# A close look at the living standards of Chilean elderly men and women\*

by

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#### **ABSTRACT**

The Chilean population is expected to age rapidly in the course of the generations born from 1950 to 1970. The fraction of individuals 65 years or older will increase from 6.1% (1990), to 12.7%(2025), and to 17.3 (2050). This paper examines the levels of income per capita and living arrangements of the current elderly, estimates their poverty rates, and compares these with the poverty rates for the younger population. The key data source for the statistical analysis is the micro data set of *the Caracterización Socioeconómica Nacional* (CASEN), a nationally and regionally representative household survey for 1994.

The data shows that women are less likely to earn income than men in any of the categories of income generation. Yet, in the case of retirement income, gender differences are relatively smaller. In urban areas, the fraction of elderly men that receive an old-age pension is twice as large as that of elderly women – 62 vs. 31 percent. But, an additional 19 percent of elderly women receive survivor's pensions, closing the retirement income gender gap. In rural areas, where old-age pensions are less typical, more than 23 percent of elderly women are beneficiaries of a PASIS, a government program targeted to the elderly poor.

In urban and rural areas, older women are more likely to be widows, and more likely to live in extended households than men of the same age group. An interesting finding for he case of Chile is that poverty rates —measured at the household level using equivalency scales, are generally lower among elderly males and females, compared to younger males and females. However, controlling for age category, poverty rates are higher among females.

### 1. Introduction

The Chilean population is expected to age rapidly in the course of the generations born from 1950 to 1970. The fraction of individuals 65 years or older will increase from 6.1% (1990), to 12.7%(2025), and to 17.3 (2050) (see Table 1). How is the current generation of elderly fairing? What are the key factors that drive the living standards of elderly men and women? This paper examines the levels of income per capita and living arrangements of the current elderly, estimates their poverty rates, and compares these with the poverty rates for the younger population.

# 2. Standards of Living of the Elderly: Data and Methodology

The key data source for the statistical analysis is the micro data set of *the Caracterización Socioeconómica Nacional* (CASEN) for 1994. This is a nationally and regionally representative household survey carried by the National Planning Office (MIDEPLAN), through the Universidad de Chile's economics department. The sample contains 178,057 observations (111,643 representing urban and 66,414 representing rural areas). Urban areas are defined as groupings of dwellings with population of 2,000 or more. The survey collects information on: demographics, characteristics of the dwelling, educational attainment, health care, occupation and employment, and incomes. Income questions distinguish income from work, income from capital, rental, imputed rent, and transfers such as pensions.

The data used is the one adjusted by Cepal (see Cepal, 1995) with three additional corrections that were justified in a recent study by The World Bank (see World Bank, 1997). (1) Live-in domestic service workers are treated as a separate household. (2) Incomes are deflated by a regional price index. (3) The three richest households in the sample are excluded from the income analysis because the incomes reported can be regarded as genuine outliers (see World Bank, 1997, Vol. II, pg 6).

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#### Income Data

The survey records the various income sources for each member of the household with a significant amount of detail. Unfortunately, we do not have any direct measure of the non-monetary contribution of individuals to the household production function (with babysitting, household chores and the like). Thus, our analysis looks solely to monetary incomes plus imputed rent from own housing. Workers report their income from work. In addition, workers and non-workers report on three possible sources of income. (1) "Other incomes" include: rental of property, interest on financial or monetary assets, an estimate on owner-occupied housing, donations, alimony, value of home production and other. (2) "Government transfers" include: PASIS pensions<sup>3</sup>, unemployment benefits, SUF family subsidy, water subsidy; other. (3) "Retirement" benefits include: Workers' pensions, invalidity pensions, and widows or other dependent pensions.

Table 2 presents a summary of this information where the population 16 and over has been categorized by age and as "wage earner" or "non-wage earner." The "wage earner" category includes individuals that work and report monetary income. The "non-wage earner" category consists of pensioners, renters, others, and none. "Pensioners" includes individuals who report retirement income as the <u>only source</u> of income (includes PASIS program). "Owner" includes individuals with imputed income from house ownership, if this is the <u>only source</u> of income. "Other" includes non-wage earners with various sources of income, and "None" includes individuals without any personal income.

There are significant gender differences in the likelihood of generating wage incomes. These differences, in turn, reflect the known gender differences in labor force participation patterns, which are analyzed in more detailed in Cox Edwards, 1999 (b). Close to 70% of men of all ages generate wage income from work and only 32% of urban women and 16% of rural women of all ages do so. The division of labor within households typically renders a specialization along gender. This is particularly evident

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<sup>&</sup>lt;sup>2</sup> The survey assigned imputed rent from owner-occupied housing to the head of households. Nevertheless, in a number of cases, the owner of the dwelling was not the reported head. We reassigned those values to the reported owner.

among married men and women. Married women are more likely to specialize in the production of goods and services within the household, and married men specialize in labor market activities. This reduces women's individual capacity to generate monetary savings through the social security system. Nevertheless, when we examine individual incomes among the population of elderly, we find relatively small differences in income generation by gender.

