Retail Trade Index Base 2005

Methodological Manual

January 2008

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1. Introduction.

The Retail Index short-term survey forms part of the action plan for the development of the statistical system on trade developed by Eurostat and is governed by what is set out in Council Regulation (EC) No. 1165/98 dated 19th May 1998 on short-term statistics and modified by European Parliament and Council Regulation (EC) No.1158/2005 dated 6th July 2005. The Retail Trade Index is moreover one of the Main European Economic Indicators (MEEI), the objective of which is to provide speedy information to the European Central Bank, falling within the so-called EMU Action Plan.

The objective of the Retail Trade Indices is to ascertain the main characteristics of companies dedicated to retail trade in Spain, which allows for the short-term measurement of activity evolution within the sector.

The indices' Base Year is 2005 and the first data in the new base is published in January 2006. Where possible, a backward link has been established to avoid a rupture in the series.

2. Survey scope

The survey scope is defined with respect to the population researched, time, and space.

2.1 **Population scope**

The population under study in the 2001 short-term Retail Trade Survey is formed by companies whose main activity is registered within Division 52 (except 52.7 Repair of personal effects) of section G of the National Classification of Economic Activities (NCEA-93), which includes the following groups:

52. Retail trade, except motor vehicle, motorcycle and moped trade; repair of personal effects and household equipment

It covers:

- The sale (without transformation) of new and used products to the general public for consumption or personal or domestic use in stores, large department stores, stands, postal order warehouses, travelling salespersons, consumption cooperatives, etc.

– The repair and installation of personal or domestic articles, even in combination with retail sales.

- Retail sales carried out by intermediaries, which are classified under the same heading as the sale of the products.

It does not cover.

- The sale of motor vehicles, motorcycles and their components, nor the sale of fuel for these items.

-The sale of cereals, seeds, minerals, crude oil, industrial chemical products, iron and steel and industrial machinery and equipment.

-The sale of food and beverages for consumption in-house and the sale of take-away food.

-The rental of personal and domestic articles to the general public.

52.1. Retail trade in non-specialised establishments

It covers:

- The activities of commercial establishments that, aside from selling *mainly food*, offer another broad range of goods such as clothing, furniture, household appliances, hardware articles, cosmetics, etc. Hypermarkets, supermarkets, medium-sized establishments and self-service stores are classified under this heading.

- Retail activities relating to all types of frozen foods.

– Non-specialised retail trade, without prevalence in food, in establishments that offer a broad range of general goods among which are included clothing, furniture, household appliances, hardware articles, cosmetics, jewellery, toys, sporting articles, etc. Large department stores and popular stores are classified in this section.

52.2. Retail trade of food, beverages and tobacco in specialised establishments

It covers:

The retail trade in specialised establishments of fruits and vegetables, meat, poultry and game, delicatessen products and cold meats, fish and shellfish, bakery products, confectionery, pastries, beverages, tobacco products, dairy products, eggs; fruit, vegetable, meat and fish preserves. It also covers the retail trade of establishments called grocer's shops.

It does not cover.

The retail trade of bread and bakery products, confectionery and pastry products in the establishments where they are produced.

52.3. Retail trade of pharmaceutical preparations, medical articles, beauty and hygiene products

It covers:

The retail trade of pharmaceutical preparations, medicines for veterinary use, medical and orthopaedic articles, herbalist's articles, cosmetics and dressing table articles, such as soaps, perfumes, skin and sun screen products.

52.4. Other retail trade of new goods in specialized establishments

It covers:

The retail trade of textiles, clothing, footwear and leather articles, furniture, lighting and other household appliances, electrical appliances, radio, television and sound apparatus, hardware articles, paints and glass, DIY materials, construction materials, paints and varnishes, sanitary fittings, books, newspapers and stationery, optical, photographic and precision materials, clocks and watches, jewellery and silver articles, toys, sports articles, specialised household goods, wallpaper and floor coverings, seeds, flowers, plants and pets, fuels (except for automobiles), commercial art galleries, etc.

It does not cover.

The retail trade of antiques, ancient and second hand books, rental of videotapes. It does not include the retail trade of fuels for automobiles either.

52.5. Retail trade of second-hand goods in establishments

It covers:

Antique shops, the retail trade of second hand books and of other second hand goods, such as furniture, clothes, machines, materials, etc.

It does not cover.

Auction activities carried out by the courts, the restoration of art works and ancient books, the retail trade of second hand motor vehicles, stamps and coins.

