

INSTITUTO NACIONAL DE ESTADISTICA



Labour Cost Survey: Methodology

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1. Introduction

The Labour Cost Survey is published every four years and is carried out within the European Union framework with common methodology and content criteria. The aim is to gather comparable results about the level and structure of labour costs in the Member States.

Therefore, the same reference period, coverage scope and information requested is used, in agreement with EU regulations that have to be fulfilled by all member states.

These surveys were begun in 1988, continued in 1992 and 1996 and the survey referring to 2000 is currently being developed; this is always done within a framework that allows reliable comparisons to be made between the EU member states and regions.

This methodology focuses on the results obtained in the 1996 survey, the latest one available.

2. Objectives

The survey firstly aims to fulfil the European Union regulations that oblige all member states to carry out a survey on the level and structure of labour costs, following the regulations on reference period, coverage scope, information requested and characteristics, data collection, representation, process and transmission of results and implementation process.

The basic interest however, stems from understanding the labour factor cost and its components: wages, obligatory social security contributions, voluntary contributions, direct corporate benefits, compensations, vocational training costs and other labour related costs.

3. Scope, coverage and reference period

The Labour Cost Survey's **statistical unit** is the Social Security Contribution Account, a concept traditionally used in salary and labour cost surveys carried out both by the INE and other organisations with responsibility in this area.

The Social Security Contribution Account is composed of a group of workers employed by others who develop their labour activity in one or several work places belonging to the same company, located in the same province, generally performing the same main activity and with homogeneous characteristics as regards social security contributions. These aspects allow a fair regionalisation of the data. This unit does not coincide exactly with the company or the establishment or work place, although in many cases it does coincide with the latter.

In some cases, the informant unit does not coincide with the statistical unit or the survey unit and instead the company centralises all information on its associated contribution accounts.

The population scope under study are the Social Security Contribution Accounts, regardless of their size, belonging to companies with 10 or more workers registered in December 1995.

The population group comprises all workers employed by others regardless of their type of contract or working day. It excludes all persons whose pay stems mainly from company profits or sales commissions; therefore, members of the Board of Directors and those who receive a wage exclusively from sales commissions are excluded.

The geographical scope includes the whole national territory, with information broken down by Autonomous Community and the information for Ceuta and Melilla is included together.

Sectorial scope

Contribution accounts where economic activity is classified in the three large sectors are researched: industry, construction and the services sector and specifically those centres with economic activities in sections C to K of the National Classification of Economic Activities (NCEA-93). More precisely, the sectorial scope encompasses 48 divisions or branches of activity, spread out over industry, construction, trade, accommodation and catering, transport and communications, real estate activities, services rendered to other companies, rents and leases, insurance and financial intermediation. Agricultural, farming and fishing activities, Public Administration, social security, defence, health, education, other social activities and services provided to the community, personnel services, domestic personnel and extraterritorial bodies are excluded from the survey.

The reference period for labour cost statistics information collection is the complete or calendar year of 1996, which also coincides with the so-called 1996 financial year.

4. Definitions

Labour cost and its components

Labour cost is defined as the cost incurred by the employer for the use of labour and consists of the following amounts: salary for work undertaken or for incomplete work time that is paid, bonuses and rewards independent of ordinary and extra payments, payments in kind and in general and any other type of payment for work carried out by the worker. The labour cost also includes social security contributions paid by the employer, voluntary employer contributions for plans, pension plans and various types of insurance for their workers, as well as direct contributions to workers and their family members for different eventualities: retirement, death, invalidity or survival. Also included are compensations for dismissal, vocational training, transport and corporate costs, as well as costs incurred for the supply of work wear and various implements and tools.

The cost is measured in net terms for the employer; in other words, deducting the various subsidies received, tax deductions granted and worker contributions if applicable.

The survey defines twenty eight amounts constituting the labour cost of which four are negative and make up the subsidies section; this labour cost structure is consistent in all the results tables and is also obtained in absolute values (ptas.) as well as percentage values of the gross labour cost.

The first important block of labour cost components corresponds to the **wages and salaries** amount, which is defined as the ensemble of direct payments made up of the total payments in money and in kind, as well as both ordinary and extra payments paid to workers for work carried out or for contracted working time, however it is quantified (per task or service, piecework or for time) and accrued (per hour, day, week or month). This amount groups together **wages and salaries in cash**, which are the total of salary payments in cash made by the company during 1996 to the group of workers, except apprentices, in the selected contribution centre. The gross accrued income is counted, in other words, before worker social security contributions have been deducted and income tax payments made. Neither allowances nor travel expenses are included.

