

The Myth of the Spending Multiplier

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Economist

Most economics textbooks include the doctrine of the macroeconomic spending multiplier. This doctrine says that an increase in spending gets multiplied into an increase in overall output and income many times more than the initial spending. For example, if government spends another billion dollars, gross national product, or total output, could grow by \$10 billion. If that sounds like magic, it is indeed magical, but the fact is, there is no magic in economics. The spending multiplier is a myth, even if it is presented in almost all economics textbooks, and believed in by most economists.

There is an actual multiplier in the economy, but it is not a multiplier of goods. It is a money multiplier. Every bank loan creates money, because the borrower now has more money, and the depositors still have their previous money. Banks keep a small fraction of deposits on reserve, and loan out the rest. The borrower deposits his loan into some bank, which becomes a new deposit that the bank can loan out. So if the banks keep a tenth of deposits on reserve, an initial deposit of \$100 in currency can potentially get multiplied into \$1000 of extra money.

The British economist John Maynard Keynes said during the Great Depression that there is also a spending multiplier. He said that economies were stuck in depression, and investors were too pessimistic to increase their spending for capital goods. When people save some of their income, there is less consumption, so with less consumption and discouraged investors, there is no growth. But government could come to the rescue. An increase in government spending would be multiplied into many times more spending, income, and production.

To understand the spending multiplier, we need a bit of mathematics. The equation for total spending is:

$$Y = C + I + G + X - M$$

where Y is total spending, C is consumption, I is economic investment (an increase in capital goods), G is government spending, X is exports, and M is imports. To simplify the explanation, we can assume that exports equal imports, and leave out (X-M).

Consumption depends on after-tax income and on how much of that income gets consumed rather than saved. The “marginal propensity to consume,” the portion of income used for consumption, will be designated by the letter b. The consumption function is

$$C = b(Y-T), \text{ where } T \text{ is taxes paid.}$$

Suppose people save ten percent of their income, so $b=.9$ and $(1-b)$, the portion of income saved, is $.1$. Now replace C with $b(Y-T)$:

$$Y = b(Y-T) + I + G.$$

When we solve for Y, we get:

$$Y = (1/(1-b))(I + G - bT).$$

This equation for Y is the Keynesian determination of national income and spending. An increase in G gets multiplied by $(1/(1-b))$. If overall savings is one tenth of income, then the multiplier is 10, so a billion dollars of more government spending results in a \$10 billion increase in total spending, thus also of total income and output. Better yet, if only one percent of income gets saved, the multiplier is one hundred! Every dollar of extra government spending gets multiplied into \$100 of output! That is why Keynesian economists believe that when the economy is depressed, savings is bad for the economy; saving reduces the multiplier.

One cannot argue with the mathematics of the multiplier. But one can argue with the economics. First of all, if the extra G comes from taxes T, then the multiplier is smaller, because we have to subtract more T. If $b=.99$, almost all the increase in G is offset by the increase in T. Likewise, if the extra G comes from borrowing within the country, that leaves less income for C and I. So we only get the full multiplier effect if the extra government spending is based on money that comes in from abroad.

The more fundamental error is that the Keynesian derivation of national spending depends on the consumption variable C being replaced by the consumption function, but with investment I left unchanged. However, from where comes the funds for investment? It must come from savings, the portion of income not used for consumption. So there is an investment function similar to the consumption function:

$$I = (1-b)(Y-T).$$

Replacing I with this function,

$$Y = b(Y-T) + (1-b)(Y-T) + G.$$

When we cancel out the duplicated variables on both sides of the equation, we get $G=T$, or government spending equals taxes paid. There is no multiplier! There is no determination of Y from savings versus consumption!

A major theorem in economics is that investment comes from savings. If exports equal imports, then savings equals investment. Therefore, in a normal economy, more savings does not imply less spending, since the reduction in consumption is offset by an increase in investment. Only when something is already terribly wrong does savings get hoarded into cash rather than being borrowed for investment.

There can appear to be a spending multiplier when money comes in from abroad. Suppose a foreign tourist spends \$100 for shoes. The shoe seller now has an extra \$100, and uses this to buy corn. Now the corn grower has \$100, and buys more stuff. The foreign spending gets multiplied into a greater amount of total spending and production. As that \$100 keeps circulating, there seems to be a spending multiplier of infinity as each seller gets more money to buy more goods.

