

# Government budget appropriations or outlays on R&D

*GBAORD financed less diversified research in the United States than in the EU-25 and in Japan*

Statistics  
in focus

SCIENCE AND TECHNOLOGY

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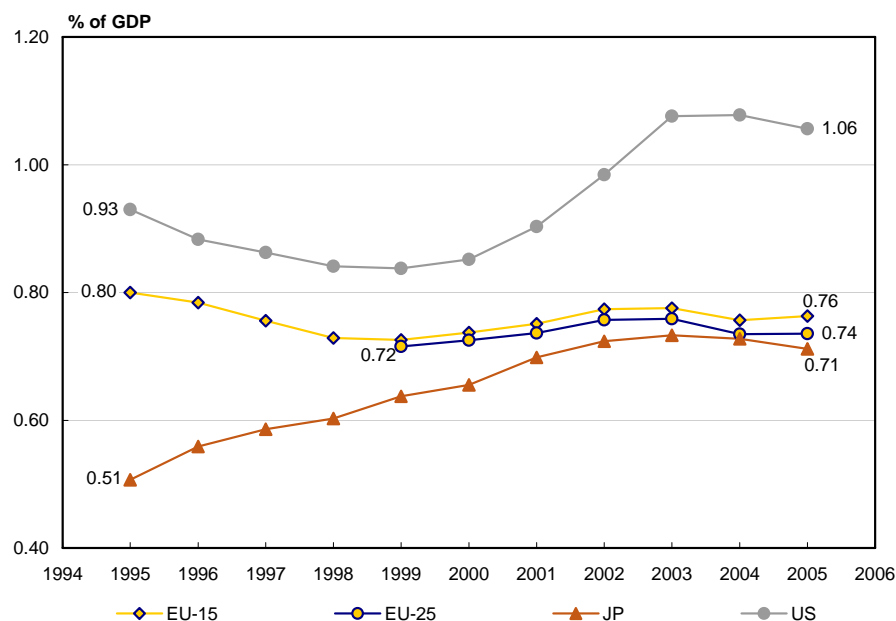
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Figure 1: GBAORD as a percentage of GDP, EU-15, EU-25, Japan and the United States — 1995 to 2005



