Wages of Persons with Disability
Annual results

Exploitation of the Wage Structure Survey and of the State Database of Persons with Disabilities
Methodology and general description of the operation

Last update September 2022

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I Introduction

The group of persons with disabilities has been a key priority for social policies developed in recent years. One of the essential aims of these policies is to integrate these people into the labour market.

In order to achieve this objective, among other actions, an agreement was signed in 2002 between the Ministry of Labour and Social Affairs (MTAS) and the Spanish Committee of Representatives for Persons with Disabilities (CERMI) on measures to improve employment opportunities for persons with disabilities, which constituted the II Employment Plan MTAS-CERMI 2002-2004.

Since then, various regulations have been adopted so as to ensure that as many persons with disabilities as possible may enter the labour market, whether ordinary or sheltered.

It should also be noted that the integration of this group into the labour market also appears as a relevant objective in Spain's National Action Plan for Employment for 2003 and in the Second Action Plan for Persons with Disabilities (2003-2007).

In order to evaluate these action plans, it is necessary to have data that allows a comparison of their effectiveness, as well as an updated view on the situation of the group of persons with disabilities.

Among the available statistical sources that the Spanish National Statistics Institute (INE) has on disability are the Disability, Independence and Dependency Situations Survey 2008 (EDAD 2008) and the 2002[1] ad hoc module for Persons with disabilities and their relationship with employment in the Economically Active Population Survey (EAPS).

Both surveys provide a wealth of information on the group of persons with disabilities, but due to its periodicity it is not possible to ascertain the short-term impact of social policies directed at this population group.

On the other hand, it is necessary to understand how the economic situation and the breakdown of employment are affecting the most vulnerable groups, including persons with disabilities.

To this end, as agreed in the Collaboration Agreement signed by CERMI, the ONCE Foundation, the Institute for the Elderly and Social Services (IMSERSO) and the INE, a new operation has been developed, the Employment of persons with disabilities, based on **cross-checking the information from the Economically Active Population Survey (EPAS) from the INE with that existing in the IMSERSO State Database of Persons with Disabilities (BEPD).** In addition to the labour and demographic data in the survey, there is also the disability data provided by the Base, obtained for persons with a disability certificate. Making use of the BEPD administrative register avoids increasing the EPAS's response burden.

In order to carry out the project, there has also been funding for technical tasks provided by the ONCE Foundation within the framework of the Operational Programme to Combat Discrimination 2007-2013, the Por Talento Programme, co-financed by the European Social Fund.

The project began as a pilot test in 2010 with reference data from 2008. During 2011, provisional results were obtained for the reference periods 2009 and 2010. For the first time, it included data on employment promotion measures and sheltered employment from the General Social Security Treasury (TGSS), as well as information on benefits received from

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[1] A new module on disability was published in 2012.

the Registry of Public Social Benefits of the National Social Security Institute (INSS) and data dependence from the System for the Autonomy and Support for Dependent Persons (SAAD).

Given the importance of maintaining and broadening these studies on the group of persons with disabilities, in order that efforts are combined, and work, knowledge and experience are shared on an ongoing basis, the four institutions, to which the Directorate General for Policies on Disability Support (part of the Ministry of Health, Social Policy and Equality) was incorporated, renewed the partnership agreement and broadened their analysis objectives, proposing a new study to determine the feasibility of obtaining wage data relating to the group of persons with disabilities, by means of the joint development of the BEPD and the Wage Structure Survey (WSS) conducted by the INE.

The consideration of persons legally recognised as disabled, which was extended through legal assimilation in 2003, (Law 51/2003), definitively established under Royal Legislative Decree 1/2013, 29 December, published on 3 December 2013, which approves the revised text of the "General Law of rights of persons with disabilities and their social inclusion".

According to this Royal Decree, persons officially recognised as disabled are considered those with a degree of disability greater than or equal to 33%. In addition, it establishes that social security pensioners who have a recognised permanent disability pension to the degree of total, long-term or severe disability will be considered as having a degree of disability greater than or equal to 33%, and state pensioners who have a retirement pension or retirement due to permanent incapacity or unfitness for work.

As a result of this Royal Decree, the population scope of The Salary of Persons with Disabilities extended to include the aforementioned group. 2014 was the first year to experience this change.

The following chapters of this document set out the methodology followed.

II Information Sources

Four sources of information have been used:

1. The Annual Salary Structure Survey (ASSS). This is an annual statistical operation that obtains salary information comparable to the Salary Structure Survey (SSS). It has a lower level of detail and is carried out to complete the information of the SSS, of a quadrennial nature, in the years in which it is not carried out.

2. ASSS information is obtained through the combined processing of the Social Security General Affiliation File (SS) and Model 190 statements: Annual Summary of Withholdings and Advance Payments on Personal Income Taxes by the State Tax Administration Agency (AEAT) and the Regional Treasuries of Navarra, Bizkaia y Gipuzkoa, along with the occupation and work time variables provided by the survey attached to the INE Quarterly Labour Cost Survey.

3. The State Database of Persons with Disabilities (SDPD) began in 1992 with the data on those persons whose disabilities had been recognised as of the beginning of the 70s.

