



Methodology of the Directory of Institutional Units and Establishments

San José, Costa Rica
2010

Contents

I. Introduction	3
II. Objectives	4
III. Methodology	5
3.1 Updating Mechanisms	7
• Telephone Operation	8
• Large Companies Operation	8
IV. Improvements in the DEE	10
V. Variables.....	10
VI. Product	13



I. Introduction

The Directory of Institutional Units and Establishments¹ is an organized nationwide register of companies and/or establishments (or any other defined statistical unit), with data characterizing them according to identification, location, economic activity and size.

Having a register such as this one at a national level is essential in order to generate economic statistics and learn the movements and structure of different economic sectors. The Directory also provides a sampling frame for conducting censuses and economic surveys, be they in regard to all activity sectors or one in particular, as well as allowing for better planning and implementation of these operations.

Additionally, it is a direct source for observing company behavior and dynamic; that is, it allows for one to learn the number of companies by economic activity, size, or geographical area. As time goes on, a dynamic analysis including mergers, openings, closings, and temporary work stoppage of economic units will be possible.

The economic surveys that can be conducted with the data obtained from this company sampling frame serve as input for the national account system managed by the Central Bank, and allow at the same time for data to be obtained concerning many other topics of interest, depending on the needs of external clients, such as chambers, banks, investigators, etc.

The practice of creating and updating a Business Register through administrative registers is implemented now in many Latin American and European countries, and has turned out to be a positive practice for their applications and the conservation of resources. Experience also suggests that this is an undertaking that will require time in order to perfect the data quality and the techniques for handling the data, as well as achieving the desired goals of coverage and efficiency.

1 The Directory of Institutional Units and Establishments does not have 100% nationwide coverage, since the information comes from administrative registers and a sweep of 39 districts in the country.



II. Objectives

- **Main Objective**

To have a permanent system for updating and improving the quality of the Directory of Institutional Units and Establishments.

- **Specific Objectives:**

- » To improve the sector coverage of the Directory of Institutional Units and Establishments.
- » To have an improved Directory of Institutional Units and Establishments in regards to coverage, as well as the quality of variables such as geographical location, identification, branch of activity and study unit.
- » To analyze demographic changes in companies from one year to another.



III. Methodology

The Directory of Institutional Units and Establishments, hereafter DUIE (by its acronym in Spanish), has been created and updated using administrative registers as a main source, due to the fact that they have timely and reliable data. It is for this reason that a review of the database obtained in the DEE is performed every year in order to determine if, upon comparing the administrative registers, it is possible to note significant differences regarding new or closed businesses, variables, etc.

This review is conducted due to the fact that it is not fitting to use the data taken directly from the administrative registers since they have not been adapted to the statistical requirements. The analysis that is performed on the administrative registers is the following:

- Reviewing the received data: verifying the existence of lost values, strange characters, and outliers, among other factors.
 - Correlation of the branch of activity (usually ISIC Rev.3) with ISIC Rev.4.
 - Evaluating variable quality and identifying variables of interest.
 - Performing cross-checks of corporate and personal identification numbers, with the aim of determining matches between the administrative register and the Directory of Institutional Units and Establishments. The registers that match are those that are kept; those that do not match will be incorporated as new registers or are businesses that have ceased their activities.
 - The companies that are considered “new” will have their data verified telephonically.
- 

In this way, each administrative register is subjected to prior analysis before being included as input for the update.

The administrative registers currently used for comparison with the DEE are:

- The Central Collection System Employer Payroll Register (SICERE by its acronym in Spanish), as at December of each year.
- The Large Taxpayers and Large National Taxpayers of Direct Taxation of the Ministry of Finance (which, due to their financial, legal and accounting characteristics, play a significant role in the national economy).
- Legal Entities of the National Register.
- Electoral Roll of the Supreme Electoral Body
- List of Establishments of the Consumer Price Index

However, these sources are not the only ones; there are other administrative sources that meet the required characteristics and could be used in the DUIE update.