Eurostat estimates: EU-15 and EU-25.  
JP 2005: provisional data

Source: Eurostat, R&D statistics

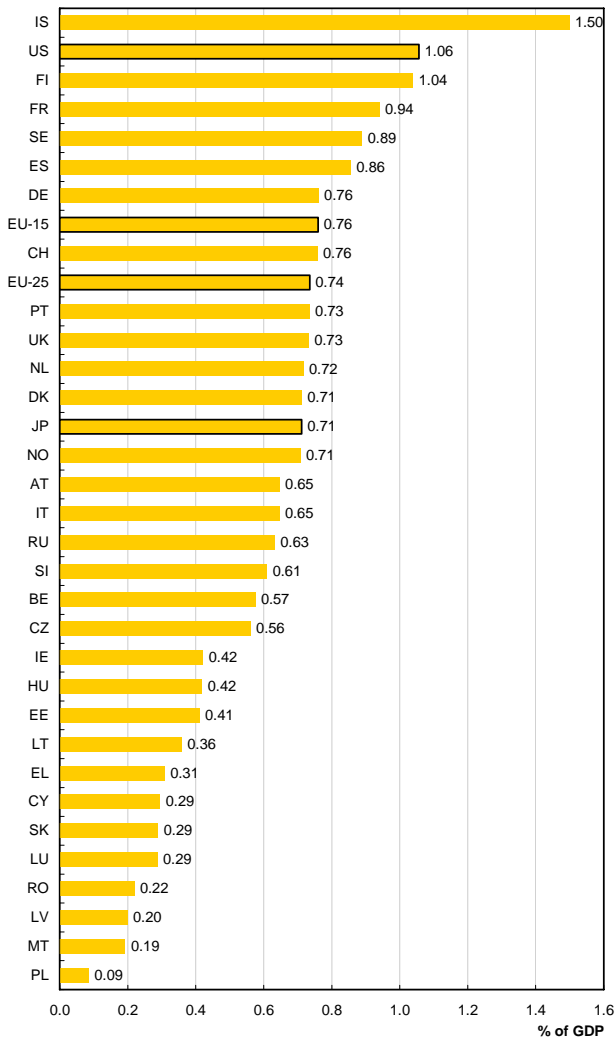
## Main findings

- In 2005, GBAORD, expressed as a percentage of GDP, amounted to 1.06%, 0.74% and 0.71% for the United States, the EU-25 and Japan respectively. In the EU-15, this ratio decreased slightly between 1995 and 1999, but remained quite stable from 2000 onwards.
- Iceland led with 1.50% of GDP devoted to GBAORD in 2005. Only one EU Member State had a GBAORD higher than 1% of its GDP: Finland, with 1.04%.
- In absolute terms (expressed in euro), five Member States accounted for almost 80% of the total EU-25 GBAORD in 2005: Germany, France, the United Kingdom, Italy and Spain.
- 13.6% of EU-25 total GBAORD in 2005 was allocated to 'Defence', whereas more than half (56.6%) was devoted to this objective in the United States.
- The United States spent most of its GBAORD on 'Defence' and 'improvement of human health', which together accounted for almost 80% of total US GBAORD in 2005.
- The main field of science financed from General University Funds (GUF) in 2005 was 'Natural sciences'. By contrast, 'Agricultural sciences' received few General University Funds (GUF).



## EU-25 GBAORD as a share of GDP quite stable since 2000

Figure 2: GBAORD as a percentage of GDP, EU-25 and selected countries — 2005



Eurostat estimates: EU-15 and EU-25.  
 Provisional data: BE, CZ, DE, EL, FR, IT, AT, NL, IS, NO and JP.  
 National estimates: EE and HU.  
 Exceptions to the reference year: CH and RU 2004.  
 Source: Eurostat, R&D statistics

Figure 1 shows government budget appropriations or outlays allocated to research and development (GBAORD) expressed as a percentage of GDP for the European Union, Japan and the United States. This indicator removes the individual weights of the countries and therefore allows a comparison of GBAORD across the various entities/countries.

GBAORD as a percentage of GDP decreased slightly in the EU-15 between 1995 and 1999 but was quite stable from 2000 onwards.

In Japan, GBAORD increased over the entire 1995-2003 period. From 2003, the ratio decreased slightly and equalled 0.71% of GDP in 2005. In relative terms, Japan almost closed the gap it had with the EU-25, where GBAORD reached 0.74% of its GDP in 2005 (Figure 2).

GBAORD in the United States decreased between 1995 and 1999. However, it notably increased between 1999 and 2003 when it reached its highest share (1.08%). In 2005, it was equal to 1.06%, substantially higher than the respective values recorded in the EU-25 and Japan.

In Europe, large differences exist between the individual countries. Iceland led with 1.50% of its GDP devoted to GBAORD in 2005. Only one EU Member State had a GBAORD higher than 1% of its GDP: Finland, with 1.04%.

France ranked second among the EU Member States in allocating the highest public budget to R&D in relative terms (0.94% of GDP).

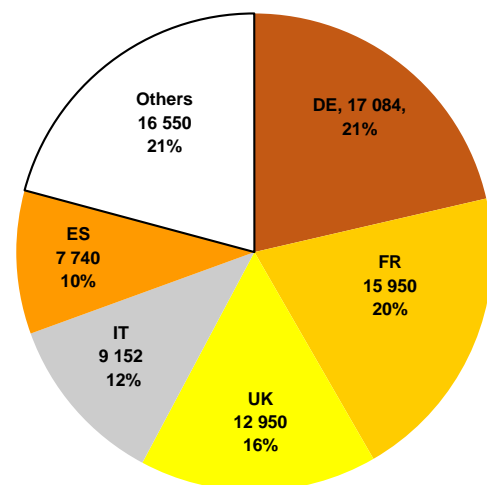
Sweden, Spain and Germany followed with a ratio exceeding the EU-25 average (0.74%).

Four other Member States ranged between the European average of 0.74% and 0.70% of GDP: Portugal, the United Kingdom, the Netherlands and Denmark. Norway displayed a similar result.

Five Member States still allocated more than 0.5% of their GDP to GBAORD: Austria, Italy, Slovenia, Belgium and the Czech Republic. Other Member States ranked between 0.42% (Hungary) and 0.09% (Poland).

