

LONG-TERM TRENDS OF POVERTY IN LATIN AMERICAN COUNTRIES*

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Abstract

The article attempts an assessment of the long-term evolution of poverty in the four Latin American countries for which there is enough historical data. Argentina, Colombia, Chile, and Mexico represent a variety of the different national situations present in the region. Intertemporal comparability was preferred in order to depict the long-term trends of poverty and alternative estimates of poverty, corresponding to different degrees of deprivation, were used in order to assess the robustness of those trends. With the same purpose, the results of using poverty lines constant over time are compared with the trends obtained using poverty lines shifted as a result of medium-term growth. On the other hand, differences in income underestimation between surveys in each country were accounted for, in order to improve intertemporal comparison. Resulting country trends can be summarized as: poverty-reducing growth in the case of Colombia, an interrupted trend of poverty reduction in Mexico, the restoration of a broken trend of poverty reduction in Chile, and the emergence of poverty in the faltering economy of Argentina.

Resumen

Este artículo evalúa la evolución de largo plazo de la pobreza en cuatro países latinoamericanos (Argentina, Colombia, Chile y México) prefiriendo comparabilidad intertemporal de distintos indicadores. A su vez, se presentan resultados que comparan resultados en los que se mantienen líneas de pobreza constantes y variables como resultado del crecimiento de mediano plazo. Los resultados pueden resumirse del siguiente modo: el crecimiento redujo la pobreza en

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Colombia, se produjo una interrupción en la reducción de la pobreza en México, se restauró una tendencia interrumpida de reducción de la pobreza en Chile, y se generó en pobreza en Argentina.

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JEL Classification: *I32.*

1. INTRODUCTION

Latin America is the region with perhaps the widest inequalities in the distribution of welfare and wealth. The comparatively middle average income attained by many of the countries in the region does not preclude that ample proportions of their populations live in situations of absolute deprivation of the necessities of life according to any objective criteria. Economic growth in the postwar period has been significant but in many instances unstable, to slump across the region in the eighties. Recovery of growth in the nineties has proceeded at only moderate average rates. On the other hand, only in some cases traditional inequalities have significantly diminished with growth, albeit in all cases they were widened by the recessions of the eighties, and in some instances they were further enhanced by the effect of structural reforms (Altimir, 1996). This complex panorama calls for a case-by-case assessment of the probable evolution of poverty during the long and eventful postwar period.

To attempt an assessment of the long-term evolution of poverty, based on available data for the past—limited in terms of accuracy, measurement techniques and the type of data available—involves enormous compromises between how poverty should be measured and what we are actually able to estimate. Availability of comparable income distribution data was the main reason to restrict this inquiry to the four countries selected. They also represent a variety of the different national situations present in Latin America. Section 2 presents the method devised for dealing with data limitations and arriving at arduous compromises. Intertemporal comparability in order to depict the long-term trends of poverty and the use of alternative estimates to assess the robustness of those trends were preferred to the implausible attempt at obtaining estimates of poverty as accurate and as decomposable as those being obtained with present practices and data availability. The reader incurious about methodological intricacies can skip this section and go to Section 3, where the resulting trends obtained for each country are depicted and analyzed in the context of the growth and macroeconomics of each subperiod, with commentaries on the possible *ex post facto* effects of social policy in correcting those trends.

2. ESTIMATING POVERTY TRENDS ON THE BASIS OF GROUPED INCOME DISTRIBUTION DATA

The analysis of long-term trends of absolute poverty in Latin American countries has to be based on already published or processed data on the distribution of household income, originally gathered for different purposes. Available data

usually refers to the distribution of households by total (in general, close to a disposable income concept) household income or of income recipients by personal income. Very seldom the distribution of households by per capita household income is available for the not-recent past and the distribution of households by consumption expenditure rarely is.

Employment household surveys are the most frequent source of data, followed by scantier income and expenditure surveys and occasionally by acceptably reliable income information from population censuses. Also, in some instances, researchers have produced estimates of the distribution of income combining those different sources of data and the national accounts.

Therefore, producing estimates of poverty comparable over time requires: i) using the same poverty criterion; ii) explicitly taking into account the accuracy with which income was measured by each source in each period; iii) otherwise considering the comparability of data available for different dates; and iv) recognizing the difference between the distribution of households by total household income and by per capita income.

Under these circumstances, which force us to make important procedural assumptions, the best aim we can pursue is to obtain an index –or a family of indices, under different poverty definitions– approximating the long-term trend of the evolution of poverty, comparability over time being the overriding criterion. Moreover, as we shall see, given the relative degree of accuracy of the distributive data, using poverty measures that incorporate the degree of inequality is rather pointless, for which reason the indices of the evolution of poverty are based on the incidence measure (headcount ratio) or P(0) of the FGT class of measures.

2.1. Poverty measurement in Latin America

Measurement of income poverty on the basis of household survey data using the food share method was initiated at ECLAC by Altimir (1979) and later undertaken regularly in ECLAC's *Social Panorama* (ECLAC, 1994, 1995, 1997, 1999, 2000). On the other hand, only in the eighties some countries of the region began producing official estimates of poverty, along similar methodological lines.

Essentially, that practice for drawing country-specific poverty lines consists in: (i) setting up in detail (taking into account cost, prevailing habits and availability of foodstuffs) what can be normatively considered a minimum food basket, providing adequate calorie and protein intakes; (ii) valuing it at relevant prices to obtain a minimum food budget; and (iii) blowing up the food budget to obtain a consumption budget that may cover all basic needs currently attended to privately, on the basis of the food/non-food allocation of resources by households which spend on food just the amount of the minimum food budget (i.e.: the "food share method").

This way of assessing poverty involves some fundamental conceptual choices: (i) it considers poverty as the *inadequacy* of private consumption; (ii) it uses the consumption/income metric as the *scale* along which living standards are *unidimensionally* measured and, therefore, it assesses utilities more than capabilities, to measure the inadequacy of which would require to consider non-consumption attributes; (iii) it rests upon an *absolute* standard of depriv-

tion, even though recognizing (by the country and area specificity, as well as by considering dietary habits) the context-dependency of any absolute standard; and (iv) it reflects a *normative* stance, since it rests on what should be (although allowing for some behavioral lee-way) the minimum adequate food budget and, even when recurring to behavioral evidence for establishing the non-food component of the standard, it does so with a view to make sure that the resulting amounts cover the other basic needs currently met by means of private consumption¹.

Altimir's (1979) poverty lines for 1970 were based on the then accepted international nutritional standards, weighted by the age and gender composition of each country's population, which were transformed into country-specific minimum-cost adequate food baskets by selecting those foodstuffs and varieties that could satisfy nutritional needs at the lowest cost per nutrient, at existing prices. However, to avoid trivial solutions, the selection took into account both the actual availability of each foodstuff and the dietary habits of low-income groups in each country and was constrained by lower bounds to the amounts of foodstuffs providing high-quality proteins and of vegetables and fruits providing minerals and vitamins and by upper bounds to the amount of foodstuffs providing cheap calories. Minimum food budgets for the capital city of each country were established by valuing each foodstuff in the minimum adequate food basket at its cost-of-living retail price, while minimum food budgets for other urban areas and for rural areas were obtained by the (informed) rule of thumb criterion of setting them at 5% and 25% respectively below those for the capital city.

The minimum private consumption budgets used as poverty lines for metropolitan and other urban areas were assessed as twice the respective cost of the minimum food baskets, since the observed food share of urban households merely meeting the food budget was roughly around .5, according to available expenditure surveys in some of the countries considered, after checking for the feasibility that those non-food budgets adequately cover housing and expenditures supplementary to free public services such as education and health care. Poverty lines for the rural areas were drawn at 1.75 the corresponding minimum food budgets, on the basis of scanty information on consumption patterns of rural households (Altimir, 1979, 1982a).

CEPAL's poverty lines for the eighties were drawn according to the same approach. New nutritional standards (FAO/WHO/UNU, 1985) were used, resulting in higher protein and lower calorie average requirements. On the other hand, taking advantage of the greater availability of disaggregated data from expenditure surveys for almost every country considered, the minimum food baskets were established on the basis of the composition of food consumption of those strata of households (the "reference group") that in each country attained with some latitude the minimum nutritional requirements, although such reference baskets were adjusted to those minima as well as to mean national availability of each foodstuff and depurated of high-price-per-nutrient or nutritionally superfluous items (CEPAL, 1991).

¹ To consider these choices in the framework of the many conceptual issues involved in measuring poverty, see Lipton and Ravallion (1994).

Therefore, the criterion used by CEPAL for obtaining the minimum food baskets was one based on habits, taking into account availability and cost, rather than one of minimum-cost, taking into account availability and habits, as in the 1970 poverty lines. This difference of criteria has resulted, for some countries, in wide variations with respect to the 1970 minimum food baskets valued at the same prices (CEPAL, 1991; Appendix 1, Table 2), as is apparent in Table 1, where both sets of lines are expressed at prices of the second semester of 1988.

On other regards, the procedure for obtaining the private consumption poverty lines on the basis of the minimum food budgets is the same as the one used in the 1970 estimates. Analysis of expenditure patterns in urban areas of each country, according to the latest available surveys, indicated that the respective reference groups (of households spending on food somewhat more than the minimum food budget) had a food share between .4 and .5 of total consumption expenditure (CEPAL, 1991; Table 8), giving credence to the applicability (at the poverty threshold) of the uniform criterion of doubling the value of the minimum food budget to allow for other basic needs². For rural areas, the criterion of drawing the poverty line at 1.75 the value of the respective minimum food budget was also maintained.

Beyond the use of a standard procedure for obtaining them, CEPAL's poverty lines are country-specific enough. In particular, they represent different levels of real welfare inasmuch the underlying consumption budgets are of different purchasing power. In an attempt to overcome this inconvenience, defining poverty according to a uniform welfare level in all countries of the region, Psacharopoulos *et al.* (1993) used poverty lines representing US\$ 60 a month in 1985 purchasing power parity dollars (of private consumption) and defined an additional extreme poverty line at US\$ 30 per person per month in 1985 PPP dollars³ private consumption) and defined an additional extreme poverty line at US\$ 30 per person per month in 1985 PPP dollars⁴.

2.2. Selecting poverty lines for the long-term assessment of poverty

The practice just reviewed provides alternative poverty lines for each country, drawn according to the food-share method but using different combinations of normative/behavioral criteria, and with a set of exogenously established (for international comparability) lines. Rather than attempting a new round of esti-

² Even accepting that a non-food share for the poor somewhat lower than that of the "reference group" may be justified on the basis of covering only "basic" needs, a uniform procedure for all countries in the region results in a comparative underestimation of poverty in those countries with higher real income.

³ Thus maintaining the relationship established by Altimir (1979 and 1982a) and CEPAL (1991) between the "moderate poverty" line and the "extreme poverty" line. Psacharopoulos *et al.* (1993) also adopted the urban-rural price differentials used in those previous studies.

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mates, our purposes may well be served by selecting the poverty lines to be used from the existing sets.

