Helicopter Money: An Introduction

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What is Helicopter Money?

Helicopter money sounds like a somewhat fanciful concept. Milton Friedman popularized the idea in a 1969 paper, and other economists have pointed out that central banks have unlimited power to stimulate the economy because even in the worst case they could always print money and give it to consumers by dropping it from helicopters.(1)

The developed world has been mired in crisis since 2008, trying ever more aggressive policies to bring about recovery, but still being left with inflation below target, and growth not as high as people would like.(2) With long run interest rates in Japan and Germany near zero (3), commentators have started to debate whether central banks have the tools to get the economy back to reasonable levels of performance. We know however that central banks always have the tools available, all they need is the political will to utilize the full range of policy instruments at their disposal, in this case helicopter money.

As a result, helicopter money, radical as it may seem, has been getting increasing attention in the economic policy debate, yet discussions of helicopter money often get mired down in economic minutia that only someone with an economics PhD could understand. This introduction is an attempt, hopefully successful, to answer the basic questions surrounding helicopter money in a way that is more accessible to more people who might not have a PhD in economics.

Basic Tradeoff

In 2008, the world was beset by the most severe economic crisis since the great depression. Countries around the world responded by lowering interest rates nearly to zero and running surprisingly high budget deficits to stimulate their economy.(4) This created a difficult but fundamental tradeoff where countries wanted to keep running high deficits in order to improve their economies, but if you run deficits too long then you risk a Greek style debt crisis. Policymakers then faced a difficult choice. On the one hand, they could do what Europe did and do dramatic amounts of austerity and face high unemployment, low growth, and inflation significantly below target.(5) On the other hand, you could do what Japan did and keep running significant deficits for decades and deal with debt nearly 240% as a percent of GDP, the highest in the world among advanced countries.(6)

Solution: Helicopter Money

The way to get around this difficult tradeoff is to use helicopter money. Debt crises only occur because you usually need to pay back debt with tax money, and there is a limit to how much tax money you can raise in any economy. If you pay back the debt with printed money, then there is no limit to how much you can repay and no longer any risk of not being able to pay your debts. This sounds like a radical dangerous solution, but after the financial crisis, the US government was issuing debt worth 8-10% of GDP for the first few years and the central bank was periodically buying debt with printed money worth approximately 6-7% of GDP (known as quantitative easing or QE).(7) The result was positive (core inflation rose to 2% after the second round of QE), but not particularly dramatic since growth never rose above 3.0%.(8) This is not exactly helicopter money, printing money and giving it directly to citizens, but if the government gives money to citizens by issuing debt, and then the central bank buys government debt with printed money, this is close to helicopter money just using banks as the middle man.

Temporary QE vs Helicopter Money

Now central banks would adamantly deny that they are experimenting with helicopter money. The first key point is that QE in its current form is explicitly temporary. Central banks buy government debt with printed money, but they all plan to eventually sell the bonds back to banks, thereby removing all the printed money from the economy, and forcing governments to eventually repay all the debt with tax money. Helicopter money is explicitly designed to be permanent. With helicopter money, policymakers print the money and distribute it directly to citizens and though technically reversible (governments could collect the money through taxes and burn it), this is much more difficult to do. As a result, QE is seen as a temporary influx of printed money into the economy and helicopter money is seen as a permanent distribution of printed money into the economy. Therefore, combining permanent QE with higher deficits is basically equivalent to helicopter money.

Temporary QE Not Enough, Can Also Expand Fiscal Stimulus

The goal of quantitative easing was to provide a short run monetary stimulus to the economy. The temporary QE definitely helped. Core inflation rose to 2%. Growth returned to 1.5-3.0% enough to keep the output gap from growing but not fast enough to close it quickly either. Unemployment gradually declined but for a long time though almost all of this was due to people who stopped looking for work entirely. However, as a result of this continually moderate economic performance, the working age employment to population ratio has only recently reached pre-crisis levels.(9)

In order to overcome these continuing economic difficulties, one approach would be to significantly increase the levels of fiscal stimulus. In this case, temporary QE was not enough since the fear of rising debt levels caused the US government to significantly reduce the deficit during and after the 2012 election.(10) In order to overcome the fear of a debt crisis, you need to pair additional fiscal stimulus with permanent QE, essentially helicopter money. Once the government knows the central bank will be buying the debt and holding it in perpetuity (including giving the interest back to the government), then the government knows it will not need tax money to repay the debt and can try higher levels of fiscal stimulus with less risk. Only by removing this fear of debt crisis will we be able to get the levels of fiscal stimulus we need to get the economy to full recovery.

Will Helicopter Money Cause Inflation?

