

The money tree

Quantitative easing: what it is and the chances of NZ going down this path

- **Quantitative easing is a somewhat untested policy tool that central banks can use when conventional monetary policy is failing to gain traction.**
- **Central banks engage in QE by "printing money" to buy assets, usually government securities from the banks, which can help to stimulate the economy by lowering interest rates and providing funds for lending.**
- **There are doubts about the effectiveness of QE in Japan earlier this decade, and it is too early to judge whether the Fed and BoE's recent efforts have been successful.**
- **NZ is less likely to need to use QE because conventional monetary policy is still judged to be effective.**

In *The Hitchhikers Guide to the Galaxy*, a newly formed society adopts the leaf as their currency. Portable, convenient, ready-made, and with the added bonus that everyone is immediately immensely rich. Unfortunately, hyperinflation soon means that three deciduous forests are required to buy one peanut. Unfazed, the group's monetary authorities decide to embark on an ambitious deforestation program.

Central banks in the US, UK and Japan have in the past few months started to "print money" with gusto, and others are about to join the party. In this article we look at whether this is collective madness or brilliance: why, what, and whether we're eventually going to have to burn the money trees down to get things back on an even keel. We take a look at the NZ situation and conclude that while printing money (in polite circles called "quantitative easing", or QE) is unlikely to be embarked on here, one can never say never.

Why do it?

In modern monetary policy, the central bank raises and lowers interest rates to try to keep inflation on a low and steady path and smooth out the business cycle. But what happens when interest rates are cut as far as they can go – to zero or close to it – but the economy is still seriously in the doldrums? And even worse, what if prices start falling, stranding real interest rates in positive territory?

The global economy is shrinking for the first time since WW2. Central banks have furiously cut interest rates to the bone and governments are spending up large, but economies are still haemorrhaging jobs and the only light at the end of the tunnel is an oncoming train. With central banks around the world rapidly running out of rate-cutting ammo, it's time to pull out the non-conventional weapons. QE aims to kick-start the economy by lowering the price and increasing the availability of credit.

What is it?

In a modern financial system things are a bit more complicated than literally turning on the printing presses. However, the concept is similar, in that the central bank conjures money out of thin air. The process works as follows.

- The central bank (CB) buys up financial assets by writing cheques, essentially, which it can do on an unlimited basis thanks to being the monopoly money supplier.
- The banks' reserve holdings at the CB increase directly, if the assets are purchased from banks, or indirectly, as the proceeds are deposited.
- Retail banks should then be able to make more loans off these reserves, stimulating the economy.
- In addition, the CB can influence the price through its purchases. With bonds, the price and the interest rate are inversely related – so the CB can push down interest rates by buying up large. If the bonds are government debt, the government has to then pay less interest, freeing up money for fiscal stimulus. If the bonds are corporate debt, lower interest rates should stimulate investment.

Government bond purchases are the most traditional form of QE, but the CB can buy corporate debt, securities backed by mortgages or commercial loans, or indeed any asset at all – equities, buildings, or used postage stamps. In each case, QE amounts to subsidizing the owners of the chosen assets, and the CB can target the stimulus as they wish, as long as they're happy to take on the credit risk.

For further information, questions or comments contact Brendan O'Donovan, telephone (04) 470 8250, email bdonovan@westpac.co.nz

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What's the catch?

The government stimulates economic growth without incurring more debt, and indeed has the option of reducing the carrying cost of its debt as an added bonus? Sounds too good to be true. And it is, beyond the short term. Central banks can print money but the taxpayer can't buy a free lunch with it. The fiscal payback comes when the CB eventually goes to sell the accumulated financial assets (in particular, government bonds). They will wait until the economy has recovered. By this time the prices of these assets will almost certainly have fallen – i.e. their yields risen – to more normal levels, and the CB will make a loss. Depending on the scale of QE that has been undertaken, this could make an enormous hole in the government books further down the track.

However, the main macroeconomic risk around quantitative easing is unleashing a serious inflation problem. Central banks have a tendency to be quicker off the mark cutting rates than hiking them (a fact that must take its share of the blame for the current mess the world economy finds itself in). Similarly, with quantitative easing, the temptation will be to wait too long, to be sure the recovery and asset markets are robust, before unwinding the stimulus by dumping the assets back into the markets. Indeed, a commitment to keep QE in place well into the recovery is a necessity to make it effective. Hence, while QE is not in and of itself inflationary, the risks are biased towards a policy mistake in the future that is. If the money trees start self-seeding, policymakers may find themselves requiring a pretty serious bushfire to restore faith in the value of their sheaves of green.

Who's doing it?

