Economic Viewpoint

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The central banks still have some ammo left

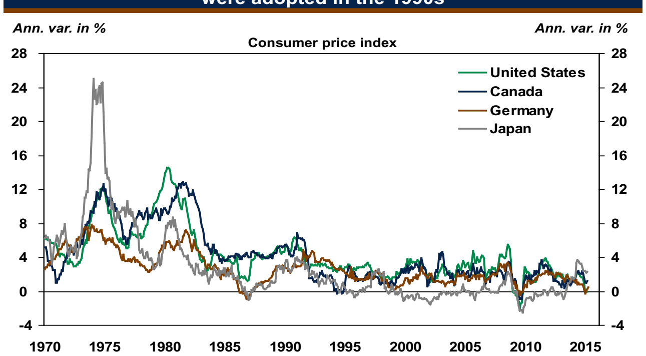
But doing more would likely involve breaking some taboos and require government collaboration

The last few years have seen central banks engage in increasingly aggressive and even pioneering monetary policy. In Europe, the use of negative key rates and the purchase of financial securities have even taken a variety of interest rates into negative territory. Although traditional interest rate and credit tools seem to be nearly depleted, central banks could theoretically use much more direct tools to support the economy and boost inflation. For example, they could really start to print money to finance public spending or tax cuts. Such policies would be incredibly risky, however, and could only be contemplated in the event of a catastrophe. Without going to that extreme, central banks could try to do more to get governments to stimulate the economy if the situation deteriorates again.

THE CENTRAL BANKS HAD TO BE DARING

The last financial crisis triggered a real monetary policy revolution in the leading economies. Prior to the crisis, the major central banks set monetary policy primarily by varying their key interest rates, allowing them to control short-term interest rates and influence longer-term rates. Because lower rates encourage credit to expand, central banks were able to affect the pace at which the economy grew and keep inflation close to where they wanted it. This model, which is based on inflation targets, seemed effective in all leading economies except one (graph 1). Only the Bank of Japan (BoJ) was unable to get inflation close to target levels. However, this seemed to be primarily because of the country's major structural problems (e.g. banks in poor financial health, excess public debt) rather than poor monetary policy.

Graph 1 – Inflation has been under control since inflation targets were adopted in the 1990s



Sources: Datastream and Desjardins, Economic Studies

In 2008, faced with the worst crisis since the Great Depression of the 1930s, some central banks ended up in a situation in which key rates no longer seemed to be adequate to fulfill their mandates. Even after cutting rates as much as possible, the banks deemed that they needed more expansionary monetary policy to stimulate economic activity and stave off a widespread drop in prices. The major central banks primarily turned to two mechanisms. The Federal Reserve (Fed), Bank of England (BoE), the BoJ and, more recently, the European Central Bank (ECB) purchased huge amounts of financial securities to support their prices and bring long-term interest rates down, a type of policy often described as quantitative easing. Many central banks also resorted to forward guidance to signal future monetary policy movements. These non-traditional measures were essentially an extension of pre-crisis monetary policy, making it possible to keep downside pressure on interest rates once the key rates had hit their floors (graph 2 on page 2).

Some European central banks went even further, taking certain key rates into negative territory[1]. Initially, only the

[1] We will soon publish an *Economic Viewpoint* on negative interest rates.

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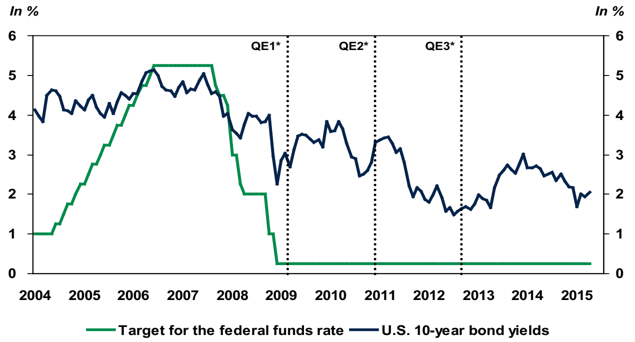
Graph 2 – Although the U.S. key rate hit its floor at the end of 2008, bond yields kept retreating