As shown in Figure 3, in absolute terms, five Member States accounted for almost 80% of the EU-25 total GBAORD in 2005. These were Germany (EUR 17.1 billion), France (EUR 16.0 billion), the United Kingdom (EUR 13.0 billion), Italy (EUR 9.2 billion) and Spain (EUR 7.7 billion).

Figure 3: Distribution of EU-25's GBAORD, in EUR million — 2005



Eurostat estimate: EU-25.

Source: Eurostat, R&D statistics

## More for civil research in Europe and in Japan, more for defence in the US

In the European Union, 13.6% of total GBAORD was allocated to 'Defence' research in 2005; the remainder (86.4%) was devoted to civil research (Table 4).

However, in many Member States the share of GBAORD allocated to 'Defence' research was less significant and in some cases, it was minimal. This was the case, for instance, in Ireland and Austria.

In 2005, 'Defence' represented a substantial part of total GBAORD in the United Kingdom and in France, with 31.0% and 22.3% of total GBAORD respectively. In Sweden and Spain, it accounted for 17.4% and 16.1%. Hence, if 'Defence' represented a significant part of total GBAORD in the EU-25 (13.6%), it is mainly accounted for by this specific group of countries.

As a comparison, more than half (56.6%) of total

GBAORD was allocated to 'Defence' research in the United States in 2005.

Table 4 also compares the growth of civil GBAORD and of 'Defence' GBAORD.

For the EU-15 as a whole, GBAORD allocated to civil research increased at a higher annual average growth rate (AAGR) between 2000 and 2005 (2.4%) than GBAORD allocated to 'Defence' (1.4%). In other words, the share of 'Defence' in total GBAORD in the EU decreased between 2000 and 2005.

While the 'Defence' share in GBAORD decreased at EU-15 level, ten EU-25 Member States actually saw an increase of that share. This was notably the case in France, Italy, Finland and Sweden.

The same situation occurred in Japan and in the United States. The importance of GBAORD allocated to 'Defence' in the United States keeps growing, with an annual average growth rate (2000-2005) of 9.1%.

Table 4: Total GBAORD in million constant 1995 PPS and proportion allocated to civil research and to defence research in 2005 and real AAGR 2000-2005, EU-25 and selected countries

	Total GBAORD	Distribution of civil and defense GBAORD	AAGR 2000-2005		
			Defense	Civil	Total
EU-25	62 615 s		:	:	2.0 s
EU-15	60 404 s		1.4 s	2.4 s	2.3 s
BE	1 345 p		4.4 p	1.8 p	1.8 p
CZ	792 p		6.1 p	8.4 p	8.3 p
DK	880		7.8	0.0	0.0
DE	13 277 p		-5.7 p	0.4 p	0.0 p
EE	58 e		46.0 e	10.1 e	11.4 e
EL	529 p		6.9 p	2.5 p	2.5 p
ES	6 530		0.4	13.5	10.7
FR	12 368 p		2.0 p	0.9 p	1.2 p
IE	474		:	12.2	12.2
IT	7 571 p		39.0 p	0.1 p	0.7 p
CY	34		:	:	:
LV	44		17.6	9.8	9.9
LT	121		-4.7	12.3	12.2
LU	58		:	:	21.6
HU	491 p		:	:	:
MT	10		:	:	:
NL	2 543 p		-6.1 p	-1.3 p	-1.4 p
AT	1 259 p		2.4 p	2.6 p	2.6 p
PL	312		:	:	-23.7
PT	1 089		-6.9	5.5	5.4
SI	187		126.4	5.8	6.9
SK	161		-1.4	2.4	0.3
FI	1 213		24.5	2.8	3.3
SE	1 870		27.8	4.4	6.9
UK	9 397		0.4	5.2	3.5
IS	114 p		:	5.3 p	5.3 p
NO	824 p		9.1 p	3.3 p	3.6 p
EEA	63 553 s		:	:	2.0 s
CH	1 363		-7.9	4.8	4.7
JP	18 960 p		9.6	3.5	3.1 p
US	91 205		9.1	4.8	7.1

Exceptions to the reference year:

