

19 December 2023

Community Innovation Survey in Enterprises
Year 2022. Definitive Results

Spending on innovative activities reached 20,836 million euros in 2022

In the 2020-2022 period, 23.9% of Spanish companies were innovative.

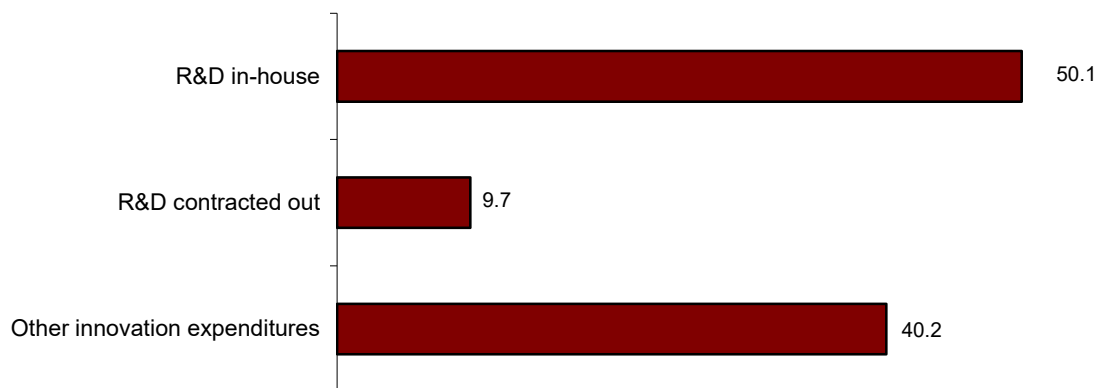
Spending on innovative activities

Spending on innovative activities reached 20,836 million euros in 2022. This figure represented 0.9% of the Spanish business turnover.

A total of 50.1% of the expenditure went towards *internal R&D*, 9.7% to *external R&D* and 40.2% to *other innovative activities*¹.

Distribution of spending on innovative activities by type of spending. Year 2022.

Percentage



¹ The other innovative activities, according to the 2018 Oslo Manual, are: Engineering, design and other creative work, Marketing activities and brand equity, Activities related to Intellectual Property, Employee training activities, Development of software and activities related to databases and Acquisition and leasing of tangible assets, so long as they are used in innovation.

Spending on innovative activities by activity

Companies in the *Services* sector accounted for 55.8% of expenditure on business internal R&D in the year 2022, while those in *Industry* sector accounted for 42.6%.

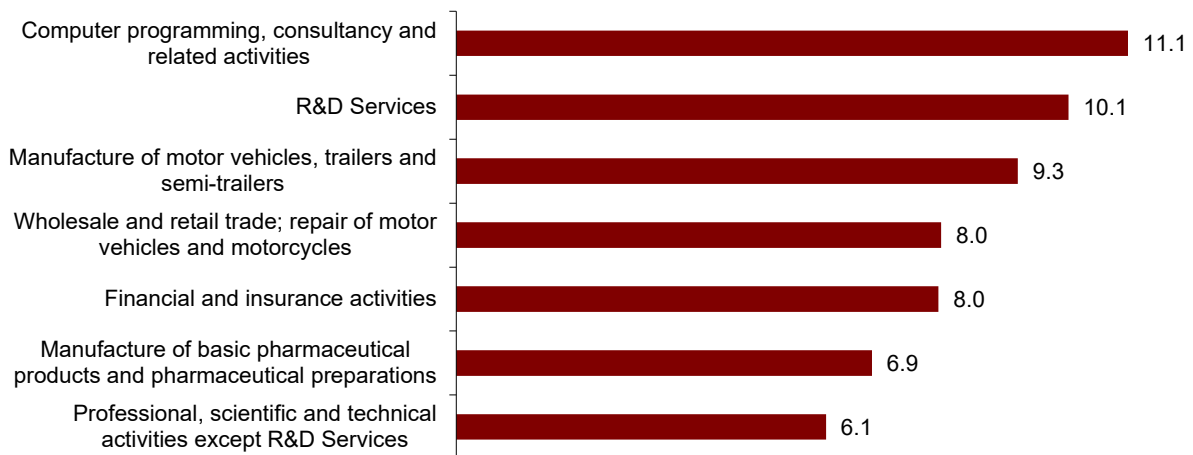
Spending on innovative activities by activity 2022

| | Thousands of € | % |
|----------------------------------|----------------|-------|
| TOTAL | 20,836,041 | 100.0 |
| Agriculture, forestry and fishig | 134,351 | 0.6 |
| Industry | 8,872,359 | 42.6 |
| Construction | 212,436 | 1.0 |
| Services | 11,616,896 | 55.8 |

By branches of activity, companies in the area of *Programming, consulting and other IT activities* accounted for the highest percentage of total spending on innovative activities, with 11.1% of the total. This was followed by *R&D Services* (10.1% of the total) and *Motor Vehicles* (9.3%).

