

Central Banks Communications and Monetary Policy

Monetary Dialogue September 2018



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Abstract

Communications about plans for future monetary policy are one of the key tools through which central banks can affect the economy. The addition of non-standard policies such as quantitative easing has complicated communication for central banks and there have been some lessons for the ECB to learn from communications mistakes made by other central banks in recent years. The ECB has so far done well in handling the communications issues relating to the ending of its Asset Purchase Programme but it faces a number of communications challenges as it seeks to normalise monetary policy.

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EXECUTIVE SUMMARY

- Communications about plans for future monetary policy are one of the key tools through which central banks can affect the economy.
- In particular, the yields on long-term financial instruments depend on expectations of future monetary policy and are sensitive to guidance from central banks.
- For many years, central banks were highly secretive about their decision-making procedures, fearing that revealing too much information would restrict their flexibility.
- Central banks around the world have gradually accepted that transparency in communicating their goals and strategies to the public helps to make policy more effective.
- Experience over the past two decades with periods in which policy rates are at or close to zero has highlighted the importance of providing forward guidance on the likely length of time that interest rates will remain very low.
- The Federal Reserve and Bank of England's experiences with using specified numerical values of the unemployment rate as a trigger to raise interest rates were not successful. These central banks kept policy rates at zero after the "trigger" level of unemployment was reached because of the absence of inflationary pressures. The ECB should not use this tactic of specifying a specific level of unemployment (or any other indicator) as dictating the end of its zero interest rate policy.
- The addition of non-standard policies such as quantitative easing (QE) has complicated communication for central banks. The public will expect interest rate increases to come after a QE programme has ceased so the central bank can provide additional information on the future path of interest rates by signalling whether it is planning to continue its assets purchases at its current rate or planning to reduce them and also by signalling a timeline for the end of the programmes.
- The 2013 "taper tantrum" event shows how central banks can mishandle their communications strategy in ending a QE programme and trigger unwanted financial tightening.
- The ECB has so far done well in handling the communications issues relating to the ending of its Asset Purchase Programme but it faces a number of communications challenges as it seeks to normalise monetary policy, most notably in relation to how high policy rates will go in the next cycle.
- Over the longer term, the ECB faces a communication problem in establishing its commitment to a symmetric 2 percent inflation target because it has undershot this target for so long.
- Perhaps the key communications issue facing the ECB is the need to replace Mario Draghi with someone who agrees with his approach to monetary policy and who will provide continuity rather than a sharp change in policies.

1. INTRODUCTION

Communication with the public is an area where central banking has changed remarkably over the past three decades. As Blinder et al (2008) put it in a survey paper on central bank communications “*A few decades ago, conventional wisdom in central banking circles held that monetary policymakers should say as little as possible, and say it cryptically.*” Today, however, central banks communicate with the public via a wide range of methods such as formal statements after policy meetings, press conferences and regular speeches by members of policy-making boards. Over the past decade, the language in central bank statements about what the bank intends to do in the future is more important than any concrete decision made (or not made) during monetary policy meetings.

Despite this general consensus that central banks should be more open with the public than in the past, there are still a wide range of different approaches taken by central banks to communicating their policy stances and future intentions. There have also been a number of cases in recent years where leading central banks have communicated key policy changes poorly or lost credibility by failing to stick to policies that they had signalled. So central banks face a delicate balance act in getting their communications right.

Non-standard monetary policies such as quantitative easing (QE) have brought a new set of challenges to central bank communications. On the one hand, the ability to signal the length of time that purchases programmes are in place, and also the quantity of purchases that are planned, can be a useful way to communicate monetary policy plans during an extended period of policy rates being set at zero, as is the current situation in the euro area. On the other hand, the Federal Reserve’s handling of its phasing out of its QE programme, which led to the so-called “taper tantrum” in financial markets, provides an example of where the complexity of these non-standard instruments can make it hard for central banks to get across the message they really intend.

The ECB’s June Governing Council meeting has signalled a phasing out and then ending of its balance sheet expansion and also provided new guidance about the future path of policy rates. As I discuss later in this paper, the ECB has handled these communications well so far. This reflects a sound communications strategy from the ECB but the calm response from financial markets may also matter because market participants have learned a lot over the past few years about how QE programmes impact the economy and have seen successful ends to such programmes in both the UK and the US. This has probably eased the ECB’s difficulties in communicating to financial markets how its QE programme will end.

The structure of the rest of this paper is as follows. Section 2 provides a review of the arguments for and against transparency in central bank communications and reviews how communications have changed over time at the Fed and the ECB. Section 3 discusses some of the difficulties that have occurred with central bank communications in recent years, focusing on the Fed and Bank of England’s plans (subsequently cancelled) to raise policy rates once unemployment rates fell below a pre-determined benchmark and also on the 2013 “taper tantrum” provoked by Federal Reserve announcements related to the phasing out of QE. Section 4 concludes by discussing the communication challenges facing the ECB at present and in the coming years.

