplier?

It states that certain types of spending multipliers may be as high as 1.71. However, no attempts were made to provide reasoning for such multipliers beyond obfuscating references that provide no empirical rationale.

Zubairy, Sarah. 2013. "[On Fiscal Multipliers: Estimates from a Medium Scale DSGE Model](.)." *International Economic Review*, **forthcoming.**

What is the purpose of the paper?

Uses DSGE to analyze the multipliers associated with several different fiscal rules under varying assumptions.

Does the paper directly estimate the fiscal multiplier?

Spending Multiplier is 1.07; multipliers for taxes less than 1.

Is the estimate statistically significant?

Yes.

Does the paper itself perform an out of sample test?

No.