# Does government spending create jobs and/or inflation?

https://cafehayek.com/2010/10/does-government-spending-create-jobs.html

if the government builds a bunch of bridges, there have to be workers to build the bridges. [...] Were they unemployed before they were hired to working on the bridge? If their leaving created job openings at their old firms, did that create an opening for an unemployed worker? If the skills of bridge building are somewhat specialized, then the effect of the spending on new bridges is to raise the demand for workers with those skills. That will in turn increase the wages of workers with similar skills, making them less desirable and **somewhat offsetting the increase in workers on the bridge**. Then there are the raw materials used to make the bridges. The increase in demand for those materials will also increase the price of those materials, discouraging their use and possibly reducing employment elsewhere, partially offsetting the workers hired to build new bridges.

I'd like to hear the case of how government spending lots of borrowed money encourages business to invest. [inflation ?] [it's using available labor force and production capacities – that business can't use at the same time (at full capacity – **check unemployment hysteresis**) – **it could reduce net exports**, but when the country is a net importer already, it worsens the trade imbalance]

https://www.stlouisfed.org/on-the-economy/2016/august/does-government-spending-create-jobs

Following a policy change that began when the unemployment rate was high, **if government spending increased by 1 percent of GDP, then total employment increased by between 0 percent and 0.15 percent**. Following a policy change that began when the unemployment rate was low, the effect on employment was even smaller.

https://www.forbes.com/sites/johntharvey/2012/10/22/government-creates-jobs/

At the federal level, we can spend in deficit indefinitely and without fear of default (see It is Impossible for the US to Default), meaning that the government can spend even without tax revenue, and its spending can create private sector sales—and jobs. Therefore, in a world where we have a difficult time generating sufficient demand to hire all those willing to work, **the private sector is actually more dependent on the government to boost its sales than the government is on the private sector for tax revenues** (see Why the Private Sector NEEDS the Government to Spend Money). Now who is the parasite?!

Don't forget, the rules of accounting tell us that **if the government is in deficit, then the private sector must be in surplus** (see Why You Should Love Government Deficits)!

https://www.forbes.com/sites/johntharvey/2012/07/18/why-you-should-love-government-deficits/

So, next time you hear Obama or Romney talking about reducing the deficit, be sure you put that into the proper context. **They are talking about draining your savings account**!

I'm sure many of you are thinking that the above ignores our debt to China. However, 100% of our debt to China (which amounts to less than 10% of the total, incidentally) is a function of our trade deficit with them, not the budget deficit. Even if the federal budget were balanced or in surplus, we'd owe just as much to China. The only difference would be that they would probably be holding fewer Treasury bills since they would not be available in such quantity. **Instead, they would hold more US private sector assets**.

https://www.forbes.com/sites/johntharvey/2011/07/02/learn-to-love-the-deficit/

**if 90 people can produce a sufficient volume of goods and services to satisfy 100 people, then why would the private sector hire all 100?** It wouldn't, and those without jobs must go without the output that we are nevertheless able to produce for them. The unemployed lack the income that would make the production of those extra goods and services profitable.

This is where the government can play a useful, indeed vital, role. They can supplement demand by employing the unemployed as soldiers, sailors, airmen, marines, teachers, firemen, police officers, etc. [...] And **the funds to finance these activities should come from deficit spending**. There is no point in taxing away spending power from the private sector in order to create demand from the government. That's self-defeating. [unless you have other projects in mind than those of consumers]

**The proper measure of the size of the debt is relative to the size of the economy**. Gross Domestic Product is typically used as the gauge of the latter. Even the most extreme measures of where it stands today puts debt/GDP at less than 100%. It reached it peak during WWII, when it was around 120% of GDP. The 1950s were, incidentally, hardly a period of economic Armageddon.

Every penny of US debt is owed in a currency we are legally permitted to print. There is ZERO chance that we could be forced to default [**until the US debt is no longer in dollars**]. We may choose to do so (just as a person in a room full of food could choose to starve), but that would be foolish. Note the strong contrast with Greece. They could, indeed, default, since they owe their debt in a currency they don't control (there are, incidentally, many other reasons why the US and Greece are not analogous, but this one is key).

Quantitative easing was meant [to] change the form in which financial assets were held in the banking system so that it would easier for institutions to loan money. It created absolutely no new income whatsoever, which is why it was an utter waste of time. The problem was never that banks didn't have money to loan. It was (and is) that **everyone is too scared to borrow**.

