

Forward Guidance

Perspectives from Central Bankers, Scholars
and Market Participants

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A VoxEU.org eBook

Introduction

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Forward guidance is the provision of information by central banks about the future conduct of monetary policy and in particular about the central bank's policy interest rate.

Forward guidance is aimed at influencing the public's expectations. This goal is not new; it has long been understood that managing expectations is an important part of monetary policy. In fact, following the high inflationary 1970s, institutions were put in place to credibly anchor expected inflation rates to a low target level.¹ The economic logic for this sort of expectations management is simple. Prices and wages set today depend crucially on people's expectations of the future paths of prices and wages. For example, *current* inflation will be lower when expected *future* inflation is lower.

Forward guidance shares the basic economic logic that links today's decisions to future expectations, but it differs in its subject. Forward guidance focuses on the *instruments* of monetary policy rather than the *targets* of monetary policy.

But this aspect of monetary policy is also not new. Before the Global Crisis, monetary policy committees provided information about their policy interest rate in future periods as well as setting the current rate. Some did so explicitly – providing a numerical forecast of the forward path of the policy interest rate. Other monetary policy setters did it implicitly – providing more or less explicit messages in official statements and speeches.

What is new is the scope and motivation for using forward guidance as a monetary policy tool. This has changed substantially during the recent economic downturn for several central banks. The aims of this eBook are to:

¹ See Sheard (2013, this eBook).

- highlight how the implementation of forward guidance has evolved over time;
- clarify what central banks hope to achieve with forward guidance;
- discuss what economic theory says about forward guidance; and
- raise possible objections to forward guidance or to the way it is currently implemented.

To accomplish these goals, the eBook brings together a collection of contributions written by a diverse group of authors. They include:

- central bank officials from the Bank of England, the Bank of Japan, the ECB, and the US Federal Reserve;
- researchers at universities and central banks; and
- financial market practitioners.

Different types of forward guidance: Delphic and Odysian

With forward guidance, central banks provide information about future monetary policy. This can be done by announcing numerical guidelines for the forward path of the policy interest rate, or through less quantitative verbal statements. An example of the latter would be the announcement that a monetary policy committee has a bias towards an increase at the next meeting. The phrasing in such statements is not always unambiguous, as demonstrated by the following statement of the Federal Open Market Committee (FOMC) reported in Rudebush and Williams (2006): "*Policy accommodation can be removed at a pace that is likely to be measured*".

The Reserve Bank of New Zealand began announcing a forward path for the policy interest rate as part of its usual routine in 1997, followed by the Norges Bank in 2005, the Riksbank in 2007, and the Czech National Bank in 2008. Campbell et al. (2012)

refer to such announcements as Delphic forward guidance, because it provides a forecast, but no commitment of any kind.

The Bank of Japan was a pioneer in using forward guidance as an accommodative monetary policy. In 1999, the Bank of Japan found itself in a situation in which the policy interest rate could not be reduced any further to stimulate the economy and to reverse deflationary pressure. It announced that interest rates would stay at zero until deflationary concerns were dispelled. This is referred to as state-contingent forward guidance.

When the financial crisis erupted, central banks slashed policy interest rates to values close to zero and this was not enough to stabilise financial markets and turn the economy around. Central banks provided further support to financial markets and economy activity through purchases of a range of financial assets and by accepting a larger set of assets as collateral.²

As the crisis developed, central banks started to explore different forms of forward guidance. The initial attempts were modest. In December 2008, the FOMC announced that "*[t]he Committee anticipates that weak economic conditions are likely to warrant exceptionally low levels of the federal funds rate for some time*". In March 2009, "*for some time*" was replaced by "*for an extended period*". This is 'open-ended' forward guidance, since it is not clear when the policy of exceptionally low interest rates will end. In contrast, 'time-contingent' forward guidance does indicate the end date. Time-contingent forward guidance was initiated by the Riksbank. On 21 April 2009, the Riksbank lowered its repo rate to 50 basis points and release a statement saying that "*the repo rate is expected to remain at a low level until the beginning of 2011*". A few hours later, the Bank of Canada announced that "*[c]onditional on the outlook for inflation, the target overnight rate can be expected to remain at its current level [of 0.25%] until the end of the second quarter of 2010*".³ Although, there is a clear escape clause or