3.1 Updating Mechanisms

The updating mechanisms used were the Telephone Operation and the Large Companies Operation. The following contains a brief description of each one.

It is important to mention that, upon contacting each one of the business for its update, it was determined what the criteria were for defining the continuity of the company; that is, the aim was to learn if the company was still the same, or had changed due to possible modifications in the following variables:

- Activity, identification and location.
- Identification and activity.
- Identification and location.

The standards of continuity will allow the interviewer to determine if the company becomes inactive, giving way to the creation of a new company via a change in one of the above variable combinations. If the company changes its identification and activity, its identification and location, or its identification, activity and location, then a new company should be created, rendering the previous one inactive.



◆ Telephone Operation

An update was performed of the registers that, due to special situations, had still not been updated since their incorporation into the 2008 DEE. The selection of these registers was determined by size and age (referring to the date of incorporation into the 2008 DEE).

In this case there were certain setbacks due to the quality of the telephone numbers that were provided; namely, that many of them did not correspond to the companies that they were supposed to. Furthermore, there are some companies that did not have a telephone number because the informant did not provide this data during the fieldwork of the 2008 DEE, and there are many suspended telephone numbers, which impeded making contact with the business.

◆ Large Companies Operation

The registers that were updated were those that, due to their legal, financial and accounting characteristics, play an important role in the national business sector. The selection of said registers was determined by size and economic activity, as is shown in Table 1. These registers are referred to as Large Firms, and were 100% updated.

The updating procedure was performed via telephone calls, fax, email and personal visits when necessary. As in the telephone operation, an automated registration system was used.



Table 1

Large Companies Criteria (According to ISIC Rev. 4)			
Branch of Activity	From	To	Employee Range
· Agriculture, Livestock, Forestry and Fishing.	0111.01	0322.99	Greater than or equal to 100.
· Mining and Quarrying	0510.00	0990.00	Greater than or equal to 100.
· Manufacturing Industries.	1010.01	3320.00	Greater than or equal to 100.
· Electricity, gas, steam and air conditioning supply.	3510.01	3530.00	Greater than or equal to 100.
Water supply; sewerage, waste management and remediation activities.	3600.01	3900.00	Greater than or equal to 100.
· Construction.	4100.00	4390.00	Greater than or equal to 100.
· Wholesale and retail trade; repair of motor vehicles and motorcycles.	4510.00	4799.00	Greater than or equal to 100.
· Transportation and storage.	4911.00	5320.00	Greater than or equal to 100.
· Accommodation and food service activities.	5510.01	5630.00	Greater than or equal to 100.
· Information and communication.	5811.00	6399.00	Greater than or equal to 100.
· Financial and insurance activities.	6411.00	6630.00	Greater than or equal to 100.
· Real Estate Activities.	6810.00	6820.00	Greater than or equal to 100.
· Professional, scientific and technical activities.	6910.00	7500.00	Greater than or equal to 100.
· Administrative and support services activities.	7710.01	8299.00	Greater than or equal to 100.
· Education.	8510.01	8550.00	Greater than or equal to 100.
· Human Health and Social Work Activities.	8610.01	8890.00	Greater than or equal to 100.
· Arts, entertainment and recreation.	9000.00	9329.00	Greater than or equal to 100.
· Other community service activities.	9411.00	9609.00	Greater than or equal to 100.



3.2 Improvements in the DEE

The DUIE received a series of improvements with the aim of streamlining the processes and analyses that are performed, from the updates via telephone, to the reports, data cubes, downloads and inconsistency checks, among other factors.

The improvements in the registration system allowed for one company to be associated with a group of companies, for groups of companies to be searched for, for the existence of a company in the DEE to be verified to avoid duplicating its data, for the length of personal and corporate identification numbers to be verified, and for the validation of data, among other considerations.

Moreover, two different closing procedures were implemented, a preliminary and a final closing procedure, which facilitated annual comparisons. At the same time, the database downloading module was improved, allowing for analyses of aspects of interest to be performed via filter selection, without the need to download the entire DUIE.

