

Central Banks Should Publicly Announce Plans to Hold Their Government Bonds Indefinitely

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Introduction

Interest rates in the US, Japan, and Europe are currently near zero and expect to remain near zero for an extended period of time going forward into the future. In addition, Japan has had their interest rates stuck near zero for over 20 years, the EU for the past 7, and the US for 8 of the last 12 years. This zero lower bound for interest rates limits the ability of central banks to control the economy using their traditional tool, and central banks have been looking for new ways to do this instead. Central banks in Japan, Europe, and the US have turned to quantitative easing (QE), printing money and buying bonds, in order to boost the economy when interest rates are near zero, and are currently doing exactly that right now.

In theory, it is a bit unclear whether QE would have a big impact on the economy, after all a lot of the cash banks gain from selling bonds simply ends up being held in reserves at the central bank, having little direct impact on the economy by laying dormant. In practice, QE has had a positive impact on the economy by lowering long term interest rates, boosting inflation when deflation was a real risk, and stabilizing debt markets when governments were borrowing a lot of money in the peak of the financial crisis. These positive impacts have made QE the go to tool that central banks rely on when interest rates are stuck near zero, but unfortunately, QE is not powerful enough by itself to get us through a deep economic downturn on its own. In order to counteract the powerful effects of a severe recession, the economy needs short term interest rates to fall to zero, considerable amounts of QE and substantial fiscal stimulus from the government as well.

Luckily for us, Keynes still rules in the middle of a crisis, where governments do run large budget deficits when the recession is at its peak, even if some believe (probably correctly) that governments should have done even more at the time. The problem is that soon after the worst was over, governments felt substantial pressure to quickly reduce these large deficits to sustainable levels, and this led to the onset of austerity programs in the US and Europe before central banks had the ability to offset them because interest rates were still near zero. This likely slowed the pace of recovery substantially, allowing the extraordinarily high unemployment rates to remain elevated longer than desired. QE fought off fears of a debt crisis while the recession was ongoing, but the QE was explicitly temporary and expected to be removed from the economy later by selling those bonds purchased with printed money back to private investors. As a result, governments still feared a debt crisis far into the future, and it was this pressure that forced them to engage in premature austerity.

In the aftermath of the crisis, central banks have deemed QE to be a valuable new tool to fight recessions when interest rates are near zero, but only if the QE is temporary. The idea of making the QE central banks have already created permanent by leaving the printed money in the economy indefinitely is completely forbidden, even if it would help fight premature austerity by reducing fears of a debt crisis

long term. In some ways, this is a bit of an odd distinction since neither Japan or the ECB has been able to withdraw any of the QE done in the 2008 financial crisis, even in the peak of the last business cycle, and the US was only able to withdraw about 20% of their past QE. That means even though QE is theoretically designed to be temporary, in practice, it is likely already permanent in Japan and the Europe. In the US, since the Federal Reserve has started up new rounds of QE and it is unclear when these new rounds of QE might stop, it could be a very long time before the Fed makes any of the past QE temporary, and it is highly unlikely that the Fed will be able to fully unwind the past rounds of QE over the course of the next business cycle. If for all practical purposes then the QE is likely permanent in Japan, Europe, and the US, then why are central banks so adamant in refusing to acknowledge that QE is no longer temporary?

Why Is Permanent QE so Dangerous?

The short answer is that the latest theory on monetary policy generally assumes forward looking inflation expectations. In these models, people look forward into the future when trying to decide how much inflation is going to happen right now. If central banks promise to make QE permanent, then the money supply far in the future is going to be dramatically higher as well, because the printed money is never removed from the economy. As a result, prices are going to be very high far into the future as well. Since these models assume people are forward looking, they also figure that if prices are going to be high T periods later (say 25 years), then people will figure out that prices in period $T-1$ (or 24 years) is going to be high too. This also means prices will be high in period $T-2$ (23 years) and period $T-3$ (22 years), and this recursive process of backwards induction continues all the way until people figure prices will be high in just a year from now, and raise inflation right now as a result. That means monetary theorists argue that as soon as central banks make their QE permanent, these forward looking inflation expectations will cause inflation to immediately spike.