2 See IMF (2013) for an overview.

3 The Bank of Canada raised the target interest rate to 0.5% June 1 2010.

'knockout', this type of statement suggests commitment. Campbell et al. (2012) refer to forward guidance with commitment as Odyssean forward guidance.⁴

The Federal Reserve followed the lead of the Bank of Canada. In particular, the August 2011 FOMC statement announced that the Fed would keep its policy interest rate exceptionally low until "*at least ... mid-2013*" and the anticipated period was extended to "*late 2014*" in the January 2012 statement. The downside of time-contingent forward guidance is that the market may take the length of the announced anticipated period as an indication of the seriousness of the problems affecting the economy. Moreover, time-contingent forward guidance has not been very convincing to financial markets. Chehal and Trehat (2009) and Woodford (2012) demonstrate this for the 21 April 2009 forward guidance policy of the Bank of Canada and Woodford (2012) does this for the forward guidance policy of the Riksbank started at the same date. As argued, just stating that interest rates will be exceptionally low for some time is not enough. Market participants need to be informed of how the central bank will make decisions in the future and how keeping interest rates exceptionally low for an extended time period is justified by the central bank's views.

State-contingent forward guidance

Possibly because of these lessons, both the Bank of England and the Federal Reserve adopted state-contingent forward guidance. The FOMC statement of the 30-31 July meeting announced that "*the Committee decided to keep the target range for the federal funds rate at 0 to 1/4% and currently 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%, inflation between one and two years ahead is predicted to be no more than a half percentage point above the Committee's 2% longer-run goal, and longer-term inflation expectations continue to be well anchored*". Similarly, at its

4 Odysseus enjoyed the beautiful and irresistible Siren call, but remained on course and avoided the Siren's trap, because he got himself tied to the mast and his crew had wax in their ears.

1 August meeting the Monetary Policy Committee of the Bank of England "*agreed its intention not to raise Bank Rate from its current level of 0.5% at least until ... the unemployment rate has fallen to a 'threshold' of 7% ...*". In addition to conditions related to inflation, the Bank of England included the condition that monetary policy could not pose a significant threat to financial stability.

Faced once more with deflationary pressure, the Bank of Japan has again relied on forward guidance. On 4 April 2013, it introduced a forward guidance policy,⁵ with one striking difference with the forward guidance policy implemented by the other central banks. Whereas the forward guidance policies of other central banks have specified periods during which particular policies would be put in place, the Bank of Japan gives a time period, namely two years, for achieving an *objective*, namely a 2% inflation rate. Shirai (2013, this eBook) argues that this calendar aspect helps to make the forward guidance of the Bank of Japan more convincing. Since the unemployment rate in Japan is actually quite low and the public is aware of the deflationary pressure, it is unlikely that giving a specific date changes the public's view on the severity of the problems facing the Japanese economy, whereas this may be the case when forward guidance specifies how long a particular policy will (need to) remain in place.

The forward guidance by the ECB is still of an open-ended nature. On April 4 2013, it announced that "[t]he Governing Council expects the key ECB interest rates to remain at present or lower levels for an extended period of time". One possible reason why the ECB did not opt for the type of state-contingent forward guidance adopted by the Bank of England and the Federal Reserve is that its main aim was to clarify to financial markets the ECB's assessment of the state of the economy and to re-assert its strategy, and not to (temporarily) suspend its strategy. Bletzinger and Wieland (2013, this eBook) shed light on the question of what "*an extended period of time*" means. Using a reaction function based on past choices of the ECB's Governing Council, they argue that the ECB should anticipate raising its key interest rates at the latest by May 2014.

5 See Shirai (2013, this eBook).

Does forward guidance affect expectations?

If forward guidance doesn't affect the public's expectations, then there seems little point in doing it. Is there empirical evidence that announcements by the central bank affect expectations?

Several papers address this question using pre-crisis routine forward guidance. The conclusion is that forward guidance does affect expectations, but the influence is limited, especially at longer horizons.⁶ Goodhart (2013, this eBook) is especially sceptical and notes that "*the official path adjusts to market rates, rather than vice versa, (except at short horizons in Sweden when the relationship is two-way)*". Not everybody is this negative, but it is clear that expectations of the public do not move one for one with forecasts provided by central banks.

