

30 November 2010**Statistics on R&D Activities**
Year 2010. *Preview results***Main results**

- **Expenditure on R&D** reaches 14,588 million euros in the year 2010, with a 0.1% increase as compared with 2009. This expenditure represents **1.38% of GDP***, which is the same as that recorded for the year 2009, on recalculating both GDP figures with the new 2008 base.

- The Public Administration R&D expenditure increases 0.1%, whereas that of Companies decreases 0.8%, as compared with 2009.

- The business sector accounts for 51.5% of total R&D expenditure, as compared with 51.9% in the year 2009.

- The Public Administration finances 46.6% of R&D activities, as compared with 42.9% from the Companies sector.

- The Autonomous Communities with the greatest investment effort in R&D are Comunidad de Madrid, Comunidad Foral de Navarra, País Vasco and Cataluña. All of them register intensity figures in expenditure above the national average.

- Illes Balears, Andalucía and Castilla-La Mancha are the Autonomous Communities with the highest growth rates in R&D, as compared with 2009.

(*) Data calculated with regard to national GDP for the year 2010 in base 2008.

Internal expenditure on Research and Development (R&D)

Internal expenditure on Research and Development (R&D) reached 14,588 million euros in 2010, accounting for 1.38% of Gross Domestic Product (GDP) and indicating an increase of 0.1%, as compared with the year 2008.

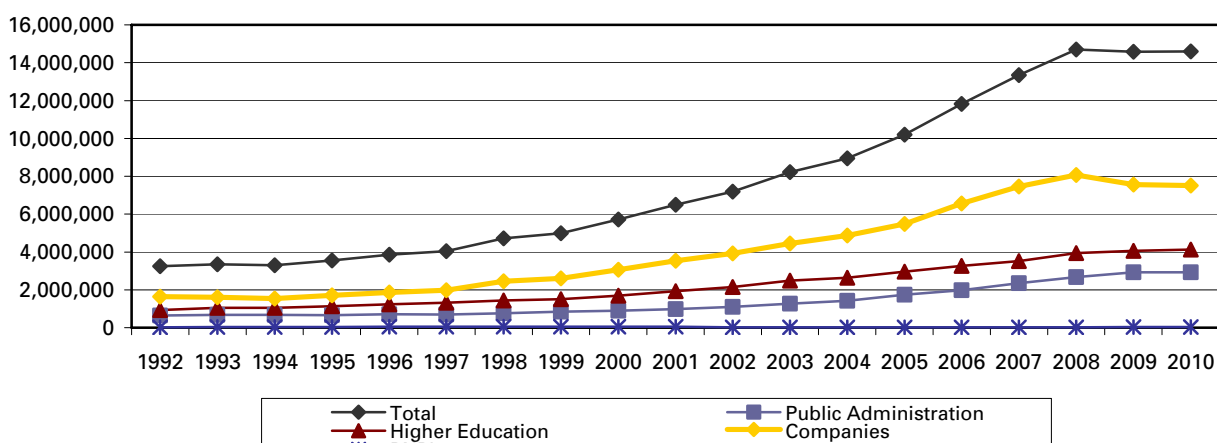
By field of operation, the business sector registered the highest percentage over total R&D expenditure, standing at 51.5% (which accounted for 0.71% of GDP). The next sector in importance was Higher Education, with 28.3% of total expenditure, representing 0.39% of GDP.

In turn, Public Administration R&D expenditure accounted for 20.1% of total expenditure (0.28% of GDP). The remaining 0.2% corresponded to the Private Non-Profit Institutions sector (PNPI).

Comparing R&D expenditure activities in 2010 with that recorded the previous year, it is worth noting that the business sector experienced a decrease of 0.8%. It should be borne in mind that in this sector, the number of units that carried out R&D activities decreased 15.6%, as compared with 2009.

On the other hand, the Public Administration sector registered an annual growth rate of 0.1% in internal R&D expenditure.

Evolution of R&D expenditure (thousands of euros)



Financing of R&D activities

In the year 2010, R&D activities were mainly financed by the Public Administration (46.6%) and the private sector (42.6%). The funds originating from foreign sources (5.7%), from Higher Education (3.9%) and from the PNPI (0.7%) financed remaining total R&D expenditure.