CH, JP by NABS socio-economic objectives: 2004

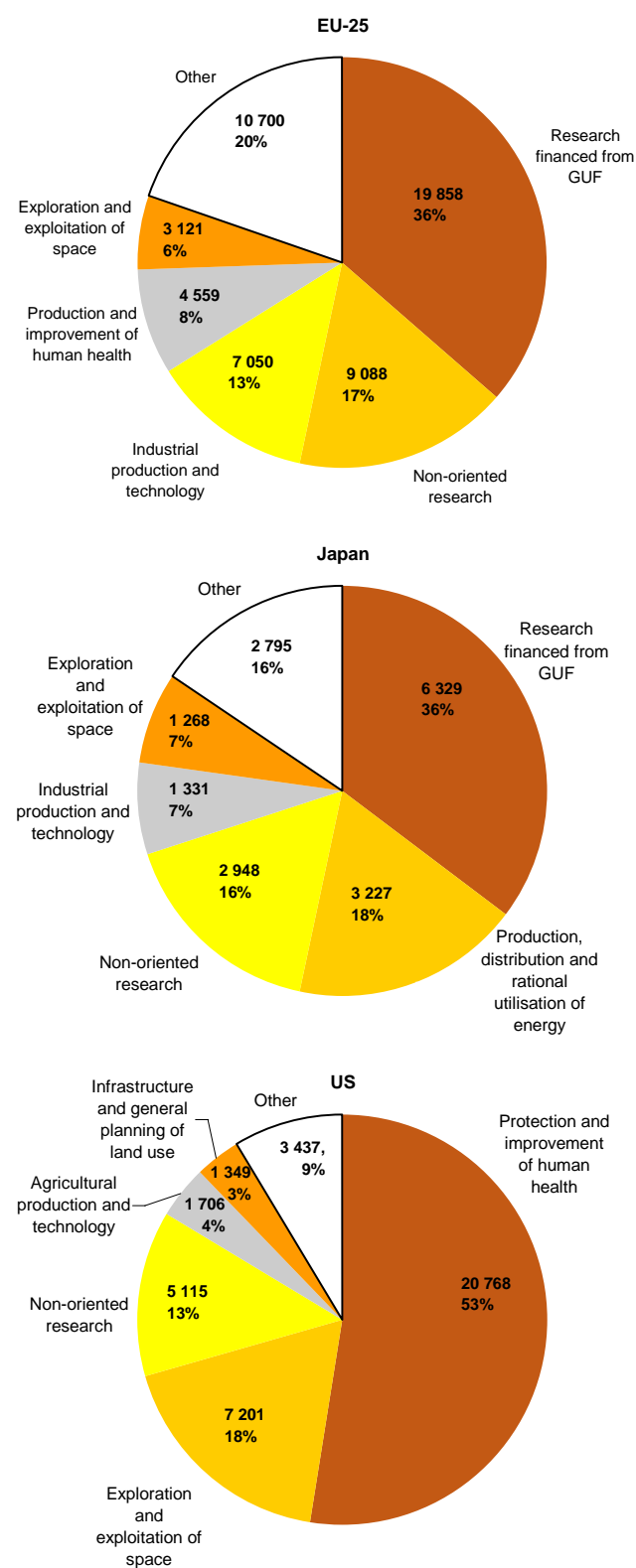
Exceptions to the reference period:

CH, JP by NABS socio-economic objectives: 2000-2004.  
CZ and SK: 2002-2005

Source: Eurostat, R&D statistics

## GBAORD allocated to miscellaneous civil research in Europe and in Japan

Figure 5: Distribution of civil GBAORD by main NABS socio-economic objectives in million constant 1995 PPS, EU-25, Japan and the United States — 2005



Eurostat estimate: EU-25.

Provisional data: US.

Exception to the reference year: JP 2004.

Source: Eurostat, R&D statistics

Figure 5 presents civil GBAORD broken down by main socio-economic objectives according to the NABS — *Nomenclature for the analysis and comparison of scientific programmes and budgets*.

In 2005, the main EU-25 civil socio-economic objective was 'Research financed from General University Funds (GUF)' with almost 20 billion constant 1995 PPS. In fact, it represented more than one third (36%) of the EU-25's total civil GBAORD.

This category was followed by 'Non-oriented research' and 'Industrial production and technology' with respectively 17% and 13% of total civil GBAORD (9 and 7 billion constant 1995 PPS).