52.6. Retail trade not carried out in stores

It covers:

The retail trade of any type of product by mail order (the goods are sent to the buyer who has previously chosen them from a catalogue, sample or any other type of offer). This also includes retail trade by television, radio and telephone of any product, retail trade at sales posts and markets, door to door sales, retail trade by means of coin operated machines and travelling salesmen.

It does not cover:

Retail trade in supply market stands nor the maintenance and repair of vending machines.

2.2 <u>Time scope</u>

Invoicing or gross sales indices are developed monthly. Employment indices are developed on a quarterly basis until December 2004; after January 2005, they are published monthly.

2.3 Geographical scope

All statistical units located within Spain are under study.

3. Statistical unit

Companies that carry out any of the activities included within the population scope as their main economic activity are used as a statistical unit. The company is also the informant unit, given that because it is perfectly defined and located, and accounting and employment data is available, the response is facilitated and homogeneous information is obtained.

The company is the smallest combination of legal units that constitutes an organisational unit that produces goods or services and which has a certain degree of decision-making autonomy, especially in relation to the allocation of their current resources. A company may carry out one or more activities in one or various local units.

4. Concepts and definitions

4.1 <u>Company classification variables</u>

Companies may be classified according to three criteria:

- a. Main activity according to the 1993 National Classification of Economic Activities codes (NCEA-93).
- b. Size of the company by number of employees.
- c. Geographical distribution by Autonomous Community
- a) Company activity

The economic activity carried out by a company is defined as the creation of added value by means of the production of goods and services.

Each one of the statistical units studied (companies) frequently carry out various activities that should be classified in separate classes of the National Classification of Economic Activities. In general, activities developed by an economic unit may be of three types: main, secondary and auxiliary activities. The main activity is differentiated from secondary activities in that it generates greater added value; whilst auxiliary activities are those that generate services that are not sold on the market and that only serve the unit on which they depend (administration departments, transport services or storage).

Due to the difficulties faced by companies in calculating added value when various activities are carried out, the activity that generates the greatest

volume of business is considered the main activity or, failing that, that which employs the greatest number of persons.

Finally, the information that is requested from the informant units refers not only to the main activity under consideration, but also to all the secondary and auxiliary activities that are carried out.

b) Size of the company

The size of the companies is one of the most important variables when it comes to determining the performance of companies. This size may be established in terms of the magnitude of turnover or production value, or by considering the number of persons on the company payroll. In these statistics, the latter option is chosen to determine the size of the companies.

c) Geographical distribution

The sample is representative by Autonomous Community.

4.2 Variables studied

The variables studied may be classified in three groups:

- a) Economic variables.
- b) Employment variables.
- c) Trade specific variables.

a) Economic variables.

This block includes information on company revenues in the reference month.

Turnover

This covers the amounts invoiced by the company during the reference month pertaining to the sale of goods and provision of services that are the object of company traffic, both in the exercising of their main activity, as well as with regards to any other secondary activity carried out by the company.

They are recorded in net terms after deducting sales refunds, as well as volume discounts over sales. Not deducted are cash discounts nor discounts for prompt payment.

This covers all amounts invoiced by the unit (company) during the reference period, which includes all commercial sales of goods and services supplied to third parties that are the object of the company's traffic.

With the aim of classifying revenues, goods under transaction are grouped according to the CPI classification groups.

Food, beverages and tobacco: Fruits and vegetables, meat, poultry and game, delicatessen products and cold meats, fish and shellfish, bread and bakery products, confectionery and pastries, alcoholic and non-alcoholic beverages, tobacco products, dairy products, eggs, fruit, vegetable, meat and fish preserves, etc.

Non-food products:

Fabrics, clothing and footwear. Personal equipment: Fabrics, wool for knitting, raw material for the manufacture of rugs, carpets or embroidery, sheets, tablecloths, towels, haberdashery articles, clothing, furriery articles, clothing accessories like gloves, ties, hats, umbrellas, walking sticks, ... footwear, leather articles, cosmetics and dressing table articles, etc.

Household equipment: Furniture (except office furniture), lighting, nonelectric domestic equipment, cutlery, dinner service, glassware, pottery and china, curtains and lace curtains, ...wood, cork and wicker articles. Household appliances (including sewing machines), radio and television apparatus and other audiovisual equipment, musical equipment and music scores, hardware articles, lawnmowers, DIY material and equipment, paints, varnishes and enamel, construction materials such as bricks, wood and bathroom fittings, computers, photographic and precision equipment, etc.