4. It contains the data on all those persons resident in Spain who have requested the assessment of the degree of disability, considering all those persons recognized to have a degree of disability greater than or equal to 33% (a requirement to access certain benefits, tax benefits, payments in social contributions, parking vouchers and others) to have disabilities[2].

5. The General Treasury of Social Security (GSST), which provides information on measures to promote the employment of workers with disabilities. Among them, those aimed at promoting ordinary employment through incentives such as subsidies, bonuses and reductions in contribution quotas stand out.

6. **The National Institute of Social Security (INSS),** is the entity responsible for the Registry of Public Benefits whose purpose is to register social benefits of economic content, intended for individuals and families, using public resources. In particular, the benefits associated with social security pensioners with a permanent disability pension to the degree of total, long-term or severe, and state pensioners who have a retirement pension or retirement due to permanent incapacity or unfitness for work.

This register makes it possible to identify the group of pensioners who are considered as having a degree of disability equal to or greater than 33% according to Royal Legislative Decree 1/2013.

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[2] In art. 1 point 2 of Law 51/2003 of 2 December, LIONDAU establishes that persons with disabilities are those who have been recognised as having a degree of disability equal to or greater than 33 per cent.

III Project objectives

The fundamental objective of this project is to obtain data on the earnings of workers with disabilities and to do so in comparison to workers without disabilities.

It is intended to provide the distribution of the salaries of people who have a certificate of disability based on:

- The personal characteristics of workers: sex, age, nationality.

- The characteristics of the job and the company: occupation, type of contract (indefinite, determined), type of working day, size of the company, activity sector.

- Disability: type of disability, degree of disability, employment promotion measures (bonuses and disability-specific contracts).

IV Characteristics of the Project

As already indicated, the research is derived from the crossing of a registry (State Database of Persons with Disabilities) and a survey (Annual Salary Structure Survey).

Disability is an atypical phenomenon that affects a small percentage of the population and has important effects on the participation in the labor market of the people it affects.

In addition, the information base on which the salary of people with disabilities is based, the Annual Salary Structure Survey, was designed for purposes unrelated to the issue of disability.

For all these reasons, the sample size obtained is limited and makes detailed exploitation at certain levels of disaggregation impossible. The main areas of this statistic are set out below.

1 Population Scope

Includes salaried employees who contribute to Social Security under the following conditions:

- They belong to the General Social Security Regime and carry out economic activities framed in Sections B to S of the CNAE-09

- They belong to the Special Scheme for Seafarers and their economic activity is maritime transport (division 50 of the CNAE-09).

- They have been registered with Social Security for at least two months during the reference year, one of them being in October.

Agriculture, Households with Domestic employees, Extraterritorial Organizations and officials assigned to Mutual Societies are excluded.

It also excludes all chairpersons, members of administrative boards and, in general, all personnel whose remuneration is not mainly in the form of wages, but rather commissions or benefits.

2   Geographical scope

the entire national territory is investigated.

The fact that disability is an atypical phenomenon means that the size of the subsample of people with disabilities available is insufficient to provide independent data for each autonomous community. For this reason, information is provided by aggregating communities. Following the European standard, the aggregation is carried out at the NUTS1 level.

3 Reference period

The reference period is the calendar year, so only annual results are obtained.

3.1 ANALYSIS UNITS

The random unit selection procedure corresponds to a stratified two-stage sampling, in which:

– The first-stage units are the Social Security Contribution Accounts

– The second-stage units are those Workers associated with said Accounts.

The Social Security Contribution Account is an administrative concept traditionally used in wage and labour cost surveys. It comprises a group of workers employed by others, who carry out their employment activity in one or more workplaces at the same company, within the same province, and in general, but not necessarily, as part of the same main activity and with uniform features in terms of Social Security contributions.

Among the employees surveyed, the focus of interest is on people with disabilities.

3.2 VARIABLES UNDER STUDY

3.2.1 Salary variables

Salary data is obtained through data from the Annual Salary Structure Survey (ASSS). The terminology on salaries thus fully corresponds to that used in ASSS.

The main salary concepts considered are:

– **Salary gain**: Also called simply profit. Includes total salary payments in cash and remuneration in kind. Includes base salary, payments for overtime, salary supplements, extraordinary payments (due beyond the current payment period), payments in kind. Arrears corresponding to previous years are not included, nor is other non-salary income, such as allowances, compensation and travel expenses.

– **Annual gross earnings**: refers to the remuneration in cash and in kind paid during the reference year prior to the deduction of taxes and social security contributions paid by employees and withheld by the employer.

  The annual profit also includes all "non-normal payments", that is, payments that are not paid in each remuneration period and payments in kind.

– **Earnings per normal working hour:** Obtained from the gross profit divided by the number of hours paid during the same period.

  For an adequate interpretation of the earnings, we must take into account that earnings from the second and subsequent jobs of the same employee are not collected. We use the earnings of each worker in the company for which they have been selected.

In addition, for a correct comparison between workers, an annual salary adjustment is made for those who have not worked all year in the same workplace, either because they have started or ended their contract, or because they have been registered with Social Security but without receiving remuneration from the company, as in the case of maternity/paternity leave, unpaid leave, ERTE, etc. In these cases, the annual salary corresponding to what they would have received if they had been working all year under the same conditions is assigned.

