

Study: Models that forecast impact of government spending are easily manipulated

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Credit: George Hodan/public domain

Economists at North Carolina State University and Indiana University have found that the most widely used model for predicting how U.S. government spending affects gross domestic product (GDP) can be rigged using theoretical assumptions to control forecasts of how government spending will stimulate the economy.

By accounting for these assumptions, the researchers developed an impartial version of the model, which found that every dollar of increased government spending results in more than a dollar's worth of GDP growth.

"There is a longstanding debate over the impact of government spending, and people who are very smart disagree - one camp holds that a dollar of spending leads to more than a dollar in GDP growth, while the other camp holds that spending results in less than a dollar in GDP growth," says Nora Traum, an associate professor of economics at NC State and co-author of a paper describing the work. "This debate is important because it plays a role in determining government spending policies."

In an attempt to better understand the issues underlying the debate, the researchers evaluated the model used by economists - from central banks to the International Monetary Fund - to predict the impacts of government spending.

The researchers found that by making tweaks to specific assumptions in the model, they could effectively force the model to make predictions that supported one government spending camp or the other - even if they used the exact same data.

For example, the researchers found that assumptions related to how Congress and central banks will address the servicing of national debt could have a powerful effect on the predicted impact of [government spending](#).

Based on their observations, the researchers then developed an agnostic model, which was designed to avoid those tweaks that predispose the results to support a particular argument.

"We found that the agnostic [model](#) predicts roughly \$1.30 in near-term

GDP growth for each \$1 in spending," Traum says.

"This work looks at aggregate [government spending](#), but it raises some interesting questions about the impact of [spending](#) in specific areas, and on how these statistical assumptions may be influencing economic forecasts in other sectors," Traum says.

The paper, "Clearing Up The Fiscal Multiplier Morass," is published in the journal *American Economic Review*. The paper was co-authored by Eric Leeper and Todd Walker of Indiana University.

More information: Clearing Up the Fiscal Multiplier Morass, *American Economic Review* (2017). www.aeaweb.org/articles?id=10.1257/aer.20111196&&from=f

Provided by North Carolina State University

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