

# **Methodology**

## **Industrial Companies Survey 2007**

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## **1 Introduction.**

Publishing the 2007 Industrial Companies Survey facilitates basic information on the industrial situation and the analysis of its main structural characteristics. This survey, implemented as of the reference year, 1993, provides a general vision of the industrial structure annually. Its methodology follows Eurostats recommendations, very specific in their regulations and directives, and at the same time, it offers an adequate analytical focus on the industrial reality it attempts to reflect.

The following sections describe, in the first place, the general methodological lines followed in planning the survey, its objectives, the unit system and research scope. Subsequently, the sample process and its design are referred to; followed by the main variables definitions; and finally, the different phases of the surveys development are commented briefly: information collection, processing, tabulation and dissemination of the results.

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## **2 Objectives and theoretical framework of the survey.**

The Industrial Companies Survey is part of a complex project to update the set of industrial statistics, which intends as its last objective, to design an authentic Integrated Industrial Statistics System, in which thanks to the assembly of its different investigations, adjusted to certain definitions, nomenclatures and common methodological criteria, a broad supply of completely coherent and inter-related economic information about the industrial sector is offered. Within this general framework, the survey's main objective is to provide specific, reliable information in the shortest possible time frame about the main structural characteristics and activity of the various sectors that make up the economies industrial activity; in such a way that both national and international information demands on this subject can be met.

Achieving this objective becomes part of a specific set of plans that impregnate the philosophy of this survey and which essentially are a response to the following action.

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ADAPTATION TO THE EUROPEAN UNION REGULATION.

The Community integration objective is stated in two fundamental aspects with respect to the structural survey:

a) In the first place, the consideration of a survey model for multiple units, in which the company assumes the central role in agreement with European Community regulations, but in which, in order to cover the need to provide geographically broken down information that will satisfy the growing demand for data on a regional level, as well as the interest in having reliable figures on the different branches of activity available to facilitate an adequate vision of the industrial activity, other complementary units have been included in the survey (both on an observation unit level as well as on an analytical one).

b) In the second place, in order to adapt to the European Nomenclature on Activities (NACE Rev. 1.1), the Industrial Companies Survey is designed, in terms of statistical

division by sectors and infrastructure, on the basis of the National Classification of Economic Activities-1993 Rev. 1

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#### THE MAIN FOCUS FOR THE PRIMARY DATA.

The main data, in other words, those requested from the informant units, form a fundamental part of any survey, since the precision and reliability of the final results depend to a large extent on the quality of the information obtained during the collection process. In this sense the survey's philosophy is to orient the primary data towards the viewpoint of the informant units, attempting to collect those characteristics or variables which they can facilitate from them, because they are directly available in their own management documents. The subsequent re-elaboration and analysis in order to obtain the derived variables of interest to fulfil the survey's own objectives and meet research demands is the responsibility of the statistician. This purpose becomes clear in two aspects dealt with especially in the survey.

In the first place, the adaptation of the main questionnaire variables to the General Accounting Plans criteria and regulations, which has required a detailed analysis of its different variables, in an attempt to combine the corporate accounting focus with the fulfilment of its different information needs.

In the second place, the use of different questionnaire models depending on the size of the company. The Spanish industrial sector is characterised by a great heterogeneity, not only in that referring to the diverse economic activities carried out by the different companies, but also in relation to the size of the productive units, which gives rise to the fact that these have different management and information systems, carry out different types of economic-financial transactions, etc., aspects which definitively make an homogeneous treatment of these units from the statistical viewpoint more difficult. In order to adjust the data requested (and its greater or lesser specification) to the characteristics of the unit, different questionnaire models have been designed depending on the characteristics of each informant company.

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### **3 Survey units**

The surveys basic unit is the industrial company. A company is understood as any legal unit that constitutes an organised unit which produces goods and services and has a certain amount of autonomy in making decisions, mainly when using the current resources it has available. The company can carry out one or more activities in one or more places.

A company is considered industrial, for the survey, if its main activity is included within Sections C to E of the National Classification of Economic Activities (NACE-93 Rev.1).

In the surveys unit scheme, the company simultaneously assumes the roles of informant unit, that which facilitates the information requested in the survey, and of observation unit, that to which the data requested on the questionnaire refers.

