Economic Viewpoint
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Post-crisis monetary policies
Part 2 – Limiting distortion

Recourse to large-scale purchases of financial securities constitutes one of the central banks' principal innovations following the 2008–2009 financial crisis. While the purchases proved effective in supporting financial markets during the crisis, and in lowering interest rates, their positive effects on the economy and inflation are uncertain. Such purchases also create enormous distortions in the financial markets, distorsions that could have serious long-term consequences; therefore, central banks must be very cautious in resorting to them and would likely be well advised to limit massive securities purchases to crisis situations.

THE EMERGENCE OF MASSIVE CENTRAL BANK PURCHASES OF FINANCIAL SECURITIES

Recently, we published a first *Economic Viewpoint* on how monetary policies changed subsequent to the 2008–2009 financial crisis.[1] It primarily focused on the fact that central banks now seemed to be taking action based on short-term considerations. This helped bring on a cycle of almost continuous easing which seemed less and less appropriate to the situation in advanced economies. In this second study, we will primarily discuss the massive financial securities purchases made by a number of central banks in the last few years.

Central banks have been transacting in financial securities as part of normal business for a long time now. Before the crisis, for example, the Federal Reserve (Fed) held approximately US$900B in federal securities. The Bank of Japan (BoJ) had also resorted to massive asset purchases in the early 2000s in the face of a persistently weak economy and inflation. However, that was the exception rather than the rule until the 2008–2009 financial crisis. During the liquidity crunch that came about a year before the Lehman Brothers collapse, the Fed introduced several measures to inject funds into the financial system, without actually acquiring the securities investors were snubbing. These measures were not designed to further relax monetary policy—at the time, the Fed thought it best to keep key rates relatively high—but rather to ensure the financial markets were running smoothly.

At the end of 2008, the situation took a much more worrisome turn. Faced with the worst financial crisis since the Great Depression in the 1930s, injecting liquidity and taking key rates close to zero no longer seemed to be sufficient as tools. The Fed then turned to large-scale purchases of financial securities. The first purchasing program, primarily intended to support the U.S. mortgage securities market, was launched late in 2008. A few months later, the program was expanded to incorporate large purchases of federal bonds. In addition to helping the financial markets work properly, these purchases, combined with forward guidance announcing that key rates would stay at their floor for several quarters, was intended to keep easing monetary policy further by lowering longer-term interest rates. As it had also reached its effective key rate floor, the Bank of England (BoE) launched its own federal bond purchasing program in March 2009.

THE DISAPPOINTING RECOVERY NORMALIZED ASSET PURCHASES

We might have assumed that the end of the financial crisis toward the spring of 2009 would put an end to unconventional monetary policies. However, this was not what happened, as the public debt crisis in the euro zone forced the European Central Bank to turn to massive bond purchases in its turn. Dissatisfied with the economic recovery, and concerned about a relapse or overly large drop in inflation expectations, the major central banks have continued to announce new asset purchasing programs in the last few years, causing their balance sheets to swell

[1] Desjardins, Economic Studies, *Economic Viewpoint*, ''Monetary policies after the crisis - Part one: Refocusing on the medium term'', November 7, 2016, https://www.desjardins.com/ressources/pdf/pv161107-e.pdf?resVer=1478530175000

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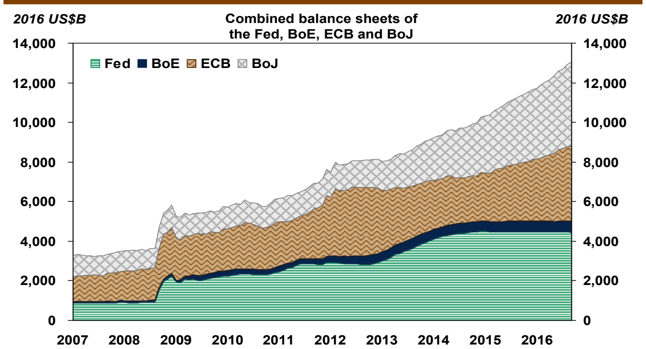
substantially (graph 1). In addition to representing further monetary policy easing, the unconventional measures were supposed to stimulate economic activity through other transmission mechanisms, in particular by way of higher financial asset prices and a lower currency. Some smaller central banks, like the Bank of Sweden, also resorted to asset purchases; others, like the Bank of Canada (BoC) officially added asset purchases to their arsenal,[2] although they have not yet used that instrument.

