C 3 Innovation behaviour in the private sector

The Europe-wide Community Innovation Surveys (CISs) are conducted every two years and provide the underlying data for the international comparison of the private sector's innovation behaviour (C 3-1).[390] Coordinated by Eurostat and based on a harmonized methodology, the CISs are conducted in all EU member states and a number of other European countries. The CISs are based on a largely uniform questionnaire and directed at businesses with ten or more employees in the manufacturing industry and selected services sectors.

The current analysis relates to 2014 (CIS 2014). In that year, the innovation intensity of the research-intensive industries in Germany amounted to 7.0 percent. It was thus higher than that of most reference countries. However, Sweden's innovation intensity was considerably higher at 11.1 percent in the research-intensive industries.

The data on innovation behaviour in the German private sector, as shown in charts C 3-2 and C 3-3, are based on the Mannheim Innovation Panel (MIP), an annual innovation survey that has been conducted by the Centre for European Economic Research (ZEW) since 1993.[391] Data from the MIP constitute the German contribution to the CISs. In addition to the data to be reported to Eurostat, the panel also includes data on businesses with five to nine employees. According to this definition, the innovation intensity (C 3-2) of R&D-intensive industries was 8.8 percent in 2016, thus increasing for the second time in succession after a fall in 2014. In other industries the rate in 2016 was 1.4 percent, i.e. at the same level as in previous years. In knowledge-intensive services (excluding financial services), innovation intensity fell in 2016 by 0.3 percentage points to 4.8 percent. In the field of financial services, the rate was 0.7 percent in 2016, as in the previous year. The level of innovation intensity was the same in other services. While the proportion of revenue generated with new products (C 3-3) increased slightly in 2016 in the R&D-intensive industries (from 33.9 to 34.3 percent) compared to the previous year, it fell quite substantially in other industries (from 8.2 to 6.5 percent). There was a slight increase in the rate in knowledge-intensive services (from 10.1 to 10.2 percent), and a relatively marked increase (from 4.8 to 6.7 percent) in other services.

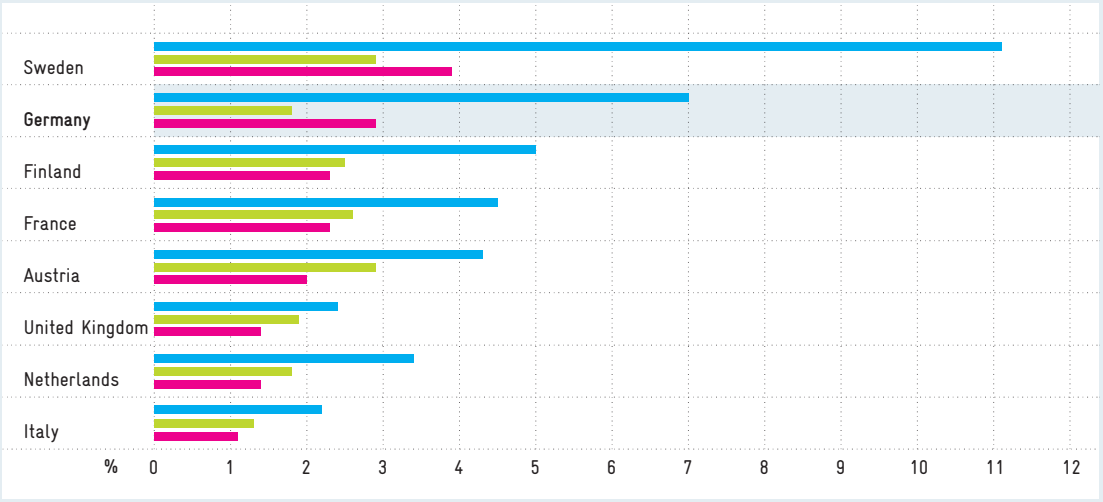
Standardization is an important factor in the commercialization of innovative technologies. At the international level, standards are developed by the committees of the International Organization for Standardization (ISO). By participating in these committees, a country can make a significant impact on global technical infrastructures (C 3-4).[392] German companies are more frequently involved in the work of the ISO than representatives of other countries.[393] China has recorded the largest increase by more than tripling the number of ISO secretariats run by Chinese representatives.

Fig. C 3-1

Innovation intensity by European comparison in 2014 as percentages

Download data

Innovation intensity: innovation expenditure by companies as a percentage of their total turnover.



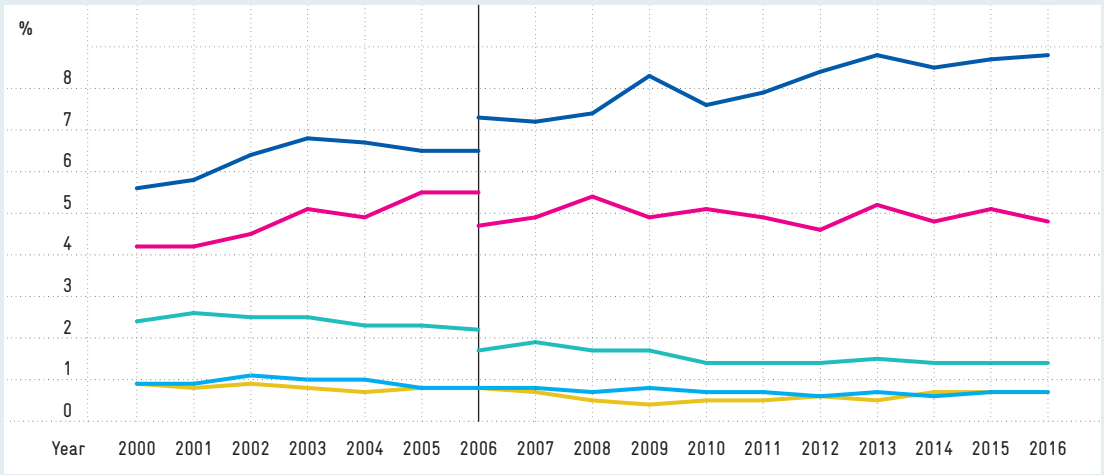
1) Research-intensive industry: divisions 19–22, 25–30 of WZ classification. Since data are not available for all sectors in all countries, the definition of research-intensive industries used in the European comparison differs from the definition normally used by the EFI.
2) Knowledge-intensive services: divisions 58–66, 71–73 of WZ classification. Since data are not available for all sectors in all countries, the definition of knowledge-intensive services used in the European comparison differs from the definition normally used by the EFI.
3) All sectors divisions 5–39, 46, 49–53, 58–66, 71–73 of WZ classification.
Source: Eurostat, Community Innovation Surveys 2014. Calculations by ZEW (Centre for European Economic Research).

