How to monitor and forecast annual public deficit every month

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This paper presents and evaluates a new approach to forecasting annual budget deficits using monthly data for an EU country. It aims at improving the accuracy of deficit forecasts, a relevant issue to policy makers in the Eurozone, and at proposing a replicable methodology exploiting public quantitative information on budgetary data. Using French data on central government revenues and expenditures, the method we propose consists of: 1) estimating monthly ARIMA models for all items of central government revenues and expenditures; 2) inferring the annual ARIMA models from the monthly models; 3) using the inferred annual ARIMA models to perform one-step-ahead forecasts for each item; 4) compounding the annual forecasts of all revenues and expenditures to obtain an annual budget deficit forecast. The major empirical benefit of this technique is that as soon as new monthly data becomes available, annual deficit forecasts are updated. This allows us to detect in advance possible slippages in central government finances. For years 2002, 2003 and 2004, forecasts obtained following the proposed approach are compared with a benchmarking method and with official predictions published by the French government. An evaluation of their relative performance is provided.

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