There are two problems with this argument. First, people might decide how much prices will rise based on the past, rather than the future. For example, most people have no idea what the Federal Reserve is doing right now, let alone what they will do decades into the future. Investors might know their plans for future policy, but might not use this elaborate process of backwards induction to raise prices right now. It seems more likely that people look to the recent past to decide how much inflation is going to happen right now, where if inflation was high last year, then it will probably be high this year, and if inflation was low last year, then it will probably be low this year. If people set their inflation expectations by looking backwards rather than forwards, then central bankers do not need to worry about their future plans causing a big spike in inflation right now.

The second problem is that these models assume the economy returns to normal far into the future as well. When interest rates are stuck near zero, banks do not loan out all of their available funds, and store a lot of their excess cash in reserves at the central bank. This process then breaks the money multiplier, where usually banks raise the money supply by 10 times the amount of cash available in the economy, but when interest rates are stuck near zero they do not. This allows central banks to greatly increase the amount of cash in the economy without causing inflation when the economy is depressed and interest rates are stuck near zero. This has been demonstrated in the past, since central banks in

Japan, Europe, and the US have printed a lot of money through QE but inflation has stayed low in all of those economies at the same time.

The monetary policy theorists assume that far out in the future interest rates will rise above zero and banks will start loaning out money again, which drives up the money supply due to the money multiplier. At this point, the economy will have returned to normal, and the theorists assume that the greatly expanded money supply will cause inflation to rise dramatically as well. In these models of the economy, temporary QE is just fine, because the printed money will remain in the economy only when it is depressed, and be removed by the time the economy returns to normal. Permanent QE however is forbidden because the printed money will still be in the economy by the time it returns to normal, which will cause inflation to spike once it does.

Most of the standard models of the economy predict that interest rates will eventually rise above zero once the crisis has passed and the economy returns to normal. Given the recent history in developed economies, it is unclear whether this is actually correct. Japan has had interest rates stuck near zero since the late 1990s, except for a brief and failed attempt to increase interest rates in the mid-2000s. Interest rates in Europe have remained stuck near zero since 2014. Most importantly, in both of these economies, interest rates did not rise above zero in the peak of the last business cycle, indicating they might not go above zero in the peak of the next business cycle, which could mean they are stuck at zero in perpetuity. In the US, interest rates did rise above zero in the peak of the last business cycle, but interest rates have been on a long downward trend, and could very well remain stuck at zero in the peak of the next business cycle and for every business cycle after that as well.

The key question is whether the rest of the developed world becomes like Japan with interest rates stuck at zero indefinitely going forward into the future. The future is impossible to predict, but it looks like Europe is following that path, and the US might be there within the next decade. If that is the case, then interest rates will stay at zero forever and the economy will stay depressed and never return to normal. That means banks never loan out all their available funds, central banks likely do QE in perpetuity, and the QE never gets withdrawn. QE would then become permanent, but because the money multiplier is still broken, this does not cause inflation to spike. In this scenario, the latest monetary policy theorists would have been wrong, because central banks do a lot of permanent QE but inflation never spikes because interest rates remain stuck near zero forever.

One important point to make is that even if this prediction is wrong, and interest rates do rise above zero again, then the central bank has tools at its disposal to make sure inflation does not spike in the future, even after doing a lot of permanent QE. The fear is that after the permanent QE is pumped in, the economy recovers, interest rates rise, banks start lending out money again, the money multiplier starts working, and this dramatically expands the money supply, causing inflation to spike. To keep this from happening, all central banks need to do is increase the reserve requirement to make sure banks keep lending constant even with an expanded supply of cash. For example, the reserve requirement in the US currently stands at 10%, and let us say that the Federal Reserve doubles the amount of cash in the economy by printing money and buying bonds. If the economy is depressed and interest rates stay near zero, banks keep the money in reserves at the Fed, and inflation stays low. The fear however is that once the economy recovers, banks would double the amount they lend causing prices to double as well over a very short period of time. If interest rates do rise above zero and banks start lending out money, all the Federal Reserve has to do is increase the reserve requirement to 20%. If this happens,

banks are required to keeping lending at their previous level, even though the Federal Reserve has doubled the amount of cash in the economy, which keeps the money supply constant and inflation low as a result. This means that as long as the central bank responds appropriately inflation will stay low even with a lot of permanent QE whether or not interest rates rise above zero in the future.