However, despite the company being the surveys central unit, the multiple objectives which are intended to be met with this research, particularly, the need to offer regional

data and by branches of activity, have driven the configuration of a multiple system of units in which, together with the company, other units are taken into account which complete the information system. These units are the industrial establishment (such as the observation unit) and the economic activity unit on a local level (such as the analysis unit).

Establishment is understood as any company or part of a company located in a determined geographical location (workshop, factory, etc). where economic activities to which one or various people dedicate their work to the same company are carried out. An establishment is considered industrial if its main activity is industrial.

The economic activity unit on a local level, for the purposes of the survey, is understood as that part of a company that carries out a determined activity at a determined geographical location. The local activity unit is not the object of direct observation, it is an analytical unit whose data is obtained based on the information collected both on a company and an industrial establishment level.

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## **4 Survey scope.**

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### **4.1 POPULATION SCOPE**

The population object of the study is the set of companies with one or more remunerated employed persons, and whose main activity is included in sections C to E of the National Classification of Economic Activities (NACE-93 Rev.1). In other words, the survey covers mining and quarrying, manufacturing and distribution of electricity, gas and water. There is a detailed list of the activities researched by the survey, in the Annex II of this publication.

The main activity of the company is understood as that which generates the most added value. If this information is not available, that which provides the greatest production value is considered, or if not, that which employs the greatest number of employed persons.

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### **4.2 TERRITORIAL OR GEOGRAPHICAL SCOPE.**

From the geographical viewpoint, the survey covers the entire country, except Ceuta and Melilla.

For the purposes of statistical use, the survey is designed to facilitate results on an Autonomous Community level, this being an especially interesting aspect for regional study and analysis.

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### **4.3 TEMPORAL SCOPE**

The survey is carried out annually. As to the information reference period the data requested refer to the natural year object of the survey.

Exceptionally, companies that function by season or campaign that include two different years and have their data accounted for have referred the information to the season or campaign that finished in the said year.

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## 5 Design and sample.

### 5.1 DEFINITION OF POPULATIONS TO BE SAMPLE

The population object of study of the survey has been divided for the purposes of sample design into a series of industrial sectors. In terms of equivalence with the National Classification of Economic Activities (NACE-93 Rev.1), the sectors correspond mostly to the 3 digits level (group) of this classification. However in some cases, a greater breakdown has been chosen at class level (4 digits), in order to adequately collect the data from determined industrial activities, which at 3 digits are excessively grouped, and in others it has been necessary to group activities to 3 digits. Each one of these industrial sectors has formed a part of an independent population for sample purposes. Within each of the sectors studied, a limit of 20 employees has been established in order to delimit the set of companies that have been studied by sample. So, companies with more than 20 employees have been investigated exhaustively while companies with less than 20 employees have been investigated by sample. Nevertheless the exhaustive investigation of certain sectors or strata has been carried out, as long as the population size prevents the selection of a sample that could be considered representative. In this case, all the companies belonging to these sectors or strata, independent of size, have been included in the survey sample.

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### 5.2 TYPE OF SAMPLE. STRATIFICATION.

Within each sample sector a random stratified sample has been used.

The variables that have been taken into account when stratifying the population were the Autonomous Community and the size interval. Consequently, each stratum within a certain population to sample (activity sector) is determined by the crossing of the variables Autonomous Community and size. For the purposes of the sample, and of the following estimation process and calculation of elevation factors, the following size intervals have been designed:

<u>Size</u>	<u>Employed persons</u>
1	1-3
2	4-9
3	10-19
4	20-49
5	50-99
6	100-199
7	200-499
8	500-999
9	1000 and over

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### 5.3 SIZE OF THE SAMPLE. SETTING.

Sizes 4, 5, 6, 7, 8 and 9 have been investigated exhaustively. For the remainder a Neyman setting has been carried out pre-setting the following errors relative to the employed persons variable.

- 1% (on a sector level)
- 5% (on a sector and community level)
- 20% (on a sector, community and size level)

Sample sizes obtained in this way have been increased where necessary up to a minimum of three companies per stratum, or 2% of directory companies. The final sample has been made up by an approximate number of 44,100 companies resulting in a global sample fraction of 25.7%. By sample strata the sample fractions have been the following:

<u>Stratum</u>	<u>Fraction of sample</u>
1 - 3 employed persons	9.6%
4 - 9 employed persons	13.5%
10 - 19 employed	20.5%

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### 5.4 SELECTION OF THE SAMPLE.