Total internal R&D expenditure, by field of operation and origin of the funds. Year 2010.

Thousand euros

Field of operation	Total	Source of the funds				
		Public Administration	Higher Education	Companies	PNPI	Foreign
TOTAL	14,588,455	14,588,455	14,588,455	14,588,455	14,588,455	14,588,455
In the Public Administration	2,930,562	2,553,642	9,750	211,353	18,413	137,406
Higher Education	4,123,150	2,997,499	564,208	324,946	49,908	186,590
Companies	7,506,443	1,244,968	1,864	5,727,426	20,693	511,492
PNPI	28,300	8,145	191	7,905	10,908	1,151

R&D expenditure by Autonomous Community

The Autonomous Communities with the greatest effort in R&D activities in 2010 were Comunidad de Madrid (2.02% of their GDP), Comunidad Foral de Navarra (1.97%), País Vasco (1.95%) and Cataluña (1.63%). These four Communities were the only ones to register intensity figures in R&D expenditure above the national average.

The Autonomous Communities with the highest growth rates as compared with 2009 were Illes Balears (10.5%), Andalucía (9.4%) and Castilla-La Mancha (7.3%).

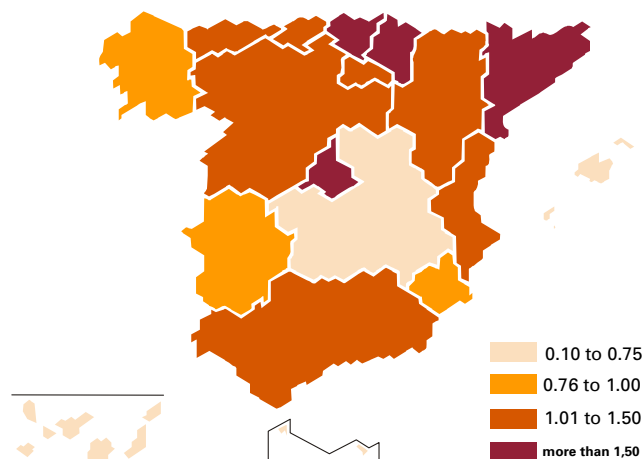
Total internal R&D expenditure, by Autonomous Community and field of operation. Year 2010.

Thousand euros

	Sector total	% over regional GDP *	Companies	Public. Administration	Higher Education	PNPI
Andalucía	1,726,766	1.20	619,489	382,958	723,401	917
Aragón	374,241	1.15	211,016	78,643	84,055	526
Asturias, Principado	238,127	1.03	97,862	36,940	102,976	349
Balears, Illes	110,385	0.41	15,626	47,158	47,260	341
Canarias	255,402	0.62	50,922	82,745	121,390	345
Cantabria	157,850	1.16	50,578	29,473	75,062	2,737
Castilla y León	608,202	1.06	325,785	66,651	215,160	606
Castilla-La Mancha	255,178	0.71	134,175	36,397	84,446	161
Cataluña	3,227,217	1.63	1,823,638	638,228	755,541	9,811
Comunitat Valenciana	1,080,986	1.06	433,455	151,973	495,044	514
Extremadura	151,778	0.83	28,847	48,733	74,034	165
Galicia	531,601	0.96	239,501	84,742	207,271	87
Madrid, Comunidad de	3,854,768	2.02	2,098,234	1,063,352	686,095	7,087
Murcia, Región de	256,149	0.94	99,274	48,744	107,860	271
Navarra, Comunidad Foral de	365,719	1.97	253,568	29,610	82,435	106
País Vasco	1,305,631	1.95	982,282	78,632	241,379	3,337
Rioja, La	84,886	1.08	42,006	25,585	16,354	940
Ceuta	1,433	0.09	57	0	1,433	0
Melilla	2,138	0.14	127	0	1,954	0

(*) Data calculated with regard to GDP for the year 2010, base 2000.

Intensity of R&D expenditure (%). Year 2010.