However, these show in some instances wide differences (see Table 1). Lines from Altimir (1979) lie in some cases (Colombia and Mexico) about 30% below those from CEPAL (1991). The \$ 60 a month of PPP dollars (Psacharopoulos *et al.*, 1993) represents around .7 of the corresponding CEPAL lines for Argentina and Chile, .6 in the case of Mexico and only .4 of the CEPAL poverty line for Colombia. On the other hand, the poverty lines drawn by INEGI/CEPAL (INEGI, 1993) for Mexico are more than 20% higher than those previously drawn by CEPAL (1991).

TABLE 1
POVERTY LINES USED IN THE ESTIMATES
(US dollars of the second semester of 1988. Monthly per capita)

Countries and alternative lines	Indigence lines		Poverty lines	
	Urban	Rural	Urban	Rural
Argentina				
CEPAL (1991)	31.5	24.4	63.0	42.7
US\$ 30 & 60 PPP	22.4	15.1	44.8	26.4
Chile				
CEPAL (1991)	21.7	16.7	43.3	29.2
US\$ 30 & 60 PPP	15.1	10.2	30.2	17.9
Colombia				
CEPAL (1991)	27.7	22.5	55.4	39.4
Altimir (1976)	20.3	15.9	40.7	27.7
US\$ 30 & 60 PPP	10.7	7.6	21.4	13.3
Mexico				
CEPAL/INEGI (1993)	32.9	26.2	65.8	45.8
Intermediate	26.5	22.1	53.0	38.6
US\$ 30 & 60 PPP	16.1	11.8	32.2	20.7

All of these absolute poverty lines were drawn with the intention of establishing thresholds of minimum private consumption below which people are considered to be "poor", in the sense that they are deprived of fully satisfying those basic needs. This, however, implies a dichotomous partition of the population into poor/non-poor (deprived/non-deprived) with at least two important consequences. On the one hand, such a sharp cut-off assumes the certainty that those below it are deprived and those above it are not, whereas the probability of actually being poor –while certainly increasing when the level of resources decreases and being very likely high at the cut-off level– is in fact unknown. On the other hand, conceptually the partition itself involves all degrees of deprivation, from the slightest (just below the poverty line) to the most extreme (at the bottom of the distribution of welfare).

When reviewing these problems, along with the possible effects of measurement errors and the arbitrariness involved in drawing the poverty lines according to any of the current approaches, Ravallion (1995) has suggested the practice of considering at least two poverty lines –the lower one interpretable as an “ultra-poverty line”– and even made the case for considering points over a wide range of the distribution of consumption or income. Along similar lines, Lipton (1988) has argued for identifying as the “ultra-poor” the sub-set of the poor who are at serious nutritional risk.

The use of dual poverty lines has been standard in Latin American practice. Altimir (1979 and 1982a) assumed that those having barely enough resources to acquire the minimum food budget had a very high probability of widely failing to meet their nutritional needs, since the satisfaction of some other unpostponable basic needs would successfully compete for those resources. Consequently, the value of total private consumption equivalent to the minimum food budget was considered as the threshold for ultra-poverty, labelled as “destitution line” (Altimir, 1982a) or “indigence line” (Altimir 1979 and CEPAL, 1991)⁵.

On the other hand, the differences between the levels of consumption represented by the poverty lines (and the corresponding indigence or extreme poverty lines) drawn by different authors can fairly be interpreted as indicating differences of the degree of deprivation or in the probability of those below it being severely deprived.

Taking advantage of those differences, a set of poverty thresholds was selected for each country, covering a wide range of income levels, from the available poverty lines, with a view both to assessing the long-term trend of poverty at different levels of resource insufficiency and to be able to analyze the dominance conditions of that trend. In all countries, CEPAL’s (1991) poverty and indigence lines were used⁶, with a view to compare the results of the present exercise with CEPAL’s current estimates of the incidence of poverty in the main countries of the region (CEPAL, 2000). Also in all of them, a poverty line of two dollars of purchasing power parity in 1985⁷ per capita a day and the corresponding extreme poverty line of one dollar of PPP a day were used, both because they represented lower thresholds and for international comparability purposes⁸. However, in Colombia and Mexico those alternatives lie widely apart, for which reason another set of intermediate poverty and indigence lines was also considered⁹.

⁵ Psacharopoulos *et al.* (1993) also set “extreme poverty” lines at half the value of the corresponding poverty thresholds (i.e.: \$ 30 PPP dollars of 1985, for international comparability).

⁶ In the cases of Chile and Mexico, these are also the thresholds used for the official estimates of poverty by MIDEPLAN and INEGI, respectively.

⁷ The PPPs for private consumption from Summer and Heston (1988) were used in each case.

⁸ These were also the lines used in Psacharopoulos *et al.* (1993), except that they were set to the period of estimation by those authors using the general consumer price index (see below).

⁹ In the case of Colombia, the lines set in Altimir (1979) were used. In the case of Mexico, those based on a stricter food basket (CEPAL, 1991).

For each country, altogether these alternative poverty and indigence lines constitute an array of thresholds representing different degrees of deprivation, ranging in value from 1 to 3 in Argentina and Chile and from 1 to 5 in Colombia and Mexico (See Table 1). The poverty lines of two dollars of PPP per capita a day represent between 15% and 18% of GDP per capita in all of the countries considered here, and the corresponding extreme poverty lines of one dollar a day between 7% and 10% of that average¹⁰. On the other extreme, the higher poverty lines amount to 20% and 25% of GDP per capita in Argentina and Chile, 33% in Mexico and as much as 43% in Colombia.

2.3. Drawing poverty lines back in time

a) *Adjusting for changes in prices*

Comparisons of absolute poverty over time requires that poverty lines in terms of consumption have a constant purchasing power. For that purpose, a cost-of-living index appropriate for the poor should be used. One possible solution is to use a bundle of goods corresponding to the level of consumption at the poverty line (Lipton and Ravallion, 1995). Lacking the information for applying such a criterion over the long periods covered in this exercise, the official CPI for food¹¹ was used in each case for backdating the minimum food budgets that were at the base of the estimation of the poverty lines selected. As far as the bundles of foodstuffs used in calculating them did not differ significantly from those consumed by households around the poverty line, this may be an acceptable proxy of the said criterion, at least for the urban areas¹².

Minimum food budgets (used also as “indigence lines”) estimated by CEPAL (1991) at 1988 prices for the capital cities or the urban areas were expressed at current prices of the reference periods of the income distribution data to be used in the estimates, by means of the CPI for food of each country. To obtain the corresponding minimum food budgets for non-metropolitan urban areas and for rural areas, the differentials (-5% and -25%, respectively) of the baseline were maintained, since for back years there is still less information on that regard.

Poverty lines for the same periods were obtained by applying to the minimum food budgets also the same coefficients used in Altimir (1979) for 1970 – on the basis of the evidence then available – and in the estimates of CEPAL (1991) for the eighties, after considering more recent evidence: 2 for urban areas and 1.75 for rural areas.

¹⁰ This is not surprising, since the per capita GDP of the four countries draw nearer, when expressed in the purchasing power parities estimated by Summer and Heston (1988).

¹¹ According to the latest update in ECLAC’s data base (CEPAL, 1996a). In the case of Chile, the official CPI was corrected for underestimation during the period 1971/1978 in accordance with the corrections estimated by Cortázar and Marshall (1980).

¹² A recent sensitivity analysis by CEPAL (1996b) of the influence of different methodological options on its poverty estimates for Chile, showed that the extrapolation to 1994 of the basic food budget for 1987 by means of the official ICP for food rendered a value only 1.3% below the one obtained by its normal procedure of valuing the basic food basket with the average of prices collected for each foodstuff included in that basket.

This criterion of maintaining the relation between food and non-food basic requirements constant over time is highly debatable, even though it is common practice. For our purposes, this procedure was preferred to the alternative of using the general CPI for the poverty lines because: (i) the food/non-food relations in the weights of the CPIs were considerably different from those of households around the poverty threshold; (ii) the bundles of non-food items in the CPIs were widely different from those of basic needs satisfiers implicit in the poverty lines; and (iii) the relationship between the minimum food budget and the respective poverty line would have been subject to the change of the relation between the prices of the bundle of foodstuffs (deemed as roughly representative of that faced by the poor) and the prices of the bundle of non-food goods (deemed as unrepresentative for the poor) and only to that change, without regard to the corresponding substitution effects and to contextual influences that may affect the food/non-food expenditure of the poor over time.

TABLE 2
SHIFTING POVERTY LINES WITH GROWTH^a
(Indices: 1988 = 100)

	Argentina		Chile		Colombia		Mexico	
	E = 0.3	E = 0.5	E = 0.3	E = 0.5	E = 0.3	E = 0.5	E = 0.3	E = 0.5
1938					82	70		
1950							76	63
1951					84	73		
1953	84	75						
1957			91	85				
1960			91	85				
1961	88	81						
1963	88	81					82	72
1964					87	79		
1967							86	78
1968			95	92				
1970	95	92						
1971					91	84		
1975	98	97						
1977							94	91
1978			98	96	96	93		
1980	100	100	98	97	97	95		
1981								
1984							100	100
1987			100	100	100	100	100	100
1988	100	100	100	100				
1990								
1992	100	100	108	107	102	103	100	100
1993					103	105		

^a By means of elasticities (E) with respect to real GDP per capita.

TABLE 3
EFFECTS OF SHIFTING POVERTY LINES ON THEIR RELATION
TO MINIMUM FOOD BUDGETS
(Poverty line/Minimum food budget)

	Argentina		Chile		Colombia		Mexico	
	E = 0.3	E = 0.5	E = 0.3	E = 0.5	E = 0.3	E = 0.5	E = 0.3	E = 0.5
1938					1.64	1.40		
1950							1.52	1.28
1951					1.67	1.46		
1953	1.69	1.50						
1957			1.84	1.70				
1960			1.84	1.70				
1961	1.76	1.61						
1963	1.76	1.61					1.64	1.45
1964					1.75	1.58		
1967							1.52	1.57
1968			1.94	1.85				
1970	1.90	1.84						
1971					1.81	1.68		
1975	1.96	1.94						
1977							1.88	1.82
1978					1.92	1.86		
1980	2.00	2.00	1.98	1.93	1.94	1.91		
1981								
1984							2.00	2.00
1987			2.00	2.00				
1988	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
1990								
1992	2.00	2.00	2.16	2.29	2.04	2.07	2.00	2.00
1993					2.06	2.11		

2.4. Selection of income distribution estimates

Income distribution statistics available in Latin America have traditionally originated in: i) labor surveys, carried out once or more times a year, ii) occasional supplementary income surveys, iii) infrequent income and expenditure surveys; iv) those few population censuses that inquired successfully about incomes; and v) more recently, in some countries, surveys of living conditions or access to public services and infrastructure¹³. In Argentina and Colombia, estimates have also been made combining different sources of data on income.

Surveys of national coverage (including rural areas) are not the rule, except for Mexico, where there is a long-standing tradition of carrying out income and expenditure surveys of national coverage. Moreover, in some countries (like Argentina or Chile) only income data covering the metropolitan area of the capital city is available for long periods of time.

¹³ Like the LSMS developed by the World Bank and carried out in Peru or the CASEN survey carried out biannually in Chile.