Two other objectives accounted for a substantial part of the EU-25's total civil GBAORD: 'Protection and improvement of human health' and 'Exploration and exploitation of space'. All other objectives showed a share of less than 5% and are regrouped in the category 'Other'.

'Research financed from GUF' was also the main socio-economic objective in Japan, with the same share as in the EU-25 (36%). However, in absolute terms, it amounted to only 6.3 billion constant 1995 PPS.

Japan's second main civil socio-economic objective of the government R&D budget was 'Production, distribution and rational utilisation of energy' (18%). Unlike the situation in Japan, this objective was one of the less significant objectives in the EU-25 and in the United States (included in the category 'Other').

As in the EU-25, the objectives 'Non-oriented research', 'Industrial production and technology' and 'Exploration and exploitation of space' were among Japan's main objectives.

The largest part of the civil government budget in the United States was devoted to 'Protection and improvement of human health'. It represented more than half (53%) the total civil GBAORD, or more than 20 billion constant 1995 PPS. This objective was not among the main civil objectives in Japan, and in the EU-25 it only represented 8%.

It should be noticed that GBAORD US data exclude the socio-economic objective 'Research financed from general university funds' (as there is no federal support via GUF) and are therefore systematically underestimated. Comparisons with other countries should be made with caution.

Two other objectives took a share of over 10% of the total civil GBAORD in the United States: 'Exploration and exploitation of space' (18%) and 'Non-oriented research' (13%). All other objectives had shares of less than 5% of total civil GBAORD.

So, overall, government budgets allocated to R&D financed less diversified research in the United States than in the EU-25 and in Japan.

## US moves towards more public R&D funds for human health and defence

Table 6 shows the real annual average growth rate (AAGR) of GBAORD broken down by socio-economic objectives for the period 2000-2005 for the EU-15, the largest EU Member States, Japan and the United States.

Within the EU-15, GBAORD decreased only for 'Production, distribution and rational utilisation of energy' (-1.2%) and remained stable for 'Exploration and exploitation of space'. Excluding 'Other civil research' (11.0%), 'Exploration and exploitation of the earth' rose fastest (7.4%), followed by 'Improvement of human health' (5.8%). 'Research financed from GUF' – the main objective in the EU – grew at an average rate of 1.9% per year.

With the exception of 'Social structure and relationship' (-1.8%), GBAORD in Japan increased between 2000 and 2004 for all socio-economic objectives. The largest increase in Japan was in 'Defence' (9.6%).

In the United States, only GBAORD allocated to 'Industrial production and technology' and 'Control and care of the environment' decreased, at -4.9% and -1.0% per year respectively. After 'Social structure and relationships' (12.6%), the objectives whose shares increased most between 2000 and 2005 were also the two main United States' objectives: 'Defence' (9.1%) and 'Protection and improvement of human health' (7.4%).

This means that the United States seems to be increasing its GBAORD specialisation in these two objectives, which together accounted for almost 80% of total GBAORD in 2005.

Of the five main European countries in terms of GBAORD, Spain expanded fastest between 2000 and 2005, with an annual average growth rate of 10.7%.

Annual average growth rates of GBAORD during the same period ran at 3.5% in the United Kingdom, 1.2% in France and less than 1% in Italy (0.7%) and in Germany (0.0%).

Two objectives grew steadily in the five main European countries in terms of public R&D funds: 'Protection and improvement of human health' and 'Other civil research'. Their growth rates exceeded that of total GBAORD.

The main European objective 'Research financed from GUF' decreased only for Italy (-1.7%).

Germany was also the only main European country to reduce its budget for 'Defence' (-5.7%). Conversely the 'Defence' budget increased strongly in Italy during the same period (39.0%).

'Production and rational utilisation of energy', a category that decreased at EU-15 level (-1.2%) also decreased in Germany (-3.2%), Spain (-3.6%) and France (-0.2%), but increased in Italy (1.3%) and the United Kingdom (0.7%).

