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**Work: National Employment Survey and Statistics on the**  
**Labour Force in Chile**

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**WORK**

**National Employment Survey and Statistics on the Labor Force in Chile**

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## **1. Introduction**

The main source of information on Work in Chile is the National Employment Survey (NES), carried out by the National Institute of Statistics (NIS). The official statistics on employment and unemployment, published monthly, are based on that survey.

Two household surveys, compiling information on the work force and employment conditions, are conducted simultaneously. These are: the Survey on Employment in Greater Santiago carried out by the University of Chile, and the "CASEN" (Socioeconomic Characterization) Survey effected by "Mideplan", the Ministry of Planning, associated with a survey on living conditions, the objective of which is linked to the evaluation of the impact of social spending on the reduction of inequality and poverty.

The NES is a household survey, which has existed since 1966 and which compiles information on the employment situation of persons older than 15 years of age, as well as the main characteristics of the employment of those in work. This survey makes it possible to: (i) describe the size, structure and characteristics of the participants in the labor market, (ii) obtain indicators of importance to macroeconomic policy (the unemployment rate) and (iii) identify zones and segments of vulnerable population which are targeted by the public employment programs.

## **2. General Characteristics of the NES.**

### ***Variables of Interest and Periodicity***

The NES variables of most interest are the unemployment rate and the absolute levels of employment and unemployment. To that end, a questionnaire is used, consisting of 22 questions which allow the categorization of persons in terms of their employment situation and in accordance with their social demographic characteristics such as sex, age and education. "

The Survey is ongoing and makes it possible to obtain moving quarterly estimates of the aforementioned variables for monthly publication.

### ***Coverage or Geographic extension***

The Survey applies to the whole country and is representative at the National level (urban/rural), Regional level (urban/rural) and in Major Urban Centers or Cities.

## ***Size of the Sample***

The NES sampling units are firstly, the sections (residential areas) and secondly, households. The survey is carried out in 36,000 households (12,000 a month) countrywide, through a system of rotating the sections and choosing a new selection of homes to avoid survey fatigue amongst participants and to keep the sample up to date. Using this system any household included in the survey is interviewed 6 times in an 18 month period.

## ***Aspects of methodology and estimation***

The method of sampling selection is based on probability in two stages with geographic stratification by region and by urban-rural area. The values associated with the design are not self-weighted and are adjusted by an exogenous projection of the population calculated by demographic methods agreed to by the NIS and CELADE (the Latin American Demographic Center).

The sampling design and the methodology of estimation used by the NES are in accordance with international standards for household surveys and have been recognized and accepted by international consultants.<sup>1</sup>

## **3. Concepts, definitions and standards**

The conceptual framework for measuring the work force is based on the 13th International Conference on Employment Statistics (ICES) of 1982, according to which persons are classified according to their activities carried out during a short reference period (a week), in three mutually exclusive categories: Employed, Unemployed, Inactive. The criteria used to establish this classification are:

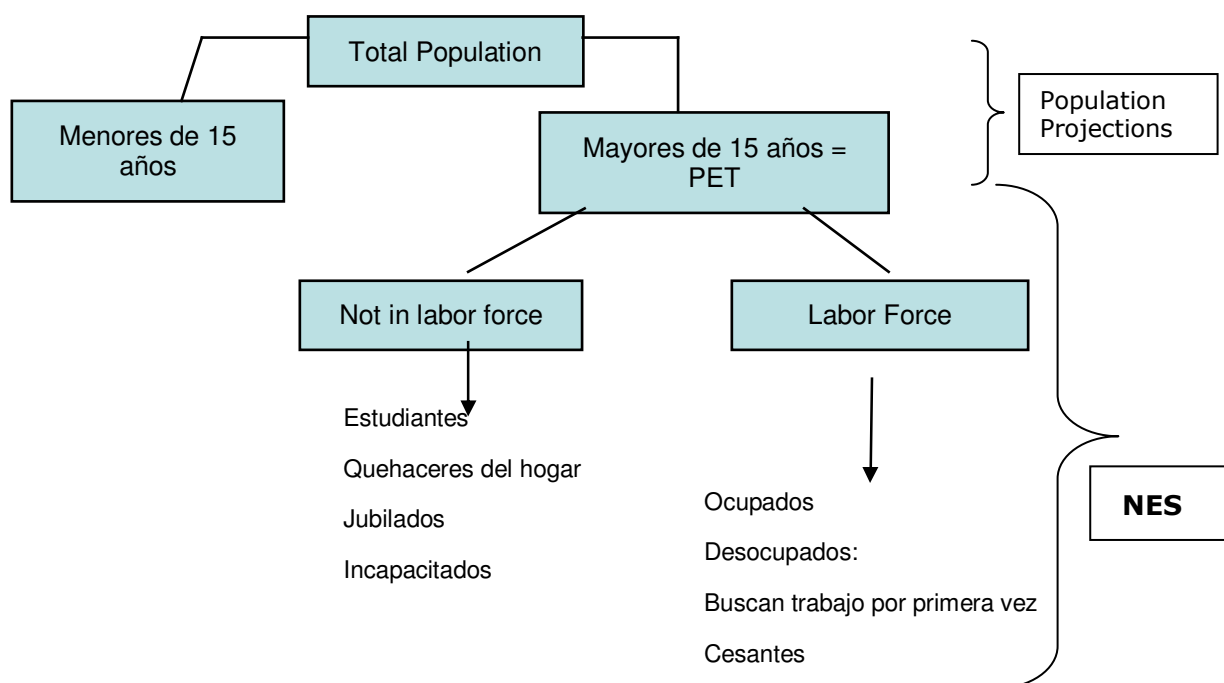
- i. To work or be employed
- ii. With the desire to work (actively seek employment)
- iii. To be available for work. Nevertheless, this last criterion is not applied either strictly or explicitly, and consequently differs from the international standard.