Gürkaynak, Sack, and Swanson (2005) is an often cited study that finds that FOMC statements contain information about the forward path of interest rates that is *not* related to the announced target value of the policy interest rate for the upcoming period. Building on this research, Campbell et al. (2012) find that those upward revisions in the forward path (i.e. those that are unrelated to changes in the current value of the policy interest rate) lower market participants' expectations of future unemployment rates and increase the expectations of inflation rates. This indicates that these anticipated increases in the policy interest rate provide information about the state of the economy. If the upward revisions would have signalled a tightening of monetary policy, then these expectations should have moved in opposite directions. This finding is important, since it implies that information on the future development of the policy interest rate can not only affect asset prices, but also affect the economic outlook more generally.

The efficacy of recently implemented forward guidance policies may be hampered by the fact that they stretch years into the future, as is pointed out by Williams (2013, this

⁶ See Moessner and Nelson (2008), Goodhart and Lim (2011), Goodhart and Rochet (2011), and Kool and Thornton (2012).

eBook). Woodford (2012) argues however, that these recent forward guidance policies may very well be more effective than routine forward guidance; whereas routine forward guidance just provided forecasts, recent forward guidance have an element of commitment or at least a promise. For example, the press release accompanying the Bank of Canada's forward guidance policy of 21 April 2009 included the phrase "*[the] Bank of Canada ... commits to*". Interestingly, even Delphic forward guidance seems to impose restrictions on the monetary policy committee. Mirkov and Natvik (2013) argue that the monetary policies of the Federal Reserve Bank of New Zealand and Norges Bank appear to be constrained by the most recently announced forecasts of the policy rate. Data limitations make it difficult to get an accurate estimate of the effect of recent forward guidance policies, but empirical studies seem to indicate that they do affect market expectations.⁷ Campbell et al. (2012) conclude that "*communication difficulties do not present an insurmountable barrier to monetary policy based on Odyssean forward guidance.*"

Motivation for forward guidance

There are several reasons why a central bank may want to provide information on the forward path for its policy interest rate and/or for other instruments of monetary policy. First, consider potential motivation for forward guidance during 'normal' times when the central bank is not constrained by the effective lower bound on its policy interest rate.⁸ Goodhart (2013, this eBook) points out that "*the central bank, supported by an array of expert modellers and with macro-economic and financial experts both among its staff and on its MPC/Executive Board, should be able to arrive at a better prediction of its own future actions in setting interest rates than anyone else. It would, therefore, represent a wilful withholding of useful information not to give such forecasts to the general public and the market.*" As discussed above, Campbell et al. (2012) point out

7 Woodford (2012) contains several very insightful descriptions of financial markets responses to recent forward guidance implementations. Also see Chahal and Trehan (2009), Gagnon et al. (2010), and Annette Vissing-Jorgensen (2011).

8 For reasons related to financial stability, central banks may not want to decrease interest rates to exactly zero. The effective lower bound may, thus, be slightly higher than zero.

that forward guidance also provides new information on the path of other economic variables such as the inflation and unemployment rates. Even if a forward path of the policy interest rate is not a very reliable predictor, then publishing such a path may still be useful in that combined with the central bank's other forecasts it provides information on the central bank's reaction function. That is, given the policymakers' view on the direction the economy is heading, the forward path reveals to the public what in their opinion the appropriate response would be.

The argument that forward guidance is important because it provides information about the central bank's reaction function, or more generally its strategy, is one that several central banks gave to motivate the recently implemented forward guidance policies.⁹

It makes sense that this argument is especially relevant during unusual and volatile periods when history is of little use in predicting monetary policy. Monetary policy has been extremely aggressive. Moreover, as pointed out by Miles (2013, this eBook) "*no one should want the Bank Rate to be virtually zero for any longer than needed.*" At the beginning of the millennium, the Bank of Japan followed a start-stop policy and the lack of perseverance may have been important in the slow recovery.¹⁰ Consequently, policymakers now stress their intent to follow through and try to convince the market that they are not about to get cold feet and withdraw too soon from following exceptionally accommodative monetary policy.