Central Banks Should Announce They Plan to Make Their Past QE Permanent

If central banks are fine doing temporary QE, but governments need permanent QE in order to avoid switching over to austerity too soon, then central banks need to find out quickly whether these monetary theorists are actually correct. Central banks can do this quite safely by announcing they plan to hold on to their bonds purchased with printed money for incrementally longer periods of time. A central bank could start by saying they plan to hold on to 10% of their bonds for 10 years, then extend this time gradually to 20 years, 30 years, 40 years, 50 years, and then permanently. After they do this, then they can increase the share of the bonds they plan to hold indefinitely from 10% to 25% to 50% to 75% to 100%.

If the monetary theorists are correct, then as soon as the central banks make this announcement inflation should spike, but if inflation stays low, then perhaps the monetary theorists got it wrong. Since most investors already know that practically the QE will remain in the economy indefinitely, having the central bank announce what they already know will most likely have little effect. If you do this experiment cautiously and incrementally, then you end up a win win situation either way. If inflation does spike, then central banks have a powerful tool to raise inflation back to target. However, if inflation stays low, then central banks know they can keep printed money in the economy permanently. Since Japan has had the longest history with interest rates stuck near zero, they should be the first ones to do this experiment, but if they are hesitant then either the US or the ECB could do the experiment, and since the switch to austerity could be right around the corner, whichever one decides to do it, they should do it as quickly as possible.

If inflation does not spike when central banks announce their QE will become permanent, then this provides an important advantage when managing the economy at the zero lower bound. If this happens, then central banks know they can move beyond temporary QE and start doing permanent QE from this point forward. Temporary QE does help avoid a short term debt crisis, but does not help reduce the risk of a long term debt crisis since all of the bonds purchased with printed money will eventually be sold back to the private market. If this happens, then all of the debt issued by the government in the crisis will need to be repaid with tax money, since none of it will be repaid with printed money. If QE is made permanent, then the bonds purchased with printed money will be held by the central bank in perpetuity, and the government never needs to pay back this debt since the central bank just rolls it over indefinitely. This eliminates the fear of a future debt crisis, since if the government does not have enough tax money, then printed money can fill the gap and pay off the debt. If there is no fear of a future debt crisis, then this allows governments to spend more money now to deal with the crisis, and reduces the pressure to switch to austerity once the immediate crisis has subsided. If QE can be made permanent, then the deficit spending enacted in the crisis can continue for much longer periods of time, and governments will not need to engage in fiscal contraction when interest rates are still stuck near zero.

Key Distinction: This Is Not Modern Monetary Theory (MMT)

In some ways, this experiment is controversial, because it could lead to central banks paying off government debt with permanently printed money. To be clear, however, this is not an argument for eliminating the government budget constraint under any circumstances and letting the government spend as much as it wants knowing they can just pay for it with printed money. Modern Monetary Theory (MMT) argues the government should not have to worry about a future debt crisis because the central bank can just print money to pay for it, and it should just do as much deficit spending as it wants as long as inflation is under control. In fact, they suggest that raising or lowering the deficit should be the primary way the government manages the ups and downs of the business cycle. Clearly, when interest rates are above zero, central banks are designed much more favorably to manage the economy, and monetary policy should be the primary tool used to engage in counter cyclical policy. Under normal circumstances, fiscal policy is a very crude tool that is difficult to wield effectively through legislation and all the political pressures that contribute to it.

What Modern Monetary Theory seems to miss is the money multiplier, where if a government did run deficits and pay for it with printed money when the economy was doing well and interest rates are above zero, then the government can only do this in trivial amounts before sparking inflation. Whatever boost to the money supply created by the central bank is multiplied by 10 when the banks loan out the money, so the practical rule that you can just run deficits and pay for it with printed money until you cause inflation means you can only do this to a trivial extent. This dynamic is completely different when interest rates are at zero and the money multiplier is broken, in this case central banks lack their primary tool to manage the economy and you can likely permanently print money and buy a lot of bonds to a surprising extent without sparking inflation. You cannot do infinite amounts of this, but you will probably be able to do this in moderate amounts, and the trick is to find the sweet spot of running higher but still restrained deficits over the long term. This would allow the economy to return to full potential even when interest rates are near zero, and the permanent QE implemented by the central bank prevents any debt crisis over the long term, while the restrained nature of the deficits would keep inflation in check as well. Again, governments cannot run deficits and pay for it with permanently printed money when interest rates are above zero, but if interest rates are stuck near zero and banks are not loaning out the money, then the multiplier is broken, and we can now engage in this behavior to a surprising (but not unlimited) extent unlike we did before.