QE was initiated in November last year when the US Federal Reserve announced that it would buy \$600bn of government-sponsored enterprise debt and mortgage-backed securities, in an attempt to thaw the mortgage lending market. They stated they would choose which assets to buy with the aim of reducing credit spreads (i.e. reducing the interest rate relative to safer government debt) and improving the functioning of private credit markets. However, in March they extended the program to government debt as well.

The Bank of England joined the party in March this year, announcing that it would buy up to £150bn of public-sector and corporate debt over time. This program is expected to be expanded. The Bank of Japan also announced in March a 29% increase in its purchases of government bonds in response to "market needs" – widely interpreted as a return to QE.

The odd man out so far is the European Central Bank (ECB). The European situation is complicated by the fact that the ECB is the central bank for a large number of governments. However, behind the scenes QE proposals are being frantically worked on with the particulars to be announced on May 7.

The Canadian and Swedish central banks – both with policy rates sitting at 0.5% – have also indicated that they are considering starting QE.

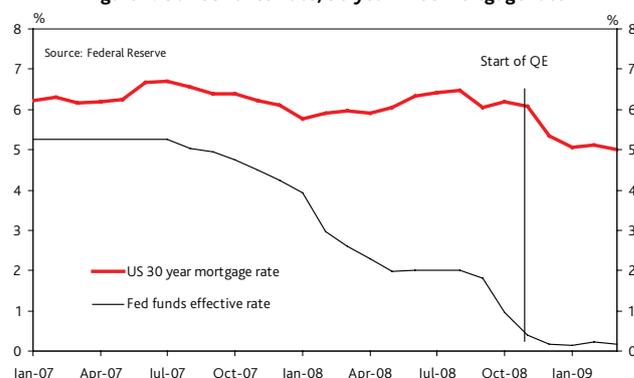
Is it working?

There are a number of things one can look at to get a handle on whether QE is working.

Has it brought down interest rates?

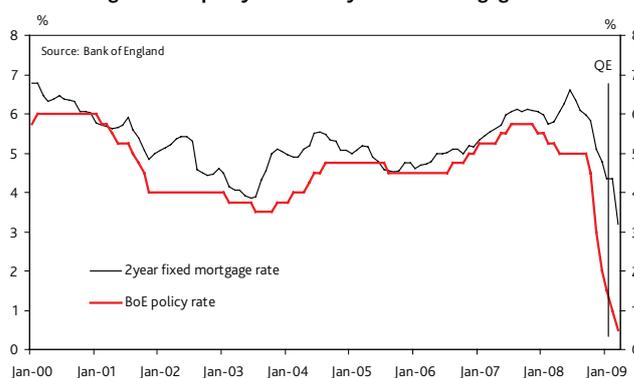
In Japan's 2001-06 QE episode, the only precedent we have, the buying of long-term government debt succeeded in pushing long term rates down (10 year rates hit 0.48% in mid-2003), reducing the cost of government debt. And indeed, this time round, we've also seen some results. The November announcement of the start of QE in the US, and the March announcement of the expansion of the program, led to a fall in wholesale and retail (mortgage) rates (Figure 2) that dramatic cuts to the Fed Funds rate had failed to achieve – though the fall is still only modest.

Figure 1: US Fed Funds Rate, 30 year fixed mortgage rate



In the UK, the story is similar: the central bank got more traction on mortgage rates once QE was announced in March (Figure 2). However, the impact on wholesale bond rates has not tended to be enduring, leading some to suggest that the Bank of England is likely to be disappointed with what QE has achieved so far.

Figure 2: UK policy rate and 2 year fixed mortgage rate

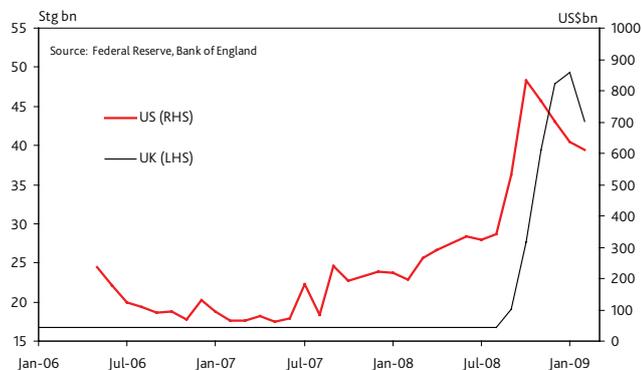


The Fed also aimed with its QE to reduce credit spreads, the difference between yields on risky assets versus safe ones. We have seen a narrowing of credit spreads in recent weeks, but it is very difficult to know whether this is the result of QE or a general improvement in risk sentiment.

But has it kick-started lending activity?

The QE we've seen in the UK and US has led to sharp increases in reserves held at the central bank (Figure 3) – in theory fuel for increasing lending.

