

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

By [Paul Hubert](#)

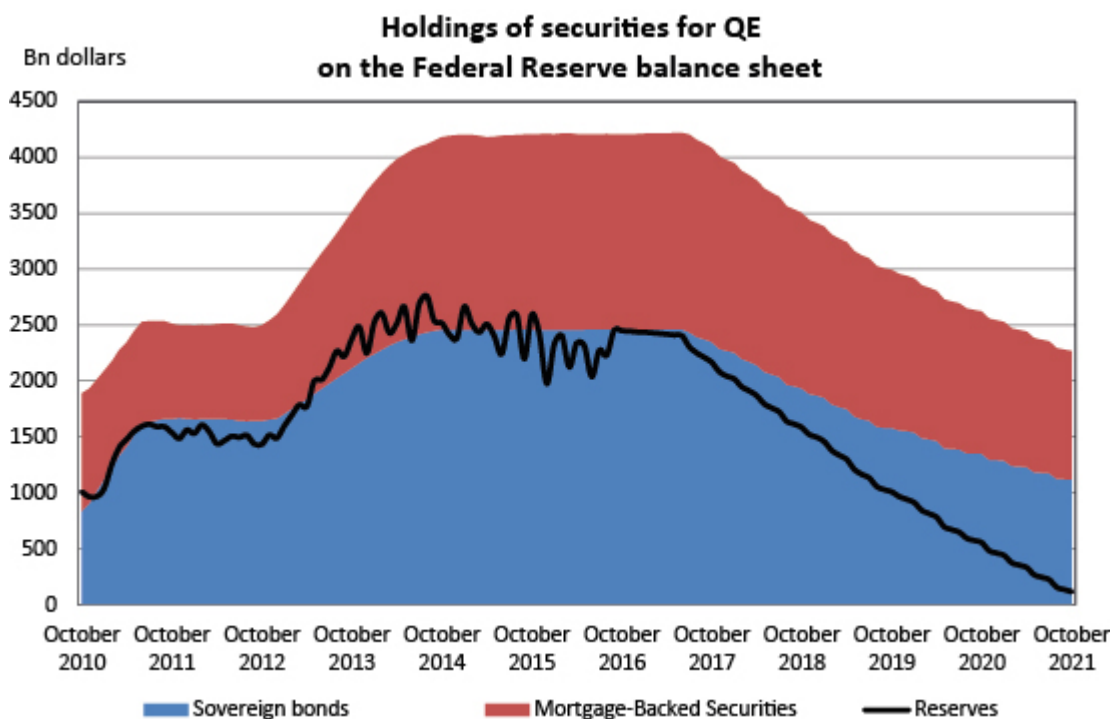
US monetary policy began to tighten in December 2015, with the Fed's key rate moving from a target range of 0 – 0.25% to 0.75 – 1% in 15 months. To complement its monetary policy, the Fed also manages the size of its balance sheet, which is a result of programmes to purchase financial stock (also called [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 [principles for policy normalization](#) 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 [FEDS Notes](#) 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 [Curdia and Woodford \(2011\)](#), [Bernanke \(2016\)](#), [Reis \(2017\)](#).

[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.

The ECB is extending its QE programme but mixes up its

communications

By [Paul Hubert](#)

On Thursday, March 10, after the meeting of its Governing Council, the European Central Bank (ECB) announced a series of additional measures for the quantitative easing of monetary policy. The aim is to prevent the onset of deflation and to boost growth in the euro zone. The key innovation lies in the measure for bank financing at negative rates. While the measures were well received by the markets at the time of the announcement, a lapse in Mario Draghi's communications during the press conference following the Board of Governors meeting greatly undercut some of the impact expected from the decisions taken.

What decisions were taken?

– The three key rates set by the ECB were lowered. The main refinancing rate went down from 0.05% to 0%, while the marginal lending rate was cut from 0.30% to 0.25%. Finally, the [deposit facility rate](#), which compensates the excess reserves that banks hold on the ECB's balance sheets, is down from -0.30% to -0.40%. It thus now [costs a bank more](#) to have cash on the ECB's balance sheet.