- **Salary ratio (between two categories)**: defined as the quotient between the earnings corresponding to the first category and the earnings corresponding to the second.

When value 1 is taken, there is equal pay for both categories. The further away from 1, the greater the wage inequality between them, with the gain being greater for the first category when the value is greater than 1, and greater for the second when the gap is less than 1.

SPD provides information on the salary ratio between people with and without disabilities calculated for annual earnings.

3.2.2 Disability Variables

The terminology for disability is a complex phenomenon that reflects an interaction between the characteristics of the human organism and the characteristics of the society in which it lives.

However, since the study is based on the use of administrative records, the definition of disability used is restricted to the legal concept.

Thus, the concepts related to the group of people with disabilities that are used are:

- **Disability:** Persons with a recognized degree of disability equal to or greater than 33 percent. Social security pensioners who have a recognised permanent disability pension to the degree of total, long-term or severe disability will be considered as having a degree of disability greater than or equal to 33%, and state pensioners who have a retirement pension or retirement due to permanent incapacity or unfitness for work.

- **Deficiency**: any organic or functional alteration giving rise to a disability.

- **Employment promotion measures**: One way to counteract the negative trends are measures aimed at promoting inclusion in ordinary employment. These favour the hiring, particularly permanent hiring, of people with disabilities and their permanence on the job.

Notable among these policies is the **reductions and discounts in contribution quotas**, both for salaried workers and self-employed.

In the case of salaried workers, there is another measure that encourages ordinary employment is the specific type of contract for workers with disabilities in which, in addition to Social Security contribution discounts, include certain subsidies.

3.3 CLASSIFICATION VARIABLES

1. Sex
2. Age groups
3. Type of working day
4. Type of contract
5. Employment groups
6. Size of the unit
7. Activity sectors
8. Groups of Autonomous Communities (NUTS1)
9. Disability Type
10. Degree of disability
11. Discounts or reductions due to disability
12. Specific disability contract

V Information processing

The starting data of the Annual Salary Structure Survey (ASSS) have undergone a validation procedure that guarantees the completeness, correctness and coherence of the information.

The State Database of Persons with Disabilities (SDPD) is cleaned, in order to ensure the correct identification of all its registers and to eliminate those corresponding to deceased persons and those of residents in collective dwellings. To this end, the Continuous Register and the Death Statistics files have been used as contrast files.

The ASSS sample file is crossed with the SDPD, adding information from the administrative source to the survey information.

Thanks to the Social Security Registration File sent by the General Treasury of the Social Security (GSST), variables related to measures to promote employment (disability contracts and reductions/bonuses in contribution quotas) are incorporated. In addition, the subsample of people with disabilities within the ASSS sample is completed with persons who could not be identified as having a disability through the SDPD but who nonetheless appear in the GSST as having a degree of disability greater than or equal to 33%.

After that, new cross-referencing are made at the individual level using the information received from the National Social Security Institute (NSSI) belonging to the Registry of Public Social Benefits. This data makes it possible to identify social security pensioners who have a recognised permanent disability pension to the degree of total, long-term or severe, and state pensioners who have a retirement pension or retirement due to permanent incapacity or unfitness for work.

It should be noted that the validity of this cross-referencing is controlled through the conjunction of the following measures, which serves to provide admission/rejection criteria:

− Name and surname similarity measurement (alphanumeric string comparison routine defined and implemented in the INE's Area of Employment of Persons with Disabilities)

− Date of birth comparison measure

− Similarity measure of the Natural Person Identifier (NPI)

Once the variables related to disability have been linked to the ASSS sample, said information is sent to the State Tax Administration Agency and the Provincial Treasury of Navarra, Bizkaia and Gipuzkoa so that cross-referencing can be carried out with the Annual Summary File of Income Tax Withholdings and Payments (Model 190).

Since the CC and worker samples are random, by means of an elevation process, the average values of the annual earnings per activity, Autonomous Community, etc. will be obtained. Salary distributions may also be obtained.

VI Estimators and sampling errors

1 Sample

The procedure for random selection of units in the Annual Salary Structure Survey corresponds to a stratified two-stage sampling, where the first stage units are the Social Security contribution accounts, while the second stage units are the workers.

The strata classify each first-stage unit according to its autonomous community, economic activity (according to the current national classification) and size.

Eight size intervals are considered, which are the following:

1. From 1 to 4 workers

2. From 5 to 9 workers

3. From 10 to 19 workers

4. From 20 to 49 workers

5. From 50 to 99 workers

6. From 100 to 199 workers

7. From 200 to 499 workers

8. More than 500 workers

This latter size group is extensively researched and in some very large centres 50 workers are selected.

The list of units selected in the first stage is sent again to the General Social Security Treasury (GSST), which obtains the list of workers who have been registered with Social Security for at least two months, one of them being October of the reference year. From this list the employees are selected, the second stage units.

Finally, the subsample of people with disabilities is identified within the sample of workers, through the cross-referencing of the latter with the State Database of People with Disabilities and with the records of the GSST and the Registry of Public Social Benefits.

2 Estimators

Separate ratio estimators are used. The number of workers in each establishment, according to the directory of Social Security Contribution Accounts, is used as an auxiliary variable.

