



**Congressional
Research Service**

Informing the legislative debate since 1914

Fiscal Policy: Economic Effects

Jeffrey M. Stupak

Analyst in Macroeconomic Policy

May 16, 2019

Congressional Research Service

7-....

www.crs.gov

R45723



Fiscal Policy: Economic Effects

Fiscal policy is the means by which the government adjusts its spending and revenue to influence the broader economy. By adjusting its level of spending and tax revenue, the government can affect the economy by either increasing or decreasing economic activity in the short term. For example, when the government runs a budget deficit, it is said to be engaging in fiscal stimulus, spurring economic activity, and when the government runs a budget surplus, it is said to be engaging in a fiscal contraction, slowing economic activity.

The government can use fiscal stimulus to spur economic activity by increasing government spending, decreasing tax revenue, or a combination of the two. Increasing government spending tends to encourage economic activity either directly through purchasing additional goods and services from the private sector or indirectly by transferring funds to individuals who may then spend that money. Decreasing tax revenue tends to encourage economic activity indirectly by increasing individuals' disposable income, which tends to lead to those individuals consuming more goods and services. This sort of expansionary fiscal policy can be beneficial when the economy is in recession, as it lessens the negative impacts of a recession, such as elevated unemployment and stagnant wages. However, expansionary fiscal policy can result in rising interest rates, growing trade deficits, and accelerating inflation, particularly if applied during healthy economic expansions. These side effects from expansionary fiscal policy tend to partly offset its stimulative effects.

The government can use contractionary fiscal policy to slow economic activity by decreasing government spending, increasing tax revenue, or a combination of the two. Decreasing government spending tends to slow economic activity as the government purchases fewer goods and services from the private sector. Increasing tax revenue tends to slow economic activity by decreasing individuals' disposable income, likely causing them to decrease spending on goods and services. As the economy exits a recession and begins to grow at a healthy pace, policymakers may choose to reduce fiscal stimulus to avoid some of the negative consequences of expansionary fiscal policy, such as rising interest rates, growing trade deficits, and accelerating inflation, or to manage the level of public debt.

In recent history, the federal government has generally followed a pattern of increasing fiscal stimulus during a recession, then decreasing fiscal stimulus during the economic recovery. Prior to the "Great Recession" of 2007-2009 the federal budget deficit was about 1% of gross domestic product (GDP) in 2007. During the recession, the budget deficit grew to nearly 10% of GDP in part due to additional fiscal stimulus applied to the economy. The budget deficit began shrinking in 2010, falling to about 2% of GDP by 2015. In contrast to the typical pattern of fiscal policy, the budget deficit began growing again in 2016, rising to nearly 4% of GDP in 2018 despite relatively strong economic conditions. This change in fiscal policy is notable, as expanding fiscal stimulus when the economy is not depressed can result in rising interest rates, a growing trade deficit, and accelerating inflation. As of publication of this report, interest rates have not risen discernibly and are still near historic lows, and inflation rates show no sign of acceleration. The trade deficit has been growing in recent years; however, it is not clear that this growth in the trade deficit is a result of increased fiscal stimulus.

R45723

May 16, 2019

Jeffrey M. Stupak

Analyst in Macroeconomic
Policy

-re-acte--@crs.loc.gov

For a copy of the full report,
please call 7-.... or visit
www.crs.gov.

Contents

What is Fiscal Policy?	1
Expansionary Fiscal Policy	1
Potential Offsetting Effects to Expansionary Fiscal Policy	2
Investment and Interest Rates	2
Exchange Rates and the Trade Balance	3
Inflation.....	4
Fiscal Expansion Multipliers.....	4
Long-Term Considerations Regarding Fiscal Stimulus	5
Unsustainable Public Debt.....	6
Decreased Business Investment.....	6
Crowding Out Government Spending.....	6
Withdrawing Fiscal Stimulus	7
Potential Offsetting Effects to Withdrawing Fiscal Stimulus.....	7
Investment and Interest Rates	7
Exchange Rates and the Trade Balance	8
Inflation.....	8
Fiscal Contraction Multipliers.....	8
Fiscal Policy Stance.....	8

Figures

Figure 1. Federal Budget Deficit/Surplus.....	9
---	---

Tables

Table 1. Average First-Year Fiscal Multipliers for Stimulus in Selected Models.....	5
---	---

Contacts

Author Contact Information	11
----------------------------------	----

The federal government has two major tools for affecting the macroeconomy: fiscal policy and monetary policy. These policy interventions are generally used to either increase or decrease economic activity to counter the business cycle's impact on unemployment, income, and inflation. This report focuses on fiscal policy; for more information related to monetary policy, refer to CRS Report RL30354, *Monetary Policy and the Federal Reserve: Current Policy and Conditions*, by Marc Labonte.