Within the **wages and salaries in cash** amount, the following concepts are highlighted:

Base salary, which is the basic and fixed part of the salary and which is defined as the minimum payment agreed in collective agreements and generally calculated in ptas/month or ptas/day. If there is no collective agreement or other agreement between the employer and worker, the base salary is understood to be the Interprofessional Minimum Wage (IMW).

Overtime payments correspond to both structural and non-structural overtime payments at a price that should be the equivalent of at least one normal hour. Work that represents additional work undertaken outside normal working hours is therefore paid. Overtime may also be offset with time off. Overtime payment is open to collective negotiation and can, as usually happens, be established at a higher rate than a normal hour's payment.

Salary supplements, which are defined as the ensemble of remunerations paid at a higher level than basic remunerations (base salary and extra payments) that the employer usually pays in accordance with the collective agreement. They can be of different types, do not usually have the same name and can be called bonuses, premiums, supplements or rewards. They include: *personal supplements*, where the worker's seniority or continued service is valued, or the worker's qualifications, both academic and professional, knowledge of languages, IT, etc.; *supplements related to the job*, which are set in terms of the specific circumstances in which the job is carried out. There are nighttime bonuses, bank holiday bonuses, as well as those for danger, difficulty and toxicity. Other bonuses include *supplements for quality and quantity of work*, which reward attendance and punctuality and productivity incentives that reward work performance above the minimum set.

Extraordinary payments, which include all payments with a due date later than the current payment period (generally the month), even though they are of an irregular nature. Basically they are made up of *extra bonuses* or *Christmas or summer payments* (regulated by law) and *profit bonuses*. The amount is known in advance and does not depend on the worker's or the company's results. They should be considered as such even though they are received on a pro-rata basis month by month. The amount granted in the special Christmas and summer payments is set out in the collective agreements and usually corresponds to a normal month's salary.

Profit bonuses reward the workers' participation in the company's profit. In the majority of agreements and collective agreements, a known amount is set in advance that can amount to one month's salary.

Payments for incentives or results are payments linked to individual or company results. The sum is not known beforehand, but depends on performance, goals achieved, level of production achieved, etc. These payments should not be confused with other fixed supplements or with overtime payments, as in these cases the amount is known in advance.

Compensation payments that include amounts received by workers to reimburse or compensate them for detriments suffered while working for the company or to advance them the amount necessary to cover a cost incurred for this reason. They include: *transport allowance, currency devaluation and compensation for relocation*.

Another cost within the wages and salaries amount are *the payments to worker savings plans*, which include payments made by the company to set up special funds in order to buy shares in the company and other financial assets for workers, even when workers do not have direct access to these assets. These should however not be confused with pension plan contributions.

Payments in kind include the valuation of goods given by the employer to their workers or the cost incurred by the employer in acquiring these goods. Distinction is made between:

Company products, which are goods and services from the company given free of charge or below the market price. The amount to be taken into consideration will be equivalent to the cost of the product when it is given free of charge, or the difference between the cost price and the price charged to the worker if the sales price is lower than the cost price. Any other compensatory payment for profit in kind that is not enjoyed will also be taken into consideration.

Housing includes the imputed cost of workers using housing owned or rented by the company. Added to this is the assistance given to workers to buy or rent a house.

The other large block of labour costs is made up of the so-called "*non-wage costs*", topped by the **obligatory social security contributions**, which are legally established employer contributions to the social security system for workers in order to cover the benefits set up by the system. These are benefits resulting from illness, occupational accidents, invalidity, retirement, death, survival, unemployment, vocational training, wage guarantee or any other eventuality covered by the social security system. The employer makes the contributions through self-payments on official documents set out for this purpose (tc1 & tc2), calculating the quotas/amount on salary bases via a contribution type expressed as a percentage of the base.

The important new addition to this survey with regards the previous surveys in 1988 and 1992 is that all the information corresponding to the obligatory social security contributions has been obtained from administrative files (that contain the tc1 of the accounts selected in the sample in magnetic format) provided by the General Social Security Treasury in order to reduce the statistical load born by companies.