Let h be the cross-referencing of the region (AC) r, the activity branch (according to division of the CNAE-09) s, and the size group t. For the economic data of the j-th worker of the i-th establishment belonging to intersection h, the first and second stage elevation factors are respectively:

$$F_{1j} = \frac{\sum_{i=1;j\in i}^{N_h} D_i}{\sum_{i=1;j\in i}^{n_h} D_i}$$

$$F_{2j} = \frac{B_i}{b_i}$$

Where, N_h is the number of CCs in the stratum h in the directory of Social Security Contribution Accounts, n_h is the number of CCs in the stratum h In the first stage sample, D_i is the number of workers in the directory in the ith CC, B_i is the number of workers of the i-th CC who were registered with Social Security throughout the month of October of the reference year and b_i is the number of workers of the ith CC in the sample.

In order to obtain the earnings estimators for any crossover C of variables (by activity, occupation, gender, Autonomous Community, etc.), we have:

− The estimate of the total annual profit:

$$\hat{X}_C = \sum_{j \in C} F_{1j} F_{2j} X_j$$

where X_j is the annual earnings of the j-th worker.

− The estimate of the total number of workers:

$$\hat{Z}_C = \sum_{j \in C} F_{1j} F_{2j}$$

− Estimated total annual hours worked:

$$\hat{H}_C = \sum_{j \in C} F_{1j} F_{2j} h_j$$

where h_j are the annual hours worked by the j-th worker.

Then, the mean annual profit ratio estimator is:

$$\widehat{GT}_C = \frac{\hat{X}_C}{\hat{Z}_C}$$

And the estimator of the mean hourly profit is:

$$\widehat{GH}_C = \frac{\hat{X}_C}{\hat{H}_C}$$

3 Sampling errors

The formula for obtaining sampling errors is the one corresponding to the coefficient of variation, also called relative error. It is then that the sampling error for the total annual profit in any crossing of variables C is:

$$e(\hat{X}_C) = \frac{\sqrt{\widehat{Var(\hat{X}_C)}}}{\hat{X}_C} 100$$

where $\widehat{Var(\hat{X}_C)} = \sum_h \widehat{Var(\hat{X}_{Ch})}$ is the estimated total variance.

The estimated total variance is obtained with the variance for each crossing h of region, activated branch and size group as follows:

$$\widehat{Var(\hat{X}_{Ch})} = \frac{N_h(N_h - n_h)}{n_h} \frac{\sum_{i=1}^{n_h}(\hat{X}_{C_i} - \hat{R}_{C_h}D_i)^2}{n_h - 1} + \frac{N_h}{n_h} \sum_{i=1}^{n_h} \frac{B_i(B_i - b_i)}{b_i} \hat{S}_{C_i}^2$$

where

$$\hat{X}_{C_i} = \frac{B_i}{b_i} \sum_{j=1}^{b_i} X_j$$

with $X_j = 0$ if $j \notin C$,

$$\hat{R}_{C_h} = \frac{\sum_{i=1}^{n_h} \hat{X}_{C_i}}{\sum_{i=1}^{n_h} D_i}$$

$$\hat{S}_{C_i}^2 = \frac{\sum_{j=1}^{b_i}(X_j - \frac{1}{b_i}\sum_{j=1}^{b_i} X_j)^2}{b_i - 1}$$

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VII Publication of results

The information in The Salary of Persons with Disabilities is published in a press release commenting on the main data. At the same time, the results tables are available in INEbase, whose index is reproduced below and which responds to the objectives of the project:

− On the one hand, it aims to compare the wages of persons with disabilities with that of persons without disabilities

− On the other hand, it provides detailed information regarding the wage distribution of persons with disabilities analysed, depending on the main features of the disability.

In addition, it includes sampling errors for the main analysis variables, in order to have the reliability reference of the estimates.

Due to the nature of the operation - which uses a company survey as one of its sources - and the discrete sample size, it is not expected to provide microdata, since dissemination of this data would compromise statistical secrecy.

General table index

1. **Annual earnings:** for wage-earning workers, according to whether or not they have disabilities

2. **Wage distribution**: for wage-earning workers, according to whether or not they have disabilities

3. **Population Percentages:** by wage bracket, according to the general wage distribution

4. **Annual wage differences**: wage gap between people with and without disabilities

5. **Sampling errors**: variation coefficients for the annual earnings per worker variable calculation

For further details and a breakdown of these tables, see Annex III of this document.

Annex I

Description of the Annual Salary Structure Survey and of the State Database of Persons with Disabilities

Annnual Salary Structure Survey

The Annual Salary Structure Survey (ASSS) is an annual statistical operation that arises from the need to have annual salary information classified by sex.

The background of this survey can be found in the previous Industry and Services Salary Survey, where information broken down by sex was requested in the fourth quarters of each year from 1989 to 2000.

The need to include in the questionnaire other labor costs in addition to wages (to comply with the requirements of the European Regulations on the Labor Cost Index) and the high informative burden on companies of requesting this information in aggregate form, led to the elimination of the breakdown by sex in the Quarterly Labor Cost Survey as of the year 2000.

On the other hand, by virtue of Regulation No. 530/1999 concerning structural statistics on labor costs and labor income in the EU, which is compulsory for all Member States, the Salary Structure Survey (SSS) is carried out every four years. This survey collects wages of individual workers and together with these, a large number of variables such as age, studies, seniority in the company, type of contract..., and of course gender. Given the large volume of information requested, it has been carried out every four years since 2002.