What is Fiscal Policy?

Fiscal policy is the means by which the government adjusts its budget balance through spending and revenue changes to influence broader economic conditions. According to mainstream economics, the government can impact the level of economic activity, generally measured by gross domestic product (GDP), in the short term by changing its level of spending and tax revenue.¹ Expansionary fiscal policy—an increase in government spending, a decrease in tax revenue, or a combination of the two—is expected to spur economic activity, whereas contractionary fiscal policy—a decrease in government spending, an increase in tax revenue, or a combination of the two—is expected to slow economic activity. When the government's budget is running a deficit, fiscal policy is said to be expansionary: when it is running a surplus, fiscal policy is said to be contractionary.

From a policymaker's perspective, expansionary fiscal policy is generally used to boost GDP growth and the economic indicators that tend to move with GDP, such as employment and individual incomes. However, expansionary fiscal policy also tends to affect interest rates and investment, exchange rates and the trade balance, and the inflation rate in undesirable ways, limiting the long-term effectiveness of persistent fiscal stimulus. Contractionary fiscal policy can be used to slow economic activity if policymakers are concerned that the economy may be overheating, which can cause a recession. The magnitude of fiscal policy's effect on GDP will also differ based on where the economy is within the business cycle—whether it is in a recession or an expansion.²

Expansionary Fiscal Policy

During a recession, aggregate demand (overall spending) in the economy falls, which generally results in slower wage growth, decreased employment, lower business revenue, and lower business investment. Recessions occur for a number of reasons, but as seen during the most recent recession from 2007 to 2009, they can result in serious negative consequences for both individuals and businesses.³ However, the government can replace some of the lost aggregate demand and limit the negative impacts of a recession on individuals and businesses with the use of fiscal stimulus by increasing government spending, decreasing tax revenue, or a combination of the two. Government spending takes the form of both purchases of goods and services by the government, which directly increase economic activity, and transfers to individuals, which indirectly increase economic activity as individuals spend those funds. Decreased tax revenue via

¹ Olivier Blanchard, *Macroeconomics*, 5th ed. (Upper Saddle River NJ: Pearson Education, 2009), pp. 450-451.

² The economy shifts from periods of increasing economic activity, known as economic expansions, to periods of decreasing economic activity, known as recessions. For more information, see CRS In Focus IF10411, *Introduction to U.S. Economy: The Business Cycle and Growth*, by Jeffrey M. Stupak.

³ For more information on the causes of recessions, refer to CRS Insight IN10853, *What Causes a Recession?*, by Marc Labonte.

tax cuts indirectly increases aggregate demand in the economy. For example, an individual income tax cut increases the amount of disposable income available to individuals, enabling them to purchase more goods and services. Standard economic theory suggests that in the short term, fiscal stimulus can lessen the negative impacts of a recession or hasten a recovery.⁴ However, the ability of fiscal stimulus to boost aggregate demand may be limited due to its interaction with other economic processes, including interest rates and investment, exchange rates and the trade balance, and the rate of inflation.

Potential Offsetting Effects to Expansionary Fiscal Policy

Investment and Interest Rates

To engage in fiscal stimulus by either increasing spending or decreasing tax revenue, the government must increase the size of its deficit and borrow money to finance that stimulus. This can lead to an increase in interest rates and subsequent decreases in investment and some consumer spending.⁵ This rise in interest rates may therefore offset some portion of the increase in economic activity spurred by fiscal stimulus.

At any given time, there is a limited supply of loanable funds available for the government and private parties to borrow from—a global pool of savings. If the government begins to borrow a larger portion of this pool of savings, it increases the demand for these funds. As demand for loanable funds increases, without any corresponding increase in the supply of these funds, the price to borrow these funds, also known as interest rates, increases. Rising interest rates generally depress economic activity, as they make it more expensive for businesses to borrow money and invest in their firms. Similarly, individuals tend to decrease so-called interest-sensitive spending—spending on goods and services that require a loan, such as cars, homes, and large appliances—when interest rates are relatively higher.⁶ The process through which rising interest rates diminish private-sector spending is often referred to as *crowding out*.⁷ However, the degree to which crowding out occurs is partially dependent on where the economy is within the business cycle, either in a recession or in a healthy expansion.