Actual Way That This Experiment Could Possibly Lead to Inflation

So far, making QE permanent has a couple of different potential problems. Theorists argue that inflation could spike right away as soon as you make the QE permanent, because of forward looking inflation expectations, but people might actually be backwards looking when deciding on inflation, so this concern might not be a problem. Theorists also argue that inflation could spike long term due to permanent QE once the economy returns to normal and interest rates go above zero. Though we cannot know for sure, it is possible that, as in Japan, interest rates might remain near zero indefinitely, so this doomsday scenario might never arrive either. Plus, even if it does, central banks can just raise the reserve requirement to prevent banks from loaning out too much money and keep inflation from spiraling out of control, so policymakers have the tools available to keep this from happening as well.

On the plus side, if the experiment turns out not to cause inflation in the short run, then policymakers gain a key advantage because they can run higher deficits without any fear of a future debt crisis. The real potential problem, however, is that weakening the government's budget constraint might work a little too well, where politicians do not hit the sweet spot for the ideal deficit level, but instead use the opportunity to pass massive tax cuts or spending increases. Once there is no fear of a future debt crisis, it appears as though there is no limit, when actually governments can only run money financed deficits in moderate amounts. Policymakers are used to a normal economy, where the money multiplier works and a little bit of money printing has a big impact on the money supply. Once this money multiplier is broken due to zero interest rates, governments can fund deficits with printed money a lot more than before, but still not an unlimited amount. It is possible that politicians might not be able to make this nuanced distinction and now feel the need to take dramatic policy changes that lead to uncontrollable deficits.

There are three ways to make sure this does not happen, so that politicians do end up enacting deficits that hit the sweet spot of not too small but also not too big. First, advocates for this approach need to create a powerful intellectual framework supporting moderate deficits that are strictly limited by their overall impact on inflation. The most important task here is to shoot down arguments made by Modern Monetary Theorists, that deficits paid for with printed money are appropriate under all circumstances, when realistically this only works when interest rates are stuck near zero. Another key task is to make sure that the arguments for greater deficits for counter cyclical reasons are not hijacked to justify massive redistributive policies like enormous tax cuts for the rich or dramatic expansions of spending for the poor. Instead, advocates for this approach need to delineate that some deficit spending is appropriate, in moderate amounts, and only to the extent that inflation stays at target and under control. This intellectual framework has been successfully established at central banks around the world, where monetary stimulus and low interest rates are seen as acceptable when appropriate, but only under the constraint that inflation stays close to target. A key priority when adopting this approach is to create this same intellectual framework in the legislative and executive branches when it comes to deficit spending.

Second, advocates for this approach need to create institutional safeguards to ensure deficits do not spiral out of control. One way to do this would create a maximum allowable deficit, say 5% of GDP, and if the government wanted to pass a budget that exceeded this amount, then they would need a supermajority in order for it to pass, unless the central bank gave its seal of approval. In the US, this could be done by modifying the current standards for reconciliation protection, where this process allows budgets to pass with only 50 votes in the Senate (avoiding the 60 vote filibuster requirement) if certain conditions are met, and policymakers could add a condition that requires the overall deficit to remain under 5% of GDP, unless the Federal Reserve explicitly approves, if they want to pass their budget with only 50 votes. In addition, a condition could be added that requires this legislation to have no negative impact on the deficit after 5 years (the current limit is 10 years) to make sure any increase in the deficit is a direct response to short term economic considerations.

Third, Congress should pass laws that ensure counter cyclical policy is done primarily through automatic stabilizers and decision making at the Federal Reserve, and uses Congress only as a last resort in the most extreme situations. The fear is that once deficits are allowed to increase to address counter cyclical concerns, this argument will be used as a trojan horse to justify policies to provide a distinct political advantage to the party in power, or be used to massively redistribute resources to favored

constituencies. As a result, this power to create deficits for counter cyclical purposes needs to be taken away from Congress as much as possible, so that automatic stabilizers or the independent, politically insulated Federal Reserve can make that determination. If politicians then try to use counter cyclical concerns to justify bad policy, opponents can just argue there is no need for Congress to pass larger deficits since these counter cyclical concerns are already addressed through other channels. That means in a small recession, Congress would have to take no action at all on counter cyclical policy, and would only have to intervene in the largest or most unusual recessions. These cases would be rare overall, and would limit the power of counter cyclical concerns to influence policy in a negative way under most circumstances.

