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PRESS RELEASE

Nowcasting Belgium

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The meteorological term nowcasting has become increasingly popular in economics over the last six years after the success of statistical methods in formalizing the mixture of judgment and expert knowledge involved in the calculation of early estimates of economic activity. Unlike nowcasting users in meteorology, who base their decisions on the current weather along with forecasts for a period of zero to six hours ahead, institutions responsible for economic policy need to make important decisions without directly observing the current state of the economy. In this paper, *nowcasting* refers to estimating GDP growth over the past few quarters along with an early assessment of the current and future economic situation.

The nowcasting model described here provides a joint representation of the euro area and Belgian economies that uses the intraquarterly data releases as an input to update our assessment of GDP growth in real time. The sequence of releases is determined by the schedule of the various institutions that publish their data in a non-synchronous manner. Unlike the situation in which forecasts are revised due to both changes in expert judgment and updates in univariate models, my formal approach enables forecast revisions to be broken down in terms of the “news”. That is, the model identifies the “news” implicit in each macroeconomic release and automatically determines how much weight it will have in updating the GDP growth estimates. Interestingly, the weights are determined by the quality and the timeliness of the data releases, insuring against the human tendency to favour information that confirms their beliefs or hypotheses.

The empirical results underline the importance of survey data (*soft data*) such as the Business Sentiment Index compiled by the National Bank of Belgium. In particular, the release corresponding to the first month of each quarter plays an important role in updating GDP growth expectations. Other indicators that have a major impact on growth forecasts are the PMI (Manufacturing survey) released by Markit Economics for the euro area, the 3-month euribor and real house prices in Belgium, which turn out to contribute mainly at long-term horizons. This is consistent with my finding that, three months prior to the publication of the Belgian Flash, the nowcast turns out to be as accurate as the flash release itself. The paper goes further than the literature in understanding whether the importance of survey data can be accounted for by their timeliness or rather their quality. In a counterfactual exercise, I show that the weights associated with survey data do not deteriorate when all hard data is published with the same degree of timeliness. This result underlines the quality of survey data and their usefulness at nowcasting.

This paper is structured as follows. Section 2 defines the model and compares it to the state of the art. Section 3 presents the data and the particularities of GDP revisions. Section 4 studies the precise role of all data releases in the process of updating the real GDP growth rate expectations. In addition I briefly discuss why such a role depends crucially on timeliness and quality, which are valuable characteristics of macroeconomic data releases. Finally, section 5 presents out-of-sample forecasts that would have been obtained by the model since the last quarter of 2007 using the information that was available in real time. The last section concludes.