# SERVICE SECTOR INDEX (ICI) OF THE BASQUE COUNTRY.
# Base year 2015

## Methodological note

The objective of the Service Sector Index is to obtain a short-term indicator of the evolution of sales and employed personnel in the Services sector in the Basque Country and its Provinces. It offers, inasmuch, a global vision of the Services sector as a whole.in quarterly terms.

The base year for the indices is 2015, with the first quarter of 2010 being the first period for which the indexes have been obtained employing the same sectorisation used in the ICS.

# 1. Scope of the Service Sector Index

## 1.1 Population coverage

The Trade, Transport & Storage, Hotel Management & Catering, Information & Communications, Professional, Scientific & Technical Activities and Administrative Activities & Auxiliary Services subsectors form part of the population coverage of the Service Sector Index, and are classified in the NACE Rev. 2 (CNAE 2009) in the following form:

A. **Trade**: Establishments that have Wholesale trade (division 46), Retail trade (division 47) and Sales and repair of motor vehicles and motorcycles (division 45) as their main activity.

B. **Other Services**: Establishments that have Transport & Storage (section H), Hotel Management & Catering (section I), Information & Communications (section J), Professional, Scientific & Technical Activities (part of section M), or Administrative Activities & Auxiliary Services (part of section N).as their main activity.

A sectorisation of the sections from the CNAE 2009 has been carried out with the purpose of obtaining results comparable to the European level admitting, in turn, the inclusion of the specifics of the Basque Country.

## 1.2. Geographic scope

The statistical units included in the geographic area of the Basque Country and in its Provinces, independent of whether its head offices are located elsewhere.

## 1.3. Timeframe

The reference period is the natural quarter.

# 2. Statistical unit

The statistical unit employed is that company whose main activity is any of those included within the population coverage with activity in the period of reference in the corresponding geographic area.

# 3. Study object variables

The study object variables in the Service Sector Index are the following:

### a. Income via Sales

"Income via Sales" is the total turnover of the company in the Basque Country and its Provinces. It includes the amounts invoiced by the company services rendered and/or sale of goods that form part of the operations of the company, including those carried out via subcontracting.

Costs billed for packaging and transport, the sales of goods bought for resale under the same conditions in which they were received and the sale of sub-products are included. Also included are hours worked and invoiced to third parties for sub-contracting work only.

They are entered in the accounts with the taxes incurred by the goods and services with the exception of VAT charged to the customer.

It does not include the subsidies received from public authorities or the European Union, financial income, or other operational revenue, such as subventions, sales of shares and fixed assets, income from interests, dividends and patents, renting out company property, production units and machinery. Neither does it include income from staff amenities (canteens, etc.) or the supply of goods and services within the unit of observation.

### b. Employed Personnel

"Employed Personnel" is taken to be the average of individuals working for the company and in the geographical area in the quarter in question. "Employed Personnel" are considered to be those workers who receive remuneration for their work, irrespective of the type of contractual relationship established with the company (permanent, temporary, full-time or part-time). The owners and family helpers who work at least a third of the working day are also considered to be employed. However, people working on commission are excluded.

## 4. Sampling plan and sample design

### 4.1 Survey frame

Eustat's Directory of Economic Activities: (DIRAE) has been used as a survey frame, containing information on the main economic activity and the number of employed personnel in the companies and their establishments.

### 4.2 Sample design

An exhaustive sampling is carried out on all companies with 50 or more employees in the Basque Country and on companies with between 10 and 50 employees with establishments in the three Provinces.

The sample is taken up to a total of approximately 1,130 units, carrying out a random sampling stratified in three stages, using province, employment and economic activity as stratification variables.

- Allocation proportional to the square root of the number of establishments in each province.
- Allocation proportional to the square root of the number of establishments in each employment strata.
- Neyman optimum allocation by economic activity.

The sample size permits representative indices to be obtained at C Sectorisation-level for the Basque Country and at B Sectorisation-level from the sectorisation of the Services sector.

# 5. Base Year

The base year of the Service Sector Index is 2015, which means that the weights used for the aggregation of the indices are those obtained from structural information referring to the year 2015.

The year 2015 has been chosen as the reference year for all indices included in the Service Sector Index.

# 6. Calculation of Indices

## 6.1 Simple indices by Province

Simple indices at the CNAE 2009 Class level for each Province for the "Income via Sales" variable (at current and constant prices[1]) and for "Employed Personnel" (hereinafter denominated generically by "X") are obtained in the following manner:

1. In 2015:

$$ISX_t = \frac{\sum X_t}{\overline{X}_{2015}} 100,$$

where $\overline{X}_{2015}$ is the average of X in the base year 2015.

2. From 2016:

$$ISX_t = ISX_{t-1} \frac{\sum X_t}{\sum X_{t-1}},$$

where $X_t$ and $X_{t-1}$ are measured in common companies in t and in t-1 (with activity in the Province in question both in t and t-1).

## 6.2 Simple indices for the Basque Country as a whole

The simple indices for the Basque Country as a whole are obtained as a lineal combination of the simple indices from the Provinces using the structural weighting

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[1] "Income from sales" is obtained via the application of quarterly price indexes to "Income from sales" at constant prices offered by companies.

corresponding to the base year 2015.

### 6.3 Composite indices by Province

The composite indices of the L,C, B and A sectorisations and the Service Sector Index are obtained as a lineal combination of the indices of the sectorisation immediately below (greater desegregation) using in each case the structural weighting corresponding to the base year 2015.

### 6.4 Composite indices for the Basque Country as a whole

The composite indices of the L,C, B and A sectorisations and the Service Sector Index for the Basque Country as a whole are obtained as a lineal combination of the indices from the Provinces of the corresponding sectorisation using the structural weighting corresponding to the base year 2015.

# 7. Correction and deseasonalisation of indices

All of the indices are corrected for calendar effects and deseasonalised to make them comparable over time. The indices corrected for calendar effects are homogenous in year-on-year terms and the deseasonalised indices are homogenous both in quarter-on-quarter and year-on-year terms.

In turn, the series corrected for calendar effects and the series adjusted for seasonal effects since the 2015 base year are obtained using the JDemetra+ 2.2.1, software, following the Eurostat recommendations for carrying out seasonal and calendar adjustments in the official statistics of the European Union.