

Weekly Inflation Forecasting: A Two-Step Machine Learning Methodology

General comments

- Throughout the paper the distinction between out-of-sample and in-sample predictions seems to be blurry and difficult to follow. As a consequence, it is difficult to understand and interpret the paper's results. The paper would benefit from being much clearer on this:
 - a. For instance, are the results in table 4 on page 16 based on in-sample or out- of-sample evaluations?
 - b. How was figure 1, titled "Forecast interval...", constructed if only 20% of the sample are not used for estimation?! This can hardly be forecasts?!
 - c. What about table 4? What is the evaluation sample here?!
 - d. Etc...
- The paper would benefit from a more formal testing procedure of predictive performance, for instance, à la Giacomini and White (2006).
- The author could evaluate the "weekly" forecasts against the monthly forecasts to see whether the using of weekly data provides any additional information, i.e., whether there is an informational advantage when using more recent information; this is akin to a nowcasting exercise.
- Figure 3 would benefit from additionally plotting monthly forecasts, to see to what extend the weekly forecasts did better.
- The equivalence between monthly and weekly values postulates in 2.1 and 2.2 hinges on the assumption of linearity of the model in the predictors. However, regression trees, as in the random forecasts or the Extra Tree Regressor case, are non-linear in the predictors because they are based on interaction effects of variables. Therefore, the linearity assumption fails in that case – that should be discussed.
- On page 12, the comparison of MSEs reported in other papers for forecasting inflation series of other countries is completely redundant since these are different inflation series with potentially other DGPs.
- Are the expectations in 2.1 and 2.2 conditional or unconditional?
- What about seasonal effects within a month or week?
- What is the unit of the left-hand-side variable? Normalized CPI in levels? That isn't clear from the text.
- All tables and figures need notes that make them self-comprehensive, i.e., that the reader can understand the tables/figures without having to look for additional information in the text.