C3

INNOVATION BEHAVIOUR IN THE PRIVATE SECTOR

The Europe-wide Community Innovation Surveys (CIS) are conducted every two years and provide the database for the international comparison of the private sector's innovation performance (C 3–1).⁴⁸² Coordinated by Eurostat and based on a harmonised methodology, the CIS are conducted in all of the EU member states and a number of other European countries. The CIS comprise a largely unitary questionnaire and are directed at businesses with ten or more employees in the manufacturing industry and selected services sectors. The current analysis refers to the year 2010 (CIS 2010). In 2010, Germany's knowledge economy had an innovation intensity of 6.4 percent. The ratio was thus below that of Finland and Sweden, but still higher than that of Austria, France, the Netherlands and Italy.

Data on innovation behaviour in the German private sector as shown in Figures C 3–2 to C 3–4 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. Data from the MIP constitute the German contribution to the CIS. In addition to the data to be reported to Eurostat, the panel also collects data on businesses with five to nine employees.⁴⁸³

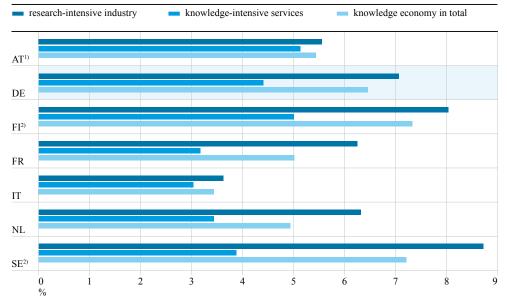
In the knowledge-intensive industry, innovation intensity (C 3–2) increased from 7.9 percent in 2011 to 8.3 percent in 2012, while innovation intensity in other industry and knowledge-intensive services stagnated.

The proportion of revenue generated with new products (C 3-3) decreased in the R&D-intensive industries to 34 percent as opposed to 36 percent in the previous year. Knowledge-intensive services experienced a sharp decline from 13 percent to 9 percent. In other industry and in knowledge-intensive services, the proportion of revenue generated with new products decreased by 1 percentage point, reaching 8 percent and 5 percent, respectively.

Standardisation is an important factor in the commercialisation of innovative technologies. At international level, standards are developed in the committees of the International Organization for Standardization (ISO). Through participation in these committees, a country can make a significant impact on global technical infrastructures (C 3–4).⁴⁸⁴ German companies are more frequently involved in the work of the ISO than representatives of all other countries.

Innovation intensity in 2010 in European comparison (figures in percent)



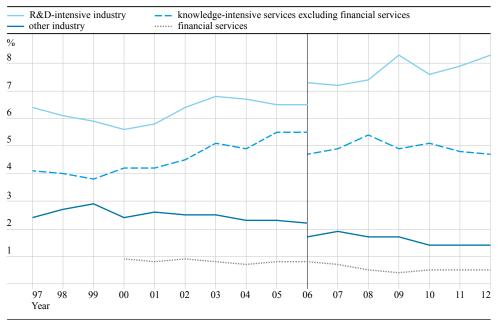


Innovation intensity: companies' expenditure (on R&D, machinery and software, as well as external knowledge) relative to total revenue.

¹⁾excluding pharmaceutical industry ²⁾excluding pharmaceutical industry, including electrical engineering Source: Eurostat, Community Innovation Surveys 2010. Calculations by ZEW.

