

**Chile**  
**ISSP 2006 – Role of Government IV**  
**Study Description**

## ISSP Study Description Form - Chile (CL)

*Study title:* National Public Opinion Study N° 24

*Fieldwork dates:* June 24 – July 13 2006

*Principal investigators:* Carolina Segovia  
Centro de Estudios Públicos (CEP)

*Sample type:* The guiding methodological principle underlying CEP's public opinion surveys is that effective and accurate survey research must be based on a truly representative sample of the universe in question. For CEP's purpose, this universe is made up of Chilean adults 18 years of age and older. Our studies use a probability multistage cluster sample of 1,505 individuals.

The sample is designed in three stages, such that all adult individuals throughout the country have a calculable probability of being included. The 2002 Census data is consulted to determine the regional population structure of people 18 years of age and older. This makes it possible firstly to establish regional stratification and then each region is stratified by rural and urban zone. Table I shows the regional structure of the Chilean population.

**Table I. Regional Breakdown of Population (%)**

| <b>Region</b>                   | <b>% Population<br/>18 years<br/>of age and<br/>older<sup>1</sup></b> | <b>Region</b>                      | <b>%<br/>Population<br/>18 years<br/>of age and<br/>older<sup>1</sup></b> |
|---------------------------------|---|------------------------------------|---|
| I Tarapacá                      | 2,8   | VII Maule                          | 5,9   |
| II Antofagasta                  | 3,2   | VIII Bío Bío                       | 12,2  |
| III Atacama                     |   | IX La<br>Araucanía                 | 5,6   |
| IV Coquimbo                     | 1,6   | X Los Lagos                        | 7,0   |
| V Valparaíso                    | 3,9   | XI Aisén                           | 0,6   |
| VI Libertador Bdo.<br>O'Higgins | 10,4  | XII Magallanes<br>and<br>Antarctic | 1,0   |
| XIII Metropolitan<br>(Santiago) | 5,1   |                                    |   |
|                                 | 40,7  |                                    |   |

<sup>1</sup>Source: 2002 Census Data National Institute of Statistics.

### Sampling Stages

#### *First Stage*

The first stage of the sampling process sets the number of completed interviews per cluster at 5; a cluster is defined as a block (*manzana*) or

populated entity (*entidad*).<sup>1</sup> The application of 5 interviews per cluster to the total number of interviews targeted in the sample (1,505) yields 301 primary sampling units (PSUs) to be identified in the first stage of sample selection.

The PSUs are proportionally distributed throughout the regions of the country, taking into account the region's contribution to population (both urban and rural), as described in Table II.

**TABLE 2**  
**Number of Clusters per Region**

| Region                          | Number of clusters |       |       |
|---------------------------------|--------------------|-------|-------|
|                                 | Urban              | Rural | Total |
| I Tarapacá                      | 7                  | 1     | 8     |
| II Antofagasta                  | 10                 | 0     | 10    |
| III Atacama                     | 5                  | 0     | 5     |
| IV Coquimbo                     | 9                  | 3     | 12    |
| V Valparaíso                    | 28                 | 3     | 31    |
| VI Libertador Bdo.<br>O'Higgins | 10                 | 5     | 15    |
| VII Maule                       | 12                 | 6     | 18    |
| VIII Bío Bío                    | 30                 | 7     | 37    |
| IX La Araucanía                 | 11                 | 6     | 17    |
| X Los Lagos                     | 14                 | 7     | 21    |
| XI Aisén                        | 2                  | 0     | 2     |
| XII Magallanes and Antarctic    | 3                  | 0     | 3     |
| XIII Metropolitan (Santiago)    | 118                | 4     | 122   |
| TOTAL                           | 259                | 42    | 301   |

Using the most reliable digital information on hand, i.e. 2002 census data, a cumulative listing of population by province (*provincia*), borough (*comuna*), district (*distrito*), zone (*zona*) and block (*manzana*) was prepared in the urban case; and by province, borough, district, locality (*localidad*) and entity (*entidad*) in the rural case (geographically arranged).

In both the rural and the urban case a fixed interval is set for each region by dividing the total population for that region by the number of PSU's assigned to it. Within each region, a purely random selection process is followed, such that each individual (as represented by population statistics) has a calculable probability of being selected as the reference point for a PSU.

This is carried out through a computerised, random, proportionate-to-population process to select blocks in the urban areas and entities in the rural areas. A computer program is developed to select the 259 urban

---

Bloc<sub>k</sub>s (*manzanas*) are used in urban areas, while in rural areas the census equivalent is the entity (*entidad*).

blocks and the 42 rural entities for the sample. All the blocks and entities are identified by number and located on a census map.

#### *Second Stage*

The second stage in the sampling process is to select households (dwellings) within PSUs. Selection rules for households within chosen blocks and entities are provided to interviewers, to enable them to select households randomly within each cluster. After taking a census of each selected block and entity, a random walk or systematic sampling<sup>2</sup> procedure is followed, whereby every  $n$ th dwelling is included in the sample until a total of 5 households are identified.

#### *Third Stage*

The third stage is to select, within each household, a person to be interviewed. Interviewers are instructed to apply a random selection process (random number table) to identify the person to be interviewed.

