

The Daily Dish

Is Federal Debt a Problem?

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Eakinomics: Is Federal Debt a Problem?

There has been a wave of revisionist thinking on the undesirability of federal deficits and debt. Proponents of this view range from advocates of Modern Monetary Theory (MMT) on the progressive left, to recent research by Olivier Blanchard (OB) and commentary by Lawrence Summers and Jason Furman (SF) on the center-left, to the indifference of the Trump Administration toward the budgetary outlook on the populist right. Traditionally, deficits were viewed as undesirable (except when fighting a recession necessitated them) because they competed with the private sector's need for funds to finance productive investment or were financed by foreign capital that then had claim to the future income from U.S.-based investments. In either instance, the burden of the debt was ultimately borne by future citizens in the form of a diminished standard of living. Is it possible that there is no burden to the federal debt, or even that it makes us better off?

At the heart of the recent discussion is the reality of low interest rates, i.e. interest rates that are below the growth rate of the economy. The simple arithmetic of debt accumulation indicates that if interest rates remain low — relative to the growth of gross domestic product (GDP) — it is easier to handle federal debt.

MATH ALERT: IF YOU DO NOT LIKE MATH, DRINK COFFEE FOR THE NEXT 8 LINES.

To see this, let D be the debt in the hands of the public, Y be GDP, r the interest rate, g the growth rate of GDP, E federal expenditures, and R federal revenues. P is the "primary deficit," the amount by which E exceeds R. The debt-accumulation identity is:

$D_t = (1+r)D_{t-1} + (E_t-R_t)$

Dividing both sides by the level of GDP gives:

$(D_t/Y_t) = (1+r)(D_{t-1}/Y_t) + (P_t/Y_t)$

Since $Y_t = (1+g)Y_{t-1}$ this is:

$(D_t/Y_t) = (1+r)(D_{t-1}/(1+g)Y_{t-1}) + (P_t/Y_t)$

Finally, using lower-case letters to denote ratios to GDP, this means:

$d_t = (1+r)/(1+g)\ d_{t-1} + p_t$

In English, the debt-to-GDP rises with interest costs, but falls with growth in the economy. Of course, running primary deficits automatically demands more debt. This reality has the implication that if r > g, you need primary surpluses (p < 0) to keep debt from rising. That is, controlling the debt is hard fiscal work. But if g > r and p = 0, then the debt will (eventually) shrink away (relative to GDP). Finally, if g > r, you can run primary deficits and still shrink the debt. Perhaps managing the debt is not such hard work after all?

An important contribution of OB is to note that the current situation of low interest rates is more the rule than the exception. I was surprised by this, but my thinking was too much conditioned by the experiences of the ’70s to the ’90s, when the reverse was true. The contribution of SF was to argue that policymakers should not try to reduce deficits — just that they should not make them worse. So, in their view, all that is needed is that if a new spending program is enacted, then new taxes should be raised, or other spending cut, to offset the new program. The position of the Trump Administration has been that growth is the key; it has made no serious attempt to address budget issues.

But in each case, one still must eventually at least stabilize d, if not reduce it. To see how the alternatives fit together, consider that the Congressional Budget Office (CBO) projects a primary deficit for 2029 of $482 billion. It also projects that the debt-to-GDP ratio is 92 percent (d=0.918). It further projects that the growth rate of (nominal) GDP is 3.8 percent (g=0.038) and that the interest rate is 3.2 percent (r = 0.032). Since g > r, the claim is that we can still run a primary deficit and keep the fiscal house in order. Unfortunately, if you merely want to stabilize the ratio of debt to GDP (not have it decline), the primary deficit in 2029 has to be $163 billion. In the parlance of D.C., that means you would have to cut the primary deficit by roughly $320 billion — or $3.2 trillion over 10 years. That is serious work!

Worse, the calculation is very sensitive to interest rates and growth rates. 3.2 percent is an average interest rate (the ratio of interest to the debt). If one instead uses the projected 10-year rate of 3.7 percent, then the primary deficit has to be $23 billion to stabilize the debt. That means, for all practical purposes, balancing the primary (non-interest) budget. By

recent standards of conduct, that is a fantasy. At the other end of the spectrum, if one assumes that the economy will grow at 5 percent (the Trump Administration's assumed 3 percent real growth with 2 percent inflation) and interest rates are 3.2 percent, then the debt will stabilize relative to GDP with a primary deficit of $478 billion — almost exactly what CBO projects. With fast growth, the administration's budgetary indifference makes more sense.

To me the upshot is clear. There is no free pass for federal debt. Believing that there is no work to do means betting the ranch on either very low interest rates or very high growth rates, or both.