During a recession, crowding out tends to be smaller than during a healthy economic expansion due to already depressed demand for investment and interest-sensitive spending. Because demand for loanable funds is already depressed during a recession, the additional demand created by government borrowing does not increase interest rates as much, and therefore does not crowd out as much private spending as it would during an economic expansion.⁸

In addition to fiscal policy, the government can influence the business cycle through the use of monetary policy, which is implemented by the Federal Reserve. The Federal Reserve is an independent government agency charged with maintaining stable prices and maximum

⁴ Michael Greenstone and Adam Looney, *The Role of Fiscal Stimulus in the Ongoing Recovery*, Brookings Institution, July 6, 2012, <https://www.brookings.edu/blog/jobs/2012/07/06/the-role-of-fiscal-stimulus-in-the-ongoing-recovery/>.

⁵ Laurence Ball and Gregory Mankiw, *What Do Budget Deficits Do?* National Bureau of Economic Research (NBER), Working Paper no. 5263, September 1995.

⁶ Ibid.

⁷ Benjamin M. Friedman, *Crowding Out or Crowding In? Economic Consequences of Financing Government Deficits*, Brookings Institution, Brookings Papers on Economic Activity, 3:1978, https://www.brookings.edu/wp-content/uploads/2016/11/1978c_bpea_friedman.pdf.

⁸ Alan J. Auerbach and Yuriy Gorodnichenko, “Measuring the Output Responses to Fiscal Policy,” *American Economic Journal: Economic Policy*, vol. 4, no. 2 (May 2012).

employment through its monetary policy. The Federal Reserve can influence interest rates throughout the economy by adjusting the federal funds rate, a very short-term interest rate faced by banks. Decreasing interest rates reduces the cost to businesses and individuals of borrowing funds to make new investments and purchases. Conversely, increasing interest rates raises the cost to businesses and individuals of borrowing funds to make new investments and purchases. The Federal Reserve can conduct monetary policy in a complementary nature to fiscal policy, offsetting the rise in interest rates by decreasing the federal funds rate. Alternatively, the Federal Reserve can pursue a policy that offsets stimulus, pushing interest rates up by increasing the federal funds rate.⁹

Exchange Rates and the Trade Balance

Another potential consequence of government fiscal stimulus is an increase in the value of the U.S. dollar and a subsequent increase in the trade deficit, which mitigates some portion of the rise in economic activity resulting from the fiscal stimulus. As discussed above, fiscal stimulus can cause interest rates to rise. In a global context where interest rates are rising in the United States relative to the rest of the world, demand for investment inside the United States is likely to increase among investors around the world as they seek out higher rates of return.¹⁰ The greater demand for investment in the United States is likely to temper the increase in interest rates resulting from fiscal stimulus. However, foreign investors must first exchange their own currency for U.S. dollars to invest in the United States. The increased demand for U.S. dollars increases the value of a U.S. dollar relative to other foreign currencies. As the U.S. dollar appreciates in value, domestic demand for imported goods increases because a U.S. dollar can now buy more goods and services abroad, but foreign demand for U.S. goods and services decreases because they are now relatively more expensive for foreigners. The end result is generally an increase in the U.S. trade deficit, as exports decrease and imports from abroad increase in the United States.¹¹ An increasing trade deficit, all else equal, means that consumption and production of domestic goods and services are falling, partly offsetting the increase in aggregate demand caused by the stimulus.

As discussed above, however, during a recession interest rates are less likely to rise, or are likely to increase to a lesser degree, due to an already depressed demand for investment and spending within the economy.¹² Without rising interest rates, or if they increase to a lesser degree, the associated increase in the trade deficit is also likely to be smaller. In addition, if the Federal Reserve engages in similarly stimulative monetary policy, it may be able to mitigate some of the anticipated increase in the trade deficit by further preventing an increase in interest rates.¹³

⁹ For further information regarding monetary policy, refer to CRS Report RL30354, *Monetary Policy and the Federal Reserve: Current Policy and Conditions*, by Marc Labonte.

¹⁰ Laurence Ball and Gregory Mankiw, *What Do Budget Deficits Do?* National Bureau of Economic Research (NBER), Working Paper no. 5263, September 1995.

¹¹ Olivier Blanchard, *Macroeconomics*, 5th ed. (Upper Saddle River NJ: Pearson Education, 2009), pp. 450-451.

¹² Alan J. Auerbach and Yuriy Gorodnichenko, "Measuring the Output Responses to Fiscal Policy," *American Economic Journal: Economic Policy*, vol. 4, no. 2 (May 2012).

¹³ For further information regarding monetary policy, refer to CRS Report RL30354, *Monetary Policy and the Federal Reserve: Current Policy and Conditions*, by Marc Labonte.

