An evaluation of automatized econometric forecasts (AIF) for Norwegian core inflation for the period 2004q2-2007q1.

Automatized econometric inflation forecasts have been published twize a year, starting in July 2004. The forecasts are automatized, with a minimum of intervention after the econometric specification of the forecasting mechanism is completed. Therefore these econometrically based forecasts have been dubbed Automatized Inflation Forecasts forecasts (AIF for short).¹

Nymoen (2005) gives an evaluation of how the forecasting model underlying AIF performs relative to Norges Bank’s inflation forecasts in 2002 and 2003. Here, we evaluate the true ex-ante forecasts based on forecast errors for the period 2004q2-2006q4. The forecasted variable is the annual rate of inflation.

The graphs in the upper panel in the figure show the mean forecast errors, MFE. A negative MFE means that the inflation forecasts are on average higher than the actual inflation rates in the period. The biases of the AIF forecasts are small for forecast horizons 1, 2, 3 and 4: the MFEs are less than 0.25 percentage points. Norges Bank’s inflation forecasts are more markedly biased than AIF for horizons 2, 3 and 4.

Figure 1: First panel: Mean forecast errors, MFE, for core inflation (annual rate of change in CPI-ATE). Inflation report forecast in red, and AIF forecast in blue. Second panel: Mean squared forecast errors, MSFE. Source: Inflation Report/Monetary Policy Report 2/04 - 2/07 and AIFs published at http://folk.uio.no/rnymoen/forecast_air_index.html

¹ In 2007 Norges Bank changed the name from Inflation Report to Monetary Policy Report. The acronym of the automatized econometric inflation forecasts was changed from AIR to AIF.
The biases of AIF become markedly bigger for forecasts length 7-10 quarters, and are not much different from the bias of forecasts in the Monetary Policy Reports.

The second panel of the figure shows the mean squared forecast errors, MSFE, to which large forecast errors contribute more than small errors. This measure gives more or less the same picture at the mean forecast errors.

Compared to the previous evaluation of AIF, the difference between between AIF and Norges Bank’s forecast have become less. The forecasts in the Monetary Policy report have improved over the time span of this evaluation series.