Argentina's Crises and the Poor, 1995-2002

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Abstract

This paper documents the impact of Argentina's recent economic crises on different aspects of poverty, with a special focus on the economic collapse of 2002. We discuss the methodology of poverty measurement in Argentina and we use a simple rule to compensate for the lack of regional poverty figures until 2001, providing consistent series of urban poverty estimates at the national and regional levels. We then present series of short term dynamics of poverty, decomposing the changes in every period of time with panel data. Finally, we analyse the determinants of poverty, with a focus on accounting for observed differences in income (and thereby poverty) between October 2001 and May 2002. Among other conclusions, we find in our decomposition analysis that households without the means to diversify their income sources suffered more than others from the crisis of 2002.

Keywords: Poverty, Unemployment, Argentina.

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1 Introduction

In the first half of 2002, Argentina was hit by a crisis that can be traced back to a combination of a lack of fiscal discipline and the adoption of an exchange rate parity with the US dollar in the nineties, among other factors. After a lost decade in the eighties that ended in hyperinflation, Argentina pegged its currency to the US dollar in 1991 (the Convertibility Plan). A period of relative stability ensued between 1991 and 1994, but the Convertibility's currency board made the economy vulnerable to external shocks. A first shock took place in 1995, following the devaluation of Mexico's currency. After a brief recovery, the country was hit again by Brazil's devaluation in January 1999. The lack of competitiveness of Argentina's economy combined with large increases in public spending in the nineties,[1] and the resulting difficulty to service the country's external debt led to the decision in early 2002 to putting an end to the parity between the Argentine peso and the US dollar. This almost unavoidable measure led the country's economy to collapse. The peso lost nearly 70 per cent of its value against the US dollar from January to August 2002, social unrest and political instability ensued, and the subsequent fall in confidence and productive activity resulted in a fall in the Gross Domestic Product of 10.9 per cent during 2002. Inflation soared, real wages fell, and poverty rates exploded. Our aim is to analyze the evolution of poverty during the turbulent period 1995-2002, with an emphasis on the last year.

The Instituto Nacional de Estadisticas y Censos (INDEC) reported that in May 2002, 53% of the population lived in poverty, a rate 15 percentage points higher than that of October 2001. The share of the population living in extreme poverty increased similarly during the crisis. The movements in poverty and extreme poverty mirrored a dramatic fall in household income, and a clear deterioration of labor market conditions. In May 2002 the unemployment rate topped 21.5 percent, 5.1 percentage points over the October 2001 rate. It is also likely that a larger share of the population became un-

[1] This also happened in other Latin American countries; see CEPAL, 2001.

deremployed or worked part-time due to the lack of good full-time jobs, and that some workers tried to combine various jobs in order to make ends meet (Kritz, 2002).

There is a substantial literature on income distribution and poverty in Argentina. FIEL (1999) contains a series of papers covering many different aspects related to household welfare, and Gasparini *et al.* (2001) provide a very good long term perspective from the mid-seventies to the end of the nineties. These studies, however, do not document the collapse of the economy in 2002.

The purpose of this paper is to establish a baseline measurement and some stylized facts on poverty trends, determinants and dynamics, as part of a broader set of papers covering related issues for the same period in Argentina. These contributions examine movements in and out of poverty in more detail, and provides a decomposition of poverty into its transient and chronic components (Cruces and Wodon, 2002). They also analyze the impact that shocks, or more broadly risk, plays in reducing income levels and increasing poverty under the assumption that households are risk averse (Cruces and Wodon, 2003).[2]

The paper is organized as follows. Section 2 discusses methodological issues of poverty measurement in Argentina. We extend INDEC's methodology, going back further in time to expand the geographic coverage of poverty estimates. Section 3 builds on these comparable series of poverty measures, discussing trends for various regions and for the country as a whole from 1995 to 2002. We also provide a decomposition of poverty dynamics at the national level. Finally, Section 4 develops a regression analysis of the determinants of equivalent adult income and poverty, which constitutes the basis of a Oaxaca-style decomposition of changes in mean income over time. Conclusions follow.

[2] The former paper applies a decomposition developed by Jalan and Ravallion (2001), while the latter uses a methodology developed by Makdissi and Wodon (2003).

2 The measurement of poverty in Argentina

2.1 The data and the income aggregate

This section discusses the data used in this paper and some methodological issues for the measurement of poverty in Argentina. The poverty measures, regressions and decompositions presented in this paper are based on the Argentine Permanent Household Survey ("Encuesta Permanente de Hogares" – EPH). The survey is collected in urban areas every year by INDEC in May and October, and is representative of urban Argentina (approximately 80% of the total population).[3] While the structure of the survey is a rotating panel where 25% of the sample is replaced in each round, we only exploit this feature of the data when presenting the short term dynamics and the decomposition of poverty transitions. Following INDEC's methodology, in our basic poverty estimates and the analysis of the determinants of income and poverty we consider the data as repeated cross-sections. We use the fifteen survey rounds available between May 1995 and May 2002.

Three components are necessary for estimating poverty: an income or expenditure estimate,[4] a poverty line, and a poverty measure. The latter is simply a device to aggregate the information on poverty obtained at the household level into a regional or national estimate. While we construct our own series of regional poverty lines, we follow INDEC's measurement methodology to ensure consistency between our own and official numbers. We thus provide a critical review of each of these components, highlighting

[3] While poverty estimates based on the EPH are ususally called "national", as will be done in this paper, it should be stressed that the survey only covers large urban centers. A small but non negligible fraction of the population resides in rural areas, and unfortunately relatively little is known about them. Fiszbein, Giovagnoli, and Aduriz (2003) conducted a special survey after the 2002 crisis, and report information on relatively small rural towns. Finally, the 1997 Encuesta de Desarrollo Social, conducted by SIEMPRO and INDEC, is a valuable source of information on rural areas, but there is no systematic data collection covering the welfare of countryside residents.

[4] Consumption estimates based on expenditure data are a proxy for permanent income, and as such they are usually considered better metric of household welfare. The EPH, however, is mainly a labor markets survey and it does not collect this type of information. Expenditure surveys are only carried out every ten years in Argentina

some methodological issues that arise on poverty measurement in Argentina.

Consider first the income aggregate. The issue of aggregating income at the household level is not trivial. Many poverty reports are based on per capita income, but its problem as an indicator of well being is that it does not allow for economies of scale in the household, nor for differences in needs between members. By ruling out economies of scale, the analyst considers that the needs of a family of eight are exactly twice the needs of a family of four. With economies of scale, a family of eight having twice the income of a family of four would be judged better off than the family of four. Thus, not allowing for economies of scale tends to over-estimate the negative impact of family size on poverty (Lanjouw and Ravallion, 1995).

Moreover, by ruling out differences in needs between household members, the analyst does not consider the fact that larger households with many children may not have the same needs per capita than smaller households: the needs of infants and children tend to be lower than those of adults. In other words, measures of poverty based on per capita income rely on the estimation of the cost of basic needs for an "average" individual, but very large families do not consist of average individuals because they tend to have many infants and children. Thus, not considering differences in needs may also lead to an over-estimation of the impact of the family size, through the number of infants and children, on poverty (Coulter et al., 1992; Cowell and Mercader-Prats, 1999).

INDEC's methodology deals with the issue of differences in needs, but not with economies of scale (INDEC, 2002). The extreme poverty or indigent poverty line used by INDEC is based on the cost of a normative basic food basket, but an assessment of differences in needs is taken into account. Specifically, the caloric requirements of various types of household members are differentiated by INDEC according to age and gender, as shown in Table 1 which is reproduced from Morales (1988). For example, a 30 to 59 year old men is assumed to need 2,700 kcal per day, while a two year old girl or boy is assumed to need only 1,360 kcal per day, in which case in comparison to the 30-59 year old man, the two year old boy or girl represents only 0.5

equivalent adult.

Using Table 1, INDEC constructs the adult equivalent income aggregate for each household by first summing up the income of all members living in the household, and then dividing the total household income by the total number of adult equivalents. Denoting by k_i the number of members in household i, by ψ_j the income of each one of them ($j = 1, ..., k_i$) and by q_j the coefficient of equivalent adult corresponding to the age and gender of the member, INDEC's adult equivalent income for household i, y_i, is defined as

$$y_i = \frac{\sum_{j=1}^{k_i} \psi_j}{\sum_{j=1}^{k_i} q_j} \tag{1}$$

While not dealing directly with economies of scale at the household level, this income aggregate is still better than the use of income per capita for poverty measurement. We should stress, however, that this is the case for official figures – some practitioners in Argentina incorporate economies of scale into their income aggregates (see for instance Gasparini and Sosa Escudero, 1998 and Gasparini, 1999). We chose however to follow INDEC's methodology in order to provide estimates comparable with the official figures.

There is one further issue regarding income aggregates: the treatment of zero observations. In order to keep our poverty numbers consistent with the official measures, the observations with zero income considered "valid" by INDEC are used in the estimations below.[5]

2.2 Regional heterogeneity and poverty lines

The second component of poverty estimation is the establishment of a poverty line, which serves as a threshold for the relevant income aggregate. Most im-

[5] Our inclusion of a relatively small number of obsevations with zero income in the sample differs from the methodology adopted by Lee (2000). In a background paper for a Poverty Assessment prepared by the World Bank (2000), Lee discarded all observations with zero income. Moreover, a small fraction of the districts of the Greater Buenos Aires area (GBA, hereafter) were incorporated to the sample only in 1998 – we follow INDEC in excluding those observations to keep the historical series consistent.

portantly, poverty lines should be allowed to vary between regions, reflecting geographic differences in prices and in the purchasing power of income. We now turn to INDEC's methodology on poverty lines and to our own approach to fill in the gaps in regional estimates.

INDEC constructs extreme poverty lines, which represent the cost of a basic food basket. Moderate poverty lines are then computed with the inverse of the observed Engel curve coefficient to incorporate the cost of basic non-food goods (see INDEC, 2002, for details, and Ravallion, 1998, for an in depth discussion).

In terms of geographic coverage, while the EPH is collected in most major urban areas of the country, until May 2001 INDEC only estimated poverty lines for the GBA area. Thus for the period prior to May 2001 there are no continuous official regional and national poverty numbers in Argentina. Since 2001, INDEC has been computing official regional extreme poverty lines using a "transition methodology" based on purchasing power parity estimates across regions.[6]

Our aim is to complement INDEC's effort to provide regional and nation-wide urban poverty measures for the period 1995-2000, using regional poverty lines that take into account the heterogeneity in costs of living.

We rely on a simple rule in order to be closer to the spirit of the existing official estimates of poverty by INDEC. We simply compute the rate of change of the GBA poverty line over the period May 1995-May 2001, presented in the Appendix as the "implicit GBA poverty line deflactor". We then take the May 2001 official regional poverty (and extreme poverty) lines, and apply the GBA rate of change to obtain values for the previous years.

Our simple rules departs from previous efforts to compute regional poverty lines. In a background paper for the World Bank Poverty Assessment, Lee (2000) computed poverty lines at the regional level up to October 1998. The author started from the official INDEC basic food basket for the GBA area (the extreme poverty line), and adapted this basket for regional patterns

[6] A note on the transition methodology is available on INDEC's website: http://www.mecon.indec.gov.ar

of consumption of the lower quintiles using data from the latest available consumption survey. This represented an advance for poverty measurement in Argentina because for the first time estimates of poverty in urban areas outside of the GBA area were made available.

An apparent drawback is that our rule is clearly less sophisticated than Lee's computations or INDEC's "transition methodology". We are implicitly assuming that the change in poverty lines over time in all regions is the same as the change in the GBA poverty line during the period 1995-2001. While this is a strong assumption and may lead to some bias in regional poverty comparisons, we argue that this bias is likely to be small. Using Lee's (2000) estimates as a benchmark for the period 1995-1998, the differences between his poverty rates and ours are small, and the trend is not affected.

Even if our regional poverty lines are based on a simplifying assumption, their main advantage is that they provide consistency and continuity with INDEC's estimates for 2001 and onwards. In that sense, our estimates can be considered a complement to the national poverty estimates found in World Bank (2000).