2. CENTRAL BANK TRANSPARENCY OVER THE PAST 30 YEARS

In this section, I first discuss the arguments that have been used both against and for transparency in central bank communications, describing how the balance of opinion in both the academic and central banking communities have moved towards favouring more transparency. I will then briefly discuss how communications strategies have evolved over time at the Federal Reserve and the ECB.

2.1. Theoretical Arguments Against and For Transparency

Given the large amount of communication from modern central banks, it may be hard to understand why central banks were so secretive in the past. One useful set of evidence that explains why the Federal Reserve was so secretive was documented by Marvin Goodfriend (1986). Goodfriend's paper describes a legal case brought against the Fed under the Freedom of Information Act, requesting them to disclose their policy directive after each meeting of the Federal Open Market Committee (FOMC). This directive was a set of instructions to the managers of the "System Open Market Account" (i.e. the operations desk at the New York Fed) including a set of "tolerance ranges" for the money supply and the federal funds rate. The Fed opposed this request and after legal proceedings that lasted from 1976 to 1981, they eventually won the case.

In legal proceedings, the Federal Reserve made a number of arguments against releasing this document immediately after their meetings. They argued that issuing an immediate statement would provide an unfair advantage to a small group of investment banks that would get access to the statement before the general public. They also believed that issuing statements could constrain their policy actions in the future, perhaps because once their policy objectives have been made clear, they worried the public would lose faith in them if they then began pursuing different objectives over the following months. Finally, they worried that these announcements would cause volatility in financial markets due to financial markets regularly reassessing the policy stance based on statements.

In 1984, Fed Chairman Paul Volcker (quoted in Blinder et al, 2008) supported the policy of not issuing statements on the following grounds:

"One danger in immediate release of the directive is that certain assumptions might be made that we are committed to certain operations that are, in fact, dependent on future events, and these interpretations and expectations would tend to diminish our needed operational flexibility."

In contrast to this official position, the academic economist community had by 1984, been moving towards a position that central banks should be transparent and communicate their policies and goals to the public in a clear fashion. Here, I describe three different strands of academic literature that pointed in this direction.

2.1.1. Anchoring of Inflation Expectations

During the 1960s, macroeconomists generally believed there was a "Phillips curve" trade-off between inflation and unemployment. Policy-makers could run a hot economy with a low unemployment rate at the expense of putting up with somewhat higher inflation. Milton Friedman's famous 1967 address to the American Economics Association shed doubts on this idea and the subsequent macroeconomic events also showed this was a flawed approach. Friedman pointed out that if inflation has been higher due to a low unemployment rate, then workers will become used to this higher inflation rate and come to expect it. With these higher inflation expectations, the real wage increases required in a tight labour market will require even higher inflation, which could fuel further rises in inflation expectations and set off an inflationary spiral.

As macroeconomic textbooks were revised from the 1970s onwards to focus on “expectations-augmented” versions of the Phillips curve, academic focus on central banking turned to how central banks could manage the public’s inflation expectations. Clear and consistent communications were one important tool in keeping the public’s inflation expectations well anchored.

With this thinking becoming more prevalent, central banks have become increasingly focused in the past two decades on communicating their intentions in relation to inflation. There have been many elements to this movement. Central bank legal mandates have in many cases been refined to make clear that controlling inflation is a key or perhaps primary goal. Many central banks now also communicate an explicit target rate of inflation to the public with the academic case for inflation targeting well summarised in a 1999 book co-authored by Ben Bernanke, who later became Fed Chairman and established a clear inflation target.

2.1.2. Discretion versus Commitment

The central bank officials of the 1970s objected to the release of statements about policy actions on the grounds that it reduced their flexibility to make the best decisions at each point in time because it may commit them to be more consistent in their actions. However, the academic literature on expectations and macroeconomic policy of the late 1970s had largely concluded that complete flexibility and discretion in monetary policy-making was not always such a good thing.

In a famous paper, subsequently mentioned in the Nobel prize citation, Finn Kydland and Edward Prescott (1977) showed that in “dynamic” environments in which policy actions can affect the behaviour of the private sector and vice versa, purely flexible policy-making featuring complete discretion to take separate period-by-period decisions, was not usually the best approach. Instead, they demonstrated that a policy that committed to a particular set course of action could generally produce a better outcome.

The Phillips curve relationship between inflation and unemployment was one of the examples featured in Kydland and Prescott’s paper. The fact that there may be a short-run trade-off between inflation and unemployment (before inflation expectations catch up with reality) will generally lead policy-makers with discretion to attempt to exploit this trade off. However, as developed in many subsequent papers such as Barro and Gordon (1983), better outcomes can be obtained through a commitment to not exploit this trade-off and instead focus on delivering low inflation. In the “discretion” equilibrium in these models, the public knows that central bank will attempt to exploit the Phillips trade-off and this means higher expected and actual inflation but the average unemployment rate still ends up being the so-called “natural rate”. The “commitment” equilibrium has the same average unemployment rate but a lower inflation rate.¹

These insights have had a practical effect on central banks. Explicit inflation targets and more articulated policy mandates can be seen as ways to commit central banks to take the correct long-term course of action rather than setting policy in a highly flexible way. The global move towards increased independence for central banks can also be seen as an implication of these ideas, since politicians tend to have a relatively short election-focused time horizon for decisions and are thus less likely to adopt a long-run commitment-based approach to monetary policy.