About 60% of elderly women and 70% of elderly men receive some sort of pension income

The relative importance of the various sources of income changes according to age and gender. For example, 67% of urban men of all ages obtain income from work and 70% of non-working older men have retirement income, suggesting a correspondence between work income and retirement income for men. The patterns for women are different. Only 32% of urban women of all ages obtain income from work, while 60% of non-working older women have some sort of retirement income. The picture is not too different in rural areas, except for a smaller percentage –only 16%-- of women report income from work.

The lack of correspondence between wage income and pension income is not necessarily driven by weak links between contributions and benefits within the social security system. It may also explained by two other factors. In urban areas, most elderly women are widows. A large fraction of them have pension benefits either from their own work or from their husbands. The fraction of widows in rural areas is smaller, but the fraction of elderly women that are pension beneficiaries is 60% --about the same as in urban areas. In rural areas, where poverty rates are higher, close to 40% of female beneficiaries of pension income are PASIS beneficiaries.

#### **PASIS**

The social assistance pension (Pension Asistencial - PASIS) was established by

These are targeted to the poor, and will be explained in detail in this section.

Decree Law 869 (1975). It is given to indigents that are over 18 and incapacitated, or above 65, that have resided in the country for a minimum of three years. In December of 1998, old-age PASIS beneficiaries represented 12.5% of all old-age beneficiaries (public and private). Coverage is significant in the rural areas where poverty levels are higher. Indigence is defined as an individual with:

- (a) no resources of her/his own, or resources equivalent to less than 50% of the minimum pension per month; and
- (b) average family income below 50% of the minimum pension, where average family income is defined as family income divided by the number of family members.

The targeting of PASIS is evident, as the poverty levels are much larger among PASIS recipients. In fact, based on the 1994 data we use here, we calculate that about 75% of poor women receive the PASIS subsidy. While these pensions are financed by a special fund distributed to the thirteen regional authorities (*Intendencias*), the amount of the PASIS benefit is determined by law. With the regional budget the individual benefit set, the number of beneficiaries in each region is pre-determined. Thus, *Intendencias* use a special poverty measure indicator to establish priorities and target the limited funds. Currently, most of the *Intendencias* have waiting lists of qualified individuals without access to benefits. Given the relative scarcity of resources, *Intendencias* made a significant effort to assign priorities and remove non-qualifiers from the list of beneficiaries until 1995. Currently *Intendencias* do not have the authority to remove beneficiaries from the list of qualifiers. The Institute of Pension Settlements (Instituto de Normalizacion Previsional - INP) assists the *Intendencias* with some of the background checks.

The PASIS benefit has two components: (a) free medical assistance in the Public System and, (b) a monthly benefit which has changed by law several times. The benefit is indexed to the CPI (adjusted every December). In October of 1999, the benefit was \$32,772.84 (approx. US\$ 64) per month. This is equivalent to 50% of the minimum pension, or about 11% of the average wage. Given that the data analysis in this paper is

based on 1994 information, it is relevant to note that the typical amount for 1994 was \$15.967.<sup>4</sup>

#### The household unit

To describe the living arrangements of older men and women, we start out with three conventional household types: unipersonal, nuclear, and extended. Each household is formed by a minimum of one family, conformed by a "head of household," who may have a spouse or partner, a child, a parent, a sister, etc. Everybody is defined in relation to the "head of household." If the family is limited to a head, spouse or partner and child(ren), it is considered a "nuclear" family. If the family includes other members aside from the "nuclear" family, it is considered "extended." Non-family members, except for live-in domestic workers, are classified in the same family category of the main family. Live-in domestic workers are considered unipersonal households.

A non-trivial fraction of older men and women live with married children in an extended family situation. There is also a non-trivial number of older men and women that live with unmarried grown up children. This situation does not fit with the extended family definition, although it is closer to the extended family than to a nuclear family, simply because grown children are likely to be taking care of their parents. To attend to this distinction, nuclear families were subdivided into two types: those with at least one child 30 years of age or older, and those with no children 30 or above.

We first look at a series of indicators of living conditions of old age women and men as compared to younger men and women. The key variables are summarized in Table 3, which presents the population along the rural-urban divide. The urban-rural distribution of population in Chile is 10 to 2 approximately. It is useful to note that male ratios are above one for all age groups in rural areas, and below one for all age groups in urban areas. A relatively large fraction of women migrate to urban areas to study or work at a relatively young age. It also appears that women's life expectancy is higher in urban

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<sup>&</sup>lt;sup>4</sup> For a comparison to per capita income and other relevant indicators, see Table 22.

areas. The tables show very similar levels of access to utilities in urban and rural areas, as well as decline in schooling differences across generations.