Table 6: Real(1) AAGR 2000-2005 of GBAORD by NABS socio-economic objective, EU-15, Germany, Spain, France, Italy, United Kingdom, Japan and the United States

Socio economic objectives	EU-15	DE	ES	FR	IT	UK	JP	US
01. Exploration and exploitation of the earth	7.4 s	0.8	4.3 e	12.5	15.8 p	16.3	6.0	0.1 p
02. Infrastructure and general planning of land-use	5.4 s	2.4	52.7 e	-1.5	33.7 p	-4.2	6.9	0.3 p
03. Control and care of the environment	2.2 s	0.3	4.1 e	10.8	4.8 p	-1.5	5.9	-1.0 p
04. Protection and improvement of human health	5.8 s	4.2	20.7 e	4.1	4.8 p	3.9	3.7	7.4 p
05. Production, distribution and rational utilization of energy	-1.2 s	-3.2	-3.6 e	-0.2	1.3 p	0.7	2.4	4.7 p
06. Agricultural production and technology	2.3 s	-6.5	15.6 e	0.6	11.0 p	-0.4	2.5	0.4 p
07. Industrial production and technology	3.6 s	0.2	15.8 e	1.6	-1.6 p	3.6	4.9	-4.9 p
08. Social structures and relationships	2.4 s	1.3	23.1 e	-15.4	10.3 p	0.3	-1.8	12.6 p
09. Exploration and exploitation of space	0.0 s	0.9	0.7 e	-1.6	2.5 p	1.7	8.8	1.9 p
10. Research financed from GUF	1.9 s	0.6	4.4 e	3.2 p	-1.7 p	5.9	2.4	:
11. Non-oriented research	1.5 s	0.6	34.2 e	-2.6 p	-9.4 p	9.7	6.7	3.4 p
12. Other civil research	11.0 s	44.9	91.1 e	4.7	:	10.2	:	:
13. Defence	1.4 s	-5.7	0.4 e	2.0	39.0 p	0.4	9.6	9.1 p
<b>86. Total civil</b>	<b>2.4 s</b>	<b>0.4</b>	<b>13.5 e</b>	<b>0.9 p</b>	<b>0.1 p</b>	<b>5.2</b>	<b>3.5</b>	<b>4.8 p</b>
<b>99. Total GBAORD</b>	<b>2.3 s</b>	<b>0.0 p</b>	<b>10.7 e</b>	<b>1.2 p</b>	<b>0.7 p</b>	<b>3.5</b>	<b>3.1 p</b>	<b>7.1 p</b>

(1) AAGR is calculated using constant 1995 PPS.

Exception to the reference period:

JP by NABS socio-economic objectives: 2000-2004.

Source: Eurostat, R&D statistics

## Agriculture sciences of lower priority in General University Funds

Table 7 outlines provision for the socio-economic objectives 'Research financed from GUF' and 'Non-oriented research' broken down by field of science, both in absolute terms and as a percentage of the total.

Of 'Research financed from GUF', 'Natural Sciences' obtained the largest budget in Germany (32.0%), Spain (37.7%), Ireland (36.6%) and Finland (25.2%). This field also accounted for a substantial proportion of funding in the Czech Republic (33%) and the Netherlands (20.7%).

In Germany, among 'Natural sciences', it was 'Mathematics and computer sciences' that received the most. In Spain, Ireland and Finland, the budgets were more equally spread among the Natural Sciences subcategories.

'Engineering sciences' accounted for the largest share in the Czech Republic (34.4%), 'Medical

sciences' in the Netherlands and 'Social sciences' in Greece (23.6%) and Slovenia (31%).

While it was not the main field financed from GUF, 'Humanities' was quite important in Greece (15.6%) and even more so in Slovenia (25.0%).

The distribution of GBAORD allocated to 'Non-oriented research' was still much more specialised than the distribution of 'Research financed from GUF'. The highest share was allocated to 'Natural sciences' for all countries with the exception of Slovenia, with shares between 43.8% (Finland) and 95.7% (Ireland). While the main field financed in Slovenia was 'Engineering sciences' (30.5%), 'Natural sciences' was almost as significant with 30.4%.

'Agricultural sciences' received small allocations from General University Funds (GUF) and even less when it was financed through 'Non-oriented research'.