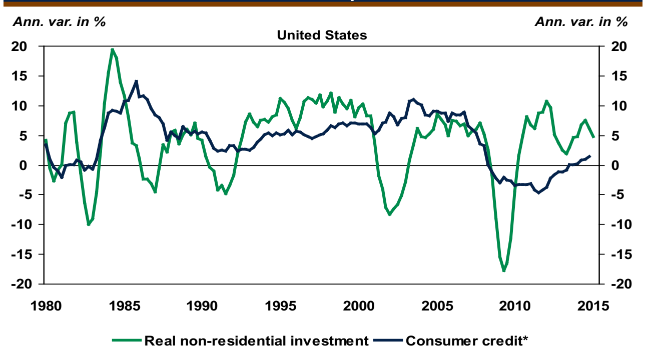
* First round of Federal Reserve quantitative easing.
Sources: Datastream and Desjardins, Economic Studies

rate paid on financial institutions' deposits with the central bank was negative. Recently, however, Switzerland and Sweden also took their overnight rates into the red to offset upside pressures on their currencies and fight deflation.

A LIMITED SUCCESS

The last few years have shown that central banks were able to get around the problem of the zero bound for interest rates to further ease their monetary policies. Simultaneously, recent experience has highlighted the limits of interest-based monetary policies. Despite the spectacular cuts to rates, the economic recovery was generally disappointing and deflation fears have not been completely eliminated. Debate continues to rage over the effectiveness of the quantitative measures central banks instituted; however, we can conclude that the direct impact of low interest rates on credit and investment was fairly limited (graph 3). Most of the positive impacts of such measures instead seem to have come from inflating the value of certain financial assets, particularly stock prices, and their downside impact on currencies. It is risky for central banks to rely too heavily on these two monetary policy transmission mechanisms.

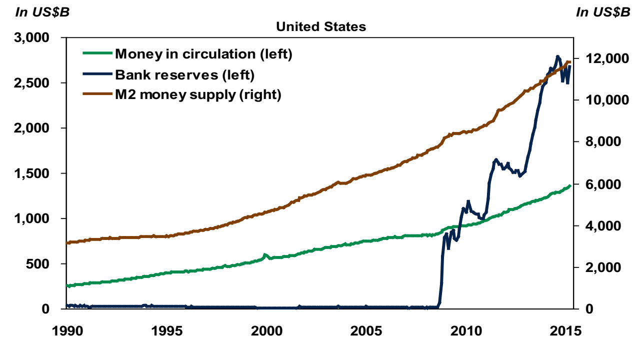
Graph 3 – The plunge in interest rates did not make investment or credit explode



* Deflated by the consumption expenditure deflator.
Sources: Federal Reserve Board, Bureau of Economic Analysis and Desjardins, Economic Studies

The growth of the U.S. money supply in the last few years clearly demonstrates that the Fed's extraordinary measures only had a small impact on the amount of money in circulation (graph 4). In this context, it is false to say that the Fed has printed money to flood the U.S. economy with new cash since 2008. It would be more correct to say that it made massive bond purchases, which expanded its balance sheet and banks' reserves, boosted the value of numerous financial assets, and took bond yields down sharply.

Graph 4 – The Federal Reserve's actions made bank reserves skyrocket, but not the money supply



Sources: Datastream and Desjardins, Economic Studies

IT WOULD BE HARD TO DO MORE BY LOWERING INTEREST RATES

Even though the global economy is still fragile, it is encouraging to see that economic outlooks are improving in most of the leading economies. The U.S. economy was almost stagnant in the first quarter of 2015, but this largely reflects one-off factors. Like last year, U.S. growth should rebound quickly, capitalizing on the good situation U.S. consumers are in. Thanks to the ECB's very aggressive stimulus actions and weak euro, Euroland's economy finally seems to be emerging from its slump. The weak yen should also give Japan's economy some support. In this context, and with the inflation fears generated by last year's collapse in oil prices apparently dissipating, nothing suggests that the major central banks will have to move to further ease their monetary policies in the near future. On the contrary, the question is rather when the Fed will start to raise its key rates and if the ECB will wind up its bond purchases more quickly than forecast.

