



Statistics Netherlands

Division of Macro-economic Statistics and Dissemination (MSP)
Prices, short term indicators and programming (MPP)

BUSINESS SURVEYS RESEARCH

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Summary: In this paper Statistics Netherlands briefly presents its current plans and research activities on business and consumer surveys.

Keywords: business survey, timeliness, short-term economic statistics, expected value approach, nowcasting, economic sentiment indicator, producer's confidence, production index, turning point detection.

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1. Introduction

In this paper Statistics Netherlands briefly presents its current plans and research activities on business surveys. The following topics will be discussed:

- The use of business surveys for acceleration and “nowcasting” of quantitative statistics.
- The extension of the Industrial Producer’s Confidence Indicator to one for the entire business.
- The use of business surveys for the creation of Production Indices in the Services Industry.
- The use of business surveys for “turning point detection”.

2. Acceleration and nowcasting of quantitative statistics

Timeliness is becoming an increasingly important dimension of the quality of statistical information. Statistics Netherlands have recognized this and have given a high priority to improving the timeliness of short-term statistics. It is felt that a substantial improvement of timeliness cannot be achieved without a redesign of the compilation process.

A considerable part of the research will be devoted to the so called Expected Value Approach. At first glance, this approach seems to offer an attractive combination of nowcasting and measuring. Instead of starting the statistical process with “observed values”, the process begins with “expected values”. This will be done on meso level for an aggregate of enterprises or, if possible, for each enterprise on micro level. In the latter case, this can be seen as an extreme case of imputing for non-response. These expected values or nowcasts could be obtained using related indicators (for example energy consumption as a proxy for production) or tendency surveys. These expected values are then replaced by statistical data from enterprises as soon as those become available. The estimates for the other missing values are also improved with this data. The processing system could be structured in such a way that an intermediate result can be produced at any given moment. In the first days following the end of the reporting period this provisional result is based primarily on models and approximations (using a.o. business survey results), but in the course of time the provisional result will gradually turn into a statistical result. At a certain point in time the aggregates will be reliable enough to be published. At a later point in time, results at a more detailed level can be released.

Statistics Netherlands are presently exploring the possibilities of using these approaches for short-term industrial production statistics, like the industrial production index. This index, published each month by Statistics Netherlands, is one of the most important short-term economic indicators. To a certain extent, this indicator is a first impression of economic growth/decline.

Industrial turnover is used as the primary source for the production index, if possible in combination with stock data. Producer price indices are used to arrive at volume measures. Statistics on industrial turnover are published monthly. The first release is around 37 days after the end of the reference month. While this is not particularly slow compared to other European countries, it is considerably slower than in the United States, where quarterly GDP is published after 25-30 days, and the first monthly industrial output estimate around the 15th of the following month.

Tendency survey data at the micro level over a number of years are available for our research. How these data are going to be used within the Expected Value Approach is the subject of current studies.

3. Creation of a confidence indicator for the entire business

The “Producer’s Confidence” is the arithmetic average of the answers (balances) to the questions on production expectations, order-books and stocks (the latter with inverted sign). The composition of this indicator is equal to the industrial confidence indicator published by the European Commission.

Current research is aimed at the execution of a confidence indicator for the Netherlands, in which also other industries are represented. The first goal is the composition of a confidence indicator for the services industry. Statistics Netherlands are currently recalculating their own quarterly results from the Business Services Industry Surveys (period: 1992 till now) and comparing them with the monthly results from the Dutch research bureau TNS/NIPO to create a time series from 1993 onwards.

In the future the Retail Trade Survey and the Other Services Survey (TNS/NIPO) can also be added to a national indicator, that should have a lead (and predictive value) on monthly and quarterly results.

4. Creation of Production Indices in the Services Sector

Statistics Netherlands have little information about production figures in the Services Industry. Besides a number of quarterly turnover statistics of e.g. computer

companies and employment agencies, information is scarce in comparison with other statistical domains, such as industry.

The aim is to create a Production Index for this sector, like the Industrial Production Index, using a.o. the time series from the Services Survey (see point 3). This research will start when the Services Survey time series become available.

5. Turning point detection

Probably the most important function of short-term economic statistics is tracking the business cycle. For this, survey indicators are uniquely well qualified. They usually track the business cycle quite closely, exhibiting relatively few idiosyncratic, unconnected cycles. Also, they are usually the most current statistics available, due to the relatively easy data collection process. Most of the other relevant statistics usually come available with a lag of two months or more. At Statistics Netherlands, we recently developed a new business cycle analysis system. Four of its twelve indicators are survey variables; producer confidence, tendency of new orders, consumer confidence and propensity to purchase durable goods. The system is designed to give an overall impression of the state of the business cycle, while special attention was given to the detection of turning points. These are crucial moments in business cycle analysis, as it is at these times that an economy goes from recession to growth or vice versa. It is not the aim of our system to predict these turning points, but to accurately identify them as they occur. For this, survey indicators are very valuable. In our reference period, 1990 to 2001, the survey variables reliably identified all turning points, generally with a lead of several months.

Most economic variables exhibit idiosyncratic cycles which are not connected to the general business cycle, limiting their use in turning point detection. Survey indicators are not free of this, though they generally exhibit less of these fluctuations than most other short-term economic statistics. For this reason, we monitor several survey variables at the same time, in combination with several other economic variables. This reduces the risk of incorrectly calling, or missing, a business cycle turning point. All in all, survey indicators are a very important tool for keeping track of the business cycle.

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