The amounts that make up these obligatory contributions are:

Common eventualities, which correspond to non-professional eventualities within the general contributions and cover retirement, temporary incapacity, invalidity and death or

survival arising from common illness or a non-occupational accident, as well as social services and health care in the aforementioned cases and in the case of maternity.

Overtime hours are contributions for this concept, including both structured overtime or overtime carried out for reasons beyond control, as well as unstructured overtime or voluntary overtime without the need for justification. The overtime limit is set at 80 hours a year.

Training and work experience are contributions that cover common eventualities for workers of the contribution centre working on a training or work experience contract and to whom some kind of reduction in the payment of social security contributions is applicable. These workers are differentiated from the other workers by the different rates applied in the calculation of quotas/amounts.

Common services include contributions from companies collaborating in the management of the temporary incapacity eventuality through occupational accident or occupational disease.

Occupational accident (OA) and Occupational Illness (OI) include contributions corresponding to professional eventualities arising from occupational accidents and occupational disease.

Unemployment, the Wage Guarantee Fund (FOGASA) and vocational training (VT), which are contributions to cover this type of eventuality.

Another large group of employer contributions for workers that forms part of the non-wage costs are **voluntary contributions**, which include employer contributions to private social security circuits or other insurance companies with the aim of covering, improving or complementing the benefits set out by the social security system. These contributions are not obligatory and are usually set out in collective agreements via negotiation. Only employer contributions are considered, including:

Pension plans and funds, which include the total amount of contributions that the company or pension plan or fund promoter makes to banks, pension funds and/or plans for their workers, who are contributors to the plan or fund. The contributions can be clearly defined, and in this case, the benefits to be received by the beneficiaries will be predetermined. These can be in absolute terms or according to wage, seniority, supplements or other points of reference. A mixed criterion can also be given, which combines the two aforementioned criteria. The pension plan and fund contributions cover all or some of these eventualities: retirement, total or permanent invalidity in terms of the usual job, or absolute or permanent invalidity in terms of all jobs, and the death and survival of the contributor or beneficiary.

Health, maternity or accident insurance are amounts paid by the employer to private medical societies as payment for health care coverage for workers and their families that improve or increase the INSALUD coverage. Direct payments to workers for any of these causes are not included.

Other plans or insurance includes the total amount of payments made by the company for other voluntary corporate benefits that are not paid directly to the workers, such as

group life insurance premiums, unemployment insurance and other insurance not previously mentioned.

The next chapter within the non-wage costs section refers to so-called **direct corporate contributions**, which are payments that the company makes directly to workers or their family, or also to ex-workers, to help them in particular circumstances and as a supplement to particular social contributions. These include:

Temporary incapacity (TI), which includes the total of the following two payments.

Temporary incapacity benefit payments (TI), which are payments made as part of the TI benefit that the employer pays during the first 15 days of sick leave and that are not covered by social security.

TI supplement that includes the amounts added by the employer, either voluntarily or in accordance with the collective agreement, to the TI benefits and which are paid by either the employer or the social security. These amounts help make up the affected worker's salary to 100% or less of their normal salary.

Unemployment is the payment made voluntarily by the employer as a supplement to the INEM's benefit for workers affected by temporary suspension or a reduction in working hours in the case of a labour force adjustment plan, so that they can retain their wages or part of them.

Retirement is an amount paid to ex-workers that aims to complement the social security pension or private insurance and which is either paid just once, or periodically with a view to mitigating, in part or in whole, the difference between the salary prior to retirement and the pension received. Also included in this section are payments for "voluntary redundancy (with incentive payments)".

Death and survival are the amounts paid directly by the company to a surviving spouse and to the children of the dead worker, as a supplement to the widow's and orphans' subsidies and pensions.

Invalidity or disability is the amount paid by the company to complement workers' or ex-workers' invalidity or disability subsidies or pensions. This can be paid just once or periodically.

Family assistance is a cost paid directly to workers affected by certain family eventualities, such as marriage, birth, nursery expenses, children's studies or other similar events.

Medical assistance is the monetary payment received by workers directly from the company that corresponds to costs incurred by workers in relation to health care that falls outside the sphere of social security.

