

7 July 2010

Statistics on Biotechnology Use
Year 2008. *Provisional results*

**Business expenditure on Biotechnology-related activities grows
31.8% in 2008, as compared with the previous year**

**Internal expenditure on Biotechnology R&D activities registers an
interannual increase of 14.8%**

Business expenditure on Biotechnology-related activities reached 711 million euros in 2008, with a 31.8% increase with regard to the previous year.

A total of 942 companies carried out Biotechnology-related activities, indicating a 23.3% increase as compared with 2007. 13.2% of these companies had income of international origin related to biotechnological activities.

For the 32.4% of companies with Biotechnology-related activities, said activities were their main or sole activities. 23.9% considered them to be a secondary line of business, and 43.7% claimed that they were a necessary tool for one or several stages of the production process.

Internal expenditure on Biotechnology-related R&D activities

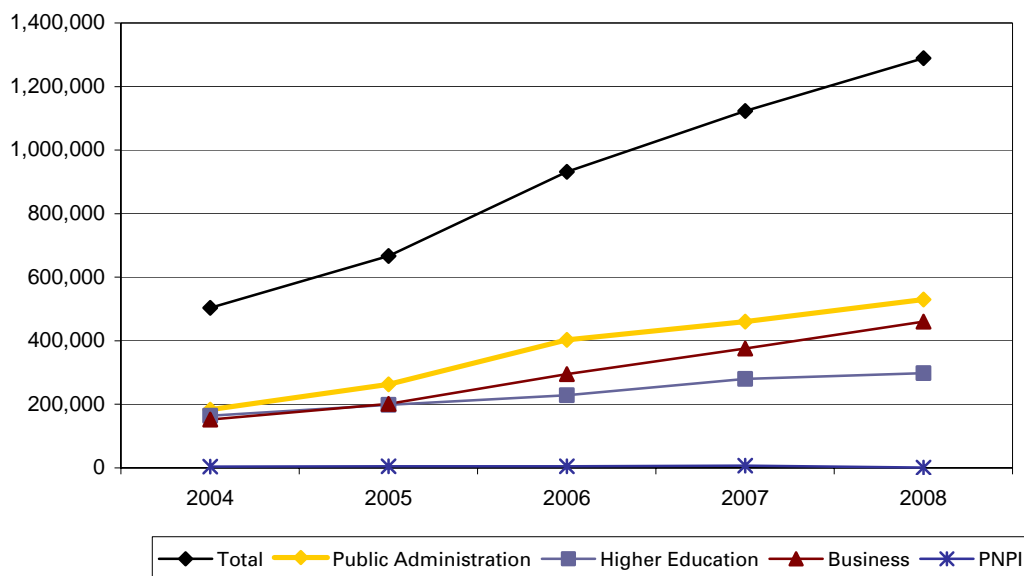
Internal expenditure on Biotechnology-related R&D activities reached 1,289 million euros in the year 2008, accounting for 8.8% of total internal expenditure on R&D activities, and a 14.8% increase as compared with 2007.

By sector of operation, Public Administration presented the highest percentage over total internal expenditure on Biotechnology R&D activities (41.1%), followed by the Business sector (35.7%) and Higher education (23.1%).

The business sector experienced a 22.5% increase in internal expenditure on Biotechnology-related R&D activities in 2008. Moreover, the number of companies with internal Biotechnology R&D activities registered an increase of 18.0%.

In turn, in Public Administration, internal expenditure on Biotechnology R&D grew 15.1%, whereas in Higher education, the annual rate was 6.2%.

Evolution of internal expenditure on Biotechnology R&D (thousands of euros)



Internal Biotechnology-related R&D activities in 2008 were mainly financed by the Public Administration (56.7%) and the private sector (31.1%). Funds from foreign sources (7.1%), from Higher education (3.7%) and from Private Non-Profit Institutions (1.4%) financed the rest.

Employment in Internal Biotechnology-related R&D activities

The total number of persons dedicated to internal Biotechnology R&D activities, on a full-time equivalent, increased 9.3% in 2008, reaching 19,658. This figure amounted to 9.1% of the total personnel employed in R&D activities.

The group of researchers in internal Biotechnology R&D activities reached the figure of 12,317 persons.

58.1% of personnel were women. The highest percentages of female participation were recorded in Public Administration (63.0%) and in Business (59.2%).

Personnel employed in internal Biotechnology R&D activities, according to field of operation, by occupation and sex. Year 2008

On a full-time equivalent

Field of operation	Total		Researchers	
	Total	Women	Total	Women
TOTAL	19,658	11,414	12,317	6,595
Public Administration	8,563	5,396	4,934	2,864
Higher education	6,130	3,081	4,587	2,161
Business	4,933	2,918	2,780	1,561
PNPI	32	19	16	9

Data by Autonomous Community

The Autonomous Communities that registered the greatest internal expenditure on Biotechnology R&D in 2008 were Comunidad de Madrid and Cataluña, followed by Comunitat Valenciana, Andalucía and País Vasco.

