

Creating a New Fiscal Standard: The Benefits of Using Debt Service Costs as a Percent of GDP

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Introduction

During this pandemic, the government has passed a considerable amount of fiscal stimulus that has in turn considerably raised the amount of debt as a percent of GDP in the US. The pandemic has also caused interest rates to fall dramatically in the US, however, so that now the CBO projects that debt service costs over the medium term will actually be lower than they were before the pandemic even with all that new debt incurred during the crisis. This turn of events inspired Jason Furman and Larry Summers (2020) to make a presentation at the Brookings Institution in collaboration with the Peterson Institute for International Economics suggesting that perhaps the old approach of using outstanding debt as a percent of GDP is an outdated fiscal standard in this new world of low interest rates, and offers a new standard based on the total amount of real debt service costs projected over the next decade, excluding interest payments returned by the central bank, which they say should remain below 2% of GDP.

This paper has the potential to completely revolutionize the way policymakers approach the problem of growing debt accumulation. One key observation they make is that the standard economic models consistently overestimate what interest rates will be in the future, and have been doing so consistently for decades, and their paper tries to rethink our framework for fiscal analysis once you assume that interest rates will keep declining long term and stay low in perpetuity. Now there is no guarantee that interest rates will stay low forever of course, but it is important to think through the implications if they do remain near zero long term, since they have remained low for over two decades in Japan, and both the US and Europe might be converging to an environment with perpetually low interest that Japan has lived with for a long time. If this scenario does turn out to be accurate, then perhaps our old fiscal standards need to be thrown out the window, since debt levels can rise to much higher levels when interest rates stay low. Before we do, however, it is important to look at the advantages and disadvantages of these two different approaches that each provides their own fiscal standard to guide decisions on budget policy.

Disadvantages of Old Approach

The first problem with the old approach of comparing outstanding debt as a percent of GDP (whether it is total debt or debt held by the public) to a set upper limit is that outstanding debt and GDP are very different concepts. Calculating the total amount of outstanding debt adds up all the debt accumulated over the entire history of a government into one very big number, which represents the total stock of debt. GDP is the amount of goods and services produced by an economy in one given year, which represents a flow of production over time, and using a standard of outstanding debt as a percent of GDP

compares a stock accumulated over a government's lifetime to a flow of output in any given year, which is essentially comparing apples to oranges. The new fiscal standard corrects this by using debt service costs, which is the amount of interest paid on the debt in any given year, comparing an annual flow (debt service costs) to another annual flow (GDP) which is conceptually less problematic.

The second problem with the old approach is that any debt as a percent of GDP standard is going to be too strict in a low interest rate environment. In the past, interest rates fluctuated depending on where you were in the business cycle, so that when interest rates did fall during a downturn it was not safe to assume they would remain low long term. Incorporating interest rates into the fiscal standard in this environment just added a great deal of volatility, and even though interest rates were steadily declining long term, this process was happening so gradually that it seemed best to avoid the extra volatility even if it did overstate the interest costs far into the future. Now that interest rates have fallen all the way near zero, the fluctuation in interest rates across the business cycle is much lower, and the long term trends are much more important, so that explicitly incorporating interest rates into the fiscal standard makes a lot more sense now. If you fail to include interest rates in the calculation for a fiscal standard, then any strict upper limit is going to automatically incorporate the much higher interest rates that existed in the past as part of that standard, causing the fiscal standard to be much too strict in a low interest rate environment. This flaw in the old fiscal standard can then encourage governments to engage in austerity, even when interest rates are very low, which is not what would be recommended for the economy.

The third problem with the old fiscal standard is that there is no consensus on what the debt limit should be. The EU adopted a maximum debt level of 60% of GDP in its Stability and Growth Pact, but now that limit seems unrealistic as many EU members have gone well above it. Reinhart and Rogoff (2010) suggested an upper limit of 90% of GDP in the last crisis, but their analysis contained spreadsheet errors in the calculation, and is not seen as a reasonable threshold anymore. Due to Greece, there is some lingering fear that debt as a percent of GDP is dangerous once it reaches 150% to 175% of GDP, but Japan has blown through that limit (their debt is now over 235% of GDP) without experiencing any difficulties managing their debt. Since economists cannot agree on what the upper limit on debt should be, policymakers are similarly confused, and for the time being, the recommendation is that the world is in a middle of a crisis and there is room for more debt with interest rates near zero, so governments should err on the side of doing too much rather than too little. This works for the time being, but once the crisis is over policymakers are going to need some guidance on how much debt is too much, and when it makes sense to start creating austerity plans, and realistically any upper debt limit is going to have to take into account interest rates in a country, which can be done by switching the upper limit from a debt to GDP ratio to a debt service to GDP ratio.