Health: Pharmaceutical preparations, drugs for veterinary use, medical and orthopaedic articles, herbal products, optical products (glasses, lenses...) etc

Leisure: Books, newspapers and stationery, toys and sports articles, video games, seeds, flowers, plants, fertilisers, pets, food for pets, computer programs. Records, CDs and audio and videotapes (recorded and blank), artificial flowers and plants, etc.

Other goods: Clocks, jewellery and silverware, small household goods, wallpaper and floor coverings (rugs, fitted carpets,), fuels except for automobiles (liquid fuel, liquid gas bottles, coal and wood, for heating and domestic use, etc), commercial art galleries, office material and equipment including furniture, mementos, craft goods, religious articles and imitation jewellery, stamps and coins including second hand articles, gifts and smoking articles, communication material (telephones, faxes,.), leather or imitation leather travel articles, etc.

b) Employment variables

1. Employed personnel

The total number of people who work in the observation unit, also including owners who work in the unit, working partners and unpaid family employment.

2. Unpaid personnel.

Consists of persons who direct or actively participate in company work without receiving fixed remuneration or a salary. Included are owners,

autonomous partners who are active within the company and family assistance. Not included are partners that solely provide capital, nor family members of the owner who do not actively participate in the company.

3. Paid personnel:

Consists of employees tied to the company by a labour contract and whom are paid fixed or periodic amounts in the form of a wage, salary, commission, efficiency wage or payments in kind. Distinction is made between *fixed personnel* (with an indefinite contract or labour relationship) and *temporary personnel* (with a fixed term contract).

Remunerated owners, students with formal commitments in exchange for remuneration or education and domestic workers are also considered employees

- c) Trade specific variables
- a- Premises

Premises are defined as any structurally separated and independent building that is not dedicated exclusively to family housing and in which economic activities dependent on a company are carried out and in which one or more persons work for the company.

b- Large Department Store

A department store is defined as any establishment that has a sales and exhibition area greater or equal to 2500 square metres. Sales area is defined as any area that is accessible to the public and where sales transactions take place; it includes shop windows, display cabinets, shelves and hallways within the establishment.

c- Large Chain

A Large Chain is defined as any establishment that has 25 or more outlets and 50 or more employees.

d- Small Chain

A Small Chain is defined as any establishment that has more than one outlet, except those with 25 or more outlets and 50 or more employees

Companies with a Single Outlet

A Company with a Single Outlet is defined as one which carries out its commercial activity via a single premises

e- Specialised trade

Is defined as the trade carried out by companies in which the volume of invoicing of one sole type of product, considering as such those included in one sole class of the NCEA-93, exceeds 50 per cent of the total, and that carried out by companies who market less than five types of products, considering as their main activity that which corresponds to the product with greatest revenue volume.

f- Non specialised trade

Is defined as the trade carried out by companies that sell more than five types of products, none of which have invoicing that exceeds 50 per cent of the total.

5. Sampling plan and sample design.

5.1 Survey framework

The Central Companies Directory (CCD), which contains information on the main economic activity and on the number of employees in companies and updated in November 2000, has been used as the framework for the survey, facilitating their stratification by these concepts. Also featured in this directory are data on the identification and location of the statistical units, which is necessary for collecting the information correctly.

The data contained in the CCD is obtained from administrative sources, mainly from the State Tax Agency and Social Security, and it is completed with information proceeding from the INE's statistical operations.

5.2 Sample design

Stratified sampling has been used. The division of the sample between different strata is done using the Neyman allocation. A random selection is made in each stratum, except with companies with more than 49 employees, as they all form part of the sample. Retail trade companies (division 52 of the NCEA except group 527) have been used from the reference population. The companies selected have been classified on the basis of 3 variables: main activity, size and Autonomous Community.

The size of the sample has been calculated to be able to provide indicators on the turnover and employment variables, which are representative of the following populations.