Distribution of internal R&D expenditure by branch of activity. 2022

Percentage



Spending on innovative activities by Autonomous Communities

In 2022, the communities with the highest spending on innovative activities were the Community of Madrid (30.2% of the total), Catalonia (26.2%) and the Basque Country (9.1%).

Spending on innovative activities according to the community or autonomous city where it is carried out. 2022

| | Thousand of € | % |
|-----------------------------|-------------------|--------------|
| TOTAL | 20,836,041 | 100.0 |
| Andalucía | 1,195,516 | 5.7 |
| Aragón | 469,667 | 2.3 |
| Asturias, Principado de | 204,572 | 1.0 |
| Balears, Illes | 180,113 | 0.9 |
| Canarias | 230,564 | 1.1 |
| Cantabria | 120,772 | 0.6 |
| Castilla y León | 811,292 | 3.9 |
| Castilla-La Mancha | 411,815 | 2.0 |
| Cataluña | 5,452,850 | 26.2 |
| Comunitat Valenciana | 1,815,254 | 8.7 |
| Extremadura | 96,636 | 0.5 |
| Galicia | 823,545 | 4.0 |
| Madrid, Comunidad de | 6,289,155 | 30.2 |
| Murcia, Región de | 364,844 | 1.8 |
| Navarra, Comunidad Foral de | 362,355 | 1.7 |
| País Vasco | 1,900,624 | 9.1 |
| Rioja, La | 84,048 | 0.4 |
| Ceuta | 11,116 | 0.1 |
| Melilla | 11,304 | 0.1 |

Innovative companies in the 2020-2022 period

23.9% of Spanish companies were innovative (in terms of product or business processes) in the 2020-2022 period. Of these, 12.0% were product innovators and 21.0% business process innovators.

Innovator companies 2020-2022 Period:

| | % on total of enterprises |
|--|---------------------------|
| Innovative enterprises* | 23.9 |
| Enterprises with product innovations* | 12.0 |
| Enterprises with business process innovations* | 21.0 |

*Definition according to Oslo Manual 2018: <https://icono.fecyt.es/sites/default/files/filepublicaciones/manualoslo2018.pdf>

By activity sectors, the industrial sector (31.1%) had the highest percentage of innovative companies in the 2020-2022 period, while *Construction* (13.1%) had the least.

Innovative companies by branches of activity. 2020-2022 Period:

Percentage

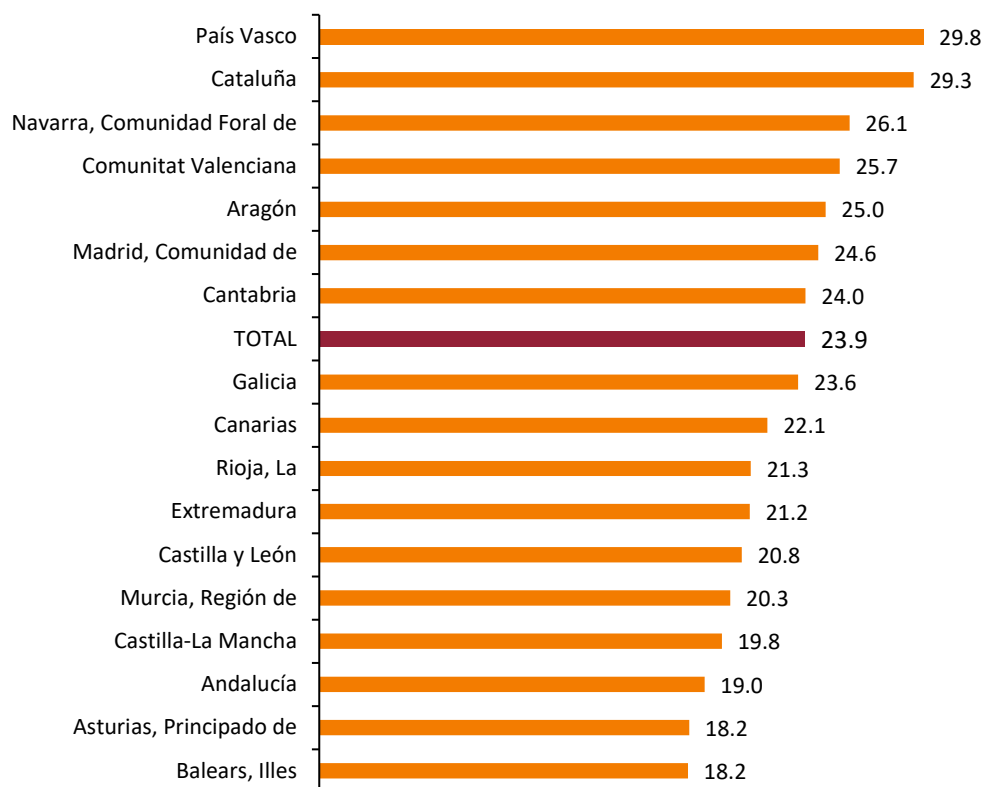
| | Innovative enterprises | Enterprises with product innovations | Enterprises with business process innovations |
|-----------------------------------|------------------------|--------------------------------------|---|
| TOTAL | 23.9 | 12.0 | 21.0 |
| Agriculture, forestry and fishing | 13.1 | 5.6 | 10.6 |
| Industry | 31.1 | 19.3 | 27.2 |
| Construction | 16.0 | 4.7 | 14.4 |
| Services | 24.1 | 11.6 | 21.1 |

