Follow-up on task-force on quality of EU BCS data

An overview of recent harmonisation steps in the EU BCS programme

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Business and consumer surveys and short-term forecast (ECFIN A4.2)
Outline

1. Harmonisation steps as a follow-up to 2013 task-force group 6 ("volatility analysis of individual questions")

2. Further harmonisation steps
1. Harmonisation steps as a follow-up to 2013 task-force group 6 (“volatility analysis of individual questions”)

What the task-force had done:

Filtering out individual survey questions (e.g. country X, industry survey, question 1), which had:

- **counter-intuitive sign of correlation** with ref. series and/or
- particularly **low correlation** with ref. series and/or
- **high volatility** compared to average volatility of the national sectoral survey +
- **translation clearly deviating** from EU BCS question and potentially explaining high volatility and/or bad tracking performance

relevant cases were identified

partner institutes were asked to change the questions
1. Harmonisation steps as a follow-up to 2013 task-force group 6 ("volatility analysis of individual questions")

INDU Q4 / RETA Q2: assessment of level of stocks
- **too large** (above normal)
- **adequate** (normal for the season)
- **too small** (below normal)

better to capture cyclical signal

INDU Q2 / INDU Q3: assessment of level of order books
- **more than sufficient** (above normal)
- **sufficient** (normal for the season)
- **not sufficient** (below normal)

better to capture cyclical signal

adaptation of national survey questionnaires:
- **above normal**
- **normal for the season**
- **below normal**

**option 1:**
- **too large** (above normal)
- **adequate** (normal for the season)
- **too small** (below normal)
- **more than sufficient** (above normal)
- **sufficient** (normal for the season)
- **not sufficient** (below normal)

for INDU Q4 / RETA Q2

**option 2:**
- **too large**
- **adequate**
- **too small**
- **more than sufficient** (above normal)
- **sufficient**
- **not sufficient** (below normal)

for INDU Q2 / INDU Q3 / BUIL Q3

11 national survey questions were adapted (in 5 countries)
1. Harmonisation steps as a follow-up to 2013 task-force group 6 ("volatility analysis of individual questions")

### Deviating formulations for the time dimension

<table>
<thead>
<tr>
<th>questions referring to the past / next 3 months</th>
<th>questions referring to current situation</th>
</tr>
</thead>
<tbody>
<tr>
<td>“…in the last month&quot;</td>
<td>“…at the end of the previous month&quot;</td>
</tr>
<tr>
<td>“…in the quarter that just ended, compared to the previous one&quot;</td>
<td></td>
</tr>
<tr>
<td>“…in the last three months compared to the previous period&quot;</td>
<td></td>
</tr>
<tr>
<td>“…in this month compared to the average of the last 3 months&quot;</td>
<td></td>
</tr>
<tr>
<td>“…over the next / past 2-3 months&quot;</td>
<td></td>
</tr>
<tr>
<td>etc.</td>
<td></td>
</tr>
</tbody>
</table>

### Other deviations

- Confusing instructions on whether to include seasonal effects in answer or not
- Questions inquiring orders and contracts (instead of orders only)
- Etc.

17 national survey questions were adapted (in 11 countries)
On balance…

adaptations:
- of 28 questions
- in 13 countries
- in all 4 business sectors (INDU, SERV, RETA, BUIL)

+ 4 institutes announced:
complete and systematic verification of all national translations
Other harmonisation steps taken
Submission of consumer data (Q51 and Q61)

Refer to quantitative assessments of past and expected inflation
If answer to Q5 / Q6 is 9: don’t know, leave cell Q51 / Q61 blank!

**Q5: perceived past inflation:**
- 1: +++ risen a lot
- 2: ++ risen moderately
- 3: + risen slightly
- 4: = stayed about the same
- 5: - fallen
- 9: ?? don’t know

**Q6: future inflation expectations:**
- 1: +++ increase more rapidly
- 2: ++ increase at same rate
- 3: + increase at slower rate
- 4: = stay about the same
- 5: - fall
- 9: ?? don’t know
1. Other harmonisation steps taken – Submission of consumer data (Q51 and Q61)

### Q5: perceived past inflation:
- 1: +++ risen a lot
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### Q6: future inflation expectations:
- 1: +++ increase more rapidly
- 2: ++ increase at same rate
- 3: + increase at slower rate
- 4: = stay about the same
- 5: - fall
- 9: ?? don’t know

If answer to Q5 / Q6 is 4: stay(ed) about the same, put a 0 into cell Q51 / Q61!
1. Other harmonisation steps taken – Submission of consumer data (Q51 and Q61)

**Q5: perceived past inflation:**
- 1: +++ risen a lot
- 2: ++ risen moderately
- 3: + risen slightly
- 4: = stayed about the same
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**Q6: future inflation expectations:**
- 1: +++ increase more rapidly
- 2: ++ increase at same rate
- 3: + increase at slower rate
- 4: = stay about the same
- 5: - fall
- 9: ?? don’t know