2.3 Measures of poverty

With an adequate income aggregate and a set of regional poverty lines, it is straightforward to estimate the poverty measures at the national and regional level.

We compute decomposable poverty measures defined by Foster, Greer and Thorbecke (1984). Denoting by n the number of individuals or households in the sample, z the (region-specific) poverty or extreme poverty line, and y_i the adult equivalent income defined in equation (1), we compute a series of measures defined as

$$FGT\left(y,z,\alpha\right)=\frac{1}{n}\sum_{y_i<z}^{n}\left(\frac{z-y_i}{z}\right)^{\alpha}, \tag{2}$$

With the parameter set to $\alpha = 0$, we obtain the poverty (or extreme

poverty[7]) headcount. With $\alpha = 1$ and $\alpha = 2$, we obtain the poverty gap and the squared poverty gap, which take into account not only the number of poor butalso the intensity of poverty. INDEC focuses only on the headcount indices of poverty and extreme poverty, which are simply the shares of the population with adult equivalent incomes below the poverty and extreme poverty lines.

In the next section, we discuss our estimates for the regions and the country as a whole over the period 1995-2002, and we include estimates of poverty for the period which were not calculated previously, filling the gaps left by the lack of official 1995-2000 regional poverty lines.

3 Poverty trends and dynamics, 1995-2002

3.1 Income, prices an poverty lines

This section presents our main empirical results for poverty. We will first discuss the evolution of the two main components of poverty measurement, the income aggregate and the poverty lines. We then describe the regional and national poverty trends. The final subsection deals with the simple short term dynamics of poverty over the period 1995-2002.

As mentioned in the introduction, the years 1995-2002 were marked by the impact of repeated shocks to the Argentine economy. In 1994-95, the country was severely affected by contagion of the crisis that followed the devaluation of the Mexican currency, after which the economy entered in a period of recovery for approximately two years. This recovery came to an end when Brazil, Argentina's main trading partner, devalued its currency in January 1999. This episode marked the beginning of a three year recession that ended in the crisis that ensued from December 2001.

Figure 1 presents the evolution over time of the national average of our main income aggregate, the average nominal and real adult equivalent in-

[7] The terms indigent / indigence are synonimous of extreme / extremely poor. Both will be used in this paper.

comes over time.[8] The impact of the different crises and recoveries can be clearly appreciated in the evolution of adult equivalent income, which fell from almost 4% from May 1995 until October 1996. It recovered briefly until May 1998, but from then on both nominal and real income fell continuously, with the sharpest decrease corresponding to the financial crisis of 2002 (the May 2002 round in our data).

For illustration, Figure 1 also depicts the trend in unemployment over time. During the "Tequila crisis", the unemployment rate reached very high levels, with a peak of 18.8% in May 1995, and persistent effects until October 1996. Thereafter, unemployment fell, with the lowest level of 12.4% observed in October 1998. From that point onwards, unemployment increased again, mirroring the evolution of income, with the largest increase of more than 3 percentage points occurring over the last six months of the period under study.

Figure 2 provides information on the trends of real adult equivalent income by region. It appears from the figure that the GBA and Patagonica areas had the highest levels of income over the whole period, followed by Pampeana, Cuyo, the Noroeste (Northwestern), and finally the Noreste (Northeastern) regions. While there are large regional differences in income levels, the time trends are nevertheless similar for the all regions.

We now turn to the second main component of poverty measurement. The regional poverty lines discussed in Section 2 are depicted in Figure 3, along with the Consumer Price Index (CPI). The poverty lines in Figure 3 roughly follow the trend in the CPI for most of the period. For example, from October 1998 to October 2001 the poverty lines and the CPI fall in a similar manner, reflecting the deflationary pressures of the recession, which also explain why nominal income was above real income in Figure 1.

There is, however, a sharp increase in real terms of the poverty lines for

[8] Real values are adjusted for the Consumer Price Index (CPI), and correspond to September 2001 prices.

The CPI, poverty lines, poverty and equivalent income estimates, and the data underlying all the figures are available in the Appendix to this paper. Note that all the estimates are obtained with INDEC's sample weights.

the last six months of the period under study corresponding to the 2002 crisis. For instance, in the GBA area while both the CPI and poverty lines increase substantially. The rise in real terms is approximately 7.5% from October 2001 to May 2002. This is illustrated in Figure 3 by the bold line, which goes up sharply in the last period. This reflects the fact that the increase in the cost of goods consumed by the poor was larger than the overall increase in the CPI, hitting the poor more than the rest of the society. The adjustments in the consumption baskets of the poor is left for future research.

3.2 Poverty trends

After this brief description of the evolution of adult equivalent income and regional poverty lines, we can turn to the poverty estimates given by Equation (2). The resulting headcounts of poverty and extreme poverty (indigence) at the national level are given in Figure 4, corresponding to the measure of Equation (2) with $\alpha = 0$ and z set to the poverty and extreme poverty lines respectively.[9]

We provide these measures both at the levels of households (share of households in poverty or extreme poverty) and individuals (share of individuals in poverty or extreme poverty), as done by INDEC. As it is usually the case, the proportion of individuals under poverty/extreme poverty lines is always higher than the proportion of households, reflecting the fact that poor households tend to have more members than non-poor households (see discussion of economies of scale in Section 2).

The trends in poverty are clearly affected by the series of crisis, recovery, recession and crisis discussed above. During the Mexico crisis, from May 1995 to October 1996, the poverty and extreme poverty headcounts increased significantly. Poverty fell slightly from October 1996 until May 1998, during the recovery that followed the "Tequila effect".

[9] As INDEC, we will discuss only poverty headcounts. We also computed the poverty gap and squared poverty gap measures for each region, which are available in the Appendix. For the sake of brevity we will not discuss these measures, since their trends are very similar to those observed for the headcount.

May 1998 is clearly the turning point in our data. From that period on, the individual-based poverty headcounts increased steadily from 28.6% to 38.3% in October 2001, with a roughly similar trend for extreme poverty and for household-based measures. Even without considering the financial crisis of 2002, an increase in poverty of 10 percentage points in only three years is clearly remarkable. Moreover, the proportion of the population in extreme poverty doubled over the same period, from 6.8% to 13.6%, reflecting the worsening of the labor market conditions and economic activity during the recession.

While the rise in poverty during the 1998-2001 recession is extraordinarily large, the period from October 2001 to May 2002 (covering the economic crisis of 2002) deserves a separate analysis. The previous figures are useful to understand the basic factors behind the explosion of poverty in such a short period of time. At the national level, the individual-based poverty headcount jumped from 38.3% to a staggering 53% (13.6% to 24.8% for extreme poverty), with household measures following the same upward trend. The factors behind this jump in poverty rates are the sharp increase in prices and hence poverty lines (Figure 3), coupled with the fall in real and nominal income of the households (Figure 1). As households' income fell and prices rose, a larger fraction of the population ended up classified as poor. The analysis of the determinants of poverty will be developed in Section 4.

Finally, Figure 5 presents a consistent series of individual-based headcounts of poverty for the various regions during the whole period.[10] The regional ranking of adult equivalent income (Figure 2) is reversed for poverty measures: as for income, there are significant differences in poverty within the country, with the GBA and Patagonica areas faring systematically better, and the North (East and West) being consistently poorer than the rest of the country. Through most of the period under review, the ranking of the regions in terms of poverty estimates did not change, with fairly similar re-

[10] Note again that while our regional measures match the INDEC numbers from 2001 onwards, for 1995-2000 the poverty rates for the country as a whole and for each region were constructed using the methodology described in Section 2.

gional trends. In proportional terms, however, the increase in poverty in the GBA area from October 2001 to May 2002 was larger than the rise observed in the other regions.

We now turn to an overview of the dynamic component of these trends.

3.3 Poverty transitions and short term dynamics

With our consistent poverty figures we can describe the patterns of poverty trends and dynamics for the whole country from 1995 to 2002. We construct our poverty transition figures by exploiting the rotating panel nature of the EPH, which allows us to follow households for up to four periods. This feature of the survey has been under-exploited in poverty analysis in Argentina, of which Paz (2002) constitutes a rare exception.[11] We will focus only on transitions between two periods only, following households for six months and providing basic descriptive statistics and trends. Cruces and Wodon (2002) contains a more complete analysis of poverty dynamics and decompositions between transient and chronic poverty in Argentina during the same period, and Cruces and Wodon (2003) use longer panels with four observations per household to construct risk-adjusted measures of income and poverty.

Figure 6 presents our main poverty dynamics results. The figure provides a decomposition of poverty at each round of the EPH.[12] Starting from October 1995, it displays the proportion of poor individuals as a function of the poverty status in the previous round. The lines in the graph correspond to the proportion of the population in one of four transition categories: the non-poor who stayed non-poor, the poor who stayed poor, the poor who

[11] While not often used for poverty analysis, the EPH panel is more common in the labor market literature for Argentina (see for instance Galiani and Hopenhayn, 2000). Lavergne et al. (1999) discuss the variability of income at the individual level with the same source of data.

[12] Note that the poverty rates are slightly different from the ones presented above, because we are using a different sample. This is due to the nature of the rotating panel, in which we can only keep trace of at most 75% of the households in the subsequent round. While many households stay in the sample for four rounds, we ignored this extension and matched households in one round intervals. Cruces and Wodon (2003) argue that the attrition effect is not important, at least for poverty headcounts.

escaped poverty, and the non-poor who became poor in the following period.

There are several ways to interpret Figure 6. It can be thought of as a decomposition of total poverty (also shown in the figure) into those who stayed poor and those who became poor. On the other hand, we can interpret it as a decomposition of the non-poor in two groups, those who stayed non-poor and those who escaped poverty. Finally, we can also obtain the change in poverty between two rounds of the EPH from this graph, since this is simply the proportion of those who entered poverty minus the proportion of those who escaped poverty (for this reason, the latter rate appears as negative in the figure).

Figure 6 complements the main poverty trends in Figure 4. Excluding the last rounds covering the financial crisis, which will be discussed separately, the proportions of people switching poverty status is fairly stable and relatively high when compared to the absolute changes in poverty. In each round, an average of 7% to 8% of the population manages to escape poverty, while an average of 8% to 9% of the population enters poverty. This high volatility in movements in and out of poverty is not evident in the static cross-sectional poverty trends, since the resulting net changes in poverty (until May 2001) are comparatively modest (changes in total poverty were never higher than 2.4 percentage points before the crisis of 2002).

Despite this relatively high and stable levels of switching in poverty status, the worsening of the economic conditions over the period is still evident in the almost continuous increase in the proportion of the poor who stayed poor (excluding the brief recovery period of 1997/1998). The proportion of the non-poor who stayed non-poor was fairly stable between 60% and 65% of the population until May 2000, but after that point it started to decline.

Figure 6 is especially informative with respect to the effects of the financial crisis of 2002. We can appreciate that the recession and the subsequent crisis of 2002 affected not only the levels of poverty but also its persistence. As poverty increased drastically towards the end of the period under study, there was also a dramatic change in the pattern of dynamics.

The proportion of the individuals who were poor and remained poor in-

creased from 26.4% between the rounds of October 2000-May 2001 to 36.6% between October 2001 and May 2002. Moreover, 18.3% of the population was non-poor in October 2001 and became poor in May 2002, compared to an average of about 8% to 9% for the previous rounds. Lastly, as a share of the total population, the poor who stayed poor (fairly stable between 60 and 65% in previous periods) reached a level of only 42.6% for the last period.

Finally, we provide some evidence on movements within the poor. Table 2 presents more detailed information on dynamics for the period 1995-2002 by decomposing the population and reporting transitions with respect to three subgroups (as opposed to only two subgroups in Figure 6): the non-poor, the moderately poor and the indigent or extremely poor.

It is interesting to observe that there is also considerable mobility within the poor, with an average of around 3% of the population switching between indigence and poverty (or vice versa) in every round of the EPH. From May 1998 onward however, there is a clear and continuous increase in the share of individuals who were moderately poor and became indigent. As expected, there is very little switching between the indigent and non-poor categories, with the exception of the last round in which 4% of the population are classified as indigent but were non-poor in the previous round.