As a result, even if there is some concern that Congress might be subject to strong political pressures to increase the deficit beyond what is appropriate, and that this could lead Congress to go too far in response, there are steps that can be taken to substantially reduce this risk. Advocates could create a strong intellectual framework that only allows deficits to the extent that inflation remains under control. Advocates could get Congress to create institutional safeguards on its own behavior that requires a supermajority to enact deficits above a certain limit unless the central bank explicitly approves. Finally, advocates could also delegate the execution of counter cyclical policy as much as possible to automatic stabilizers and the Federal Reserve, so that Congress would not be tempted to hijack counter cyclical concerns for the own nefarious political purposes.

There is of course still some risk, deficits might rise too quickly, but there is also a serious risk that governments might perpetually enact too little fiscal stimulus over the long term, which creates its own risk to the economy. If interest rates stay near zero long term, then central banks do need to learn if permanent QE can be safely done, so that governments can feel safe to raise the deficit level to that sweet spot above what was acceptable before, but still low enough to keep inflation under control. If the experiment is done cautiously and incrementally, then hopefully this will carry over to decisions about the deficit as well, where the deficit gets gradually lifted until the economy reaches full potential without raising inflation above target. To assume we are destined to failure before we even try seems too pessimistic, and I would like to believe we can create effective policies in this new environment that gets this balance just right.

Conclusion

In our current environment, central banks need new tools to manage the economy now that interest rates are stuck near zero. Fortunately, temporary QE has proven to be successful, and central banks now consistently utilize that new tool when recessions hit. Unfortunately, however, QE left in the economy permanently has been completely forbidden as a policy tool, even though governments would find this useful because that would allow them to run higher deficits for a longer period of time once there is less fear of a debt crisis in the future. This is especially odd, since for practical purposes, QE in Japan and Europe will likely never be withdrawn, and in the US, in the very best case it could take over a decade to do exactly that, so that realistically QE is already permanent.

The most likely scenario is that interest rates will remain near zero indefinitely in Japan, Europe, and the US, and central banks in all three places will have to continually engage in new rounds of QE to keep the economy at potential. If this happens, QE will effectively become permanent, but it could take a long

time, perhaps over a decade, for central banks to explicitly acknowledge this new development. As a result, governments over the medium term will face considerable pressure to rein in the large deficits that resulted from the latest crisis, and switch over to austerity before interest rates have risen above zero.

This means that central banks need to quickly attempt the experiment described above, where central banks publicly announce they plan to hold on to the government bonds they purchased with printed money for incrementally longer periods of time and for incrementally larger shares of the debt they own. If done carefully and incrementally, this would be a win win situation regardless of what happens, where if inflation quickly spikes, then central banks have a powerful tool to raise inflation up to target. If the experiment does not lead to an immediate spike in inflation, then this would allow central banks to learn quickly whether QE can safely be made permanent and signal to governments across the developed world that it is safe to continue running deficits longer than previously thought because there is no fear of a future debt crisis.

The real fear is that the experiment does not cause inflation to spike and opens the doors for higher deficits that tempts governments to do too much once their budget constraint is relaxed. That creates a very strong imperative to create a powerful intellectual framework that limits deficits to those that keep inflation under control, while also building in institutional constraints like supermajority requirements and diverting control over counter cyclical policy over to automatic stabilizers and decisions made by the Federal Reserve. By building in a cautious and incremental approach from the very beginning, this should be enough to ensure that deficits do not spiral out of control and that inflation remains in check, even as deficits do end up higher overall.

There is a real danger to perpetual long term economic underperformance due to insufficient fiscal stimulus when interest rates are stuck near zero, and finding our way around this problem through permanent QE seems like a risk worth taking. For decades, economists have ensured deficits funded with printed money have remained forbidden to avoid spiraling inflation, now we need to create a new framework that allows deficits funded with printed money to occur in moderate amounts and only to the extent that they do not raise inflation. If this has been done successfully before, it can be done successfully again, and if we do find success in this endeavor, then this could save the developed world from decades of underperformance, making this experiment definitely worth trying.