

20 November 2007

Statistics on Scientific Research and Technological Development (R+D)

Year 2006. (Provisional results)

Main results

- The expenditure on R+D rises to 11,801 million euros, reaching 1.20% of the GDP, with an increase of 16% as compared with 2005.
- The business expenditure on R+D rises 20% with respect to 2005.
- The company sector accounts for 55.5% of the total expenditure on R+D, compared to the 53.8% registered in 2005.
- The number of companies that carry out R+D activities grows 15%.
- The Public Administration sector presents a growth rate of 13% as compared with the year 2005.
- The Autonomous Communities that make the greatest effort in R+D activities are Comunidad de Madrid, Comunidad Foral de Navarra, País Vasco and Cataluña, offering intensity figures that are higher than the national average.
- Cantabria, La Rioja and Principado de Asturias are the Autonomous Communities registering the highest growth rates.

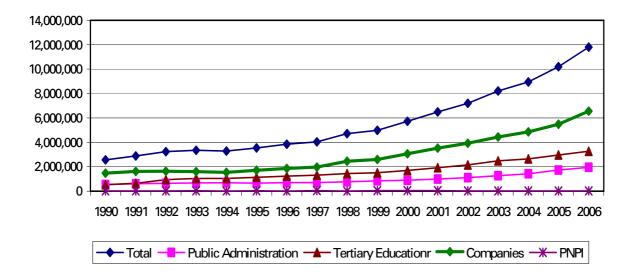
The domestic expenditure on Research and Development (R+D) rose to 11,815 million euros in 2006, accounting for 1.20% of the Gross Domestic Product (GDP) and indicating an increase of 16% as compared with the year 2005.

By field of operation, the company sector registered the highest percentage over the total expenditure on R+D (55.5%), accounting for 0.67% of the GDP. The next sector in importance was Tertiary education (with 27.6% of the total expenditure, representing 0.33% of the GDP). The Public Administration expenditure on R+D accounted for 16.7% of the total expenditure and 0.20% of the GDP. The remaining 0.2% corresponded to the Private Non-Profit Institutions (PNPI) sector.

In 2006, the business sector experienced a 20% increase in its expenditure on R+D activities as compared with 2005. In addition, in this sector, the number of units carrying out R+D activities grew 15% with respect to 2005.

On the other hand, the Public Administration sector registered a growth rate of 13% in domestic expenditure on R+D.

Evolution of the expenditure on R+D (thousand euros)



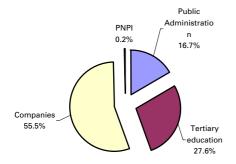


The R+D activities were mainly financed by the private sector (47.1%) and the Public Administration sector (42.5%). The funds originating from foreign sources (5.9%), from Tertiary education (3.9%) and from the PNPI (0.6%) financed the remaining 10.4% of the total expenditure on R+D.

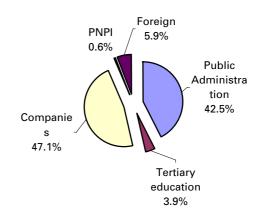
The total domestic expenditure on R+D, by field of operation and origin of the funds. 2006 (thousand euros)

Field of operation	Total	Public Administration	Tertiary Education	Companies	PNPI	Foreign
TOTAL	11,815,218	5,020,049	466,075	5,561,629	66,041	701,425
Public Administration	1,970,824	1,718,060	2,426	119,170	10,403	120,765
Tertiary education	3,265,739	2,349,895	461,265	257,698	33,905	162,976
Companies	6,557,529	946,612	2,368	5,179,436	12,759	416,354
PNPI	21,127	5,481	16	5,325	8,975	1,331

Total domestic expenditure on R+D, by field of operation. 2006



Total domestic expenditure on R+D, by origin of the funds. 2006





Comunidad de Madrid, Comunidad Foral de Navarra, País Vasco and Cataluña, the Autonomous Communities making the greatest effort in R+D

The Autonomous Communities that made the greatest effort in 2006 in R+D activities were Comunidad de Madrid (1.98% of its GDP), Comunidad Foral de Navarra (1.92%), País Vasco (1.60%) and Cataluña (1.43% of its GDP). These were the only Communities to register intensity figures above the national average for R+D expenditure.

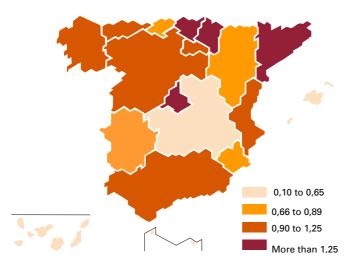
On the other hand, the Autonomous Communities that recorded the highest growth rates were Cantabria, La Rioja and Principado de Asturias.