The sample selection within each stratum has been carried out via the application of a random start systematic sampling once the companies have been previously ordered by the number of employed persons. The sample procedure has been established in such a way that the selection process is independent from one year to the next, for a determined stratum, the probability that a company is selected from year t is independent of whether or not it is selected in year t-1.

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### 5.5 ESTIMATORS.

Unslanted expansion estimators have been used in the stratified sample of the following type:

$$\hat{X}_h = \sum_{j=1}^{n_h^*} \frac{\hat{N}_h^*}{n_h^*} X_j + \sum_{k \neq h} \sum_{j=1}^{n_k^h} \frac{N_k}{n_k} X_j$$

where  $\hat{X}_h$  is the estimate of variable X in stratum h.

In the previous formula the first sum represents the contribution of companies that have not changed stratum and the second one the contribution of units from stratum h that were initially selected in another different stratum k.

The number of companies of the stratum in the directory is adjusted, for the calculation of estimates, based on the number of closed-down companies in the stratum.

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## 5.6 SAMPLE ERRORS.

The relative sample error is calculated from the estimator variance  $\hat{V}(\hat{X})$ :

$$\epsilon(\hat{X}) = \frac{\sqrt{\hat{V}(\hat{X})}}{\hat{X}} 100$$

where  $\hat{V}(\hat{X}) = \sum_h \hat{V}(\hat{X}_h)$

$$\text{and } \hat{V}(\hat{X}_h) = \hat{N}_h^* (\hat{N}_h^* - n_h^*) \frac{\sum_{j=1}^{n_h^*} (X_j - \bar{X}_h^*)^2}{(n_h^* - 1)n_h^*} + \bar{X}_h^{*2} \frac{\hat{N}_h^* (N_h - \hat{N}_h^*) (N_h - n_h)}{N_h (n_h - 1)} + \sum_{k \neq h} N_k (N_k - n_k) \frac{S_k^{h^2}}{n_k}$$

being

$$S_k^{h^2} = \frac{\sum_{j=1}^{n_k^h} X_j^2}{n_k - 1} - \frac{\left( \sum_{j=1}^{n_k^h} X_j \right)^2}{n_k (n_k - 1)}$$

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## 6 Variables and definitions.

For a better comprehension and interpretation of the results presented in the tables, the main variable and characteristics covered are defined below. It is observed that these variables are only included for the purposes of survey data collection in questionnaires directed at companies with 20 or more employees for which related information is offered in tables by groups referring to this subgroup of companies.

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### EMPLOYED PERSONS.

Employees are understood as, the set of persons fixed or temporary, that in the reference year of the data were carrying out remunerated or non-remunerated labour for the company, while belonging to and being paid by it. Persons with a leave for illness, paid

vacations, unpaid occasional leave, etc., are included. as well as part time employees (as long as they work more than 1/3 of the complete working day). Persons employed and paid by other companies or agencies that are made available to the company are not included. people who are carrying out maintenance or repair work in some of the company premises or establishments and being paid by other companies; as well as persons on sabbatical, unlimited leave or retired. The members of the Board of Directors who are remunerated exclusively for their presence at Board Meetings and those partners or other persons that work less than 1/3 of the working day are also not included. Within the set of employees a distinction is made between non-remunerated personnel and remunerated personnel for the purposes of the survey.

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#### UNPAID PERSONNEL.

Are the persons that direct or actively participate in company work without fixed remuneration or salary and that work at least 1/3 of the normal working day. Active owners and partners, family aid and other non-remunerated persons are included.

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#### PAID PERSONNEL.

Paid personnel is understood as the set of persons that work or carry out tasks for a company in return for a determined financial remuneration or salary. Both persons who carry out functions directly related to the companies productive activities (workers, shop managers, officials, apprentices, etc.), as well as those other persons whose tasks are not directly linked to the productive process (salaried directors, managers, technicians, administrative and office personnel, substitutes, sales persons, etc.) are included.

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#### HOURS WORKED.