Of course there are concerns when trying helicopter money. About 30 seconds into any conversation about helicopter money someone will inevitably bring up the case of Weimar Germany. Between 1921 and 1924, the Weimar government printed money to pay for government expenses, but did it in such ridiculous amounts that there was severe hyperinflation across all of Germany. Technically, it was the later economic crisis of 1931 that caused the economic malaise that helped bring Hitler to power (11), but the example is so ingrained in the consciousness of economists of the potential disaster of using printed money to directly pay for government spending that the EU treaties regulating the European Central Bank included an explicit ban on this type of policy. (12)

One important point to make, however, is that circumstances are different now. Helicopter money is less likely to cause inflation when the economy is depressed and interest rates are stuck at zero because the money multiplier is broken. In fact, as pointed out before, we already know we can print lots of money temporarily with only a modest effect on inflation, so the problem is not that printing money will cause inflation when the economy is depressed, the argument is that inflation will start to increase once the economy recovers and the money multiplier starts working again.

The highly controversial though I think increasingly correct response to this concern is that there is a good chance the economy will not return to normal, that interest rates will not rise above zero, and the money multiplier will stay broken forever. Japan accumulated a massive asset bubble in the late 1980s that burst in the early 1990s, and they still have interest rates stuck at zero 25 years later.(13) If interest rates really are stuck at zero forever, then we do not need to worry about the economy recovering and inflation starting to rise once the money multiplier starts working again.

If, however, this assumption is wrong, then there are still policy approaches available to make sure inflation does not start increasing. The most important idea is that if we print a bunch of money to pay off debt and then the economy recovers, we can just raise the reserve requirement to limit the effect of the money multiplier and ensure inflation stays low and steady. If the interest rates stay at zero forever, which I think is a significant possibility, then there is no need to worry about printed money causing inflation, and if the economy recovers and rates rise above zero, then we have tools, the reserve requirement, which can prevent inflation from causing any problems.

Will Helicopter Money Cause Government Spending to Spiral Out of Control?

The second key argument against helicopter money is that once you start doing helicopter money, it is so easy and so popular that government will not be able to stop doing it and the stimulus levels will spiral out of control. There is some validity to this argument since Weimar Germany clearly could not control their plans. On the other hand, when Japan's government in the early 1930s tried funding deficits directly with printed money under finance minister Takahashi Korekiyo, he successfully stimulated the economy out of recession without causing too much inflation. Unfortunately, when the finance minister tried to reduce its use, he was assassinated and inflation rose dramatically afterwards. Perhaps this example shows that funding deficits with printed money without causing excess inflation might be possible, but that directly financing government spending with printed money might be a difficult policy to end successfully.(14)

The trick to making sure helicopter money does not spiral out of control is to develop a strong intellectual and institutional framework for a moderate limited policy. Most central banks in advanced countries have an explicit policy of inflation targeting,(15) ensuring that concerns over rapid inflation are seriously considered when making policy. Plus, there has been a decades long push to make central banks more independent,(16) so that as a result, many institutions are designed to resist popular pressure (and the risk of assassination) for more stimulus and well situated to balance the worries of inflation against the need for more helicopter money.

Finding Our Way Out

The real dilemma is whether we should even try and experiment with some use of helicopter money to see if it can work and can be used in moderation, or do we declare the whole project to be too risky and ban it outright from ever being tried. In this case, the economic stakes seem too high. The US, Japan, and Europe all face the prospect of decades of mediocre economic performance with Europe maintaining unemployment rates in the Eurozone above 7%, and Japan never quite being able to consistently make their modest 2% inflation target, and the US continuing to experience slow growth long after the crisis was over.(17)

The trick to keeping a few lost decades from materializing in all the advanced economies is to carefully experiment with more aggressive forms of stimulus, including helicopter money, in ways we can learn what works and what does not, and can figure out ways to ensure policy does not spiral out of control. To assume the impossibility of cautiously finding a solution seems too pessimistic to me.

The most problematic intellectual mistake in the current debate is the idea that the economy is just about to recover, policy is just about to return to normal, and the primary goal of policy should be to end unconventional policy as quickly as possible. In this view, the best way to manage the economy is to manipulate interest rates, but if the economy remains depressed from this point on, then we might need unconventional policy in perpetuity too. Maybe we are entering a new era of economic policy where interest rates are no longer needed and we find other ways like helicopter money to manage the ups and downs of the business cycle. The longer this crisis lasts, and the longer current policy is seen as inadequate, then the closer we get to more aggressive approaches and the closer we get to trying helicopter money.

The real question is whether or not we blindly accept decades of mediocre economic performance or do we experiment with new approaches to try and improve upon what we have been able to achieve before. The real question is how fast can we learn from our past policy mistakes to ensure a bright outlook for our economic future. The real question is can helicopter money actually be the solution we have been desperately seeking.

