The reduction of the US Fed's balance sheet: When, at what pace and with what impact?

By Paul Hubert

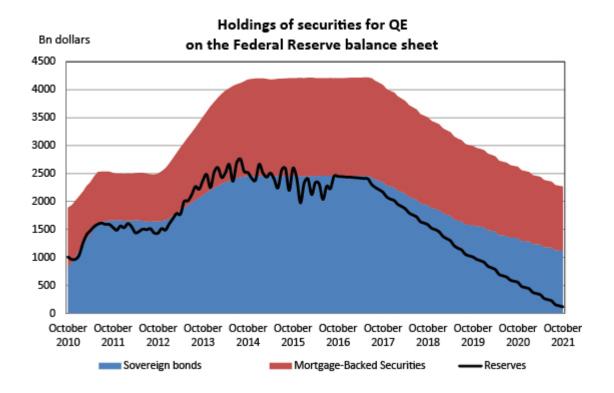
US monetary policy began to tighten in December 2015, with the Fed's key rate moving from a target range of 0 — 0.25% to 0.75 — 1% in 15 months. To complement its monetary policy, the Fed also manages the size of its balance sheet, which is a result of programmes to purchase financial stock (also called quantitative easing programmes). The Fed's balance sheet now comes to 4,400 billion dollars (26% of GDP), compared with 900 billion dollars in August 2008 (6% of GDP). The improvement in the economic situation in the United States and the potential risks associated with QE pose questions about the timing, pace and consequences of the normalization of this unconventional tool.

The minutes of the meeting of the Monetary Policy Committee (FOMC) on 14 and 15 March 2017 provide some answers: the Fed's procedure for reducing the balance sheet calls for not reinvesting the proceeds of securities arriving at maturity. Today, at a time when the QE programmes have not been active since October 2014 and the Fed is no longer creating money to buy securities, it is continuing to hold the size of its balance sheet constant by reinvesting the amounts of securities reaching maturity. The FOMC is to stop this policy of reinvestment "later this year" [1] and as a consequence begin to reduce the size of its balance sheet.

In accordance with the <u>principles for policy normalization</u> published in September 2014 and December 2015, the Fed will not sell the securities it holds, thus on the financial markets it will not modify the equilibrium situation on the

stocks but only on the flows. Uncertainty remains as to the rate at which the non-reinvestment will be carried out, depending on the securities concerned by the non-reinvestment and the desired final size of the Fed's balance sheet.

A reading of the minutes of the March meeting also indicates that "participants generally preferred to phase out or cease reinvestments of both Treasury securities and agency MBS". In January 2017, the Fed's economists published in <u>FEDS Notes</u> a simulation of the size of the Fed's balance sheet based on the assumptions set out above. Assuming that non-reinvestment begins in October 2017, and using their data on the assets portfolio held by the Fed, the following graph was developed.



These projections show that a non-reinvestment policy implies that the balance sheet will shrink by about 600 billion dollars a year up to October 2019, by 400 billion in the third year and by 300 billion in the fourth year. Treasury bonds will decline by 1.2 trillion dollars while holdings of MBS fall by USD 600 billion[2]. Based on these assumptions, the

level of the reserves will be 100 billion dollars in October 2021, i.e. their pre-crisis level, and the Fed will have an equivalent amount of Treasury and MBS debt at that time (approximately 1,100 billion each). The question arises as to the size of the balance sheet that the central bank wishes to return to: the nominal pre-crisis amount, the amount expressed as a share of pre-crisis GDP, or a higher level (with its holding of securities serving its goals of macroeconomic stabilization and financial stability [3])? By not responding explicitly to this question, the Fed is giving itself the possibility both to adjust its target according to the reaction of the market and to take time to decide what size to target if it wishes to use this instrument on an ongoing basis.

The economic and financial impact of a decline this large in the size of the balance sheet could be limited. While private expectations about these changes in the size and composition of the Fed's balance sheet should affect financial conditions, modifying the balance of supply and demand for financial securities, the various announcements related to this policy normalization have not had any impact as yet. Following the publication of the minutes of the last meetings of the FOMC and of the FEDS Notes describing this reduction policy, there was no reaction in interest rates or the exchange rate for the dollar or on the stock markets. Either the financial markets have not taken this information on board (because it has gone unnoticed or is not credible) or it has already been incorporated into asset prices and future expectations.

In other words, it does not seem that the coming reduction in the size of the balance sheet, if it is done on the basis of the mechanisms communicated, will tighten monetary and financial conditions beyond what is expected from the future increases in interest rates, monetary policy's conventional instrument [4]. If this proves to be the case, normalization would indeed live up to its name. Applied to the euro zone,

this would tend to show that an ultra-expansionary monetary policy is not irreversible.

- [1] More specifically: "Provided that the economy continued to perform about as expected, most participants ... judged that a change to the Committee's reinvestment policy would likely be appropriate later this year."
- [2] Assuming that the US government's net borrowing requirements will be about 300 billion dollars a year over these four years, the decline in the Federal Reserve's demand for government securities will be on a similar order of magnitude.
- [3] This issue has been extensively debated in the academic literature since the implementation of the QE programmes; see among others <u>Curdia and Woodford (2011)</u>, <u>Bernanke (2016)</u>, <u>Reis (2017)</u>.
- [4] While the reduction in the balance sheet should theoretically mainly affect long-term interest rates, the lack of a response coupled with recent increases in short-term interest rates may result in flattening the yield curve in the United States, and thus reduce the banks' intermediation margin.