Another labour cost component is the **compensation for dismissal**, which includes the total of payments made for compensations for dismissal and contract expiry, as well as the wages received during the dismissal process, the so called "processing wages", which the employer must pay in this situation. These include:

Compensation for individual dismissals, which are the amounts paid to workers as a result of their contract expiring. Causes: unfair dismissal, mutual agreement or expiry of temporary job contracts.

Compensation for group dismissals, which are payments made as a result of the expiry of work contracts due to financial, technical, organisational or production reasons, with or without a labour force adjustment plan.

Vocational training costs are those paid for providing knowledge and training in vocational techniques to workers. This training is linked to the job and is of interest to the company. Costs incurred from assisting workers who are undertaking regulated training will not be considered. The following are considered to be vocational training costs: ***maintenance costs, adaptation and equipment of buildings and facilities used for training, participation in courses, fees and allowances of external trainers (never of workers from the company), training materials and the amount paid to the training companies***, but always in gross terms without deducting subsidies and aid received from the INEM or other public training organisations.

Transport costs are costs incurred by the company for the free or reduced cost transport of employees from their homes to their place of work. Costs relating to maintenance staff and drivers are not included when these workers belong to the company's staff, nor the amounts paid directly to workers as compensation when they use transport not belonging to the company.

Corporate costs are the ensemble of costs of a varied nature with the aim of improving the quality of life of workers via corporate activities driven by working groups. Costs derived from ***the maintenance or adaptation of canteens for workers' use, as well as indirect payments made to these workers in the form of meal tickets, maintenance and repair costs of buildings and facilities used for nurseries, sporting and cultural activities and recreational services, study aid and grants for workers, help with children and Christmas hampers are highlighted***. The costs of personnel in charge of these services when they belong to the company are not included.

Other costs correspond to amounts paid by the employer when meeting the needs of employing new staff, using recruitment agencies, placing job adverts in the press, paying travel or accommodation expenses for candidates or renting facilities for carrying out interviews. Similarly, costs not included in other sections, such as those incurred in renewing work wear and work tools are included.

Subsidies are the ensemble of refunds received by the employer from public organisations. They are negative and therefore reduce the gross labour cost. They are divided into:

Contracting subsidies, which are amounts received directly by the company in the form of a subsidy for the creation of employment and only for this concept.

Subsidies in social security contributions, which include subsidies derived from reductions and discounts in the contributions made to the social security.

Vocational training subsidies are the total amount received by the company from the INEM or any other public organisation as payment for vocational training for the company's staff.

Tax deductions are the amounts that persons liable for Corporate Tax and Income Tax, who carry out business, professional or artistic activities, deduct from the aforementioned taxes for the creation of employment.

The **net cost** is the gross labour cost minus subsidies.

5. Survey design

Survey framework

The survey stems from the Central Company Directory (CCD), updated in December 1995, which was used to locate companies with 10 or more workers that perform the activities under study.

Subsequently, this directory is cross-referenced with the General Register of Social Security Contribution Accounts, provided by the Social Security General Treasury, updated in December 1995; this framework has the advantage of being continuously updated, as well as the fact that the unit is the actual unit of the survey. This cross-reference is performed to filter the NCEA-93 code of the latter directory.

Finally, the Social Security Contribution Accounts Directory from companies with 10 or more workers and classified in the economic activity divisions under study is used to obtain the final sample of contribution accounts for the survey.

Sampling plan

The sampling type used corresponds to *stratified random sampling with optimum allocation*, where the units are the contribution accounts.

The stratification criterion is created considering three variables: Autonomous Community (18 in total, Ceuta y Melilla are considered together), economic activity as regards the NCEA-93 division (48 divisions) and unit size (seven strata sizes).

Survey units, in other words, contribution accounts are stratified in terms of the number of workers, as follows:

Stratum	Number of workers
1	from 1 to 4
2	from 5 to 9
3	from 10 to 19
4	from 20 to 49
5	from 50 to 99
6	from 100 to 199
7	200 and more

The results will also be presented by focussing on the size of the company to which the contribution centre belongs. The last stratum was researched exhaustively.

The sampling sizes by stratum have been obtained by prefixing a standard admissible relative error of 3% for the labour cost variable per hour at both a national level and an NCEA-93 division level, and at 10% for the Autonomous Communities. The final sampling size was determined at 19,624 contribution accounts.

In the following tables, the sample designs are presented both by economic activity at different breakdown levels and size, as well as on an Autonomous Community level and by size.