There was thus an information gap during the years that the SSS was not carried out. The Annual Salary Structure Survey aims to fill this gap. The ASSS also takes advantage of information from the administrative records of Social Security and Personal Income Tax, together with a simple survey carried out by the INE to obtain this information in the least costly way for companies.

OBJECTIVES

The main objective of the Annual Salary Structure Survey is to identify the gross annual earnings classified by different characteristics of the worker such as gender, occupation, economic activity, age, etc.

SURVEY UNITS

The random unit selection procedure corresponds to a stratified two-stage sampling, in which:

− The first-stage units are the Social Security Contribution Accounts

− The second-stage units are those Workers associated with said Accounts.

The Social Security Contribution Account is an administrative concept traditionally used in wage and labour cost surveys. This comprises a group of workers employed by others, who carry out their employment activity in one or more workplaces for a single company, within a single province and generally under a single main activity, although not necessarily so, and with standard features as regards Social Security contribution.

GEOGRAPHICAL SCOPE

The geographical scope comprises the whole national territory.

POPULATION SCOPE

The population scope includes all workers employed by others, who provide services in contribution centres, regardless of their size, and who have been registered with Social Security for at least 2 months during the reference year of the information, one of which is the month of October. It excludes all chairpersons, members of administrative boards and, in general, all personnel whose remuneration is not mainly in the form of wages, but rather commissions or benefits.

As per sectoral coverage, the survey studies those contribution centres whose economic activity is included in the three large sectors: Industry, Construction and Services. Excluded from the survey are agricultural, livestock and fishing activities; in part, Public Administration, Defence and Compulsory Social Security (this includes public employees belonging to the General Social Security System, and it excludes civil servants attached to Mutual provident societies); domestic staff and extra-territorial organisations.

REFERENCE PERIOD

The reference period is annual.

MAIN DEFINITIONS

The main concept analysed in the ASSS is annual earnings, including total wages received in cash and remunerations in kind. The gross accrued income is used, that is, before making deductions from Social Security contributions by the worker or Personal Income Tax withholdings (IRPF).

CLASSIFICATIONS

The main definitions used in the Survey appear in annex IV of this document.

State Database of Persons with Disabilities

The State Database of Persons with Disabilities began in 1992 with the data on those persons whose disabilities had been recognised as of the beginning of the 70s.

It contains the data on all those persons resident in Spain who have requested the assessment of the degree of disability, considering all those persons with a recognized degree of disability greater than or equal to 33% (a requirement to access certain benefits, tax benefits, payments in social contributions, parking vouchers and others) to have disabilities[3].

The information collected in the Base is a result of the evaluations performed by the Base Centres of the Territorial Directorates of the IMSERSO in Ceuta and Melilla, and by the bodies with jurisdiction regarding evaluation in the Autonomous Communities, pursuant to the procedure established in Royal Decree 1971/1999, of 23 December (amended by RD 1856/2009 of 4 December).

The purpose of the Royal Decree is to regulate recognition of the degree of disability, establishment of new applicable scales, determining the organisations with jurisdiction for performing said recognition, and the procedure to follow, all with the purpose of the assessment and classification of the degree of disability affecting the person being uniform throughout the State, thereby guaranteeing equal conditions for citizen access to benefits, economic rights and services granted by public bodies.

The assessment of disabilities is carried out in accordance with the scale established in annex 1.A of the aforementioned. The said annex establishes the guidelines for determining the limitations of an activity caused by permanent impairments, associated with a given health condition. All deficiencies suffered are taken into account in the assessment, and the three most important are included in the Database.

In their ruling, experts collect the medical, psychological or social reports necessary for determining the degree of disability, which may be subject to review in the two years following its recognition, so long as a reasonable improvement is validated, a diagnostic mistake is accredited or "substantial" changes occur in the circumstances that gave rise to recognition of the disability.

Assessment rules are not focused as much on the extent of the impairment, as on its effect on the ability to carry out everyday tasks. In this sense, illnesses that occur as outbreaks and interfere with the daily lives of persons suffering them are also subject to assessment. In order to apply for certification, it is necessary to visit the corresponding Department of Social Affairs, collect an application form and undergo a medical examination, under the terms established by law. Subsequently, the interested party awaits the outcome.

For the purposes set out in the Royal Decree, disability situations are qualified in degrees, according to the Activity Limitations and/or Participation Restrictions.

The degree of disability is obtained by applying the pre-set scales and is corrected with an assessment of supplementary social factors (family situation, economic resources, employment situation, cultural level, social environment).

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[3]Tax exemption on the purchase of a vehicle, aid for the purchase of a home, mobility subsidy for transport costs, health and pharmaceutical assistance, etc. For their part, regional or local institutions may contemplate other individual aid for the adaptation of the home or the acquisition of technical aids, as well as reserved parking areas or priority access to employment.

