

2 December 2007

**Statistics on Scientific Research and Technological Development
(R&D)
Year 2007. Provisional results**

Main results

- Expenditure on R&D rises to 13,342 million euros in 2007, reaching 1.27% of GDP, with an increase of 12.9% as compared with 2006.
- The Public Administration sector presents a growth rate of 19.2% as compared with the year 2006. In turn, the Tertiary Education sector increases 7.7%.
- Business expenditure on R&D rises 13.7% with respect to 2006.
- The company sector accounts for 55.9% of total expenditure on R&D, in comparison with the 55.5% registered in 2006.
- The number of companies that carry out R&D activities grows 16.3%.
- 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.
- Castilla-La Mancha, Región de Murcia and País Vasco are the Autonomous Communities registering the highest growth rates.

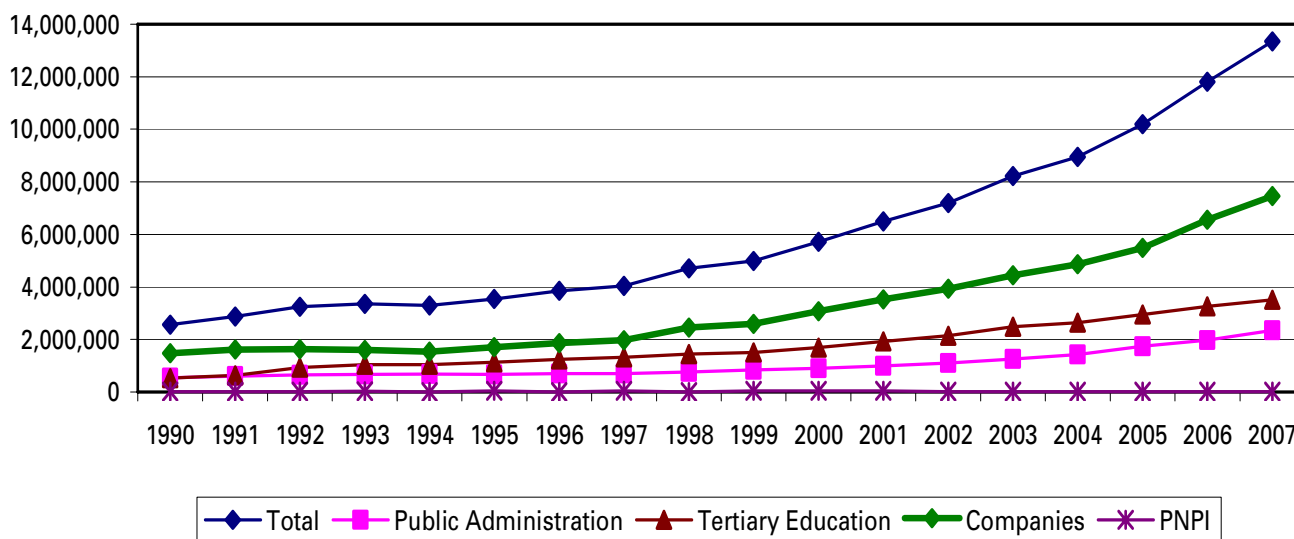
Domestic expenditure on Research and Development (R&D) rose to 13,342 million euros in 2007, accounting for 1.27% of Gross Domestic Product (GDP) and indicating an increase of 12.9% as compared with the year 2006.

By field of operation, **the company sector registered the highest percentage over total expenditure on R&D (55.9%), accounting for 0.71% of GDP.** The next sector in importance was Tertiary Education (with 26.4% of total expenditure, representing 0.33% of GDP). Public Administration expenditure on R&D accounted for 17.6% of total expenditure and 0.22% of GDP. The remaining 0.1% corresponded to the Private Non-Profit Institution (PNPI) sector.

In 2007, the business sector experienced a 13.7% increase in its expenditure on R&D activities, as compared with 2006. In addition, in this sector, the number of units carrying out R&D activities grew 16.3% with respect to 2006.

On the other hand, the Public Administration sector registered a growth rate of 19.2% in domestic expenditure on R&D.