While covering only short term dynamics, the results presented in this section are broadly consistent with the medium term estimates reported in Cruces and Wodon (2002). We now turn to the analysis of poverty determinants.

4 Determinants of poverty

4.1 Estimation and descriptive statistics

After the lengthy discussion of poverty measurement and results, we will provide a brief analysis of the determinants (or correlates) of poverty.

We estimate linear regression models for the logarithm of the adult equivalent income of households normalized by the household's poverty line. Denoting by X_i the vector of independent variables for household i, and as

before by y_i the adult equivalent income of this household,[13] we estimate the following regression

$$\log(y_i/z) = \alpha + X_i\beta + \varepsilon_i, \tag{3}$$

The advantage of using linear regressions over probits and logits of poverty status is that we can avoid the specification problems occurring with the non-linear models. Moreover, the model in equation (3) is equivalent to computing the probits or logits since it is still straightforward to compute the probability of being poor from the linear regressions models (e.g., Ravallion and Wodon, 1999):

$$\Pr[\log y_i/z < 0|X_i] = \Phi[-(\alpha + X_i\beta)/\sigma]. \tag{4}$$

where σ is the standard deviations of the errors in the regression, and Φ the cumulative density of the standard normal distribution.

The independent variables X_i in the regressions include (a) household level variables, including the number of babies, children, adults, and elderly household members, and their square, whether the household head has a spouse, whether the household head is a woman, the age of the head and its square, and the migration status of the head (in the last five years); (b) characteristics of the household head, including his/her level of education; whether he/she is unemployed or inactive; whether he/she is an employer, a self-employed worker, or a wage worker; the type of his/her qualification, and whether he/she works in the public; and (c) the same set of characteristics for the spouse of the household head, when there is one. In addition, we include geographic dummies for five of the six regions mentioned previously, with the GBA area serving as reference.

The regressions are estimated for four of the 15 rounds of the period under study, namely October 1995 (the first round, corresponding to a reces-

[13] In each of the four rounds we use, we have a proportion of 1.6%, 1.2%, 2.4% and 3.6% households reporting valid zero incomes. These households were assigned a normalised income of 1% of the poverty line, lower than the lowest reported income, so that they are included in the semi-log regression.

sion year), October 1998 (corresponding to the peak of the recovery), October 2001 (corresponding to the situation of the country after three years of recession), and May 2002 (a few months after the collapse of the currency).

Table 3 presents the mean of the variables used for the regression.[14] The sample mean for the logarithm of the adult equivalent income is 0.599 in October 1995 (corresponding to a mean income of 2.87 times the poverty line), 0.634 in October 1998 (mean income of 3.03 times the poverty line), 0.452 in October 2001 (mean income of 2.77 times the poverty line), and 0.029 in May 2002 (mean income of 1.975 times the poverty line). Most of the variables are categorical, so that the mean represents the share of the sample population with these characteristics. Instead of describing these summary statistics, we turn to the discussion of the regression results, which will inform us about the effect of each of these variables on income in a multivariate context.

4.2 Regression results and decomposition

Table 4 presents the results of the estimation of the model described in Equation (3) for different rounds of the EPH. These results are fairly typical of income regressions and poverty profiles. A larger number of infants, children, or adults in the household (or more generally a larger household size) leads to a reduction in the expected adult equivalent income. The coefficients of the linear variables for the number of family members of various ages are negative, while those of the squared terms are positive, suggesting that the impact is decreasing at the margin. Note however that in the case of elderly household members, the impact is not statistically significant in the first two regressions, and positive rather than negative in the last two regressions. This suggests that households with elderly members may have been better protected from the crisis than other households, perhaps because they rely more on pensions (that were paid during the crisis) than labor income, which fluctuated much more. Part of the impact of age is also

[14] The same results for the non-poor, the moderately poor and the extremely poor are available in the DP version or upon request from the authors.

captured through the age-group indicators for the head, which also suggest that households with elderly heads tend to be better off than those with younger heads.

Households with female heads tend to be slightly better off, as do households whose head has recently migrated, suggesting that there might not be a negative effect to these characteristics after controlling for human capital and other covariates. By contrast, having a head or spouse inactive or unemployed leads to a substantial reduction in adult equivalent income, and thereby an increase in the probability of being poor. A higher level of education for the head or the spouse leads to higher income, as expected. If the household head is an employer, there is evidence that the household enjoys a higher level of income (this is not observed with the spouse). By contrast, the head (or the spouse in May 2002) being self-employed, working in the informal sector (according to the definition of informality of the International Labor Office), or working in the public sector tends to lead to a lower income. In some cases, however, the coefficients are not statistically significant at the standard levels of confidence. As it is usual in this type of analysis, we find that a higher qualification for the head (and to a lower extent for the spouse) leads to higher income.

Interestingly, not having a spouse in the household leads to a large reduction in income in May 2002, possibly because of the inability for the household to diversify income sources. We will come back to this point when discussing the decomposition of changes in income.

Finally, even after controlling for a wide range of observable household characteristics, there are still large differences in expected adult equivalent income between regions, as first noted in Section 3. Households living in Patagonica have a higher level of income than households living in the GBA area, while households living in Pampeana, Cuyo, and especially the Noroeste and Noreste regions, have lower levels of income.

The results from the regression analysis of income in different periods can be exploited to decompose the effects of changes in mean income over time into changes in the characteristics of households and changes in the returns to

these characteristics. The idea relies on comparing coefficient estimates and mean values for the regressions estimated for these two rounds, so that we can decompose the overall change in income over time into the contribution of changes in returns (changes in coefficient estimates), and the contribution of changes in endowments (changes in household characteristics) – see Oaxaca (1973) and Blinder (1973) for detailed descriptions of the approach.

Table 5 provides the results of a Oaxaca-Blinder-type decomposition of changes in income between October 2001 and May 2002. This allows us to better understand the large fall in household income and dramatic increase in poverty rates observed between October 2001 and May 2002, and to quantify the relative importance of household characteristics and returns.

Perhaps surprisingly, changes in characteristics account only for 7.6% of the total change in income, with changes in returns accounting for the rest (92.4%). Among the changes in characteristics, the increase in unemployment for household head accounts for 6.9 % of the total of 7.6 percent, with other factors explaining the rest of the variation.

Among the changes in returns, economy-wide impacts (the reduction in the constant, plus the changes in the coefficients of the geographic variables) explain 26.9% of the total drop in income. Changes in the "returns" to demographic and related variables account for 7.8% of the total change in income, with most of the impact occurring in the working age population. This probably represents job losses among household members others than the head and spouse, including young adults.

Changes in the coefficient estimates for the household head variables add up to a small impact of 3% over time. By contrast, changes in the returns for the characteristics of the spouse account for a very large 54.8% of the total change in income. More than three fourths of this is due to a larger negative impact of not having a spouse in the household, having an inactive or (to a smaller extent) an unemployed spouse. These findings strongly suggest that households who could not diversify their income sources through earnings from a spouse suffered more than other households from the collapse of the economy in the first half of 2002.

5 Conclusion

This paper documented different aspects of the evolution of poverty in Argentina in the period 1995-2001. In the first place, we discussed the poverty measurement methodology employed in Argentina, highlighting its strengths and weaknesses. We then used a simple rule to construct regional poverty lines for the whole country. With these poverty lines, we computed and discussed national and regional poverty trends and dynamics, focusing on the repeated crises of the period 1995-2001, and especially on the economic collapse of 2002. Finally, we estimated linear regression models of household income which were then used in a Oaxaca-style decomposition of changes in time.

Filling the gap of poverty estimates for the period 1995-2000 by constructing regional poverty lines proved to be rewarding. We were able to account for the significant differences in poverty levels between the regions, which showed that the Patagonica and GBA regions fare systematically better than average, while the Northeast and Northwest are always poorer. While this result is fairly standard in studies of the Argentine economy, our poverty lines allow us to construct consistent poverty trends for the regions for the whole period 1995-2002. We confirmed that while the levels tend to be different, there seems to be a common trend in poverty over the whole country. However, we also observed that the increase in poverty for the last round, corresponding to the 2002 crisis, was proportionally higher in GBA than in other regions.

The regional poverty lines also provide consistent poverty series for the country as a whole during the entire period. Our simple decomposition of current poverty by status in the previous round revealed the nature of poverty dynamics at the national level. We found strong evidence of high volatility in movements in and out of poverty, which are obscured by the comparatively modest changes in total poverty along most of the period under study. There was also significant mobility within the poor, with poor people getting in and out of extreme poverty quite frequently.

The overall upward trend in poverty during the period is clearly reflected

in the almost constant increase in the proportion of the population being poor and staying poor in the following round of the survey. Finally, the 2002 crisis seems to have increased not only the levels but also the persistence of poverty, with a large drop in the proportion of the population that escapes poverty and a large increase in those becoming and staying poor.

Regarding the income regressions, most of the results were similar to the existing literature on poverty profiles. However, the findings from the decomposition analysis were revealing as to whom suffered most from the crisis and why. The increase in unemployment for household heads accounted for only a small share of the total drop in average adult equivalent income between October 2001 and May 2002. Most of the drop was rather due to an increase in the negative impact of not having a spouse, or having a spouse who was inactive or unemployed.

These findings suggest that households without a spouse were especially affected by the crisis, as they could not rely on the income diversification strategy that earnings from a spouse implicitly provide at a time of a large economy-wide drop in income.

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Table 1: Caloric needs by age and gender

Age	Gender	Calories needed (kcal)	Units per equivalent adult
1 year		1170	0.43
2 years	Girls	1360	0.5
3 years	and	1500	0.56
4 to 6 years	Boys	1710	0.63
7 to 9 years		1950	0.72
10 to 12 years		2230	0.83
13 to 15 years	Men	2580	0.96
16 to 17 years		2840	1.05
10 to 12 years		1980	0.73
13 to 15 years	Women	2140	0.79
16 to 17 years		2140	0.79
18-29 years		2860	1.06
30-59 years	**Men**	**2700**	**1**
60 and + years		2210	0.82
18-29 years		2000	0.74
30-59 years	Women	2000	0.74
60 and + years		1730	0.64

Source: table from Morales (1988).

Table 2 Poverty transitions – May 1995 - May 2002

	NP to NP	NP to P	NP to I	P to NP	P to P	P to I	I to NP	I to P	I to I	Total Poverty	Total Indigency	Total
May 95 to Oct. 95	64.12	8.38	1.16	6.52	10.17	2.84	1.22	2.10	3.49	20.65	7.49	28.14
Oct. 95 to May 96	61.27	7.65	1.67	7.01	11.57	3.57	0.99	2.95	3.31	22.17	8.55	30.72
May 96 to Oct. 96	60.30	8.21	1.45	6.54	11.69	3.93	1.17	2.88	3.82	22.78	9.20	31.98
Oct 96 to May 97	59.75	6.83	1.08	7.28	12.87	2.98	1.60	3.66	3.95	23.36	8.01	31.37
May 97 to Oct. 97	62.57	6.69	1.49	6.37	12.48	3.09	1.00	2.74	3.56	21.91	8.14	30.05
Oct. 97 to May 98	62.56	6.84	1.02	7.49	11.71	2.79	1.47	3.15	2.97	21.70	6.78	28.48
May 98 to Oct. 98	63.12	6.53	1.27	6.30	12.16	3.35	1.00	2.61	3.67	21.30	8.29	29.59
Oct. 98 to May 99	61.04	7.65	1.13	6.33	11.75	3.40	0.91	3.42	4.36	22.82	8.89	31.71
May 99 to Oct. 99	61.41	6.04	1.12	6.54	12.93	3.44	1.26	3.31	3.95	22.28	8.51	30.79
Oct. 99 to May 00	60.27	7.81	1.25	5.85	13.31	4.06	0.76	3.11	3.57	24.23	8.88	33.11
May 00 to Oct. 00	58.39	6.61	1.03	6.73	13.88	4.24	1.03	3.66	4.43	24.15	9.70	33.85
Oct. 00 to May 01	56.54	8.33	1.60	6.23	13.34	4.40	0.87	3.25	5.44	24.92	11.44	36.36
May 01 to Oct. 01	54.25	7.35	1.64	5.70	14.50	4.71	1.02	3.89	6.94	25.74	13.29	39.03
Oct. 01 to May 02	42.58	14.33	3.96	2.14	12.08	10.45	0.43	2.71	11.31	29.12	25.72	54.84

Note: P: Poor, NP: Non poor, I: indigent. Source: Authors' estimation.