On a national level:

- 1- 5211 (Retail trade with a predominance of food, beverages and tobacco in non specialised establishments)
- 2- 5212 (Retail trade of other products in non-specialized establishments)
- 3- 522 (Retail trade of food, beverages and tobacco in specialised establishments)
- 4- 523 (Retail trade of pharmaceutical preparations, medical articles, beauty and hygiene products)
- 5- 5241+5242+5243 (Retail trade of textiles, clothing and footwear and leather articles)

- 6- 5244+5245+5246 (Retail trade of furniture; lighting equipment and other household articles; electrical household appliances and radio and television goods; hardware articles, paints and glass)
- 7- 5247+5248 (Retail trade of books, newspapers and stationery; other retail sale in specialised establishments)
- 8- 5261 (Mail order retail trade)
- 9- 525+5262+5263 (Retail trade of second hand goods in establishments; via stalls and markets; other non-store retail trade)

On an Autonomous Community level. (17 plus Ceuta and Melilla individually)

- 1- 5211+5212 (Non-specialised trade)
- 2- Remaining groups

On an Autonomous Community level. (17 plus Ceuta and Melilla individually)

- 1- 5211+522 (Food)
- 2- Remaining groups

Companies have been classified according to size in four stratums:

- 1- Less than 3 employees
- 2- From 3 to 9 employees
- 3- From 10 to 49 employees
- 4- 50 or more employees

The last stratum was considered exhaustive. With the remaining groups, an annual rotation of 25% was carried out.

5.3 Information collection.

Information collection is carried out through the INE Provincial Delegations, with companies completing a monthly questionnaire. Mail has been the data collection procedure employed, with telephone and fax support.

Information collection at the provincial INE delegations is done in line with the following calendar:

- End of the reference month (T): the questionnaires are forwarded to companies.
- T+7: The questionnaires reach the delegation. Recording and filtering processes.
- T+18: Central Services receive the recorded questionnaires. Filtering and calculation of the indices.
- T+30: Publication of results.

5.4 Rotation of sampling units.

Within the retail trade sector, every year both new company registrations as well as company delistings take place. Moreover, and although European Regulations establish that base changes must be carried out every 5 years, with smaller companies it is necessary to rotate within a shorter time frame, to avoid tiredness in the informant units.

In view of the above, annual rotations of approximately 20-25% of the sample are carried out, with the inclusion of all the new companies of the exhaustive stratum, the elimination of all those companies that have been delisted, those companies that cannot be located, were erroneously included, or have merged, and the substitution of small companies for which the compliance of the questionnaires involves a huge effort.

The annual rotations are carried out during the month of January each year. The object of the process is to determine a new selection of sampling units that represents the distribution of retail trade in Spain, and to carry out a reweighting of said units in such a manner that the sampling data can be transferred into population data.

6 Base year

The base year of an index indicates the period to which the comparisons of different situations carried out refer. This means that generally, a base year relatively close to the current period is usually chosen, given that comparisons lose meaning when the comparison periods become spread apart. For this reason, it is advisable to periodically update the information relating to the base year, in other words, change the base year so that the index does not become obsolete and lose meaning.

The index Base Year is 2005. The index has previously had 1994 and 2001 as base years. In the Base Year 2001 the study of companies selling pharmaceutical products and medical articles, mobile units or those without permanent facilities and trading in second hand objects was included and the level of index breakdowns was increased, as indices by Autonomous Community began to be produced.

The January 2006 index will be the first to be published with the base 2005.

7 Elaboration of the retail trade index

2005 will be considered as the base year for the elaboration of Retail Trade Indices. During this year the companies that will form part of the sample will be determined and average invoicing necessary both for the calculation of the index and the weightings will be calculated.

7.1 Sales volume index.

An index linked at Autonomous Community level will be used and a weighted index at national level. It is a monthly index.

The first index that we will calculate will be January 2006.

The calculation of this first month for each Autonomous Community will be carried out according to the following formula:

$$I_{january2006}^{AC} = \frac{\sum_{k} I^{AC}_{january2006k} * W_{k}}{I^{AC}}$$

Where:

AC: is the Autonomous Community for which we are calculating the index.

k: is the company.

F^{AC}_{January2006k}: is the invoicing of company k in January 2006 in Community AC (AC being the code of the autonomous community).

 $w_{\mbox{\tiny k}}$ is the weighting of the company within the Autonomous Community to which

it belongs.

I^{AC}: Average invoicing, which is calculated:

$$I^{AC} = \frac{\sum_{k} \sum_{2001} I^{AC}_{2005,k} * w_k}{12}$$

where: - $I_{2005,k}^{AC}$ is the invoicing from 2005, the base year for a determined variable in a specific community.

For the remaining months, that is, February 2006 onwards, the index will be calculated:

$$I^{CA}{}_{j} = I^{CA}{}_{j-1} * V^{CA}{}_{j,j-1}$$

$$V^{AC}_{j,j-1} = \frac{\sum_{k} I^{AC}_{jk} * w_{k}}{\sum_{k} IAC_{j-1,k} * w_{k}}$$

where:

g- j: is the month for which the index is calculated.

h- $I^{\rm AC}_{ jk}$ is the invoicing of companies corresponding to an Autonomous Community in month j.

i- $F^{AC}_{j-1,k}$ is the invoicing of companies corresponding to an Autonomous Community in the month j-1.