On the other hand, the measurement of income in different types of surveys is subject to a number of non-sampling errors which affect the accuracy of both the mean and the shape of the distribution in varying degrees.

Therefore, in order to obtain poverty measurements of *comparable accuracy* (even though this accuracy may be less than that required of current measurements for policy purposes) to analyze long-term trends, it was deemed necessary first, to select for each subperiod surveys as comparable as possible and second, to take into account the differences in the underestimation of income of even otherwise similar surveys. Previous work on income distribution in these countries (Altimir, 1981, 1982b, 1986, 1987 and 1994) provided insights on the reliability of available income distribution measurements, that also helped for such a selection. This, for each country, considering the type of surveys (or of multi-sources estimates), geographical coverage and relative reliability of available results, is summarized in annex Table A.1. The selection also excluded data for years of recession, in order to better approximate the underlying trends in “normal” times.

2.5. Accounting for income underestimation

Estimating the incidence of poverty by applying independently valued poverty lines to income distributions that are subject to different degrees of income underestimation would not only result in exaggerating incidence but, even more important for our purposes, in incomparable estimates of poverty.

One way to obtain an assessment of the degree of incomes underestimation in available distributions is by comparing them with the corresponding (i.e.: conceptually similar) national accounts averages (Altimir, 1987). The discrepancies between surveys’ mean income and the equivalent income concepts derived from national accounts have been calculated by CEPAL for most available surveys in the postwar period¹⁴.

In order to account for income underestimation, indigence and poverty lines applicable to each income distribution were adjusted downwards –when necessary– according to the discrepancy with national accounts calculated by CEPAL for that distribution. This procedure assumes the same proportion of income underestimation along the entire distribution. Therefore, it may involve some downward bias in estimating the incidence of poverty, as far as income underestimation may actually either increase with income or at least be different for different types of income (with unitary income elasticity for each of them) as assumed in Altimir (1987). However, that the incomes of the poor are better reported than on average is by no means certain.

2.6. Adjusting for differences in the distribution by total household income and by per capita household income

Poverty lines are drawn in per capita terms. A household is considered poor if its per capita income falls below the line. That is how the incidence of poverty among all households is determined in the CEPAL estimates published in the

¹⁴ Including CEPAL (1987b) for Argentina, CEPAL (1987a) for Chile, CEPAL (1986) for Colombia, CEPAL (1988) for Mexico and CEPAL (1989) for eight countries.

Social Panorama, which are the benchmark for the present estimates. However, very few of the statistics on income distribution for the past are in terms of per capita household income; most rank households by total household income or even refer to the distribution of earners by size of their personal income.

The ranking of individual households by their total income is very different from the ranking of the same households by their per capita income. However, the aggregate distribution of households by relative –to the mean– per capita income, being generally less concentrated than that by relative size of total household income, usually is not of a shape so utterly different from this last. Nevertheless, transforming one into the other by means of the average size of all households would introduce a bias when estimating the incidence of poverty, not only because of the possible differences between both frequency distributions, but also because households in the neighborhood of the poverty line are of a size different from the average.

There is enough empirical evidence that, while household size decreases with per capita income, it increases with total household income. The analysis of the relevant data from a number of household surveys carried over the last two decades in Latin American countries revealed pretty stable lesser-than-one relations between the mean size of households in each of the lower decile groups of the distribution of households by total income and the average household size¹⁵. Consequently, the per capita indigence and poverty lines were transformed into per household lines by adjusting the average household size of the survey by the coefficient corresponding to the relevant decile¹⁶.

In those cases (Colombia, at the national level) in which it was necessary to base the estimates on the distribution of income among income earners, a similar transformation was made, from a per capita to a per earner poverty line, by means of the average persons per earner in the household. In this case there is also evidence that the number of earners in the household increases with total household income, but there is not enough of it on which to base a similar adjustment function. Therefore, in those cases there is a bias toward overestimating the incidence of poverty *vis à vis* the estimates based on the distribution of household income, although it may not significantly affect their comparability over time.

2.7. The poverty measure

The long-term trends of the evolution of poverty are assessed by means of the incidence of poverty (i.e.: the proportion of households below the poverty

¹⁵ The estimated relations were: .826 for the first decile group, .903 for the second decile, .953 for the third one, and close to one for the fourth and fifth deciles, in all cases with low variances.

¹⁶ Applying the same procedure to the results of recent surveys in which both the distribution of households by per capita income and by total income were available, as well as the alternative of transforming the per capita line to a household basis by means of the average size, showed that: (i) the second procedure overestimated poverty incidence between one and two fifths of the incidence estimated on the distribution by per capita income and (ii) the procedure adopted reduced that overestimate at least by half, in some cases completely and in some other even produced a slight underestimation.

line or head-count index). As it is well known, this index is insensitive to the depth of poverty. Other measures reflect how far is the average income of the poor from the poverty line (as the poverty gap does) or the severity of poverty amongst the poor (like the Foster-Greer-Thorbecke P_2 measure).

However, it was deemed inappropriate to estimate these other measures, considering the limitations of the data being used and the *ad hoc* procedures devised for estimating the proportion of the poor with a degree of accuracy (or inaccuracy) that admits at least its comparability over time. In particular, the unavailability in most cases of data on the entire distribution of the poor according to their per capita income and the possibility that differential income underestimation among the poor may impair the comparability of such measures over time.

Nevertheless, the use of several poverty lines, of different severity, according to which the incidence of poverty has been alternatively estimated, in a way (conceptually less rigorous than the above mentioned measures) permits the analysis of the evolution of a wide spectrum of poverty situations.

2.8. Indices of the evolution of absolute poverty and benchmark estimates of poverty incidence

The estimates of the incidence of poverty among households (in annex Tables A.2 to A.5) obtained by the procedures described above are intended to provide successively comparable pairs of measurements, based on alternative poverty criteria, on the basis of which the trends of poverty over a long period of time can be assessed. Considering the relative accuracy of those measurements and the chaining procedure used, each series has been expressed as an index, with the base in the first “normal” (i.e.: non recessive) year for which there is a benchmark estimate.

CEPAL’s estimates of the incidence of poverty for the eighties and early nineties in the *Social Panorama* (ECLAC, 1997, 2000), which were obtained by processing all households according to their (adjusted¹⁷) per capita income and using the CEPAL poverty and indigence lines, are considered as *benchmark estimates*. The corresponding estimates in the series (Annex Tables A.4 to A.7) using the CEPAL lines for the same years and based on the same surveys are in most cases close to those benchmarks, but do not coincide with them because the data were treated with the same procedures used for earlier periods, for the sake of comparability over time. Therefore, it is fair enough to apply the indices of incidence corresponding to the CEPAL poverty lines to the benchmark estimates for the base year in order to obtain a rough approximation to the incidence of poverty –according to that standard– in a distant period, as it is done in Figures 1 to 4.

¹⁷ Adjustment of the income of households for underestimation is done according to the procedure first proposed in Altimir (1987), which considers the underestimation of each type of income as equivalent to the shortfall of the mean income of that type with respect to the corresponding mean from the national accounts and assumes that the degree of underestimation (and, therefore, the adjustment) is constant for each type of income (CEPAL, 1991).

Each series of incidence estimates for a given geographic coverage and the index built upon it corresponds to a different definition of absolute poverty, inasmuch as it originates in applying a different poverty or extreme poverty line to the same distribution data. Thus, incidence estimates in Annex Tables A.2 to A.5 for a given year somehow stratify the poor from the broadest to the strictest criterion of deprivation, as concentric circles of poverty.

On the other hand, the indices in Tables 2 to 5 depict the trend of each particular definition of poverty. In general, these trends may and do differ, reflecting changes in the distribution of income affecting the proportions suffering from different degrees of deprivation. There are different ways of looking for the “general” trend of absolute poverty over the long-run and for its changes in specific sub-periods. One way is to focus on the index corresponding to the more ample definition of poverty, considering those corresponding to the other definitions or degrees of severity as indicative of differential trends within the universe of the poor. Another way is to observe the trend of the average of indices corresponding to the different deprivation criteria as representative of changes in all shades of poverty. But in any case it is necessary to analyze the possible ambiguity of the trend; as we are using the headcount ratio for different points of the poverty spectrum, it is possible to analyze the first-order dominance; i.e.: only if the incidence of poverty according to all definitions (cut-off points on the “poverty incidence curve”¹⁸) changes in the same direction, the change or trend is unambiguous.

2.9. The effect of shifting the poverty standard

The recognition that absolute poverty norms are nevertheless dependent of the societal context (although not *relative* to any parameter of the income distribution) and that implicit societal norms shift over time drawn *inter alia* by economic growth and its effects on styles of living should be reflected in poverty lines used by experts. In the present exercise, as indicated above, that recognition led to shifting poverty lines at 1988 prices according to two arbitrary elasticities (0.3 and 0.5) with respect to per capita growth¹⁹. However, that relationship was applied only during periods of growth, while poverty lines thus shifted were maintained constant during periods of stagnation or recession and recovery, up to those moments when per capita income rose to new heights. Such a procedure implicitly assumes that societal norms and the basic traits of living styles, once modified as a consequence of growth and societal change, do not regress in the face of recession.

That recognition and the consequent shifting of poverty lines was necessary for better assessing the long term trends of poverty. If we consider the possible effects on the CEPAL poverty lines of the significant growth that took place in these countries between 1950 and 1980, poverty incidence in Colombia at the beginning of that long period would be closer to 70% than to the 80% obtained

¹⁸ See Ravaillon (1995).

¹⁹ A more thorough assessment of poverty standards and of the incidence of poverty in the distant past would require the analysis of consumption patterns and dietary intakes of yore, as Altimir (1979, 1982) or CEPAL (1991) have done for the recent past.

with 1988 poverty lines, with which the incidence in 1988 is around 50% (See Figure 1). In the same manner, the more than 70% of poverty incidence obtained for 1950 in Mexico shrinks to 53% when allowing for the effect of societal change in comparison to the 34% in 1984 (See Figure 2). Likewise, the incidence of more than 50% of poverty estimated for Chile in 1957 becomes 40% when considering the possible effects of growth taken place until 1980 in comparison with the similar 40% in 1980 (See Figure 3). In the case of Argentina, the small incidence of poverty before 1980 may have been also affected by growth, in which case we should compare the 7% reached in this year with still smaller magnitudes of incidence in the past (See Figure 4).

It is not likely that societal values and norms had changed during the eighties, in the absence of sustained growth²⁰. Consequently, poverty measurements in the eighties with the 1988 lines should be comparable. But eventually in the nineties recovery took place and per capita income at some point surpassed previous peaks. If we look at this more recent past with the same regard that we apply to the distant past and shift the 1988 poverty lines accordingly, from the point in which the previous peak was surpassed, the effect of growth on the reduction of poverty is weakened and the abatement of poverty becomes less notorious. In Chile, where per capita income in 1998 was 66% higher than in 1988 (and corresponding changes in lifestyles quite obvious), the 39% poverty incidence in 1987 would be more comparable with 31% in 1998 (or with 24% if we adopt a 0.3 elasticity) than with the 20% estimated using a constant poverty line (see Figure 3). In Colombia, where per capita income grew 24% between 1988 and 1997, the 50% incidence of poverty in the first year would not have been reduced at all by 1997, instead of having diminished to 45% maintaining the poverty line invariant (see Figure 2). On the contrary, Argentina and Mexico have only slightly increased their real per capita income (5% and 4%, respectively) since 1994, increases small enough to assume that growth has no yet affected lifestyles²¹.

