

# Forward-Looking Monetary Policy, Leading Indicators, and the Riksbank's *Inflation Report* vs. the ECB's *Monthly Bulletin*\*

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## 1. Forward-looking monetary policy

The primary objective of Eurosystem monetary policy is to maintain price stability. The Eurosystem has defined price stability as an annual increase in the HICP below two percent.<sup>1</sup> Because of the lags in the effects of monetary-policy actions on aggregate demand and inflation, the Eurosystem cannot affect current inflation and output, nor inflation or output in the near future. A rough benchmark is that monetary policy affects output in about a year and inflation in about two years. Therefore, Eurosystem monetary policy has to be guided by output-gap forecasts about one year ahead and inflation forecasts about two years ahead (see below for the role of output-gap forecasts). As discussed in Svensson [5], this also implies that the current economic and monetary situation is of relevance only to the extent that it helps to predict output about one year ahead and inflation about two years ahead.

For successful policy, the Eurosystem must construct conditional inflation forecasts. These forecasts should depend on all relevant information, including the Eurosystem's view of the transmission mechanism for monetary policy, its view of the current economic and monetary situation within and outside the Euro area, information about current and future fiscal policy,

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<sup>1</sup> As many commentators have suggested, it would be better to formulate this definition in an unambiguous and symmetric way as a point inflation target, say 1.5%, possibly with a tolerance interval,  $\pm 1\%$ .

private-sector inflation expectations, etc. In particular, the forecasts should be contingent on alternative paths for the monetary-policy instrument rate, that is, the interest rate on the main refinancing operations. This way, the Eurosystem can select an instrument-rate path, for which the conditional inflation forecast about two years ahead is in line with the definition of price stability, and then set the instrument rate accordingly.

At regular intervals (say every quarter), the inflation forecast should be updated with new relevant information. If the new information has significant effects on the inflation forecast about two years ahead, a new instrument-rate path may have to be selected and implemented.

The construction of an inflation forecast also requires the construction of forecasts of the main factors determining inflation, like the output gap (the difference between output and potential output), the real exchange rate, indirect taxes, and other factors affecting production costs. The output-gap forecast is of special relevance, since one of the main channels of the transmission mechanism from the instrument rate to inflation is via aggregate demand and output. The output-gap forecast requires a forecast of both output and potential output. Estimating and forecasting potential output is one of the main challenges in practical monetary policy.

The output-gap forecast is also of independent interest. There is general agreement among central bankers and academic researchers that a monetary policy aiming at price stability should avoid causing unnecessary variability to real variables like output. Thus, monetary policy aimed at price stability should put some weight on stabilizing the output gap. In the literature, this has been called “flexible” inflation targeting, as distinct from “strict” inflation targeting, where there is no concern for excess variability output and other real variables. In practice, this often means a more gradual approach to maintaining price stability. For instance, if inflation is away from its target, it is brought in line with the target more gradually and slowly.<sup>2</sup>

State-of-the-art forecasting for monetary policy, including assessments of the uncertainty of the forecasts, is presented in the regular *Inflation Reports* by the Bank of England and by Sveriges Riksbank and in the regular *Monetary Policy Statement* by the Reserve Bank of New Zealand.

## 2. Indicators

Monetary policy is conveniently discussed in terms of “targets”, “instruments” and “indicators”. Target variables are operational goal variables (for instance, HICP and a measure of the output

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<sup>2</sup> See King [3] and Svensson [4] for discussion of these issues.

gap). Instruments are the variables under complete control by the central bank that are used to implement monetary policy (the interest rate on the main refinancing operation). Indicators are variables, prices and quantities, which provide information to the central bank about the current and future economic and monetary situation. Indicators that are supposed to be highly correlated with the future value of a particular variable are often called “leading indicators.” The idea is that one or several leading indicators would provide good forecasts of the future value of a variable of interest.

In practice, there is no evidence in favor of any magical leading indicator that can provide short-hand forecasts of inflation or other variables.<sup>3</sup> The rate of money growth has often been promoted as such a leading indicator for inflation. Although there is high correlation in the long run between money growth and inflation, there is little or no empirical evidence in favor of money-growth as a leading indicator for inflation for the horizons relevant to practical monetary policy (say 1–3 years). As many commentators have noted, these facts throw considerable doubt on the Eurosystem’s emphasis on its money-growth indicator, M3 growth relative to the reference value.

