

Review of the ECB's strategy and alternative approaches

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Affecting private agents' expectations is an important part of monetary policy. Transparency about the objectives and the reasoning behind monetary policy decisions has therefore become the norm. There is, however, no unique "best" way to handle central bank communication. Institutional aspects and historical experience matter. Norges Bank has followed the advice of academics to publish our own projection of the interest rate – or preferred interest rate path – as a means of influencing private agents' expectations. In our communication, we stress that our projected interest rate path is conditional on economic developments and our understanding of the functioning of the economy – and not an unconditional promise. It is also essential that the public understand the reasoning behind a specific interest rate path. We have therefore developed and published a set of six criteria that we use to assess alternative interest rate paths. These criteria are useful tools both for internal discussion and for external communication.

1. Introduction

Many years ago, central banking was a game of secrecy. The purpose of communication was not to be transparent, but indeed to divert people's attention from your true reaction pattern. Today, most central banks, including the ECB, consider transparency crucial. The ECB publicly announces its monetary policy strategy and regularly communicates its assessment of economic developments. Norges Bank goes even further than this by publishing its own interest rate forecast.

If one asks the question: "What are the similarities and dissimilarities between the ECB and Norges Bank?", one should bear in mind what Alan Blinder and Charles Wyplosz said at the American Economic Association conference last year: "The appropriate volume and methods of central bank communication depend crucially on the nature of the monetary policy committee."¹ So what is useful and correct in Oslo may not be the best solution in Frankfurt. The MPCs are set up in different ways. There is not necessarily "one fit for all". I shall therefore explain what we do in Oslo in terms of communication and strategy and share with you our experiences so far. I will also comment on the ECB practices.

2. The forecast contingent on the central bank's own interest rate forecast

When our MPC² decided to move forward and publish a forecast of the central bank's interest rate path, the decision was based on several arguments. One was the well established theoretical argument that monetary policy mainly works through expectations. Monetary policy is only effective if the central bank is able to influence

interest rate expectations. Michael Woodford expressed this very clearly when he stated that monetary policy is the "management of expectations". "For not only do expectations about policy matter, but (...) very little else matters"³

The central bank has an almost "one-to-one" impact on the shortest money market rates. The shortest rates, however, are of limited importance. How can central banks influence interest rate expectations? When inflation targeting was in its infancy, inflation targeters typically started out by assuming a constant interest rate (CIR) in their inflation reports. If the inflation forecast was above target at the announced time horizon, it was assumed that the central bank would raise interest rates. By the same logic, it is also possible to communicate indirectly to the market by basing forecasts on implied future interest rates in the market (MIR). For a long time, however, academics have advocated that central banks should publish forecasts based on the optimal interest rate path (OIR). Norges Bank does that now. We did not, however, make this move in one giant step. We moved gradually.

The first step was taken in the beginning of 2003 when the MPC started to publish its monetary policy intentions for the next four months - the monetary policy strategy.

The strategy includes an announced interval for the policy rate over the following four months until the next *Inflation Report* is released, conditional on economic developments that are broadly in line with our projections. The interval might in some sense be interpreted as the Bank's four-month forecast interval for the interest rate. So in this sense, Norges Bank had already gained experience of publicised interest rate forecasts, but only for four-month periods.

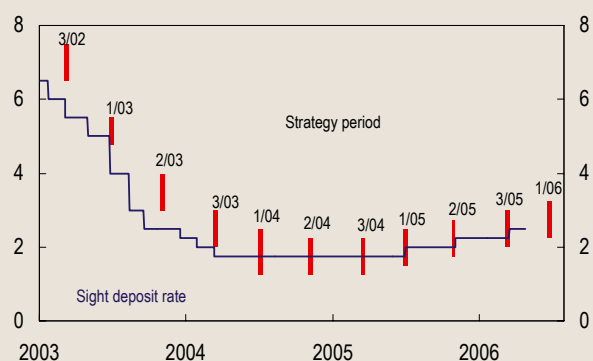
* The article is based on a presentation at the conference "The ECB and Its Watchers VIII" in Frankfurt on 5 May 2006. Please note that the abstract has been added to the web version of the article since the printed version was published.

¹ Blinder, Alan S, and Charles Wyplosz (2005): "Central Bank Talk: Committee Structure and Communication Policy", Paper presented at the session "Central Bank Communication" at the ASSA meetings, Philadelphia, January 9, 2005.