¹ A simplified version of this kind of model is presented in my undergraduate lecture notes available at <http://www.karlwhelan.com/IMB/part15.pdf>.

2.1.3. Financial Market Efficiency and the Term Structure of Interest Rates

Another academic development that influenced central bank practice on communications was the development of the efficient markets hypothesis for financial markets. As the macroeconomists focused on the effect of rationality in expectations formation on inflation, finance economists such as Eugene Fama presented evidence that financial markets seemed to process information in a relatively efficient manner.

For monetary policy, the efficient markets hypothesis has particularly important implications for the determination of longer-term interest rates. Some of the interest rates that households, governments and businesses borrow at are closely related to the short-term policy rate set by central banks: Adjustable rate mortgages for households or short-term “treasury bills” for government, for example. However, many other borrowing contracts have longer-term fixed rates. Ehrmann and Ziegelmeier (2014) calculate that 45 percent of euro area mortgages are adjustable rate, with the majority being fixed rate with fix terms of various lengths. Most government debt is also long-term with fixed interest rates.

If markets process information efficiently, then arbitrage relationships require that longer-term interest rates be determined by the expected value of future short-term interest rates. Similarly, other “long lived” assets such as stocks and exchange rates will be affected by the expected value of short-term interest rates in the coming years.

From this point of view, not only should central banks communicate with the public about their future plans for monetary policy but these communications are a crucial vehicle through which monetary policy affects the economy. This modern viewpoint on the monetary policy transmission mechanism was laid out by well-known macroeconomist Michael Woodford (2001) at the 2001 Jackson Hole conference for central bankers. He informed his audience:

“the current level of overnight interest rates as such is of negligible importance for economic decision-making; if a change in the overnight rate were thought to imply only a change in the cost of overnight borrowing for that one night, then even a large change (say, a full percentage point increase) would make little difference to anyone’s spending decisions. The effectiveness of changes in central-bank targets for overnight rates in affecting spending decisions (and, hence, ultimately pricing and employment decisions) is wholly dependent upon the impact of such actions upon other financial-market prices, such as longer-term interest rates, equity prices, and exchange rates it is the expected future path of short-term rates over coming months and even years that should matter for the determination of these other asset prices, rather than the current level of short-term rates by itself.”

This may not have been quite the consensus view among central bankers in 2001 but the years since then have seen central bank practice take on board this message.

2.2. The Evolution of Central Bank Communications

One reason there are still so many unresolved issues relating to how central banks should communicate with the public is that there is a relatively small sample of information to draw on because central banks were so secretive until relatively recently. Here, I briefly discuss how communications strategies have evolved at the Federal Reserve and ECB over the past 25 years.

2.2.1. The Federal Reserve

The Federal Reserve has always been required to communicate with the public by issuing reports to Congress and its Chairman appearing before Congressional committees but it has a relatively limited track record of explicitly commenting on its monetary policy actions in a timely manner.

Prior to 1994, the Fed would hold policy meetings, take decisions and then announce nothing, leaving it up to market participants and the media to figure out whether monetary policy had changed. The Fed's first post-meeting statement in February 1994 was only 99 words and was said merely that "to avoid any misunderstanding" they were planning a small increase in short-term interest rates (the size of the increase was not mentioned).² After this, statements were only released when there was an explicit change in policy. Only in 1999 did the Fed start issuing policy statements after every meeting, whether the stance on interest rates had changed or not.

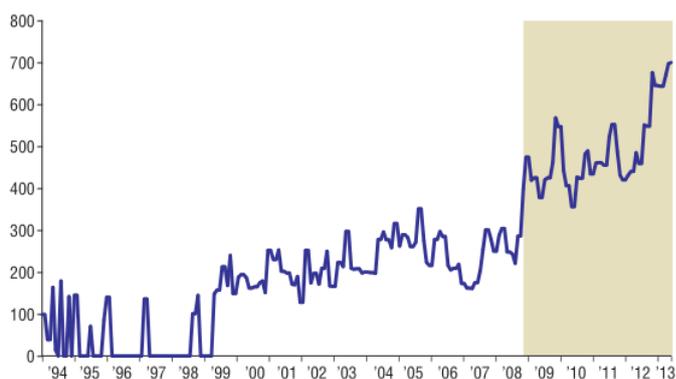
Over time, the length of post-FOMC statements has grown: See the figure below, taken from Wynne (2013), documenting this increase. From 1999 onwards, statements began to include commentary on the state of the economy and various hints as to the future stance of policy. At first, this took the form of a discussion of the likely future stance of policy (e.g. October 1999 when the committee "*adopted a directive that was biased toward a possible firming of policy going forward*") without providing much information on the timing of future changes. One sign of things to come occurred in 2003 when, during a period of low interest rates and sustained economic weakness, the statement was amended to say "*the Committee believes that policy accommodation can be maintained for a considerable period.*"

Forward guidance began to play a major role after the global financial crisis of 2008. Having cut interest rates effectively to zero, the Fed began to use the language in its statements as a key tool for influencing long-term interest rates. The January 2009 statement said "*The Committee continues to anticipate that economic conditions are likely to warrant exceptionally low levels of the federal funds rate for some time*" and some version of this language was included in statements for years afterwards.