This puzzle is solved by a barter example. Suppose a corn grower increases production by \$100. Total spending grows only by that \$100 of output. The corn grower trades his extra output for shoes of value \$100. The shoe maker does not make more shoes, as he has already optimized the amount of labor he seeks to engage in, relative to leisure. What happens is that an extra portion of others' output now goes to the corn grower, in trade for a portion of the extra corn. Nobody else will work more merely because the corn grower chose to work more.

Simplify this to a two-person economy, a corn grower and an apple grower. The corn grower increases his crop. He can now trade for more apples, but the apple grower does not plant more apple trees. The apple grower trades more of his apples for corn, since the corn grower offers to trade more corn. The apple grower does not grow more merely because his neighbor grows more corn. Therefore the increase in

corn does not get multiplied into more apples. There is simply a greater amount of output from the greater amount of corn.

Now, to be fair to the Keynesians, there can be, under some circumstances, an output multiplier when an economy is depressed. When there are idle workers, idle capital goods, and idle land, then if an outsider comes in to buy goods, or somebody decides to produce more goods, this employs resources previously idle. If the shoe maker sells more shoes, and he would like to work more, the sale might stimulate him to produce more shoes. If other idle workers likewise get stimulated, then total output will rise.

There can also be an output multiplier when the economy stays depressed due to credit constraints. Everybody wants to expand, but nobody will lend the funds to do so. If people form a credit union and make mutual loans, the constraint is gone. Farmer John now plants crops on the promise of future payment for his labor, and dentist Jane now cleans teeth on the promise of future payments by the patients. Everybody works more, on the promise to get paid later, and then workers pay back their loans from their greater wages.

But these real multipliers have nothing to do with savings versus consumption. The Keynesian multiplier was based on the false premise that one can decrease savings without affecting investment. That results in the futile policy of increasing government spending on the hope of a multiplier kicking in. Historically, the greater spending by Japan after the 1990 collapse of its real estate bubble did not stimulate its economy, and the deficits and money expansion in the USA after 2008 did not magically create high economic growth. The Keynesian spending multiplier is a myth.

Instead of spending more money, government can truly stimulate their economies in several ways. First, decrease the costs of production by reducing taxes on labor and goods. Second, push land to its most productive use by taxing the location value of optimal use regardless of current use. Third, eliminate credit constraints by removing excessive restrictions on lending by banks, credit unions, and mutual aid organizations. Fourth, make property rights secure by abolishing the asset forfeitures and excessive eminent domain takings that make investment insecure.

Removing imposed costs, restrictions, and confiscations results in a real income multiplier. The real multiplier ultimately comes from more labor, not merely more spending.

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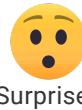
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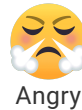
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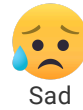
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7 Comments

Edward Dodson ▼

E

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Best Newest Oldest



Jon Chance

2 years ago

If we had legitimate sovereign national governments with real elections and genuine public treasuries, there'd be no perceived need for "bank" corporations.

All money -- like **United States Notes** -- would be issued by public treasuries, not by "banks", and this money would be fully backed by **sovereign national territory** (Location Value Rent).

Zero "banks".

Zero taxation.

Zero socialism.

Zero poverty.

Zero wars of aggression.

Article 8

First US Constitution (Articles of Confederation)

Socialism is the billionaires' best friend.

It was invented to save their fraudulent "bank" corporations.

Who wins and who loses by preventing legitimate governments from being reestablished?

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The hOEP Project

→ Jon Chance

2 years ago

Why don't we have "legitimate sovereign national governments with real elections and genuine public treasuries"?

Made in Webflow

Do you believe we ever had those things? Have you considered maybe the elites just lied and told the public these were legitimate and genuine things? What happens when slaves are given the superficial illusion of freedom and the belief they elect their own leaders and control the government?

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Jon Chance

→ The hOEP Project

2 years ago

American Revolutionaries like George Mason, Thomas Jefferson, Patrick Henry, Thomas Paine, and many others were establishing a legitimate sovereign national government during 1776-1787.

But the Bank of England and British Loyalists counterfeited the US currency and caused a financial collapse. The original US government and the **First US Constitution (Articles of Confederation)** were overthrown by the "Federalist" coup d'etat of 1787.

Examine **Ratification** by Pauline Maier, **The Money Masters** by Bill Still, **Common Sense**, the **Virginia Declaration of Rights**, and other original documents.