Table 3: Means of variables used in the regression analysis

	Oct. 95	Oct. 98	Oct. 01	May 02
Income				
Log Normalized Inc. (Dep. Variable)	0.599	0.634	0.452	0.029
Normalized Income	2.863	3.033	2.771	1.975
Household demographic variables				
Infants 0-5	0.389	0.368	0.364	0.368
Infants 0-5, squared	0.708	0.653	0.618	0.627
Children 6-14	0.587	0.571	0.579	0.572
Children 6-14, squared	1.287	1.233	1.281	1.269
Youth 15-24	0.632	0.627	0.642	0.640
Youth 15-24,squared	1.275	1.264	1.324	1.310
Adults 25-64	1.547	1.529	1.529	1.534
Adults 25-64,squared	3.270	3.213	3.260	3.304
Elderly 65+	0.357	0.348	0.345	0.346
Elderly 65+,squared	0.532	0.520	0.512	0.517
Characteristics of the household head				
Age - 19 and younger	0.005	0.005	0.006	0.006
Age - 20-29	0.102	0.109	0.108	0.118
Age - 30-39	0.201	0.195	0.196	0.192
Age - 50-59	0.176	0.185	0.188	0.189
Age - 60 and older	0.299	0.293	0.289	0.289
Female head	0.246	0.266	0.287	0.287
Recent migrant	0.061	0.056	0.055	0.053
Inactive	0.298	0.284	0.288	0.289
Unemployed	0.076	0.060	0.100	0.124
Primary education - Complete	0.340	0.313	0.315	0.311
Secondary education - Incomplete	0.158	0.174	0.162	0.163
Secondary education - Complete	0.152	0.152	0.170	0.173
Superior education - Incomplete	0.008	0.009	0.011	0.014
Superior education - Complete	0.028	0.027	0.034	0.035
University education	0.137	0.156	0.159	0.162
Employer	0.039	0.036	0.032	0.025
Self-employed	0.158	0.161	0.159	0.150
Informal worker	0.242	0.256	0.256	0.251
Public sector worker	0.101	0.107	0.107	0.115
Qualification: Operative	0.283	0.336	0.307	0.294
Qualification: Technician	0.142	0.111	0.109	0.101
Qualification: Professional	0.067	0.069	0.061	0.058

Table 3 (continued): Means of variables used in the regression analysis

	Oct. 95	Oct. 98	Oct. 01	May 02
Characteristics of the spouse of the head				
No spouse in the household	0.326	0.354	0.370	0.372
Inactive	0.414	0.387	0.361	0.367
Unemployed	0.044	0.029	0.039	0.041
Primary education - Complete	0.238	0.219	0.207	0.208
Secondary education - Complete	0.127	0.115	0.118	0.122
Secondary education - Incomplete	0.099	0.113	0.104	0.099
Superior education – Complete	0.033	0.033	0.041	0.041
Superior education - Incomplete	0.008	0.009	0.010	0.011
University education	0.062	0.072	0.077	0.074
Employer	0.007	0.007	0.007	0.005
Self-employed	0.055	0.058	0.051	0.049
Informal worker	0.104	0.107	0.103	0.103
Public sector worker	0.049	0.054	0.056	0.057
Qualification: Operative	0.055	0.064	0.066	0.068
Qualification: Technician	0.052	0.055	0.055	0.050
Qualification: Professional	0.023	0.024	0.025	0.021
Geographic location				
Noroeste	0.079	0.080	0.087	0.086
Noreste	0.044	0.044	0.047	0.049
Cuto	0.061	0.061	0.064	0.067
Pampeana	0.239	0.230	0.236	0.236
Patagonica	0.025	0.026	0.030	0.030

Source: Authors' estimation based on EPH, various years.

Table 4: Determinants of the logarithm of adult equivalent income, 4 waves

	October 1995	October 1998	October 2001	May 2002
Demographic Characteristics				
Infants 0-5	-0.24433	-0.30165	-0.25725	-0.27684
	[0.02661]***	[0.02381]***	[0.03077]***	[0.03388]***
Infants 0-5, squared	0.0177	0.03216	0.02117	0.0264
	[0.00981]*	[0.00803]***	[0.01225]*	[0.01166]**
Children 6-14	-0.31097	-0.3588	-0.35999	-0.40797
	[0.02151]***	[0.01987]***	[0.02276]***	[0.02761]***
Children 6-14, squared	0.0254	0.0338	0.03326	0.04931
	[0.00629]***	[0.00574]***	[0.00591]***	[0.00799]***
Youth 15-24	-0.20042	-0.24443	-0.21964	-0.28438
	[0.02012]***	[0.02026]***	[0.02537]***	[0.02581]***
Youth 15-24,squared	0.03625	0.04068	0.03032	0.04043
	[0.00533]***	[0.00593]***	[0.00777]***	[0.00718]***
Adults 25-64	-0.03948	-0.09075	-0.14661	-0.15345
	[0.02902]	[0.02638]***	[0.03147]***	[0.03343]***
Adults 25-64,squared	0.01969	0.03307	0.04277	0.04468
	[0.00656]***	[0.00653]***	[0.00685]***	[0.00693]***
Elderly 65+	0.09637	0.11308	0.31982	0.2265
	[0.04226]**	[0.04303]***	[0.06193]***	[0.06091]***
Elderly 65+,squared	-0.01864	-0.03182	-0.11321	-0.06938
	[0.01982]	[0.01670]*	[0.02730]***	[0.02835]**
Household Head				
Age - 19 and younger	-0.00293	-0.26098	-0.03158	-0.29081
	[0.09615]	[0.12865]**	[0.09247]	[0.17067]*
Age - 20-29	-0.07147	-0.10458	-0.23807	-0.27386
	[0.04259]*	[0.03304]***	[0.04448]***	[0.04803]***
Age - 30-39	-0.00658	-0.06784	-0.02339	-0.0814
	[0.02826]	[0.02589]***	[0.03177]	[0.03661]**
Age - 50-59	0.1028	0.08367	0.08387	0.098
	[0.03100]***	[0.02771]***	[0.03303]**	[0.03780]***
Age - 60 and older	0.28388	0.27698	0.28313	0.34877
	[0.04003]***	[0.04225]***	[0.04904]***	[0.04871]***
Female head	0.00819	0.02301	0.06393	0.12417
	[0.03420]	[0.03243]	[0.03571]*	[0.04120]***
Recent migrant	0.07623	0.06606	0.1869	0.14692
	[0.04163]*	[0.03725]*	[0.05099]***	[0.05199]***
Inactive	-0.3034	-0.3404	-0.3811	-0.42221
	[0.03941]***	[0.03911]***	[0.04048]***	[0.04615]***
Unemployed	-1.03994	-1.00701	-1.22472	-1.32347
	[0.06754]***	[0.06682]***	[0.06102]***	[0.05924]***
Primary – Complete	0.22367	0.26017	0.30162	0.32528
	[0.03021]***	[0.02964]***	[0.03623]***	[0.03928]***
Secondary - Incomplete	0.37366	0.42805	0.51528	0.50457
	[0.03573]***	[0.03214]***	[0.04177]***	[0.04545]***
Secondary - Complete	0.5503	0.63778	0.7061	0.73102
	[0.03648]***	[0.03281]***	[0.04155]***	[0.04558]***
Superior - Incomplete	0.73473	0.78072	0.82721	0.74246
	[0.07228]***	[0.07264]***	[0.10665]***	[0.13583]***
Superior - Complete	0.75415	0.78427	0.8119	0.79235
	[0.05705]***	[0.05688]***	[0.07632]***	[0.06685]***
University	0.74585	0.90477	1.04606	1.01651
	[0.04659]***	[0.03980]***	[0.04602]***	[0.05517]***
Employer	0.16157	0.19504	-0.01549	0.05468
	[0.04752]***	[0.03998]***	[0.04462]	[0.05797]
Self-employed	-0.00391	-0.01575	-0.12642	-0.17033
	[0.02980]	[0.02637]	[0.03442]***	[0.03841]***
Informal worker	-0.13889	-0.18306	-0.25971	-0.30988
	[0.02890]***	[0.02407]***	[0.02869]***	[0.03483]***

Public sector worker	-0.04977	-0.05864	-0.15009	-0.15555
	[0.02122]**	[0.02114]***	[0.02810]***	[0.02944]***
Qualification: Operative	0.13199	0.13929	0.1372	0.20569
	[0.02597]***	[0.02271]***	[0.02782]***	[0.03354]***
Qualification: Technician	0.30427	0.2892	0.31863	0.3691
	[0.02856]***	[0.03105]***	[0.03738]***	[0.04498]***
Qualification: Professional	0.59281	0.62129	0.60583	0.62525
	[0.04434]***	[0.04008]***	[0.04413]***	[0.05433]***
Spouse of the household head				
Spouse Not Present	-0.09793	-0.11367	-0.18862	-0.45197
	[0.05409]*	[0.05326]**	[0.06398]***	[0.08197]***
Inactive	-0.45358	-0.44232	-0.49056	-0.69309
	[0.04011]***	[0.03422]***	[0.04115]***	[0.05942]***
Unemployed	-0.70195	-0.67531	-0.77335	-1.06108
	[0.06957]***	[0.06567]***	[0.07360]***	[0.08628]***
Primary – Complete	0.04197	0.0574	0.05987	0.03359
	[0.03326]	[0.03267]*	[0.04426]	[0.04794]
Secondary - Complete	0.24674	0.21855	0.2667	0.2451
	[0.03999]***	[0.03826]***	[0.04809]***	[0.05396]***
Secondary - Incomplete	0.12322	0.13625	0.13836	0.13998
	[0.03779]***	[0.03679]***	[0.05057]***	[0.05484]**
Superior – Complete	0.25843	0.22303	0.28442	0.31861
	[0.04944]***	[0.04702]***	[0.05723]***	[0.07530]***
Superior - Incomplete	0.189	0.13143	0.313	0.33903
	[0.06656]***	[0.06276]**	[0.07500]***	[0.07964]***
University	0.33703	0.29133	0.31367	0.37527
	[0.05278]***	[0.04289]***	[0.05786]***	[0.06560]***
Employer	0.15084	0.05925	-0.07125	-0.11247
	[0.10522]	[0.07523]	[0.09294]	[0.10868]
Self-employed	0.053	-0.02589	0.03401	-0.19551
	[0.04299]	[0.03674]	[0.04465]	[0.06059]***
Informal worker	-0.15711	-0.14433	-0.1968	-0.30724
	[0.03980]***	[0.03404]***	[0.03844]***	[0.06045]***
Public sector worker	-0.04933	-0.02644	-0.00106	-0.07332
	[0.03728]	[0.03171]	[0.03470]	[0.04715]
Qualification: Operative	-0.01649	0.02436	0.058	-0.09425
	[0.04106]	[0.03357]	[0.03910]	[0.05435]*
Qualification: Technician	-0.0426	-0.02779	0.04012	-0.0847
	[0.04471]	[0.04253]	[0.04781]	[0.07188]
Qualification: Professional	0.06656	0.14982	0.19818	0.09212
	[0.06989]	[0.05647]***	[0.06411]***	[0.07889]
Regional Controls				
Noroeste	-0.2455	-0.17707	-0.16548	-0.12195
	[0.02190]***	[0.02066]***	[0.02367]***	[0.02630]***
Noreste	-0.30608	-0.33603	-0.30846	-0.33379
	[0.02253]***	[0.02311]***	[0.02744]***	[0.03080]***
Cuyo	-0.20772	-0.17752	-0.14353	-0.13006
	[0.02169]***	[0.02062]***	[0.02514]***	[0.02867]***
Pampeana	-0.09521	-0.11192	-0.10557	-0.07175
	[0.01869]***	[0.01822]***	[0.02299]***	[0.02593]***
Patagonica	0.14781	0.11424	0.21671	0.2831
	[0.02516]***	[0.02260]***	[0.02634]***	[0.02815]***
Constant	0.76447	0.80508	0.70095	0.57406
	[0.06786]***	[0.06344]***	[0.07553]***	[0.09925]***
Observations	27756	24802	20953	20739
R-squared	0.43	0.49	0.47	0.45

Robust standard errors in brackets

* significant at 10%; ** significant at 5%; *** significant at 1%

Source: Authors' estimation based on EPH, various years.