In urban and rural areas, older women are more likely to be widows, more likely to live in extended households, and less likely to live in a nuclear household than men of the same age group. Older women are more likely to live in unipersonal households in urban areas than in rural areas. The overall number of elderly women is much higher than the overall number of elderly men, a result of gender differences in longevity. Therefore, this analysis faces the challenge of establishing the living standard or well being of older individuals inserted in extended households, and then comparing it with that of older individuals living alone, or with their spouse.

#### 3. The Welfare of Older Men and Women

Once it has been established that about 60% of elderly women and 70% of elderly men receive some form of pension income, we turn to measure their actual income levels. We use CASEN data for 1994 to examine their housing arrangements, their levels and sources of income, and the incidence of poverty. Given that retirement income is not the only source of income, and that old men and women most often do not live alone, we compare the levels of household income per capita for men and women 60 and over, controlling for the type of household structure they live in.

Table 4 organizes households according to the number of elderly individuals that live in them in urban and rural areas. The number of elderly households, where all members are under 60, represents more than 67% of urban households. The fraction of non-elderly households in rural areas is smaller, below 63%. The presence of elderly (males or females) is more common in rural households. While 27% of rural households contain at least one elderly male, only 20% of urban households contain an elderly male. At the same time, 24% of households in both rural and urban areas house at least one elderly woman. In the tables that follow we report per capita incomes for elderly and non-elderly households, controlling for the number of elderly that live in each.

In order to measure income per capita, we must take into account the fact that there are economies of scale within households and that the cost of living varies according to age. We start with a sensitivity analysis, using five alternative scales: a simple members count (N); the Chile scale (Neq); the Deaton scale (NeqD); the OECD scale (NeqO); and the Cutler scale (NeqC).<sup>5</sup> The Chile scale is a household-equivalency scale calculated by Contreras (1995), using the "Rothbarth adult goods method".<sup>6</sup> We use these five different sets of weights to count household members and calculate income per capita. The results are shown in Tables 5 to 11.

Table 5 shows that those *urban households with one or two elderly are generally better* of in per-capita income than households without elderly. But, pc income among households with more than two elderly is significantly below the average. If households are categorized by the number of elderly that live in them, average incomes are the highest among households with two elderly, except when using the Cutler scale. Households with two elderly, which are mostly representative of nuclear households of elderly couples, have a better than average standard of living, except when we use the Cutler scale. This scale gives extra weights to the elderly cost of living, weighting individuals above 65 as 1.27 individuals in the 20-65 age-range. The other formulas, except for Deaton's, allow for economies of scale for the second adult. In rural areas,

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With Naa = number of additional adults in the household

 $N_{11-15}$  = number of children aged 11-15 in the household

 $N_{5-10}$  = number of children aged 5-10 in the household

 $N_{0-4}$  = number of children aged 0-4 in the household

The Deaton scale weights all adults 18 or over as 1; children below 6 as .2; children between 7 and 13 as .3; and children 14-17 as .5. The OECD scale weights the first adult as 1; additional adults as .5; and children less than 14 as .3. The Cutler scale weights adults 20 to 65 as 1; adults above 65 as 1.27; and children less than 20 as .72. (see.....)

Contreras' scale was estimated excluding all households with a single adult from the sample, and taking two adults as a reference type. He found that adult good expenditures were restored to the childless couple level when incomes for families with one child in the age categories below was raised by estimated percentages. Contreras' original scale was modified to include single individual households, and to take into account economies of scale within the household. The scale used, which is also applied to unipersonal households, is the following:

 $Y_i = X_i/M_i$ , where

 $M_i = 1.2 + 0.8(N_{aa} + N_{11-15}) + 0.4 N_{5-10} + 0.3 N_{0-4}$ 

income per capita among households with elderly is just slightly above the average, according to any of the scales.

Using a poverty line of 30,100 pesos per equivalent adult<sup>7</sup>, we estimate poverty counts and the fraction in poverty, using the same estimates of household income per capita shown in the income tables. The results for poverty calculations by household according to the number of elderly are presented in Table 6 and contain two key results. Poverty rates are higher in rural areas compared to urban areas across comparable households with or without elderly. The data also shows that poverty among households with elderly is lower than poverty among households at large, both in urban and rural areas. This conclusion is robust to the choice of equivalency scale, except when using Cutler's. Therefore, the conclusion regarding the relative well being of the elderly can be turned around if we assume, as Cutler does, that the elderly are subject to a substantially higher cost of living.

Table 7 focuses on individuals, and allows a closer look at gender differentials. Once again, income per capita is measured at the household level adjusting household size according to equivalency scales. The estimated per capita incomes are applied to each individual, and the table presents poverty counts by age and gender category. Table 7 leads us to conclude the following. Poverty rates are generally lower among elderly males and females, compared to younger males and females --in the 16 to 59 age-range. Poverty rates are higher among 16-59 year old females relative to 15-59 year old males, and also higher among elderly females relative to elderly males.

