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Even the most innovative countries can improve on workplace innovation

European Innovation Scoreboard 2017

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The [European Innovation Scoreboard \(EIS\) 2017](#) shows some remarkable outcomes. While 'firm investments' (business R&D expenditure; non-R&D innovation expenditure such as machines and equipment) have increased between 2010 and 2016, the scores for 'innovators' (product/process innovators; organisational/marketing innovators) have decreased (table 10, p. 19).

Looking at the EIS 2017 and its indicators, one might expect that 'workplace innovation' is somewhere hidden behind 'SMEs marketing/organisational innovation'. Performance has been decreasing in European countries between the previous measurement in 2009 (Community Innovation Survey, CIS, 2010) and the most recent measurement in 2014 (CIS 2016). A linear regression for the full period has been used to estimate a further decrease from 34.9 to 33.5 in two years' time (EIS 2017, p. 38). For the workplace innovation community, it is interesting to see how performance regarding these indicators has developed in Europe.

Interesting too is how the most innovative countries perform on 'SMEs organisational/marketing innovation'. In the EIS, Member States are classified into four groups based on their average performance scores. Calculated by a composite indicator, the *Summary Innovation Index*, Denmark, Finland, Germany, the Netherlands, Sweden, and the United Kingdom are *Innovation Leaders* with innovation performance well above that of the EU average (pp. 6-7).

Finally, we are curious to discover whether a correlation can be found between 'national programmes/initiatives on workplace innovation' on the one hand and performance on 'SMEs marketing/organisational innovation' on the other.

What does the indicator measure?

- "Number and name of indicator: 3.1.2 SMEs introducing marketing or organisational innovations (percentage of SMEs).
- *Definition numerator*: Number of SMEs who introduced a new marketing innovation or organisational innovation to one of their markets (source - Eurostat, Community Innovation Survey).
- *Definition denominator*: Total number of SMEs (source - Eurostat, Community Innovation Survey).

- *Interpretation:* The Community Innovation Survey mainly asks firms about their technological innovation. Many firms, in particular in the services sectors, innovate through other non-technological forms of innovation. Examples of these are marketing and organisational innovations. This indicator captures the extent to which SMEs innovate through non-technological innovation" (EIS 2017, p.87).

Organisational innovation is measured by three questions and marketing innovation by four questions (Community Innovation Survey, 2010 and 2016). The questions ask for changes in the last three years and do not differentiate between the whole company and parts of it, between adoption of a new concept and applying it. This makes the indicator a relatively weak one. Another time span and differentiation between parts of companies could have given different outcomes. True implementation of new concepts takes time. "Thus, applying the 'three years question' incorrectly classifies only latecomers as innovative and early adopters as noninnovative" (Armbruster et al., 2009, p.655). Could this explain the surprising decrease in Cyprus and the Czech Republic (Table 1)?

Results

Nota bene: In Table 1 results are reported in 'normalised country performance' related to the EU average. The Table indicates relative performance, not absolute performance.

Table 1: Normalised country performance on 'SMEs marketing/organisational innovations' 2009 – 2014.

| country | 2009 | 2014 | change | country | 2009 | 2014 | change |
|-----------|------|------|--------|-------------|------|------|--------|
| Austria | + | ++ | ↑ | Latvia | -- | -- | ↑ |
| Belgium | + | ++ | ↑ | Lithuania | -- | -- | ↑ |
| Bulgaria | - | - | ↓ | Luxembourg | ++ | ++ | ↑ |
| Croatia | - | - | ↓ | Malta | - | - | ↑ |
| Cyprus | ++ | - | ↓ | Netherlands | - | - | ↑ |
| Czech Rep | ++ | - | ↓ | Norway | - | + | ↑ |
| Denmark | + | + | ↓ | Poland | -- | -- | ↓ |
| Estonia | - | -- | ↓ | Portugal | + | + | ↓ |
| Finland | - | + | ↑ | Romania | - | -- | ↓ |
| France | + | + | ↑ | Serbia | -- | - | ↓ |
| Germany | ++ | ++ | ↓ | Slovakia | - | -- | ↓ |
| Greece | ++ | + | ↓ | Slovenia | + | - | ↓ |
| Hungary | -- | -- | ↓ | Spain | - | -- | ↓ |
| Iceland | ++ | + | ↓ | Sweden | - | - | ↓ |
| Ireland | + | ++ | ↑ | Turkey | ++ | + | ↓ |
| Italy | + | - | ↓ | UK | - | + | ↑ |

Source: European Innovation Scoreboard 2017. Table composed by Frank Pot

Legend:

++ normalised performance above 120% of EU;

+ between 90% and 120% of EU, - between 50% and 90% of EU;

-- below 50% of EU.

Normalised performance uses the data after a possible imputation of missing data and transformation of the data.

↑ Change between 2009 and 2014 is positive;

↓ Change between 2009 and 2014 is negative.

Conclusions

- For European countries together, the change in performance 2009 – 2014 regarding 'SMEs marketing/organizational innovations' is negative. During these years, less attention was paid to marketing and organisational innovations.
- Looking at the six countries who have the best general performance, the innovation leaders, only Germany performs above 120 % of EU normalized performance, Denmark, Finland and UK between 90 and 120 % and Netherlands and Sweden between 50 and 90%.
- There seems to be a correlation between national workplace innovation programmes/campaigns and performance on this indicator, although the research does not provide causal relationships. The Netherlands and Sweden do not fit this conclusion: relatively low score in spite of national initiatives. I don't know whether Luxembourg, Turkey, Greece and Iceland (relatively high scores) have had such programmes or which other factors can explain this performance.
- There is much room for improvement regarding performance on 'SMEs marketing/organisational innovations' even in countries that are innovation leaders.
- Assuming that this indicator more or less covers workplace innovation, workplace innovation programmes and dissemination should be continued. New initiatives should be prepared in countries with relatively low performance.
- More and more sophisticated research is necessary to monitor developments.

References

Heidi Armbruster, Andrea Bikfalvi, Steffen Kinkel and Gunter Lay. 'Organizational innovation: The challenge of measuring non-technical innovation in large-scale surveys'. *Technovation* 28 (2008) 644–657.

Hugo Hollanders and Nordine Es-Sadki. *European Innovation Scoreboard (EIS) 2017*. Brussels: European Commission.