The fourth problem with the old fiscal standard is that it does not take into account the amount of debt held by central banks. The old standard either uses total debt outstanding in country or debt held by the public in a country, which excludes debt held by other branches of the same government. Even the looser standard of debt held by the public, however, includes debt held by the central bank. This was not a problem in the past when the central banks had small balance sheets, but once they started printing money and buying government bonds in their quantitative easing (QE) campaigns, central banks have accumulated a substantial amount of government debt. In Japan, where QE has been going on the longest, the Bank of Japan owned around 40% of all government debt by the end of 2017, and if the US and Europe continue to experience interest rates stuck near zero, the amount of debt held by their

central banks would likely grow substantially as well. Central banks do not have to worry about any risk of future default, so they will not be the ones to trigger any debt crisis when they sell off their bonds, and can simply roll over their debt in perpetuity if need be. In the US, debt held by the central bank is even less of a problem since the central bank turns over the interest earned on the government bonds it holds back to the US Treasury. The current fiscal standard does not account for this considerable growth in bond holding by central banks, and since these bonds pose substantially fewer risks, they should be excluded from any determination of a proper fiscal standard.

Advantages of the New Fiscal Standard

The first advantage provided by the new fiscal standard is that it creates a more compelling case for avoiding premature austerity by directly incorporating interest rates into the calculation. With the old standard, when interest rates fell near zero there was a strong case for more stimulus because of the short term economic benefits, but this often had to be counterbalanced by concerns over long term debt levels. This new standard addresses the tradeoff more directly when long term interest rates fall near zero. There are still the short run economic benefits, but the new fiscal standard directly assuages any concerns about long term debt sustainability, turning a difficult tradeoff into a one sided argument. As a result, this new standard makes a stronger case for avoiding austerity as long as interest rates are low, which practically means stimulus will likely be able to continue longer after the immediate crisis is over. This in turn will speed up the recovery, which is especially important given how far the economy has deteriorated due to this latest crisis.

The second advantage provided by this new fiscal standard is that it gives central banks a direct way to encourage fiscal stimulus. When you switch to a standard that uses debt service costs as a percent of GDP, then governments are allowed to issue more debt until long term interest rates start to go up. Central banks, however, can directly affect long term interest rates by expanding or contracting QE. If the central banks think more fiscal stimulus is needed, they can print more money and buy more government bonds, which lowers debt service costs by keeping interest rates low. If the central bank thinks the government is doing too much fiscal stimulus, they can withdraw their QE and raise long term interest rates, which under the new fiscal standard would lead to budget cutbacks as debt service costs rise above their desired level. Right now, the Federal Reserve only has the power of language and persuasion to convince the government to do more fiscal stimulus, which is often ineffective in the face of larger concerns over deficit levels. This new standard would give more power to technocratic policymakers to decide when more or less fiscal stimulus is needed, which is better than our current approach of relying primarily on politicians.

The third advantage is that this new approach creates an explicit fiscal standard that is more relaxed, while still creating limits on a politician's behavior. Right now, the old approach is basically broken, where past recommendations for debt limits seem unreasonable now. No one knows what the new standard should be, in part because it depends on the prevailing interest rates that each individual country experiences. Politicians need some guide to understanding their budgetary limits, and even if there is considerable uncertainty in any future projection, there are tradeoffs between running deficits that are too high or too low that always need to be considered. This new fiscal standard balances these tradeoffs, by creating a new limit that is less strict, but at the same time does not allow the government

to run unlimited deficits. If governments raise deficits above the level that exceeds the amount of excess savings in an economy, then interest rates will rise and governments will be prodded into cutting back. This means the new fiscal standard allows deficits just large enough to get the economy to full employment, but restricts deficits that go above that amount since that causes interest rates to start increasing again. Realistically, it would be inflation that limits the deficits run by the government because they can only run deficits as long as interest rates stay low, and the central bank can raise that level by expanding QE until inflation starts to rise. This leads to the combination where the government is limited by the central bank which is limited by inflation, which means the government is ultimately limited by inflation as well.

Disadvantages to the New Fiscal Standard

The first potential problem with the new fiscal standard is that long term interest rates reach zero later than short term interest rates. The basic idea is that a government should be doing fiscal stimulus when short term interest rates hit zero, because that is when monetary policy is insufficient to get the economy to full potential. The new fiscal standard, however, only allows more fiscal stimulus when debt service costs are low, which depend on long term interest rates. Since short term interest rates hit zero before long term interest rates, there will be a significant lag time between the point when an economy needs fiscal stimulus and when the new fiscal standard will recommend it. In practice, for Japan, the EU, or the US, this is not actually a problem since short term interest rates fell close to zero over 10 years ago, giving long term interest rates time to fall as well. At this point, interest rates are quite low in all three economies (long term interest rates are even below 1% in Italy), so each region has made it past the lag time necessary to have the new fiscal standard make good recommendations for policy, but if a country first starts to experience low short term interest rates, then this new fiscal standard might not be appropriate until long term rates fall substantially as well.