Table 5 Decomposition of the change in income between October 2001 and May 2002

	Change in characteristics	Change in returns	Change in characteristics, as % of total change	Change in returns, as % of total change
Demographic/household variables				
Infants 0-5	0.001	0.007	0.29%	1.71%
Infants 0-5, squared	0.000	-0.003	-0.05%	-0.78%
Children 6-14	-0.003	0.027	-0.60%	6.49%
Children 6-14, squared	0.000	-0.020	0.10%	-4.82%
Youth 15-24	-0.001	0.041	-0.13%	9.80%
Youth 15-24,squared	0.000	-0.013	0.10%	-3.13%
Adults 25-64	0.001	0.010	0.18%	2.48%
Adults 25-64,squared	-0.002	-0.006	-0.44%	-1.49%
Elderly 65+	0.000	0.032	-0.02%	7.63%
Elderly 65+,squared	0.000	-0.023	0.12%	-5.36%
Age - 19 and younger	0.000	0.001	0.00%	0.35%
Age - 20-29	0.002	0.004	0.55%	1.00%
Age - 30-39	0.000	0.011	-0.02%	2.64%
Age - 50-59	0.000	-0.003	-0.02%	-0.63%
Age - 60 and older	0.000	-0.019	-0.01%	-4.49%
Female	0.000	-0.017	0.00%	-4.09%
Recent migrant	0.000	0.002	0.08%	0.50%
			0.11%	**7.81%**
Household head variables				
Inactive	0.001	0.012	0.15%	2.82%
Unemployed	0.029	0.012	6.94%	2.90%
Primary - Complete	0.001	-0.007	0.28%	-1.74%
Secondary - Incomplete	-0.001	0.002	-0.14%	0.41%
Secondary - Complete	-0.002	-0.004	-0.55%	-1.02%
Superior - Incomplete	-0.002	0.001	-0.59%	0.28%
Superior - Complete	-0.001	0.001	-0.33%	0.16%
University	-0.003	0.005	-0.63%	1.13%
Employer	0.000	-0.002	-0.03%	-0.41%
Self-employed	-0.001	0.007	-0.26%	1.56%
Informal worker	-0.001	0.013	-0.34%	2.97%
Public sector worker	0.001	0.001	0.27%	0.15%
Qualification: Operative	0.002	-0.020	0.43%	-4.77%
Qualification: Technician	0.002	-0.005	0.58%	-1.20%
Qualification: Professional	0.001	-0.001	0.34%	-0.27%
			6.11%	**2.97%**
Household spouse				
Spouse Not Present	0.000	0.098	0.09%	23.21%
Inactive	0.003	0.074	0.70%	17.59%
Unemployed	0.001	0.012	0.32%	2.76%
Primary – Complete	0.000	0.005	-0.02%	1.29%
Secondary - Complete	-0.001	0.003	-0.25%	0.62%
Secondary - Incomplete	0.001	0.000	0.14%	-0.04%
Superior – Complete	0.000	-0.001	-0.04%	-0.34%
Superior - Incomplete	0.000	0.000	-0.12%	-0.07%
University	0.001	-0.005	0.20%	-1.08%
Employer	0.000	0.000	-0.04%	0.05%
Self-employed	0.000	0.011	0.01%	2.64%
Informal worker	0.000	0.011	0.01%	2.70%

Public sector worker	0.000	0.004	0.00%	0.97%
Qualification: Operative	0.000	0.010	-0.03%	2.45%
Qualification: Technician	0.000	0.006	0.05%	1.47%
Qualification: Professional	0.001	0.002	0.19%	0.52%
			1.22%	**54.77%**
Geographic location				
Noroeste	0.000	-0.004	-0.04%	-0.89%
Noreste	0.000	0.001	0.09%	0.29%
Cuyo	0.000	-0.001	0.10%	-0.21%
Pampeana	0.000	-0.008	0.01%	-1.89%
Patagonica	0.000	-0.002	0.01%	-0.47%
Constant	0.000	0.127	0.00%	30.03%
			0.16%	**26.86%**
Total			**7.59%**	**92.40%**

Source: Authors' estimation based on EPH, various years.

Figure 1

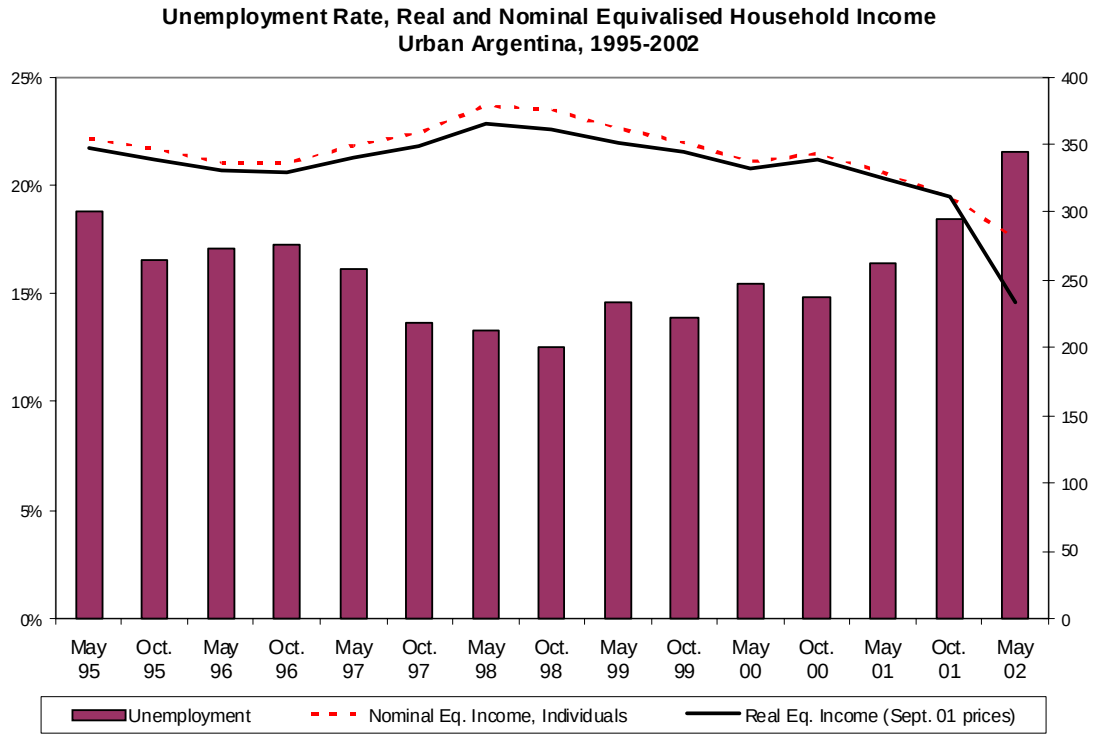


Figure 2

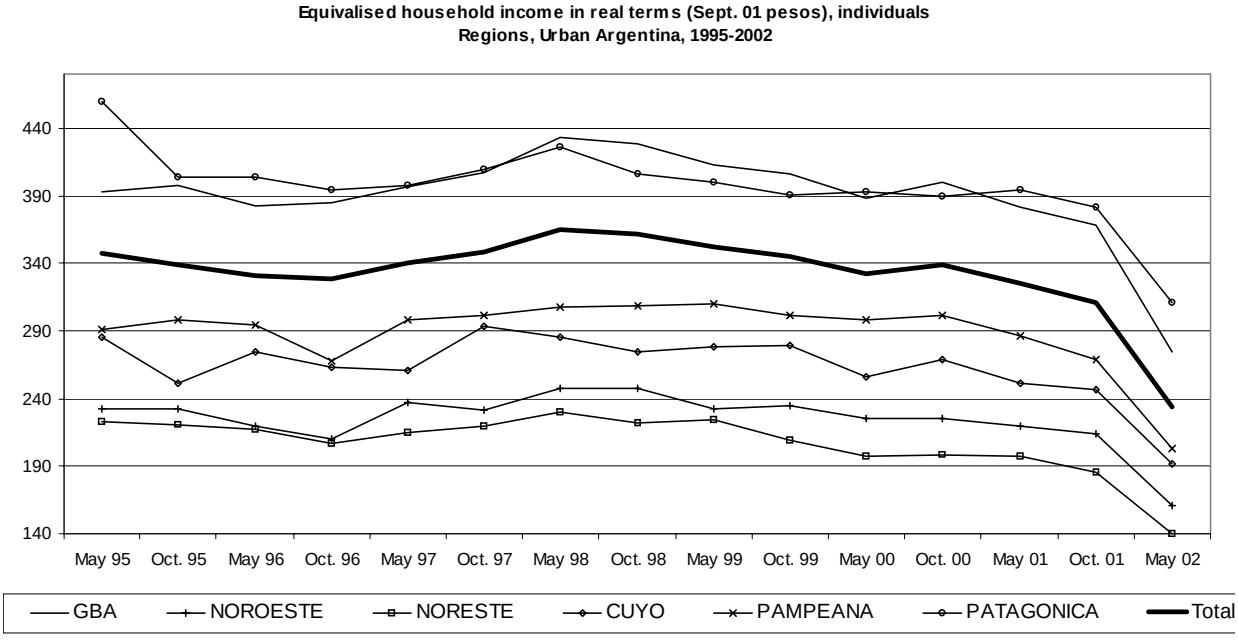
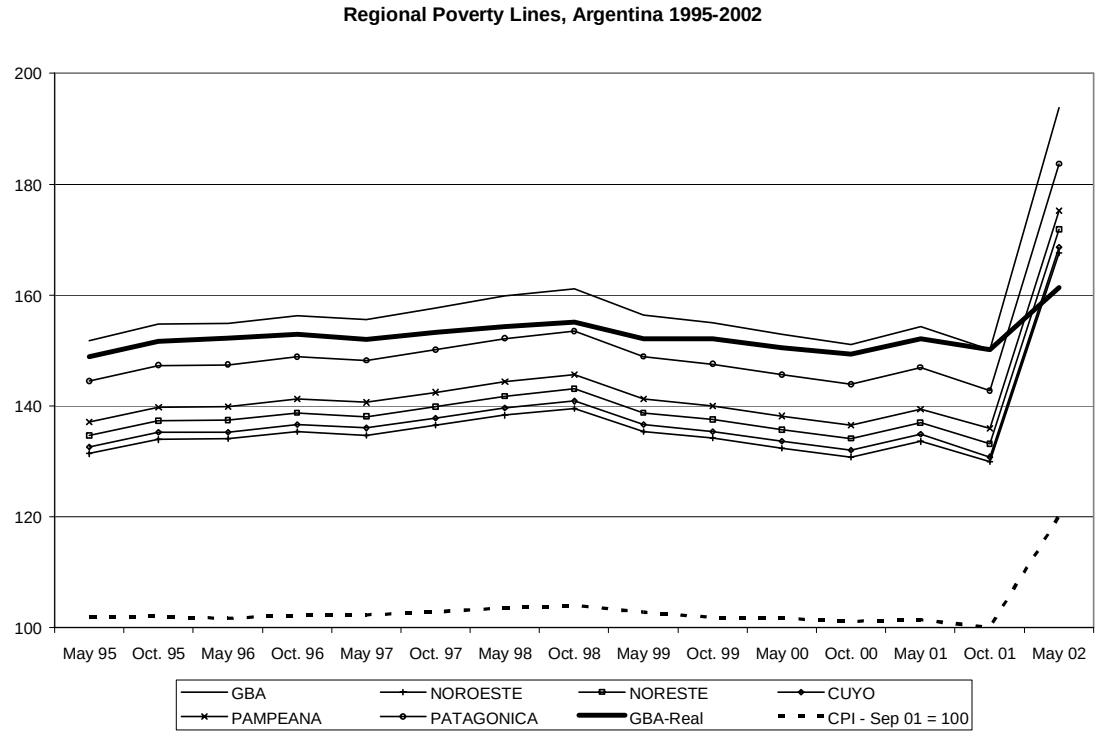
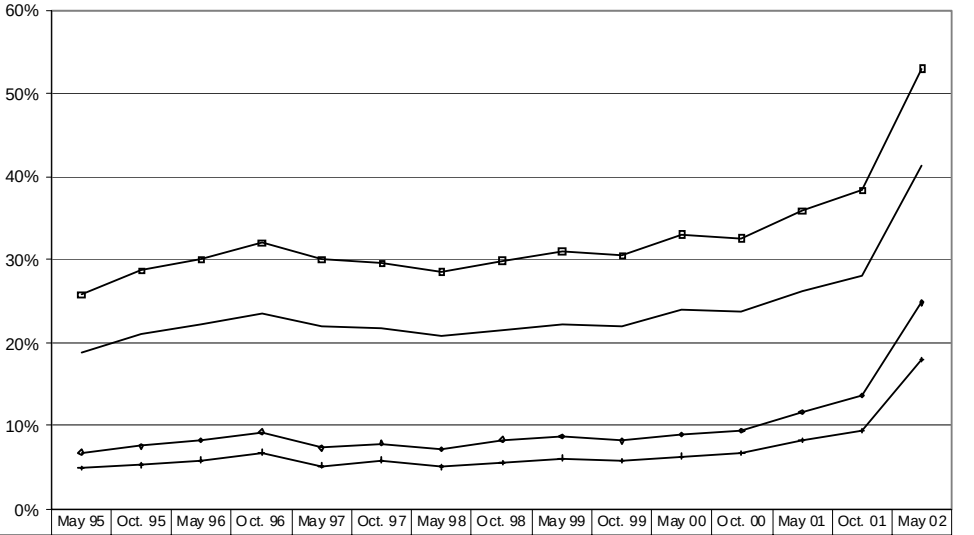