Hours worked is understood as the total number of effective hours worked by the personnel employed during the reference year of the survey. This concept includes the hours really worked (both normal and overtime) during work periods; the time dedicated in the workplace to the preparation of tools, elaboration of monitoring forms, etc.; the duration of dead time that could have occurred in the workplace both for the occasional lack of work and stoppage of machines, accident, etc. as well as the time corresponding to brief periods of rest in the workplace (breakfast, lunch, etc.). However, agreed hours (and paid) but not worked as a consequence of discharges for disease, strikes, vacations, holidays, etc., Interruptions for meals and hours used for the journey from home to work and vice versa.

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#### NET SALES OF PRODUCTS.

This concept covers the total sales of finished product made by the company during the reference year (those goods manufactured by the company in their productive process, or by third parties, via production by subcontractor and that are destined for final consumption or use by other companies), semifinished products (goods manufactured by the company that are not normally destined for sale until they are the object of elaboration, incorporation or subsequent transformation) as well as sub products, waste, containers and assemblies (sub products are goods obtained during the productive process which are secondary or accessories to main manufacturing; residuals unavoidably obtained at the same time as the products or sub products, always having intrinsic value

and that can later be used or sold; containers, recipients or earthenware jars normally destined to be sold together with the product that they contain; and packaging, coverings or wrappings, generally not recoverable, destined to protecting products or merchandise that must be transported).

Sales are considered net, in other words once "rappels" on sales (discounts and the like that are based on achieving a certain volume of orders) and returns of sales (shipments returned by customers, normally for not fulfilling the order conditions) as well as discounts caused by quality defects, delays in the order delivery period, etc. after invoicing.

Product sales are valued at sales price excluding transport costs and taxes on these transactions.

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#### NET SALES OF MERCHANDISE.

This concept covers the total sales amount made by the company during the reference year for all those goods acquired for subsequent sale without transformation (resale of goods in the same state as they were acquired).

Sales must be considered net, in other words once rappels, returns etc. have been discounted.

Sales of goods are valued at sales price, excluding transport costs and taxes on these transactions.

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#### PROVISIONS OF SERVICES.

This concept covers the total income obtained by the company during the reference year as compensation for services (that are the object of ordinary company traffic) provided to other companies, people or institutions. Within each heading, income per subcontractor is important. In other words, the payments made to the company by another company (the contractor) for their participation, as a subcontractor in the design or production of a certain product. They are valued for the total amount without taxes.

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#### NET TURNOVER.

This is the result that is obtained from deducting the product sales amount, goods and services, from services corresponding to ordinary company activities, the amount of discounts and other bonuses on sales as well as VAT and directly related taxes. Its content corresponds to the net sum of amounts related to the net sale of products, net sale of goods and the providing of services.

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#### GEOGRAPHICAL DESTINATION OF SALES

This concept covers the distribution by geographical markets of the total turnover amount for the company. 3 geographical destinations are specified: Spain, other European Union countries and the rest of the world.

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#### DISTRIBUTION OF TURNOVER BY ACTIVITIES.

This concept covers one distribution per activity of the total company turnover, differentiating between the amount dedicated to industrial activities, the amount corresponding to commercial activities and that dedicated to other activities.

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#### WORK CARRIED OUT FOR FIXED ASSETS

This concept covers the payments of expenses incurred by the company for fixed (construction of enlargement of machinery, technical installations, equipment for information processes and other goods included within company fixed assets) and non-fixed assets (research and development, IT applications, etc.) using their own equipment and personnel. This concept includes production of capital goods or buildings, as well as large repairs and improvements carried out on existing ones in order to increase their useful life, its production capacity or its performance. This heading also includes the balancing entry for expenses which correspond to the payments to other companies in concept of retribution for work commissioned from them for research and development (off premises R + D expenses).

Work carried out by the same company for its fixed assets, both material and not material, is valued at cost price, which is determined by adding to the acquisition of raw materials and other consumable materials, costs directly imputed to the product, as well as the indirect costs which could reasonably have repercussions on the product involved.

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#### OPERATING SUBSIDIES.

This concept covers the total amount of subsidies (monetary assignments without

payments) granted to companies during the reference year by administrations, other companies or individuals. Those carried out by the partners, group, multi-group or associated companies, in order to compensate for operating deficits are not included.

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#### OTHER OPERATING INCOME.

This concept covers the total income (which is not extraordinary) obtained by the company during the reference year from leasing, industrial property for use, commissions, personnel services and various services.

