Jan F Qvigstad: Comments on Lars E O Svensson's lecture "Policy expectations and policy evaluations – the role of transparency and communication"

Speech by Mr Jan F Qvigstad, Deputy Governor of Norges Bank (Central Bank of Norway), at the conference "Ten Years of Riksbank Independence", Stockholm, 11 September 2009.

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Introduction

It was a great pleasure to accept the invitation to discuss professor and fellow central bank deputy governor Lars Svensson's lecture in connection with the tenth anniversary of Riksbank independence.

In his lecture, Lars Svensson discussed communication, credibility and monetary policy evaluation. He looks at general issues for central banks seeking to influence key rate expectations, using the Riksbank as an example.[1] I will not venture to remark on the Riksbank's assessments but will offer my comments on the same issues in the light of Norges Bank's experience of interest rate forecasts.

There are a number of similarities between the communication strategies of the Riksbank and Norges Bank. And underlying these strategies is a model developed by, among others, Lars Svensson. In his lecture today, he described how to arrive at an interest rate path that "looks good". He showed, as he has on many previous occasions, that this can be formalised by finding the interest rate path that minimises a given loss function.

When does the interest rate "look good"?

Svensson raises the issue of whether monetary policy is well balanced, not only ex-post but also ex-ante. In his presentation today, he presents a system for evaluating and ranking different policy alternatives, showing how Taylor diagrams can be used to evaluate whether one interest rate forecast results in lower volatility in inflation and the output gap than another. If a forecast results in inflation closer to target and a narrower output gap through the forecast period, this forecast is selected. On other occasions, the choice between two forecasts can be more problematic. The forecast that is selected will depend on preference and the considerations that are given weight.

I completely agree with Lars Svensson that policymakers must rank the different policy alternatives based on their preferences. In some cases, policymakers may wish to keep the interest rate high while in others a low interest rate may be preferred. However, it is equally important to take account of preferences over time, i.e. having a system to check whether the preferences underlying the baseline scenario in one report are the same as those of the previous report. And once preferences have been formalised in a loss function, it is relatively simple to find the optimal interest rate path for a given model. The choice of path will then depend on policymakers' preferences. A policymaker's preferences may of course change over time, but I am in favour of basing the analysis on the same set of preferences as previously. This approach will contribute to consistency in communication over time.

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[1]   Cf. Woodford's (2005) formulation: " For not only do expectations matter, […] very little else matters."

Criteria for a "good" interest rate path

Inspired by Svensson, Norges Bank has developed a set of criteria for a "good" interest rate path. The intention is to make it easier for others to understand how we think, although the criteria also define the agenda for the internal discussion.[2]

The first criterion for a good interest rate path is to set the interest rate with a view to bringing inflation back to target in the medium term following a shock. The primary objective is to achieve the inflation target.

The second criterion reflects the flexibility of inflation targeting. There are many routes to the objective. Which one should we choose? According to the criteria, emphasis should be placed on finding an interest rate path that also stabilises output and employment.

So far, our approach tracks Svensson's theoretical approach fairly closely, with some deviation from the analytical method he presents in his article. The most important difference is that we have chosen to focus directly on the target, using a loss function to describe monetary policy. The approach proposed in the article primarily relies on a description of policy under different rules followed by calculation of the loss using the loss function.

Because the model is primarily a model and reality is primarily reality, some tailoring is required to connect model and reality. Some additional criteria have therefore been formulated. These criteria are necessary because our models are uncertain and because confidence in monetary policy cannot always be taken for granted. The criteria do not conflict with Svensson's monetary policy research, but can be regarded as a bridge between the model and reality.

Allow me to show you how the criteria were used in the work on the March *Monetary Policy Report* by outlining the thought process involved. Although the charts I will be presenting are a simplification , they serve to illustrate our working methods. Norges Bank's assessment of the current situation and the forecasts – with below-target inflation and a considerably negative output gap – might, under criteria 1 and 2, indicate in isolation that the interest rate should be set very low and even be negative towards the end of 2009. This is illustrated by the green line. However, the Executive Board chose to take a less drastic course of action on the basis of the other criteria taken into consideration.