Once non-traditional monetary policies such as Quantitative Easing were introduced, the Fed used guidance about the size and timing of these policies to enhance its messaging about when policy rates would lift off zero: Financial markets understood that the sequence in which events would occur would be that first QE purchases would slow down, then the QE programmes would cease and only then would the Fed considering raising interest rates. In this sense, the QE policy allowed three different ways to communicate with the public about the timing of interest rate increases.

² See <https://www.federalreserve.gov/fomc/19940204default.htm>.

Figure 1: Number of Words in Post-FOMC Statements



NOTE: The shaded area is the period of the FOMC's unconventional monetary policy with interest rates at the effective lower bound of near zero.

Source: Wynne (2013).

The Fed also introduced a number of additional elements of transparency in their communication over the past fifteen years. These included

- **Voting Information:** From March 2002 onwards, FOMC statements including information on how committee members voted, information that was previously included in the minutes, where were released with a delay.
- **Minutes:** The Fed now releases the minutes of its meetings in a more timely manner.
- **Press Conferences:** The Fed introduced post-meeting press conferences a few years ago and Chairman Powell is introducing a policy of holding a press conference after each meeting, starting in January 2019.
- **Inflation Target:** Since 2012, the Fed is now explicit that it has an inflation target of 2 percent and that its preferred measure for targeting inflation is the core personal consumption expenditure deflator.
- **FOMC forecasts:** The Fed now provides quarterly forecasts from each of the individual FOMC members, giving a stronger sense of where the committee agrees and disagrees on the outlook for key macroeconomic variables.

Together, these steps have transformed how the Fed communicates with the public. That said, as we discuss below, these steps have not come without their own mistakes and the Fed's strategy is likely to evolve over time as understanding of what works well (and what does not) grows.

2.2.2. The ECB

Unlike the Federal Reserve, which has a long history and a complex set of legal mandates, the European Central Bank is a modern institution and many aspects of its operations reflect macroeconomic thinking at the time of the Maastricht Treaty in the early 1990s, by which time the importance of central bank communications and private sector expectations was becoming well understood. Thus, from its first day, the ECB has had a clear legal mandate with price stability as its primary goal and has been transparent about how it interprets its price stability mandate, with the strange exception of its continuing insistence that its inflation target is "below, but close to, two per cent" instead of naming an actual figure. In terms of communicating decisions, the ECB has always conducted press conferences

after its monetary policy meetings with the President reading a detailed statement explaining the decisions taken and then fielding a wide range of questions.

In these senses, the ECB was, from its inception, somewhat ahead of the Federal Reserve and other international central banks in its approach to communicating its goals and decisions to the public. That said, one can point to two areas where the ECB has been relatively slow to move towards the modern approach of more open communications.

The first is the voting behaviour of the members of the Governing Council. The ECB leadership are understandably reluctant to have disagreements about monetary policy presented as being disputes between members of different countries or splits between different national blocks. However, this means information about how decisions are made is often vague. For many years, it was communicated that all key decisions were unanimous. In recent years, even with the release of “summaries” of ECB meetings, we are generally just told there was a “large majority” in favour of a particular policy. With the public unclear how much support particular policies have and some members of the Governing Council occasionally giving speeches that show they disagree with official policies, this is an area where the ECB might be better off having greater transparency.

The second is forward guidance on interest rates. Until recent years, the ECB made a point of principle that they did not “pre-commit”, with Jean-Claude Trichet in particular emphasising this at almost every ECB press conference. That said, ECB statements often contained hints about the future path of interest rates, sometimes signalled in language about upside or downside risks to inflation, sometimes signalled via “word games” such as whether or not President Trichet said the ECB was going to be “vigilant”.

From 2013 onwards, the ECB became somewhat more open about its future intentions, with July 2013 representing the official start of “forward guidance”. The ECB had been saying for some time that the *“monetary policy stance will remain accommodative for as long as necessary”* and supplemented this with the additional statement *“The Governing Council expects the key ECB interest rates to remain at present or lower levels for an extended period of time.”* While this new approach yielded lots of headlines, it is not clear whether it ever had much impact on medium or longer-term yields. The evidence shows bond yields did not move much after the announcement of July 2013 and the statement seemed little more than a confirmation of what markets expected. The ECB never clarified what “an extended period of time” actually meant and ultimately this experiment in forward guidance was over-taken by the need to communicate future policy intentions via discussion of the Asset Purchase Programme.