The total domestic expenditure on R+D, by Autonomous Community and field of operation. 2006 (thousand euros)

Andalucía	1,213,815	0.90	402,995	283,184	527,245	392
Aragón	263,428	0.88	152,310	50,787	60,009	322
Asturias (Principado)	188,113	0.90	88,030	29,001	70,913	169
Balears (Illes)	70,655	0.29	13,306	20,320	36,886	143
Canarias	254,510	0.65	66,295	66,207	121,961	47
Cantabria	98,100	0.80	30,874	15,560	48,844	2,822
Castilla y León	511,335	0.97	286,364	42,209	182,235	526
Castilla-La Mancha	155,703	0.47	75,726	21,142	58,694	142
Cataluña	2,614,383	1.43	1,698,424	311,393	598,028	6,538
Comunitat Valenciana	913,160	0.96	348,066	109,353	455,198	544
Extremadura	117,288	0.73	21,212	36,428	59,645	3
Galicia	449,522	0.90	198,170	75,306	175,926	120
Madrid (Comunidad de)	3,415,991	1.98	2,074,409	796,935	535,836	8,811
Murcia (Región de)	192,516	0.78	84,013	36,214	72,244	45
Navarra (C. Foral de)	316,978	1.92	214,725	23,888	78,239	126
País Vasco	959,393	1.60	751,868	39,263	167,885	377
Rioja (La)	75,127	1.06	50,447	13,551	11,129	0
Ceuta y Melilla	5,202	0.19	295	84	4,823	0

 $^{(\}mbox{\ensuremath{^{'}}})$ Data calculated with respect to the GDP of the year 2006, base 2000.

Intensity of the expenditure on R+D. 2006 (%)





The number of persons employed in R+D activities grows 8%

The number of persons employed in R+D activities on a full-time equivalent increased 8.1% as compared with 2005. In the case of women, the increase was 9.3%. During the year 2006, a total of 188,978 persons worked in R+D activities, on a full-time equivalent, representing 9.57 per thousand of the employed population.

The group of researchers reached the figure of 115,798 persons per year, accounting for 5.86 per thousand of the employed population and indicating an increase of 5.5% with respect to the year 2005.

38.2% of the R+D personnel were women. The highest percentages of female participation in R+D activities were recorded in the PNPI (52.6%) and the Public Administration (49.3%). In companies, this percentage stood at 29.2%.

Personnel employed in R+D, by field of operation and according to occupation and sex. 2006 (full-time equivalent)

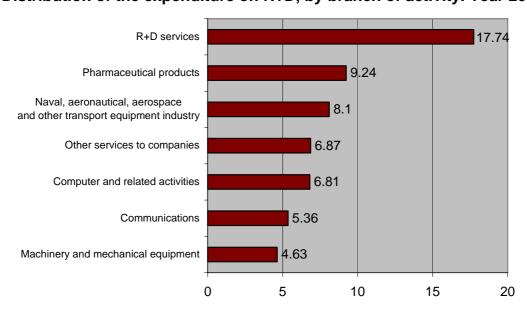
Sector de ejecución	Personal I+D		Investigadores	
	Total	Mujeres	Total	Mujeres
TOTAL	188,977.6	72,171.2	115,798.4	43,430.6
Administración pública	34,587.9	17,046.7	20,062.7	9,499.5
Enseñanza superior	70,949.5	30,631.4	55,443.0	22,506.3
Empresas	82,869.8	24,193.3	39,935.7	11,256.7
IPSFL	570.4	299.8	357.0	168.1

R+D expenditure in the company sector

Industry accounted for 52.2% of the expenditure on R+D in 2006, while services companies represented 44.5% of said expenditure.

By branch of activity, R+D services companies were worth noting, with 17.7% of the total expenditure, and pharmaceutical companies with 9.2%.

Distribution of the expenditure on R+D, by branch of activity. Year 2006



Methodological note

The R+D statistics have been prepared following the methodological recommendations of the *Proposed Standard Practice for Surveys on Research and Experimental Development* of the OECD (Frascati Manual). In particular, the new version expressly recommends "that all companies carrying out R+D work, either continuously or sporadically, be included in R+D surveys".

Until the year 2001, the R+D statistics were based exclusively on a census of the known statistical units that carried out R+D activities. For this purpose, an annual request was made to different bodies of the State Central Administration and the Autonomous Communities for information on the units receiving aid in order to carry out R+D activities.

The inclusion of sporadic R+D made it necessary to obtain information on the rest of the units not previously included a priori in the R+D Directory. This goal was achieved through a sample study of approximately 26,000 units that were representative of the group of companies with 10 or more employees and within the scope of the study.

Since the year 2002, this statistical operation has been carried out together with the survey on Technological innovation in companies, researching a census of potentially investigating statistical units, which is updated annually, and which this year is comprised of 20,600 units and a randomly chosen sample of companies.

Scientific research and technological development (R+D) is comprised of the creative work carried out systematically in order to increase the volume of knowledge, including the knowledge of man, culture and society, and the use of this knowledge to create new applications.

The main aggregates for quantifying the national effort invested in R&D activities are the gross domestic expenditure on R+D, which includes the current and capital expenditure corresponding to R+D activities undertaken within the State throughout the year, and the personnel working on R&D tasks, which includes all of the persons who have worked in the country throughout the year, on a full-time equivalent (FTE).