Once the base index has been calculated for each Community the rest will be weighted sums

General Index for an Autonomous Community

 $I^{CA}_{General} = I^{CA}_{Alimentacion} \times Pond^{CA}_{Alimentacion/General} + I^{CA}_{Re sto} \times Pond^{CA}_{Re sto/General}$

The general index of an Autonomous Community is the weighted sum of the food indices and the non-food indices of said Autonomous Community.

National Food Index

$$I^{Nal}Food = \sum_{AC} I^{AC}Food \times Weighting^{Food}_{AC/National}$$

The national food index is the weighted sum of the food indices of all the Autonomous Communities.

National Index for Non-food Products

$$I^{Nal}_{Re\,maining} = \sum_{AC} IAC \operatorname{Re} maining \times Weighting^{Re\,maining}_{AC/National}$$

The national index for non-food products is the weighted sum of the remaining indices of all the Autonomous Communities.

General National Index

The general national index may be calculated in two different ways and both should yield the same result. These are:

- 1. Weighted average of the indices of the Autonomous Communities.
- 2. Weighted average of the national indices for food and non-food products.

It is expressed as:

1. Weighted average of the indices of the Autonomous Communities.

$$I^{Nal}_{General} = \sum_{AC} IAC_{General} \times Weighting^{General}_{AC/Nal}$$

2. Weighted average of the national indices for food and non-food products.

 $I^{Nal}_{General} = I^{Nal}Food \times Weighting^{Nal}_{Food/General} + I^{Nal}_{Remaining} \times Weighting^{Nal}_{Remaining/General}$

where:

7.2 Employment index.

Since January of 2005 the employment index is a monthly index.

The employment index is calculated in the same manner as the sales volume index, using a linked index at an Autonomous Community level, that is:

$$I^{ECA}_{j} = I^{ECA}_{j-1} * V^{ECA}_{j,j-1}$$

$$V^{ECA}_{j,j-1} = \frac{\sum_{j} E^{CA}_{jk} * w_{k}}{\sum_{j} E^{CA}_{j-1,k} * w_{k}}$$

Once the employment indices of the different Autonomous Communities have been calculated, the national employment index will be calculated as a weighted sum of the former. It is expressed as:

$$I^{ENal}{}_{j} = \sum_{AC} I^{ECA}{}_{j} \times Weighting^{E}{}_{AC/National}$$

Up until December 2004, the employment index was issued on a quarterly basis, published solely in the months of March, June, September and December.

7.3 Department stores index.

The Department Stores Indices are calculated with a restricted group of companies, which have premises with a sales surface area of more than 2500 square metres, using in the calculation of the index only that invoicing or employment that corresponds to said premises, instead of the total invoicing or employment of the company.

The index is calculated in the same way as the indices for the entire retail sector; we are dealing with a linked index calculated solely on a national level.

7.4 Indices by distribution type

As of January 2006 indices are available in accordance with company profiles regarding number of premises or establishments, via which they carry out retail sales. The objective is to be able to study, via these indicators, the evolution of the different types of trade distribution. Thereby the indices are computed for Large Chains, Small Chains and Companies with a Single Premises, regarding both turnover and employed staff.

The methodology applied in order to compute these indices is the same as the one used for the other retail sector indicators and they have been compiled in such a way as to comply with the following condition:

 $I_{General}^{Nal} = I_{GrandesCadenas}^{Nal} \times Pond_{GrandesCadenas}^{Nal} + I_{PequeñasCadenas}^{Nal} \times Pond_{PequeñasCadenas}^{Nal} +$

 $+ I_{E.Unilocalizadas}^{Nal} \times Pond_{E.Unilocalizadas/General}^{Nal} + I_{GrandesSuperficies}^{Nal} \times Pond_{GrandesSuperficies/General}^{Nal}$

7.5 Linked Series.

The base change in a short-term indicator implies a series break due to both the updating of the weightings system used in the indices calculation and the modifications to the sample units, adapting these elements to the new population structure.

On the other hand, the base change has been used in the Retail Trade Index to replace companies that have answered the questionnaire over a number of years, as they have not been removed from the sample in the annual rotations, with the aim of avoiding tiredness in the informant units.