3. COMMUNICATIONS PROBLEMS IN RECENT YEARS

In this section, I discuss three examples of where modern central bank guidance on monetary policy has not worked well. Two of the examples relate to forward guidance on policy rates and one example relates to Quantitative Easing.

3.1. Forward Guidance Failures

Forward guidance on policy rates becomes particularly important when these rates have reached very low levels.³ Once it is clear there is no room to cut interest rates further, then guidance on the direction of future changes is pointless: Everyone knows that the next move is for policy rates to go up at some point so the way to provide additional information is to signal *when and if* policy rates are going to rise.

Two recent examples of highly concrete forward guidance on interest rates being lifted off from zero occurred between 2012 and 2014, involving the Federal Reserve and the Bank of England. Both examples illustrate the dangers involved in implementing forward guidance successfully.

3.1.1. The Fed's Unemployment Rate Guidance

In the Federal Reserve's case, the slow recovery from the 2008/09 recession meant that the federal funds rate had been kept close to zero for some years with inexact forward guidance provided such as "the Committee anticipates that weak economic conditions are likely to warrant exceptionally low levels of the federal funds rate for some time." As economic recovery began to take hold and unemployment fell towards 8 percent, the Fed debated how to inform the public about how the zero rate policy was going to end. In December 2012, the Fed introduced new guidance, stating that the FOMC "*anticipates that this exceptionally low range for the federal funds rate will be appropriate at least as long as the unemployment rate remains above 6-1/2 percent, inflation between one and two years ahead is projected to be no more than a half percentage point above the Committee's 2 percent longer-run goal, and longer-term inflation expectations continue to be well anchored.*"

This policy was likely motivated by a belief that 6.5 percent was perhaps close to the "natural rate of unemployment" and that inflationary pressures would set in once unemployment had reached this level. The forecasts from FOMC members provided after the December 2012 meeting also showed that the vast majority of FOMC members believed this 6.5 percent unemployment rate would not be reached until 2015.

As it turned out, the unemployment rate fell faster than the committee anticipated and fell to 6.5 percent in early 2014. With its key indicator of inflationary pressures, core PCE inflation, running below two percent and little sign of growing inflationary pressures, the FOMC decided to not use this 6.5 percent unemployment rate as a trigger to increase the federal funds rate. Instead, it moved on to vaguer language suggesting lots of information would be taken into account when deciding to raise rates – "*This assessment will take into account a wide range of information, including measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial developments.*"

The Fed did not end up raising interest rates until December 2015, when the unemployment rate was 5 percent, and even now with the unemployment rate standing at 3.9 percent, it has only increased rates to between 1.25 percent and 1.5 percent.

³ I am reluctant to specifically say "when rates have reached zero" because the ECB's experience shows interest rates can be cut below zero. At present, the ECB's deposit rate is the key policy rate that influences money market interest rates and it is currently at minus 40 basis points.

3.1.2. The Bank of England's Unemployment Rate Guidance

In similar circumstances, the Bank of England decided in August 2013 to use a threshold level of the unemployment rate to indicate when they would most likely raise interest rates. The language used was the following: *"The Committee intends not to raise Bank Rate from its current level of 0.5% at least until the Labour Force Survey (LFS) headline measure of the unemployment rate has fallen to a threshold of 7%, subject to the conditions below."* The conditions indicated the Bank might still raise rates if inflation went more than 0.5 percentage points above target, if inflation expectations became unanchored or if financial stability concerns required higher rates.

At the time this policy was decided, the UK labour force survey showed an unemployment rate of 7.8 percent. The subsequent months saw faster employment growth than the Bank of England had anticipated and, in the absence of any sign of inflationary pressures, the minutes of the January 2014 meeting reported *"Members therefore saw no immediate need to raise Bank Rate even if the 7% unemployment threshold were to be reached in the near future."*

The policy was abandoned publicly in May 2014 once the unemployment rate had reached 7 percent. At this point, the minutes of the meeting included the following: *"Looking beyond the immediate decision, the Committee discussed how to set policy to achieve the 2% inflation target, while supporting the recovery, once the 7% unemployment threshold had been reached. Despite the sharp fall in unemployment, the Committee judged that there remained scope to absorb spare capacity further before raising Bank Rate ... In terms of the immediate policy decision, however, all members agreed that, in the absence of other inflationary pressures, it would be necessary to see more evidence of slack reducing before an increase in Bank Rate would be warranted."*

Worth noting is that these minutes mention the phrase "slack" twelve different times.

3.1.3. Some Lessons

A clear lesson from these episodes is that it is a mistake to rely on one indicator when making key policy commitments via forward guidance. The unemployment rate is only one measure of potential inflationary measures in the economy and the empirical "Phillips curve" relationships between inflation and unemployment is not a highly reliable guide to the path of inflation over a one or two-year horizon. Incorporating further measures of slack would not change this conclusion.