Table 8 takes a closer look at the elderly population to establish any differences in poverty rates among the very old (above 70) relative to the old (60 to 70). The evidence suggests that there are no clear patterns of differences among these two groups, except for the fact that rural women between 60 and 70 appear to be less poor than rural men in that same age group.

Table 9 summarizes the data on living arrangements by age and gender, using the four household types defined earlier. It is clear that *elderly women are more likely to live in extended families than elderly men* are. About 50% of elderly men live in nuclear households with or without adult children. This pattern is observed in urban and rural areas, and suggests that *men are more likely to age with their household while women, perhaps because they live longer, are more likely to age with an extended family.* 

Table 10 presents calculations of poverty counts for the elderly according to the housing arrangement that describes them. The income per capita figures (not shown) used to arrive to these calculations, indicate that across the different scales, income per capita levels are the highest among unipersonal and nuclear households. Nuclear households with adult children (30 or over) are characterized by capita incomes below nuclear, and above extended. This would suggest that the unipersonal or nuclear-household arrangement is an alternative that lower income households cannot afford. Yet, the distribution o income among unipersonal households of elderly individuals is very unequal, causing a high poverty incidence among unipersonal households.

These cross tabulations do not allow us to draw any conclusions on causality. Extended households may originate on the move of an elderly widow to her son's household. They may also originate on the move of a man, wife and children to his parent's house. When we turn to poverty counts, we see that *the highest incidence of poverty among the elderly is found among extended households*. Again, there are many possible explanations. However, we shall see that the incidence of poverty is larger among extended households where the elderly have a positive impact on pc income (Table13).

Sources of Income among the elderly

We turn to the various sources of income among the elderly and to the significance of these sources to the overall household's monetary income. About 74% of urban and

A regional price level indexed incomes in the different regions. The poverty line is the same used by a recent World Bank study on Chilean Poverty and Income Distribution (World Bank, 1997).

rural elderly women generate some form of monetary income. Close to 100% of elderly males in urban areas generate some form of monetary income and about 93% of elderly males in rural areas do so. Women are less likely than men to contribute in any of the categories of monetary income generation (wages, imputed rent, and own pension), although the differences are less pronounced in the pension category.

The fraction of elderly men that receive an old-age pension is twice as large as that of women –62 vs. 31 percent. Yet, an additional 19 percent of elderly women receive survivor's pensions, closing the retirement income gender gap. In every category, women with sources of income earn less relative to men. Differences are smaller in the PASIS program and the imputed rent category relative to the other income categories. The fact that elderly women are poorer than elderly men is also evident in the importance of the PASIS program as a source of income for elderly women, particularly in rural areas.

Table 12 uses the same categories used in Table 11 to show the significance of income contributions of the elderly to total household income. The likelihood that elderly women make contributions to household incomes is lower than that of elderly men.

Furthermore, the relative contribution of elderly women's incomes towards total household incomes --among those that make contributions-- is also lower than income producing elderly men. The exception on the last regularity is the case of imputed income from owner occupied housing. This last finding suggests the importance of researching the role of investments in housing, as an alternative to social security savings, in the case of women.

The finding that a significant fraction of elderly women live in extended households raises another set of questions. Do these women improve the standard of living of the household they join? Is it that other family members join in after old age women become widows? Are these extended households close to the poverty line? Table 13 reports the results of comparing extended-households income per capita with and without the elderly

person in question. Unfortunately, we do not have any direct measure of the non-monetary contribution of elderly individuals to household's production.

Close to 85% of elderly men have a positive impact on the extended household's income, in rural as well as urban areas. However, less than 45% of elderly women have such a positive impact. The average income effect of the presence of an elderly person in the household (positive or negative) is relative small in rural areas, and more significant in urban areas. Perhaps surprisingly, the incidence of poverty is higher among households that get an income per capita boost from the elderly.

#### 4. Conclusions

Women are less likely to earn income than men are. This is true in any of the categories of income generation. Yet, in the case of retirement income, gender differences are relatively smaller. In urban areas, the fraction of elderly men that receive an old-age pension is twice as large as that of elderly women –62 vs. 31 percent. But, an additional 19 percent of elderly women receive survivor's pensions, closing the retirement income gender gap. In rural areas, where old-age pensions are less typical, more than 23 percent of elderly women are beneficiaries of a PASIS, a government program targeted to the elderly poor.

In urban and rural areas, older women are more likely to be widows, and more likely to live in extended households than men of the same age group. Poverty rates —measured at the household level using equivalency scales, are generally lower among elderly males and females, compared to younger males and females. However, controlling for age category, poverty rates are higher among females.