In this manner, the population is classified according to whether it forms part of the labor force (employed or unemployed) or to those outside it (inactive). The latter includes the categories of students, those who perform unpaid domestic duties, retirees, and disabled persons.

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1 Study ordered by the Chilean Central Bank and carried out by two consultants of the U.S. Bureau of Labor Statistics and the U.S. Census Bureau: "Report and Recommendations on two Chilean Labor Force Surveys". Bregger and Hoy (2006).

The number of persons under 15 years of age and the total population are external data that come from the population projections based on the Population Census that is held every ten years in Chile.



#### **4. Variables/ Topics.**

##### ***Unemployment rate.***

The basic population parameters estimated in the NES are the numbers of persons in the work force (employed and unemployed). Thus, the most important indicator is the unemployment rate.

##### ***Classification of the Employed.***

The employed are classified, in turn, in the following categories:

<b>Employed according to:</b>	<b>Categories</b>
Employment Category	5 Categories
Class of Economic Activity <b><i>Classification CIIU, Rev.2</i></b>	9 Classes
Occupational Groups	11 Occupational Groups

Classification <b>COTA 70</b>	
Size of the establishment	Less than 5 workers, 5-9 workers, 10 and more workers.
<b>Other Variables :</b>	
<b>Hours worked</b>	Weekly normal hours worked. Weekly hours effectively worked.
<b>Weeks in search of employment.</b>	Number of unemployed persons by number of weeks seeking employment.  Average number of weeks seeking employment during the period being measured.

### ***Supplementary Income Survey.***

In the last trimester of each year (October-December) an additional questionnaire, called the Supplementary Income Survey (SIS), containing 8 questions on earnings from employment and other sources, is added to the NES. This survey is an important source of information on employment earnings, complementary to the employment information of the NES, and of great importance for the analysis of conditions in the employment market.

### **5. Tables.**

Based on the NES about 50 tables are generated monthly which are analyzed to publish the more relevant variables in the institutional web and for external users (mainly Government organizations and international organizations like the ILO). There is also a multidimensional data base available to users who can access the information they require.

### **6. Good Practices.**

There are a number of procedures, both operational and technical, some of which have been implemented some time ago and others which are more recently, which are described as follows.

#### ***Documentation***

The NES has documented almost all of the stages that comprise the carrying out of the survey, the training of the interviewers, the supervision and quality

control of the compilation of the data, as well as the processing and the publication of the results.

The documentation is important not only because others can always continue to implement the methodology, but also because, understanding the origin of an indicator in its statistical and operational dimensions, is of great importance for the improvement and updating of the methodologies and for the innovation of statistical products, as social and economic phenomena continue to evolve.

### ***Methodological updating***

The sampling frame of the NES is based on the Population Census held every ten years. After each census, the basis for all household surveys is updated and following this a selection for a new sample made, thereby ensuring that the household sample is in accord with the country's demographic dynamics. In the same way, the updating of the projections of population is carried out, to which the estimates of the work force which are provided by the NES are adjusted.

### ***Updating of concepts and of the instrument of measurement, in accordance with new phenomena in the labor market***

As a result of the economic transformations in recent decades and their impact on the competitiveness of firms and on work organization, new phenomena, which are not being reflected in the current NES, have emerged. For example: new kinds of work, employment conditions and levels of labor protection, as well as other phenomena related to the underutilization of the labor force not covered up till now, such as hourly sub employment, among others.

Since 2004 the NIS has been working on updating the NES questionnaire to better its measurement of the conditions and the evolution of the labor market. To that end, it invited experts, analysts and labor policy makers to a discussion about the new data and measurement requirements. This resulted in the design of a new questionnaire which significantly improves the conceptual and measurement criteria and increases the quantity of information and number of indicators on the employment market, in accordance with current international standards.

At the present time the new NES questionnaire is being tested and will produce official figures from February 2009 onwards.

The new NES project signifies updating its conceptual and measurement criteria, in accordance with international standards. This implies a qualitative change of significant importance in the way in which the issue of employment has been treated up until now, essentially focused, as it has been, upon

indicators of specific situations like the unemployment rate.