Graph 1 – Central bank balance sheets exploded due to large-scale financial asset purchases



Fed: Federal Reserve; BoE: Bank of England; ECB: European Central Bank; BoJ: Bank of Japan
Sources: Datastream and Desjardins, Economic Studies

We might think that the central bankers' initial goal after the crisis would be to use all of their tools to their utmost over a short period to generate a strong economic recovery. In this scenario, the central banks would have then been able to normalize monetary policy quickly. In reality, the economic recovery has disappointed steadily in recent years, and inflation has generally remained too low. This prompted central bankers to announce ever more aggressive stimulus measures, which even led to negative rates in Europe and Japan.

Massive asset purchases were seen less and less as extraordinary measures, but rather as a more or less normal part of the central banks' arsenal. In a recent speech,[3] the Fed's Chair confirmed that large-scale purchases of financial securities were now a part of the monetary policy toolkit and could be used in the future, for example, when key rates have been lowered as much as possible. The BoC also used the argument about the potential for using asset purchases to justify keeping its inflation target at 2%.[4]

DO SECURITIES PURCHASES DO MORE GOOD THAN HARM?

At first glance, the soft economic recovery and persisting overly low inflation in the advanced economies could make us conclude that asset purchases are not effective monetary policy tools. However, the central banks seem convinced that the situation would have been a lot worse without the purchases.

Many serious studies[5] have examined the issue, generally concluding that asset purchases had a major impact on interest rates and the prices of other financial assets. The contrasting movements by stock markets and bond yields since 2010 is a good illustration of this phenomenon, in our opinion (graph 2). The conclusions regarding the benefits of quantitative measures for economic activity and inflation are not as clear. The BoE study cited above concludes that there are some indications that asset purchases temporarily boost activity and prices. However, these effects varied a great deal depending on the country and time period; quantitative measures seem more effective when the financial markets are struggling.

Graph 2 – The asset purchases may explain the contrasting movements by stock markets and yields since 2010

Sources: Datastream and Desjardins, Economic Studies

A final point of note that emerges from the BoE study is that quantitative purchases have substantial effects internationally. For example, the Federal Reserve's asset purchases inflated the value of financial assets internationally, in addition to triggering major adjustments in the currency market. Canada's experience is a good illustration of these international effects: our bond yields continued to fall in the post-crisis years, even though the BoC did not resort to quantitative measures.

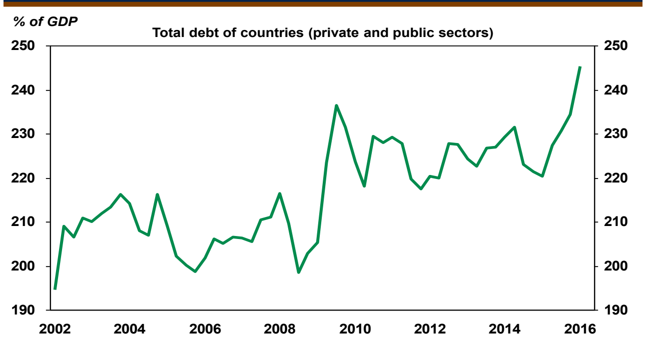
The central banks have always been aware that financial securities purchases also had less positive consequences, for example, playing against households that needed

[2] Bank of Canada, *Framework for Conducting Monetary Policy at Low Interest Rates*, December 2015.
[3] Janet L. Yellen, *The Federal Reserve's Monetary Policy Toolkit: Past, Present, and Future*, August 26, 2016.
[4] Bank of Canada, *Renewal of the Inflation-Control Target*, October 2016.

[5] For example, Bank of England: QE: the story so far, *Staff Working Paper* No. 624, Haldane, Roberts-Sklar, Wieladek and Young.

interest income and increasing the risk of financial bubbles. However, these negative effects seemed limited and were more than offset by the positive macroeconomic effects. Perceptions have started to change in the last few quarters, as more and more major actors, like the BoJ, are worried about the negative effects on financial stability and other things associated with overly low bond yields. The fact that, even though the economic recovery remains subdued, the global debt rate has shot up to a peak that dates back several decades (graph 3) could also be a worrisome consequence of maintaining unconventional monetary policies over an extended period.

Graph 3 – The surge in global debt is worrisome



Sources: Bank for International Settlements and Desjardins, Economic Studies

THE MEDIUM- AND LONG-TERM EFFECTS ON INFLATION ARE NOT CLEAR

Outside periods of financial strain, central banks have primarily resorted to large-scale financial securities purchases in response to overly low inflation that is threatening to decrease inflation expectations. Among other things, the idea was to demonstrate that they remained determined to get inflation close to the target. However, these efforts did not prevent inflation expectations from declining, in general, until very recently (graph 4).