Table 1. Sample design by Autonomous Community and unit size. All activities

Autonomous Communities	Strata ¹				
	Total	1	2	3	4
National total	19,624	7,349	5,135	4,377	2,763
Andalucía	1,690	590	419	385	296
Aragón	989	376	284	241	88
Asturias	839	358	237	165	79
Baleares	787	377	227	140	43
Canarias	1,035	414	268	238	115
Cantabria	637	305	179	108	45
Castilla y León	1,208	479	304	278	147
Castilla-La Mancha	983	414	273	227	69
Cataluña	2,264	611	528	532	593
C. Valenciana	1,605	549	429	382	245
Extremadura	680	344	190	123	23
Galicia	1,183	446	308	295	134
Madrid	1,998	540	439	457	562
Murcia	873	378	248	188	59
Navarra	779	321	234	165	59
País Vasco	1,321	444	339	346	192
La Rioja	565	285	176	90	14
Ceuta y Melilla	188	118	53	17	.

¹ 1.- **Strata** : 1 units of 1 to 19 workers; 2 units of 20 to 49 workers; 3 units of 50 to 199 workers; 4 units of more than 200 workers

Table 2. Sample design by NCEA-93 divisions and unit size

NCEA-93 divisions	Strata ¹				
	Total	1	2	3	4
Total	19,624	7,349	5,135	4,377	2,763
Industry	9,439	3,450	2,535	2,215	1,239
10	95	29	19	25	22
11	25	13	6	4	2
12	3	.	.	2	1
13	40	26	5	3	6
14	286	142	103	35	6
15	903	236	211	247	209
16	62	20	16	7	19
17	388	134	107	89	58
18	423	159	124	107	33
19	329	127	122	74	6
20	436	186	158	82	10
21	305	106	70	96	33
22	442	167	127	108	40
23	61	26	13	8	14
24	638	292	103	128	115
25	395	133	116	110	36
26	584	185	167	153	79
27	380	119	90	96	75
28	649	217	194	176	62
29	463	162	131	106	64
30	91	57	18	10	6
31	438	149	113	104	72
32	199	84	49	35	31
33	192	92	46	44	10
34	318	91	62	79	86
35	215	83	45	47	40
36	511	198	174	116	23
37	78	37	35	5	1
40	246	78	57	53	58
41	244	102	54	66	22
Construction	1,431	521	407	384	119
Services	8,754	3,378	2,193	1,778	1,405
50	661	292	245	112	12
51	1,115	474	318	236	87
52	1,130	444	242	200	244
55	915	332	266	212	105
60	660	214	170	150	126
61	59	41	7	4	7
62	163	63	32	37	31
63	439	198	119	89	33
64	285	97	50	50	88
65	651	137	98	158	258
66	497	267	110	68	52
67	200	121	42	30	7
70	310	161	105	44	.
71	250	136	88	24	2
72	243	90	69	53	31
73	13	6	3	2	2
74	1,163	305	229	309	320

¹ 1.- **Strata** : 1 units of 1 to 19 workers; 2 units of 20 to 49 workers; 3 units of 50 to 199 workers; 4 units of more than 200 workers

Estimators

Separated ratio estimators have been used, taking the number of workers in the Social Security Directory of Contribution Accounts as the auxiliary variable.

If we call stratum h from selection as defined, due to the crossing of the branch of activity, Autonomous Community and size variables, any questionnaire k chosen in a stratum h has a raising factor F_h defined by:

$$F_h = \frac{D_h^*}{d_h'}$$

in which,

$$D_h^* = D_h \left(1 - \frac{d_h''}{d_h'} \right)$$

where:

D_h is the total of workers according to the directory in the **directory centres** of stratum h .

d_h' is the total of workers according to the directory in the **sample centres selected** in stratum h .

d_h'' is the total of workers according to the directory in the **sample centres questioned** in stratum h .

d_h''' is the total of workers according to the directory in the **sample centres selected in stratum h which are delisted**.

The estimate therefore of the total of one variable X (no. of workers, effectively worked hours or total labour cost) for any scope G is :

$$\hat{X}_G = \sum_h \sum_{k \in G} F_h X_{kh}$$

where X_{kh} is the value of X of the questionnaire k selected in stratum h .