Inflation

As discussed above, the goal of fiscal stimulus is to increase aggregate demand within the economy. However, if fiscal stimulus is applied too aggressively, or is implemented when the economy is already operating near full capacity, it can result in an unsustainably large demand for goods and services that the economy is unable to supply. When the demand for goods and services is greater than the available supply, prices tend to rise, a scenario known as inflation. A rising inflation rate can introduce distortions into the economy and impose unnecessary costs on individuals and businesses, although economists generally view low and stable inflation as a sign of a well-managed economy.¹⁴ As such, rising inflation rates can hinder the effectiveness of fiscal stimulus on economic activity by imposing additional costs on individuals and interfering with the efficient allocation of resources in the economy.

The Federal Reserve has some ability to limit inflation by implementing contractionary monetary policy. If the Federal Reserve observes accelerating inflation as a result of additional fiscal stimulus, it can counteract this by increasing interest rates. The rise in interest rates results in a slowing of economic activity, neutralizing the fiscal stimulus, and may help to slow inflation as well.

Fiscal Expansion Multipliers

Economists attempt to evaluate the overall impact of fiscal stimulus on the economy by estimating *fiscal multipliers*, which measure the ratio of a change in economic output to the change in government spending or revenue that causes the change in output.¹⁵ A fiscal multiplier greater than one suggests that for each dollar the government spends, the economy grows by more than one dollar. A multiplier may be larger than one if the initial government stimulus results in further spending by private actors. For example, if the government increases spending on infrastructure projects as part of its stimulus, directly increasing aggregate demand, numerous contractors and construction workers will likely receive additional income as a consequence. If those workers then spend a portion of their new income within the economy, it further increases aggregate demand. Alternatively, a fiscal multiplier of less than one suggests that for each dollar the government spends, the economy grows by less than one dollar, suggesting the expansionary power of the fiscal stimulus is being offset by the contractionary pressures discussed above.

Estimates of fiscal multipliers vary depending on the form of the fiscal stimulus and on which economic model the economist uses to measure the multiplier. For example, a 2012 academic research article estimated fiscal multipliers for various forms of stimulus utilizing several different prominent economic models from the Federal Reserve Board, the European Central Bank, the International Monetary Fund (IMF), the European Commission, the Organisation for Economic Co-operation and Development (OECD), the Bank of Canada, and two models developed by academic economists. The authors found varying estimates (see **Table 1**) for different forms of fiscal stimulus ranging from 1.59 for cash transfers to low-income individuals to 0.23 for reduced labor income taxes.¹⁶ Based on these estimates, increasing government

¹⁴ See, e.g., Richard G. Anderson, *Inflation's Economic Cost: How Large? How Certain?* Federal Reserve Bank of St. Louis, July 2006, at <https://www.stlouisfed.org/publications/regional-economist/july-2006/inflations-economic-cost-how-large-how-certain>.

¹⁵ Nicoletta Batini, Luc Eyraud, Lorenzo Forni et al., *Fiscal Multipliers: Size, Determinants, and Use in Macroeconomic Projections*, International Monetary Fund, September 2014, <https://www.imf.org/external/pubs/ft/tnm/2014/tnm1404.pdf>.

¹⁶ Gunter Coenen et al., "Effects of Fiscal Stimulus in Structural Models," *American Economic Journal, Macroeconomics*, vol. 4, no. 1 (January 2012), pp. 22-68.

spending on consumption by 1% of GDP would result in a 1.55% increase in GDP, and decreasing labor income taxes by 1% of GDP would result in a 0.23% increase in GDP.

Table 1. Average First-Year Fiscal Multipliers for Stimulus in Selected Models

Fiscal Stimulus	Multiplier
Government Investment	1.59
Government Consumption	1.55
Targeted Transfers	1.30
Consumption Taxes	0.61
General Transfers	0.42
Corporate Income Taxes	0.24
Labor Income Taxes	0.23

Source: Gunter Coenen, Christopher J. Erceg, Charles Freedman et al., “Effects of Fiscal Stimulus in Structural Models,” *American Economic Journal, Macroeconomics*, vol. 4, no. 1 (January 2012), p. 46.

Note: Multipliers are averages across the seven models of the first-year effects on real GDP of fiscal stimulus lasting for two years, assuming no change in monetary policy for two years.