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The hOEP Project

→ Jon Chance

2 years ago edited



thank you so much for sharing that. I've been researching solutions to politics based on the idea of taking away from the elites and rich people control of the price setting mechanisms. The powers that rule the world have rigged our market places with a "fixed price system" that makes the r  poorer at the same time. I would like to share with you technology to free the

public from control of currency by implementing price setting system controlled by the public and consumers.

what I've discovered in my product research and competitive analysis is the idea of lowering prices for poor people and raising prices for rich people makes sellers profit compared to using a fixed price for all. it also reduces inequality and decrease power of the money makers and money controllers. BUT when ever it's been tried it gets sabotaged by mysterious forces and misrepresented in history books too. Your comment about the founding fathers and bank of England sabotage of economy is consistent with my expectations of how the money system and the PRICE SYSTEM has been rigged to favor the rich and impoverish the poor.

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Jon Chance

→ The hOEP Project

2 years ago

Your approach is Marxist.

If you're a Marxist, a Communist, or a Socialist, you should honestly present your ideas as Marxist, Communist and/or Socialist "solutions".

Perhaps the CCP will be interested.

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D

danlan

3 years ago

Article may be correct, but one sentence may be a mistake.

"There can appear to be a spending multiplier when money comes in from abroad. Suppose a foreign tourist spends \$100 for shoes. The shoe seller now has an extra \$100, and uses this to buy corn."

The shoe seller has \$100 to replace the shoes he sold from inventory and some profit to spend, just as he would if a local bought the shoes.

How can a fiscal multiplier be greater than one?

Say, there is \$99 in the economy, which buys \$99 worth of goods. Add \$1 to the economy. Now, we can have either aggregate price of goods increasing by \$1 to \$100 (slight inflation) or production will increase by \$1 worth of goods to meet the added demand. Goods production is now \$100 and sales are \$100. Revenue of \$100 from sales enables \$100 investment in new goods. Where is the multiplier? With the velocity of money at one, which plays no part in Keynes' equation or this discussion, one dollar can only purchase one dollar of goods or be invested into production of one dollar of goods. One dollar added to the money supply increases the money supply by one dollar and not more than one dollar. In Keynes' equation

$Y = 1/(1-k)$,

If all money is spent, the multiplier goes to infinity (an impossible age of total abundance), which is true in an infinite amount of time and infinite number of transactions. Placing the equation in its series representation $1 + k + k^2 + k^3 + \dots$ to infinity tells the story. With $k=1$, the first transaction results in 1, next is 1 and so on to infinity. If $k=0.8$, the first transaction is 0.8, the next transaction is 0.64... After infinite transactions, the sum of all transactions is $1/1-0.8 = 5$. The same dollar is used over and over again, produce, sell, produce...and after infinite time, the sum of all production is 5 dollars, just as it is for every other dollar in the system whose spending factor, $k=0.8$.

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E

Edward Dodson

4 years ago

There are two issues I would ask you to comment on, Fred. One (alluded to in your analysis but not specifically addressed) is the extent to which revenue flowing into the accounts of businesses is diverted into financial speculation after distribution to high income executives and even by corporate treasurers. Then, at the end of the fiscal business year, whatever dividends are distributed flow mostly to individuals with a very high net worth who do not need these extra dollars (or other currency balances) for consumption. There is also a very high distribution of dividends into non-profit entities such as foundations and universities. These income flow would seem to me to have a significant influence on the multiplier effect.

The second issue is the one I continue to find troubling. Namely, that every time a bank makes a loan new money is created. As I have written often enough, my experience in banking does not support this assertion. I do not dispute that central banks create new money out of thin air, but individual banks must possess or acquire currency balances in order to make a loan to someone or to some entity. It is a myth that the recording of a loan on the books creates money in the account of the recipient that can then be used as a

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Economist

FRED E. FOLDVARY, Ph.D., (May 11, 1946 — June 5, 2021) was an economist who wrote weekly editorials for [Progress.org](https://progress.org) since 1997. Foldvary's commentaries are well respected for their currency, sound logic, wit, and consistent devotion to human freedom. He received his B.A. in economics from the University of California at Berkeley, and his M.A. and Ph.D. in economics from George Mason University. He taught economics at

Virginia Tech, John F. Kennedy University, Santa Clara University, and San Jose State University.

Foldvary is the author of *The Soul of Liberty, Public Goods and Private Communities*, and *Dictionary of Free Market Economics*. He edited and contributed to *Beyond Neoclassical Economics* and, with Dan Klein, *The Half-Life of Policy Rationales*. Foldvary's areas of research included public finance, governance, ethical philosophy, and land economics.

Foldvary is notably known for going on record in the *American Journal of Economics and Sociology* in 1997 to predict the exact timing of the 2008 economic depression—eleven years before the event occurred. He was able to do so due to his extensive knowledge of the real-estate cycle.

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