The new survey will make it possible to widen the dimensions of the analysis of conditions in the labor market, of the characteristics and motivations of the search for employment, of the presence of new kinds of employment associated with the phenomenon of the outsourcing and subcontracting of activities by firms, of the level of precariousness of jobs in terms of the existence of contracts and social security coverage, as well as of new complementary indicators of the unemployment rate that reflect the under utilization in hours and inadequate use of the work force.

In parallel with this monthly questionnaire, four modules were designed with a different periodicity, as dictated by the phenomenon of a given measurement, related to the following subjects: Human Capital, Labor Flexibility, Income (an improvement on the present NES questionnaire) Labor History, Informality.

### ***Implementation of new methodologies and indicators***

Given the need to improve the analysis of the employment market and to advance to new methodologies of dynamic analysis, the NIS is presently developing a project, based on the NES, to estimate the labor force flows. This project is based on the potentiality of the survey design, which, through the system of rotation of homes, allows for a follow up of the households and the persons interviewed in two or more periods. The survey results will provide indicators of labor force flows for a better understanding of the dynamism and mobility of persons in different employment categories.

It is hoped that this methodology will also be implemented, based on the new NES questionnaire, which will come into effect from February 2009.

### ***Integrated System of Household Surveys (ISHS)***

The NES forms part of the Integrated System of Household Surveys, a project currently being undertaken by the NIS with the objective of integrating and coordinating the different household surveys under a common conceptual framework. This refers not only to the surveys carried out by the NIS in order to satisfy the demand for social information, but also those of other organizations or government institutions (e.g. the "CASEN" of "Mideplan", the National Youth Survey carried out by the National Youth Institute, etc)

The ISHS constitutes in turn a strategy of coordinating efforts and public resources in the elaboration of diagnoses and the design and evaluation of social policies, based on the role of the NIS as the country's principal statistical organization.



## ***Strengthening of the analysis of statistics***

The relevance of the quality of statistics, although it must be part of the concern of the institutions that produce them, has become more important lately at the NIS, together with Transparency and Independence, which constitute the pillars of the current management of the institution. As the community is increasingly better informed, and the dynamics of social and economic phenomena have accelerated, the demand and need for more and better quality information have also grown.

An institutional effort in this direction has been the creation of Units of Analysis and Studies, which not only realize the task of reviewing the statistical and methodological quality of the statistical products, but also their consistency and pertinence to the study of economic and social phenomena.

## **7. Complexities and the need for new practices**

### ***Obsolescence of samples between censuses***

The methodology of updating the sampling frame and the samples for the household surveys after each census, runs the risk of the samples becoming rapidly obsolete, given the acceleration of the population and housing dynamics and the long period between censuses (10 years).

The impact of this situation on household surveys is not insignificant, given the important source of social information they constitute (employment, living conditions, Security, Quality of Urban Life, etc).

Since 2006 the NIS has been working on its Master Sampling Frame, the objective of which is to achieve an updated sampling frame to eventually replace the Population and Housing Census carried out every 10 years. At present the project has an implementation phase in the new household surveys and one of them is the New NES.

### ***Different dimensions of the quality of statistics***

Concern about quality faces the need to define the concept in its application to the field of the permanent production of statistics. The standardization of production processes for long periods runs the risk of becoming routine, when the concept of quality is reduced solely to improving processes through better technology.

In this respect, the field of social statistics requires special attention, given the multidimensional character of the phenomena they help to measure and,

consequently, their correlation with other dimensions. The analyses of quality must include some other aspects such as:

- The coherence of the statistics with others (an analysis usually carried out by agents external to the institutions which produce statistics).
- The practice of identifying external validation agents when other sources of information on the same phenomena exist (e.g. Administrative Registers) and their degree of comparability and the determination of how complementary they are.
- The evaluation of the pertinence of the methodology of measurement given the magnitude and characteristics of the phenomena in their dynamism.
- The permanent analysis of the measured phenomena and the evaluation of the need for new statistics or indicators.
- Analytical integration of the social statistics generated by the institution producer of statistics (Demographics, Employment, Income, etc) and its different sources (Households, Establishments, Administrative Registers).

## ANNEX

### GENERAL LABOR FORCE SITUATION FROM NES

Abr-Jun 2008  
(Numbers in thousands)

<b>Fuerza de Trabajo (Labor Force)</b>	
Ocupados (employment)	6.583,1
Desocupados (unemployment)	603,0
<b>Inactivos (Not in Labor Force)</b>	
Quehaceres del hogar	2.712,0
Estudiantes	1.645,5
Jubilados o Rentistas	696,3
Incapacitados permanentes para trabajar	170,7
Otros inactivos	415,9
<b>Total Población de 15 años y más</b>	<b>12.826,5</b>
Tasa de Participación (Labor Force Participation Rate)	56,0 %
Tasa de Ocupación (Employment Population Ratio)	51,3%
Tasa de Desempleo (Unemployment Rate)	8,5 %