Even if the US government were in surplus, we would owe as much to China because our debt to them is simply the difference between how much we exported to them and how much we imported from them. They then take those excess earnings and use them to buy financial assets. That we had large budget deficits only served to make a particular financial asset—Treasury Bills—available to them in large quantities. **We never needed China to buy these to finance the deficit because (in a roundabout fashion) we could always have monetized debt** (i.e., sold the Treasury Bills to the Federal Reserve for brand new cash—see above for why this is not inflationary). The one thing we still don't import from China are dollar bills! If they wanted all the money back tomorrow, we could just print it up and ship it over.

https://www.forbes.com/sites/johntharvey/2011/05/14/money-growth-does-not-cause-inflation/

### MV = Py

where M is equal to the supply of money, V the velocity of money (or the average number of times each dollar bill is spent), P the average price of goods and services, and y the total quantity of all goods and services sold during the time period in question.

this is what is assumed in the "money growth==>inflation" view:

M: That which is money is easily defined and identified and only the central bank can affect it's supply, which it can do with autonomy and precision.

V: The velocity of money is related to people's habits and the structure of the financial system. It is, therefore, relatively constant.

P: The economy is so competitive that neither firms nor workers are free to change what they charge for their goods and services without there having been a change in the underlying forces driving supply and demand in their market.

y: The economy automatically tends towards full employment and thus y (the existing volume of goods and services) is as large as it can be at any given moment (although it grows over time).

### V [...] is constant (something Friedman takes pains to emphasize in the original article)

[...] Friedman says that y is constant at the level associated with the natural rate of unemployment, while V is indirectly related to agents' demand for cash. When people want to hold more cash, V, the rate at which they spend cash, naturally falls, and vice versa. But, Friedman further specifies that V is relatively constant and so, therefore, is the demand for cash. Thus, when the central bank raised the supply of cash from 200 to 400, this meant that people were holding more cash than they wished to have in their portfolios. The Fed had created a situation in which the supply of money (newly raised) exceeded the demand (still at the original level). The result was that people, in the language of the "money growth==>inflation" view, rid themselves of excess money balances by spending that cash. They hoped to buy more goods and services but since, in aggregate, more did not exist, they only bid up their prices: money growth led to inflation. [...] there is a great deal of evidence that the velocity of money IS NOT constant. As one would expect, it tends to decline in recessions when people do, in fact, want to hold more cash.

But perhaps the real nail in the coffin of the "money growth==>inflation" view is this: the phenomenon that Milton Friedman identifies as key to the whole process, i.e., the excess of the money supply over money demand, cannot happen in real life. The irony here is that something else we already cover in the intro macro class makes this evident. How is it that the Federal Reserve increases the money supply? Remember that Friedman used a helicopter–indeed, he had to, for there was no other way to make the example work. This wasn't just a simplifying device, it was critical, for it allowed the central bank to raise the money supply despite the wishes of the public. However, that can't happen in the real world because the actual mechanisms available are Fed purchases of government debt from the public, Fed loans to banks through the discount window, or Fed adjustment of reserve requirements so that the banks can make more loans from the same volume of deposits. All of these can raise M, but, not a single solitary one of them can occur without the conscious and voluntary cooperation of a private sector agent. You cannot force anyone to sell a Treasury Bill in exchange for new cash; you cannot force a private bank to accept a loan from the Fed; and private banks cannot force their customers to accept loans. Supplying money is like supplying haircuts: you can't do it unless a corresponding demand exists.

There's no reason to throw the baby out with the bath water, so let's retain the equation. However, we need new assumptions with respect to M, V, P, and y:

M: A precise definition and identification of money is elusive in a modern, credit-money economy, and its volume can change either with or without direct central bank intervention. In addition, the monetary authority cannot raise the supply of money without the cooperation of the private sector. Because central banks almost always target interest rates (the price of holding cash) rather than the quantity of money, they tend to simply accommodate demands from banks. When private banks communicate that they need more reserves for loans and offer government debt to the Fed, the Fed buys it. It's the private sector that is in the driver's seat in this respect, not the central bank. The central bank's impact is indirect and heavily dependent on what the rest of the economy is willing to do (which is, incidentally, why all the QE and QE II money is just sitting in bank vaults).

V: The velocity of money is, indeed, related to people's behavior and the structure of the financial system, but there are discernable patterns. It is not constant even over the short run.