² At Norges Bank, the Executive Board functions as the MPC

³ Woodford, M., (2005, p. 3). "Central-Bank Communication and Policy Effectiveness". Paper presented at FRB Kansas City Symposium on "The Greenspan Era: Lessons for the Future," Jackson Hole, Wyoming, August 25-27, 2005.]

Chart 1. 4-month forecast intervals and outcome. Interval for the sight deposit rate at the end of each strategy period and actual developments. Per cent. 1 Jan 03 – 27 Apr 06



Source: Norges Bank

As shown in Chart 1, we have on a few occasions deviated from the announced strategy. Market agents have not criticised us for this. On the contrary, we have been praised for not being stubborn. When the facts change, we change our mind. So we do not think of an ex ante announcement as a strait-jacket.

As from last November, we have taken this process one step further and published our own forecast of the interest rate three years ahead, as shown in Chart 2. This means that the MPC has now in a sense “assumed ownership” of the interest rate in our projections. Even though explicit interest rate forecasts are rarely seen in central banks, we must keep in mind that investors and analysts have a long tradition of producing such forecasts.

Forecasts for inflation, output, the interest rate and other variables are based on an assessment of the current situation and a perception of how the economy works. There is substantial uncertainty associated with future interest rates, as illustrated in the fan charts. The chart on the left indicates our “conviction” and the chart on the right our “doubt”.

The move towards presenting forecasts based on our best judgment of future interest rates has been a learning process. While our forecasts were based on a constant interest rate (CIR) assumption in 2001 and 2002, our projections

were based on market interest rate expectations (MIR) in 2003 and up to November last year. On some occasions, we stated that it was our view that the interest rate would move on a different path than that indicated by market expectations

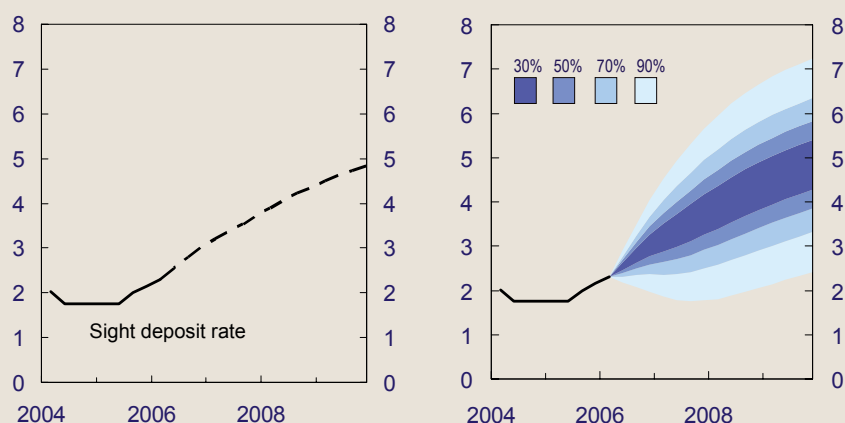
However, monetary policy is probably most effective when the central bank communicates its monetary policy intentions directly rather than commenting on others’ interest rate expectations. By publishing our own interest rate forecast (OIR), we give the public more information about our intentions, conditional on current views and knowledge. This should – we hope – make future interest rates more predictable and monetary policy more effective.

It is also easier to interpret and evaluate our forecasts on the basis of an interest rate assumption that we consider to be realistic.

Our MPC finds it useful to think within the framework of an interest rate path when they decide on the strategy and specific interest rate decisions. They have adopted the view that it is the interest rate path, and not just the current short-term rate, that matters. For the members of the MPC, transparency about how they reach their decision is a natural consequence of this view. One might say they follow the “Duisenberg principle”: “Transparency requires that our communication closely reflects our internal decision-making process.”⁴

So far, our experiences of publishing our own forecast of future interest rates have been good, and the move has been welcomed by market participants, academics and the media. We think we have managed to communicate that the projected interest rate path is an uncertain forecast, and not a promise. However, our interest rate forecasts in the last two inflation reports have been quite close to market interest rate expectations. An

Chart 2. The sight deposit rate in the baseline scenario in *Inflation Report* 1/06 and fan chart. Per cent. Quarterly figures. 04 Q1 – 09 Q4



Source: Norges Bank

⁴ Duisenberg, Wim (2001): “Letter of Dr. W. F. Duisenberg, President of the ECB to the Chairperson of the Committee on Economic and Monetary Affairs”, www.ecb.int.

exciting test of the effectiveness of our new communication strategy will be when our interest rate forecast deviates significantly from market expectations

3. Criteria for a good interest rate path

Princeton University Professor Lars Svensson suggested at this conference last year that the MPC of central banks should engage in an iteration process where the MPC shall “find an instrument-rate path such that projections of inflation and the output gap ‘look good’”. This can be seen as a “down-to-earth” approximation of a complex optimising problem. The MPC then needs criteria that define a “good interest rate path” – criteria to which the MPC can relate. Norges Bank is at present using six criteria of what constitutes a “good” interest rate path.⁵ I would like to add that establishing these criteria is an ongoing process, and should not be interpreted as “commandments” that are carved in stone.