Does Price Stability entail Financial Stability?

by Paul Hubert and Francesco Saraceno (@fsaraceno)

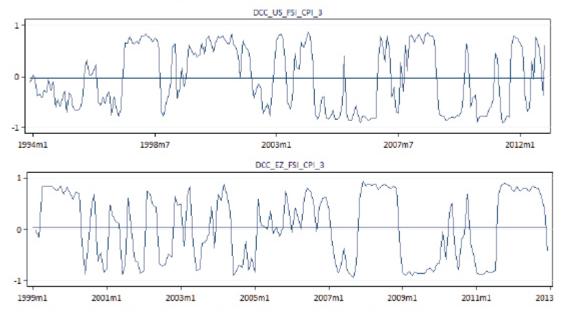
Paul Krugman raises the very important issue of the impact of

monetary policy on financial stability. He starts with the well-known observation that, contrary to the predictions of some, expansionary monetary policy did not lead to inflation during the current crisis. He then continues arguing that tighter monetary policy would not necessarily guarantee financial stability either. If the Fed were to revert to a more standard Taylor rule, financial stability would not follow. As Krugman aptly argues, "That rule was devised to produce stable inflation; it would be a miracle, a benefaction from the gods, if that rule just happened to also be exactly what we need to avoid bubbles."

Krugman in fact takes position against the "conventional wisdom", which has been widespread in academic and policy circles alike, that a link exists between financial and price stability; therefore the central bank can always keep in check financial instability by setting an appropriate inflation target.

The global financial crisis is a clear example of the fallacy of this conventional wisdom, as financial instability built up in a period of great moderation. A <u>recent analysis</u> by Christophe Blot, Jérôme Creel, Paul Hubert, Fabien Labondance and Francesco Saraceno shows that the crisis is no exception, as over the past few decades, in the US and the Eurozone, the link between price and financial stability has been unclear and moreover unstable over time, as shown on the following figure.

Figure. Coefficient of correlation between consumer price index and financial stability index for the US (top) and the Euro area (bottom)



Source: Authors' computations. For more details on data and methodology, please refer to: https://ideas.repec.org/a/eee/finsta/v16y2015icp71-88.html

We therefore subscribe to Krugman's view that financial stability should be targeted by combining macro- and micro-prudential policies, and that inflation targeting is largely insufficient. In another work, Christophe Blot, Jérôme Creel, Paul Hubert and Fabien Labondance argue that the ECB should be endowed with a triple mandate for financial and macroeconomic stability, along with price stability. They further argue that the ECB should be given the instruments to effectively pursue these three, sometimes conflicting objectives.

No surprises from the Fed*

By Christine Rifflart

Not surprisingly, at its meeting on 29 and 30 October the Monetary Policy Committee of the US Federal Reserve decided to maintain its unconventional measures and to leave the federal funds rate unchanged. Since the end of 2012, the Fed has been

making massive purchases of securities (government bonds and mortgage debt) at a rate of \$85 billion per month. The aim is to put pressure on long-term rates and to support economic activity, including the real estate market.

The Federal Reserve, which is committed to a strategy of transparency and communication aimed at orienting investor expectations, also confirmed that it will hold the rate at between 0 and 0.25% so long as: the unemployment rate is greater than 6.5%; forecasts of inflation over 1 to 2 years do not exceed the long-term inflation target, set at 2%, by more than a half-point; and long-term inflation expectations remain stable. According to our forecast in October (see The United States: capped growth), the unemployment rate, which was 7.2% in September, could fall to 6.9% by end 2014. Finally, inflation, which was at 1.5% in the third quarter of 2013, should not exceed 1.8% in 2014. In these conditions, no rate increase is expected before the second half of 2015. Policy will thus remain particularly accommodating.

There is greater uncertainty about the withdrawal of the unconventional measures than about keeping long-term rates at artificially low levels. A cessation or reduction of these measures was announced last May and is thus expected by the markets, and in any case they were not meant to last. Between May and September 2013, foreign private and public investors had anticipated the beginning of their withdrawal and began offloading some of their securities. This influx of securities depressed prices and led to a one-point increase in long-term public rates in just a few weeks. But the fragile character of growth, inadequate job creation and especially the public relations efforts undertaken by the central banks to reassure the financial markets led to putting off the actual date the purchases are to be curtailed. Long-term rates fell once again, and have continued to fall in recent weeks following the October budget crisis.

If, in retrospect, it appears that it was premature to

anticipate an early withdrawal of the unconventional measures, the question of timing still remains. In its press release, the Committee stated that any decision will depend on the economic outlook as well as on a cost-benefit analysis of the programme. However, the economic situation is not expected to improve in the coming months. If Congress reaches a budget agreement before December 13, this will certainly be on the basis of cuts in public spending. This new fiscal shock will further dampen growth and penalize the labor market yet again. The issuance of new debt, which was compelled in 2013 by the statutory debt ceiling, might then grow very slowly in 2014 due to budget adjustments. Faced with this moderate growth in the supply of securities, the Federal Reserve could reduce its own purchases to the benefit of other investors. This could help maintain equilibrium in the securities market without a sharp fall in asset prices.

This normalization of monetary policy instruments should not be long in coming. But there are risks involved, and a sharp rise in long-term rates cannot be excluded. The markets are volatile, and the events of May and June have not been forgotten. But much of the movement has already been taken on board by the markets. The Federal Reserve will therefore have to beef up its communication strategy (by for example announcing in advance the date and scope of its decision) if it is to succeed the difficult balancing act of maintaining a highly accommodative monetary policy while gradually dispensing with its exceptional measures to maintain low interest rates. Let us assume that the exercise will be a success. Long-term public rates, at 2.7% in third quarter 2013, should not exceed 3.5% by the end of 2014.

^{*}This text draws on the study "Politique monétaire: est-ce le début de la fin ?" [Monetary policy: Is it the beginning of the end?], which is to appear soon in the <u>OFCE 2013-2014</u> outlook for the global economy.