FILE STRUCTURE: CONTENT OF THE DATABASE

The main variables collected in the BEPD are the following:

Variable	Observations
Numeric identifier	The foreign population is identified with the NIE (identification number for foreign nationals), passport number or residence card.
	The letters D or R that precede the ID number indicate the existence of a "legal representative".
	When the person acting as representative has one or two assessed representees with no ID, 1 or 2 is added.
Sex	"M/F" (male/female)
Name	(available since 2011 for BEPD2009, 2010…)
Surnames	(available since 2011 for BEPD2009, 2010…)
Address	(available since 2011 for BEPD2009, 2010…)
Town	(available since 2011 for BEPD2009, 2010…)
Date of birth	"DDMMYYYY"
Date of evaluation	"DDMMYYYY"
Deficiency	According to the Table of Impairments
Degree of disability	Greater than or equal to 33% and less than or equal to 100%

UPDATING OF THE DATABASE

The degree of disability is subject to revision whenever a reasonable improvement in the circumstances causing its recognition is expected, and the deadline by which said revision should be carried out must be established.

In all other cases, revision of the degree due to worsening or improvement may not be commenced, until at least a minimum period of two years has elapsed since the date on which the resolution was handed down, except in cases in which there is sufficient evidence of a misdiagnosis or substantial changes have occurred, giving rise to the recognition of degree, whereby it will not be necessary to wait until a minimum period of time has elapsed.

The updated Base includes those persons who have requested an evaluation for the first time, and will likewise include the revisions of the degree of disability of those individuals already evaluated, so long as they are in the circumstances described in the paragraphs above.

Similarly, changes in residence, personal situation of the individual, etc., will be up-to-date so long as the interested party notifies them to the body with jurisdiction in this respect.

The Base is updated annually

DISABILITY CLASSIFICATION

The BEPD has its own system for classifying the typology of impairments and their causes. Although the concept of impairment is the same as that which the Classification of Impairments, Disabilities, and Handicaps of the WHO defines for first-level consequences of illness ("any loss of, or abnormality in, a psychological, physiological or anatomical function"), it has been necessary to adapt the structure of the WHO to the data contained in the decisions to reliably collect information recorded in proceedings for recognising the condition of persons with disabilities. Therefore, the classification has been simplified, categories have been grouped and they have also been adjusted to incoming applications for information at the IMSERSO.

Thus, the BEPD has 3 codes that are intended to sort pathological situations that may be suffered by those applying for recognition of the disability condition:

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1   Deficiency code.

This records both structural and functional alterations which have given rise to the disability. It contains a total of 106 different impairments (identified by a numeric 4-digit code) which, in order to aid data processing, are grouped according to the altered structure or function, in accordance with the following classification:

a) Physical and other:

- Osteoarticular system

- Neuromuscular system

- Cardiovascular, immunological and respiratory systems

- Digestive, metabolic and endocrine systems

- Others

b) Intellectual

c) Mental

d) Sensory:

- Visual system

- Auditory system

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2   Diagnostic code.

This describes the pathologies giving rise to the anomaly in the organism structure or in its functions. It contains 684 diagnoses, encoded to 3 digits, which may be organised into 13 groups.

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3   Etiology code.

It covers the large aetiological groups, for the purpose of having access to data regarding the origin (congenital, traumatic, etc.) of the assessed disabilities. It covers 14 groups (encoded to 2 digits).

Annex II:

Analysis variables and their categories

This annex presents the categories considered for the study and classification variables, derived from those with such variables in the sources used to construct the "Wages of Persons with Disabilities" (WPD) statistics.

The following table features the complete list of WPD analysis variables, together with their categories:

Variable	Values
Workers	Total
	Persons without disabilities
	Persons with disabilities
Sex	Both sexes
	Men
	Women
Age groups	All ages
	From 16 to 29
	From 30 to 44 years
	45 or more years
Employment groups	All occupations
	Discharges
	Average
	Registrations
Type of working day:	Total
	Full-time
	Part-time
Type of contract:	Total
	Permanent
	Fixed-term
Size of the company	Total
	From 1 to 49 workers
	From 50 to 199 workers
	200 workers and over
Groups of Autonomous Communities	National total
	Northeast
	Northeast
	Community of Madrid
	Centre
	East
	South
	Canarias

Variable	Values
Activity sectors:	All activity sectors
	Industry and construction
	Services
Disability Type	Total
	Physical and other:
	Intellectual
	Mental
	Sensory
	Not given[1]
Degree of disability	Total
	33% - 44%
	45% - 64%
	65% and over
	Not given1
Discounts or Reductions due to Disability	Total
	Wage earners, without discounts or reductions in the contribution quotas
	Wage earners, without discounts or reductions in the contribution quotas
Wage earners with discounts or reductions in the contribution quotas	Total
	Specific disability contract
	Other contracts

[1] The group "Not given" consists of pensioners who have a recognised permanent disability pension and are not registered in the SDPD.