Figure 3: Bank reserves held at central bank

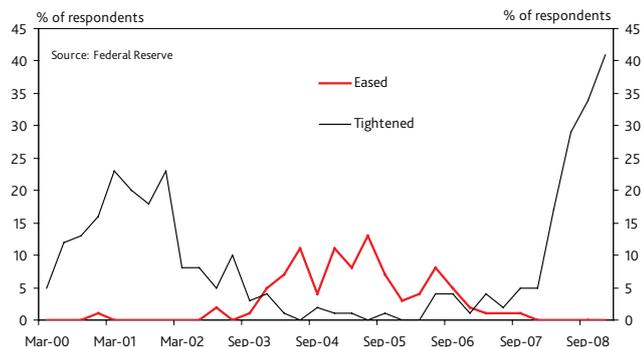


But the risk is that these reserves are squirrelled away to shore up bank balance sheets, rather than on-lent. This was Japan's experience in the period 2001-2006: while bank reserves at the central bank increased to over 4 times the required level, this did not lead to an increase in lending. Will we end up pushing on the same string this time? The balance sheets of overseas banks are clogged with toxic and illiquid assets, and more loans are turning bad every day as the economy deteriorates.

It is all very well reducing interest rates, but if no one is willing to lend then the price of borrowing is irrelevant. So what's the evidence?

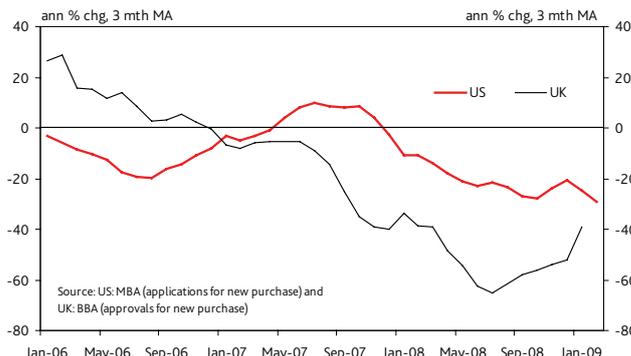
US banks are still scurrying to tighten their credit criteria, hardly suggesting a strong appetite to lend (Figure 4). US consumer credit is falling (-3.5% year on year in February).

Figure 4: US Federal Reserve survey of large banks' lending criteria



And in the UK and US, mortgage lending is still severely in the doldrums (Figure 5). In the most recent Bank of England credit survey it was reported that lenders were still reducing the availability of credit to households. However, credit growth in other sectors was more positive: unsecured credit availability to households and small businesses was reduced by less than expected, and corporate credit availability had increased slightly over the past three months.

Figure 5: Mortgages for new house purchase



In addition, there have been some tentative signs of a bottoming in UK house prices and US house sales, albeit at extremely weak levels. Is this thanks to QE? Or just the fact that even data in free-fall hit bottom eventually? It's hard to tell. It is probably still too soon for QE to have had its full effect, but in any case we will never know to what extent QE helped. It is extremely difficult to analyse the impact of QE in historical episodes, because so much else (traditional monetary easing, fiscal stimulus) tends to be going on at the same time.

Consensus opinion is that QE probably didn't help Japan much in the 2001-2006 episode. However, there are three main ways in which QE is different this time. Firstly, central banks have embarked on it early, whereas in Japan it was a last resort after a decade of economic stagnation and flirting with deflation. Secondly, this time several large economies are doing it at the same time. Such coordinated efforts are likely to have a greater chance of success. Thirdly, there is a greater focus on the type of assets the CBs are buying, targeting particularly poor-functioning asset markets to get more bang for the newly-minted CB bucks.

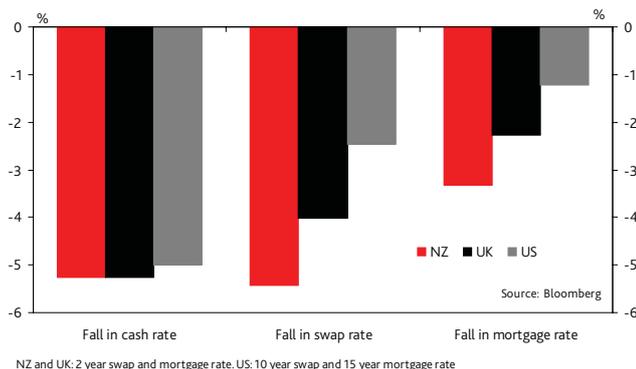
But the only thing one can be sure of is that the debate about whether QE was a good idea will rage for decades to come.

Will NZ do it?