Criterion 3 states that previous methods of operation should be taken into account and that the interest rate should normally only be changed gradually. With emphasis on interest rate smoothing in the loss function (i.e. criteria 1+2+3), the result is the black line. This interest rate path is still low, and lower than the path that was in fact chosen.

Criterion 4 states that monetary policy should be robust and criterion 5 that cross-checking should be carried out. In a turbulent economic situation, we were uncertain whether our model was the right one for the Norwegian economy and wanted to guard against model misspecifications. In an economy where unemployment is around 3 per cent and inflation is on target, setting the interest rate as low as zero was regarded as going too far.

A practical approach to model uncertainty is to cross-check using simple monetary policy rules such as the Taylor rule (criterion 5). In addition to the basic Taylor rule, we usually employ a variation of this rule involving external interest rates, and a rule where the output gap is replaced by GDP growth. A mechanical application of the Taylor rule would have resulted in a forecast approximately as indicated by the blue line in the diagram, i.e. considerably higher than the interest rate path that was chosen. A higher interest rate path would also have resulted in more negative output and inflation gaps. Achieving the inflation target would have taken ten years.

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[2] See Holmsen et al. (2008) for a discussion of the implementation and communication of optimal monetary policy.

An interval for the interest rate is determined based on the criteria, where optimal policy (with interest rate smoothing) defines the lower boundary and the Taylor rule yields the upper boundary. After an overall assessment, the interest rate forecast indicated by the red line was selected. The interest rate decision, in Norway as elsewhere, is based on discussion by a board. Criteria 3, 4 and 5 introduce conditions that cannot easily be observed. We have to apply judgement. The criteria contribute to consistency and structure the discussion.

The Riksbank also applies judgement when selecting the interest rate path. But Svensson does not discuss possible shortcomings in the macroeconomic model. In Chart 10, he shows how the various interest rate paths, differing by around ½ percentage point in the period to summer, could result in differences in the inflation rate of close to 4 percentage points as early as next autumn. Monetary policy seems to be having a very strong impact. It would be interesting to hear whether he thinks that relying so heavily on such a model in interest rate setting is robust, and how possible errors in the model should be guarded against.

We also know from experience that market participants' perceptions can differ from ours, particularly somewhat further ahead. There can be a variety of reasons for these differences and Svensson discusses a number of them.

It would also be useful to study the volatility surrounding publication of key macroeconomic variables. We would prefer to see lower volatility around monetary policy meetings, and that any surprises are postponed to a time closer to the publication of new macroeconomic data. Solberg Johansen (2008) – winner of the Bertil Ohlin prize for best thesis in international economics at the Stockholm School of Economics – examines volatility in the yield curve. Her findings provide some support for a decrease in volatility around monetary policy meetings, but no strong evidence to suggest that financial market volatility around the publication of new data has changed after Norges Bank began to publish interest rate forecasts. Another study that might provide useful input is Ehrmann and Fratzscher's (2007) analysis of developments in US market rates in the period between monetary policy meetings under two different communication regimes.

I will close by concurring with Blinder and colleagues (2008) when they write that: "… the publication of projected paths for the central bank's policy rate appears to be the "new frontier" in central bank communication. But it has been practised in so few countries for so few years that we have little empirical knowledge of its effects as yet. As more data accumulates, this should be a high-priority area for future research." It is reassuring to know that the economist that has begun this important work is Lars Svensson.

References

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Norges Bank's criteria for a "good" interest rate path:

1. Inflation close to target in the medium term

2. Reasonable balance between the path for inflation and the path for capacity utilisation

3. Gradualism and consistency

4. Robustness

5. Cross-checks

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Alternative paths for the key policy rate

—Criteria 1 og 2

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Alternative paths for the key policy rate

Alternative paths for the key policy rate

Alternative paths for the key policy rate

Alternative paths for the key policy rate

a. Alternative repo-rate paths
Percent, quarterly averages

b. CPIF
Annual percentage change