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**Table 1: Chile – Population Aging** 

	Year, or	r five-year p	period start	ing in
Demographic Indicator	1990	2005	2025	2050
% population 65+	6.1	7.7	12.7	17.9
Median age	25.6	29.6	34.3	38.5
Life expectancy at birth (males)	71.5	73.7	75.9	77.5
Life expectancy at birth (females)	77.4	79.8	82.2	84.0
Life expectancy at 60 (males)	18.3	19.5	20.6	n.a.
Life expectancy at 60 (females)	21.8	23.4	23.5	n.a.
Life expectancy at 65 (males)	14.8	15.9	16.9	
Life expectancy at 65 (females)	17.9	19.3	19.6	n.a.

Source: CELADE. Boletin Demografico 61 & 62 (1998)

Table 2: Income Sources, by age and gender Urban and Rural areas

	Workers		Non	Workers		Total
	Income from	Retirement	Various	Inputed rent	No income	
	various sources	only	income sources	only		
URBAN						
males						
16 to 39	69.29	1.21	2.58	0.29	26.63	100
40 to 59	82.52	9.95	2.35	2.09	3.09	100
60 plus	23.85	70.05	1.98	2.06	2.07	100
Total	67.01	12.89	2.43	1.04	16.62	100
LIDDAN						
URBAN females						
16 to 39	36.65	1.31	4.09	1.42	56.54	100
40 to 59	38.46	8.88	4.09	6.12	42.26	100
60 plus	6.67	59.66	3.24	3.96	26.47	100
Total	32.3	12.93	4	3.17	47.59	100
Total	02.0	12.00	<u>'</u>	0.17	17.00	100
RURAL						
males						
16 to 39	78.13	1.72	2.98	0.35	16.81	100
40 to 59	84.14	7.3	4.83	1.09	2.63	100
60 plus	26.77	64.94	4.19	1.72	2.38	100
Total	70.85	14.23	3.69	0.79	10.44	100
RURAL						
females						
16 to 39	19.75	1.6	6.27	1.22	71.16	100
40 to 59	16.21	9.56	9.75	3.7	60.78	100
60 plus	3.78	60.2	6.29	3.96	25.77	100
Total	16.03	13.87	7.23	2.38	60.49	100

Source: Casen 94

Table 3: Basic Indicators of Living Conditions

URBAN		MALE			FEMALE	
	16 to 39	40 to 59	60 plus	16 to 39	40 to 59	60 plus
Population Totals	2,226,430	1,097,127	511,849	2,391,319	1,235,381	702,101
Marital Status						
married	39.02%	80.57%	73.07%	44.13%	67.15%	40.36%
widow	0.16%	1.60%	13.57%	0.50%	6.77%	41.34%
single	52.94%	6.49%	5.23%	44.70%	10.88%	9.87%
Employment						
currently employed	70.86%	87.31%	37.77%	37.98%	42.50%	11.19%
ever employed	83.90%	99.20%	96.87%	68.51%	74.15%	64.29%
Household structure						
unipersonal	1.91%	2.39%	7.15%	2.62%	3.87%	13.05%
nuclear	60.05%	64.65%	37.25%	59.12%	55.72%	21.62%
nuclear with adult offspr.	4.77%	4.12%	12.80%	3.21%	4.99%	12.83%
extended	33.28%	28.84%	42.80%	35.05%	35.42%	52.50%
Domestic Workers	0.03%	0.07%	0.00%	1.96%	1.49%	0.67%
Disability in population	1.29%	2.19%	6.12%	0.94%	2.50%	9.11%
Schooling						
none	1.12%	2.21%	7.37%	1.03%	3.37%	10.30%
Incomplete Primary	10.56%	35.55%	54.06%	11.11%	39.31%	58.22%
Complete Primary	8.08%	9.56%	5.26%	8.38%	10.27%	4.79%
Incomplete Secondary	29.64%	8.32%	6.46%	27.26%	9.51%	4.93%
Complete Secondary	24.78%	21.21%	13.59%	25.99%	20.48%	14.05%
Post Secondary	24.16%	20.86%	11.40%	24.70%	15.28%	5.92%
Utilities						
electricity	99.62%	99.68%	99.53%	99.68%	99.74%	99.48%
water	99.07%	99.29%	99.25%	99.11%	99.36%	99.36%