#### *Other Important Aspects in the CEP Sample Design*

In the second and third stages, the interviewer has to make a minimum of three attempts on three different days to try to reach the original house or person to be interviewed. In these attempts the interviewer must deliver a letter signed by the CEP director explaining the nature of CEP and the aims of the study.

If the original household or person finally cannot be contacted, they are replaced. The rules for replacement are as follows:

#### **A. Blocks and Entities**

The replacement of a block or entity will occur only in the following situations:

- 1) Vacant lots that could not be detected prior to sample selection
- 2) Areas which are almost inaccessible
- 3) Entities and/or blocks intended basically for commercial use
- 4) Parks or stadiums
- 5) Areas belonging to the armed forces

Blocks and entities are randomly replaced: the original selection is replaced with the one whose identification number comes immediately before that of the original. If this is not successful, the block/entity with the identification number immediately following the original selection is taken.

#### **B. Households**

Failed dwellings are accounted for as follows:

- 1) By outright refusal to receive the interviewer, even having received the letter from the CEP director.  
By the absence of occupants at a house after three visits on three different days (vacations or other reasons).
- 2) The house is unoccupied.

---

<sup>2</sup> The total number of numbered dwellings was divided by 5 (the number of interviews per cluster); this gave an interval length, such that if it was  $43/5 = 8$ , starting from the point randomly pre-assigned as the first dwelling, the interviewers went to dwelling No 9, then to No 17, and so on until 5 interviews were completed.

- 3) Access denied (condominiums or buildings with security guards)
- 4) Other special cases (foreigners with whom it is impossible to communicate, etc.)

Each failed dwelling is randomly replaced by another one from the same block/entity. The replacement interval is defined as  $(k-1)$ , where  $k$ = the original selection interval. Starting from the last house originally selected, the interval  $(k-1)$  is added to select the first replacement house, and so on. The fieldwork treatment of replacement houses as regards the number of repeat visits is the same as for the original houses.

### **C. Individuals**

Individuals are replaced under the following circumstances:

- 1) When the person selected refuses to answer the questionnaire, even after receiving the letter from the CEP director.
- 2) When the person selected cannot be located after three attempts on three different days, or will be away for a period longer than the duration of fieldwork.
- 3) The person offers to respond on a date long after the closing date of the field work.
- 4) Individuals with serious physical or psychological handicaps which prevent them from responding (mentally handicapped, deaf and dumb, etc..)
- 5) The individual is physically and psychologically fit, but is ill, in bed and does not want, or is unable to respond to the survey.
- 6) The selected individual is a foreigner with less than 5 years in the country (unable to vote).
- 7) The person starts to answer but he/she does not want to finish the interview.
- 8) Other specific cases.

In replacing individuals, the dwelling is replaced according to the rules explained above, and a random selection process chooses an individual from the new household.

It is important to bear in mind that, by using these replacement rules, the sample size achieved is always very close to 1505 (issued sample size).

*Fieldwork*  
*institute:* ICCOM

*N. of*  
*respondents:* 1505

|   |   |                |
|---|---|----------------|
| <i>Details about issued sample:</i>         | 1. Total number of starting or issued names/addresses (gross sample size) * | .....1716..... |
|   | 2. Interviews (1.0)   | .....1505..... |
|   | 3. Eligible, Non-Interview  |                |
|   | A. Refusal/Break-off (2.10)   | .....97.....   |
|   | B. Non-Contact (2.20)   | .....94.....   |
|   | C. Other  |                |
| i. Language Problems (2.33)                 | .....7.....   |                |
| ii. Miscellaneous Other (2.31, 2.32, 2.35)  |   |                |
| 3. Unknown Eligibility, Non-Interview (3.0) | .....   |                |
| 4. Not Eligible                             |   |                |
| A. Not a Residence (4.50)                   | .....   |                |
| B. Vacant Residence (4.60)                  | .....13.....  |                |
| C. No Eligible Respondent (4.70)            | .....   |                |
| D. Other (4.10,4.90)                        | .....   |                |

\* When new sample units are added during the field period via a new dwelling units list or other standard updating procedure, these additional issued units are added to the starting number of units to make up the total gross sample size. Also, when substitution is used, the total must include the originally drawn cases plus all substitute cases. See AAPOR/WAPOR Standard Definitions , pp 9-10 for further clarification.

*Language(s):* Spanish

*Weight present:* Yes

*Weighting procedure:* A weighting procedure is applied in order to correct for distortions in the representativeness of the sample as regards three variables of interest: Gender, Age, (grouped in five categories: 18-24 years, 25-34, 35-44, 45-54, 55 or older) and Urbanity (classification of place of residence as urban or rural). This makes it possible to obtain a sample with characteristics similar to those of the population. The weights are constructed by calculating the quotient between the expected distribution and that observed in the cross between Urbanity, Gender and Age. The expected distribution is obtained from the 2002 census data provided by the National Institute of Statistics. The result of the weighting slightly corrects for problems of under- and over-representation among certain specific groups of the population.

*Known systematic properties of sample:* The sample design described above has been used in the last 23 surveys and has given good results, so it can be stated that it does not have properties that might be causing some type of bias in the results.

*Deviations from ISSP questionnaire:* None