Fig. C 3-2

Innovation intensity in industry and knowledge-intensive services in Germany as percentages

Download data

Innovation intensity: innovation expenditure by companies as a percentage of their total turnover.



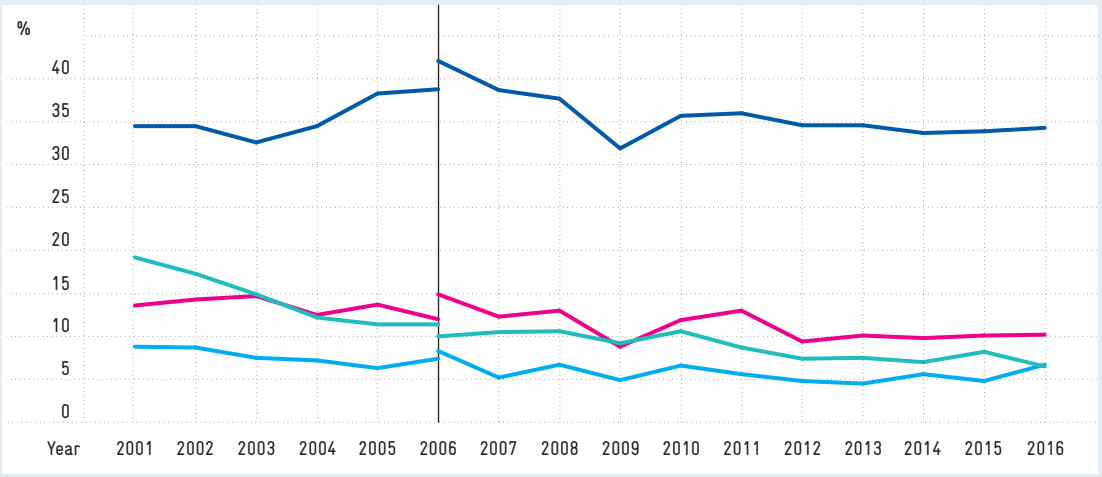
2006: break in time series. Figures for 2016 are provisional.
Source: Mannheim Innovation Panel. Calculations by ZEW (Centre for European Economic Research).

C

Fig. C 3-3

Download data

Percentage of turnover generated by new products in industry and knowledge-intensive services

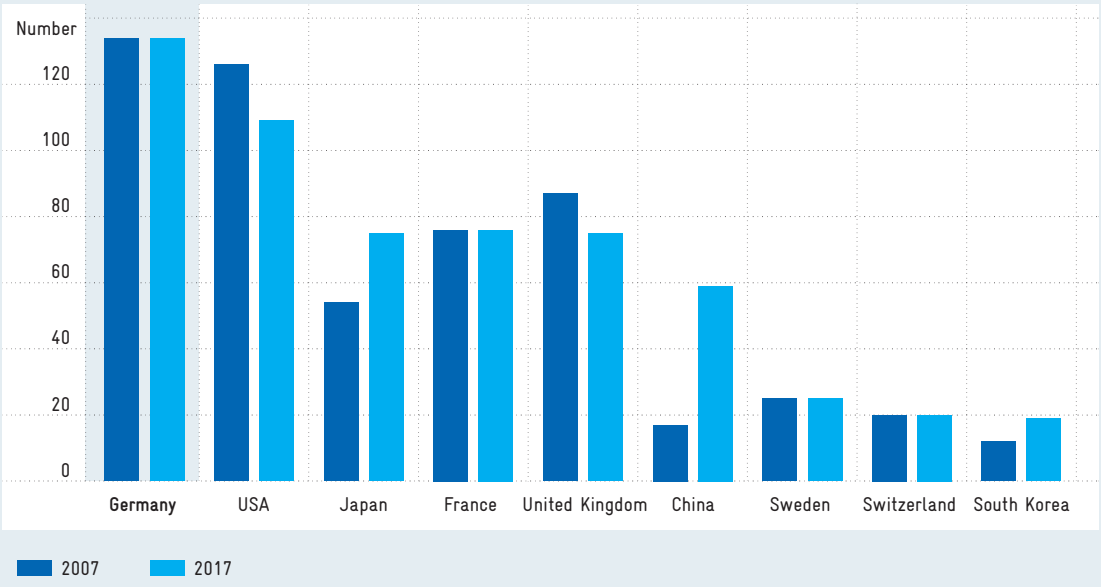


2006: break in time series. Figures for 2016 are provisional.
Source: Mannheim Innovation Panel. Calculations by ZEW (Centre for European Economic Research).

Fig. C 3-4

Download data

Number of secretariats listed by the technical committees and subcommittees of the International Organization for Standardization (ISO)



Source: own diagram based on ISO (2008: 15) and
http://www.iso.org/iso/home/about/iso_members.htm (last accessed on 13 November 2017).