Total internal expenditure on Biotechnology R&D, by Autonomous Community and sector of operation. Year 2008

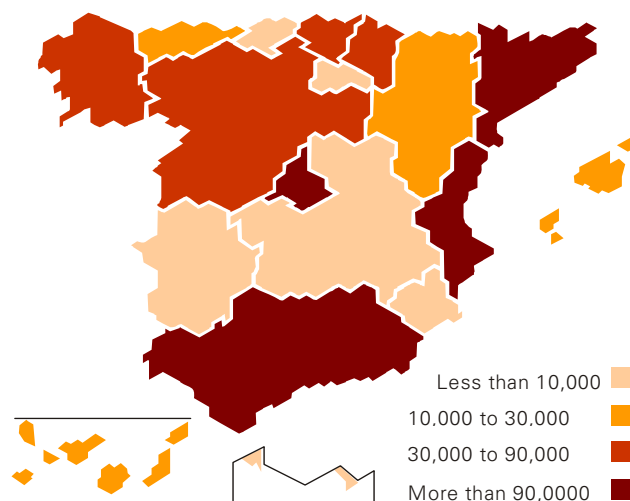
Thousands of euros

	TOTAL	Rest of sectors *	Companies
TOTAL	1,288,867	828,214	460,653
Andalucía	108,938	81,247	27,691
Aragón	22,013	18,484	3,529
Asturias (Principado de)	13,084	11,588	1,496
Balears (Illes)	13,649	12,849	800
Canarias	19,431	17,982	1,449
Cantabria	917	-	917
Castilla y León	53,976	38,400	15,576
Castilla-La Mancha	8,284	7,688	596
Cataluña	338,952	216,660	122,292
Comunitat Valenciana	119,147	97,920	21,227
Extremadura	4,883	2,335	2,548
Galicia	45,039	31,020	14,019
Madrid (Comunidad de)	409,263	236,557	172,706
Murcia (Región de)	9,294	5,936	3,358
Navarra (Comunidad Foral de)	34,342	21,342	13,000
País Vasco	84,923	26,624	58,299
Rioja (La)	2,732	1,582	1,150
Ceuta and Melilla	-	-	-

(*) Rest of sectors, Public Administration, PNPI and Higher education

Internal expenditure on Biotechnology-related R&D activities. Year 2008

(thousands of euros)

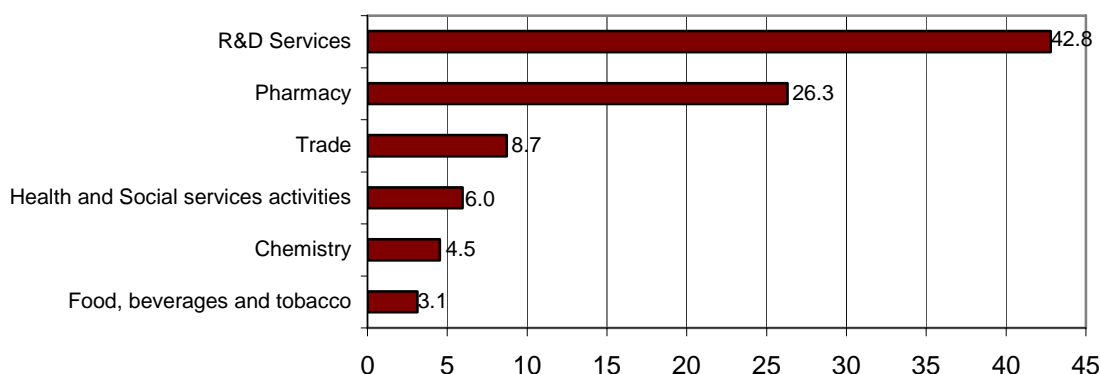


Data by sector and branch of activity

The Services sector accounted for 61.1% of internal expenditure on Biotechnology-related R&D activities in the year 2008. In turn, companies in Industry accounted for 35.8% thereof.

By branch of activity, worth noting were *R&D Services* (with 42.8% of total expenditure) and *Pharmacy* (with 26.3%).