P: While it is true that factors like production bottlenecks can be a source of price movements, the economy is not so competitive that there are not firms or workers who find themselves able to manipulate the prices and wages they charge. The most important inflationary episode in recent history was the direct result of a cartel, i.e., OPEC, flexing its muscle. Asset price bubbles can also cause price increases (as they are now). The key here, however, is that **P CAN be the initiating factor–in fact, it has to be, since M can't.** 

y: The economy can and does come to rest at less-than-full employment. Hence, while it is possible for y to be at its maximum, it most certainly does not have to be.

As already mentioned, the most important inflationary episode in post-WWII history was that during the 1970s and early 1980s. From 1968 through 1972, consumer price inflation averaged 4.6%. Over the next ten years it was 7.5%. What happened? What caused this sudden and dramatic acceleration in prices? Did the Fed accidentally print too much money? As already explained, that can't happen–you simply can't raise the money supply above the

demand. M did rise, however, and largely proportionally to the increase in P. This is a much more realistic story of those events.

As the price of oil skyrocketed, so costs of production rose for many, many US businesses. Because there is a lag between purchasing inputs and selling output, most firms have to borrow money (working capital) to bridge the gap. As the ripple effect of the OPEC price increases moved throughout the economy, the demand for cash by these businesses rose. Quite reasonably, private banks and the Fed did what they could to accommodate. These were fair requests on the part of US entrepreneurs. Loans were extended and government debt sold by the private sector to the central bank. This raised the supply of money. Therefore, the rising prices led to an increase in the supply of money and not the other way around. QE, QE II, and the federal government deficit cannot by themselves cause inflation.

And this is how it really works, at least until the Fed starts using helicopters for monetary policy.

[the Fed can 'forcefully' purchase securities simply by proposing an attractive price – but then reserves are not necessarily used]

# https://www.forbes.com/sites/johntharvey/2011/05/30/what-actually-causes-inflation/

The OPEC oil cartel in the 1970s and 1980s is a classic example of marker power. Had there been other viable sources of what they sold, they could not have restricted supply and driven up prices as they did because the competition would not have allowed them to do so. We would have just bought oil (or a close substitute) from someone else. Up to late 1973, they lacked the political will to set strict quotas among the various exporters. But, once the motivation was provided by US involvement in the Yom Kippur War, they made a conscious decision to raise prices by cutting supply. And because they were able to avoid competition, it worked! Even though households do not buy barrels of oil, it caused terrible inflation. It drove up the prices of anything that used petroleum or petroleum-based products, it raised the price of gas and, therefore, anything that needed to be transported, and it caused inflation in other energy sources as users shifted to those products. Market power–not money growth–caused this inflation. The money supply only rose as a result of the fact that firms and consumers took out larger loans and **sold assets for cash [assets not indexed on inflation, like bonds** (although some are inflation-indexed :

https://www.investopedia.com/terms/i/inflation-indexedsecurity.asp – wikipedia : *As of 2019, government-issued inflation-linked bonds comprise over \$3.1 trillion of the international debt market.*[3] *The inflation-linked market primarily consists of sovereign bonds*, with privately issued inflation-linked bonds constituting a small portion of the *market.*]. The Federal Reserve acted as it should have done in these circumstances, accommodating this increased demand.

**Inflation never affects everyone equally.** It shifts buying power from one group to another (even though the winners may still complain because they see themselves as hurt by the overall price increases—what they don't understand is their role in causing the latter!).

very relevant today, inflation can be injected from the asset market. The connection between the prices of goods and services and those of financial assets is tenuous. Sometimes there is practically none at all. Witness the 1990s, with a massive increase in stock prices but very little movement in the consumer price index. However, lines of causation can exist, particularly though commodities futures. I have already written about this at length in the context of gas prices: Why You Are Paying So Much For Gas

The gist of the above is this. When speculative money bids up the price of a commodity future, this creates an incentive for those actually selling the commodity to withhold supply today in favor of the future (when prices will presumably be higher). The rising spot price then convinces the speculator that her bet had been correct, and she increases her position. This may drive futures prices even higher, and so on. Thus, a goods price is driven up by the price of a financial asset. The winners here are 1) those whose portfolios include those assets (of course, they can only realize their gain by selling) and 2)the producers of the commodities in question. Those producers often bear the brunt of the blame for these inflations, but they are not actually the source. As usual with inflation, it leads to a rise in the money supply as agents take out loans and sell government securities. The way to stop this inflation is not via blocking monetary growth, however, but to control the link between the asset market and the commodity price.