3. COUNTRY TRENDS

In 1980, an estimated 35% of Latin American households (25% of those in the urban areas and 54% of rural households) were in poverty and 15% in extreme poverty, according to CEPAL standards²². After the critical and eventful decade of the eighties, the incidence of poverty in the region had increased to 41% of households. Economic recovery across the region in the early nineties reduced it only slightly, to 39% (with 17% of households in extreme poverty) in 1994. Ensuing unstable growth only dented the incidence of poverty to 36% in 1997. Still close to 200 million people live on incomes below those poverty

²⁰ With Colombia as the exception, which continued growing during the eighties.

²¹ If nevertheless we apply the shifting procedure also for this period in both countries (for the sake of consistency, both with the past and with the effect of future growth), a percentage point should be added to the incidence of poverty estimated with constant poverty lines, thus reaching 15% in Argentina and 39% in Mexico.

²² Psacharopoulos *et al.* (1993) estimated that in 1980 close to 27% of the population lived below the 60 PPP dollars line.

lines, almost half of them in extreme poverty. Moreover, in contrast with 1980, almost two thirds of Latin American poor (and more than half of the indigent) now live in urban areas (ECLAC, 1997, 2000).

In this context, the four countries we are considering here are differently situated. Colombia and Mexico, with an incidence of poverty exceeding or just below –respectively– 40%, belong to a class with Brazil and are therefore near the regional mean, to which they contribute significantly. Chile, which for some time belonged to that class, has recently improved its poverty incidence into a more moderate degree, comparable with the one traditionally held by Costa Rica. Argentina, in spite of its recent slide into significant poverty, still exhibits, along with Uruguay, one of the lowest incidences of the region. (See ECLAC, 1997; Table 16.) These, however, are the present stage of long-term processes of evolution and change that the economies and societies underwent, to assess the consequences of which on the evolution of poverty is the purpose of this paper.

The evolution of poverty, as measured by its incidence (i.e.: the head-count ratio) is dependent on the growth of the economy, since it affects the relationship between the absolute poverty line being used and the average income, and on changes of the distribution of income that affect the proportion of units that fall below the poverty line. Thus, inequality changes have an effect on poverty as far as they involve changes in the relative position of the groups at the bottom of the distribution *vis à vis* those at the other echelons of the distribution.

Growth in Latin America has been significant between 1950 and 1980 (2.7% per capita a year for the region as a whole). However, the four countries have grown, on average, at different speeds (Mexico, at 3.4% per capita a year, Colombia at 2.3%, Argentina at around 2% and Chile at 1.4%) and with contrasting steadiness (Colombia and Mexico, quite steadily; Argentina and Chile, with disruptions and instability or severe fluctuations). The regional crisis of the eighties brought recession to all of them –in different degrees and duration– except Colombia. All four eventually recovered in the nineties, Chile and Argentina averaging 5.3% and 4.4% per capita up to 1998 and Colombia and Mexico 1.3% annual per capita in the same period.

On the other hand, income inequality –traditionally very high in the countries of the region– in the fifties was considerably higher in the labor surplus economies of Colombia and Mexico than in land-abundant Argentina, with Chile in an intermediate situation. In the first two countries, inequality rose even more during the fifties and sixties, when it began a decline that reached previous levels by the end of the seventies. In Argentina and Chile, inequality crawled upwards during the fifties and sixties, but in both countries increased significantly during the seventies (Altimir, 1994).

During the crisis of the eighties, different combinations of external shocks, policy failures and recession brought about increases of inequality in Argentina, Chile and Mexico, while a mild recession and steady policies in Colombia allowed even for a decrease of inequality. Subsequent recovery induced decreases of income inequality, but at the end of the crisis (i.e.: when economies were again growing at full-capacity), at least Argentina and Mexico had degrees of inequality wider than before the crisis, and Chile had to wait for further sustained growth and progressive policies to barely recover pre-crisis levels of inequality (Altimir, 1996).

Trends of absolute poverty have been obviously affected by the evolution, just sketched, of growth and equity. To at least avoid the effect of cyclical fluctuations blurring the longer-term trends of absolute poverty, only years in which the economies were closer to their potential growth path²³ were considered.

3.1. Colombia: poverty-reducing growth

In 1964, after a quarter century of moderate growth with increasing inequality (Londoño, 1995), the incidence of poverty –at the national level– had been reduced only slightly, but unambiguously: it was lower at every level of deprivation considered here. Accepting that the incidence of all shades of poverty in 1938 was somewhat higher than in 1951, and that the more extreme the poverty the higher, development during WWII and its aftermath brought about some improvement, more significant to the poorest²⁴. In this light, the advances of the subsequent period, between 1951 and 1964, look meager, even for the poorest²⁵ (See Table 4).

TABLE 4
COLOMBIA: EVOLUTION OF ABSOLUTE POVERTY
Indices of Estimated Incidence

Alternative	Relation to GDPpc In 1988	1938	1951	1964	1971	1978	1980	1988	1992	1994	1997 poverty lines ^{1/}
I. Constant poverty lines^{2/}											
A. National level											
(Indices 1988 = 100)											
c) CEPAL P.L	0.46	170	159	150	125	109		100		93	87
b) Altimir P.L	0.33	219	201	186	136	112		100			
c) CEPAL I.L	0.24	336	294	266	180	126		100			
d) US\$ 60 PPP P.L	0.17	426	369	346	187	111		100			
e) US\$ 30 PPP	0.09	440	302	296	121	96		100			
Average		318	265	248	150	111		100			
B. Urban areas											
(Indices 1980 = 100)											
a) CEPAL P.L	0.52			183	129		100		105	114	104
b) Altimir P.L	0.37			223	140		100				
c) CEPAL I.L	0.25			237	139		100				
d) US\$ 60 PPP	0.19			258	114		100				
e) US\$ 30 PPP	0.10			^{4/}	118		100				
Average				225	128		100				
Memo: GDP_{pc} growth (annual %)^{5/}		1.1	1.9	2.4			3.4	1.5	1.5	3.7	1.6

²³ At least, locally, in the sense that the years selected were not of recession. On the other hand, abnormal non-seasonal fluctuations that may have affected the distribution of incomes could anyhow blur the assessment of poverty trends.

²⁴ With contemporary standards, the incidence of poverty in 1951 would have been as much as 84% using the CEPAL moderate poverty line, 75% using the less generous Altimir line, and even 45% using the 60 PPP dollars of 1985 line. This highlights the need for shifting poverty norms along with growth: using a .5 elasticity, poverty incidence would have been 75%, 32% and 30%, respectively, with extreme poverty at 15% of households, when using the 30 PPP dollars yardstick. (See Table A.4 and Figure 1.)

²⁵ Moreover, shifting poverty lines with growth, the incidence of poverty at the low end of the distribution would have not been reduced in this period.

Table 4 (cont.)

Alternative	Relation to GDPpc In 1988	1938	1951	1964	1971	1978	1980	1988	1992	1994	1997 poverty lines ^{1/}
II. Shifting poverty lines^{3/}											
A. National level											
(Indices 1988=100)											
a) CEPAL P.L.		153	142	137	112	102	100			96	97
b) Altamir		183	167	162	122	103	100				
c) US\$ PPP P.L.		279	246	263	128	98	100				
Average			205	185	187	121	101	100			
B. Urban areas											
(Indices 1980=100)											
a) CEPAL P.L.				167	114		100		114	129	125
b) Altamir				167	123		100				
c) US\$ PPP P.L.				257	92		100				
Average				197	110		100				
III. Extreme poverty											
A. National level											
(Indices 1988=100)											
c) CEPAL I.L.	0.24	336	294	266	180	126	100			122	94
e) US\$ 30 PPP I.L.	0.09	440	302	296	121	96	100				
Average			388	298	281	150	111	100			
B. Urban areas											
(Indices 1980=100)											
c) CEPAL I.L.	0.25			237	139		100		101	115	96
e) US\$ 30 PPP I.L.	0.10			636	118		100				
Average					326	128	100				

^{1/} Poverty lines (P.L.) are drawn at twice the level of indigence lines (I.L.) for the urban areas and at 1.75 for the rural areas.

^{2/} The different poverty lines for the second semester of 1988 were held constant in real terms over time by maintaining their relation to the respective indigence lines (basic food budgets), which have been valued at the prices of each period by means of the food component of the consumer price index.

^{3/} 1988 poverty lines were shifted backwards according to a 0.5 elasticity with respect to real per capita GDP, except for periods of recession, when constancy (i.e.: zero elasticity) was assumed.

^{4/} Grouped data do not allow for estimating the incidence of indigence at a very low level.

^{5/} Average of the period starting in the preceding year.

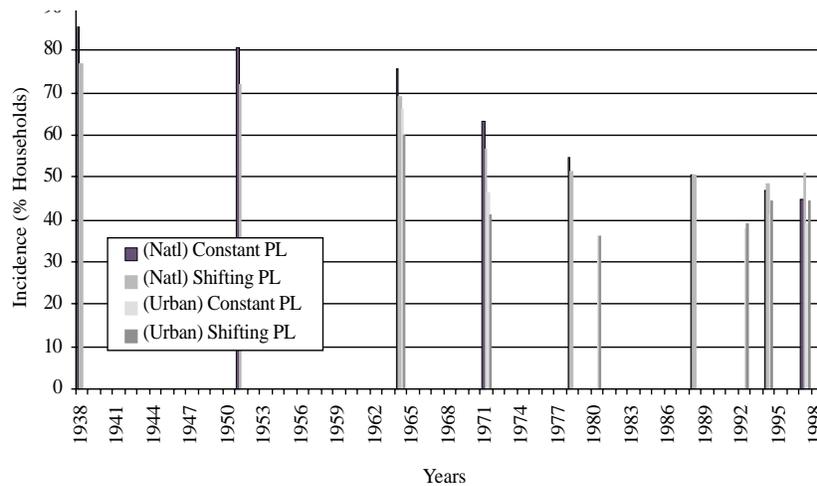
Distributive improvement and accelerating growth steadily –and unambiguously, since the reduction occurred at all levels of deprivation– reduced significantly the incidence of poverty in the late sixties and somewhat more in the seventies. By 1978, incidence of the more ample definitions of poverty had dropped a third or more of its 1964 level and extreme poverty had been reduced by more than half or even by two thirds (depending of the yardstick we follow²⁶). The abatement of poverty in the urban areas was no less spectacular and also relatively more intense at the lower end of the distribution.

²⁶ In 1978, extreme poverty or indigence at the national level is estimated at 27%, 15% or 5%, depending on the severity of the extreme poverty line (See Table A.6). On this respect, it should be noted that the 30 dollars of PPP did not cover, in 1988, more than 40% of the minimum food budget estimated by CEPAL or a mere half of the more austere one estimated by Altamir (1979). (See Table 1.)