Annex III

Breakdown of the results tables

Index of broken down SPD results tables

1 ANNUAL EARNINGS

For wage-earning workers, according to whether or not they have disabilities

1. Sex and age groups

2. Sex and type of working day

3. Sex and type of contract

4. Sex and occupation groups

5. Sex and size of the unit

6. Sex and activity sector

7. Annual earnings by groups of Autonomous Communities (NUTS1)

8. Sex and type of disability

9. Sex and degree of disability

10. Sex and discounts or tax reductions due to disability

11. Sex and specific disability contract

2 SALARY DISTRIBUTION

For wage-earning workers, according to whether or not they have disabilities

1. Sex

2. Age groups

3. Type of working day

4. Type of contract

5. Employment groups

6. Disability Type

7. Degree of disability

3 POPULATION SCOPE

By wage bracket, according to the general wage distribution

1. Population percentage of people with wages below the percentiles, by sex

2. Population percentage of people with wages below the percentiles, by age groups

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3. Population percentage of people with wages below the percentiles, by type of working day

4. Population percentage of people with wages below the percentiles, by contract type

5. Population percentage of people with wages below the percentiles, by employment groups

6. Population percentage of people with wages below the percentiles, by disability type

7. Population percentage of people with wages below the percentiles, by degree of disability

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4 ANNUAL SALARY DIFFERENCES

Wage ratio between people with and without disabilities:

1. Sex
2. Age groups
3. Type of working day
4. Type of contract
5. Employment groups

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5 SAMPLING ERRORS

1. Variation coefficients for the annual earnings per worker variable calculation
2. Sex
3. Activity sectors
4. Groups of Autonomous Communities (NUTS1)
5. Disability Type
6. Degree of disability

Annex IV

Classifications used

Type of disability associated with deficiency

In 1991, the IMSERSO implemented a new means of classification of impairments, adjusting to the information required and to the contents of the assessment reports. The objective is to record those alternations that have caused disabilities (impairment codes) in the BEPD.

It contains a total of 106 different impairments (identified by a numeric 4-digit code) which, in order to aid data processing, are grouped according to the altered structure or function, in accordance with the following classification:

a) Physical and other:

– Osteoarticular system

– Neuromuscular system

– Cardiovascular, immunological and respiratory systems

– Digestive, metabolic and endocrine systems

– Others

b) Intellectual

c) Mental

d) Sensory:

– Visual system

– Auditory system

Table of deficiencies (4 digits)

(Continued)

Group	Deficiency group	Code	Denomination
1	Osteoarticular	1101	Alteration alin., Spinal Column, w/out functional limitations
		1102	Alteration alin., Spinal Column, with functional limitations
		1103	Spinal functional limitation
		1104	Absence of fingers or phalanges
		1105	Absence of msd or its essential parts
		1106	Absence of msi or its essential parts
		1107	Absence of mmii or its essential parts
		1108	Functional limitation of the right hand
		1109	Functional limitation of the left hand
		1110	Bimanual functional limitation
		1111	Functional limitation in msd
		1112	Functional limitation in msi
		1113	Functional limitation in both mmss

Table of deficiencies (4 digits)

(Continued)

Group	Deficiency group	Code	Denomination
		1114	Functional limitation in one foot
		1115	Bipodal functional limitation
		1116	Functional limitation in lower limb
		1117	Functional limitation in both mmii
		1118	Functional limitation in one ms and one mi
		1119	Functional limitation both mmss and a mi
		1120	Functional limitation both mmss and a mi
		1121	Functional limitation in four extremities
		1122	Functional limitation extremities and cv
		1123	Short stature
		1124	Morpho-thoracic anomaly
		1125	Disability of the osteoarticular system
2	Neuromuscular	1201	Paralysis of the peripheral nerve
		1202	Paresis of the paripheral nerve
		1203	Paralysis of the cranial nerve
		1204	Paresis of the craneal nerve
		1205	Monoplegia msd
		1206	Monoparesis msd
		1207	Monoplegia msi
		1208	Monoparesis msi
		1209	Monoplegia of a lower limb
		1210	Monoparesis of a lower limb
		1211	Dysparesis
		1212	Diplegia
		1213	Paraplegia
		1214	Paraparesis
		1215	Right hemiplegia
		1216	Left hemiplegia
		1217	Right hemiparesis
		1218	Left hemiparesis
		1219	Quadriplegia
		1220	Tetraparesis
		1221	Generalized seizures
		1222	Generalized nonconvulsive seizures
		1223	Partial seizure
		1224	Coordination disorder

Table of deficiencies (4 digits) (Continued)

Group	Deficiency group	Code	Denomination
		1225	Balance disorder
		1226	Coordination and balance disorder
		1227	Vasomotor disorder
		1228	Autonomic dysfunction
		1229	Disability of the neuromuscular system
3	Chronic Diseases	6001	Disease of the respiratory system
		6002	Disease of the circulatory system
		6003	Disease of the digestive system
		6004	Disease of the endocrine-metabolic system
		6005	Disease of the blood and hematopoiet organs
		6006	Disease of the genito-urinary system
		6007	Dermatological disease
		6008	Immune mechanism disorder
		6009	Transplanted
		6010	Terminal state
		6011	Chronic Diseases
		8002	Total surgical loss of an organ
		8003	Partial surgical loss of an organ
4	Mental retardation	2100	Profound mental retardation
		2101	Severe mental retardation
		2102	Moderate mental retardation
		2103	Slight mental retardation
		2104	Borderline intelligence
		2105	Developmental delay
5	Mental Disorder	2106	Developmental disorder
		2107	Cognitive disorder
		2108	Affective disorder
		2109	Behavior alteration
		2300	Mental Disorder
6	Visual	3101	Mild binocular visual acuity loss
		3102	Moderate binocular visual acuity loss
		3103	Severe binocular visual acuity loss
		3104	Severe binocular visual acuity loss
		3105	Blindness
		3106	Lost vision in one eye
		3107	Decreased visual efficiency