Last is a supply shock. If a storm rages through the Gulf of Mexico, taking out oil derricks and refineries along the way, this may well raise the price of oil and gas. As it should, for this creates incentives to build more derricks and refineries and for consumers to find alternate energy sources. Again, this is what capitalism is supposed to do. In terms of who wins with this sort of inflation, it's obviously more complex since it depends on whose derricks were destroyed and who gets to build new ones. In any event, this, too, can lead to a rise in the money supply and there is no logical reason for the Fed to block this. [with inflation the incentive is to sell bonds and invest in stocks (with lower costs of financing returns are higher), this implies a reallocation of resources toward the private sector]

# https://finance.zacks.com/bond-market-size-vs-stock-market-size-5863.html

While the stock market might get more press, **the U.S. stock market total capitalization is actually a bit smaller than the bond market**, though neither is small. The stock market has just over \$30 trillion in total market capitalization, meaning the value of all outstanding shares, while the total amount of debt owed through bonds is more than \$40 trillion. [...] The bond market includes companies, government agencies and nonprofits that raise money by issuing bonds, essentially borrowing money at interest from investors. It's steadily grown in size over time, and according to the Securities Industry and Financial Markets Association, an industry group, the total amount of debt outstanding at the end of 2017 was more than \$40.7 trillion.

That included **more than \$14.4 trillion in United States Treasury debt, more than \$9.2 trillion in mortgage-related bonds, more than \$8.8 trillion in corporate bonds and more than \$3.8 billion in municipal bonds.** While corporate and Treasury debt have essentially steadily increased over the past few decades, mortgage-related bonds are still off their peak from 2008, around the end of the housing boom and before the start of the great recession.

Because every higher price you pay means someone is getting more income, inflation causes a redistribution of income. Sometimes it does so in a manner that we would endorse and sometimes not. But in any event, it causes a rise in the demand for money that the Fed

will almost certainly accommodate--and rightfully so, for **refusing to do so almost always serves to punish those already in the weakest position**. [not more production to counteract]

https://www.americanprogress.org/issues/economy/reports/2011/09/08/10257/government-spending-can-create-jobs-and-it-has/

**Increased investments in infrastructure saved or created 1.1 million jobs in construction industry and 400,000 jobs in manufacturing by March 2011**. Almost all of these jobs were in the private sector. The reason for this success is simple: Upgrading roads, bridges, and other basic infrastructure not only creates jobs but also paves the way for businesses small, medium, and large to benefit. Infrastructure investments lower the cost of doing business, making U.S. companies more competitive. And they put people to work earning good, middle-class incomes, which expands the consumer base for businesses.

There were a variety of ways that the Recovery Act encouraged infrastructure investment. Build America Bonds, for example, lowered the cost of borrowing for states who invested in infrastructure, which meant that public projects are more affordable for states—and ultimately, a better deal for taxpayers.

By the end of 2010, \$93 billion in investments to the green economy had created or saved nearly 1 million American jobs. These 997,000 jobs include both the "green jobs" created directly by investment in specific industries and indirectly by their suppliers, as well as the additional jobs created when workers spend their incomes back into the economy.

https://www.heritage.org/jobs-and-labor/report/governments-proper-role-creating-jobs-top-five-actions-take

In February 2009, when the ARRA became law, 12.5 million Americans (8.1 percent of the work force) lacked jobs.[4] In December 2011, with 80 percent of the ARRA's government "stimulus" money spent, 13.1 million Americans (8.5 percent of the work force) lacked jobs. [5]

https://www.ssc.wisc.edu/~gwallace/Papers/Ramey%20(2011).pdf

Some of the papers find that government spending leads consumption to decline, consistent with the negative wealth effect of the neoclassical model. Others find that consumption increases, consistent with rule-of-thumb consumers. Household stud-ies, such as the work by Jonathan A. Parker et al. (2011), can help shed light on this issue. Christopher J. Nekarda and Ramey (2011) present evidence that industry markups do not change in response to government spend-ing, as required by the New Keynesian model.

https://d1wqtxts1xzle7.cloudfront.net/35792932/spending\_priorities\_PERI.pdf? 1417433017=&response-content-disposition=inline%3B+filename

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We show that **investments in clean energy, health care and education create a much larger number of jobs across all pay ranges, including mid-range jobs** (paying between \$32,000 and \$64,000) and high-paying jobs (paying over \$64,000). Channeling funds into clean energy, health care and education in an effective way will therefore create significantly greater opportunities for decent employment throughout the U.S. economy **than spending the same amount of funds with the military**.