Innovative companies in the 2020-2022 period, by Autonomous Communities

The autonomous communities with the highest percentage of innovative companies in the 2020-2022 period were the Basque Country (29.8% of its companies were innovative), Catalonia (29.3%) and the Autonomous Community of Navarre (26.1%).

Innovative companies by Autonomous Communities and Cities*. 2020-2022 Period:

Percentage of the population of companies with 10 or more employees in each autonomous



community

*The data of the autonomous cities of Ceuta and Melilla are not published by statistical secrecy.

Data reviews and updates

The data published today are final. All results are available on INEbase.

Methodological annex

New practical implementation of the statistical unit 'Company'

According to the European Statistical System, the Business Innovation Survey has implemented the new statistical concept of Business. According to this modification, the statistical company may coincide with the legal unit, the business group or a part of a group of companies (the latter two cases represent about 3% of the total). Therefore, the results of the survey and its distribution by activities, company sizes and autonomous communities of the registered offices are affected.

Due to the methodological change, the indicators are not comparable with those of previous years. However, the methodological annex offers a comparative analysis under the assumption of considering Legal Units as an operational approach to companies.

The definition of the statistical unit 'Company' is given by the European Union Regulation (696/93) which defines it as the *'smallest combination of legal units that produces goods or services and that enjoys a certain autonomy of decision mainly when using the resources available to it'*.

Up to and including the 2020 reference period, the INE has been identifying, for operational purposes, the statistical unit Company with the Legal Unit (by means of the NIF) in the Business Innovation Survey. Thus, each Legal Unit formed a Company for statistical purposes.

However, the progressive complexity, in the way of operating internally, that business groups have today has led the European Statistical System (ESS) to consider the search for an improvement in the way of reflecting, in official business statistics, the activity of these groups. Indeed, Legal Units that belong to business groups sometimes sell their products or provide their services exclusively or mainly within the group, without being market-oriented or having decision-making autonomy over the entire production process.

Therefore, and in accordance with the ESS, **based on the data with reference period 2022**, the Business Innovation Survey establishes a new practical application of the statistical concept of Company, according to which a 'Company' can be:

- An independent Legal Unit that is not part of the company group, meaning that it should have decision-making autonomy.
- A business group consisting of one or more Legal Units, operating together.
- A subset of one or more Legal Units of a business group.

This change in the treatment of companies, which has also been implemented in the Statistical Exploitation of the Central Company Directory (DIRCE), was announced by the INE in a press release on December 17, 2019:

https://www.ine.es/prensa/nueva_definicion_empresa.pdf

For more information on the delineation of the statistical unit Company within the business groups, please consult the following link:

https://www.ine.es/metodologia/t37/t3730200_profiling.pdf

Effects of the implementation of the Statistical Company in the Business Innovation Survey

The adoption of the concept of Statistical Company in the Business Innovation Survey implies that, when the Company is made up of more than one Legal Unit (ULE), its ULEs must be grouped by consolidating all the values of each indicator in the Statistical Company.