The magnitude of fiscal multipliers likely depends on where the economy is in the business cycle. As discussed above, during a recession fiscal stimulus is less likely to result in offsetting contractionary effects—such as rising interest rates, trade deficits, and inflation—resulting in a larger increase in economic activity from fiscal stimulus. Accordingly, another academic research article attempted to estimate fiscal multipliers depending on whether the economy was in an expansion or a recession, and found that the multiplier for government spending was between 0 and 0.5 during expansions and between 1.0 and 1.5 during recessions.¹⁷

Long-Term Considerations Regarding Fiscal Stimulus

Persistently applying fiscal stimulus can negatively affect the economy through three main avenues. First, persistent large budget deficits can result in a rising debt-to-GDP ratio and lead to an unsustainable level of debt.¹⁸ Second, persistent fiscal stimulus—particularly during economic expansions—can limit long-term economic growth by crowding out private investment. Third, rising public debt will require a growing portion of the federal budget to be directed toward interest payments on the debt, potentially crowding out other, more worthwhile sources of government spending.

Some economic research has suggested that relatively high public debt negatively impacts economic growth. For example, one academic research paper suggested that for developed countries, a 10-percentage-point increase in the debt-to-GDP ratio is associated with a 0.15- to 0.20-percentage-point decrease in per capita real GDP growth.¹⁹

¹⁷ Alan J. Auerbach and Yuriy Gorodnichenko, “Measuring the Output Responses to Fiscal Policy,” *American Economic Journal: Economic Policy*, vol. 4, no. 2 (May 2012).

¹⁸ Assuming annual budget deficits exceed annual GDP growth, the debt-to-GDP ratio will rise over time.

¹⁹ Manmohan S. Kumar and Jaejoon Woo, *Public Debt and Growth*, International Monetary Fund (IMF), Working Paper, vol. 10, no. 174 (July 2010).

Unsustainable Public Debt

As noted, persistent fiscal stimulus can result in a rising debt-to-GDP ratio and lead to an unsustainable level of public debt.²⁰ A rising debt-to-GDP ratio can be problematic if the perceived or real risk of the government defaulting on that debt begins to rise. As the perceived risk of default begins to increase, investors will demand higher interest rates to compensate themselves.

The tipping point at which public debt becomes unsustainable is difficult to predict. A continually rising debt-to-GDP ratio is likely to lead to an unsustainable level of debt over time. The threshold at which a nation's debt becomes unsustainable depends on a number of factors, such as the denomination of the debt, political circumstances, and, potentially most importantly, underlying economic conditions. A change in these circumstances may shift a nation's debt to unsustainable without the underlying amount of debt changing at all. To date, it does not appear that the United States has an immediate concern with respect to unsustainability; however, the U.S. debt-to-GDP ratio is projected to continually rise under current policy.²¹

Decreased Business Investment

Persistent fiscal stimulus, and the associated budget deficits, can decrease the size of the economy in the long term as a result of decreased investment in physical capital.²² As discussed previously, the government's deficit spending can result in higher interest rates, which generally lead to lower levels of business investment. Business investment—spending on physical capital such as factories, computers, software, and machines—is an important determinant of the long-term size of the economy. Physical capital investment allows businesses to produce more goods and services with the same amount of labor and raw materials. As such, government deficits that lead to lower levels of business investment can result in lower quantities of physical capital, and therefore may reduce the productive capacity of the economy in the long term.²³

As discussed earlier, some of the increase in interest rates and decline in domestic investment resulting from fiscal stimulus will likely be offset by additional investment in the United States from abroad. The inflow of capital from abroad is beneficial, as it allows for additional investment in the United States economy. However, in exchange for these investment flows, the United States is now sending a portion of its national income to foreigners in the form of interest payments. With a larger portion of investment flows coming from abroad, rather than from within the United States, a larger portion of the U.S. national income will be sent abroad.

Crowding Out Government Spending

Rising public debt may also be of concern due to its associated interest payments. All else equal, an increase in the level of public debt will result in an increase in interest payments that the

²⁰ Public debt is the money that the government owes to its creditors, which include private citizens, institutions, foreign governments, and other parts of the federal government. For more information on the public debt, refer to CRS Report R44383, *Deficits, Debt, and the Economy: An Introduction*, by Grant A. Driessen.

²¹ Moody's Analytics, *Fiscal Space, An alternative, economic fundamentals-based measure of the risk of sovereign debt default*, <https://www.economy.com/dismal/tools/global-fiscal-space-tracker>.

²² Depending on the size of the capital stock and the debt-to-GDP level, particularly when both are initially relatively low, deficit-financed government investment, such as infrastructure projects, may lead to a higher capital stock overall and therefore increase the productive capacity of the economy.

