Indicators in Dutch economy: Doing more with less

Jurriaan Biesheuvel

Seminar on the Role of National Statistical Offices in the production of Leading, Composite and Sentiment Indicators
8 - 10 December 2015 Geneva
Dutch economy

- Gateway to Europe
- Technology (electronic, bio, chemical)
- After USA largest exporting country of agriculture products (flowers)
- GDP: $800 billion
- 17 million inhabitants, GDP per capita: $52,000
Probing economic climate

Questionnaires with business related questions

Q. How do you expect your production to develop over the next 3 months?

Until 2008:
• 5 different organizations
• Similar questions in different questionnaires
• Varying quality
• No standard measures, hard to compare data

High administrative burden (annoyance at companies)
Since 2008: Integration

Cooperation of 5 organizations
One main executor: Statistics Netherlands
Stratified sample survey:
  • One questionnaire for all branches
  • adapted to DG ECFIN\(^1\) requirements where necessary

Direct results
  • Comparable
  • Consistency
  • Reduction sample size
  • Reduction administrative burden

Automation
  • Reduction of working hours
  • Reduction of error sensitivity

1. DG ECFIN: Directorate-General for Economic and Financial Affairs
Dutch business survey

- Monthly, quarterly, annually questionnaires
- Stratification: company size, region, business branch (NACE)
- Weighted by number of employees
Indirect results

**Economic Indicators**

- Confidence indicators
  - Manufacturing industry
  - Construction
  - Retail trade
  - Service sector
  - Mining and quarrying
  - Wholesale
- Job vacancy indicator
- Index order position

**Composite Indicator:**
producer confidence
Comparison with European indicators

**Economic Indicators**
- Confidence indicators
  - Manufacturing industry
  - Construction
  - Retail trade
  - Service sector
  - Mining and quarrying
  - Wholesale
- Job vacancy indicator
- Index order position

**DG ECFIN indicator:**
Economic Sentiment Indicator
- Manufacturing industry
- Construction
- Retail trade
- Service sector
- Consumers

**Business climate indicator**
(Industry: 5 questions)
Example: confidence indicator

Monthly survey for manufacturing industry: 11 questions in total

3 questions used for confidence indicator:

Q1. How do you expect your production to develop over the next 3 months? It will...

Q2. Do you consider the current overall book order to be...

Q3. Do you consider your current stock of finished products to be...?
Example: confidence indicator

Balance:
Total + minus total −

Seasonal correction
weight

Seasonal correction
weight

Seasonal correction
weight

aggregation

confidence indicator for manufacturing industry
International comparison

Confidence indicator manufacturing industry November 2015*

*Large majority of data was taken before Paris terror attacks at 2015-11-13
Example: composite indicator

Producer confidence

Indicator Branch A
weight

Indicator Branch B
weight

Indicator Branch C
weight

aggregation

Producer confidence
Producer confidence as leading indicator

- Producer Confidence vs GDP

% growth

GDP y-on-y | GDP q-on-q | producer confidence

Leading indicator: Vacancies

Q. How do you expect your firm’s total employment to change over the next 3 months?
Future planning

- New temporal questions
  - R&D
  - innovation
- Adjust derived indicators completely to DG ECFIN definitions
  - Economic sentiment indicator = producer confidence
  - Business climate indicator
- Further refinement aggregation (district level)
- Publish statistical uncertainties
  - include uncertainty seasonal correction ⇒ bootstrapping
Conclusions

• Statistics Netherlands is the main executor of producing statistics of the Dutch economic climate.
• Confidence and vacancy indicators can be used as leading indicators.
• Future: further harmonization
## Dutch business survey

<table>
<thead>
<tr>
<th>Panel</th>
<th>Observation period</th>
<th>branch</th>
<th>Number of strata</th>
<th>Sample size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Month panel</td>
<td>First 3 weeks of month</td>
<td>Industry Services Manufacturing</td>
<td>191</td>
<td>4,500</td>
</tr>
<tr>
<td>Quarter panel</td>
<td>First 6 weeks of quarter</td>
<td>All commercial business companies</td>
<td>235</td>
<td>6,000</td>
</tr>
<tr>
<td>Year panel</td>
<td>First 6 weeks of 4th quarter</td>
<td>All commercial business companies</td>
<td>132</td>
<td>20,000</td>
</tr>
</tbody>
</table>