A problem with providing more detailed information on intended monetary policy during an unusual downturn is that central banks may not be quite sure what the best strategy is and that they learn about this as time progresses, which of course does not make it any easier to figure out what kind of forward guidance to give. But the contributions of central bank officials in this eBook make clear that monetary policymakers are sure enough about the monetary strategy they intend to follow so that a lack of knowledge on the part of the public about that strategy should be reduced.

⁹ See, for example, Dudley (2013), Dale and Talbot (2013, this eBook), and Praet (2013, this eBook).

¹⁰ See Kazuo (2013, this eBook).

Sheard (2013, this eBook) points out that there may be a downside risk to the central bank providing information.¹¹ If market participants take forward guidance seriously, but react to the headline and not the nuanced message, then "*the market's reaction to a communication surprise is prone to be amplified by the fact that market participants react at the same time and, because it is a surprise, likely mainly in the same direction.*" Similarly, Williams (2013, this eBook) points out that the Federal Reserve wants to "*avoid the public substituting independent thought with an attempt to read the Fed tealeaves*".

Another argument in favour of forward guidance that policymakers have put forward is that forward guidance reduces the sensitivity of money market forward rates at various horizons to news and data surprises.¹² Asset markets may respond stronger, however, to changes in those variables that are part of the state-contingent forward guidance policy of the central bank, such as the unemployment and inflation rates in the policies of the UK and the US.

Forward guidance and monetary stimulus

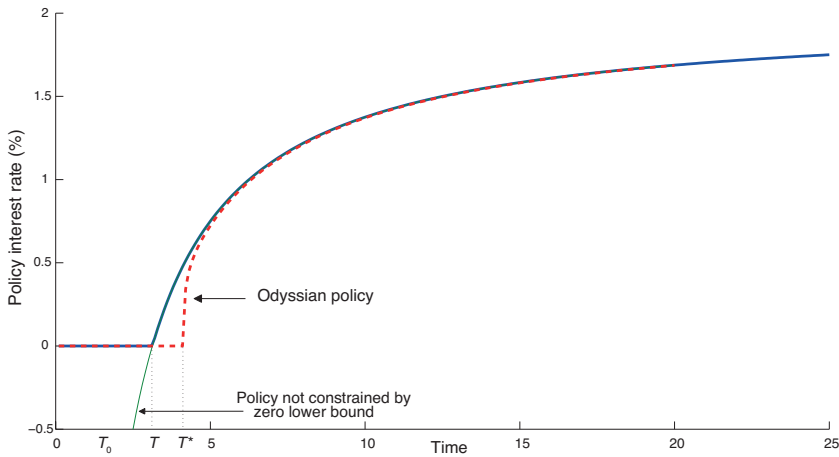
Although central banks have kept policy interest rates at historically low levels for a sustained uninterrupted period and have relied on aggressive quantitative easing, economic growth is low, unemployment is still a substantial problem, and inflation rates are, at most, slightly above usual target levels. This would suggest that additional monetary stimulus would be wanted. Could forward guidance provide such additional stimulus?

11 Lepetyuk and Stoltenberg (2013) develop a model in which revelation of information by the central bank may be detrimental for welfare, because it distorts agents' insurance incentives and may make it more difficult to insure against idiosyncratic risk.

12 For example, Benoît Cœuré, member of the executive board of the ECB makes this argument in Cœuré (2013). Empirical evidence is given in Swanson and Williams (2012).

In theory the answer is yes. To understand why, consider Figure 1, which plots alternative forward paths for the policy interest rate for an economy that is expected to gradually recover.

Figure 1 Alternative forward paths



The solid line displays the path the policy rate would follow according to the central bank's reaction function that characterises the central banks 'normal' strategy, that is, the strategy without forward guidance. T_0 is the current period. In period $T > T_0$, the economy has recovered to the extent that the bank's reaction function no longer calls for a negative policy interest rate. In period T_0 , the policy interest rate is equal to zero and the central bank cannot reduce this rate any further. But if the bank could lower the expected values of future (strictly positive) interest rates, then this would put downward pressure on long-term rates in the current period, which in turn would stimulate purchases of durables and investment. The central bank can accomplish this by promising to keep the policy interest rate "lower for longer". This corresponding time path is the dashed line in Figure 1. More specifically, the policy interest rate remains at zero until $T^* > T$ and then quickly catches up with the bank's standard reaction function. It is simple and elegant. However, there is a problem. From period T to period T^* , the bank's normal reaction function calls for a positive interest rate, whereas the bank had promised to