A quotient estimate of separated ratio estimators (cost per worker or cost per hour) is carried out using the ratio of the respective totals.

In this way,

$$\hat{Z}_G = \frac{\hat{X}_G}{\hat{Y}_G} = \frac{\sum_h \sum_{k \in G} F_h X_{kh}}{\sum_h \sum_{k \in G} F_h Y_{kh}}$$

where,

\hat{Z}_G , is the estimate of labour cost per worker in scope G .

\hat{X}_G, \hat{Y}_G , are the estimators of total cost and the total workers in said scope G, respectively.

The cost per hour estimate is done in a similar way.

Collection methods and fieldwork

The questionnaires were collected from February to December of 1997.

The information provided directly by employers was requested via a questionnaire issued by post from the INE central services. The unit in charge of the fieldwork was the *Centralised Collection Unit (CCU)*, who managed the collection and carried out the first filter of all information requested via post, telephone and fax.

Companies where more than one sample unit was selected were offered the option of centralising the data collection.

Table 3. Sample collected and response rate by NCEA-93 divisions and unit size

NCEA-93 divisions	Strata ¹									
	Total		1		2		3		4	
		Rate		Rate		Rate		Rate		Rate
Total	16,841	85.8	5,762	78.4	4,508	87.8	3,958	90.4	2,613	94.6
Industry	8,219	87.1	2,723	78.9	2,263	89.3	2,037	92.0	1,196	96.5
10	79	83.2	17	58.6	15	78.9	25	100.0	22	100.0
11	21	84.0	11	84.6	5	83.3	3	75.0	2	100.0
12	3	100.0	2	100.0	1	100.0
13	36	90.0	23	88.5	5	100.0	3	100.0	5	83.3
14	249	87.1	115	81.0	96	93.2	32	91.4	6	100.0
15	813	90.0	193	81.8	193	91.5	225	91.1	202	96.7
16	53	85.5	11	55.0	16	100.0	7	100.0	19	100.0
17	331	85.3	96	71.6	99	92.5	80	89.9	56	96.6
18	329	77.8	105	66.0	98	79.0	94	87.9	32	97.0
19	275	83.6	90	70.9	110	90.2	69	93.2	6	100.0
20	361	82.8	138	74.2	141	89.2	73	89.0	9	90.0
21	273	89.5	88	83.0	63	90.0	89	92.7	33	100.0
22	380	86.0	131	78.4	116	91.3	97	89.8	36	90.0
23	59	96.7	24	92.3	13	100.0	8	100.0	14	100.0
24	578	90.6	254	87.0	92	89.3	122	95.3	110	95.7
25	351	88.9	109	82.0	101	87.1	107	97.3	34	94.4
26	503	86.1	143	77.3	142	85.0	140	91.5	78	98.7
27	331	87.1	88	73.9	83	92.2	87	90.6	73	97.3
28	556	85.7	166	76.5	166	85.6	163	92.6	61	98.4
29	423	91.4	138	85.2	125	95.4	98	92.5	62	96.9
30	75	82.4	45	78.9	15	83.3	9	90.0	6	100.0
31	384	87.7	120	80.5	98	86.7	96	92.3	70	97.2
32	170	85.4	63	75.0	44	89.8	34	97.1	29	93.5
33	179	93.2	84	91.3	44	95.7	43	97.7	8	80.0
34	270	84.9	61	67.0	57	91.9	70	88.6	82	95.3
35	186	86.5	62	74.7	42	93.3	43	91.5	39	97.5
36	428	83.8	152	76.8	152	87.4	101	87.1	23	100.0
37	73	93.6	37	100.0	31	88.6	4	80.0	1	100.0
40	231	93.9	66	84.6	54	94.7	53	100.0	58	100.0
41	219	89.8	93	91.2	47	87.0	60	90.9	19	86.4
Construction	1,095	76.5	354	67.9	319	78.4	309	80.5	113	95.0
Services	7,527	86.0	2,685	79.5	1,926	87.8	1,612	90.7	1,304	92.8
50	578	87.4	242	82.9	221	90.2	103	92.0	12	100.0
51	975	87.4	385	81.2	291	91.5	217	91.9	82	94.3
52	959	84.9	336	75.7	211	87.2	183	91.5	229	93.9
55	780	85.2	239	72.0	245	92.1	194	91.5	102	97.1
60	535	81.1	172	80.4	148	87.1	128	85.3	87	69.0
61	54	91.5	37	90.2	7	100.0	3	75.0	7	100.0
62	146	89.6	53	84.1	29	90.6	34	91.9	30	96.8
63	380	86.6	161	81.3	101	84.9	87	97.8	31	93.9
64	251	88.1	75	77.3	43	86.0	46	92.0	87	98.9
65	620	95.2	120	87.6	92	93.9	153	96.8	255	98.8
66	396	79.7	218	81.6	86	78.2	50	73.5	42	80.8
67	180	90.0	108	89.3	38	90.5	28	93.3	6	85.7
70	235	75.8	121	75.2	79	75.2	35	79.5	.	.
71	215	86.0	107	78.7	82	93.2	24	100.0	2	100.0
72	213	87.7	72	80.0	58	84.1	53	100.0	30	96.8
73	11	84.6	6	100.0	2	66.7	2	100.0	1	50.0
74	999	85.9	233	76.4	193	84.3	272	88.0	301	94.1