In the end, in both these examples, the logic of inflation-targeting monetary policy won out: Without any sign of inflation going above target, the two central banks declined to raise interest rates. This might suggest that if one indicator was to be used to signal the future path of interest rates, it would be the inflation rate and indeed both of these examples included a fall-back option to raise rates if inflation rose by enough. However, inflation itself cannot simply be used as a single indicator for setting monetary policy because there can be temporary surges in inflation or reasons why the balancing of risks require accepting a temporary overshooting of inflation relative to target in order to maintain longer-term economic stability.

Ultimately, monetary policy making is hard. We don't have a set of rules that govern exactly how the economy behaves or how it reacts to policy actions. Promising to make policy decisions largely based on a single economic indicator is a mistake and I suspect it is not one that the ECB is going to make in the coming years.

3.2. QE-Specific Problems: The "Taper Tantrum"

For most of the time that central banks have been experimenting with communicating about monetary policy, the focus has been on communicating what is going to happen with policy interest rates.

However, in the modern era with central banks targeting very low inflation rates, there is always a risk that the policy accommodation required during a recession will lead the central bank to set policy interest rates to zero and to then consider non-standard monetary policies such as quantitative easing.

Once a central bank has started a QE programme, it can use communications about these programmes to provide additional guidance on policy. The public will expect interest rate increases to come after the QE programme has ceased so the central bank can provide additional information on the future path of interest rates by signalling whether it is planning to continue its assets purchases at its current rate or planning to reduce them and also by signalling a timeline for the end of the programmes.

Communications of this sort, however, has not always gone well. The best known event illustrating these issues is the so-called “taper tantrum” seen in financial markets in response to the Fed’s communications about its QE programme in 2013. The Fed’s third and largest round of asset purchases had begun in September 2012, with the Fed purchasing mortgage-backed securities at a pace of \$40 billion per month and longer-term Treasury securities at a pace of \$45 billion per month.

By Spring 2013, the US economy was improving and the unemployment rate had fallen to about 7.5 percent. With the Fed having signalled a 6.5 percent unemployment rate as a threshold for when it would start to increase the federal funds rate, the FOMC began to discuss winding down or “tapering” its QE purchases. The public element of this process began with an FOMC statement on May 1 that mentioned the possibility of reducing QE-related purchases. This possibility was also emphasised by Fed Chairman Ben Bernanke in testimony to Congress on May 22. Finally, in his post-FOMC news conference of June 19, Bernanke said *“If the incoming data are broadly consistent with this forecast, the Committee currently anticipates that it would be appropriate to moderate the monthly pace of purchases later this year.”*

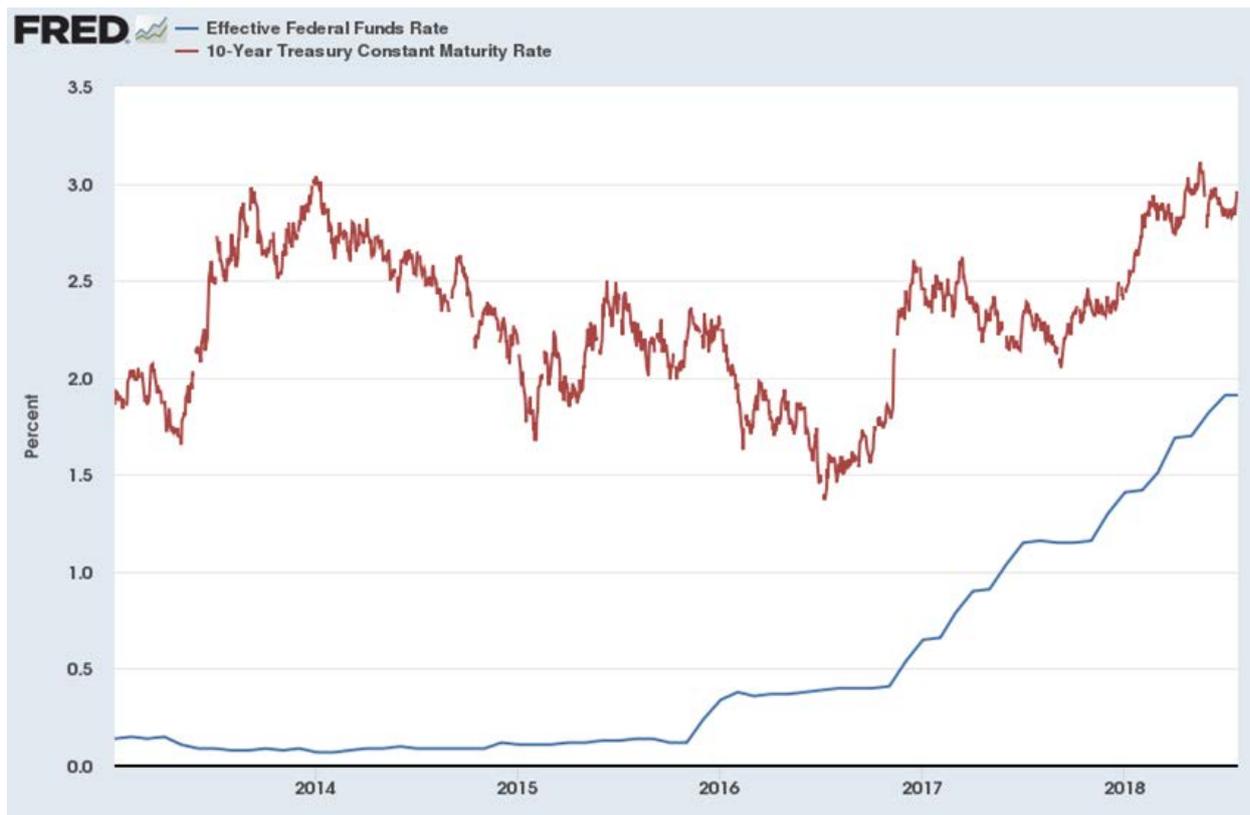
Financial markets reacted very strongly to these events. One way to measure this reaction is to look at the ten-year Treasury bond rate, which encapsulates the thinking in financial markets about the path of short-term interest rates over the next decade. The ten-year yield was 1.7 percent on the day of the first FOMC meeting mentioning a potential tapering of QE. From then onwards, the yield moved steadily upwards. By late June, the ten-year yield was about 2.6 percent and Fed officials were arguing that the market had misinterpreted their implications. Fed Governor Jerome Powell, in a speech on June 27, 2013 said⁴