keep the interest rate at zero during this period. The bank clearly has an incentive to break its promise. After all, at this point in time, it is better for the economy to have a positive policy interest rate and in the terminology of Krugman (1998) it would be 'irresponsible' not to do so. Such a policy is called a time-inconsistent policy. But if the public is smart enough to see this coming, then expectations of future policy interest rates are not adjusted downward and neither are long-term rates. For this forward guidance policy to be effective, the central bank would have to make the market believe that, like Odysseus tied to the mast, it has no way to change course.

Does this story have any relevance for the recently proposed forward guidance policies? First, consider the ECB. Peter Praet, a member of the ECB's executive board, writes in his contribution to this eBook that "*Our purpose was not to communicate a suspension – even temporarily – of our strategy. Quite the opposite: it was a sharp and definite pronouncement to reassert it.*" The ECB's motivation for forward guidance is that the market apparently thought that the ECB's reaction function was above the solid line in Figure 1, which displays the path according to the unchanged ECB monetary policy strategy.

John Williams, president and CEO of the San Francisco Federal Reserve Bank, expresses a similar view in his contribution to this eBook when he writes that "*the communication [i.e. forward guidance] allowed us to bring public expectations into closer alignment with Fed thinking. As a result, longer-term interest rates fell by 10 to 20 basis points – a significant drop*". In Williams (2013), he points out that forward guidance is an alternative way "*to ease financial conditions and thereby stimulate economic growth and job creation*". Is the additional stimulus only created by making the public understand better what the Fed had been doing, or is the additional stimulus also generated by telling the public that takeoff will occur at a date that is later than what is predicted by the usual Fed reaction function? Buiter (2013) argues that the FOMC statement regarding forward guidance given above makes clear that the Fed has de facto increased its inflation target by 50 basis points, which would indicate that there has been a change in the Fed's reaction function.

Whether the forward guidance policy of the Bank of England contains this type of Odyssean element is more difficult to determine. Spencer Dale, chief economist and member of the Bank's Monetary Policy Committee, and James Talbot, head of the Bank's Monetary Assessment and Strategy Division, write in Dale and Talbot (2013, this eBook) that "*[i]t [forward guidance] is not an attempt to inject additional stimulus by pre-committing to a 'lower for longer' policy with the aim of pushing inflation above target for a period; raising inflation expectations and reducing real interest rates.*" Charlie Bean, Deputy Governor for Monetary Policy, gives in Bean (2013) the following reason why such a policy would not be possible for the Bank of England: "*While such a time-inconsistent policy may be desirable in theory, in an individualistic committee like ours, with a regular turnover of members, it is not possible to implement a mechanism that would credibly bind future members in the manner required.*" The delayed tapering of asset purchases by the Federal Reserve seems to prove that Charlie Bean is right.

In Plosser (2013), Charles Plosser, president of the Federal Reserve Bank of Philadelphia, writes: "*To delay tapering of our current asset purchase scheme without clear and significant departures from prior guidelines suggested the FOMC was changing the goalposts and deviating from June's forward guidance. This undermines the credibility of the Committee and reduces the effectiveness of forward guidance as a policy tool. To delay tapering of our current asset purchase scheme without clear and significant departures from prior guidelines suggested the FOMC was changing the goalposts and deviating from June's forward guidance. This undermines the credibility of the Committee and reduces the effectiveness of forward guidance as a policy tool.*" The view of the Bank of England's MPC, thus, seems unambiguous and backed up by good sense.

But there are other statements to consider. Dale and Talbot (2013, this eBook) write "*... explicit forward guidance can provide greater clarity about the MPC's view of the appropriate trade-off between the horizon over which inflation is returned to the target and the support provided to output and employment.*" and "*... when faced with adverse supply shocks, the Committee should vary the pace at which inflation is returned to the*

target so as to avoid generating undue volatility in output." But how is a reduction in the pace at which inflation is returned to the target different from the time-inconsistent change in the reaction function discussed above?¹³ Isn't promising a slower pace the same as promising a lower policy rate for longer?¹⁴ If even the intended speed towards target has not changed, then the question arises how the MPC can explore 'the scope for economic expansion' within the framework provided by forward guidance.