Reports and data cubes are tools facilitating the supervision and verification of the performed work and allow for the real-time analysis of variables through the current year's data cube.

Finally, a module for inconsistency assignment was incorporated, allowing for correction of variable errors preventing the register from being consistent with the interview result assigned to the company.

IV. Variables

For coverage and quality controls, an update form containing 38 questions was applied to each interviewed company or establishment. The update form was divided into 6 sections: Location, Identification of the Institutional Unit, Number of Employees, Economic Activity, Starting Year and Informant Data.

The following are the basic variables:

- **Identification:** This refers to the variables that allow for a business to be distinguished from others.

1. Corporate name
2. Corporate or personal identification number
3. Type of company:

a- Company

This is a business that performs activities in one or several locations. This category corresponds to the case in which the “main offices” are located in a separate location, different from the other units that make up the business.

b- Single Company Endeavor

This is a business that does not depend on another one; its operations are performed at one location and it does not have any branches.

- **Location:** This refers to the physical location variables of the business within national territory, and the variables concerning contact by electronic means.
 1. Directions to company from nearby landmarks
 2. Address in terms of province, canton and district
 3. Email



- **Size:** This is the variable for determining the size of the business, with the aim of categorizing it by strata.
 - » Number of employees.
- **Economic Activity:** This refers to the variable that identifies the main and secondary activities (performed in one or several places) that the establishment is devoted to. The main activity is defined as the most important one in terms of added value and sales volume. If this data is not available, then the main activity is determined in terms of personnel or time invested.
 - » Branch of economic activity (ISIC Rev.4 code, nationalized).
- **Dynamic:** This refers to the variable that describes the start of the business.
 - » Starting date: the registered date on which activities started.
- **Informant:** This is the proprietor, administrator, manager, or any other person in the company that knows everything regarding the personnel that work there, as well as the data concerning expenses, income, and other related data.
 1. Informant's name
 2. Informant's email
 3. Informant's position



- **Others:** These are variables that could be necessary for later studies and the updating of the Directory. These variables are not available in the administrative register, but rather in the companies or establishments that were consulted in the performed operations.
 1. Activities in the same location: these are the activities, in addition to the main one, that the business performs at the same location.
 2. Activities in another location: these are the activities, in addition to the main one, that the business performs in another location.

V. Product

There will be a register of the resident companies in the country Directory of Institutional Units and Establishments dedicated to the production of goods and services for the private sector, with basic data regarding location, economic activity, identification and number of employees.

On the other hand, the available data represents an image of the moment in which the update was performed. For this reason, the changes that have occurred since the end of the updating period will not be reflected.



NATIONAL INSTITUTE OF STATISTICS AND CENSUSES (INEC)

The INEC was created by Act N° 7839, published in the Official Newspaper, “La Gaceta”, on November 4th, 1998, as an autonomous institution under public law, with legal status and its own assets. Its responsibility is to be the technical governing body of national statistics and coordinator of the National Statistics System.

The INEC has the duty to provide the public with the results of statistical activity, as well as the methods employed, in a clear and timely fashion. It also promotes the investigation, development, perfection and implementation of statistical methods.

Among the main national statistics that it must generate are: vital, demographic, foreign trade and construction statistics. Also generated are statistics resulting from national censuses regarding population, housing, agriculture and the economy; additionally, those related to household surveys with various aims, to surveys concerning agriculture, to surveys covering household income and expenses, and to surveys regarding the economy and price indexes, among others.

INEC, de la rotonda de La Bandera 450 metros oeste, sobre calle Los Negritos,
Edificio Ana Lorena, Mercedes de Montes de Oca, Costa Rica
INTERNET: www.inec.go.cr - Email: informacion@inec.go.cr Telephone:
2280-9280 ext. 326 - 327 - Fax: 2224-2221
Edited: INEC - March 2011