If answer to Q5 / Q6 is **5: fall(en)**,
respondents’ quantitative assessments enter with **negative sign** in cells Q51 / Q61!
1. Other harmonisation steps taken – Submission of consumer data (Q51 and Q61)

Calculation of average quant. inflation assessments

<table>
<thead>
<tr>
<th>NACE2</th>
<th>2014</th>
<th>Q51</th>
<th>Q61</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income of the household</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st quart</td>
<td>27.37</td>
<td>22.51</td>
<td>31.12</td>
</tr>
<tr>
<td>2nd quart</td>
<td>17.24</td>
<td>13.11</td>
<td>23.17</td>
</tr>
<tr>
<td>3rd quart</td>
<td>12.75</td>
<td>10.74</td>
<td>19.16</td>
</tr>
<tr>
<td>4th quart</td>
<td>2.51</td>
<td>1.92</td>
<td>1.49</td>
</tr>
<tr>
<td>Occupation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self employed + prof.</td>
<td>18.18</td>
<td>18.09</td>
<td>20.00</td>
</tr>
<tr>
<td>Self employed farmer</td>
<td>0.99</td>
<td>0.81</td>
<td>1.16</td>
</tr>
<tr>
<td>Cleric. + off. employees</td>
<td>1.15</td>
<td>1.24</td>
<td>2.43</td>
</tr>
<tr>
<td>Skilled manual workers</td>
<td>9.34</td>
<td>12.49</td>
<td>19.46</td>
</tr>
<tr>
<td>Other manual workers</td>
<td>21.00</td>
<td>28.38</td>
<td>26.40</td>
</tr>
<tr>
<td>Total workers</td>
<td>13.86</td>
<td>20.57</td>
<td>24.98</td>
</tr>
<tr>
<td>Other occupations</td>
<td>16.26</td>
<td>25.53</td>
<td>25.64</td>
</tr>
<tr>
<td>Work full-time</td>
<td>13.45</td>
<td>12.56</td>
<td>21.01</td>
</tr>
<tr>
<td>Work part-time</td>
<td>14.34</td>
<td>17.60</td>
<td>25.42</td>
</tr>
<tr>
<td>Unemployed</td>
<td>30.65</td>
<td>31.66</td>
<td>34.14</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>18.43</td>
<td>16.11</td>
<td>25.04</td>
</tr>
<tr>
<td>Secondary</td>
<td>18.01</td>
<td>16.26</td>
<td>22.45</td>
</tr>
<tr>
<td>Further</td>
<td>13.09</td>
<td>19.48</td>
<td>22.45</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15-29</td>
<td>13.16</td>
<td>10.68</td>
<td>22.61</td>
</tr>
<tr>
<td>30-49</td>
<td>15.60</td>
<td>13.92</td>
<td>24.08</td>
</tr>
<tr>
<td>50-64</td>
<td>18.28</td>
<td>15.56</td>
<td>23.79</td>
</tr>
<tr>
<td>65+</td>
<td>14.21</td>
<td>12.30</td>
<td>20.28</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>11.17</td>
<td>12.85</td>
<td>19.32</td>
</tr>
<tr>
<td>Female</td>
<td>19.71</td>
<td>14.13</td>
<td>23.51</td>
</tr>
<tr>
<td>TOTAL</td>
<td>15.96</td>
<td>13.57</td>
<td>21.67</td>
</tr>
</tbody>
</table>
1. Other harmonisation steps taken – Submission of consumer data (Q51 and Q61)

Calculation of Q51 TOTAL:

\[
(90 \times 0.027) + 0 \times 0.027 + 10 \times 0.027 + 2 \times 0.027 + (-10) \times 0.028 \ldots
\]

/ sum of weights of respondents who provide an answer (i.e. where answer cell is filled)
1. Other harmonisation steps taken – Submission of consumer data (Q51 and Q61)

**Calculation of Q61 WOMEN TOTAL:**

\[
(90 \times 0.027 \\
+ 10 \times 0.027 \\
+ 10 \times 0.027 \\
+ 0 \times 0.028...) \\
\text{/ sum of weights of women who provide an answer (i.e. where answer cell is filled)}
\]
1. Other harmonisation steps taken – Submission of consumer data (Q51 and Q61)

Reporting weights when quota sampling is used

Quota sampling ensures that the relative number of responses by respondent category (male / female, etc.) is in accordance with the underlying population.

Every respondent should get the same weight in the end.
Conclusions

- harmonisation is a constant challenge …
  … to be pursued through:
  - one-off actions (task-force on data quality)
  - continuous monitoring of data quality

- task-force on data quality eliminated deviations from the harmonised EU BCS questionnaire in the case of:
  - 28 survey questions
  - in 11 countries

Thanks to all institutes!