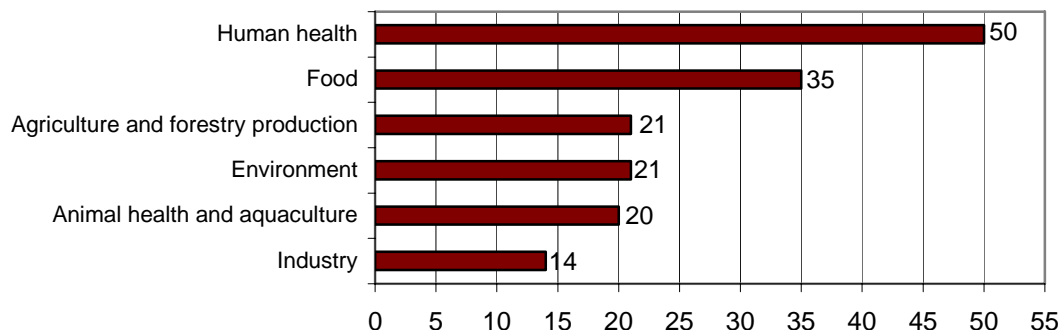
Distribution of internal expenditure on Biotechnology R&D, by branch of activity. Year 2008 (%)



Areas of Biotechnology application

Amongst the areas of final application of the products obtained from the use of the different types of biotechnology, worth noting were *Human health* and *Food*, with 50% and 35%, respectively, of the total units.

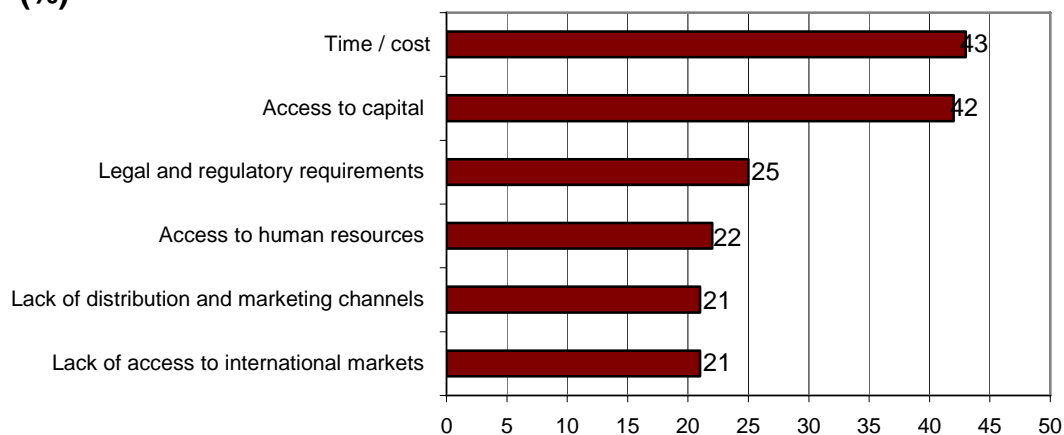
Percentage of units with biotechnological activities, according to the areas of final Biotechnology application. Year 2008



Impediments to the development of Biotechnology

The impediments that, with a high* valuation, prevented or hindered the progress of development and marketing activities of biotechnological products and processes, were time/cost and access to capital, with 43% and 42%, respectively, of the total units that carried out Biotechnology-related activities during the year 2008.

Impediments to the development of Biotechnologies. Year 2008 (%)



* The scale was: High, Medium, Low and Does not know

Methodological note

The Statistics on Biotechnology Use were prepared following the methodological guidelines of the OECD.

The information was collected, in the case of companies, through an additional module annexed to the Technological Innovation in Companies Survey, and intended for all those units that were potentially linked to Biotechnology. In the case of the Public Sector, the information is collected through a module annexed to the Statistics on R&D Activities, and is aimed at all those units that carry out the R&D statistics, be they Higher education centres, Public Administration or PNPI.

As of the year 2006, the scope of the Biotechnology statistics was broadened, considering as the target of study those units with Biotechnology-related activities (not only Biotechnology R&D), analysing the type of biotechnological activities that they carry out, and the areas of final application of the products obtained from these, as well as the obstacles that prevent or hinder the progress of the development and marketing of biotechnological products and processes. In 2007, it considered the internationalisation of Biotechnology-related activities, and beginning in 2008, it has included expenditure on external Biotechnology R&D activities.

Biotechnology comprises the application of science and technology to living organisms, as well as to their parts, products and models, in order to alter living or inert material, for the purpose of producing knowledge, goods or services.

The main aggregates for quantifying the national effort in Biotechnology-related activities, performed within the State throughout the year, comprise: expenditure on Biotechnology-related activities, personnel dedicated to these activities, including persons who have worked on a full-time equivalent (FTE), internal expenditure on Biotechnology R&D, which includes current and capital expenses, and the personnel dedicated to Biotechnology R&D tasks, which includes the group of persons who have worked on a full-time equivalent (FTE).

Adaptation to new National Classification of Economic Activities 2009 (CNAE 2009)

The European Parliament and Council passed the new classification of economic activities for statistical purposes within the European Union, known as NACE Rev.2, on 20 December 2006, via Regulation (EC) no. 1893/2006. This Regulation also stipulates the use of the new classification in the statistics of the community scope, for the purpose of ensuring the harmonised implementation of the same.

The adaptation to the new European classification (NACE Rev.2) and to the national version of this (CNAE 2009) has caused changes in the Statistics on Biotechnology Use. These changes may be viewed in the results by branch of activity.

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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