“Market adjustments since May have been larger than would be justified by any reasonable reassessment of the path of policy. In particular, the reaction of the forward and futures markets for short-term rates appears out of keeping with my assessment of the Committee’s intentions, given its forecasts.”

The markets didn’t seem to pay much attention to the Fed’s pushback. By the time the Fed actually started to taper QE purchases in January 2014, the ten-year Treasury yield had reached 3 percent, almost doubling from the previous May. (See Figure 2 below). This resulted in a far larger tightening in financing conditions than the Fed had intended.

⁴ <https://www.federalreserve.gov/newsevents/speech/powell20130627a.htm>.

Figure 2: Ten Year US Treasury Bond Yield and Effective Federal Funds Rate (Daily Data)



Source: Federal Reserve Bank of St. Louis, FRED database.

It is clear now that financial markets over-reacted to the Fed's QE announcements. Rather than signalling a rapid tightening of monetary policy, the Fed waited almost two years after it began tapering its QE purchases to increase the federal funds rate and then did so very slowly. Indeed, by February 2015, the ten-year rate was back to 1.7 percent, reversing all of the increase that occurred during what became known as the "taper tantrum". Indeed, it is only now, after a number of years of Fed policy rate increases, that the ten-year rate has returned to the 3 percent values seen in early 2014.

This episode suggests that the ECB will face important challenges over the next few years as it prepares to wind back and shut down its QE programme.

4. COMMUNICATIONS ISSUES CURRENTLY FACING THE ECB

I conclude by discussing a range of communications issues that the ECB is currently facing and will face in the coming years. First, I will discuss the exit from its Asset Purchase Programme (APP) and then I will focus on some wider communications issues.

4.1. The ECB's Exit from QE

In contrast to the experience of the Federal Reserve, so far the ECB has handled the communications surrounding the ending of its QE programme well and there has been little disruption to financial markets or unintended tightening. I think there are three reasons for this success.

First, the ECB has gradually given out information about the end of the APP over time with each announcement having little impact on its own, whereas financial markets appears to have taken the guidance provided by the Fed in May/June 2013 to have been a big event.

The first sign that the ECB was ready to end QE came in the published account of the June 2017 Governing Council meeting. The ECB's guidance on the APP programme had been that it was willing to increase the pace of its asset purchases. The account of the June meeting showed the Council was discussing dropping this "easing bias" from its statements: This language was dropped in March 2018. In October 2017, the ECB decided to reduce monthly pace of asset purchases by half to €30 billion from January 2018 onward but they also extended the programme, which had been due to end in December 2017 to to at least September 2018. In June 2018, the ECB announced that monthly asset purchases of €30 billion euros would continue until September, and then to be phased out with 15 billion euros in each of October, November and December. This has been coupled with guidance that policy rates will be kept at record lows at least through the summer of 2019.

Overall, this gradual and careful approach has worked well and has prevented European long-term bond rates from jumping in the same way as occurred in the US during 2013. In fact, longer-term AAA euro area bond yields have fallen somewhat during 2018.⁵

A second reason the QE exit announcements have caused little disruption is financial markets understand that the cumulative purchases from the programme are, in many cases, reaching the self-imposed limits that the ECB set in relation to not owning more than one-third of any sovereign bond issue. The ECB still has flexibility to purchase more of the private sector assets that are part of the APP but the sovereign bond programme is the central element of the APP and the decision to wind it down has not been a surprise to financial markets.