²³ Laurence Ball and Gregory Mankiw, *What Do Budget Deficits Do?* National Bureau of Economic Research (NBER), Working Paper no. 5263, September 1995.

government must make each year. Rising interest payments may displace government spending on more worthwhile programs. In 2019, interest payments on the debt are projected to be about 1.8% of GDP, or about \$382 billion. By 2029 interest payments on the debt are expected to increase significantly, rising to about 3.0% of GDP or about \$921 billion.²⁴

Withdrawing Fiscal Stimulus

As the economy shifts from a recession and into an expansion, broader economic conditions will generally improve, whereby unemployment falls and wages and private spending increase. With improving economic conditions, policymakers may choose to begin withdrawing fiscal stimulus by decreasing the size of the deficit or potentially by applying contractionary fiscal policy and running a budget surplus. As discussed in the previous section, policymakers may choose to withdraw fiscal stimulus for a number of reasons. First, persistent fiscal stimulus when the economy is near full capacity can exacerbate the negative consequences of fiscal stimulus, such as decreasing investment, rising trade deficits, and accelerating inflation. Second, decreasing the size of the budget deficit slows the accumulation of public debt.

The government can withdraw fiscal stimulus by increasing taxes, decreasing spending, or a combination of the two. When the government raises individual income taxes, for example, individuals have less disposable income and decrease their spending on goods and services in response. The decrease in spending reduces aggregate demand for goods and services, slowing economic growth temporarily. Alternatively, when the government reduces spending, it reduces aggregate demand in the economy, which again temporarily slows economic growth. As such, when the government reduces the deficit, regardless of the mix of fiscal policy choices used to do so, aggregate demand is expected to decrease in the near term. However, withdrawing fiscal stimulus is expected to result in lower interest rates and more investment; a depreciation of the U.S. dollar and a shrinking trade deficit; and a slowing inflation rate.²⁵ These effects tend to spur additional economic activity, partly offsetting the decline resulting from withdrawing fiscal stimulus. Whether the decrease in aggregate demand is problematic for overall economic performance depends on the state of the overall economy at that time.

Potential Offsetting Effects to Withdrawing Fiscal Stimulus

Investment and Interest Rates

Withdrawing fiscal stimulus is likely to put downward pressure on domestic interest rates, which encourages additional spending and investment, increasing economic activity. When the government decreases its budget deficit, the demand for loanable funds decreases because the government reduces the amount of those funds it is borrowing. The decrease in demand for loanable funds decreases the price to borrow those funds (i.e., interest rates decline). Declining interest rates encourage increased business investment into new capital projects and consumer spending into durable goods by reducing the cost of borrowing.²⁶

²⁴ U.S. Congressional Budget Office, *Updated Budget Projections: 2019 to 2029*, May 2019, p. 15.

²⁵ Olivier Blanchard, *Macroeconomics*, 5th ed. (Upper Saddle River NJ: Pearson Education, 2009), p. 450-451.

²⁶ Laurence Ball and Gregory Mankiw, *What Do Budget Deficits Do?* National Bureau of Economic Research (NBER), Working Paper no. 5263, September 1995.

Exchange Rates and the Trade Balance

Withdrawing fiscal stimulus is also expected to result in a depreciation of the U.S. dollar and an improved trade balance with the rest of the world. Assuming the shrinking deficit causes a decline in U.S. interest rates relative to interest rates abroad, individuals in the United States and abroad would rather make investments outside of the United States to benefit from those higher interest rates. Individuals shifting their investments outside the United States must first exchange their U.S. dollars for foreign currency, which decreases the value of the U.S. dollar relative to foreign currencies. As the U.S. dollar depreciates, foreign goods and services become relatively more expensive for U.S. residents and U.S. goods and services become relatively less expensive for foreign individuals.²⁷ This generally results in an improved trade balance as foreign demand for U.S. goods and services (exports) increases and domestic demand for foreign goods and services (imports) decreases.