New Zealand is less likely than the US or UK to run out of traditional monetary policy ammunition for three reasons. Firstly, our neutral interest rate is relatively high, due to being a small, far-flung, seriously indebted nation. The Reserve Bank can therefore cut rates much further below "neutral" than in other countries. Eyes light up here at borrowing rates under 6%, whereas in larger rich economies such rates are the norm.

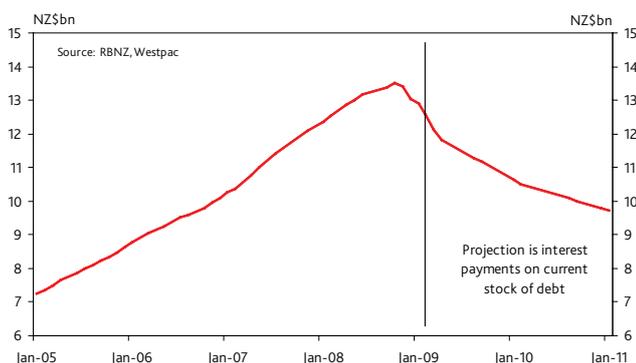
Secondly, interest rate cuts have been largely passed through into the most popular retail mortgage rates, thanks to our solid banking system. In contrast, the central banks in the US and UK (where their banking systems became dysfunctional) have struggled to get traction despite equally large cuts in the overnight cash rate (Figure 6).

Figure 6: Wholesale and retail lending rates



The NZ housing market is already showing some signs of responding to the historically low mortgage rates now on offer, with housing sales well off their lows. And importantly for consumption going forward, the mortgage debt servicing burden of NZ households has come off considerably over the past 6 months (Figure 7) and will continue to do so as more mortgages roll off onto lower interest rates. There is therefore still a considerable amount of stimulus from monetary policy easing in the pipeline.

Figure 7: NZ households' mortgage debt servicing burden

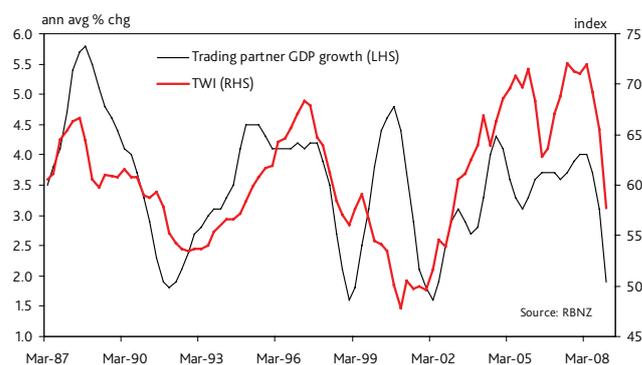


Thirdly, we are a very open economy with a floating exchange rate that tends to get trashed when bad things happen (Figure 8). A sharply lower currency facilitates the necessary economic adjustment away from spending towards saving, and from consuming to exporting. It cushions the fall in commodity prices that inevitably accompanies a slow-down in world growth. While the Reserve Bank cannot set the exchange rate, and can influence it only at the margin through intervention, the NZD generally tends to move in the right direction to reinforce the thrust of monetary policy.

This puts us in a much better position than the likes of Japan, whose currency has strengthened sharply even as their exporters choke (Japanese export values in February were half those of a year earlier).

It is therefore less likely that New Zealand will end up going down the QE track. But never say never – we are already a year into this recession and there are few signs of things improving. Interest rates and the exchange rate are currently defying the

Figure 8: NZ's trading partner growth and the TWI



Reserve Bank's wishes by tightening. And it is far from clear that the interest rate premium NZ has to pay to raise funds offshore in this environment has peaked. The RBNZ may yet find itself fertilising the money tree.

Given the dramatic increase in bond issuance that the Treasury is forecasting over the coming years, it would be very convenient for the Government if the RBNZ were to absorb some of it through QE. But under the Reserve Bank Act the RBNZ has operational independence in how it conducts monetary policy to meet the inflation target, and could therefore (ostensibly) not be pressured into helping out on this front.

Conclusion

With several major economies now embarking on quantitative easing, a new era in global monetary policy has arrived. It is hard to know how things will play out in this high stakes game, with the way out of the quagmire less than clear. Desperate times call for desperate measures, but the long-term credibility of inflation targeting (which has already been brought into question by failing to recognise asset bubbles as inflation) is at stake. NZ is fortunate in that its more traditional tools and channels for monetary policy are likely to keep working longer than in many other countries, and it is unlikely that the RBNZ will embark on QE. Still, it's nice to know that if we really need them, the money trees are ready for planting.

Brendan O'Donovan, Chief Economist, Ph: (64-4) 470 8250

Sharon Zollner, Economist, Ph: (64-4) 381 1414