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#### INCOME FROM LEASES

The income obtained by the company during the reference year, as a consequence of the letting to third parties, for their use or disposition, of furniture or real estate property for rental is included in this heading.

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#### INCOME FROM INDUSTRIAL PROPERTY CEDED IN OPERATION

This concept covers the fixed or variables quantities obtained by the company during the reference year received for the concession of operations, right to use or the concession of use of the different manifestations of industrial property.

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#### INCOME FROM COMMISSIONS

The fixed or variable quantities obtained by the company as payment for mediation services carried out occasionally, in other words, without being the object of the companies main activity, are included in this concept.

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#### INCOME FROM SERVICES TO THE STAFF

Amount of income obtained by the company during the reference year as a consequence of various services provided by the company to personnel such as co-operative stores, dining rooms, transport, housing, etc.

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#### MISCELLANEOUS OPERATING INCOME

The income obtained by the company, originated by the temporary provision of certain services to other companies or individuals (transport, repairs, advice, reports, etc.).

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#### TOTAL OPERATING INCOME.

Is the total amount obtained as a result of adding the different incomes tied to operation, obtained by the company during the reference year.

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#### CHANGES IN STOCKS OF RAW MATERIALS.

The variation in raw materials stocks is defined as the amount corresponding to the difference between the final stocks of raw materials at the end of the reference year and initial stocks at the beginning of the year. Stock variations are valued at acquisition prices.

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#### VARIATION OF STOCKS FROM OTHER SUPPLIES

The variation in the stocks of other supplies is defined as the difference between the total amount of final stocks of those supplies at the end of the reference year and initial amount at the beginning of the year. Stock variations are valued at acquisition prices.

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#### CHANGES IN STOCK.

The variation in the stocks of goods is defined as the amount corresponding to the difference between the final stocks of goods at the end of the reference year and initial stocks at the beginning of the year. Stock variations are valued at acquisition prices.

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#### CHANGE IN PRODUCT INVENTORIES.

The variation in product inventories is defined as the difference between the total final supply of these products at the end of the reference year, and the initial supply of the same at the beginning of said year. Stock variations are valued at production cost.

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#### CONSUMPTION OF RAW MATERIALS.

This concept covers net purchases (in other words, once taxes and reimbursements have been discounted) of raw materials (goods acquired for their transformation in the productive process) carried out by the company during the reference year, reduced or increased by the amount of the corresponding variation in stock (according to whether this is positive or negative).

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#### CONSUMPTION OTHER SUPPLIES.

This concept covers the net purchase of supplies (fuels, spare parts, packaging, office material, etc.) made by the company during the reference year, reduced or increased by the amount of the corresponding variation in stocks (according to whether this is positive or negative).

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#### CONSUMPTION OF MERCHANDISE.

This concept covers the net purchases of merchandise (goods acquired for resale without transformation) carried out by the company during the reference year, reduced or increased by the amount of the corresponding variation in stocks (be this positive or negative).

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#### WORK DONE BY OTHER COMPANIES.

This the expense corresponding to the work that, forming part of the production process, is taken care of and carried out by other companies. Within this concept subcontracts that correspond to the relation between two companies (the subcontractor and the main contractor) for which the first one participates in the design and production process of a determined product in benefit of another company are included, participa-

tion is based on a determined plan and technical guidelines supplied by contracting company and in which it supplies the main raw materials are included.

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#### CONSUMPTION AND WORK CARRIED OUT BY OTHER COMPANIES.

Is the total amount obtained as a result of adding the consumption of raw materials, of supplies and goods, and work carried out by other companies.

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#### GEOGRAPHICAL ORIGIN OF THE ACQUISITIONS.

This concept covers the distribution, according to geographical origin of the total amount of purchases made by the company. Distinction is made between 3 geographical origins: Spain, other European Union countries and rest of the world.

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#### WAGES AND SALARIES.