### **3. The Riksbank’s *Inflation Report* vs. the ECB’s *Monthly Bulletin***

Instead, forward-looking monetary policy requires the use of a number of indicators and pieces of information to construct inflation and output-gap forecasts. The Riksbank’s *Inflation Report*, for instance the June *Report* [6], is an example of state-of-the-art use of indicators and construction of an inflation forecast. The quarterly report contains systematic updates with new information of the determinants of CPI and core inflation. The presentation and discussion is organized according to the Riksbank’s view of the transmission mechanism. The report first summarizes information on recent inflation and then surveys the international determinants of Swedish inflation, namely international activity and inflation, the exchange rate, and import prices. A major section is devoted to the discussion of developments of domestic demand and domestic supply, including an estimation of the output gap. Several measures of inflation expectations are presented and discussed. (Private-sector inflation expectations are important, both as determinants of future inflation and as measures of the credibility of the Riksbank’s inflation target.) Interest-rate developments and the mortgage effect on the CPI are analyzed.

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<sup>3</sup> Recently, Cecchetti, Chu and Steindel [1] have warned against the reliance on single leading indicators of inflation.

In particular, the whole presentation and discussion is focussed on the consequences for the inflation forecast, with an assessment of the separate effects on future inflation from each separate group of determinants. The discussion culminates in the main-scenario forecast of CPI inflation and core inflation for the next two years, followed by a detailed assessment of the magnitude and bias of the risk, that is, the uncertainty about the forecast. The information is summarized in graphs similar to the Bank of England's fan charts, with the main-scenario forecast and a probability distribution around it.

The forecast is conditional on an unchanged instrument rate, as is the case for the Bank of England. If the two-year-ahead forecast deviates from the inflation target, this motivates an increase or a reduction in the instrument rate, depending on whether the forecast falls above or below the inflation target. More recently, the Riksbank has also included a discussion of forecasts with variable instrument-rate paths, in particular, those consistent with market interest-rate expectations. The June 2000 *Inflation Report* also contains a discussion of the relation between the output-gap forecast and the inflation forecast, and an evaluation and comparison of Riksbank inflation forecasts relative to external forecasts during 1993–98.

Regrettably, the Eurosystem's *Monthly Bulletin*, for instance the June *Bulletin* [2], is quite different. It includes a fair amount of information, including monetary and financial developments with interest rates and monetary aggregates, some interest rate expectations (implied forward rates), and a measure of inflation expectations constructed from real and nominal French bonds. It provides discussion of price developments, and of output, demand and labor market developments, including confidence indicators. The June *Bulletin*, like every third *Bulletin* for some time, includes a brief report on output and inflation forecasts external to the Eurosystem. Fiscal developments are also reported.

However, the *Bulletin* is not organized so as to provide the best information for, and evaluation of, a forward-looking monetary policy. Instead, it gives the impression of an obligatory report, where volume rather than substance and purpose is the priority. In the Riksbank's *Inflation Report*, the information is selected and organized in accordance with its importance for the inflation forecast which is the center of forward-looking monetary policy. In contrast, the organizational principle of the *Monthly Bulletin* is not apparent. There is no attempt to organize the presentation according to a consistent view of the transmission mechanism, no attempt to weigh the different indicators together to assess the net effect on the inflation forecast, and no attempt to systematically assess the magnitude and bias in the uncertainty of future inflation.

The information published is incomplete in many instances (and redundant in others). For instance, although GDP growth is reported, there is no discussion and estimation of potential output and the output gap. The information provided on private-sector inflation expectations is very shallow. A two-page editorial contains some brief discussion of the consequences for future inflation, but without any serious attempt to weigh different indicators together. Nor does it provide any specific information on the time-profile of the inflation forecast and the magnitude and bias of the uncertainty about the forecast. The *Bulletin* is essentially backward-looking, in contrast to the forward-looking *Inflation Report* of the Riksbank. All together, this makes the evaluation of Eurosystem monetary policy difficult, and the *Bulletin* gives the impression of being designed to maximize the Eurosystem's discretion and minimize its accountability.

## References

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