Evolution of expenditure on R&D (thousand euros)



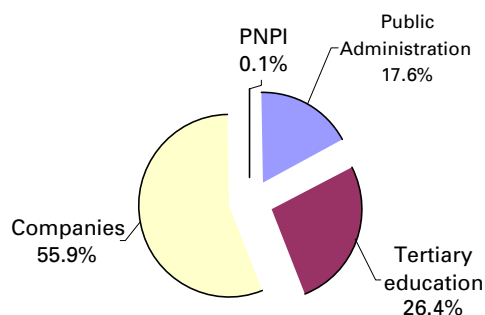
R&D activities were mainly financed by the private sector (45.5%) and the Public Administration sector (43.7%). The funds originating from foreign sources (7.0%), from Tertiary Education (3.3%) and from the PNPI (0.5%) financed the remaining 10.8% of total expenditure on R&D.

Total domestic expenditure on R&D, by field of operation and origin of the funds. 2006

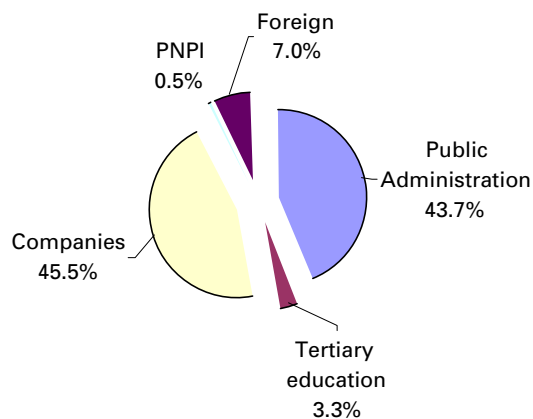
Thousand euros

Field of operation	Total	Public Administration	Tertiary Education	Companies	PNPI	Foreign
TOTAL	13,342,371	5,824,632	444,509	6,065,035	72,678	935,517
Public Administration	2,348,843	2,029,131	5,440	145,460	12,945	155,868
Tertiary education	3,518,595	2,572,118	436,884	317,193	40,969	151,430
Companies	7,453,902	1,217,866	1,907	5,596,244	11,176	626,708
PNPI	21,031	5,518	279	6,137	7,587	1,511

Total domestic expenditure on R&D, field of operation.



Total domestic expenditure on R&D, by origin of the funds. 2007



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 2007 in R&D activities were Comunidad de Madrid (1.96% of its GDP), Comunidad Foral de Navarra (1.89%), País Vasco (1.87%) and Cataluña (1.48% 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 Castilla-La Mancha (37.4%), Región de Murcia (28.6%) and País Vasco (26.8%).

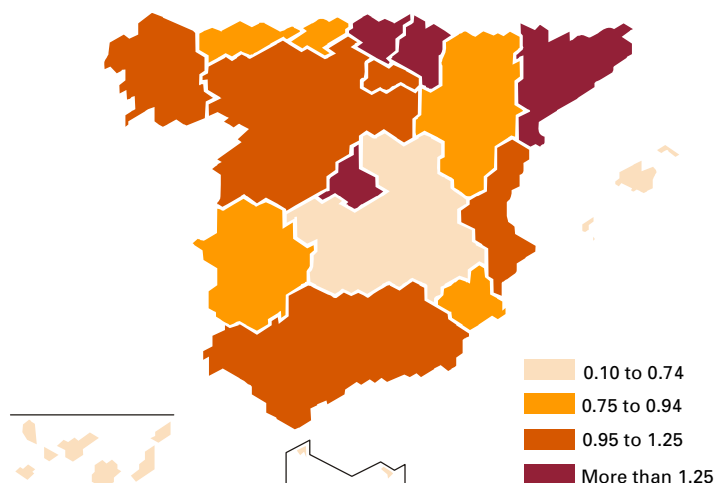
Total domestic expenditure on R&D, by Autonomous Community and field of operation. 2007