However, the last few years have taught us that optimism must be tempered with caution. Since 2009, the global economy has on numerous occasions seemed to be doing better then relapsed into another soft patch. The central banks must therefore be ready to act if the outlooks for economic growth or inflation erode again. If it were only an erosion of the economic situation, central bankers would no doubt resort to the very tools they used recently, that is, key rate cuts or further purchases of financial securities, which would probably take bond yields to new lows.

In the event of a major shock, such as a financial crisis similar to the one experienced in 2008, everything suggests that these tools would however be insufficient. To further relax their monetary policies, major central banks could be tempted to take their key rates further into negative territory. It is hard to envision such additional cuts having a substantial positive impact on economic growth or inflation expectations, however, particularly in a situation of financial panic, in which plunging consumer and business confidence would put the brakes on demand for credit. Rates this negative would also cause a lot of concern in the financial sector, and could therefore hurt credit supply. Very negative deposit rates could also prompt savers to take their money out of the banks and develop other, less expensive ways to hang onto it (cash, safe deposit boxes, investments in foreign jurisdictions). Note that, in the event of a worldwide crisis, the stimulus provided by negative rates through local currency depreciation could not help all countries at the same time.

INTEREST RATES ARE AN INEFFECTIVE TOOL IN THE EVENT OF A LIQUIDITY TRAP

In light of the events of recent years, we can easily imagine a scenario in which central banks end up in a situation in which interest rate tools—traditional or unconventional—would not be enough to combat deflationary forces. Since the Great Depression of the 1930s and the works of Keynes, economic theory is well aware that this kind of situation can arise, especially when the economy falls into a liquidity trap in which credit and investment no longer respond to interest rate levels. The mixed effect of the last few years' highly aggressive monetary policies suggests that the global economy fell into a situation similar to a liquidity trap after the 2008 crisis.

Theoretically, it would be easy, even in a liquidity trap, to create inflation within a fiat monetary system in which nothing limits the government's ability to increase the supply of money. A central bank backed by its government would only have to use the printing press to really flood its economy with currency. In 1969, Milton Friedman used the expression "helicopter drop" to refer to this option, which we will describe as direct monetary stimulus (DMS) for the rest of this article. An extreme example of DMS would be to send a cheque for several thousand dollars to every person in the country every month. In this case, prices would inevitably explode, as consumers would realize that the real value of the money they have is going to decline. They would therefore rush to spend the cash received and would be prepared to pay a lot more to acquire real goods. In an important speech in 2002,[2] Ben Bernanke did not hesitate to assert that "under a paper-money system, a determined government can always generate higher spending and hence positive inflation."

PRINTING MONEY IN PRACTICE

In reality, it would be hard for a central bank to decide, on its own, to start sending cheques out to the population, for both legal reasons, and in terms of legitimacy. It would be better, and even necessary, to coordinate with the government before moving ahead with DMS. In this context, the most realistic way to inject money directly into the economy would be for the government to proceed with big tax cuts directly financed by the central bank.[3] To finance the tax cut, the government could issue infinite-term bonds that pay no interest; the central bank would buy them by creating new money. This way, the tax cut would not erode the government's financial situation and would not raise fears of future tax increases.[4] Irreversibility of a DMS is essential to maximize its effectiveness. A tax cut like this would have a clear positive impact on consumption, at least nominally, and would therefore put upside pressure on inflation without using the interest rate and credit transmission channel. Similarly, a central bank could finance public spending or investment directly. The effect on consumption and inflation would be less direct, but it would still provide effective support for economic activity without using the usual monetary policy transmission mechanisms.

WHY IS DMS A MAJOR TABOO FOR CENTRAL BANKS?

If central banks possess an effective tool to stimulate activity and eradicate deflation risks, why have they not used it in the last few years? The answer is because printing money to finance public spending would break several modern monetary policy taboos and, in some cases, would even be illegal. As we said earlier, for maximum effectiveness, DMS must be irreversible. This means that the central bank would not be able to backpedal if its stimulus proved too effective and overly intense inflationary pressures materialized. Implementing DMS would therefore force central banks to shelve their inflation targets, at least

[2] Remarks by Federal Reserve Governor, Ben Bernanke, before the National Economists Club (Washington, D.C.) on November 21, 2002: "Deflation: Making sure 'It' doesn't happen here," www.federalreserve.gov/boarddocs/Speeches/2002/20021121/default.htm.