During the slowdown of the eighties, the incidence of poverty continued to be reduced, at the national level at least²⁷, albeit more sluggishly and not so definitely, since the most extreme poverty (i.e.: below one PPP dollar a day) increased somewhat. However, the incidence of poverty and indigence in the urban areas may have remained approximately constant, both according to CEPAL and to DNP²⁸. But in the nineties, the continuous reduction of poverty ceased: after an increase around 1994, the incidence of poverty in 1997 was about the same as at the beginning of the decade. (See Table 4.)

Therefore, the long-run record of the Colombian economy and society is one of strongly poverty-reducing growth. Beyond the changes of pace just outlined, the incidence of all shades of income poverty has significantly and steadily decreased over the more than half a century between the end of the thirties and the beginning of the nineties, when the process stalled (see Figure 1). Moreover, the greater reduction has been that of extreme poverty: however defined, its incidence has dwindled to a fourth of what it was in the pre-war years (or a third of the 1951 levels), affecting at present at most a sixth of households. However, the incidence of poverty defined at a more moderate level has also significantly decreased over the long run: to 45%, almost a half of what it was in 1951 when, according to contemporary standards, would have included at least four fifths of the population (see Table 4). Even allowing for the effects of long-term development on poverty lines –by shifting them according to a .5 elasticity with respect to growth–, current moderate poverty incidence of 51% of households at the national level would still be almost two thirds of what has been estimated for fifty years back (see Figure 1).

FIGURE 1
COLOMBIA: LONG-TERM EVOLUTION OF ABSOLUTE POVERTY



²⁷ And on the basis of Londoño’s estimates (Londoño, 1995) of the distribution of income in Colombia.

²⁸ See Pérez, Lasso, Parra and Rivas (1996). DNP uses a set of poverty lines that is, on average, 20% higher than CEPAL’s poverty line for the urban areas. Although its minimum food budgets average 10% less than that used by CEPAL.

On top of the effects of growth and labor market developments that lie behind this evolution of poverty stemming from the primary distribution of income²⁹, successive social policies since the seventies have had a significant progressive impact on the distribution of welfare and, hence, on poverty. Both the increase of real social expenditures and their better targeting had improved the secondary distribution of income in favor of the lower strata³⁰.

3.2. Mexico: an interrupted trend of poverty reduction

During the fifties and early sixties the Mexican economy grew at a significant rate (2.8% per capita a year) while inequality was increasing (Altimir, 1982). In that phase of unequalizing growth the incidence of poverty decreased only modestly (about 20%, for most definitions) and that of extreme poverty may have even increased. Moreover, accounting for the influence of growth on poverty norms (i.e.: shifting poverty lines) the incidence of poverty more amply defined would have been reduced by only a seventh, while the proportion of households below a more severe line³¹ would have not even changed.

However, in the sixties growth accelerated and inequality peaked, to start a progressive improvement that stretched over the seventies. In the process, the incidence of extreme poverty was reduced to less than a half its previous level and incidence according to the more ample definitions decreased to about two thirds of what it was in 1963. Even considering the possible influence of the rapid (3.4% per capita) growth of the 1963-1977 period on the definition of poverty, the incidence according to the most ample definition would have been reduced by 25%. (See Table 5.)

Between 1977 and 1984, a period which includes the slowdown of the early eighties, the reduction of extreme poverty continued apace, due to distributive improvement, while the incidence of a more general concept of poverty diminished more modestly. In 1984, at 34% of households at the national level, the incidence of poverty was half that existing in 1950 (or two thirds, if poverty lines are shifted backwards).

The ensuing period of recession and adjustment brought about a considerable increase of inequality and an unambiguous increase of poverty at all levels³². By 1994, in spite of economic recovery (per capita income had regained the 1980 level) the incidence of poverty and extreme poverty had increased significantly. Further deterioration between 1994 and 1998 brought the incidence of poverty to the levels of the seventies (see Figure 2).

²⁹ It must be noted that distribution statistics do not capture rents from drug trade and from other criminal activities, that are important in the case of Colombia. Their probable regressive effect is increasing with their importance (Londoño, 1997), although it is difficult to assess their possible impact on poverty, beyond the visible one of dislocation of rural communities and mass exodus.

³⁰ Londoño (1997) estimates that the evolution of social expenditure between 1970 and 1995 has reduced by 1.6 points the Gini coefficient of the distribution of income; half of it attributable to the level and composition of social expenditures and the other half to their better targeting.

³¹ That equivalent (shifted) to 60 PPP dollars in 1985.

³² Lustig and Mitchell (1995) finds that, using survey data corrected for underreporting, poverty rises between 1984 and 1989 for all the poverty lines proposed by different authors. See also CEPAL's estimates for those years (ECLAC, 2000).

TABLE 5
MEXICO: EVOLUTION OF ABSOLUTE POVERTY
(Indices of Estimated Incidence 1984=100)

Alternative poverty lines ^{1/}	Relation to GDPpc in 1988	1950	1963	1967	1977	1984	1994	1998
I. Constant poverty lines^{2/}								
A. National level								
a) CEPAL/INEGI P.L.	0.33	212	177	148	111	100	114	116
b) Intermediate P.L.	0.27	249	195	160	117	100		
c) CEPAL/INEGI I.L.	0.17	394	282	196	127	100		
d) US\$ 60 PPP P.L.	0.16	388	302	210	137	100		
e) US\$ 30 PPP I.L.	0.08	330	343	180	153	100		
Average^{4/}		295	260	175	130	100		
Memo: GDPpc growth (annual %)^{5/}			2.8	1.5	3.0	2.1	1.9	0.9
B. Urban Areas								
a) CEPAL/INEGI P.L.	0.37		181	134		100	99	105
b) Intermediate P.L.	0.30		214	145		100		
c) CEPAL/INEGI I.L.	0.19		288	124		100		
d) US\$ 60 PPP P.L.	0.18		287	121		100		
e) US\$ 30 PPP I.L.	0.09		359	124		100		
Average^{3/}			260	131		100		
Memo: GDPpc growth (annual %)				4.5		2.6	1.9	0.9
C. Rural Areas								
a) CEPAL/INEGI P.L.	0.26		163	141		100	120	124
b) Intermediate P.L.	0.22		184	150		100		
c) CEPAL/INEGI I.L.	0.15		244	197		100		
d) US\$ 60 PPP P.L.	0.12		332	222		100		
e) US\$ 30 PPP I.L.	0.07		308	205		100		
Average			246	183		100		
II. Shifting Poverty lines^{6/}								
A. National level								
a) CEPAL/INEGI P.L.		157	137	118	101	100	114	119
b) Intermediate P.L.		172	148	120	105	100		
d) US\$ 60 PPP P.L.		198	200	141	117	100		
Average		176	162	126	108	100		
B. Urban areas								
a) CEPAL/INEGI P.L.			134	99		100	99	110
b) Intermediate P.L.			152	97		100		
d) US\$ 60 PPP P.L.			176	72		100		
Average			154	96		100		
C. Rural Areas								
a) CEPAL/INEGI P.L.			130	112		100	120	136
b) Intermediate P.L.			135	119		100		
d) US\$ 60 PPP P.L.			214	139		100		
Average			192	123		100		

Table 5 (cont.)

Alternative poverty lines ¹	Relation to GDPpc in 1988	1950	1963	1967	1977	1984	1994	1998
III. Extreme poverty								
A. National level								
c) CEPAL/INEGI I.L.	0.17	394	282	196	137	100	127	138
e) US\$ 30 PPP I.L.	0.08	330	343	180	153	100		
Average		362	313	188	145	100		
B. Urban areas								
c) CEPAL/INEGI I.L.	0.19		288	124		100	99	101
e) US\$ 30 PPP I.L.	0.09		359	124		100		
Average			324	124		100		
C. Rural areas								
c) CEPAL/INEGI I.L.	0.15		244	197		100	107	135
e) US\$ 30 PPP I.L.	0.07		308	205		100		
Average			276	201		100		

^{1/} Poverty lines (P.L.) are drawn at twice the level of indigence lines (I.L.) for the urban areas and at 1.75 for the rural areas.

^{2/} The different poverty lines for the second semester of 1988 were held constant in real terms over time by maintaining their relation to the respective indigence lines (basic food budgets), which have been valued at the prices of each period by means of the food component of the consumer price index.

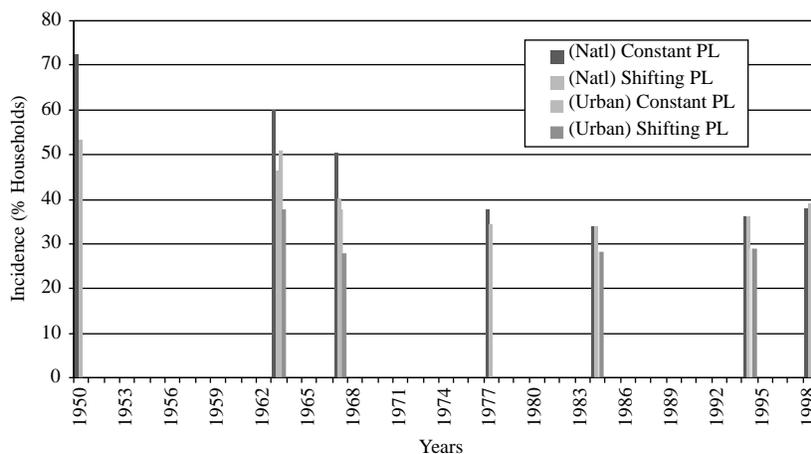
^{3/} As estimated by CEPAL/INEGI and published in "Social Panorama" (ECLAC, 1997).

^{4/} Excludes the index of the incidence of poverty estimated by means of the CEPAL/INEGI indigence line, which is very close to the US\$ 60 PPP poverty line.

^{5/} Average of the period starting in the preceding year, in real terms.

^{6/} 1988 poverty lines were shifted backwards according to a 0.5 elasticity with respect to real per capita GDP, except for periods of recession, when constancy (i.e.: zero elasticity) was assumed.

FIGURE 2
MEXICO: LONG-TERM EVOLUTION OF ABSOLUTE POVERTY



Overall, the combination of high growth and distributive improvement in the sixties and seventies has been responsible for two-thirds of the reduction in poverty and extreme poverty recorded in Mexico since 1950. During the sixties the decreases of the incidence of poverty and particularly of extreme poverty in the urban areas were relatively more intense than the corresponding decreases in the rural areas. On the contrary, reductions of poverty incidence (and particularly of extreme poverty) in the seventies were relatively more intense in the rural areas, whereas the abatement of urban poverty proceeded at a slower rhythm. The reversal, in the late eighties and nineties, of the trend towards the reduction of poverty, hit harder the rural poor; for the urban poor, even for the poorest among them, the deterioration occurred after 1994 (see Table 3).

Social expenditure had an undisputed redistributive effect in the seventies, at the very least by the expansion of its level, if not by targeting on the poor³³. This should have contributed, on top of the improvement of the distribution of primary incomes, to an even larger progress in living conditions. On the contrary, the fiscal crisis of the eighties may have affected more the poor, since the cuts and restructuring of public expenditure did not always focused on the needs of the urban poor or of rural communities (Friedman, Lustig, and Legovini, 1995). However, from 1989 onwards targeted antipoverty programs were put in place, but neither their actual impact nor their maintenance after the 1995 crisis can be readily assessed.