The second potential problem with the new fiscal standard, and the real concern inhibiting its adoption, is that interest rates might not stay low forever. One of the arguments used by the proponents of the new fiscal standard is that economists have been systematically overestimating future interest rates for decades, and this long term steady decline in interest rates makes it quite plausible that interest rates will stay near zero in Japan, the US, and Europe forever. There is however a lot of uncertainty over this prediction that interest rates will stay low in perpetuity, especially since economists do not have a strong explanation why interest rates have remained low for so long. The real fear driving opposition to this new standard is that using this new relaxed fiscal standard based on debt service costs will allow the government to dramatically increase the amount of debt issued and then the government will run into real trouble when interest rates rise well above zero in the future, quickly driving debt service costs up, which could make a much higher debt level unsustainable.

One way to deal with this problem, as suggested by Orszag, Rubin, and Stiglitz (2021) in a policy brief put out by the Peterson Institute for International Economics, is that the government can lock in low interest rates for a very long time by extending the maturity on newly issued government debt beyond the standard 30 year time frame. If the Treasury department adopts this approach, this might not solve the problem entirely, but what it does do is gives the government more time to adjust their long term budget situation if interest rates suddenly do go up. If the government is issuing debt that matures in

say 50 years, then this means it will take decades for debt service costs to go up substantially, even if interest rates rise quickly over the short term, providing a generous time buffer for the government to react to any negative interest rate shock.

Another reason the government should not be too concerned about interest rates rising dramatically in the future is that as long as interest rates stay low, central banks will likely be doing a lot of QE, so that much of the debt will likely be owned by the central banks if interest rates do go up in the future. The real fear then is not so much that interest rates will go up, but that interest rates go up *and* the central bank will be forced to sell the bonds they own back to the private market. Right now, central banks do tell everyone that their QE is temporary and eventually will be withdrawn, but practically, Japan and Europe have not been able to withdraw any of the QE they did in the last crisis, and the US only withdrew about 20% of the total QE even as short term interest rates did rise above zero during that time. In all likelihood then, even if interest rates go up, central banks will hold onto the debt they purchased in earlier times, which dramatically reduces the amount of debt that might spur a debt crisis and makes the overall debt level much more manageable overall. Plus, the worst case is that interest rates go up, and banks expand their lending, driving up the money supply overall, which in turn causes inflation to spike. One way to avoid this is to remove the printed money from the economy by having the central banks sell their bonds back to private investors, but another way is to have central banks raise the reserve requirement so that the banks cannot loan out more money, and the money supply stays the same, even if central banks do not withdraw their QE and hold onto their government debt in perpetuity.

Conclusion

Even if it is true that the future course of interest rates is difficult to predict, economists have been perpetually underestimating the long term decline in interest rates, and Furman and Summers do us a tremendous service by thinking through the implications for the budget if interest rates do stay low forever. They propose a standard that more fiscal stimulus is safe to engage in as long as real debt service costs over the next decade (excluding interest payments returned to the Treasury by the central bank) remain below 2% of GDP. This new fiscal standard solves several outstanding issues created by the old one, where simply looking at debt to GDP ratios makes problematic conceptual comparisons, does not incorporate interest rates into the calculation, fails to provide a consensus view on what the standard should be, and does not exclude the debt held by central banks. Switching over to the new standard of debt service costs as a percent of GDP makes a more compelling case for avoiding premature austerity by incorporating interest rates into the calculation, provides a direct mechanism for central banks to encourage or discourage more fiscal stimulus, and provides a more relaxed standard for fiscal responsibility while still maintaining limits on the amount of stimulus governments can provide.

It is true, that this new prediction that interest rates might stay low forever might not turn out to be accurate, but any serious problem can be avoided simply by extending the maturity on the debt issued by the government to say 50 years or simply by having the central bank hold onto the government bonds it purchased with printed money when it was doing QE even when interest rates rise. This is what happened in the last business cycle in Japan, Europe, and the US, and can also be avoided if the money supply starts to grow by simply raising the reserve requirement. Clearly, the new fiscal standard does

offer some substantial advantages over the old standard, and therefore should be seriously considered by policymakers, especially since the risk of an adverse change in interest rates in the future is something that can be appropriately managed if it does eventually take place. It is perfectly possible, however, that interest rates are going to remain low for the foreseeable future, and economists need to start planning how to react just in case it does, and this is exactly what Furman and Summers do by proposing a new fiscal standard to guide budget policy going forward into the future.

References

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