Figure 3



Note: poverty lines in nominal terms, except for GBA Real which is in September 2001 pesos.

Figure 4



	May 95	Oct. 95	May 96	Oct. 96	May 97	Oct. 97	May 98	Oct. 98	May 99	Oct. 99	May 00	Oct. 00	May 01	Oct. 01	May 02
Poor Households	18.88%	21.12%	22.12%	23.56%	22.00%	21.86%	20.89%	21.60%	22.17%	21.96%	23.90%	23.76%	26.18%	28.07%	41.38%
Indigent Households	4.94%	5.30%	5.93%	6.79%	5.22%	5.86%	5.06%	5.63%	6.12%	5.82%	6.33%	6.74%	8.25%	9.43%	17.97%
Poor Individuals	25.77%	28.70%	30.11%	32.00%	30.03%	29.54%	28.56%	29.91%	31.02%	30.48%	33.04%	32.62%	35.91%	38.31%	53.01%
Indigent Individuals	6.76%	7.55%	8.23%	9.31%	7.32%	7.90%	7.15%	8.38%	8.77%	8.22%	8.99%	9.38%	11.63%	13.63%	24.77%

Figure 5

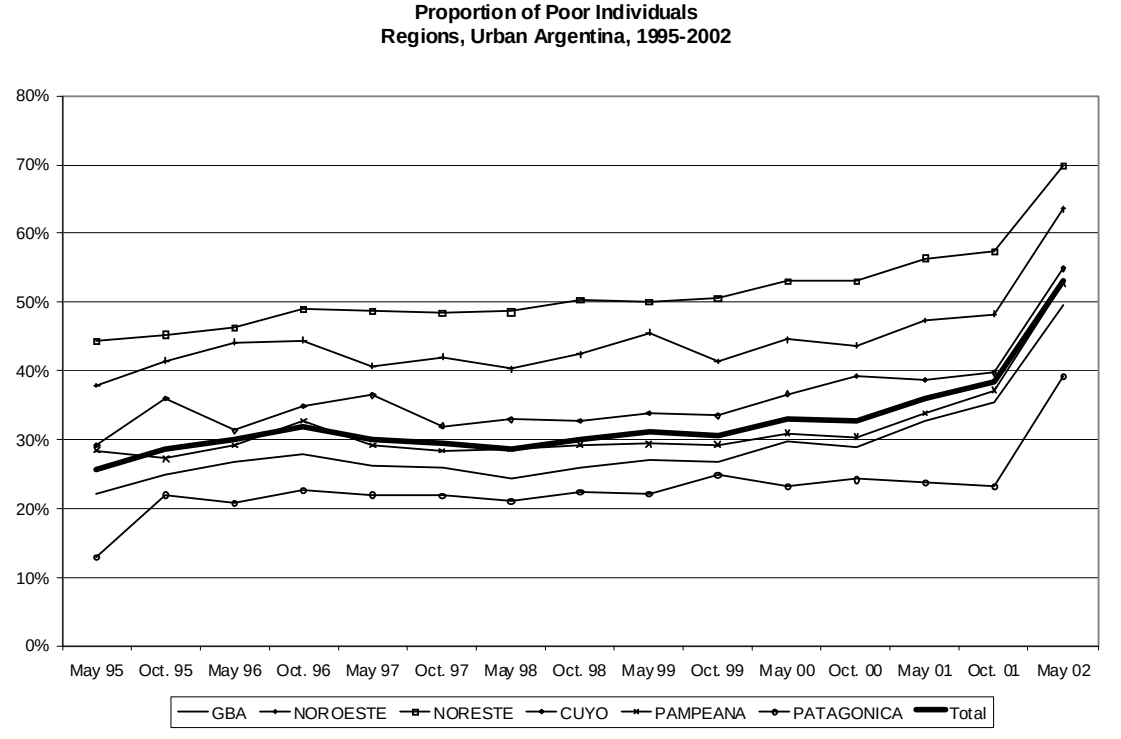
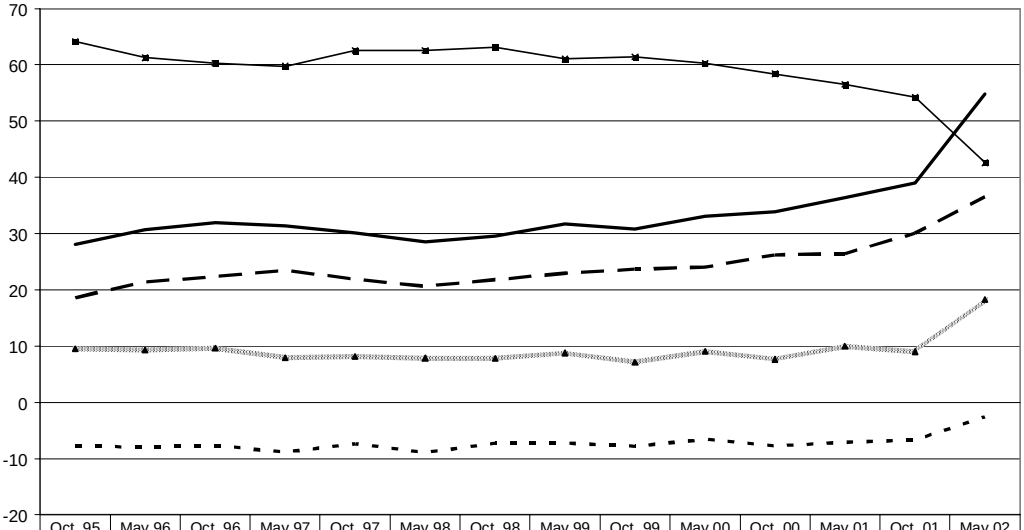


Figure 6



	Oct. 95	May 96	Oct. 96	May 97	Oct. 97	May 98	Oct. 98	May 99	Oct. 99	May 00	Oct. 00	May 01	Oct. 01	May 02
NP<->NP	64.12	61.27	60.30	59.75	62.57	62.56	63.12	61.04	61.41	60.27	58.39	56.54	54.25	42.58
NP->P	9.55	9.32	9.66	7.91	8.18	7.86	7.80	8.78	7.16	9.06	7.64	9.93	8.99	18.29
P->NP	-7.74	-8.00	-7.71	-8.88	-7.37	-8.96	-7.29	-7.24	-7.80	-6.61	-7.76	-7.10	-6.72	-2.58
P<->P	18.59	21.41	22.32	23.46	21.88	20.62	21.79	22.94	23.63	24.06	26.21	26.43	30.05	36.56
Total Poverty	28.14	30.73	31.98	31.37	30.06	28.48	29.59	31.72	30.79	33.12	33.85	36.36	39.04	54.85

Appendix Table A: Detailed Poverty Lines and Poverty Measures

Consumer Price Index	**May 95**	**Oct. 95**	**May 96**	**Oct. 96**	**May 97**	**Oct. 97**	**May 98**	**Oct. 98**	**May 99**	**Oct. 99**	**May 00**	**Oct. 00**	**May 01**	**Oct. 01**	**May 02**
Base 9/2001=100	101.892	102.036	101.676	102.245	102.334	102.829	103.531	103.967	102.768	101.857	101.662	101.145	101.432	**100.000**	120.055
Inflation	-	0.14%	-0.35%	0.56%	0.09%	0.48%	0.68%	0.42%	-1.15%	-0.89%	-0.19%	-0.51%	0.28%	-1.41%	20.05%
Implicit poverty line deflactor, GBA	-	1.96%	0.08%	0.96%	-0.45%	1.30%	1.36%	0.89%	-3.00%	-0.89%	-1.32%	-1.19%	2.12%	-2.72%	29.09%

Description

CPI provided by INDEC. Values in real terms throughout the paper are based on Sept. 2001 prices. The implicit poverty line deflactor is obtained from values in the next table.

NOTE: While the surveys are labelled May and October, the prices correspond to April and September, when the surveys are carried out.

Nominal Poverty line	**May 95**	**Oct. 95**	**May 96**	**Oct. 96**	**May 97**	**Oct. 97**	**May 98**	**Oct. 98**	**May 99**	**Oct. 99**	**May 00**	**Oct. 00**	**May 01**	**Oct. 01**	**May 02**
GBA	*151.73*	*154.71*	*154.83*	*156.32*	*155.61*	*157.63*	*159.77*	*161.19*	*156.35*	*154.96*	*152.92*	*151.10*	*154.30*	*150.11*	*193.77*
NOROESTE	131.35	133.92	134.03	135.32	134.70	136.45	138.31	139.53	135.34	134.14	132.38	130.80	*133.57*	*129.95*	*167.64*
NORESTE	134.64	137.28	137.39	138.71	138.08	139.87	141.77	143.03	138.74	137.51	135.70	134.08	*136.92*	*133.16*	*171.80*
CUYO	132.60	135.21	135.31	136.62	135.99	137.76	139.63	140.87	136.64	135.43	133.64	132.05	*134.85*	*130.78*	*168.65*
PAMPEANA	137.11	139.80	139.91	141.26	140.61	142.44	144.37	145.66	141.28	140.03	138.18	136.54	*139.43*	*135.94*	*175.20*
PATAGONICA	144.48	147.32	147.43	148.85	148.18	150.10	152.14	153.49	148.88	147.56	145.62	143.88	*146.93*	*142.74*	*183.63*
GBA-Real	148.91	151.62	152.28	152.89	152.06	153.29	154.32	155.04	152.14	152.14	150.42	149.39	152.12	150.11	161.40

Description

Poverty lines in nominal terms (italics indicate official values). Note: GBA values only are official (INDEC's) for the whole period.

