

### 24. Business enterprise R&D (BERD) in aerospace

BERD is an indicator covering R&D activities carried out in the business sector by firms and institutes. Although R&D is often carried out in government agencies and academic institutions, it is the business-driven research that is mostly associated with the creation of new products and business practices and innovation.

When analysing available OECD data for the aerospace sector, businesses located in the United States account for more than 70% of recorded aerospace BERD expenditure for 2012, more than three times higher than the European industry combined. Aerospace BERD is also much lower than BERD in other sectors, like the pharmaceutical and in the computer, electronics, optical industry. When looking at total BERD carried out in a given economy, the share which is performed in the aerospace industry ranges from 8% to 10% in the United States, France, Italy, Canada and Spain to less than 1% in Australia or Slovenia in 2012.

During the last decade, certain countries such as Korea and the Russian Federation saw a significant decrease in aerospace BERD, first in 2001, followed by a second decrease in 2007-08. Although recovering, their BERD are not yet back at 2000 levels. BERD in European countries saw a slow but steady growth until 2007/08 before evening out. In North America, Canadian BERD grew quicker than in European countries, but was more strongly affected in 2007/08 and is now more or less back at 2000 levels. US BERD evolved differently than in other OECD countries and more than doubled between 2007 and 2008. Despite steadily falling since 2009, US aerospace BERD in 2011 was still triple that of 2000.

#### **Methodological notes**

Business enterprise expenditure on R&D (BERD) covers R&D activities carried out in the business sector by performing firms and institutes, regardless of the origin of funding and is arguably most closely linked to the creation of new products and production techniques. The OECD Analytical Business Enterprise Research and Development (ANBERD) database use for the data provides internationally comparable time-series on industrial R&D expenditures. The data on R&D expenditures by the aerospace industry are based on official statistics provided to the OECD by its member countries. The comparability of BERD data over time may be affected by a number of factors, including changes in survey methods, notably the sectoral extension of survey coverage and the reclassification of units to/from the business sector.

#### **Sources**

OECD, Main Science and Technology Indicators database, data extracted 16 May, [www.oecd.org/sti/msti](http://www.oecd.org/sti/msti).

#### **Note**

Information on data for Israel: <http://dx.doi.org/10.1787/888932315602>.

### 24.1. BERD performed in the aerospace industry for selected economies

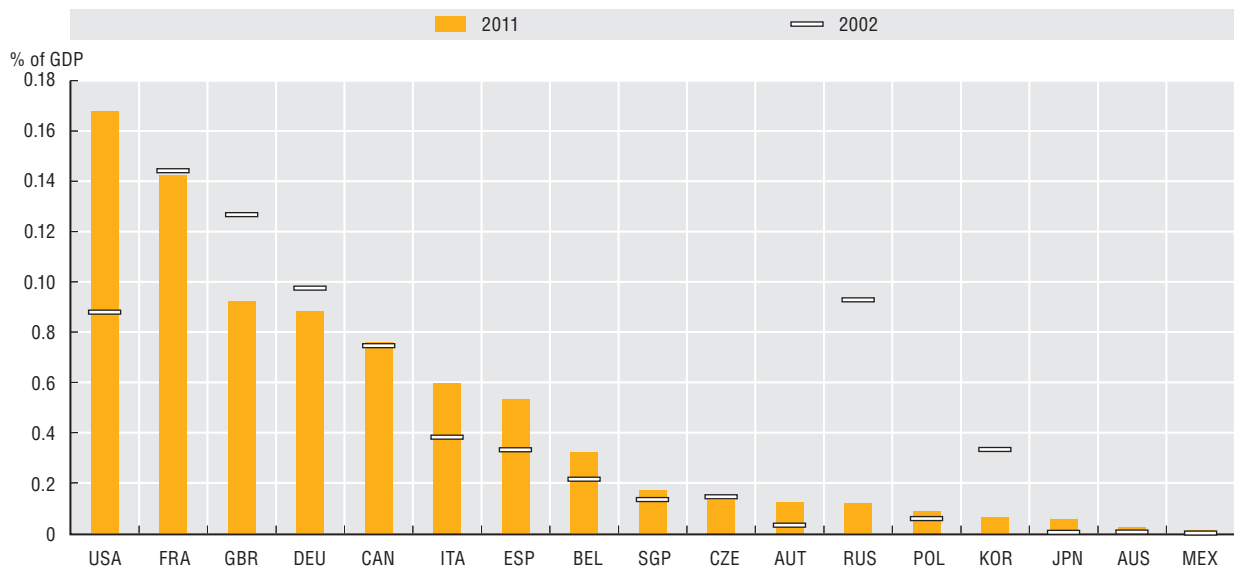
USD PPP million (current), 2012 or latest year

Country	Aerospace BERD	% of total BERD performed in aerospace industry
USA	26 054.00	8.86
FRA	3 374.49	9.91
DEU	3 061.59	4.42
GBR	2 029.93	8.14
ITA	1 227.06	8.71
CAN	1 071.08	8.26
ESP	789.40	7.53
RUS	394.00	1.99
JPN	238.02	0.21
KOR	187.19	0.37
BEL	141.67	2.12
POL	74.46	2.53
SGP	52.44	1.22
CZE	45.74	1.57
AUT	44.76	0.65
NLD	37.69	0.46
AUS	23.56	0.19
MEX	20.28	0.65
ROU	5.87	0.85
NOR	2.71	0.11
SLN	1.04	0.09


Source: OECD, 2014.

### 24.2. Aerospace BERD as a share of GDP

2011 and 2002, or latest year



Source: OECD, 2014.

StatLink  <http://dx.doi.org/10.1787/888933141988>



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