The theoretical framework does not provide concrete or easily communicable guidance. Also, when a committee makes a decision, an agenda for the discussion is needed. Finding a good path means finding a solution to a problem which entails taking many considerations into account at the same time. It is, however, not possible for a committee to discuss everything at the same time. The proposed criteria can therefore be seen as an “ordre du jour” or agenda points for “main issues for discussion”. For external communication and transparency purposes, it is also an advantage that the criteria are easy to understand.

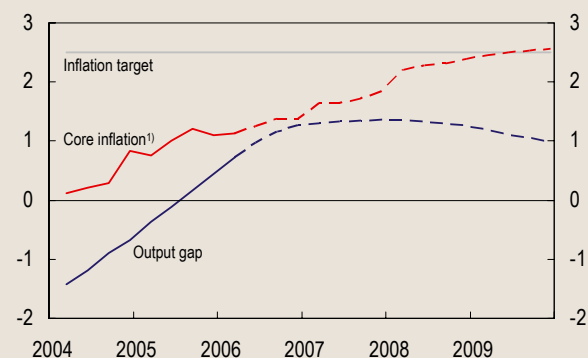
The six criteria are not on an equal footing. Criterion 1 is of primary importance. Monetary policy is all about giving the economy a nominal anchor. Shocks may have driven inflation away from target. If monetary policy is to anchor inflation expectations near the target, interest rate policy must be geared to moving inflation towards the target. Inflation should be stabilised close to the target within a reasonable time horizon, depending on the type of disturbances to which the economy is exposed.

Criteria 2 to 5 are of a more secondary nature and are only of interest if they underpin and support criterion 1, or at least do not weaken the prospects for price stability. Criterion 6 is of a different nature again, and will be discussed later in this speech.

Chart 3 shows our projections for inflation and the output gap in the previous *Inflation Report*. Provided long-term inflation expectations are on target, the inflation gap and the output gap should be in reasonable proportion to each other until they close. This is criterion 2.

What is meant by “reasonable” is partly a matter of preference, or the “lambda” in the loss function. But it

Chart 3. Inflation and output gap. Projected CPI-ATE¹⁾ and output gap in the baseline scenario in *Inflation Report 1/06*. Quarterly figures. Per cent. 04 Q1 – 09 Q4



¹⁾ CPI-ATE: CPI adjusted for tax changes and excluding energy products. A further adjustment is made for the estimated effect of reduced maximum day-care rates from January 2006
Sources: Statistics Norway and Norges Bank

also means that monetary policy should be *efficient* in the sense that it should not be possible to reduce both the inflation gap and the output gap within the policy horizon.

Striking a good balance between the inflation gap and the output gap will contribute to public support of the inflation targeting regime and thereby enhance the credibility of the nominal anchor.

But what if we are wrong on central assumptions? Criterion 3 states that interest rate developments should result in acceptable developments in inflation and output also under alternative, albeit not unrealistic, assumptions concerning the economic situation and the functioning of the economy. The strategy should ensure that we are able to bring the economy “back on track” without incurring excessive costs if we discover that we were wrong on central assumptions.

Criterion 4 is partly implied by criterion 3. When we are uncertain about the economic situation and the functioning of the economy, aggressive interest rate changes might often turn out to be harmful. Some caution may also be motivated by financial stability considerations. However, if the credibility of the nominal anchor is threatened, there could be a case for a more aggressive policy.

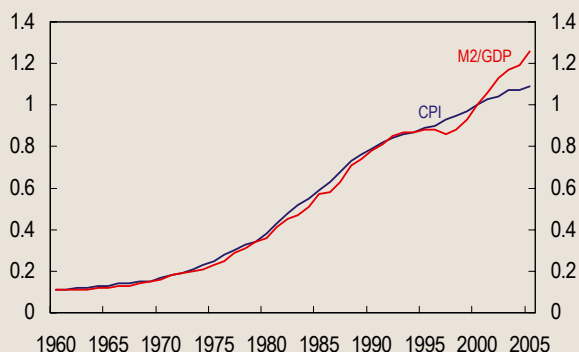
Interest rate policy must also be assessed in the light of developments in property prices and credit. This is criterion 5.