Inflation

When fiscal stimulus is withdrawn, aggregate demand for goods and services in the economy also tends to shrink, which is expected to slow inflation. Economists generally view relatively low and stable inflation as beneficial for economic growth, because businesses and consumers are relatively certain about the future price of goods and can make efficient decisions with respect to investment and consumption over time.²⁸

Fiscal Contraction Multipliers

The ultimate impact on the economy of withdrawing fiscal stimulus depends on the relative magnitude of its effects on aggregate demand, interest rates and investment, exchange rates and the trade deficit, and inflation. The same fiscal multipliers discussed earlier in the “Fiscal Expansion Multiplier” section can be used to estimate the impact of withdrawing fiscal stimulus by simply reversing the sign for each multiplier. As shown in **Table 1**, decreasing government spending on consumption by 1% of GDP is expected to reduce real GDP by 1.55% after the first year, compared to no change in fiscal policy. Alternatively, increasing labor income taxes by 1% of GDP is expected to reduce real GDP by 0.23% after the first year.²⁹

Again, monetary policy can be used alongside fiscal policy to affect the overall impact on the economy. For example, the Federal Reserve could lower interest rates to spur aggregate demand as the federal government withdraws fiscal stimulus in an effort to offset the decline in aggregate demand resulting from the shrinking deficit. This could allow the government to withdraw fiscal stimulus without decreasing aggregate demand or economic activity.

Fiscal Policy Stance

As shown in **Figure 1**, the federal government has generally been running a budget deficit for much of the past 30 years—save for two short periods in the 1960s and 1990s. This suggests that

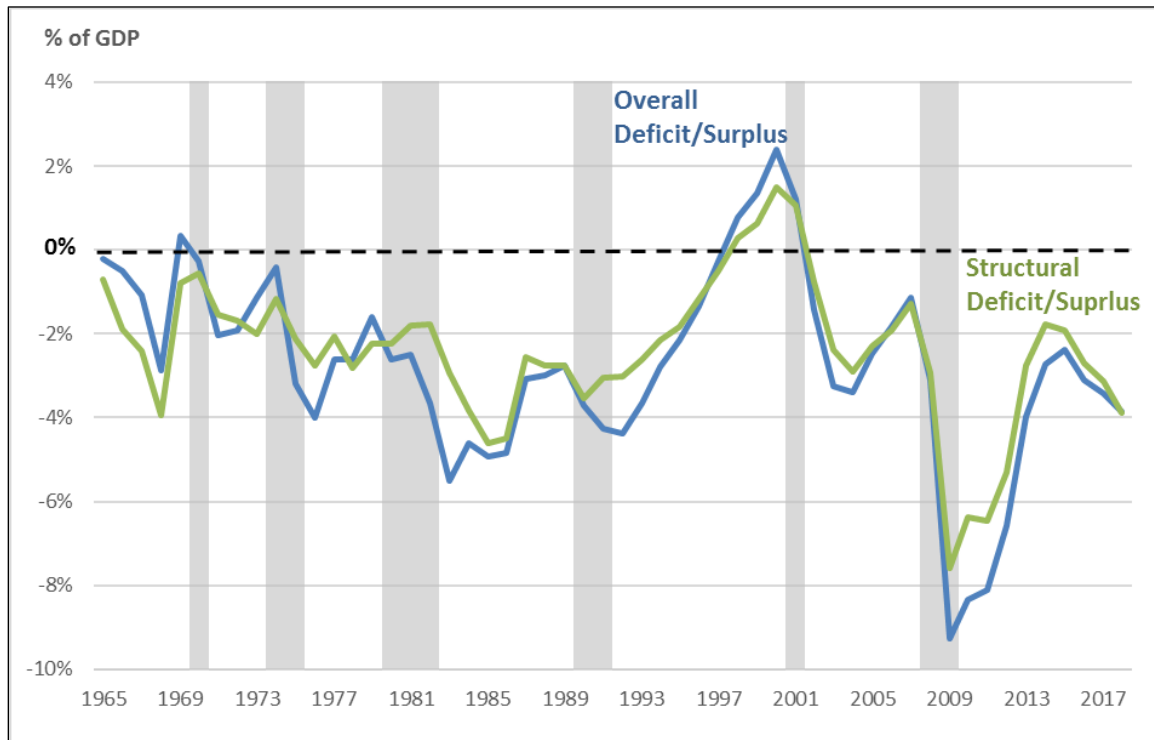
²⁷ Laurence Ball and Gregory Mankiw, *What Do Budget Deficits Do?* National Bureau of Economic Research (NBER), Working Paper no. 5263, September 1995.

²⁸ See, e.g., Richard G. Anderson, *Inflation's Economic Cost: How Large? How Certain?* Federal Reserve Bank of St. Louis, July 2006, at <https://www.stlouisfed.org/publications/regional-economist/july-2006/inflations-economic-cost-how-large-how-certain>.