Source: Casen 94

Table 3: cont

RURAL		MALE			FEMALE	
	16 to 39	40 to 59	60 plus	16 to 39	40 to 59	60 plus
Population Totals	439,080	216,259	137,872	422,377	210,759	131,506
Marital Status						
Married	39.28%					
Widow	0.25%	1.82%	14.21%	0.37%		
Single	53.16%	13.26%	11.22%	40.25%	10.44%	12.63%
Employment						
Currently employed	81.15%	88.03%	41.39%	20.96%	18.15%	6.13%
Ever employed	90.48%	98.87%	95.95%	53.81%	51.08%	45.47%
Household structure						
Unipersonal	2.12%	5.25%	9.60%	1.28%	2.53%	9.79%
Nuclear	59.44%	59.00%	36.56%	63.14%	54.75%	26.45%
Nuclear with adult offspr.	6.85%	4.98%	12.10%	3.05%	6.08%	13.90%
Extended	31.59%	30.77%	41.74%	32.53%	36.63%	49.85%
Domestic Workers	0.04%	0.04%	0.00%	0.91%	0.62%	0.19%
Disability in population	1.97%	3.31%	11.45%	1.49%	2.37%	10.30%
Schooling						
None	2.99%	12.24%	27.72%	3.02%	15.60%	31.45%
Incomplete Primary	38.60%	66.29%	62.42%	36.67%	66.06%	59.42%
Complete Primary	20.30%	6.50%		18.18%	5.69%	
Incomplete Secondary	21.18%	4.01%	1.60%	21.05%	3.18%	1.63%
Complete Secondary	10.45%	3.79%	3.24%	13.23%		
Post Secondary	5.74%	5.89%	2.20%	6.85%	3.71%	2.01%
Utilities						
Electricity	99.62%	99.68%				
Water	99.07%	99.29%	99.25%	99.11%	99.36%	99.36%

Source: Casen 94

TABLE 4: Distribution of households according to the presence of elderly dividuals (>=60)

# URBAN AREAS

# of elderly in	Male or Female	Female elderly	Male elderly
household	elderly		
No elderly	67.47	76.14	80.22
1 elderly	20.37	22.39	19.41
2 elderly	11.29	1.37	0.34
3 elderly	0.79	0.06	0.02
4 elderly	0.07	0.04	0.00
5 elderly	0.02	0.00	0.00
All households	100.00	100.00	100.00

# of elderly in	Male or female	Female elderly	Male elderly
household	elderly		
No elderly	62.56	76.33	72.83
1 elderly	22.97	22.68	26.26
2 elderly	13.60	0.95	0.84
3 elderly	0.76	0.04	0.07
4 elderly	0.11	0.00	0.00
5 elderly	0.00	0.00	0.00
All households	100.00	100.00	100.00

TABLE 5: Adult equivalence income per capita levels by gender of elderly household members

# URBAN AREAS

# of elderly	Deaton	OECD	Cutler	Chile	Income
in household	equivalency	equivalency	equivalency	equivalency	per capita
	scale	scale		scale	
None	118,028	149,963	101,759	109,141	93,176
1	119,300	154,938	88,594	114,292	110,114
2	123,369	174,160	85,316	126,139	119,148
3	87,929	134,328	55,008	94,571	84,319
4	45,439	77,167	29,536	52,128	45,314
5	79,844	118,329	40,739	80,540	70,125
Total	118,606	153,174	97,253	111,707	99,007

# of elderly	Deaton	OECD	Cutler	Chile	Income
in	equivalenc	equivalenc	equivalenc	equivalenc	per capita
household	yscale	y scale	y	y scale	
None	61,726	76,175	52,343	55,873	47,773
1	70,339	91,856	54,204	67,803	65,215
2	67,436	95,252	46,601	68,903	64,239
3	80,604	121,386	43,738	84,549	76,384
4	48,940	80,565	33,567	55,012	47,016
5					
Total	64,330	81,938	52,029	60,088	53,567

## TABLE 6: HOUSEHOLD POVERTY RATES

Poverty line = \$30,100 pesos pc (using adult equivalence scales) by gender of elderly household members

# URBAN AREAS

# of elderly	Deaton	OECD	Cutler	Chile	Income
in	equivalenc	equivalenc	equivalenc	equivalenc	per capita
household	yscale	y scale	y	y scale	
None	16.0	10.1	23.8	19.8	28.9
1	10.7	6.1	25.3	12.3	17.2
2	9.7	3.5	29.8	9.2	13.5
3	5.1	2.4	30.3	4.0	6.8
4	2.0	0.0	42.6	2.0	2.0
5	0.0	0.0	69.7	0.0	0.0
Total	14.3	8.6	24.7	17.2	25.0

# of elderly	Deaton	OECD	Cutler	Chile	Income
in	equivalenc	equivalenc	equivalenc	equivalenc	per capita
household	yscale	y scale	y	y scale	
None	36.3	23.6	49.8	42.2	56.6
1	29.2	17.1	52.3	31.6	38.1
2	24.6	9.8	57.4	22.8	31.4
3	20.2	4.6	55.0	18.9	23.6
4	15.1	12.2	35.8	15.1	15.1
5					
Total	33.3	20.5	51.2	37.5	49.5

TABLE 7: Proportion of INDIVIDUALS below the poverty line (\$30,100 pesos pc) by age and gender (using adult equivalence scales to calculate per capita income)