This includes all obligatory or voluntary quantities, paid in cash or in kind by the company to all types of employed personnel (fixed and temporary) as remuneration for the work carried out by them. These payments are accounted for by their gross amount, in other words before making the deductions corresponding to social security and taxes on income of physical persons paid for the by the workers. the integral base salary is included; Compliments in cash for overtime, seniority, qualifications, danger, incentives, attendance, residence, transport bonus, high cost of living, etc.; quotas for benefits, Christmas bonuses and extraordinary pay; remuneration in kind (valued according to the net cost they represent to the company) gratuitously supplied or at a reduced price to its employees in concept of consumers (food products, fuels, housing, clothing, shares distributed, etc.); as well as social security quotas and income tax (personal work) which is the employees' responsibility, paid for by the company without subsequent discount. Payments for the purchase of tools or work clothes are not included; current transport costs of employees organised by the company; current costs and subsidies destined for sporting, cultural and recreational facilities; professional training expenses, medical check-ups and improvements in work places. Compensation paid directly by the company to its employees for illness, unemployment, dismissal, accident, etc., are also not included. These are covered in a separate heading.

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#### COMPENSATION.

Indemnities are understood as those payments carried out directly by the company to its employees, in cases of disease, unemployment, dismissal, accident, pension, early retirements, etc. which complement those made by insurance institutions or that substitute payments not received due to lack of coverage. Payments advanced by the company to its employees which are the responsibility of social security and are therefore paid subsequently are not included.

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#### CORPORATE COSTS.

This concept includes social security paid for by the company, contributions to pension plans, retirement, invalidity or death of company personnel and other corporate costs carried out by the company as subsidies to co-operative stores and dining rooms, study grants, personnel life insurance premiums, etc.

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#### PERSONNEL COSTS.

This concept covers the total aggregate amount for payments made by the company during the reference year as wages, compensation and corporate expenses (social security, pension plans and other corporate costs).

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#### R&D COSTS FOR THE YEAR.

This concept includes the set of research expense (original and planned investigation that continues to discover new knowledge and better comprehension in scientific and technical fields) and development (correct application of achievements obtained in research up to when commercial production started) caused by work given to other companies, universities or institutions dedicated to research work and corresponding to the reference year.

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#### LEASES AND TAXES.

This covers the expenses made by the company during the reference year both for the rental of fixed and unfixed assets and for the right to use or the concession of use of the different manifestations of industrial property. These latter quantities may be fixed or variable. The financial leasing of real estate nor the value of purchasing patents, licences rights, etc are not included.

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#### REPAIRS AND MAINTENANCE.

This concept includes the current costs originated during the reference year as a consequence of maintenance work, repair and conservation of goods included in fixed assets, as well as goods acquired by financial leasing that form a part of non-fixed assets, carried out by non-company personnel.

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#### INDEPENDENT PROFESSIONAL SERVICES.

This concept covers the amount paid to independent professionals as remuneration for services provided to the company. This includes payments to economists, lawyers and auditors, commissions to representatives and independent mediating agents, etc.

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#### TRANSPORTS.

Total amount of expenses incurred by the company for transport carried out by third parties, when they are not included in the acquisition price of fixed assets or stock. Includes transport expenses associated with sales.

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#### INSURANCE PREMIUMS.

This concept covers the total amount of payments made for non-corporate insurance (excluding company personnel). Includes insurance for theft, fire etc.

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#### BANK AND SIMILAR SERVICES.

Amount paid for bank services and commissions which are not considered as financial expense. Commissions for loans and payment discounts, commissions for the transfer of funds, fees for the use of safe-deposit boxes, payments for portfolio management, custody of shares and similar services. Interest and amortisation quotas for loans, discount interest on securities, etc.

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#### ADVERTISING, PROPAGANDA AND PUBLIC RELATIONS.

This heading covers the total amount of expenses made by the company during the reference year for publicity services, propaganda, representation expenses, etc.

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#### SUPPLIES.

This concept covers the total amount corresponding to expenses met by the company for acquiring supplies that cannot be stored (electricity, gas, water, etc.).

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#### OTHER EXTERNAL SERVICES.

This concept covers the amount paid by the company as other current use expenses not included in the different types of external services specified previously. Included for example are personnel travel and food costs, current office costs, subscriptions to publications and periodicals, management institutions and shareholders meetings expenses, etc.

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#### TOTAL EXTERNAL SERVICES.

External services expenditure covers the total amount of the operating expenditures of various types carried out by the company during the reference year such as R+D expenditure, leasing and taxes, repairs and conservation, independent professional services, transport, insurance premiums, banking and similar services, publicity, propaganda and public relations, supplies and other services.