In summary, the trend of significant poverty reduction over the whole post-war period was interrupted in the eighties and has turned since then into a moderate aggravation. Moreover, the redistributive effects of social policies were largely suspended, with additional negative consequences on living standards, while it is difficult to ascertain the degree in which the actual short-term³⁴ impact of the new social policies on the poor has significantly dented the incidence of poverty.

3.3. Chile: restoring a broken trend of poverty reduction

The trend toward the reduction of poverty incidence in the urban areas of Chile, which was manifest in the fifties, gained momentum during the sixties. Poverty at all levels of deprivation approximately halved between 1957 and 1968; using CEPAL 1988 poverty lines, it would have dropped from more than 50% to less than 30% of households. Even shifting poverty lines to account for the influence of an average per capita growth of 1.8% a year³⁵ would imply that the incidence of the more ample definitions of poverty was reduced by a third during that period (see Table 6). Though there is no equivalent data for the rural areas, it is widely recognized that rural poverty may have also been reduced, as a consequence of the agrarian reform undertaken since 1965 (French-Davis, 1991).

³³ Social and rural development expenditures increased from 5.8% of GDP in 1970 to 10% in 1977 and 12.8% in 1981, falling later to 9% in 1984 and 7.2% in 1989 (Friedman, Lustig, and Legovini, 1995).

³⁴ As opposed to the longer-term impact of social policies on the structural conditions in which poverty originates.

³⁵ Which would put the incidence of poverty in 1957 at 40%.

TABLE 6
CHILE: EVOLUTION OF ABSOLUTE POVERTY
 Indices of Estimated Incidence (1987=100)

Alternative poverty lines ^{1/} to GDPpc in 1988	Relation	1957	1960	1968	1978	1980	1987	1992	1994	1998
I. Constant poverty lines^{2/}										
A. National										
a) CEPAL P.L.	0.25			91			100	71	59	46
b) US\$ 60 PPP P.L.	0.18			66			100			
c) CEPAL I.L.	0.13			66			100	14	7	7
d) US\$ 30 PPP P.L.	0.09			69			100			
Average				73			100			
B. Urban areas										
a) CEPAL P.L.	0.27	136	125	76	131	108	100	73	58	45
b) US\$ 60 PPP P.L.	0.19	109	109	62	142	109	100			
c) CEPAL I.L.	0.13	94	80	51	127	104	100			
d) US\$ 30 PPP P.L.	0.10	95	80	52	143	120	100			
Average		109	99	60	136	110	100			
Memo: Growth of GDPpc (annual %)		.5	2.2	-	5.8	-	5.9	4.2	5.0	
II. Shifting poverty lines^{3/}										
A. National										
a) CEPAL P.L.				82			100	85	76	71
b) US\$ 60 PPP P.L.				59			100			
Average				71			100			
B. Urban areas										
a) CEPAL P.L.		105	110	68	120	106	100	96	82	78
b) US\$ 60 PPP P.L.		82	84	56	128	104	100			
Average		94	97	62	124	105	100			
III. Extreme poverty										
A. National										
c) CEPAL I.L.	0.13			66			100	56	47	38
d) US\$ 30 PPP I.L.	0.09			69			100			
Average				68			100			
B. Urban areas										
c) CEPAL I.L.	0.13	94	80	51	127	104	100	53	41	31
d) US\$ 30 PPP I.L.	0.10	95	80	52	143	120	100			
Average		94	80	51	135	112	100			

^{1/} Poverty lines (P.L.) are drawn at twice the level of indigence lines (I.L.) for the urban areas and at 1.75 for the rural areas.

^{2/} The different poverty lines for the second semester of 1988 were held constant in real terms over time by maintaining their relation to the respective indigence lines (basic food budgets), which have been valued at the prices of each period by means of the food component of the consumer price index.

^{3/} 1988 poverty lines were shifted backwards according to a 0.5 elasticity with respect to real per capita GDP, except for periods of recession, when constancy (i.e.: zero elasticity) was assumed.

Until the early seventies, public social spending and social services expanded considerably. Even though this process was heavily influenced by the pressure of middle-class groups and unionized workers, significant amounts of social expenditure also favored the poor, which reflected in a rapid improvement of social indicators (Raczynski and Cominetti, 1994).

In the seventies, institutional disruption, an economic recession and a change of regime that included unfavorable rules for the workers and labor repression broke the previous trend and increased dramatically the incidence of poverty. By 1978, poverty in the urban areas had unambiguously increased: its incidence at moderate levels had about doubled and the incidence of extreme poverty had been multiplied by 2.5. Two years of booming growth (at almost 6% per capita a year) improved the situation by 1980, putting the incidence of extreme poverty at twice its 1968 level and that of more ample poverty at less than twice its previous levels (see Figure 3).

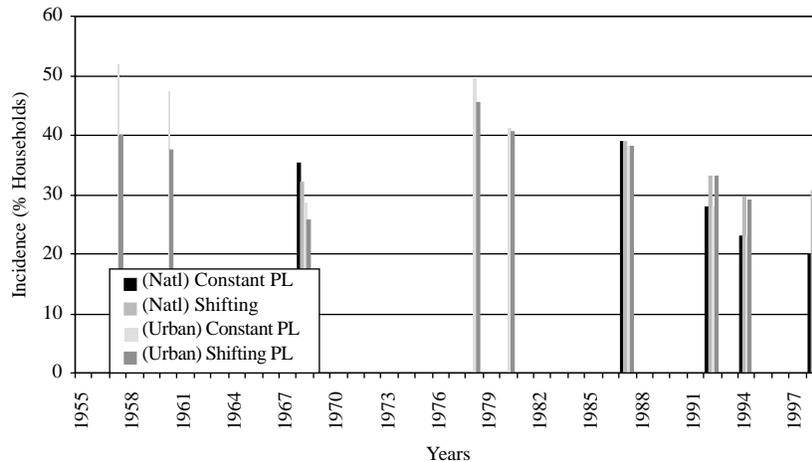
During the crisis of the eighties the incidence of poverty increased further, albeit temporarily. The deep recession (almost 20% in per capita terms, in the biennium 1982/83) brought about unprecedented open unemployment (more than a quarter of the labor force in the Greater Santiago) and a significant fall in real wages. The incidence of poverty may have increased by a fifth (Pollack and Uthoff, 1987).

The reforms of the seventies and eighties included a restructuring of public services and a change in the conception of social policies (Raczynski and Cominetti, 1994). The shrinking of the State, limiting its intervention, targeting and shifting responsibilities to the private sector became tenets of the new strategy. Total fiscal spending on the social areas was drastically reduced (10% in per capita terms) in the second half of the seventies. Even significant enhancement of total social expenditure in the eighties was mainly due to the fiscal cost of reforming the pension system to make room for private pensions; in 1987, real per capita fiscal expenditure in education was 20% lower and that in health only half the levels of 1974 (Mujica and Larrañaga, 1992). These reductions have no doubt affected the living conditions of the poor. However, this effect was marginally offset by improvements in targeting social expenditure by means of specific programs³⁶.

By 1987 the economy had recovered and was again functioning at close to full capacity. After the positive effects of recovery on real income and its distribution, the incidence of urban poverty, at all levels of severity, was still slightly higher than in 1980 and, therefore, more than twice the 1968 incidence of extreme poverty and more than 50% higher than that of more ample definitions of poverty. At the national level, the comparison between the situation in 1987 and that of 1968 appears somewhat less unfavorable than in the urban areas, as a reflection of the improved conditions in some agricultural areas. (See Table 4.). Using the official (CEPAL's) poverty lines for 1988 the estimated incidence of poverty in 1987, of 39% at the national level and 38% for the urban areas, compare with 35% and 29%, respectively, in 1968 (See Figure 3).

³⁶ In 1987, the lowest quintile of the population received 33% of actual fiscal social spending (excluding entitlements to pensions), but as much as 50-60% in the case of targeted programs, which certainly represented a minor proportion of total fiscal social expenditure (Haindl *et al.*, 1989).

FIGURE 3
CHILE: LONG-TERM EVOLUTION OF ABSOLUTE POVERTY



Sustained economic growth at more than 5% per capita a year and better working conditions in the early nineties restored the previous trend toward the abatement of poverty. Benchmark estimates indicate a reduction of the incidence of poverty (CEPAL definition) at the national level from 39% in 1987 to 24% in 1994 and only 20% in 1998, as well as a shrinking of extreme poverty from 14% to 5% of households, in the same period. Urban poverty almost halved (from 38% to 20%) between 1987 and 1998 and rural poverty decreased even more, from 45% to 23%.

Thus, after the explosion of poverty in the seventies and early eighties and the spectacular resumption of the trend towards poverty reduction, only in the early nineties may have been reached again the levels of poverty and extreme poverty incidence attained in the late sixties. Further accelerated growth improved the record over those marks.

Allowing for the shifting of poverty lines as a result of growth and societal change provides a more realistic picture, particularly taking into account the prolonged period of rapid and sustained growth experienced by Chile in the late eighties and the nineties. Not only there would have been less poverty in the sixties and the deterioration of the seventies and early eighties would result somewhat attenuated, but the recent trend to poverty reduction would be less spectacular: instead the incidence of poverty being halved, it would have decreased from 39% in 1987 to 31% (or to 24%, if a .3 elasticity is assumed in the shifting) in 1998 (see Figure 3).

The change in 1990 to a democratic regime brought also about a change of emphasis in social policies, from assistance to investment in human capital, and increases of social expenditures –on the basis of a specific tax increase for that purpose– while maintaining and improving targeting. Social policy, mainly through spending in education and health, has tended to increasingly correct the unequal distribution of income; while monetary incomes of the richest quintile

were in 1990 thirteen times those of the lowest quintile, income adjusted by social expenditure reduced that relation to nine times. By 1994, that relation had been further reduced to 8.6 times (Cowan and De Gregorio, 1996).

3.4. Argentina: the emergence of poverty in a faltering economy

In the fifties, absolute poverty in Argentina had become a marginal phenomenon: it involved a couple of percentage points of the population, and indigence was not significant. Moreover, the incidence of poverty in the rural areas did not reach a tenth of the rural population. Even relative poverty³⁷ had been reduced to less than a tenth of households.

With moderate growth (2.3% per capita a year in the fifties and 3.2% in the sixties), the creeping increase of inequality gradually enhanced the incidence of poverty in the urban areas³⁸, that by 1970 had reached between 3% and 4% of urban households³⁹. After a temporary reduction in 1974/75, during a populist interregnum, by 1980 the incidence of poverty in the urban areas had doubled with respect to 1970, after a period of slow (1.5% per capita a year, on average) and unstable growth, deep political conflict, attempts at liberalization and labor repression. Benchmark estimates indicate that about 7% of urban households were then in poverty (CEPAL line)⁴⁰. However, extreme poverty was still of marginal importance, affecting around 2% of urban households (see Table 7).