## **URBAN AREAS**

age group	Deaton	OECD	Cutler	Chile	Income
	equivalency	equivalency	equivalency	equivalency	per capita
	scale	scale	scale	scale	
Males 0 -17	20.4	13.5	35.1	26.3	40.2
Fem 0 -17	20.0	13.2	34.2	26.0	40.0
Males 18-59	14.3	7.5	21.7	16.1	24.6
Fem 18-59	15.3	8.5	23.4	17.5	26.6
Males 60+	9.5	3.8	25.9	9.6	14.4
Fem 60+	10.5	5.5	29.0	11.3	15.6

# of elderly	Deaton	OECD	Cutler	Chile	Income
in	equivalency	equivalency	equivalency	equivalency	per capita
household	scale	scale	scale	scale	
Males 0 -17	42.7	29.2	63.2	50.9	69.5
Fem 0 -17	43.4	30.4	64.1	52.1	70.6
Males 18-59	34.1	18.6	47.8	36.6	50.9
Fem 18-59	38.0	21.4	52.6	41.4	55.8
Males 60+	26.6	13.1	52.9	26.4	34.1
Fem 60+	44.1	33.6	49.5	44.4	47.4

TABLE 8: Proportion of ELDERLY INDIVIDUALS below the poverty line (\$30,100 pesos p.c.) by age and gender (using adult equivalence scales to calculate per capita income)

## URBAN AREAS

age group	Deaton	OECD	Cutler	Chile	Income
	equivalenc	equivalenc	equivalenc	equivalenc	per capita
	yscale	y scale	у	y scale	
Males 60-70	9.8	4.1	20.3	10.1	15.1
Fem 60-70	10.2	5.2	24.1	11.1	15.1
Males 71+	9.0	3.2	36.1	8.8	13.1
Fem 71+	10.9	6.1	37.1	11.5	15.4

# of elderly	Deaton	OECD	Cutler	Chile	Income
in	equivalenc	equivalenc	equivalenc	equivalenc	per capita
household	yscale	y scale	y	y scale	
Males 60-70	28.6	15.3	46.2	28.1	36.3
Fem 60-70	26.6	13.5	49.2	26.6	33.6
Males 71+	23.7	9.7	62.7	23.9	30.9
Fem 71+	26.3	12.3	68.0	27.7	35.0

TABLE 9: In what types of families do elderly men and women live?

# URBAN

	Unipersonal	Nuclear	Nuclear/adult	Extended
Male 0 –17	0.07	66.69	0.34	32.90
Fem $0 - 17$	0.16	65.98	0.43	33.43
Male 18 – 39	2.06	59.46	5.14	33.35
Fem 18 – 39	2.72	58.46	3.36	35.45
Male $40 - 59$	2.39	64.64	4.12	28.85
Fem 40 – 59	3.87	55.71	4.99	35.43
Male elderly	7.16	37.23	12.81	42.81
Female elderly	13.05	21.62	12.83	52.50

# RURAL

	Unipersonal	Nuclear	Nuclear/adult	Extended
Male 0 –17	0.05	68.34	0.73	30.87
Fem $0 - 17$	0.12	67.75	0.73	31.40
Male 18 – 39	2.32	58.84	7.31	31.52
Fem 18 – 39	1.31	63.00	3.16	32.52
Male 40 – 59	5.25	59.00	4.98	30.77
Fem 40 – 59	2.53	54.75	6.08	36.63
Male elderly	9.60	36.56	12.10	41.74
Female elderly	9.79	26.45	13.90	49.85

TABLE 10: Proportion of elderly population below the poverty line (\$30,100 pesos p.c.) by living arrangement

## URBAN

	Deaton equivalency scale	OECD equivalency scale	Cutler equivalency	Chile equivalency scale	Income per capita
Living					
arrangements					
Male elderly					
Uniperson	6.6	6.6	28.5	9.1	6.6
Nuclear	7.5	2.3	22.9	7.6	8.7
Nuclear/adult	8.0	3.4	17.2	7.0	8.7
Extended	12.3	4.8	30.8	12.3	22.2
Female elderly					
Uniperson	7.7	7.7	30.2	9.8	7.7
Nuclear	6.8	1.9	25.6	6.7	7.3
Nuclear/adult	9.4	3.7	21.9	8.3	0.1
Extended	12.9	7.0	31.9	14.2	22.4
Non- elderly*					
Uniperson	7.7	7.8	7.7	9.1	7.8
Nuclear	15.1	8.8	22.0	18.4	26.6
Nuclear/adult	8.7	3.1	14.4	7.3	9.8
Extended	16.3	7.7	26.8	17.1	28.5