[3] In 2003, Ben Bernanke proposed this solution for Japan in his speech "Some Thoughts on Monetary Policy in Japan," www.federalreserve.gov/boarddocs/speeches/2003/20030531/.

[4] The Ricardian equivalence proposition holds that, if consumers fear a tax cut would eventually be reversed, they could save the money rather than spend it, with no impact on demand.

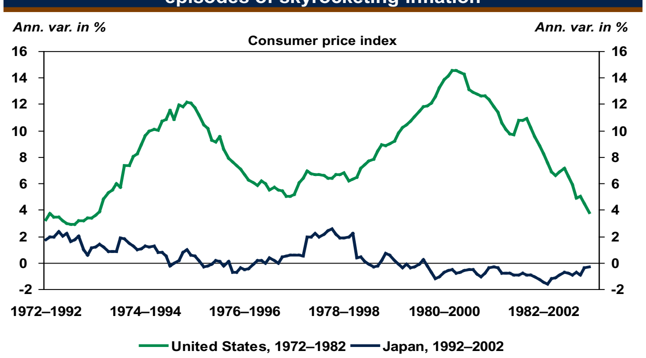
temporarily. Coordinating with government would also dangerously reduce central bank independence.

Inflation targets and independence are two of the main underpinnings of modern monetary policy, so central bankers are understandably reticent about implementing or even contemplating DMS. In November 2014, BoE Governor Mark Carney told a journalist that he could not "envisage any circumstance" in which it would be appropriate for a leading nation's central bank to resort to a helicopter drop.[5] The main reasons for this dismissal are the irreversibility of this type of action and the fact that it could strip all discipline from fiscal policy. Central bankers' reticence is also justified by the fact that, historically, use of the printing press to finance public spending has led to several episodes of skyrocketing inflation (the German experience in the early 1920s, Zimbabwe at the beginning of the new millenium, and so on). This is why even DMS partisans think it should be rigorously controlled.[6]

HAVE WE ALREADY STARTED TO INCH TOWARD DMS?

For modern central bankers, true DMS is like the atomic bomb for the U.S. army: an essential weapon that they hope never to have to use. In theory, simply the possibility of DMS should be enough to ensure that true deflation does not settle into a fiduciary monetary system. In fact, we are not aware of a major deflationary crisis in any economy that uses floating paper currency. The Japanese example does not count because deflation there has always been fairly subdued (graph 5), explaining why the BoJ has never resorted to DMS.

Graph 5 – Japanese deflation in the 1990s is slight compared with episodes of skyrocketing inflation



Sources: Datastream and Desjardins, Economic Studies

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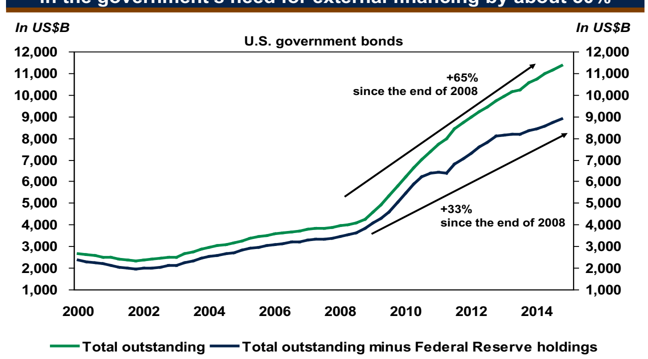
[5] Press conference following the release of the November 12, 2014 *Inflation Report*, www.bankofengland.co.uk/publications/Documents/inflationreport/2014/conf121114.pdf.

[6] For example, see: Adair Turner, "Debt money and Mephistopheles: How do we get out of this mess?" Cass Business School, February 6, 2013, 46 p., www.fsa.gov.uk/static/pubs/speeches/0206-at.pdf.