Regional values are INDEC's for 2001 and 2002, and constructed for 1995-2000 spplying the GBA poverty lines rate of change to regional May 2001 values. See text for details.

Extrene Poverty Line	**May 95**	**Oct. 95**	**May 96**	**Oct. 96**	**May 97**	**Oct. 97**	**May 98**	**Oct. 98**	**May 99**	**Oct. 99**	**May 00**	**Oct. 00**	**May 01**	**Oct. 01**	**May 02**
GBA	*64.84*	*66.12*	*65.88*	*67.38*	*65.38*	*67.36*	*68.28*	*69.78*	*65.97*	*64.57*	*62.93*	*62.44*	*63.24*	*61.02*	*81.76*
NOROESTE	57.13	58.26	58.05	59.37	57.61	59.35	60.16	61.48	58.13	56.89	55.45	55.02	*55.72*	*53.7*	*71.95*
NORESTE	58.34	59.49	59.28	60.62	58.83	60.61	61.43	62.78	59.36	58.1	56.62	56.18	*56.9*	*54.8*	*73.43*
CUYO	58.29	59.44	59.22	60.57	58.77	60.55	61.38	62.73	59.3	58.05	56.57	56.13	*56.85*	*54.49*	*73.01*
PAMPEANA	60.74	61.94	61.71	63.12	61.24	63.1	63.96	65.37	61.8	60.49	58.95	58.49	*59.24*	*57.6*	*77.18*
PATAGONICA	67.12	68.44	68.19	69.75	67.68	69.72	70.68	72.23	68.29	66.84	65.14	64.63	*65.46*	*63.16*	*84.63*

Description

Indigence or extreme poverty line, nominal terms. See text for details
Note: GBA values only are official (INDEC's) for the whole period. Regional values are INDEC's for 2001 and 2002, and constructed for 1995-2000.

Equivalised income	**May 95**	**Oct. 95**	**May 96**	**Oct. 96**	**May 97**	**Oct. 97**	**May 98**	**Oct. 98**	**May 99**	**Oct. 99**	**May 00**	**Oct. 00**	**May 01**	**Oct. 01**	**May 02**
GBA	401.09	406.09	388.69	393.13	406.51	419.27	447.96	444.92	424.73	413.80	394.98	404.28	387.00	369.15	329.52
NOROESTE	236.93	236.80	223.53	215.49	242.61	237.74	256.61	257.90	239.28	239.52	229.52	227.81	223.23	214.30	194.04
NORESTE	227.19	224.96	221.45	211.16	220.14	226.18	238.44	230.31	230.07	212.86	200.14	201.09	200.82	185.81	167.92
CUYO	291.23	256.31	279.37	268.64	266.90	302.10	294.98	285.62	286.46	284.91	260.22	272.44	255.13	246.47	229.39
PAMPEANA	296.29	304.68	300.05	274.06	304.81	310.26	318.80	321.01	318.70	307.65	302.95	305.24	290.66	269.11	244.15
PATAGONICA	468.38	411.67	410.55	403.02	407.82	420.78	441.26	422.46	411.63	398.58	400.04	394.73	400.36	381.91	373.16
Total	354.58	346.57	336.73	336.42	349.02	358.93	378.48	375.64	361.79	351.57	337.34	343.23	329.35	311.56	280.70

Description

Equivalised household income in nominal terms.
Note: adult equivalence scale as used by INDEC - see Morales (1988)

Appendix Table A, continued

Indigent individuals headcount	**May 95**	**Oct. 95**	**May 96**	**Oct. 96**	**May 97**	**Oct. 97**	**May 98**	**Oct. 98**	**May 99**	**Oct. 99**	**May 00**	**Oct. 00**	**May 01**	**Oct. 01**	**May 02**
GBA	0.0567	0.0629	0.0694	0.076	0.0569	0.0644	0.0534	0.0687	0.0759	0.0674	0.0755	0.0765	0.1032	0.1218	0.2267
NOROESTE	0.0875	0.112	0.116	0.1313	0.1096	0.1187	0.1181	0.1186	0.1298	0.1107	0.1252	0.1331	0.1454	0.1615	0.2947
NORESTE	0.1343	0.1261	0.148	0.1717	0.1479	0.1494	0.1499	0.1761	0.1769	0.1776	0.1848	0.1968	0.2302	0.2693	0.3876
CUYO	0.0558	0.0858	0.0783	0.0883	0.0922	0.0878	0.0701	0.0765	0.0795	0.0739	0.0843	0.1063	0.1102	0.1231	0.2471
PAMPEANA	0.0905	0.0746	0.0856	0.1073	0.0751	0.0793	0.0768	0.0851	0.08	0.0838	0.0881	0.0902	0.1132	0.1367	0.251
PATAGONICA	0.031	0.0721	0.0699	0.0756	0.0602	0.0621	0.0654	0.0799	0.069	0.0779	0.0757	0.0714	0.0692	0.0734	0.1534
Total	0.0676	0.0755	0.0823	0.0931	0.0732	0.079	0.0715	0.0838	0.0877	0.0822	0.0899	0.0938	0.1163	0.1363	0.2477

Description Headcount of indigent (extremely poor) individuals

Poor individuals headcount	**May 95**	**Oct. 95**	**May 96**	**Oct. 96**	**May 97**	**Oct. 97**	**May 98**	**Oct. 98**	**May 99**	**Oct. 99**	**May 00**	**Oct. 00**	**May 01**	**Oct. 01**	**May 02**
GBA	0.2217	0.2476	0.2668	0.2795	0.2629	0.2595	0.2427	0.2588	0.2711	0.2673	0.2973	0.2889	0.3267	0.3542	0.4965
NOROESTE	0.3783	0.4149	0.4419	0.4446	0.4066	0.4204	0.4023	0.4238	0.4558	0.4137	0.4455	0.4365	0.4742	0.4831	0.6355
NORESTE	0.444	0.4531	0.4623	0.4889	0.4878	0.4837	0.4861	0.5026	0.501	0.5061	0.5301	0.5314	0.5644	0.573	0.6981
CUYO	0.2924	0.3599	0.3126	0.3496	0.3647	0.3204	0.3291	0.3274	0.338	0.3342	0.3663	0.3917	0.3875	0.3966	0.5492
PAMPEANA	0.2848	0.2715	0.2916	0.3271	0.2921	0.284	0.2863	0.2927	0.2936	0.2927	0.3092	0.304	0.3387	0.3712	0.5271
PATAGONICA	0.1297	0.2203	0.2079	0.2269	0.2198	0.2183	0.2103	0.2242	0.2215	0.2476	0.2314	0.2417	0.238	0.2325	0.3917
Total	0.2577	0.287	0.3011	0.32	0.3003	0.2954	0.2856	0.2991	0.3102	0.3048	0.3304	0.3262	0.3591	0.3831	0.5301

Description Headcount of overall poor individuals - moderate poor obtained by substracting figures in the previous table.

Total poverty gap	**May 95**	**Oct. 95**	**May 96**	**Oct. 96**	**May 97**	**Oct. 97**	**May 98**	**Oct. 98**	**May 99**	**Oct. 99**	**May 00**	**Oct. 00**	**May 01**	**Oct. 01**	**May 02**
GBA	0.08671	0.09792	0.10587	0.11470	0.10326	0.10420	0.09301	0.10813	0.10979	0.10707	0.12351	0.12192	0.14402	0.16318	0.26555
NOROESTE	0.14631	0.16372	0.18298	0.18748	0.16353	0.17319	0.16447	0.16927	0.18902	0.16992	0.19012	0.18773	0.21167	0.22111	0.33150
NORESTE	0.18746	0.18892	0.20081	0.22305	0.21078	0.20542	0.21195	0.22890	0.22920	0.23661	0.25008	0.26379	0.28632	0.30340	0.41386
CUYO	0.10102	0.13375	0.12205	0.13368	0.14293	0.12852	0.11623	0.12130	0.13125	0.12610	0.14235	0.16175	0.16068	0.17512	0.28118
PAMPEANA	0.12118	0.10814	0.12288	0.14102	0.11799	0.11578	0.11230	0.11710	0.11857	0.12066	0.12941	0.13217	0.15239	0.17802	0.27720
PATAGONICA	0.04735	0.09299	0.08821	0.09279	0.08493	0.08171	0.08849	0.09433	0.08888	0.10330	0.09731	0.09881	0.09643	0.10044	0.18302
Total	0.10186	0.11371	0.12279	0.13345	0.11999	0.11984	0.11192	0.12299	0.12698	0.12472	0.13897	0.14070	0.16041	0.17942	0.28215

Description Poverty gap - FGT measure with alpha=1. See text for details.

Total squared poverty gap	**May 95**	**Oct. 95**	**May 96**	**Oct. 96**	**May 97**	**Oct. 97**	**May 98**	**Oct. 98**	**May 99**	**Oct. 99**	**May 00**	**Oct. 00**	**May 01**	**Oct. 01**	**May 02**
GBA	0.05202	0.05780	0.06405	0.06900	0.05761	0.06058	0.05242	0.06281	0.06456	0.06216	0.07137	0.07119	0.08888	0.10410	0.18258
NOROESTE	0.07846	0.08962	0.10309	0.10797	0.09080	0.09703	0.09221	0.09389	0.10917	0.09627	0.10969	0.11007	0.12557	0.13568	0.21819
NORESTE	0.10850	0.10813	0.11824	0.13410	0.12148	0.11614	0.12235	0.13792	0.13824	0.14515	0.15413	0.16903	0.18449	0.20332	0.29334
CUYO	0.05016	0.07175	0.06618	0.07261	0.07931	0.07268	0.05903	0.06319	0.07106	0.06671	0.07780	0.09132	0.09290	0.10603	0.18462
PAMPEANA	0.07510	0.06357	0.07369	0.08809	0.06889	0.06952	0.06382	0.06848	0.06863	0.07272	0.07760	0.08036	0.09482	0.11642	0.18944
PATAGONICA	0.02713	0.05560	0.05500	0.05581	0.05059	0.04539	0.05236	0.05798	0.05002	0.06307	0.05760	0.05903	0.05601	0.06272	0.11760
Total	0.10186	0.11371	0.12279	0.13345	0.11999	0.11984	0.11192	0.12299	0.12698	0.12472	0.13897	0.14070	0.16041	0.17942	0.28215

Description Poverty gap squared - FGT measure with alpha=2. See text for details.