<sup>\*</sup> above 16 years of age

Table 10: cont

# RURAL

	Deaton equivalency scale	OECD equivalency scale	Cutler equivalency	Chile equivalency scale	Income per capita
Living					
arrangements					
Male elderly					
Uniperson	22.0	22.0	48.6	24.1	22.0
Nuclear	21.9	11.5	46.6	21.3	24.7
Nuclear/adult	25.8	7.1	45.9	22.3	25.6
Extended	32.0	14.1	61.4	32.6	47.4
Female elderly					
Uniperson	19.8	19.8	62.9	26.7	19.8
Nuclear	19.7	9.4	48.9	18.5	20.9
Nuclear/adult	29.7	9.6	53.6	26.8	30.0
Extended	30.5	14.5	61.0	31.7	45.3
Non- elderly*					
Uniperson	12.5	12.5	12.5	14.7	12.5
Nuclear	36.3	23.2	49.4	41.9	55.7
Nuclear/adult	26.6	9.1	38.7	25.1	28.8
Extended	39.5	17.7	57.6	39.8	57.6

<sup>\*</sup> above 16 years of age

**Table 11: Individual Income Sources of the elderly** 

URBAN

Elderly women

Elderly men

		y women	Etherty men		
	% with income	Average amount	% with income	Average amount	
	source	(of those with	source	(of those with	
		income source)		income source)	
Salaried work	11.2	93,962	37.8	153,204	
Inputed rent from					
owner-occupied	37.7	31,007	72.2	36,107	
housing					
Own pensions	59.7	71,859	70.1	124,703	
Old age *	30.9	78,413	62.0	133,160	
Dissability *	4.5	48,363	5.6	64,233	
Survivor's *	19.4	77,206	1.2	125,943	
(PASIS) *	6.2	15,139	3.2	15,835	
Total Income	73.5	108,161	97.9	226,814	

<sup>\*</sup> included in the own pensions calculation

**RURAL** 

Elderly women Elderly men

	% with income	Average amount	% with income	Average amount (of those with
	source	`	`	
		income source)		income source)
Salaried work	6.1	70,003	41.4	92,102
Inputed rent from				
owner-occupied	32.2	13,775	64.6	18,795
housing				
Own pensions	60.2	36,515	64.9	59,085
Old age *	18.8	55,193	46.2	70,028
Dissability *	6.9	32,304	7.5	46,418
Survivor's *	14.5	40,754	0.8	50,751
(PASIS) *	23.3	14,912	14.2	15,001
Total Income	74.2	56,045	97.6	134,606

<sup>\*</sup> included in the own pensions calculation

Table 12: Contribution of income sources to total household income

URBAN

Elderly women

Elderly men

		<i>y                                    </i>		19	
	% with income	Share of total	% with income	Average amount	
	source	household	source	(of those with	
		income (of those		income source)	
		with income			
		source)			
Salaried work	11.2	26.6	37.8	35.3	
Inputed rent from					
owner-occupied	37.7	17.6	72.2	12.9	
housing					
Own pensions	59.7	35.7	70.1	43.7	
Old age *	30.9	36.2	62.0	44.7	
Dissability *	4.5	32.0	5.6	39.8	
Survivor's *	19.4	36.8	1.2	48.5	
(PASIS) *	6.2	18.6	3.2	19.1	
Total Income	73.5	47.2	97.9	62.1	

<sup>\*</sup> included in the own pensions calculation

**RURAL** 

Elderly women

Elderly men

	Liucity women		Diucity men		
	% with income	Share of total	% with income	Share of total	
	source	household	source	household	
		income (of those		income (of those	
		with income		with income	
		source)		source)	
Salaried work	6.1	27.0	41.4	31.0	
Inputed rent from					
owner-occupied	32.2	13.0	64.6	10.8	
housing					
Own pensions	60.2	31.3	64.9	40.4	
Old age *	18.8	37.3	46.2	43.6	
Dissability *	6.9	31.5	7.5	35.4	
Survivor's *	14.5	37.4	0.8	36.7	
(PASIS) *	23.3	18.2	14.2	22.3	
Total Income	74.2	43.0	97.6	64.2	

<sup>\*</sup> included in the own pensions calculation

Table 13: Elderly males raise the <u>extended household</u> pc income, elderly females tend to lower it.

#### Urban areas

	Elderly males			Elderly Females		
Effect on the		Houshls.	Average		Houshls.	Average
extended household		in	change in		in	change in
per capita income	100	Poverty	income per	100	Poverty	income
(YN-YNa)			capita			per capita
Increase	85.0	12.9	32,376	44.3	19.4	18,917
Reduce	15.0	9.1	-14,054	55.7	9.9	-24,814

#### Rural areas

	Elderly males			Elderly Females			
Effect on the		Houshls.	Average		Houshls.	Average	
extended household		in	change in		in	change in	
per capita income	100	Poverty	income per	100	Poverty	income	
(YN-YNa)		•	capita			per capita	
Increase	84.3	33.2	20,214	41.9	43.1	12,156	
Reduce	15.7	29.4	-11,198	58.1	22.9	-13,060	

YN= Household Income/Household Members