This consolidation produces a reclassification effect on the results of the 2022 statistics, based on the Statistical Company defined below:

Reclassification effect is due to the grouping of the Legal Units that are part of the Company and their reassignment to the main activity, autonomous community of the registered office and size of said Company. Defined as the rate of variation of the variables calculated for the Statistical Companies before consolidation, regarding to those obtained based on the ULEs, both referring to the 2022 period.

Impact of the Implementation of the Statistical Company in the 2022 Business Innovation Survey

| | No. of enterprises with expenditure in innovative activities | Expenditure in innovative activities | No. of innovative enterprises in 2020-2022 |
|--------------|--|--------------------------------------|--|
| Agriculture | 0.0 | -7.2 | 2.5 |
| Industry | -0.9 | 4.3 | 1.3 |
| Construction | 8.4 | 4.1 | 6.4 |
| Services | 2.8 | -1.5 | 3.1 |

Statistical results based on Legal Units

The following tables show the differences with respect to the previous period of the main variables studied in the Survey of Innovation in Companies if the Legal Unit was taken as an approach to the concept of a company.

Main variables by Legal Unit

| | Innovation in Companies Survey 2022 | Innovation in Companies Survey 2020 | Annual Rate (%) |
|--|-------------------------------------|-------------------------------------|-----------------|
| No. of enterprises with expenditure in innovative activities | 23,623 | 20,976 | 12.6 |
| Expenditure in innovative activities (thousand of €) | 20,643,336 | 17,074,397 | 20.9 |
| No. on innovative enterprises | 35,857 | 36,026 | -0.5 |

Spending on innovative activities stood at 20,643 million euros in 2022, an increase of 20.9%. And the number of innovative companies fell by 0.5% to 35,857 in the 2020-2022 period.

Comparison of expenditure on innovative activities by branch of activity and Legal Unit

| | 2022 | Percentage 2022 | 2020 | Percentage 2020 | Annual Rate (%) |
|--------------|------------|--------------------|------------|--------------------|--------------------|
| TOTAL | 20,643,336 | 100.0 | 17,074,397 | 100.0 | 20.9 |
| Agriculture | 144,758 | 0.7 | 160,352 | 0.9 | -9.7 |
| Industry | 8,503,966 | 41.2 | 7,653,938 | 44.8 | 11.1 |
| Construction | 204,099 | 1.0 | 188,238 | 1.1 | 8.4 |
| Services | 11,790,513 | 57.1 | 9,071,869 | 53.1 | 30.0 |

By branch of activity, spending on innovative activities increased by 30.0% in *Services*, by 11.1% in *Industry* and by 8.4% in *Construction*. In contrast, *Agriculture* decreased by 9.7%.

Methodological note

The main objective of the Business Innovation Survey is to provide direct information on the innovation process in companies, elaborating indicators that allow us to ascertain the different aspects of this process (economic impact, innovative activities, cost...). As well as providing rich and varied information on the technological innovation process, this study may serve as the base framework for diverse specific studies on other aspects related to science and technology (for example, use of cutting-edge technology in manufacture, technological payments and incomes, studies about patents, etc.).

Type of survey: continuous on an annual basis until 2019 and biennial since 2020.

Population scope: agricultural, industrial, construction and service companies with 10 or more employees, whose main economic activity corresponds to sections A to N, P (except branch 854), Q, R, and S (except branch 94) of the CNAE-2009

Geographical scope: the entire national territory.

Reference period of the results: in general, the year immediately prior to survey execution; however, in order to facilitate international comparability, variables related to the innovations implemented by the company refer to the three-year period prior to survey execution.

Reference period of the information: in general, the calendar year; the variables related to the innovations implemented by the company refer to the three-year period prior to the survey execution.

Sample size: more than 40,000 companies.

Sampling type: stratified sampling by company size, economic activity and autonomous community.

Collection method: mixed system that includes collection via Internet (CAWI) and by mail with significant telephone support from interviewers.

For more information you can access the methodology and the standardized methodological report at:

https://www.ine.es/dynqs/INEbase/es/operacion.htm?c=Estadistica_C&cid=1254736176755&menu=metodologia&idp=1254735576669

INE statistics are produced in accordance with the Code of Good Practice for European Statistics, which is the basis for the institution's quality policy and strategy. For more information see the section [Quality at INE and the Code of Best Practices](#) on the INE website.

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