BLOG POST

Permanent QE and helicopter money

What's at stake: As the ECB contemplates its own version of quantitative easing, this review clarifies the conditions under which this policy is believed to matter (beyond the portfolio channel) for inflation and growth. Unlike what was done in the US, the associated monetary base growth needs to be permanent. Within this framework, this review also discusses the pros and cons of helicopter money – i.e. overt money-financed deficits – as compared with permanent QE.

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Temporary vs. permanent QE

David Beckworth writes that there are two underappreciated facts about the Fed's quantitative easing programs.

The first underappreciated fact is that the large expansion of the monetary base under QE is temporary. The Fed has always planned to eventually return its balance sheet and, by implication, the monetary base back to the trend path it was on prior to the QE programs. This point has been communicated directly in several ways. By also explicitly committing to not raise the inflation target, the Fed was implicitly committing to only a temporary expansion of the monetary base.

The second underappreciated fact is that in order for QE to have made a meaningful difference the associated monetary base growth needed to be permanent. This understanding is the standard view in modern macroeconomics (Beckworth has a useful compilation of statements by Woodford, Svensson, and Obstfeld among others). The reasoning behind it is that a permanent expansion of the monetary base implies in the long-run a permanent rise in the price level, which creates an incentive to start spending more in the present when goods are cheaper. Or, from a Wicksellian perspective, it would imply a temporary surge in expected inflation that would lower real interest rates to their market clearing level.

Paul Krugman writes a stripped down version of his 1998 model to make explicit that QE is expected to be effective only to the extent that the expansion in the money base is permanent. Krugman considers an infinite-horizon model in which all the action takes place in period one. There may be shocks to consumer preferences, or fiscal policy, or monetary policy, but they all take place "now"; after period 2 everything stays the same. What this in turn means is that we can take the future price level and level of consumption as given.

From this set-up, we have an Euler equation that lets us read off current consumption from future consumption, current and future price levels, and the interest rate. And we can take future consumption as given.

$$C = C^*(P^*/P)/(1+i)$$

Now suppose that we're in a New Keynesian world in which prices are temporarily sticky; so P is given. And suppose we're at the zero lower bound, so i=0. Then there's only one moving part here: the expected future price level. Anything you do — monetary or fiscal — affects current consumption to the extent, and only to the extent, that it moves the expected future price level. Full stop, end of story. An immediate implication is that the current money supply doesn't matter. The future money supply matters, because it can affect the future price level, so a permanent increase in M can affect the economy — but that effect works entirely through expectations. What you do now matters only to the extent that people take it as an indication of what you will do in the future.

Helicopter money = money-financed deficits = permanent QE

Simon Wren-Lewis writes that the self-imposed institutional setup of strict separation between monetary and fiscal policy prevents either central banks or governments doing money financed fiscal stimulus alone. Within the existing institutional framework, there is plenty to be done to convince fiscal policy makers that reducing deficits should not be a priority in the short term, or in trying to improve the monetary policy framework so liquidity traps happen less often. Yet it would be better still if we had an institutional framework where money financed fiscal stimulus in a liquidity trap is possible. Adair Turner writes that 'helicopter money' – by which we mean overt money finance of increased fiscal deficits – may in some circumstances be the only certain way to stimulate nominal demand.

Mark Blyth and Eric Lonergan write that, in the 1930s, Keynes proposed burying bottles of bank notes in old coal mines; once unearthed (like gold), the cash would create new wealth and spur spending. The conservative economist Milton Friedman also saw the appeal of direct money transfers, which he likened to dropping cash out of a helicopter. Dylan Mattews writes that the idea is most closely associated with former Fed chair Ben Bernanke, who first raised the proposal in the context of Japan's economic malaise in 1999 and repeated it in 2002 as a Fed board member.

Mike Woodford writes that the same equilibrium can be supported by traditional quantitative easing or by helicopter money. On the one hand (traditional quantitative easing), one might increase the monetary base through a purchase of government bonds by the central bank, and commit to maintain the monetary base permanently at the higher level. On the other ('helicopter money'), one might print new base money to finance a transfer to the public, and commit never to retire the newly issued money. The fiscal consequences of the two policies are exactly the same. Under the quantitative easing policy, the central bank acquires assets, but it rebates the interest paid on the government bonds back to the Treasury, so that the budgets of all parties are the same as if no government bonds were actually acquired, as is explicitly the case with helicopter money. Willem Buiter writes that QE relaxes the intertemporal budget constraint of the consolidated Central Bank and Treasury – so that there will have to be some combination of current and future tax cuts or current and future increases in public spending to ensure that the intertemporal budget constraint of the State remains satisfied – either if nominal interest rates are positive or because fiat base money is irredeemable.

Mike Woodford writes that the effects would only be different if, in practice, the consequences for future policy were not perceived the same way by the public. Under quantitative easing, people might not expect the increase in the monetary base to be permanent – after all, it was not in the case of Japan's quantitative easing policy in the period 2001-2006, and US and UK policymakers insist that the expansions of those central banks' balance sheets won't be permanent, either – and in that case, there is no reason for demand to increase. Perhaps in the case of helicopter money, it would be more likely that the intention to maintain a permanently higher monetary base would be believed. Also, in this case, the fact people get an immediate transfer should lead them to believe that they can afford to spend more, even if they don't think about or understand the consequences of the change for future conditions [brought by the relaxation of the intertemporal budget constraint of the State], which is not true in the case of quantitative easing.

Mike Woodford proposes a policy that delivers exactly the same effect as helicopter money, but would preserve the traditional separation between monetary and fiscal policy. One could achieve a similar effect, with equally little need to rely upon people having sophisticated expectations, through a bond-financed fiscal transfer, combined with a commitment by the central bank to a nominal GDP target path (the one that would involve the same long-run path for base money as the other two policies). The perfect foresight equilibrium would be exactly the same in this case as well; and as in the case of helicopter money, the fact that people get an immediate transfer would make the policy simulative even if many households fail to understand the consequences of the policy for future conditions, or are financially constrained. Yet this alternative would not involve the central bank in making transfers to private parties.

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