End Notes

#1 – Helicopter money was popularized from Friedman (1969). Buiter (2014) offers a formalized model showing how helicopter money provides central banks with a potentially unlimited tool to stimulate the economy.

#2 – For the year 2019, core PCE inflation in the US was 1.6%, while core inflation in Europe was 1.4% and 0.7% in Japan. Growth in 2019 for the US came in around 2.3%, while Europe achieved growth of 1.7% and Japan only managed growth of 0.7%.

#3 – The interest rate on German 10 year government bonds is currently -0.4%, while the Bank of Japan specifically targets a 10 year interest rate on Japanese government bonds of 0%.

#4 – The United States, Europe, and Japan all lowered rates to a quarter point or below after the financial crisis, and deficits ballooned to 9.8% of GDP in the US, 8.3% of GDP in Japan, and 6.3% of GDP in the Eurozone.

#5 – Europe cut its deficit from 6.3% of GDP in 2010 to 0.6% of GDP in 2019, while growth plummeted to negative levels in 2012 and 2013 and still has not gone above 3%. Core inflation has not risen above 2% since the financial crisis and not risen above 1.5% since 2013, while unemployment in the Eurozone has only recently fallen to about 7% after peaking around 12% in 2013.

#6 – Japan ran deficits worth more than 4% of GDP in 19 of the last 25 years, and deficits rose above 7% of GDP from 2009 to 2013. Debt as a percent of GDP rose to 238% of GDP in 2018, by far the highest among OECD countries.

#7 – Between FY 2009 and FY 2011, the deficit in the US ranged between 9.8% of GDP and 8.5% of GDP. There were three rounds of QE. The first round lasted between March 2009 and March 2010 worth about $90 billion a month. The second round lasted for about 8 months from November 2010 to June 2011 worth about $75 billion a month. The third round started in September 2012 worth $40 billion a month, then increased to $85 billion a month in December of 2012, and then started to phase out in December 2013. When QE varied between $75 and $90 billion a month, this represented approximately 6-7% of GDP.

#8 – Core inflation started declining precipitously from the fall of 2008 to the fall of 2010 eventually going getting close to 0.5%. After the second round of QE began in November 2010, core inflation trends abruptly reversed and quickly rose above 2%. After output declined by 2.5% in 2009, growth rose significantly ranging from 1.6% to 2.9% between 2010 and 2019.

#9 – For inflation and growth trends see end note #8 above. The unemployment rate declined from around 10% in 2010 to less than 4% in 2019, though the working age employment to population ratio did not start rising until just before 2012 and did not start rising more quickly until just before 2014, meaning the decline in unemployment rate largely meant people stopped looking for work rather than getting new jobs. The working age employment to population ratio reached 80.4% at the end of 2019, which is about the same as the 80.3% pre-crisis peak.

#10 – In FY 2011, the budget deficit was 8.5% of GDP and by FY 2012 the deficit fell to 6.8% of GDP and eventually fell to 2.5% of GDP by FY 2015.

#11 – Weimar Germany experienced severe hyperinflation from 1921-1924 while trying to manage its wartime debt and war reparations, because they printed money to pay for government expenses as well. Hitler came into power in 1933 which followed a 1931 economic crisis brought about a severe deflation due to extreme government austerity, again in an attempt to manage elevated wartime debts.

#12 – Article 123 of the EU Lisbon Treaty explicitly bans direct monetary financing of governments.

#13 – Japan had an enormous housing and stock market bubble that started rising in the late 1980s only to finally pop in 1991. By 1999, interest rates had fallen to zero in Japan. The central bank tried unsuccessfully to raise rates just before the 2008 crisis, but later lowered them near zero for a long time just after the crisis. The Bank of Japan just recently lowered interest rates all the way to zero, and has even started experimenting with negative interest rates.

#14 – From 1931-1936, finance minister Takahashi Korekiyo successfully lifted Japan out of recession by using printed money to directly fund government spending without causing excess inflation (Turner 2016). When the Japanese finance minister tried to reduce the amount of government spending funded with printed money, the military revolted and assassinated him. After his assassination inflation dramatically increased in Japan as policy became much less constrained.

#15 – All OECD countries except Denmark and South Korea have central banks that use an inflation target.

#16 – Increasing evidence of lower inflation rates in countries with independent central banks created pressure to make more central banks independent since the early 1990s. This is most evident in Europe where Britain switched to a more independent central bank in the late 1998, and the highly independent European Central Bank was created in 1998 to serve all the countries using the Euro starting in 1999.

#17 – Europe has experienced unemployment above 7% since 2010. Japan managed to see its core inflation rate rise briefly above its 2% inflation target in 2014 due to a quirk in tax policy, but has remained below 1% since 2015. In the United States, growth has ranged from 1.6% to 2.9% since 2010.

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