So how do we use these criteria to develop our interest rate forecast? The process can, somewhat simplified, be described as follows. First, model-based forecasts using judgment are drawn up, with various interest rate reaction functions that reflect different policy preferences. The six criteria are useful cross-checks to ensure that the forecasts are not completely “off track”. Then, the MPC discusses the alternative interest rate paths, and the six criteria serve as a broad “ordre du jour”

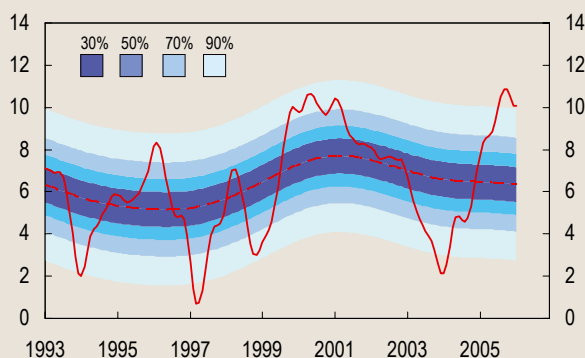
⁵ Qvigstad, J. F. “When does an interest rate path “look good”? Criteria for an appropriate future interest rate path”, *Norges Bank Working Paper 2006/5*

Chart 4 Cross-checks

4a. CPI and real scaled money supply (M2/GDP). GDP at constant prices. Index, 2000 = 1. Annual figures. 1960 – 2005



4b. Money supply (M2). 12-month growth, estimated trend growth and intervals. Per cent. Monthly figures. Jan 93 – Jan 06



to provide a basis for discussions. When the MPC has specified its judgment and policy preferences, new model-based forecasts are drawn up, where the MPC's judgments are taken into account. The process is therefore an iterative top-down bottom-up process. The criteria are only rough guides, and we do not commit to any particular rule for the interest rate setting. We only commit to an interest rate path that "looks good", on the basis of our understanding of the economy and the absence of any shocks.

Criterion 6 is about cross-checking. In the central bank world of inter-bank settlements, we are familiar with "yellow-light situations". Why simple cross-checking when our traditional methods are so sophisticated? Our analysis has a foundation in advanced economic theory and mathematical tools. Still, we must acknowledge how little we actually know. Athanasios Orphanides, who is also on this panel, will tell you all about the difficulty in measuring the output gap. Making an assessment of the true level of underlying inflation is also complicated.

It is therefore necessary to cross-check our interest rate setting by assessing our policy in the light of simple rules which are less dependent on a specific analytical

framework. On the other hand, the rules will not capture all the details in the projections, but can provide an indication of whether the proposed current interest rate path is reasonably adapted to the economic situation.

As we now publish our own interest rate forecast, market interest rate expectations are one cross-check of particular interest. If our own interest rate forecast deviates significantly from market expectations, it is important to understand the reason for the discrepancy. For example, if market participants have expectations about international developments that differ from our own, there may not be reason for concern. But if they have misunderstood our intentions or reaction function, we must do a better job in terms of communicating our strategy.

Last, but definitely not least, we have the monetary cross-check. In the long run, there is an undeniable relationship between the money supply and prices, as illustrated by Chart 4.

In an inflation targeting regime, there is a danger of devoting excessive attention to the business cycle frequency component of the inflation process, which dominates inflation developments within the target horizon of 1 – 3 years. However, we must not forget the low-frequency component of the inflation process, which goes beyond the normal target horizon. In order to secure a credible nominal anchor, it is essential to control the low-frequency movements of inflation. Chart 4 also shows actual and trend growth in the money supply in the period 1993–2005, and the historical variation around trend growth.

The ECB has provided an important way of thinking about and analysing long-run trends in the inflation process. We aim to further develop low-frequency analyses of the inflation process in Norway.

We must always bear in mind that it is not possible to fine-tune the interest rate to achieve the inflation target with a high degree of precision. Cross-checks are vital also within the framework of flexible inflation targeting. The cross-checks cannot provide guidance as to whether we should raise interest rates by 25 bp at a specific meeting or not. But they can perhaps help us to avoid some serious mistakes.

4. Concluding remarks

Transparency about the objectives and the reasoning behind monetary policy decisions has become the norm. There is, however, no unique "best" way to handle central bank communication. Institutional aspects and historical experience matter. In our setting, we find it useful to publish our own forecast of the interest rate path and make public the criteria the MPC applies when deriving this forecast.