The crisis of the eighties and the hyperinflation with which it culminated in 1989 considerably deteriorated the distributive situation and dramatically increased the extent of poverty. The magnitude of external shocks and ensuing adjustments with increasing labor underutilization brought about a further increase of poverty incidence, that by 1986 (a year of stability and partial recovery) affected 12% of urban households. At the peak of hyperinflation and the through of recession, in 1989, the incidence of poverty may have temporarily doubled and that of indigence became significant⁴¹. However, by 1992, amid rapid recovery and disinflation, the incidence of poverty had regained the 1986

³⁷ As measured by Fuchs' criterion of setting the relative poverty line at .5 the median income.

³⁸ However, it cannot be ruled out that the estimates for 1953 and 1961 underestimate somewhat the incidence of poverty, because they are based on income distributions built up from multiple sources, that may not completely take into account the intra-group dispersion of small groups of similar recipients (Altimir, 1986).

³⁹ After 1961, there is no consistent data about the distribution of rural or agricultural incomes.

⁴⁰ Our estimate using the 60 PPP dollars poverty line is about 4% of incidence, for 1980 and almost insignificant amounts, going back in time (see Annex Table A.2), which highlights the irrelevance of this yardstick for assessing the extent of poverty in a country like Argentina.

⁴¹ In such circumstances, the accuracy of any measure becomes uncertain. Official estimates put the incidence of poverty in October 1989 at almost twice the level reached in May 1988, which was certainly higher than the one prevalent in 1986. By May 1991 it was already below the 1988 level, decreasing further until October 1992 (Ministerio de Economía, 1994).

TABLE 7
ARGENTINA: EVOLUTION OF ABSOLUTE POVERTY IN THE URBAN AREAS
 Indices of Estimated Incidence^{2/} (1980=100)

Alternative poverty lines ^{1/}	Relation to GDPpc in 1988	1953	1961	1963	1970	1975	1980	1992	1994	1997
I. Constant poverty lines^{3/}										
a) CEPAL P.L.	0.20	17	18	23	55	43	100	129	135	144
b) US\$ 60 PPP P.L.	0.15	5	11	20	39	24	100			
c) CEPAL I.L.	0.10	^{4/}	12	40	^{4/}	^{4/}	100	173	193	200
d) US\$ 30 PPP I.L.	0.07	^{4/}	^{4/}	^{4/}	^{4/}	^{4/}	100			
Average		17	21	25	47	34	100			
II. Shifting poverty lines^{5/}										
a) CEPAL P.L.		4	9	13	45	40	100	129	135	156
Memo: Growth GDPpc (annual%)^{6/}			2.3	-2.8	5.0	1.9	1.5	-0.8	5.6	1.7

^{1/} Poverty lines (P.L.) are drawn at twice the level of indigence lines (I.L.) for the urban areas and at 1.75 for the rural areas.

^{2/} Calculated on the basis of the estimated headcount (% households) ratios of incidence (Annex Table A.5).

^{3/} The different poverty lines for the second semester of 1988 were held constant in real terms over time by maintaining their relation to the respective indigence lines (basic food budgets), which have been valued at the prices of each period by means of the food component of the consumer price index.

^{4/} Very small headcount ratios, not significantly different from zero, considering the errors involved in the estimation procedure.

^{5/} Excludes the index of the incidence of poverty estimated by means of the CEPAL/INEGI indigence line, which is very close to the US\$ 60 PPP poverty line.

^{6/} Average of the period starting in the preceding year, in real terms. Revised GDP series, adjusted backwards by Altimir and Hofman (1995).

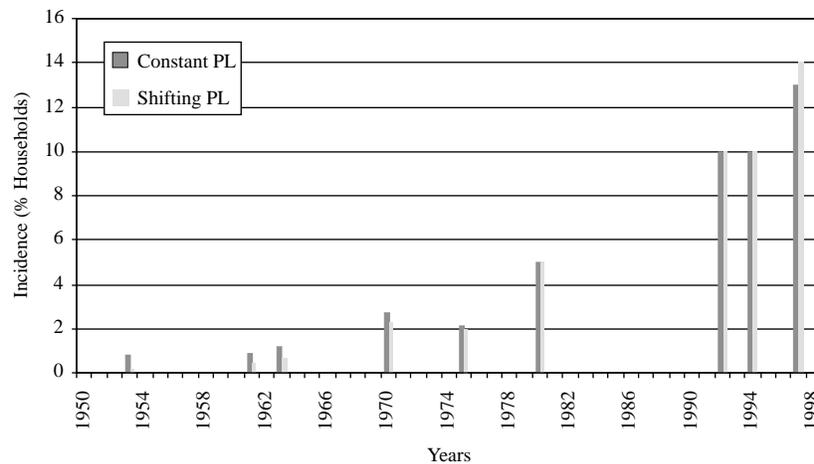
levels. Further growth in the next two years (at 5.3% per capita), which brought the economy near its potential product, in a context of drastic reforms that changed the economic regime, with almost absolute price stability and a surge of capital flows, did not make a dent on poverty, because income inequality and unemployment reached unprecedented levels⁴²: in 1994 the incidence of poverty remained at 12% of urban households, with around 2% in extreme poverty. The unstable growth of the ensuing years and the persistence of high unemployment increased further the incidence of urban poverty to 13% in Greater Buenos Aires and presumably more in the other urban areas (see Annex Table A.2).

Having been reduced to levels comparable with those of developed countries, absolute deprivation in postwar Argentina was not—even assessed by present standards—more than a marginal social problem. However, mainly due to the

⁴² See Altimir y Beccaria (1998).

increasing volatility of growth and inflation and the effects of a succession of conflicting –and eventually unsustainable– policy changes, poverty crept upwards in the seventies. Even so, it was the chain of events unleashed by the crisis of the eighties, including a succession of failed policies and eventual radical restructuring, which produced the emergence of poverty to significant proportions, even in normal times. Being still comparatively low by Latin American standards, poverty has thus become a pressing social problem for Argentine society (see Figure 4).

FIGURE 4
ARGENTINA: LONG-TERM EVOLUTION OF ABSOLUTE POVERTY
(Metropolitan Area)



Consequently, until the eighties, targeting on the poor was not a priority of social policy, which had been deployed with the aim of universal protection and actually reached more effectively the middle strata and unionized workers and which did not include specific programs coordinated to reduce (gradually increasing) structural poverty. Macroeconomic instability and the fiscal crisis of the eighties led to significant fluctuations of real social expenditure⁴³ but not to social policy reform; poverty relief initiatives (like the national food program) attracted some attention, but lacked a comprehensive approach and the otherwise unchanged structure of social expenditure did little to compensate for the rapidly increasing incidence of poverty (Beccaria and Carciofi, 1995). Stabilization and policy reform in the nineties included social policy reforms along two main dimensions: decentralization and private provision of services, prompted mainly by financial and budgetary reasons. Having real per capita social expenditure expanded to a new peak (ECLAC, 1997; Table IV.1), grow-

⁴³ Real per capita social expenditure in 1990 was 25% lower than the maxima reached in 1974, 1980 and 1987, but the average for the eighties was considerable higher than that of the seventies (Beccaria and Carciofi, 1995).

ing concern about the now significant and permanent magnitude of poverty in Argentine society have been slowly translating into specific targeted programs, which actual impact has still to be assessed.

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ANNEXES

TABLE A.1
SOURCES OF INCOME DISTRIBUTION DATA USED FOR THE ESTIMATES

Country	Source a/	Reference	Year	Coverage b/	Income Unit c/	Distribution d/	
ARGENTINA	CONADE-CEPAL (MS)	CONADE (1965)	1953	N;U	H	THY	
			1961	N;U	H	THY	
	EPC (YE)	CEPAL (1987b)	1963	U;M	H	THY	
	ECIEL (YE)	CEPAL (1987 b)	1969/70	M	H	THY	
	EED (L)	CEPAL (1987 b)	1970	M	H	THY	
			1975	M	H	THY	
	EPH (L,Y)	CEPAL (Tabs.)	1980	M	H	PCHY,THY	
1992			M	H	PCHY,THY		
CHILE	EOD (L)	Heskia (1980)	1957	M	H	THY	
		CEPAL (1987 a)	1960	M	H	THY	
		CEPAL (1987 a)	1968	M	H	THY	
		CEPAL (1987 a)	1978	M	H	THY	
		CEPAL (1987 a)	1980	M	H	PCHY, THY	
	ENIF (Y)	CEPAL (1987 a)	1968	N;R;U;M	H	THYF	
	CASEN (Y)	CEPAL (Tabs.)	1987	N;R;U	H	THY,PCHY	
1992			N;R;U	H	THY, PCH		
COLOMBIA	LONDOÑO (MS)	Londoño (1995)	1938	N	I	IRY	
		Londoño (1995)	1951	N	I	IRY	
		Londoño (1995)	1964	N	I	IRY	
		Londoño (1995)	1971	N	I	IRY	
		Londoño (1995)	1978	N	I	IRY	
		Londoño (1995)	1988	N	I	IRY	
		Londoño (1997)	1993	N	I	IRY	
	URRUTIA (MS)	Urrutia & Berry (1975)	1964	U	I	IRY	
	CEDE (YE)	CEPAL (1986)	1967/68	U	H	THY	
	EH-4/PF (YE)	CEPAL (1986)	1971	U	H	THY	
	DANE/FT (L)	CEPAL (Tabs.)	1980	U	H	THY, PCHY	
			1992	U	H	THY, PCHY	
MEXICO	CENSO (P)	CEPAL (1988)	1950	N	H	THY	
	EIGF (YE)	CEPAL (1988)	1963	N,U,R	H	THY	
			1967	N,U,R	H	THY	
	ENIG (YE)	CEPAL (1988)	1977	N	H	THY	
			CEPAL (Tabs.)	1984	N;U;R	H	PCHY,PCHY
			CEPAL (Tabs.)	1992	N,U,R	H	PCHY,THY

a/ MS: multi-source estimate; YE: income and expenditure survey; Y: income survey; L: employment survey; P: population census.

b/ N: National; U: Urban; M: Metropolitan area of the capital city; R: Rural.

c/ H: Households; I: Individual recipients.

d/ THY: total household income; PCHY: per capita household income; IRY: individual recipient personal income.

TABLE A.2
ARGENTINA: ESTIMATED INCIDENCE OF POVERTY AND INDIGENCE
ALTERNATIVE ESTIMATES
(% Households)

Alternative Lines	Coverage ^a	1953 ^b	1961 ^b	1963 ^c	1969/70 ^c	1970 ^d	1975 ^d	1980 ^d	1992 ^d	1994 ^d	1997 ^d
a) CEPAL											
1. Poverty											
i) Constant PL	N	2.2	2.7	2.7	2.5	4.2	3.3	7.7	9.9	10.4	11.1
	U	1.9 ^e	2.1 ^e	1.8							
	M			1.8							
ii) Shifting 0.3	N	0.8	1.5	1.7	2.2	3.8	3.1	7.7	9.9	10.4	11.7
	U	0.9 ^e	1.4 ^e	1.1							
	M			1.1							
iii) Shifting 0.5	N	0.5	1.2	1.5	2.0	3.5	3.1	7.7	9.9	10.4	12.0
	U	0.4 ^e	1.0 ^e	1.0							
	M			1.0							
Benchmark Estimate	<i>U</i>							7.0	...	12	...
	<i>M</i>							5.0	10.0	10.	13
2. Indigence											
	N	0.1	0.3	1.0	f	f	f	1.5	2.6	2.9	3.0
	U	f	0.3 ^e	0.6							
	M										
Benchmark Estimate	<i>U</i>							2.0	...	2	...
	<i>M</i>							1.0	1.0	2	3

Table A.2 (cont.)