– [Quantitative easing](#) (QE) has been extended in terms of its scale – securities purchases rose from €60 bn to €80 bn per month – but especially in terms of the types of securities eligible for purchase. While heretofore the ECB has bought government bonds (sovereign and/or local authority bonds), it will now buy high-quality corporate bonds, based on rating agency criteria. This measure is a direct response to the drying up of the supply of government securities and is expected to directly influence the conditions for corporations active on the bond markets.

– The most significant innovation concerns the [new Targeted](#)

[Longer-Term Refinancing Operations](#) (TLTRO), which are intended to reboot the channels of bank lending and to provide financing to banks *on the condition that* they finance the real economy. These loans to banks will be at a zero or even negative rate, based on various [criteria](#), including the amount of loans that the banks provide to households and businesses. In other words, the ECB will pay banks meeting these criteria, so that they in turn lend.

What is the expected impact?

The effect to be expected from these measures depends on the situation of the credit market. Numerous [studies](#) show that in normal times these measures have a positive effect on the economy. However, this holds true only if it is the *supply* of credit that is currently constricted in the euro zone. Conversely, if the problem lies in the demand for credit on the part of consumers and businesses who have poor prospects in terms of income and profits, then these measures will have little effect. In granting banks such favourable conditions, it is easy to imagine that the ECB is betting on increasing the solvent demand for credit, that is to say, that the ECB is providing banks with strong incentives to lend to households and individuals that might have appeared non-creditworthy in previous conditions. Another expected effect of the lower deposit facility rates and the increase in QE will pass through the channel of a lower exchange rate for the euro, which will promote euro zone exports and increase imported inflation, and therefore overall inflation in the euro zone. This channel is potentially even more important given that the US Federal Reserve has initiated a period of monetary tightening.

Nevertheless, a more relevant economic policy would be to make use of fiscal policy to support demand, especially as the conditions for State financing are at historically low levels: the French state in 2016 is earning money from issuing [debt of less than 4 years](#). Monetary policy would then have all the

more effect.

Why announce that there's no manoeuvring room left?

At the press conference following the meeting of the Governing Council, Mario Draghi announced that the ECB didn't expect "to reduce rates further", which had the effect of completely changing the financial markets' interpretation of the decisions announced just before that. While the aim of these very expansionary decisions is to further ease monetary and financial conditions and to lower the exchange rate for the euro, the announcement that future changes in the ECB's monetary policy could only be in a more restrictive direction transformed investor expectations.

As one of the main channels for the transmission of monetary policy involves expectations, several studies conducted on data from the US [\[1\]](#), Britain [\[2\]](#) and the euro zone [\[3\]](#) show that a central bank's communications need to be consistent with its decisions, otherwise the impact expected from monetary policy will be limited. This is called the "signal effect" of monetary policy. Mario Draghi's short statement is one such example. The following graph shows the exchange rate of the euro vis-à-vis the dollar during the course of 10 March. The sharp drop at mid-day corresponds to the publication of the decisions taken by the Board of Governors, while the equally sharp rise corresponds to the contradictory message issued a few minutes later at the press conference. We thus see that as a series of highly expansionary measures – one of whose goals is to push down the euro – was announced, the euro eventually rose vis-à-vis the US dollar as if restricting measures had been put in place.

This does not necessarily mean that these decisions will have no effect, but that some of the effect will be lessened, or even disappear. [Some transmission channels other than the signal effect](#) remain operative. While the exchange rate channel has now been limited by the restrictive effect

generated by the channel of expectations, we will see in the weeks and months to come whether capital movements induced by the decisions taken will have the effect expected on the euro exchange rate.

Figure. Euro-dollar exchange rate, day of 10 March 2016.



Source: Boursorama.

[1] Hubert, Paul (2015), "[The Influence and Policy Signalling Role of FOMC Forecasts](#)", *Oxford Bulletin of Economics and Statistics*, 77(5), 655-680.

[2] Hubert, Paul, and Becky Maule (2016), "[Policy and Macro Signals as Inputs to Inflation Expectation Formation](#)", *Bank of England Staff Working Paper*, No. 581.

[3] Hubert, Paul (2015), "[ECB Projections as a Tool for Understanding Policy Decisions](#)", *Journal of Forecasting*, 34(7), 574-587, or Hubert, Paul (2016), "[Disentangling Qualitative and Quantitative Central Bank Influence](#)", *OFCE Working Paper*, No. 2014-23.