**Table 7: GBAORD allocated to research financed from GUF in million euro and distribution by field of sciences as a percentage, selected countries — 2004**

Socio economic objectives	DE		CZ		EL		ES		IE		NL		SI		FI	
	million euro	%	million euro	%	million euro	%	million euro	%	million euro	%	million euro	%	million euro	%	million euro	%
<b>10. Research financed from GUF</b>	<b>6 843</b>	<b>100</b>	<b>103</b>	<b>100</b>	<b>252</b>	<b>100</b>	<b>1 386</b>	<b>100</b>	<b>363</b>	<b>100</b>	<b>1 678</b>	<b>100</b>	<b>10</b>	<b>100</b>	<b>408</b>	<b>100</b>
<b>Natural Sciences</b>	<b>2 187</b>	<b>32.0</b>	<b>34</b>	<b>33.0</b>	<b>51</b>	<b>20.1</b>	<b>523</b>	<b>37.7</b>	<b>133</b>	<b>36.6</b>	<b>347</b>	<b>20.7</b>	<b>0.7</b>	<b>6.9</b>	<b>103</b>	<b>25.2</b>
10.0 Mathematics and computer sciences	1 739	25.4	8	7.4	17	6.7	107	7.7	15	4.1	98	5.8	0.5	5.8	35	8.5
10.1 Physical sciences	112	1.6	7	6.7	11	4.3	69	5.0	35	9.6	75	4.5	0.0	0.4	20	4.9
10.2 Chemical sciences	81	1.2	7	6.9	9	3.6	157	11.3	35	9.6	76	4.5	0.0	0.3	13	3.2
10.3 Biological sciences	186	2.7	7	7.1	8	3.1	115	8.3	33	9.1	80	4.7	0.0	0.3	30	7.4
10.4 Earth and related (environmental) sciences	69	1.0	5	4.9	6	2.5	76	5.5	15	4.1	18	1.1	0.0	0.2	4	1.1
10.5 Engineering sciences	1 299	19.0	35	34.4	55	21.8	313	22.6	50	13.8	343	20.5	2.0	21.5	80	19.7
10.6 Medical sciences	1 672	24.4	15	14.7	30	11.8	171	12.3	50	13.8	510	30.4	0.8	8.9	97	23.7
10.7 Agricultural sciences	257	3.8	5	5.2	18	7.1	76	5.5	10	2.8	98	5.9	0.6	6.7	10	2.5
10.8 Social sciences	583	8.5	10	9.3	59	23.6	204	14.7	90	24.8	281	16.7	3.0	31.0	84	20.6
10.9 Humanities	845	12.3	4	3.5	39	15.6	99	7.1	30	8.3	99	5.9	2.4	25.0	34	8.3
<b>11. Non-oriented research</b>	<b>2 776</b>	<b>100</b>	<b>117</b>	<b>100</b>	<b>50</b>	<b>100</b>	<b>366</b>	<b>100</b>	<b>5</b>	<b>100</b>	<b>379</b>	<b>100</b>	<b>98</b>	<b>100</b>	<b>234</b>	<b>100</b>
<b>Natural Sciences</b>	<b>2 074</b>	<b>74.7</b>	<b>76</b>	<b>64.7</b>	<b>33</b>	<b>66.8</b>	<b>277</b>	<b>75.8</b>	<b>4</b>	<b>95.7</b>	<b>245</b>	<b>64.7</b>	<b>29.7</b>	<b>30.4</b>	<b>103</b>	<b>43.8</b>
11.0 Mathematics and computer sciences	299	10.8	6	5.1	15	29.3	64	17.5	0	2.2	29	7.6	5.1	5.2	18	7.7
11.1 Physical sciences	1 121	40.4	26	22.1	13	26.7	65	17.7	3	56.5	139	36.6	8.3	8.5	29	12.3
11.2 Chemical sciences	102	3.7	22	18.5	2	3.5	64	17.6	2	34.8	11	2.8	6.2	6.4	11	4.8
11.3 Biological sciences	484	17.4	18	15.7	3	6.5	71	19.5	0	2.2	41	10.9	6.5	6.7	37	15.8
11.4 Earth and related (environmental) sciences	68	2.5	4	3.3	0	0.8	13	3.6	0	0.0	26	6.8	3.6	3.6	8	3.2
11.5 Engineering sciences	164	5.9	7	5.8	2	3.5	4	1.0	0	0.0	31	8.1	29.9	30.5	26	11.0
11.6 Medical sciences	157	5.6	14	12.1	0	0.8	7	1.9	0	0.0	38	10.1	10.8	11.0	50	21.2
11.7 Agricultural sciences	12	0.4	0	0.2	1	1.0	9	2.3	0	0.0	0	0.0	5.1	5.2	3	1.3
11.8 Social sciences	235	8.5	4	3.6	5	9.4	11	3.1	0	2.2	23	6.0	10.6	10.8	32	13.8
11.9 Humanities	135	4.8	16	13.6	9	18.5	58	15.9	0	2.2	42	11.1	11.7	12.0	21	8.9

