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# PRESS RELEASE

**Using BREL to nowcast the Belgian business cycle: the role of survey data**
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This article assesses the contribution of data from the National Bank's business surveys in the context of short-term forecasts of Belgian GDP growth. For that purpose it uses a nowcasting platform which the Bank developed recently, called "BREL".

BREL is based on conventional bridge models that link a quarterly macroeconomic aggregate such as GDP growth to a series of monthly indicators. The indicators considered may however vary according to the timing of the forecast. They are selected by means of an algorithm which uses the 'elastic net' regression, accounting for both their predictive power and the availability of the observations which can be used to produce the forecast. It is important to take account of this second aspect in order to avoid a bias towards hard indicators, such as those relating to industrial production and business turnover. Indeed, although these indicators generally have a closer correlation with the macroeconomic aggregates for which forecasts are to be produced, they are published later than the business survey data.

The contribution of the survey data to BREL's predictive performance is examined on the basis of a series of simulations based on six different scenarios, each corresponding to a data availability situation. These scenarios aim to reproduce in a simplified way Belgium's normal schedule for the release of economic statistics, and hence the data that forecasters can actually use for a forecasting exercise conducted in real time.

As expected, the results obtained on the basis of the six scenarios show that forecasting errors tend to diminish as new observations for the monthly indicators become available. Moreover, the bridge model used at the end of the first month following the quarter under consideration produces forecasts which match the accuracy of the GDP flash estimate published at that time by the National Accounts Institute.

In regard to the indicators selected by means of the algorithm mentioned above, the results clearly show how useful the survey data are for short-term forecasts of GDP growth. That conclusion is equally valid for other macroeconomic aggregates, namely value added in industry, construction and services, private consumption and private sector employment. In general, the survey indicators are particularly useful for forecasts produced in the initial months of the current quarter, when hard data have not yet been published. However, they still have a role to play when the hard data can be used, implying that they provide information which is not reflected in the data on turnover and industrial production or the labour market statistics. The survey indicators selected in the last case include unemployment expectations derived from the consumer confidence survey and the demand expectations obtained from the manufacturing industry survey.

In addition, the simulations show that the bridge models' predictive performance significantly improves if these indicators are taken into account. However, that improved performance only really applies with the indicators relating to the individual questions in the surveys, and not the composite indicators of business and consumer confidence.

Finally, the last part of the article examines whether some of the indicators obtained from the business surveys for Belgium contain advance information useful for short-term forecasts of euro area GDP. That is indeed the case for indicators derived from the questions on demand and employment expectations in the business survey in manufacturing industry. However, it must be stressed that these two indicators are not alone in providing advance information on quarterly GDP growth in the euro area. Other data for other euro area countries perform better in that respect, particularly the Spanish industrial production index.

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