Also, the statement made in Dale and Talbot (2013, this eBook) that 'forward guidance should enhance the effectiveness of monetary stimulus' could be interpreted to mean 'more stimulus'.¹⁵

There are arguments, however, backing up the view that the newly adopted forward guidance policy has not changed the reaction function of the Bank of England, at least not relative to the reaction function describing the Bank's choices in recent years. The first is that the inflation rate has been above 3% for half of the time since 2007.¹⁶ This could indicate that the MPC had not been very aggressive about the return of inflation to the inflation target before forward guidance was adopted either. More explicit evidence that getting inflation back to target quickly had already become less important is given in Bank of England (2013) in which it is stated that "*in the February 2013 inflation report the MPC said that in response to the cost shocks hitting the economy, it intended to return inflation to the target more slowly than it had anticipated at the time of the November 2012 Inflation Report.*" Also, the fact that long-term rates increased when the Bank of England's forward guidance was revealed could suggest that the market had expected a real change in the Bank's reaction function towards a more accommodative monetary policy, but adjusted their expectations when they learned that the announced

13 Buiter (2013) goes further and argues that "[t]he Bank of England, which notionally still has a mandate that is lexicographic with price stability in pole position, has de facto adopted a dual mandate that treats inflation and the output gap or unemployment symmetrically a form of flexible inflation targeting."

14 Of course, the question arises whether the argument put forward by Charlie Bean that the current MPC members cannot credibly bind future MPC members does not apply to this slower pace. In particular, wouldn't it be optimal to ignore the earlier intention to slow down the pace towards the inflation target if the economic activity takes off and inflationary pressures build up?

15 See, for example, Yates (2013).

16 See Bank of England (2013).

forward guidance policy did not indicate a substantial change in policy compared to MPC policy choices in the recent past.¹⁷

Finally, it is not impossible that forward guidance makes monetary stimulus more powerful, and is thus more effective, without the MPC injecting any additional stimulus and without a change in the MPC's reaction function. If forward guidance will prevent the public from forming forecasts about future values of Bank Rate that *exceed* what the MPC intends to do, then the *same* accommodative path of Bank Rate will have a stronger expansionary effect on the economy. There is another reason why forward guidance could generate more stimulus without pursuing a more accommodating monetary policy. With the statement “*The inflation target applies at all times*” and other such strong statements, the MPC makes it clear that its members remain quite serious about getting any inflation back to target (at a reasonable pace) and that with respect to inflation, they are not taking any risks. Especially since the inflation rate has been above target repeatedly in the last couple years, the MPC may have felt the need to reconfirm its commitment. If this communication is successful, then it could reduce uncertainty about future inflation rates, which in turn could lower the spread on long-term bonds and thus stimulate the economy. This shows that a central bank could inject stimulus now by being *less* accommodative in the future. This strategy could backfire if expected inflation rates are also adjusted downward for the near future when short-term nominal interest rates are still low. The reason is that this would cause real interest rates to increase which would slow down the economy.

The forward guidance of the Bank of Japan is not hampered by possible time-inconsistent policies. The other banks are affected by this problem, because the (Odyssean) forward guidance policies try to stimulate growth *now* and to 'pay' for this extra growth *later* by more future inflation. The problem is that they may be tempted not to pay. The forward

17 An alternative explanation is that markets expect interest rates to rise earlier than the Bank of England does, because they expect the unemployment rate to reach 7% sooner than the Bank of England does. This explanation is not that convincing, since long-term rates went up only slightly following the announcement of the Bank's forward guidance policy. The subsequent more substantial increase in long-term rates seemed to have been driven by an increase in US rates.

guidance policy of the Bank of Japan does not focus on unemployment or economic growth. Instead, it aims to create inflationary pressure now by stressing that they are serious about sticking to their normal strategy of having an inflation rate above what inflation currently is. That is, they will be keen to 'pay'.