If an official helicopter policy is hard to imagine, this does not mean that central banks could not engage in more subtle use of this type of tool to support the economy. Central bank's role in a DMS is essentially to create money and use it to buy government bonds. In fact, that is exactly what the central banks have been doing in the last few years when they make massive government bond purchases. Of course, central banks are buying normal, interest-paying securities on the secondary markets. Because most central banks are part of the government, or hand their profits over to it, the government ends up paying interest to itself, however. The fact that bonds are purchased on the secondary rather than primary market also has no practical impact on the effect of the purchases on governments' financing constraints.

The evolution of the quantity of U.S. government outstanding clearly demonstrates the big impact the Fed's purchases had on the U.S. government's need for external financing (graph 6). Without de Fed, the other investors would have had to increase their holding of U.S. bonds by 65% since the end of 2008, instead of 33%. This combined with the spectacular drop in bond yields that largely resulted from central bank actions, has certainly given the U.S. government a lot more room to manoeuvre in recent years. The situation is similar in other economies in which central banks engaged in quantitative purchases. Because of financial market internationalization, the drop in bond yields resulting from quantitative policies also helped the budget situations in countries in which central banks did not buy bonds, like Canada.

Graph 6 – The Federal Reserve's purchases cut the rise in the government's need for external financing by about 50%



Sources: Datastream and Desjardins, Economic Studies

Some therefore charge that central banks are already monetizing their government's debt. The Fed acknowledges that its actions may look like debt monetization. However, for Fed leaders, this is a false perception. Firstly, they argue that monetization is not involved because the purpose of the purchases was not to help the government finance its expenditures, but rather to lower interest rates to meet their targets for inflation and unemployment. Secondly, and more convincingly, they note that they have always stressed the fact that the security purchases were temporary and that the Fed had all the tools it needed to tighten monetary conditions in the event that inflationary pressures materialized. The second argument could explain why the quantitative purchases of recent years have not led to highly expansionary fiscal policies to date, as governments cannot rely on their central banks as a permanent source of financing. Note, however, that the Fed is now signalling that it is not contemplating any rapid reduction to its bond holdings and some experts, including Ben Bernanke, are suggesting that the Fed should look at the option of making much of the expansion to its balance sheet permanent. Such a decision would make the quantitative purchases of recent years even more akin to true DMS.

The solution to another crisis could come more from fiscal policy

In short, we think it would be hard for the major central banks to combat the emergence of serious new deflationary forces in the current context. The usual mechanisms for monetary policy transmission—through interest rates and credit—have been relatively inefficient since the crisis and would likely become totally ineffective in the event of another major crisis. Using very negative interest rates does not seem like a realistic option, as it could have more adverse than positive effects.

Before turning to DMS, central banks would certainly try other ways to stimulate the economy, for example by buying a broader array of financial securities. The effectiveness of these measures is, however, in no way guaranteed and legal and political obstacles could quickly limit central banks' ability to act. At this point, if deflationary pressure remained too intense, central banks would become very tempted to take one step closer to DMS by encouraging governments to institute stimulating fiscal measures. For example, we could imagine a joint declaration by major central banks, ideally backed by international bodies such as the International Monetary Fund, to the effect that the particularly difficult economic situation justifies instituting major tax cuts or sweeping capital spending programs. By continuing to buy bonds, or by putting a cap on bond yields, as the Fed did in the 1940s, central banks could be certain that the markets would not penalize governments that decided to take action.

We can therefore easily picture a situation in which central banks that were short on tools would try to get governments to take up the slack. This is not problematic in and of itself, because fiscal policy, like monetary policy, is a traditional tool that is used to combat recessions. One of the problems of the last few years is that the central banks have often ended up waging the battle alone, which explains why they have had to be very imaginative. If another crisis were to strike in the current context, it would be hard for the central banks to do more without further compromising some of their principles.

The good news is that the improving economic outlooks in several leading economies raise hopes that the central banks will start to gradually normalize their monetary policies in the coming quarters. This should provide them with some renewed leeway, as they raise their key rates, so they can rely on traditional monetary policy mechanisms the next time the economy slows.

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