In order to save the break that said base change implies in the series, link coefficients have been calculated for the different indices published, so that the variation rates are kept and we are able to calculate variation rates between the indices for the new base and previous periods.

The series link consists of multiplying the series in the previous base (2001) by the link coefficient obtained for each of them.

6.4.1. Link coefficients.

The link coefficient used is the coefficient that ensures that the base year, in this case 2005, of the linked series, has an index average of 100 and this is called the structural coefficient.

The structural coefficient is defined as the coefficient between the average 2005 index in base 2005 and the average index for the same year in base 2001.

They are:

 $\bar{I}_{2005}^{Base 2001}$: 2005 indices in base 2001

 $\bar{I}_{2005}^{Base 2005}$: 2005 indices in base 2005

$$K = \frac{\bar{I}_{2005}^{Base\ 2005}}{\bar{I}_{2005}^{Base\ 2001}} = \frac{\frac{\sum_{m=1}^{12} I_{m,05}^{Base\ 2005}}{12}}{\sum_{m=1}^{12} I_{m,05}^{Base\ 2001}}$$

where:

m: months of the year

In terms of construction, the average of 2005 indices in base 2005 is equal to 100, meaning that it can be simplified:



These coefficients have been calculated independently for each series, meaning that in periods previous to the link, that is, previous to January 2006, no series is a weighted grouping of its components.

8 Corrected indices

8.1 Price effect corrected indices.

The retail trade indices at constant prices show the evolution of sales within the retail sector once the effect that prices have on the aforementioned sales have been eliminated. These indices were published for the first time in January 2004 and deflated indices are published on a national level, an Autonomous Community level and for Department Stores.

The deflators that are used in the different national indices are:

- General Index: General CPI without services or the rental of dwellings.
- Food index: CPI for food, beverages and tobacco
- Non-food products index: General CPI without food, beverages and tobacco, services nor the rental of dwellings
- Personal equipment index: CPI for clothing and footwear
- Household equipment Index: CPI for furniture and household equipment
- Other Goods Index: General CPI without food, beverages and tobacco, services nor the rental of dwellings.

The General Index from each Autonomous Community will be deflated with the general CPI without services or the rental of dwellings corresponding to each one of the communities.

7.2 Calendar effect corrected indices.

The calendar effect determines the differences that arise in a variable due to the different structure of the months (both in terms of the number of days as well as in the make up of working days and public holidays) when the remaining factors that influence said variable are constant.

The European regulation on short-term statistics whose objective is to harmonise all the indicators developed by the different countries of the European Union so that their level of comparability is as high as possible, requests that indices be provided in net terms, that is, eliminating, amongst others, the calendar effect.

Retail trade indices are affected by a series of calendar factors that differ from one country to another and even within the same country between the different Autonomous Communities. These effects may be classified into three groups:

- a) The working day effect
- b) The Holy Week effect
- c) The leap year effect.

The method used is based on regression models. The TRAMO-SEATS program has been used in line with EUROSTAT recommendations. This computer application includes these three general effects and they have been selected, with some specific characteristics, for the Retail Trade Index.

a) Working Day Effect.

The correction of the working day effect has been carried out by designing an intervention variable based on the characteristics of retail trade in Spain.

This variable is created starting with the labour calendars published in the Official State Gazette since the year 1995, and is elaborated following the same structure used by the TRAMO-SEATS program for the creation of the Trading Day series. With the objective of including all public holidays, both national as well as those corresponding

to the Autonomous Communities, the latter are weighted pursuant to the weight that each Autonomous Community has within the index.

b) Holy Week Effect.

The intervention variable used to develop the model for the Holy Week effect has been created with a series that assigns 1 to the months of March and April, depending on whether or not they contain the Holy Week, and 0 to the remaining months.

In the event that Holy Week is divided between the months of March and April, the series presents the proportional value of the public holidays present in each month. The fact that the different Autonomous Communities celebrate either Holy Thursday or Easter Monday, or both, has been taken into account and these days have been weighted according to the weighting that each Autonomous Community possesses in the Retail Trade Index.

c) Leap Year Effect.

The intervention variable that models the affects the Leap Year has on retail trade is a series formed by 0 and 1, the first value is assigned to all the months and the second to the months of February that have 29 days.

The methodology for the analysis of time series recommends a periodic revision of the models, so as to include the most up-to-date information. Thus, this implies that the series corrected for the calendar effects are provisional, with the complete series being reviewed annually.

The indices that are published with the calendar effect corrections are the General and the General Department Store indices on a national level, both in terms of current as well as at constant prices.