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DEFENSE SPENDING AND THE ECONOMY

While the potential impact of across-the-board federal defense spending cuts on national security may be up for debate, a new study published by the Mercatus Center at George Mason University finds dire predictions of these cuts' impact on the economy and jobs grossly overblown.

In "Defense Spending and the Economy," Harvard University professor of economics Robert Barro and Mercatus Center senior research fellow Veronique de Rugy survey existing research on the "multiplier effect" of an extra dollar of government spending on GDP to examine the economic impact of changes in federal defense spending.

The existing studies found that a dollar increase in federal defense spending results in a less-than-a-dollar increase in GDP when the spending increase is deficit financed. Combining this with a tax multiplier that is negative and greater than one, the authors estimate that over five years each $1 in federal defense-spending cuts will *increase* private spending by roughly $1.30.

Below is a brief overview. To read the study in its entirety and learn more about its authors, please see "Defense Spending and the Economy."

SUMMARY

Background: The Sequester and Lessons from World War II

As required by the Budget Control Act of 2011, the federal government is scheduled to cut $1.2 trillion [at time of writing] from its current baseline over the next nine fiscal years, starting in March 2013. The automatic spending reductions, through a process called sequestration, are to be divided equally between discretionary defense and nondefense spending categories.

Predictions that the sequester's defense-spending cuts will have a dire economic impact should be viewed skeptically in light of the nation's experience with much larger defense-spending drawdowns—including following World War II and the end of the Cold War—neither of which resulted in predicted economic declines.

In 1943, Keynesian economist Paul Samuelson predicted the dramatic drop in federal defense spending and the reintegration of 10 million servicemen into the civilian labor force following the end of World War II would usher in "the greatest period of unemployment and industrial dislocation which any economy has ever faced." He recommended the government maintain wartime price controls, implement "income maintenance," and engage in large-scale public works to avert this dire outcome. But the postwar bust Samuelson and many others expected never occurred.

Despite plunging war production and massive discharges of soldiers, the government offered no dismissal pay for soldiers, dismantled direct controls on the private economy, and did not implement any large-scale public works programs.

As Henderson (2010) points out, despite the massive drop in government spending—from 41.9 percent of GDP in FY 1945 to 14.7 percent in FY 1947—unemployment rose only modestly from 1.9 percent to 3.6 percent. Similarly, the economy grew a respectable 3.3 percent annually from 1978 through 2000, even as the share of defense spending dropped from 7.4 percent of GDP to 3.7 percent.

The Spending Multiplier

The spending multiplier measures the effect of an extra dollar of government spending on total economic output, gauged by real GDP.

- If the spending multiplier is positive and greater than one, private sector portions of GDP (notably personal consumer expenditure and private domestic investment) increase with an increase in government spending.
- If the multiplier is positive but less than one, GDP rises, but not by enough to maintain the private sector portions of GDP, which are crowded out when government purchases increase.
- If the multiplier is negative, GDP declines, and the private sector portions of GDP must fall by more than the expansion of government purchases.

The Defense-Spending Multiplier The defense-spending multiplier is commonly assumed to be large (or significantly greater than one). If that were correct, it would mean that a reduction in defense spending will directly affect not only military contractors; it would also have major, harmful secondary effects on contractors' clients, on services that cater to defense-sector workers, and so on.

- This ripple effect argument ignores the fact that resources freed from defense or other public purposes become available to private businesses and households.
- While measuring the direct effects of government programs on production and employment is comparatively easy, tracing how the private sector uses the freed-up resources to expand production and employment is impossible.
- The key issue is not how government outlays can have beneficial direct and indirect effects, but whether these economy-wide spending multipliers are greater than one, positive but less than one, or negative.

Empirical Studies of Spending Multipliers

Defense spending multipliers, which in many cases assume deficit-financed spending, are generally less than one:

- Barro (1984) found that defense spending multipliers were around 0.6 for spending increases associated with World War I, World War II, and the Korean War.
- Hall (1986, 2009) found similar spending multipliers using US data on defense outlays for 1920–42, 1947–82, and 1930–2008, respectively.
- Barro and Redlick (2011) estimated spending multipliers of 0.4 to 0.5 within a year, rising to 0.6 to 0.7 over two years, and expanding further by 0.1 to 0.2 when the public sees the changes as largely permanent.
- Ramey (2011) found multipliers of around 0.6 in the short run, cumulating to a peak of about 1.2 after two to three years.

Aggregate Effects of the 2009–10 Federal Stimulus Package

Under the American Recovery and Reinvestment Act, the federal government spent roughly $300 billion (2.1 percent of GDP) extra in both 2009 and 2010. The macroeconomic effects of this deficit-financed spending could be gauged by empirical estimates of defense-spending multipliers.

- Using a spending multiplier of 0.4 within the current year and 0.6 over two years, Barro and Redlick (2011) found that increased government spending would reduce private-sector portions of GDP. However, the short-term deal is quite favorable: the added government spending of $600 billion over two years comes at a cost of only $300 billion in private spending—or 50 cents on the dollar.
- But to the extent this government spending does not fall, as it did not, the subsequent increase in debt will require an increase in taxes at some point.
    - Romer and Romer (2010) and Barro and Redlick (2011) suggest tax multipliers with a one-year lag around -1.1; that is, GDP falls the next year by $1.10 for each dollar increase in federal taxes.
- Real GDP falls overall because the "balanced-budget multiplier" is negative, given that the government-spending multiplier is between 0.4 and 0.6 and the tax multiplier is -1.1. Thus, the stimulus package of 2009 was a way to get an extra $600 billion of public spending at a cost of $900 billion in private spending—not an attractive deal.

Aggregate Effects from Cutbacks in Defense Spending

Treating sequestration as a cut of five percent in defense outlays, defense spending would fall $34 billion in 2013 from its 2012 level of $677 billion. For given taxes and other federal spending, the defense-spending cut reduces the federal deficit. Hence, the public debt is lower than it would be otherwise and requires correspondingly lower taxes in the long run when compared to a benchmark path (if other federal spending does not change).

- Using a defense-spending multiplier of 0.4 within a year and 0.6 over two years and assuming that taxes have a multiplier effect on GDP of -1.1 with a one-year lag, real GDP falls compared to the benchmark path by $13.6 billion in 2013 (because of the spending multiplier) but rises by $17 billion in 2014 (because the effect from the tax multiplier more than offsets the spending effect).
- Private-sector portions of GDP rise by $20.4 billion in 2013 (60 cents on the dollar compared to the spending cut) and $51 billion in 2014 (because GDP is now above its benchmark).
- The effect of +$17 billion on real GDP continues into the future.
- Relative to the benchmark path, defense spending falls by $170 billion, taxes are cut also by $170 billion, private sector portions of GDP rise by $224 billion, and real GDP increases by $54 billion by 2017.
- In other words, over five years, we get roughly $1.30 of extra private spending for each $1.00 reduction in defense spending.

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