Thousand euros

	Total sectors	% of regional GDP*	Companies	Public Administration	Tertiary Education	PNPI
Andalucía	1,478,545	1.01	548,041	336,946	592,828	730
Aragón	296,894	0.91	163,881	65,421	67,424	168
Asturias (Principado)	211,703	0.94	96,564	41,511	73,354	274
Balears (Illes)	86,794	0.33	20,637	26,090	39,828	239
Canarias	266,802	0.63	60,446	78,939	127,328	89
Cantabria	117,464	0.89	40,283	21,626	52,008	3,547
Castilla y León	620,717	1.10	366,035	56,368	198,282	32
Castilla-La Mancha	213,959	0.59	106,262	37,707	69,971	19
Cataluña	2,908,726	1.48	1,826,186	398,336	677,379	6,825
Comunitat Valenciana	977,589	0.95	388,661	135,412	453,255	261
Extremadura	128,964	0.75	21,199	43,932	63,746	87
Galicia	555,625	1.03	307,466	72,879	175,078	202
Madrid (Comunidad de)	3,584,130	1.96	2,114,083	890,326	572,368	7,353
Murcia (Región de)	247,556	0.91	126,220	40,031	81,305	-
Navarra (C. Foral de)	333,872	1.89	219,091	36,192	78,479	110
País Vasco	1,216,725	1.87	990,946	50,506	174,602	671
Rioja (La)	90,204	1.18	57,065	16,518	16,198	423
Ceuta and Melilla	6,098	0.20	836	102	5,160	-

(*) Data calculated with respect to GDP of the year 2007, base 2000.

Intensity of expenditure on R&D. 2007(%)



The number of persons employed in R&D activities grows 6.4%

The number of persons employed in R&D activities on a full-time equivalent increased 6.4% as compared with 2006. In the case of women, the increase was 8.3%, while in the case of men, growth stood at 5.3%. During the year 2007, a total of 201,109 persons worked in R&D activities, on a full-time equivalent, representing 9.88 per thousand of the employed population.

The group of researchers reached the figure of 122,625 persons that year, accounting for 6.02 per thousand of the employed population and indicating an increase of 5.9% with respect to the year 2006.

38.9% of R&D personnel were women. The highest percentages of female participation in R&D activities were recorded in the PNPI (57.8%) and the Public Administration (49.7%). In companies, this percentage stood at 30.2%.

Personnel employed in R&D, by field of operation and according to occupation and sex. 2007

Full-time equivalent

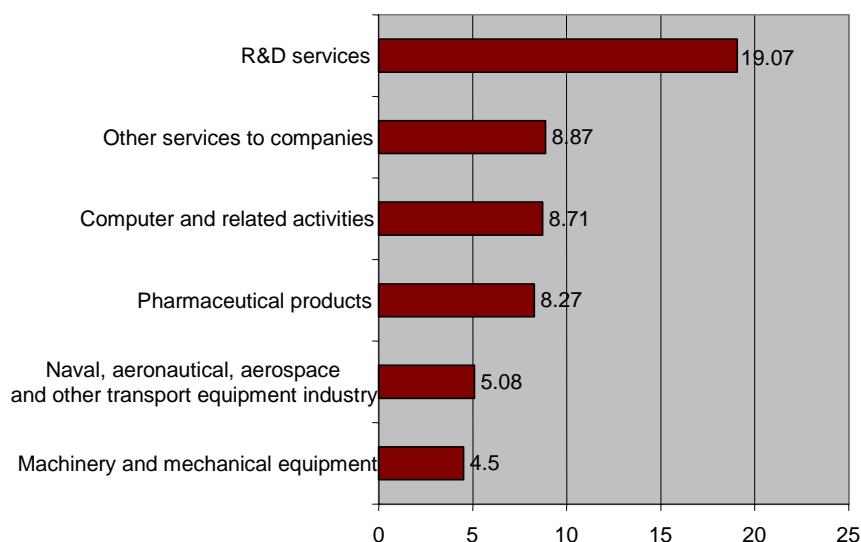
Field of operation	Total R&D Personnel		Researchers	
	Total	Women	Total	Women
TOTAL	201,109	78,170	122,625	46,458
Public Administration	37,919	18,852	21,412	10,122
Tertiary Education	75,148	32,578	58,813	23,916
Companies	87,543	26,451	42,101	12,265
PNPI	499	289	299	155

R&D expenditure in the company sector

Industry accounted for 48.1% of expenditure on R&D in 2007, while services sector companies represented 46.8% of said expenditure.

By branch of activity, *R&D services companies* (NACE 73) were worth noting, with 19.1% of total expenditure, and *Other services to companies* (NACE 70, 71, 74), with 8.9%.

Distribution of expenditure on R&D, by branch of activity. Year 2007



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 statistical units known to carry 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 27,000 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 26,000 units, plus 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 *gross domestic expenditure on R&D*, which includes 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).

For further information see INEbase-www.ine.es/en/welcome_en.htm All press releases at: www.ine.es/en/prensa/prensa_en.htm

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