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#### FIXED ASSET DEPRECIATION RESERVES.

This concept represents the correction of the value carried out by the depreciation of the company's fixed assets, both material and immaterial.

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#### TOTAL OPERATING COSTS.

This is the total amount obtained as a result of combining different operation related expenses carried out by the company during the reference year and specified in previous sections.

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#### INVESTMENT CARRIED OUT IN FIXED ASSETS.

Investment is defined as the difference between the real increases in the value of capital resources and sales of these same types of resources carried out by the company in the reference year.

Real increase of productive resources is understood as increases in value that occur in different types of material assets that have their origin in purchases from third parties of

new or used goods; in the production of fixed assets or in work carried out by the company or third parties on elements already existing with the object of increasing their productive capacity, performance or life expectancy (acquisitions, improvements and own production). "Leasing" is included as one more form of acquiring assets or of investment on the Lessors behalf.

Investment transactions are reflected by the total value, valuing purchases at acquisition prices, without including deductible VAT and including transport, installation costs, registry and notary costs and other non-deductible costs. The work carried out by the company with its own resources is valued at cost and leasing price by the cash value of the goods acquired. Sales are valued at sales price without including invoiced VAT.

A differentiation of the investment is established based on the type of good, distinguishing between investment in land and natural goods, construction, technical installations, machinery and utilities, IT equipment, transport elements and other material assets.

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#### INVESTMENT MADE IN NON-FIXED ASSETS.

This concept covers the investment made by the company during the reference year in this type of immaterial resources. R+D activity expenses, computer application development, concessions, patents, licences, trademarks and similar rights, and miscellaneous goods and non-fixed assets.

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#### OPERATING SURPLUS.

This concept covers the profit or loss of company operation in the reference year, understood as the difference between total income and total operating expense.

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#### FINANCIAL SURPLUS.

This concept covers the difference (positive or negative) between financial income received by the company during the reference year and total financial expense (interest, losses produced in the transfer of fixed and variable income shares, discounts on sales for prompt payment, etc.) of the company in the same period.

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#### EXTRAORDINARY SURPLUS.

This concept covers the difference (positive or negative) between extraordinary income and extraordinary expenses of the company corresponding to the reference year of the information.

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#### PROFIT OR LOSS FOR THE YEAR.

This concept covers the total amount of profit or loss in the financial year, which is a result of grouping (with its corresponding sign, positive or negative) the financial and extraordinary operating results, and once corporate tax has been discounted.

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## **7 Information collection.**

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### **7.1 ORGANISATION OF WORK.**

The collection of the survey information is carried out via centrally located units (URCES) where data collection from various provinces is centralised.

Questionnaires are sent by mail to companies from the sample, during the first quarter of the year after the data reference year. Together with the questionnaires the informant units receive an instruction booklet in each issue to specify concepts or clarify some of the issues requested in the questionnaire.

The personnel from collection units, in agreement with previously agreed work amounts, carry out collection tasks directed at companies who have not returned the questionnaire by mail within the specified time period with the object of requesting information from them, advising them where necessary and obtaining the completed questionnaire.

Centralised Collection Units (URCES) are responsible - apart from the questionnaire - for collection, filtering and recording of the questionnaires. This has signified a substantial modification of the traditional collection scheme, and has allowed the reduction of the time frames for availing of the data recorded on computerised support.

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### **7.2 COMPUTERISED MANAGEMENT OF THE SAMPLES FILE.**

The management of company files in the sample both to control collection and to update informant company data is carried out via a computerised application established for that purpose which facilitates guaranteeing the control and organisation of the whole process. The information updated in the database from each URCE is sent monthly and together with the questionnaires sent to the survey promoter unit that transfers this information to the central database. Similarly, the file with the questionnaires recorded up to now are sent monthly. This system facilitates continuously supervising the collection, integrating the collection and filtering processes. Additionally, it guarantees an efficient control of the process from the start of the survey as systematic errors in completing and interpreting the questionnaires may be detected in the initial phases of the survey thereby facilitating their correction.

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### **7.3 RATE OF NON-RESPONSE.**

The rate of non-response, once the questionnaire collection phase was completed, has been 5.8% for the whole of the survey.