Table of deficiencies (4 digits) (Conclusion)

Group	Deficiency group	Code	Name
7	Auditory	3201	Mild hearing loss
		3202	Moderate hearing loss
		3203	Severe hearing loss
		3204	Profound hearing loss
		3205	Deafness
		3206	Deaf-Muteness
		3207	Total hearing loss in one ear
		3208	Tinnitus
		3209	Disability of the auditory system
8	Expressive	4101	Aphasia
		4102	Dysarthria
		4103	Dysphemia
		4104	Dysphonia
		4105	Muteness
		4106	Laryngectomy
		4107	Expressive disability
9	Mixed	5200	Polymalformative syndrome
		8001	Multiple disability
10	Other	7000	Unknown deficiency
		8000	Without disability
		9000	Non-assessable acute process

Degree of disability

The population is divided into two categories, according to the percentage of the degree of disability

- Less than 33%

- 33% and over

For SPD, we have considered only the records of persons with a degree greater than or equal to 33% and similar according to Royal Legislative Decree 1/2013.

45% and 65% are the degrees of disability that establish limits regarding the receipt of pensions or the granting of early retirement.

For tabulation purposes, the following classification for the degree of disability variable shall be considered:

- 33% - 44%

- 45% - 64%

- 65% and over

- No evidence (consists of pensioners who have a recognised permanent disability pension and are not registered in the State Database of Persons with Disabilities).

Employment

The following groups based on classification NCO-11 are considered:

- High (groups 1-3 of NCO-11)

- Medium (groups 4-7 of NCO-11)

- Low (groups 8-9 of NCO-11)

NCO-11 National Classification of Occupations 2011[1]

Code	Description
1	Directors and managers
A	*Directors and managers*
2	Scientific and intellectual technicians and professionals.
B	*Scientific and intellectual technicians and professionals in health and education*
C	*Other scientific and intellectual professionals and technicians*
3	Technicians; support professionals
D	*Technicians; support professionals*
4	Accounting, administrative and other office employees
E	*Office employees who do not deal with the public*
F	*Office employees who deal with the public*
5	Workers in catering, personal, and protection services and trade salespersons
G	*Workers in catering, personal, and protection services and trade salespersons*
H	*Health service and personal care workers*
I	*Health service and personal care workers*
6	Skilled agricultural, livestock, forestry and fishing sector workers
J	*Skilled agricultural, livestock, forestry and fishing sector workers*
7	Craftspersons and skilled workers in manufacturing industries and construction (except installation and machinery operators).
K	*Skilled construction workers, except machines operators*
L	*Skilled workers in manufacturing, except installation and machines operators*
8	Installation and machinery operators and assemblers
M	*Fixed installation and machinery operators and assemblers*
N	*Drivers and operators of mobile machinery*
9	Basic occupations
O	*Unqualified services workers (excluding transportation*
P	*Unskilled agricultural, fishing, construction, manufacturing and transport industry labourers*
0	Military occupations
Q	*Military occupations*

[1] The complete classification can be consulted at www.ine.es

Economic activity

The following activity sectors based on CNAE-2009 are considered:

− Industry and construction (sections C-F of CNAE-2009)

− Services (sections G-S of CNAE-2009)

CNAE - 09: National Classification of Economic Activities[4]

Code	Description
A	Agriculture, livestock breeding, forestry and fishing
B	Extractive industries
C	Manufacturing industry
D	Electricity, gas, steam and air conditioning supply
E	Water supply, sewerage, waste management and remediation activities
F	Construction
G	Wholesale and retail business; repair of motor vehicles and motorcycles
H	Transport and storage
I	Hospitality
J	Information and communications
K	Financial and insurance activities
L	Real estate activities
M	Professional, scientific and technical activities
N	Administrative and support services activities
O	Public Administration and defence, compulsory Social Security
P	Education
Q	Health and social services activities
R	Artistic, recreational and entertainment activities
S	Other services
T	Private households with employed housekeeping staff; activities of households as producers of goods and services for their own use
U	Activities of extraterritorial organisations and bodies

[4] The complete classification can be found at www.ine.es

Bibliography

1. Annual Salary Structure Survey Methodology (INE): www.ine.es

2. Methodology of the Employment of Persons with Disabilities Statistics (INE) www.ine.es

3. Methodology of the Survey on Disabilities, Personal Autonomy and Dependency Situations (INE): www.ine.es

4. Description of the State Database on Persons with Disabilities (IMSERSO)

5. Order of the Ministry of Labour and Social Security, of 08 March 1983.

6. Law 26/1990 of 20 December

7. Royal Decree 356/1991, of 15 March

8. Royal Decree 357/1991, of 15 March

9. RD 1971/1999, of 23 December, on the procedure for the recognition, statement and qualification of the degree of disability.

10. RD Royal Decree 1169/2003, of 12 March

11. Law 51/2003 of 2 December LIONDAU

12. Law 39/2006 of 14 December

13. Royal Decree 504/2007, of 20 April

14. Royal Legislative Decree 1/2013, 29 November, which approves the revised text of the General Law of Rights of Persons with Disabilities and their social inclusion.

INE. National Statistics Institute