THE ASSESSEMENT OF UNCERTAINTY IN PREDICTIONS DETERMINED BY THE VARIABLES AGGREGATION

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ABSTRACT: The aggregation of the variables that compose an indicator, as GDP, which should be forecasted, is not mentioned explicitly in literature as a source of forecasts uncertainty. In this article we demonstrate that variables aggregation is an important source of uncertainty in forecasting and we evaluate the accuracy of predictions for a variable obtained by aggregation using two different strategies. Actually, the accuracy is an important dimension of uncertainty. In this study based on data on U.S. GDP and its components in 1995-2010, we found that GDP one-step-ahead forecasts made by aggregating the components with variable weights, modeled using ARMA procedure, have a higher accuracy than those with constant weights or the direct forecasts. Excepting the GDP forecasts obtained directly from the model, the one-step-ahead forecasts resulted form the GDP components' forecasts aggregation are better than those made on an horizon of 3 years . The evaluation of this source of uncertainty should be considered for macroeconomic aggregates in order to choose the most accurate forecast.