Personnel employed in R&D

In the year 2010, a total of 222,022 persons were dedicated to R&D activities, on a full-time equivalent, representing 12.0 per thousand of the total employed population.

The group of researchers reached the figure of 134,653 persons on a full-time equivalent, representing 7.3 per thousand of the total employed population.

40.0% of personnel in R&D on a full-time equivalent were women. The highest percentages of female participation were recorded in Private Non-Profit Institutions (53.5%) and in Public Administration (51.4%). In business, this percentage stood at 30.7%.

Personnel employed in R&D, by field of operation and according to occupation and sex. Year 2010.

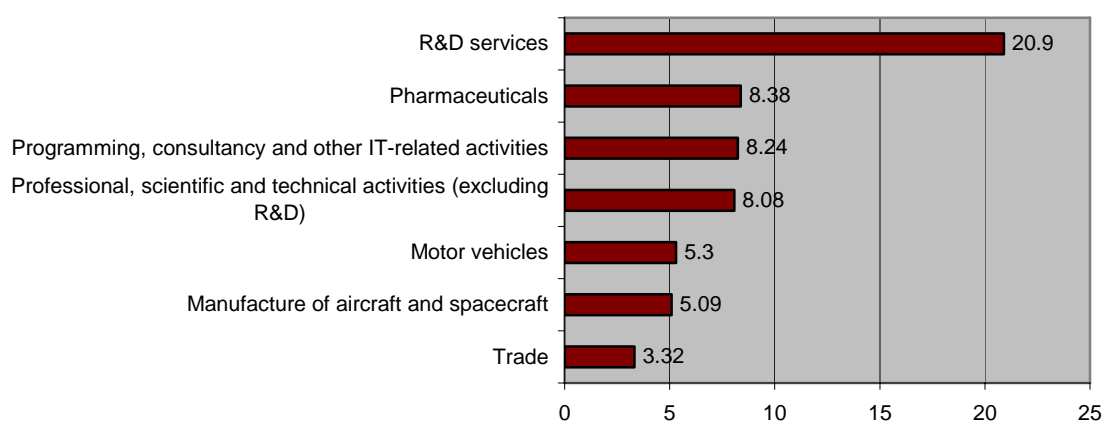
On a full-time equivalent

Field of operation	Total		Researchers	
	Total	Women	Total	Women
TOTAL	222,021.7	88,869.9	134,653.0	51,830.5
Public Administration	46,007.7	23,656.0	24,377.2	11,588.4
Higher Education	83,299.9	36,667.4	64,589.8	26,511.8
Companies	92,221.3	28,282.8	45,377.3	13,585.5
PNPI	492.8	263.7	308.7	144.8

R&D expenditure by branch of activity

Industry accounted for 47.1% of R&D expenditure in the year 2010. In turn, companies in the services sector accounted for 49.7% thereof. By branch of activity, worth noting were *R&D services*, with 20.9% of total expenditure, and *Pharmaceuticals*, with 8.4%.

Distribution of R&D expenditure, by branch of activity. Year 2010.



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 solely 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.

Since the year 2002, this statistical operation has been carried out co-ordinately with the survey on Innovation in Companies, researching a census of potentially researching statistical units, which is updated annually, and which this year comprises 20,668 units and a randomly chosen sample of companies.

Scientific research and technological development (R&D) comprises 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 *internal R&D expenditure*, which includes current and capital expenditure corresponding to R&D activities undertaken within the State throughout the year, and the *personnel dedicated to R&D tasks*, which includes all of the persons who have worked in the country throughout the year, on a full-time equivalent (FTE).

Last 14 October 2011, the INE published the annual series of the Spanish National Accounts, referring to new base 2008. The methodological innovation that includes new base 2008 is the introduction of National Classification of Economic Activities CNAE-2009. This circumstance has led us, **for the first time in this publication, to include GDP 2010 with base 2008.**

Nonetheless, and given that the Spanish Regional Accounts in new base 2008 will not be published until the end of 2011, **for the data by Autonomous Community, we have used data referring to regional GDP in 2010, in base 2000.** Once the Spanish Regional Accounts have been published in new base 2008, the INE will publish the data by Autonomous Community in the new base.