ANBERD: business enterprise R&D broken down by industry (ISIC Rev. 4)

Database Specific
Abstract
General dataset description: http://oe.cd/anberd

Data Characteristics

FULL DOCUMENTATION

The OECD's ANalytical Business Enterprise Research and Development (ANBERD) database presents annual data on Research and Development (R&D) expenditures by industry and was developed to provide analysts with comprehensive data on business R&D expenditures. The ANBERD database incorporates a number of estimations that build upon and extend national submissions of business enterprise R&D data by industry (main activity/industry orientation). The current version of the ANBERD database presents OECD countries' and selected non-member economies' business expenditure on R&D since 1987, broken down across 100 manufacturing and service industry groups. The reported data follow the International Standard Industrial Classification, Revision 4 (ISIC Rev. 4) and are expressed in national currencies as well as in US dollars at Purchasing Power Parity (PPP), both at current and constant prices.

Main activity and industry orientation:

The 2015 Frascati Manual (http://oe.cd/frascati) practice is to report BERD on an enterprise basis. The main economic activity of an enterprise is usually defined as that which accounts for most of its economic outputs; this may be identified directly from sales or indirectly proxied (such as by numbers of personnel devoted to different activities). This determines the industry in which the enterprise, and any BERD it carries out, is classified. As such, all BERD of a diversified enterprise (i.e. one with multiple lines of business) is allocated to the same industry, that of its main activity. This enables, as far as possible, the alignment and compatability of BERD data with other economic statistics (e.g. value added broken down by industry).

In addition, the Frascati Manual also recommends reporting BERD by industry orientation, whereby the statistical unit's R&D is distributed across the various lines of business to which it relates. In a few countries, hybrid approaches are followed and reported as main activity data. As an example, some countries primarily follow the main activity approach but redistribute the R&D of large diversified firms across the economic activities to which it relates. This can affect interpretation of the data and resulting statistics. There are also important differences between countries in the treatment of R&D undertaken by firms in the service sector but closely associated (though not necessarily contractually) with manufacturing firms. Industrial research institutes, largely funded by the manufacturing industries they serve, are the most frequent examples. With the implementation of the 2015 Frascati Manual, such hybrid data will be phased out in favour of a strict main activity approach. Countries still reporting hybrid data are flagged in the ANBERD country notes.