



Keynesian v. Classical Methods in Modeling State Tax Policy

David G. Tuerck

Executive Director, Beacon Hill Institute

November 30, 2013

Suffolk University, 8 Ashburton Place, Boston, MA 02108

Phone, 617-573-8750, Fax, 617-994-4279

On The Web, www.beaconhill.org, E-mail, dtuerck@beaconhill.org

The following is an assessment of the appropriateness of modeling state tax policy using methods that came to the fore in *The General Theory of Employment Interest, and Money*, published in 1936 by the British economist, John Maynard Keynes. The two features of Keynes's book that are most relevant to the topic at hand are (1) that it was written to address the economic conditions of the Great Depression, which was in its 7th full year at the time of the book's publication, and (2) that it offered a tool, called the Keynesian multiplier, for measuring the effectiveness of the policy recommendations that came out of the book.

Keynes saw it as his purpose to replace the hitherto recognized economic paradigm, then called the "classical" model, with a new paradigm that reflected the depth and persistence of the Depression. In the classical model, economic downturns, even severe economic downturns, were supposed to be self-correcting. The relevance here is that the classical model (whose assumptions mirror those of our CGE model) assumed that supply equaled demand except for brief periods of imbalance between supply and demand, which would be eventually corrected by price and wage adjustments.

Given that the ongoing economic downturn was clearly not self-correcting, argued Keynes, it was necessary to forge a new approach that both explained that downturn and provided a path back to more normal conditions. It was necessary to build a model in which the supply of goods and labor could exceed the demand for goods and labor over a protracted period of time.

Keynes's approach turned the classical model on its head: Previously, saving was necessary for investment and therefore for production and employment. Now saving was a "leakage" from the spending stream that slowed the pace of economic expansion. Previously, government spending crowded out personal consumption. Now government spending provided a spur to consumption. Government could rescue the economy from a protracted downturn by using its tax and spending powers to boost aggregate demand.

In doing so, the government would take advantage of how the Keynesian multiplier could be relied upon to increase production and consumption. Government would spend, say, another \$1,000 on some activity. It didn't matter if the activity was something useful like building a bridge or something wasteful like paying men to dig holes and fill them in again. Spending was spending. And this spending would cause production to expand by some multiple of \$1,000.

A key concept in computing the multiplier is the "marginal propensity to consume," or "MPC," defined as the additional consumption that another dollar of disposable income would yield. Suppose this MPC equaled .5. An "injection" of \$1,000 in government spending would immediately bring about \$1,000 in new production. But then consumers would spend 50% of that, adding another \$500 to production. Then consumers would spend 50% of that, or \$250, leading to further new production and to further rounds of new consumption and production so that, at the end of the day, the initial "injection" of \$1,000 in government spending yielded altogether \$2,000 in new production. Thus by spending only \$1,000, the government would cause production to rise by twice that amount. Hence, the Keynesian multiplier.

A further wrinkle in this analysis is the Keynesian "balanced budget multiplier." This concept, which comes up in Keynesian models of state tax policy, begins with the idea that, just as government spending is good for the economy, taxes are bad (though for reasons unlike those considered by STAMP). Taxes are bad in this analysis because they reduce disposable income. Suppose that the government decided to raise taxes by \$1,000, rather than increase spending by \$1,000. Now disposable income would fall by \$1,000, and as a result, consumption would fall by \$500, causing production to fall by the same amount. Then consumption and production would fall by another \$250, and so forth, until both had fallen by \$1,000.

Now suppose the government decided to raise spending and taxes by \$1,000. We get the following effects on production:

- Change in production from \$1,000 in new government spending =

- $\$1,000 + \$500 + \$250 + \$125 + \dots + 0 = \$2,000$.
- Change in production from \$1,000 in new taxes = $-\$500 - \$250 - \$125 - \dots - 0 = -\$1,000$.
- Adding: $\$2,000 - \$1,000 = \$1,000$.

Voila! The simultaneous \$1,000 increase in spending and taxes has a net positive effect on the economy of \$1,000. Conversely if the government had cut spending and taxes by \$1,000, the economy would have shrunk by the same amount. And interestingly, the result doesn't depend on the size of the MPC. Economic models that have built-in Keynesian elements show that a given increase in spending and taxes will expand the economy by that increase and that a given decrease in spending and taxes will contract the economy by that decrease.

Despite the fact that Keynes himself recognized that this line of analysis was legitimate only when production and employment were significantly below their "full-employment" norms, the Keynesian model dominated economic thinking well beyond the end of the Depression and until the early 1970s, when "stagflation" cast doubt on its applicability to current conditions. Thereafter, economists started to rehabilitate the previously discarded classical model, causing mentions of Keynes to disappear almost entirely from the academic literature and to receive less and less consideration in college textbooks.

The recent economic downturn did, in fact, breathe new life into the Keynesian corpse. But the failure of the economy to respond measurably to the 2009 "stimulus" policies suggests that this renewed life will quickly fade. The current economic weakness appears to be due, not to an insufficiency of demand, but to uncertainties surrounding Obamacare and Dodd Frank and to safety net measures that deter people from taking jobs, all of which operate on the supply-side of the economy. When ITEP criticizes us for assuming full employment, it is implying that we should be more "Keynesian" in our approach. We should treat government spending as good for the economy and taxes as bad only insofar as they reduce disposable income. The balanced budget multiplier is a handy tool for government expansionists who want to claim, in effect, that the state government can make the state economy as big as it wants by merely spending more.

We prefer the alternative approach is to revert to classical arguments that government spending crowds out consumption and that taxes matter, not for how they affect disposable income, but for how they affect incentives to work, save and invest. In that framework, a reduction in government spending translates into an increase in personal consumption. Reductions in tax rates, as they apply to sales or income taxes, increase the reward to work, saving and investment and, through that mechanism, cause production to expand. This "supply-side" approach makes sense insofar as the demand-side palliatives called for by the Keynesian model seem to have lost their usefulness some 70 years ago. No one outside of some other modeling organizations takes the idea of the balanced budget multiplier seriously anymore.

It is the position of the Beacon Hill Institute that, in modeling tax policy, Keynes's ideas work well, insofar as they do at all, for considerations of federal tax policy changes in an economy that

is clearly depressed owing to a lack of aggregate demand. The federal government can influence national economic conditions through Keynesian policies since it can run budget deficits and print money, whereas state governments can do neither. Furthermore, the federal government doesn't have to concern itself with the outmigration of capital, jobs and consumer activity in the way that the states do when it comes to raising taxes.

Economic models that use Keynesian multipliers to rationalize individual projects, such as building a sports arena in a depressed area, are also fine as far as they go. But state policy makers should be wary of models that presume to generalize that approach to making to state tax policy.

The BHI approach to modeling a reduction in, say, the state sales tax is focus on how that tax change will expand consumption by making consumption cheaper in the state and thus bring in more retail business and, by doing so, increase production and salaries. Sales tax revenues will go down, but the reduction in those revenues will be partly offset by an increase in income tax revenues and other tax revenues. Government spending will fall but the taxes previously paid to government will show up as increased consumption. The alternative view, that the path to economic expansion lies in combined spending and tax increases does not fit the facts of the current economy at the national level and certainly does not fit those facts at the state level.