Appendix B1: Mean of variables by poverty status , October 1995

	Total	Non-poor	Poor	Extreme Poor
Log Normalised Inc. (Dep. Var)	0.599	0.978	-0.327	-2.273
Normalised Income	2.863	3.467	0.739	0.211
Demographic Composition				
Kids 0-5	0.389	0.288	0.701	0.961
Kids 0-5, squared	0.708	0.468	1.391	2.248
Kids 6-14	0.587	0.418	1.150	1.409
Kids 6-14, squared	1.287	0.780	2.827	4.245
Youth 15-24	0.632	0.569	0.869	0.858
Youth 15-24,squared	1.275	1.120	1.872	1.806
Adults 25-64	1.547	1.506	1.719	1.650
Adults 25-64,squared	3.270	3.182	3.685	3.338
Adults 65+	0.357	0.392	0.255	0.125
Adults 65+,squared	0.532	0.586	0.389	0.167
Household Head				
Age - 19 and younger	0.005	0.005	0.008	0.004
Age - 20-29	0.102	0.098	0.107	0.143
Age - 30-39	0.201	0.184	0.260	0.276
Age - 50-59	0.176	0.181	0.152	0.175
Age - 60 and older	0.299	0.330	0.199	0.125
Female	0.246	0.258	0.186	0.243
Recent migrant	0.061	0.061	0.055	0.068
Inactive	0.298	0.314	0.250	0.203
Unemployed	0.076	0.045	0.123	0.386
Primary - Complete	0.340	0.318	0.417	0.444
Secondary - Incomplete	0.158	0.158	0.163	0.150
Secondary - Complete	0.152	0.171	0.091	0.056
Superior - Incomplete	0.008	0.009	0.003	0.001
Superior - Complete	0.028	0.033	0.012	0.004
University	0.137	0.166	0.030	0.037
Boss	0.039	0.048	0.008	0.006
Self Employed	0.158	0.149	0.195	0.189
Informal Worker	0.242	0.223	0.320	0.292
Public Sector	0.101	0.112	0.070	0.032
Qualification: Operative	0.283	0.286	0.304	0.172
Qualification: Technician	0.142	0.156	0.098	0.063
Qualification: Professional	0.067	0.084	0.002	0.007
Spouse Not Present	0.326	0.350	0.212	0.306
Household Spouse				
Unemployed	0.044	0.034	0.070	0.109
Primary - Complete	0.238	0.211	0.346	0.322
Secondary - Complete	0.127	0.140	0.084	0.055
Secondary - Incomplete	0.099	0.092	0.137	0.092
Superior - Complete	0.033	0.040	0.010	0.001
Superior - Incomplete	0.008	0.008	0.006	0.005
University	0.062	0.076	0.012	0.006
Boss	0.007	0.008	0.005	0.000
Self Employed	0.055	0.056	0.052	0.044
Informal Worker	0.104	0.101	0.121	0.101
Public Sector	0.049	0.058	0.016	0.006
Qualification: Operative	0.055	0.061	0.032	0.021
Qualification: Technician	0.052	0.062	0.017	0.007
Qualification: Professional	0.023	0.028	0.001	0.000
Geographic location				
region=NOROESTE	0.079	0.067	0.126	0.127
region=NORESTE	0.044	0.036	0.073	0.079
region=CUYO	0.061	0.056	0.082	0.072
region=PAMPEANA	0.239	0.242	0.220	0.237
region=PATAGONICA	0.025	0.026	0.018	0.026

Appendix Table B2: Mean of variables by poverty status, October 1998

	Total	Non-poor	Poor	Extreme Poor
Log Normalised Inc. (Dep. Var)	0.634	1.028	-0.338	-2.014
Normalised Income	3.033	3.712	0.731	0.232
Demographic Composition				
Kids 0-5	0.368	0.262	0.673	0.948
Kids 0-5, squared	0.653	0.402	1.327	2.175
Kids 6-14	0.571	0.389	1.122	1.501
Kids 6-14, squared	1.233	0.705	2.691	4.344
Youth 15-24	0.627	0.552	0.881	0.931
Youth 15-24,squared	1.264	1.062	1.944	2.117
Adults 25-64	1.529	1.487	1.697	1.630
Adults 25-64,squared	3.213	3.131	3.594	3.262
Adults 65+	0.348	0.384	0.262	0.108
Adults 65+,squared	0.520	0.571	0.409	0.147
Household Head				
Age - 19 and younger	0.005	0.004	0.005	0.005
Age - 20-29	0.109	0.106	0.114	0.145
Age - 30-39	0.195	0.177	0.254	0.277
Age - 50-59	0.185	0.190	0.163	0.189
Age - 60 and older	0.293	0.323	0.204	0.127
Female	0.266	0.276	0.209	0.292
Recent migrant	0.056	0.059	0.043	0.057
Inactive	0.284	0.296	0.241	0.229
Unemployed	0.060	0.035	0.102	0.297
Primary - Complete	0.313	0.283	0.432	0.386
Secondary - Incomplete	0.174	0.171	0.190	0.168
Secondary - Complete	0.152	0.175	0.080	0.049
Superior - Incomplete	0.009	0.010	0.005	0.002
Superior - Complete	0.027	0.033	0.005	0.005
University	0.156	0.191	0.031	0.026
Boss	0.036	0.045	0.005	0.003
Self Employed	0.161	0.153	0.182	0.212
Informal Worker	0.256	0.231	0.348	0.328
Public Sector	0.107	0.116	0.084	0.044
Qualification: Operative	0.336	0.326	0.406	0.262
Qualification: Technician	0.111	0.135	0.032	0.012
Qualification: Professional	0.069	0.088	0.004	0.001
Spouse Not Present	0.354	0.376	0.242	0.369
Household Spouse				
Unemployed	0.029	0.021	0.054	0.074
Primary - Complete	0.219	0.189	0.341	0.289
Secondary - Complete	0.115	0.128	0.076	0.046
Secondary - Incomplete	0.113	0.107	0.150	0.096
Superior - Complete	0.033	0.040	0.007	0.005
Superior - Incomplete	0.009	0.010	0.008	0.002
University	0.072	0.090	0.011	0.002
Boss	0.007	0.008	0.001	0.000
Self Employed	0.058	0.059	0.053	0.052
Informal Worker	0.107	0.107	0.109	0.102
Public Sector	0.054	0.064	0.023	0.004
Qualification: Operative	0.064	0.071	0.044	0.025
Qualification: Technician	0.055	0.068	0.008	0.007
Qualification: Professional	0.024	0.030	0.001	0.000
Geographic location				
region=NOROESTE	0.080	0.068	0.121	0.122
region=NORESTE	0.044	0.034	0.074	0.100
region=CUYO	0.061	0.058	0.075	0.053
region=PAMPEANA	0.230	0.231	0.227	0.234
region=PATAGONICA	0.026	0.028	0.018	0.027

Appendix Table B3: Mean of variables by poverty status, October 2001

	Total	Non-poor	Poor	Extreme Poor
Log Normalised Inc. (Dep. Var)	0.452	1.024	-0.360	-2.254
Normalised Income	2.771	3.650	0.718	0.195
Demographic Composition				
Kids 0-5	0.364	0.246	0.607	0.772
Kids 0-5, squared	0.618	0.365	1.111	1.546
Kids 6-14	0.579	0.352	1.018	1.420
Kids 6-14, squared	1.281	0.624	2.378	4.063
Youth 15-24	0.642	0.516	0.942	0.998
Youth 15-24,squared	1.324	0.972	2.079	2.479
Adults 25-64	1.529	1.436	1.805	1.681
Adults 25-64,squared	3.260	3.036	4.027	3.442
Adults 65+	0.345	0.413	0.208	0.110
Adults 65+,squared	0.512	0.617	0.296	0.154
Household Head				
Age - 19 and younger	0.006	0.006	0.006	0.005
Age - 20-29	0.108	0.102	0.109	0.154
Age - 30-39	0.196	0.181	0.225	0.259
Age - 50-59	0.188	0.186	0.199	0.174
Age - 60 and older	0.289	0.337	0.185	0.133
Female	0.287	0.306	0.227	0.266
Recent migrant	0.055	0.062	0.036	0.038
Inactive	0.288	0.320	0.212	0.191
Unemployed	0.100	0.050	0.156	0.370
Primary - Complete	0.315	0.272	0.420	0.436
Secondary - Incomplete	0.162	0.155	0.192	0.152
Secondary - Complete	0.170	0.199	0.106	0.077
Superior - Incomplete	0.011	0.013	0.007	0.004
Superior - Complete	0.034	0.043	0.007	0.012
University	0.159	0.209	0.039	0.019
Boss	0.032	0.042	0.011	0.006
Self Employed	0.159	0.141	0.199	0.210
Informal Worker	0.256	0.222	0.351	0.324
Public Sector	0.107	0.121	0.080	0.053
Qualification: Operative	0.307	0.299	0.373	0.240
Qualification: Technician	0.109	0.139	0.037	0.016
Qualification: Professional	0.061	0.084	0.002	0.002
Spouse Not Present	0.370	0.402	0.276	0.322
Household Spouse				
Unemployed	0.039	0.029	0.058	0.076
Primary - Complete	0.207	0.162	0.327	0.305
Secondary - Complete	0.118	0.135	0.084	0.057
Secondary - Incomplete	0.104	0.089	0.143	0.137
Superior - Complete	0.041	0.053	0.014	0.003
Superior - Incomplete	0.010	0.011	0.009	0.003
University	0.077	0.101	0.017	0.010
Boss	0.007	0.010	0.001	0.000
Self Employed	0.051	0.046	0.065	0.060
Informal Worker	0.103	0.089	0.139	0.135
Public Sector	0.056	0.069	0.027	0.020
Qualification: Operative	0.066	0.075	0.051	0.031
Qualification: Technician	0.055	0.072	0.014	0.004
Qualification: Professional	0.025	0.034	0.002	0.000
Geographic location				
region=NOROESTE	0.087	0.076	0.119	0.115
region=NORESTE	0.047	0.036	0.066	0.094
region=CUYO	0.064	0.062	0.073	0.059
region=PAMPEANA	0.236	0.239	0.225	0.233
region=PATAGONICA	0.030	0.034	0.020	0.018

Appendix TableB4: Mean of variables by poverty status, May 2002

	Total	Non-poor	Poor	Extreme Poor
Log Normalised Inc. (Dep. Var)	0.029	0.871	-0.379	-2.137
Normalised Income	1.975	3.039	0.704	0.202
Demographic Composition				
Kids 0-5	0.368	0.201	0.527	0.699
Kids 0-5, squared	0.627	0.280	0.930	1.349
Kids 6-14	0.572	0.276	0.802	1.224
Kids 6-14, squared	1.269	0.473	1.693	3.269
Youth 15-24	0.640	0.454	0.831	0.988
Youth 15-24,squared	1.310	0.859	1.697	2.256
Adults 25-64	1.534	1.400	1.729	1.713
Adults 25-64,squared	3.304	2.977	3.878	3.613
Adults 65+	0.346	0.438	0.279	0.136
Adults 65+,squared	0.517	0.651	0.444	0.183
Household Head				
Age - 19 and younger	0.006	0.005	0.005	0.008
Age - 20-29	0.118	0.104	0.128	0.151
Age - 30-39	0.192	0.166	0.218	0.240
Age - 50-59	0.189	0.186	0.194	0.189
Age - 60 and older	0.289	0.364	0.218	0.141
Female	0.287	0.323	0.225	0.253
Recent migrant	0.053	0.061	0.048	0.035
Inactive	0.289	0.341	0.233	0.196
Unemployed	0.124	0.052	0.137	0.339
Primary - Complete	0.311	0.250	0.393	0.403
Secondary - Incomplete	0.163	0.138	0.207	0.186
Secondary - Complete	0.173	0.211	0.142	0.093
Superior - Incomplete	0.014	0.018	0.008	0.009
Superior - Complete	0.035	0.050	0.019	0.009
University	0.162	0.239	0.068	0.036
Boss	0.025	0.038	0.009	0.003
Self Employe d	0.150	0.127	0.162	0.207
Informal Worker	0.251	0.206	0.303	0.327
Public Sector	0.115	0.135	0.097	0.072
Qualification: Operative	0.294	0.277	0.372	0.249
Qualification: Technician	0.101	0.144	0.057	0.021
Qualification: Professional	0.058	0.097	0.007	0.002
Spouse Not Present	0.372	0.432	0.266	0.319
Household Spouse				
Unemployed	0.041	0.025	0.047	0.081
Primary - Complete	0.208	0.143	0.294	0.306
Secondary - Complete	0.122	0.137	0.118	0.080
Secondary - Incomplete	0.099	0.072	0.148	0.125
Superior - Complete	0.041	0.058	0.022	0.011
Superior - Incomplete	0.011	0.013	0.013	0.005
University	0.074	0.110	0.031	0.014
Boss	0.005	0.008	0.000	0.000
Self Employed	0.049	0.037	0.062	0.068
Informal Worker	0.103	0.078	0.136	0.141
Public Sector	0.057	0.073	0.035	0.033
Qualification: Operative	0.068	0.075	0.062	0.054
Qualification: Technician	0.050	0.076	0.018	0.008
Qualification: Professional	0.021	0.035	0.002	0.000
Geographic location				
region=NOROESTE	0.086	0.069	0.111	0.109
region=NORESTE	0.049	0.034	0.060	0.082
region=CUYO	0.067	0.063	0.074	0.069
region=PAMPEANA	0.236	0.236	0.238	0.236
region=PATAGONICA	0.030	0.035	0.025	0.019