¹ 1.- Strata : 1 units of 1 to 19 workers; 2 units of 20 to 49 workers; 3 units of 50 to 199 workers; 4 units of more than 200 workers

Table 4. Sample collected and response rate by Autonomous Community and unit size. All activities

Autonomous Communities	Strata ¹									
	Total		1		2		3		4	
		Rate		Rate		Rate		Rate		Rate
National total	16,841	85.8	5,762	78.4	4,508	87.8	3,958	90.4	2,613	94.6
Andalucía	1,416	83.8	443	75.1	358	85.4	338	87.8	277	93.6
Aragón	866	87.6	311	82.7	252	88.7	221	91.7	82	93.2
Asturias	743	88.6	294	82.1	215	90.7	156	94.5	78	98.7
Baleares	655	83.2	296	78.5	195	85.9	123	87.9	41	95.3
Canarias	849	82	313	75.6	219	81.7	207	87	110	95.7
Cantabria	555	87.1	258	84.6	157	87.7	97	89.8	43	95.6
Castilla y León	1,041	86.2	376	78.5	269	88.5	259	93.2	137	93.2
Castilla-La Mancha	829	84.3	327	79	232	85	204	89.9	66	95.7
Cataluña	1,932	85.3	439	71.8	458	86.7	475	89.3	560	94.4
C. Valenciana	1,395	86.9	425	77.4	384	89.5	351	91.9	235	95.9
Extremadura	583	85.7	285	82.8	163	85.8	115	93.5	20	87
Galicia	1,038	87.7	359	80.5	280	90.9	269	91.2	130	97
Madrid	1,699	85	385	71.3	373	85	413	90.4	528	94
Murcia	756	86.6	298	78.8	225	90.7	175	93.1	58	98.3
Navarra	678	87	256	79.8	214	91.5	150	90.9	58	98.3
País Vasco	1,149	87	362	81.5	303	89.4	307	88.7	177	92.2
La Rioja	502	88.8	246	86.3	162	92	81	90	13	92.9
Ceuta y Melilla	155	82.4	89	75.4	49	92.5	17	100	.	.

¹ 1.- **Strata** : 1 units of 1 to 19 workers; 2 units of 20 to 49 workers; 3 units of 50 to 199 workers; 4 units of more than 200 workers

In terms of *field incidents*, of the 19,624 units selected, there were 17,511 *surveyable* companies (16,841 surveyed and 670 refusals). Of the 2,113 *un-surveyable* companies, 412 were *unreachable* 777 were *delisted* 768 were *erroneously included* and 156 were *closed*. In table format:

Unsurveyable	
Unreachable	412
Delisted	777
Erroneously included	768
Closed	156
Total	2,113

Surveyable	
Surveyed	16,841
Refusals	670
Total	17,511

3 units of 50 to 199 workers

4 units of more than 200 workers

Response rate:

The *response rate of the surveyable sample* is very high:

$Rr = (surveyed / surveyable) \times 100 = (16,841 / 17,511) \times 100 = 96.2 \%$, while the response rate of the sample selected is: $(16,841 / 19,624) \times 100 = 85.8 \%$.

Quality of estimates: Sampling errors

Variation coefficients for the annual labour cost variables per worker are calculated, as well as the labour cost per hour worked both at an NCEA-93 division level and an Autonomous Community level.