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Assessment of the paper

Bayesian Averaging vs. Dynamic Factor Models for Forecasting Economic Aggregates with Tendency Survey Data written by Piotr Bialowolski, Tomasz Kuszewski, and Bartosz Witkowski published in Economics Discussion Papers, No 2015-28, Kiel Institute for the World Economy. http://www.economics-

ejournal.org/economics/discussionpapers/2015-28

General assessment: Outstanding.

The paper presented for review includes an interesting analysis of forecasting key macroeconomic indicators on the basis of the survey data with the use of modern econometric tools. The authors present the forecast of three macroeconomic variables: the rate of economic growth, inflation rate, and unemployment rate. As regards the econometric method, the authors employ three approaches: Bayesian model averaging (BMA) approach (in 'averaging' and 'frequentiest' form) as well as dynamic factor approach.

The analysis is interesting and very important from both cognitive and applicative points of view. Firstly, the study shows how to employ business survey data to forecast macroeconomic indicators. The authors include a lot of time series from numerous Polish and international institutions, among others: Research Institute for Economic Development at the Warsaw School of Economics, Center for European Economic Research, the IFO Institute, Bureau for

Investments and Economic Cycles, Central Statistical Office, and IPSOS. Time series based on survey data have some advantages as compared with data collected from official statistics. First of all, survey data are available without significant delays. Moreover, numerous survey data time series can be treated as leading indicators for the volume of output.

Secondly, the research methodology applied in the study has numerous advantages as compared with standard approaches. First of all, it is necessary to mention the BMA method. Under the Bayesian model pooling, there are estimated many empirical models and then the results are averaged over a large number of estimated equations. In such a case, the results are less affected by, *inter alia*, the omitted variables' bias. In the case of standard approaches, conclusions are drawn on the basis of one or a few regression models. Hence, the results are naturally biased by the authors' arbitrary decision as to the set of control variables included in the model. In the case of Bayesian methods, the outcomes are much more reliable and representative. Hence, the applied method is the strength of the reviewed paper.

The authors write that their models are 'atheoretical'. I would like to add that in numerous cases it is possible to find a clear theoretical background of how a given explanatory variable affects an explained variable. It means that this approach is correct and entirely acceptable.

The structure of the paper is clear and allow to verify the research hypotheses. The whole analysis is carried out correctly from both econometric and economic point of view. I do not see any errors in mathematical formulas. The results are interpreted correctly.

I encourage the authors to continue this type of research in the future. For example, it is worth to extend the analysis for the other European Union countries.

Finally, I would like to add that the analysis has many policy implications as it gives new methods to forecast key economic indicators.

Summing up, I assess the paper as outstanding and I recommend to publish it in a high-quality economics journal.