²⁹ Gunter Coenen et al., “Effects of Fiscal Stimulus in Structural Models,” *American Economic Association*, vol. 4, no. 1 (January 2012), p. 46.

the federal government has been applying some level of fiscal stimulus to the economy for much of the past three decades, although the level of stimulus has increased and decreased over time. However, simply examining the overall budget deficit to judge the level of fiscal stimulus can be misleading, as the levels of federal spending and revenue differ over time automatically due to changes in the state of the economy, rather than deliberate choices made each year by Congress. During economic expansions, tax revenue tends to increase and spending tends to decrease automatically, as rising incomes and employment result in higher average incomes and therefore greater individual and corporate income tax revenues. Federal spending on income support programs, such as food stamps and unemployment insurance, tends to fall as fewer people need financial assistance and unemployment claims fall during economic expansions. The combination of rising tax revenue and falling federal spending tends to improve the government's budget deficit. The opposite is true during recessions, when federal spending rises and revenue shrinks. These cyclical fluctuations in revenue and spending are often referred to as automatic stabilizers.³⁰ Therefore, when examining fiscal policy, it is often beneficial to estimate the budget deficit excluding these automatic stabilizers, referred to as the *structural deficit*, to get a sense of the affirmative fiscal policy decisions made each year by Congress.

Figure 1. Federal Budget Deficit/Surplus



Source: Federal Reserve Bank of St. Louis and U.S. Office of Management and Budget, <https://fred.stlouisfed.org/series/FYFSGDA188S>.

Note: Grey bars denote recessions as determined by the National Bureau of Economic Research.

As shown in **Figure 1**, budget deficits tend to increase during and shortly after recessions (denoted by grey bars) as policymakers attempt to buoy the economy by applying fiscal stimulus.

³⁰ U.S. Congressional Budget Office, *How CBO Estimates Automatic Stabilizers*, November 2015.

This can be seen explicitly by viewing the structural deficit/surplus, as this only shows affirmative changes in fiscal policy made by Congress. The budget deficit then tends to shrink as

the economy enters into recovery and fiscal stimulus is less necessary to support economic growth. However, in recent years, the federal budget has bucked this trend. After the structural deficit peaked in 2009 at roughly 7.5% of GDP, it began to decline through 2014, falling to about 2.0% of GDP. Beginning in 2016, in spite of relatively strong economic conditions, the structural deficit has started to rise again, nearing 4.0% of GDP in 2018.

Given that the economy is arguably at or exceeding full employment currently, the increase in fiscal stimulus since 2016 is notable.³¹ As discussed earlier, expanding fiscal stimulus when the economy is not depressed can result in rising interest rates, a growing trade deficit, and higher inflation. As of publication of this report, interest rates and inflation do not appear to have been affected by the additional fiscal stimulus; interest rates are at historic lows and inflation shows no signs of acceleration.³² The trade deficit has been growing in recent years; however, it is not clear that this growth in the trade deficit is a result of increased fiscal stimulus.³³

Author Contact Information

Jeffrey M. Stupak
Analyst in Macroeconomic Policy
/redacted/@crs.loc.gov-....

³¹ Board of Governors of the Federal Reserve System, “Monetary Policy Outlook for 2019,” speech, January 10, 2019, <https://www.federalreserve.gov/newsevents/speech/clarida20190110a.htm>.

³² CRS Insight IN11044, *Low Interest Rates, Part 1: Economic and Fiscal Implications*, by Marc Labonte; and Federal Reserve Bank of St. Louis, Personal Consumption Expenditures Excluding Food and Energy, at <https://fred.stlouisfed.org/series/PCEPILFE>.

³³ Bureau of Economic Analysis, *International Transactions*, at <https://www.bea.gov/data/intl-trade-investment/international-transactions>.

EveryCRSReport.com

The Congressional Research Service (CRS) is a federal legislative branch agency, housed inside the Library of Congress, charged with providing the United States Congress non-partisan advice on issues that may come before Congress.

EveryCRSReport.com republishes CRS reports that are available to all Congressional staff. The reports are not classified, and Members of Congress routinely make individual reports available to the public.

Prior to our republication, we redacted phone numbers and email addresses of analysts who produced the reports. We also added this page to the report. We have not intentionally made any other changes to any report published on EveryCRSReport.com.

CRS reports, as a work of the United States government, are not subject to copyright protection in the United States. Any CRS report may be reproduced and distributed in its entirety without permission from CRS. However, as a CRS report may include copyrighted images or material from a third party, you may need to obtain permission of the copyright holder if you wish to copy or otherwise use copyrighted material.

Information in a CRS report should not be relied upon for purposes other than public understanding of information that has been provided by CRS to members of Congress in connection with CRS' institutional role.

EveryCRSReport.com is not a government website and is not affiliated with CRS. We do not claim copyright on any CRS report we have republished.