Graph 4 – Despite all the efforts made by central banks, inflation expectations have remained relatively low

* Calculated based on real return bonds.
Sources: Bloomberg and Desjardins, Economic Studies

One problem is that movement by inflation expectations essentially depends on how economic agents interpret the actions of central banks. If an asset purchasing program announcement is seen as excellent news for the economy that will ensure good economic growth, people will start to expect higher inflation. However, if that announcement is construed as a response to a further erosion of the economy that suggests a longer period of economic stagnation, it could make expectations drop further.

The central banks' inability to raise inflation expectations by lowering interest rates is consistent with the neo-Fisherites' controversial theory.[6] They use the equation that states that a nominal interest rate is equal to the sum of a real interest rate plus the expected rate of inflation to assert that an interest rate cut could lead to a drop in inflation expectations. Many dismiss the theory out of hand, given that lower interest rates should stimulate economic activity and trigger inflation pressures. The neo-Fisherites' arguments are harder to reject over a longer-term horizon, however, when it is usually assumed that monetary policies have no impact on real interest rates. Without completely buying into neo-Fisherism, the central banks should realize that there is some contradiction in putting downside pressure on long-term bond yields while simultaneously hoping that people will expect higher inflation.

IS ARTIFICIALLY INFLATING ASSET PRICES A GOOD STRATEGY?

Beyond the matter of whether large-scale purchases by central banks do economic activity and inflation more harm than good, a much more fundamental question arises. What will the long-term consequences be of maintaining major distortions in the financial markets? The Fed has never denied that one way asset purchases could have positive impacts on the economy was by inflating the price of numerous financial assets. In addition to directly boosting the prices of some assets that are bought in large quantities, such purchases force other security holders to purchase other assets, which are often riskier, putting downside pressure on risk premiums, among other things. Moreover, the drop in bond yields may justify higher prices for all assets that provide investors with some return. In this context, the fact that the last few years have been very good for most classes of financial assets is no surprise.

[6] Stephen Williamson, *Neo-Fisherism A Radical Idea, or the Most Obvious Solution to the Low-Inflation Problem?* Federal Reserve Bank of St. Louis, July 2016.

Logically, an increase in asset prices, even if artificial, could stimulate the economy in the short run, by increasing consumers' wealth, among other things. However, it would be hard to find a single economist worth his salt to argue that such a strategy would be beneficial over the long term. Such price inflation can lead to financial bubbles which, when they explode, could have very serious negative impacts, as illustrated by the tech bubble in the early 2000s, and the U.S. real estate bubble.

THE FINANCIAL MARKET MUST BE ALLOWED TO PLAY ITS ROLE

Even more fundamentally, we must remember that one of the financial markets' key role is to foster effective distribution of capital in the economy. Among other things, this role is played by allowing it to set a fair price for financial assets. In our opinion, the major distortions generated by the central banks' asset purchases are currently keeping a fair price from being established in several markets. Over a short period, such distortions should not have serious effects. However, if asset purchases become normal monetary policy tools, such distortions could become permanent. Note that a central bank does not have to buy an asset to support its price artificially; it only has to intimate that it could eventually buy it.

We must acknowledge that central bank action has always created certain distortions in the financial markets; Alan Greenspan, for example, sometimes seemed to use monetary policy to support the stock market. That is not comparable to today's situation, however, in which the major central banks have become key players in the bond markets and even equity market in Japan. In our opinion, there is a serious risk that the extremely low interest rates that stem from central bank action will lead to too much debt in the short term, particularly household and government debt, which could reduce economic growth in later years.

RESERVING ASSET PURCHASES FOR FINANCIAL CRISES

Once everything has been considered, we must conclude that large-scale financial securities purchases are a powerful tool that must be used with a great deal of prudence. Announcing massive financial securities purchases is a very different gesture from announcing a key rate cut, and central banks must not start to think of these two tools as substitutes for each other.

In normal times, the limited benefits of asset purchases do not justify their use, in our opinion, especially as the effects seem to be mainly felt in the short term. As we stressed in our previous *Economic Viewpoint*, it would be better for central banks to once again start focusing their action on a medium-term horizon, rather than constantly resorting to unconventional measures that could have very adverse long-term impacts.

However, it would be unreasonable to demand that central banks completely renounce large-scale financial securities purchases. These measures played an important role in limiting the fallout from the recent financial crises, and they may be needed again in times when strain is surging in the markets. To limit the distortions inherent in the fact that central banks now possess such tools, they should, however, clearly indicate that they would only be used as an extraordinary measure, and for a short period.

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