Source: Eurostat, R&D statistics

## ➤ ESSENTIAL INFORMATION – METHODOLOGICAL NOTES

### Definitions

#### GBAORD

Government budget appropriations or outlays on R&D (GBAORD) are all appropriations allocated to R&D in central government or federal budgets and therefore refer to budget provisions, not to actual expenditure. Provincial or state government appropriations should be included where their contribution is significant. Unless otherwise stated, data include both current and capital expenditure and cover not only government-financed R&D performed in government establishments, but also government-financed R&D in the business enterprise, private non-profit and higher education sectors, as well as abroad (*Frascati Manual*, § 496). Data on actual R&D expenditure, which are not available in their final form until some time after the end of the budget year concerned, may well differ from the original budget provisions. This and further methodological information can be found in the *Frascati Manual*, OECD, 2002.

These data are compiled by national authorities using data for public budgets. The procedure consists of a two step process:

- within the budget statistics, it is first necessary to identify the budget items that involve R&D;
- the R&D content of these budget items must then be measured or estimated.

GBAORD data measure government support to R&D activities, or, in other words, how much priority governments give to the public funding of R&D. In most countries national budget data is used as an administrative data source. Problems of data compilation are due to the fact that national budgets have their own terminology and methodology and therefore often do not match the Eurostat/OECD methodology contained in the 'Proposed standard practice for surveys of research and experimental development' (*Frascati Manual*, 2002).

For data in national currency, ECU/EUR current, current and constant 1995 PPS, EU aggregates are calculated as the sum of corresponding countries. For 2004, EU aggregates are estimated using provisional data and estimating the annual average growth rate.

#### Breakdown by socio-economic objectives – NABS

Government R&D appropriations or outlays on R&D are broken down by socio-economic objectives on the basis of NABS — *Nomenclature for the analysis and comparison of scientific programmes and budgets, Eurostat 1994*. The 1993 version of NABS applies from the 1993 final and the 1994 provisional budgets onwards. Not all countries collect the data directly by NABS: some follow other compatible classifications (OECD, Nordforsk), which are then converted to data compiled in accordance with NABS classification (see Table 8.2 of the *Frascati Manual*).

### Exceptions

No GBAORD data exist for Luxembourg before 2000 and therefore EU aggregates exclude Luxembourg before that year. From 2000 onwards, Luxembourg is included only for the total GBAORD.

No GBAORD data exist for Cyprus (until 2003) and Hungary, therefore EU-25 and EEA figures exclude them.

Data for Japan include federal or central government only. From 1990 to 2000, it excludes R&D in the social sciences and humanities.

US data exclude the socio-economic objectives 'Research financed from general university funds' and 'Other civil research' and are therefore systematically underestimated. Comparisons with other countries should be made with caution. Data for the United States include federal or central government only from 1989 onwards. From 1989 to 1999, it excludes most or all capital expenditure.

### EU aggregates

EU aggregates are calculated as the sum of corresponding countries (estimates are made if a country is missing).

EU-15 aggregates are available from 1981 onwards at the NABS chapter level. EU-25 aggregates are available for total GBAORD from 1999 onwards and at the NABS chapter level from 2004 onwards.

### Time series

The analysis in the present Statistics in Focus covers the period 1995 to 2005, with 2005 being provisional.

### Sources

The data are forwarded to Eurostat by the national administrations of Member States and other countries involved. Data for Japan and the United States come from the OECD – *Main Science and Technology Indicators* (MSTI).

### Abbreviations and symbols

:	Not available
-	Not applicable or real zero or zero by default
e	Estimated value
b	Break in series
p	Provisional value
r	Revised value
s	Eurostat estimate

AAGR	Annual Average Growth Rate
GUF	General University Fund
PPS	Purchasing Power Standard

Data presented in this Statistics in Focus reflects data availability in Eurostat's reference database as of 30 August 2006.

## Further information:

Data: [EUROSTAT Website/Home page/Science and technology/Data](#)

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