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### **7.4 QUESTIONNAIRES MODEL.**

3 different models of the questionnaire have been designed with the objective of making the information requested to the specific company characteristics more appropriate. In companies with less than 20 employees, a reduced questionnaire model has been used in which a set of basic characteristics and variables has been collected for fulfilling the objectives of the survey. In companies with 20 or more employees and with a unique industrial establishment, a more complex and detailed questionnaire model has

been used. Here, together with the information requested in the basic model (the model information can be perfectly integrated into the other), the variables requested have been broadened. Sometimes greater detail in the breakdown of the information is requested. The questionnaire corresponding to the companies with 20 or more employees and more than one location (with more than one industrial establishment), includes an additional section which covers information on the companies different industrial establishments, in addition to the information on a company level covered in the previous model, and a break down by industrial establishments of their main variables.

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## **8 Information processing.**

The initial stage of the survey information process coincides in time with the fieldwork and is developed in parallel to collection, as it takes place. The articulated system is centred on three main aspects: a continuous updating process; one filtering, included into the recording of the questionnaire content; and a treatment of the inter provincial management of the company unit, particularly, of companies with multiple locations. Its global objective is to establish sufficient quality levels in order to permit a significant simplification of the subsequent treatment of the information.

The recording of questionnaires is carried out continuously by the same collection units establishing the necessary control to guarantee an appropriate quality level for the whole process. This facilitates controlling, already in this phase, the errors that may affect the data obtained from informant units.

Once the questionnaires are recorded and the information is available on magnetic support, a coverage control of the information is carried out by the Promoter Unit, in order to guarantee the completeness of the recorded data, detect duplicates and coverage errors, and, at the same time, be able to carry out a first evaluation on the quality of the variables collected in the questionnaires. This phase is carried out on each one of the monthly files of recorded questionnaires and its is done prior to the formation of the complete survey file and at the start therefore, of the whole information treatment.

During the micro-filtering process, the detection and filtering of errors and inconsistencies in the identification variables of each register as well as the filtering and imputation of content errors are carried out. By virtue of the characteristics of each type of error, in certain cases, automatic imputation cases are used and in others, updates (in batch) of the file are carried out in order to incorporate the corrections of the errors detected. Similarly, the systematic errors detected in the analysis and study carried out previously on the recorded data are corrected. Once the micro filtering phase has finished, the calculation of the elevation factors to determine the estimates of different variables is proceeded with. The last stage before the tabulation and dissemination of results is obtaining the analysis tables in order to eliminate errors and inconsistencies detected via macro filtering techniques.

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## **9 Tables of results. Dissemination.**

The tables included intend to offer one basic, and at the same time relevant, information on the surveys main results, which will satisfy its different user information demands.

Data is provided both nationally and broken down by Autonomous Communities.

In the first place, a table is included that covers the number of companies distributed by sectors and size groups where each company is accounted for in the sector corresponding to its main activity. In the table, distinction is made between companies with less than 20 employees and companies with 20 or more employees.

In the first place, below, and referring to national results, a set of tables for a total of 14 activity groups as well as the entire industry which contains information on a broad number of variables is offered. Similarly a specific table is included for the set of companies with 20 or more employed persons.

Consequently, also on a national level, the sectorial table that contains the personnel data and the main financial variables for a total of 100 industrial sectors are presented.

A table is included on an Autonomous Communities level with the data for 8 variables broken down by activity groups. Finally, some additional tables that collect information on the variation indices (2007/2006) of the main variables for the entire industry and by industrial sectors, offering a basic view for the analysis of the industries inter annual evolution in its diverse aspects, are included.

It is advisable to note that the interannual variations obtained from the survey's results may be due, on some occasions (and to a greater or lesser extent), to changes in the structure of the corresponding reference populations (for example, changes in the activity of certain companies, which means that they are assigned a different activity sector from last year, etc). For this reason, the quoted variations should not, in all cases, be directly associated with a change (increase or decrease), of the same magnitude, in the productive activity of a group of companies in a certain sector or subpopulation.

Finally, it is important to point out that the dissemination of the survey is not exclusively limited to the tables offered here or covered in the publication. Saving the derived restrictions of statistical secrecy or of the surveys sample-like character, the existing computerised procedures facilitate attention to customised petitions of grouped data, which can be supplied on the support or format chosen by the user.