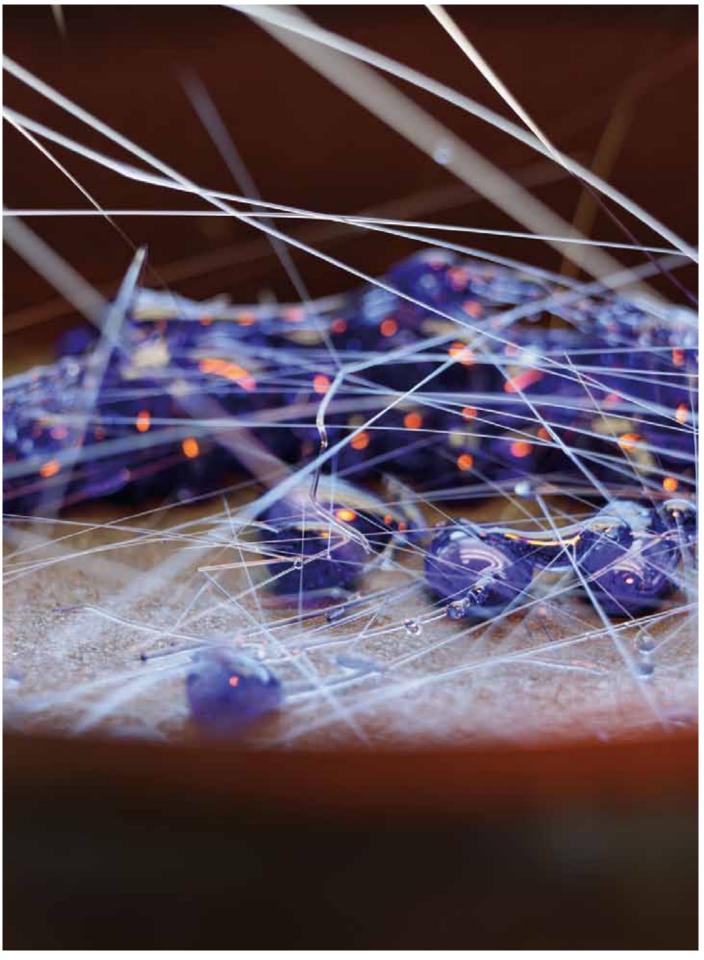
C 3-2 Innovation intensity in Germany's industry and knowledge-intensive services (figures in percent)

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Innovation intensity: companies' innovation expenditures relative to total revenue.

Break in the time series in 2006. Figures for 2012 are provisional. Source: Mannheim Innovation Panel. Calculations by ZEW.



Solidified droplets of glass used to produce a sealant for solide oxide fuel cells (SOFC). \bigcirc Jülich Research Centre (FZJ).



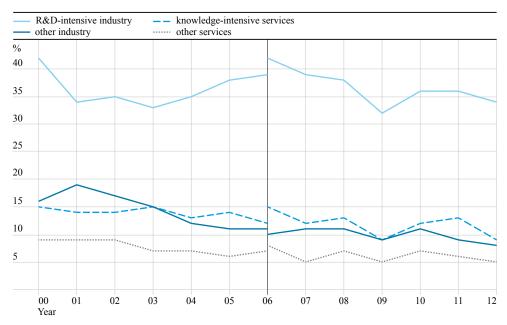
A drop of glass taken out of the induction furnace at Jülich's Central Technology Division, which has a temperature of 1,500 °C. $\ \$ Jülich Research Centre (FZJ).

Proportion of revenue generated with new products in industry and knowledge-intensive services (figures in percent)

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C 3-3

Proportion of revenue generated with new products: revenue from new or significantly improved products, newly introduced by innovative companies in the past three years, in relation to total revenue.



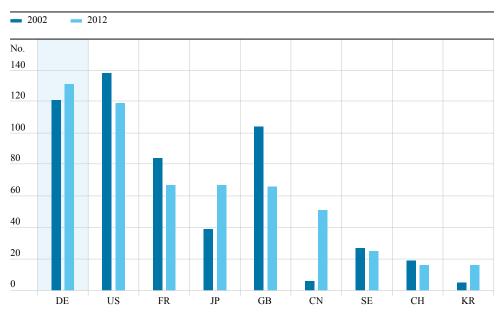
Break in the time series in 2006. Figures for 2012 are provisional. Source: Mannheim Innovation Panel (MIP). Calculations by ZEW.

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

C 3-4

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Standardisation: harmonisation of important characteristics of products, processes and services.



Source: ISO (2003:19), as well as http://www.iso.org/iso/annual_report_members_2012.pdf (last accessed on 10 January 2014). Own compilation.