A third reason this ECB's announcements have worked well is that financial markets probably understand the effects of Quantitative Easing better now than they did in 2013. One of the difficulties in managing communications around QE is that there are uncertainties about the exact mechanisms through which it affects the economy. As Ben Bernanke joked just before ending his term as Fed chairman, "*the problem with QE is it works in practice, but it doesn't work in theory.*"⁶

For example, one question is whether QE affects financial markets due to "flow effects" (the presence of the central banks every day purchasing assets) or whether it affects them due to "stock effects" (the central bank holding a large stock of assets leads to a re-pricing of those assets for the private sector). If the "stock effect" theory is correct, then ending QE purchases should have little impact but if the "flow

⁵ See https://www.ecb.europa.eu/stats/financial_markets_and_interest_rates/euro_area_yield_curves/html/index.en.html.

⁶ See https://www.brookings.edu/wp-content/uploads/2014/01/20140116_bernanke_remarks_transcript.pdf.

effect” theory is correct, then winding down purchases could lead to a reversing of the negative effect of QE on bond yields.

Most of the research that has been conducted prior to the Fed’s tapering in 2013 had pointed strongly towards the stock effect theory being the correct way to think about the QE mechanism in financial markets.⁷ However, academic studies are one thing and actual experience is another. Financial markets have now seen the Federal Reserve and the Bank of England both cease their QE purchases with minimal disruption. This perhaps helps to explain the limited reaction from financial markets to the ECB’s announcements thus far on the winding down of its APP.

4.2. Other Communications Issues for ECB

Beyond communicating about the ending of the APP, the ECB has a number of other communications challenges in the coming years.

4.2.1. How High Could Rates Go?

Once ECB decides conditions are right for raising its policy rates, it needs to give financial markets a sense of how high these rates are likely to go. The euro area economy faces many structural impediments to growth such as a shrinking work-age population and weak productivity growth.⁸ This likely means that the equilibrium “real rate” that stabilises the euro area economy is likely to be lower than it was in the past. The current extremely low yields on long-term bonds in the euro area are a signal that financial markets do not expect the ECB to bring average short-term interest rates back to the rates that prevailed prior to the global financial crisis. They are likely to be correct but this is an area where the ECB’s eventual tightening may have the potential to be disruptive if communications are not handled well.

4.2.2. Managing the Balance Sheet

At present, the ECB is planning to keep its balance sheet unchanged once the APP is over, meaning there will still be significant bond buying by the Eurosystem over the next few years⁹. Beyond that point, the ECB will have to decide whether and when to reduce the size of its balance sheet and how to communicate the effects of this to the public. The Federal Reserve is starting what is likely to be a long period of balance sheet reduction, so this should provide the ECB with some evidence of how to handle this adjustment.

4.2.3. Credibility of the Inflation Target

One area where the ECB has work to do is re-establishing the credibility of its commitment to its inflation target. The ECB has consistently undershot its inflation target over the past decade. Indeed, the HICP index is about 6 percent lower than it would be if it had continued to grow at an annual rate of 2 percent in the period since August 2007. This has generated suspicion that the ECB’s commitment to its inflation target is not symmetric i.e. that it is happier with inflation being below 2 percent than it is with inflation being above 2 percent.

A harsh reaction to inflation rising above target in the next few years would likely reinforce this perception. Indeed, one could argue that getting inflation above 2 percent for a few years would help

⁷ See for example D’Amico and King (2013).

⁸ See McQuinn and Whelan (2018) for a discussion of the euro area’s potential for growth.

⁹ See this speech by ECB chief economist Peter Praet for a discussion of the reinvestment likely in the next few years. https://www.ecb.europa.eu/press/key/date/2018/html/ecb.sp180314_2.en.html.

with re-establishing the ECB's target as a "focal point" that the public should expect as an average inflation rate over the cycle, rather than as a cap that is only occasionally exceeded.

A small but useful step that would help with communications in this area would be to get rid of the "close to but below" language and simply announce that the ECB's inflation target is a 2 percent rate.

4.2.4. Leadership and Continuity

A final set of communications issues surround the replacement of Mario Draghi as ECB president in 2019. Draghi has been a successful president. During his period, the ECB has helped to ease the "euro crisis" tensions of 2012 and has been introduced many new and innovative monetary policy tools to help the economy recover from its double-dip recessions. Consumer and business confidence in the economy is recovering and financial markets have confidence in the ECB's current policy framework.

Given this, it is important that the Draghi is replaced by someone who has supported all of the pieces of the ECB's policy framework that has been put in place during his term. The Governing Council may officially have 25 members but the President clearly plays a key role both in setting policy strategy and then in communicating it to the public. If an ECB president was to be appointed that opposed the current approach to policy, it would be damaging to the long-term credibility of the ECB as an organisation.

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Communications about plans for future monetary policy are one of the key tools through which central banks can affect the economy. The addition of non-standard policies such as quantitative easing has complicated communication for central banks and there have been some lessons for the ECB to learn from communications mistakes made by other central banks in recent years. The ECB has so far done well in handling the communications issues relating to the ending of its Asset Purchase Programme but it faces a number of communications challenges as it seeks to normalise monetary policy.

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