Forward guidance and price stability

If the policy rate is at the effective lower bound, then the nominal rate cannot go any lower. But the real rate could be reduced if inflation would increase. As discussed above, at least some of the recently implemented forward guidance policies are of an accommodative or expansionary nature. Central banks being a bit more lenient on inflationary pressure could harm central banks' reputation as being conservative on inflation.¹⁸ Bianchi and Melosi (2013, this eBook) argue that once central banks have established a good reputation as inflation fighters, then this reputation is quite persistent. This is good news. Nevertheless, these days central banks are not taking risks and they have accompanied their forward guidance policies with statements and conditions making very clear that low expected inflation is still a cornerstone of monetary policy even in unusual times, although they seem to allow for a bit more inflationary pressure when they say that inflation is allowed to return to target at a slower pace (Bank of England) or when they say that the expected inflation rate may be a bit more above the usual target (Federal Reserve).

Forward guidance going forward

This eBook is intended as part of an ongoing effort to understand and refine forward guidance. The recovery of the Canadian economy following the adoption of forward guidance by the Bank of Canada in mid-2009 raised hopes that forward guidance is a powerful tool to kick-start the economy. It is too early to tell, however, whether forward

¹⁸ Since Japan's problem is that inflation is too low, both their short-run forward guidance policy and their long-run policy call for an inflation rate that is above the current inflation rate.

guidance is effective in stimulating growth and if so what type of forward guidance is best. Nevertheless, the contributions in this eBook highlight several key lessons about forward guidance and its role for monetary policy:

- A recurrent problem facing central banks throughout this crisis is that the public expects a loosening of monetary policy to take place earlier than monetary policymakers. Although forward guidance has been shown to affect markets' expectations to some extent, not a single implementation of forward guidance has managed to closely align market expectations with policymakers' intentions. At least not yet.
- Forward guidance aimed at stimulating growth creates a tension between this short-term objective and the central bank's objective of low and stable inflation rates. Through statements and speeches, policymakers emphasise that their inflation objectives are still in place, but this could reduce the effectiveness of forward guidance in lifting a struggling economy to sustained growth.
- Economic theory predicts that a forward guidance policy that commits to keeping the policy rate 'lower for longer' than what is prescribed by the normal central bank's policy can generate substantial growth. Several policy makers – although not all – explicitly argue that this element is not part of their forward guidance policy. Without such a 'lower for longer' element, it is more difficult to see how forward guidance can stimulate growth, except when it reduces market expectations about the forward path of policy interest rates, which in turn would put downward pressure on long-term rates (as mentioned in the first bullet point above).
- Communication of monetary policy is never easy. This is especially true for new policies like forward guidance. Even when policymakers carefully craft forward guidance policies with escape clauses and guarantees about inflation targets, there is no guarantee that the nuance will not be missed by the public. Consequently, a policy that is not meant to be a 'lower for longer' policy can still be interpreted by the market as a 'lower for longer' policy. If this leads to additional borrowing with

interest payment obligations that will become problematic when interest rates do rise, then central bank's credibility may be negatively affected.

- Forward guidance may be beneficial even if it doesn't fundamentally affect anything. Forward guidance may signal to the world that central banks will leave no stone unturned and it is this continued search for solutions and central bankers' perseverance that will prevent our hopes from collapsing and will prevent the economy from becoming stuck in the kind of self-fulfilling trap of low growth that David Miles describes in his contribution to this eBook.

The best time for forward guidance may lie in the future. Central banks' balance sheets have ballooned and there is a lot of uncertainty about the question of when and at what pace these balances are going to be unwinded. The recent sharp market reactions to announcements by the FOMC on when to start tapering off asset sales have made it clear that this process is not without risks. Providing guidance on how central banks will proceed in doing so may be crucial in completing this process without severe disruptions. Barwell and Chadha argue in their contribution to this eBook that central banks should already provide guidance on what monetary policies will look like after takeoff of the policy interest rate from the effective lower bound. The Federal Reserve already does this four times a year. Last month, it reported individual forecasts of FOMC participants for the target federal funds rate for 2014, 2015, 2016, and the 'longer run'. As the day of takeoff comes closer (and hopefully this will be sooner than later), then providing information on the path towards normalised monetary policy could become very useful and central banks will have to consider seriously if - and if so, how - they would do this.

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