Alternative Lines	Coverage ^a	1953 ^b	1961 ^b	1963 ^c	1969/70 ^c	1970 ^d	1975 ^d	1980 ^d	1992 ^d	1994 ^d	1997 ^d
b) US\$30 & 60 PPP											
1. Poverty											
i) Constant PL											
	N	0.4	0.8								
	U	0.3 ^e	0.7	1.3							
	M			0.9	0.6	1.6	1.0	4.1	5.7		
ii) Shifting 0.3											
	N	0.2	0.6								
	U	0.1 ^e	0.5 ^e	1.2							
	M			0.8	0.4	1.3	0.9	4.1	5.7		
iii) Shifting 0.5											
	N	0.1	0.4								
	U	f	0.4 ^e	1.1							
	M			0.7	0.2	1.1	0.8	4.1	5.7		
2. Indigence											
	N	f	f								
	U	f	0.1 ^e	0.7							
	M			0.4	f	f	f	f	0.5		

^a N: National; U: Urban; M: Greater Buenos Aires.

^b Estimates obtained from the multisource CONADE-CEPAL Estimates of the distribution of income.

^c Estimates obtained from income and expenditure surveys.

^d Estimates obtained from the permanent (income and employment) household survey (EPH).

^e Non-agricultural households.

^f Very small, not significantly different from zero, considering errors involved in the estimation procedures.

TABLE A.3
CHILE: ESTIMATED INCIDENCE OF POVERTY AND INDIGENCE
ALTERNATIVE ESTIMATES
(% Households)

Alternative Lines	Coverage ^a	1957	1960	1968	1978	1980	1987	1992	1994	1998
a) CEPAL										
1. Poverty										
i) Constant PL										
	N			37.0 ^c			40.7 ^d	29.1 ^d	24.2 ^d	18.8 ^d
	U			27.2 ^c			38.1 ^d	27.7 ^d	22.2	17.3
	M ^b	46.7	42.7	26.0	44.8	37.1	34.3			
ii) Shifting 0.3										
	N			34.7 ^c			40.7 ^d	32.2 ^d	28.4 ^d	22.1 ^d
	U			25.8 ^c			38.1 ^d	31.0 ^d	26.2	20.4
	M ^b	37.6	34.5	2.3	43.3	36.4	34.3			
iii) Shifting 0.5										
	N			33.4 ^c			40.7 ^d	34.4 ^d	31.0 ^d	28.8 ^d
	U			26.0 ^c			38.1 ^d	32.9 ^d	28.1 ^d	26.8 ^d
	M ^b	36.1	33.8	23.2	41.0	36.5	34.3			
Benchmark Estimates										
	N						39.0	28.0	23.0	20.0
	U						38.0	28.0	23.0	19.0
	M						34.0	22.0	17.0	12.0
2. Indigence										
	N			10.3 ^c			15.6 ^d	8.7 ^d	7.3 ^d	5.9 ^d
	U			6.5 ^c			16.2 ^d	8.7 ^d	6.7 ^d	5.1 ^d
	M ^b	12.0	10.1	6.5	16.2	13.2	12.7			
Benchmark Estimates										
	N						14.0	7.0	6.0	5.0
	U						14.0	7.0	6.0	4.0
	M						11.0	5.0	4.0	2.2

Table A.3 (cont.)

Alternative Lines	Coverage ^a	1957	1960	1968	1978	1980	1987	1992	1994	1998
b) US\$30 & 60 PPP										
1. Poverty										
i) Constant PL										
	N			20.0 ^c			30.2 ^d			
	U			13.4 ^c			23.7 ^d			
	M ^b	23.2	23.2	13.2	30.3	23.2	21.3			
ii) Shifting 0.3										
	N			18.9 ^c			30.2 ^d			
	U			12.5 ^c			23.7 ^d			
	M ^b	19.8	20.7	12.1	28.6	22.5	21.3			
iii) Shifting 0.5										
	N			17.4 ^c			30.2 ^d			
	U			11.6 ^c			23.7 ^d			
	M ^b	18.1	18.8	12.0	27.3	22.1	21.3			
2. Indigence										
	N			4.6 ^c			6.7 ^d			
	U			3.1 ^c			7.5 ^d			
	M ^b	5.7	4.8	3.1	8.6	7.2	6.0			

^a N: National; U: Urban; M: Metropolitan Area.
^b Estimated on the basis of the employment survey of the University of Chile (EOD).
^c Estimated on the basis of the ENIF income survey.
^d Estimated on the basis of the CASEN multipurpose survey.

TABLE A.4
COLOMBIA: INCIDENCE OF POVERTY AND INDIGENCE
ALTERNATIVE ESTIMATES
(%Households)

A. National Level^{a/}

Alternative Lines	1938	1951	1964	1967/68	1971	1978	1980	1988	1994	1997
a) CEPAL										
1. Poverty										
Benchmark estimates									47.0	45.0
i) Constant PL	89.3	83.8	79.0		65.9	57.1		52.6	49.0	45.9
ii) Shifting 0,3	84.9	79.2	75.1		62.1	55.1		52.6	51.6	49.5
iii) Shifting 0,5	80.3	74.9	72.1		59.1	53.7		52.6	50.6	51.9
2. Indigence										
Benchmark Estimates									25	30
i) Constant PL	72.3	63.3	57.1		38.7	27.1		21.5	26.3	20.3
b) ALTIMIR										
1. Poverty										
i) Constant PL	81.1	74.5	69.0		50.4	41.6		37.1		
ii) Shifting 0,3	74.7	67.9	64.1		48.0	39.6		37.1		
iii) Shifting 0,5	67.7	62.0	60.1		45.2	38.3		37.1		
2. Indigence										
i) Constant PL	55.7	47.9	43.3		23.5	13.7		12.1		
c) US\$ 30 & 60 PPP										
1. Poverty										
i) Constant PL	51.5	44.6	41.8		22.6	13.4		12.1		
ii) Shifting 0,3	41.2	36.1	36.0		17.6	12.4		12.1		
iii) Shifting 0,5	33.7	29.7	31.8		15.5	11.9		12.1		
2. Indigence										
i) Constant PL	21.1	14.5	14.2		5.8	4.6		4.8		

Table A.4 (cont.)

B. Urban Areas

Alternative Lines	1938	1951	1964	1967/68	1971	1980	1988	1992	1992	1994	1997
			b/	c/	d/	c/		c/	f/	f/	f/
a) CEPAL											
1. Poverty											
Benchmark Estimate			70.9	56.7	49.9	36.0		38.0	38.0	41	39
i) Constant PL			64.8	50.9	45.1	38.7		40.5	38.2	41.5	38.0
ii) Shifting 0,3			61.4	44.8	41.9	37.6		41.4	39.1	43.6	41.2
iii) Shifting 0,5			35.0	19.1	20.5	36.8		42.0	39.7	45.0	43.3
2. Indigence											
Benchmark Estimate						13.0		15.0	15.0	15.0	15.0
						14.8		13.7			
b) ALTIMIR											
1. Poverty											
i) Constant PL			58.2	39.2	36.6	26.1		27.0			
ii) Shifting 0,3			49.9	32.2	33.1	25.1		26.0			
iii) Shifting 0,5			40.8	27.7	30.1	24.5		25.3			
2. Indigence											
			25.9	8.8	10.7	9.4		6.9			
c) US\$ 30 & 60 PPP											
1. Poverty											
i) Constant PL			26.8	9.5	11.9	10.4		8.6			
ii) Shifting 0,3			25.0	7.8	10.0	10.0		8.2			
iii) Shifting 0,5			24.9	6.7	8.9	9.7		8.0			
2. Indigence											
			g/	1.8	2.6	2.2		1.4			

^{a/} The estimates were obtained using the multi-sources estimates of the distribution of income by Londono (1995), except those for 1994 and 1997, which were obtained using the information on income from DANE's permanent household survey (CEPAL Tabs) – PCHY.

^{b/} Obtained on the basis of the multi-source estimate of the distribution of income of urban recipients by Urrutia and Berry (1975).

^{c/} Obtained using the distribution of income from the CEIDE income and expenditure survey covering four main cities.

^{d/} Obtained using the distribution of income from the EH4-PF income and expenditure survey. – THY.

^{e/} Obtained using the information on income from DANE's permanent household survey (CEPAL Tabs.) – THY.

^{f/} obtained using the information on income from dane's permanent household survey 9cepal tabs) – pcty.

^{g/} Grouped data do not allow for estimating the incidence of indigence at a very low level.

TABLE A.5
MEXICO: ESTIMATED INCIDENCE OF POVERTY AND INDIGENCE
ALTERNATIVE ESTIMATES
 (% Households)

A. National Level^{a/}

Alternative Lines	1950 ^{b/}	1963	1967	1977	1984	1994	1998
a) CEPAL / INEGI							
1. Poverty							
<i>Benchmark Estimate</i>							
i) Constant PL	74.3	61.8	51.8	38.8	35.0	39.8	40.5
ii) Shifting 0,3	63.5	52.8	46.0	36.7	35.0	39.8	41.2
iii) Shifting 0,5	55.0	47.8	41.2	35.4	35.0	39.8	41.6
2. Indigence							
<i>Benchmark Estimate</i>							
	48.5	34.7	24.1	15.6	12.3	15.6	17.0
					11.0	12.0	13.0
b) Intermediate							
1. Poverty							
i) Constant PL	67.1	52.6	43.3	31.5	27.0		
ii) Shifting 0,3	54.8	45.2	36.2	29.5	27.0		
iii) Shifting 0,5	46.3	39.9	32.3	28.4	27.0		
2. Indigence							
	34.9	25.6	16.4	11.3	8.4		
c) US\$ 30 & 60 PPP							
1. Poverty							
i) Constant PL	39.2	30.5	21.2	13.8	10.1		
ii) Shifting 0,3	23.7	23.9	16.6	12.5	10.1		
iii) Shifting 0,5	20.0	20.2	14.2	11.8	10.1		
2. Indigence							
	9.9	10.3	5.4	4.6	3.0		

B. Urban Areas^{c/}

Alternative Lines	1950	1963	1967	1977	1984	1994	1998
a) CEPAL / INEGI							
1. Poverty							
<i>Benchmark Estimate</i>							
i) Constant PL		53.2	39.4		29.4	29.1	31.0
ii) Shifting 0,3		45.1	32.8		29.4	29.1	31.8
iii) Shifting 0,5		39.5	29.1		29.4	29.1	32.2
2. Indigence							
<i>Benchmark Estimate</i>							
		24.2	10.4		8.4	8.3	8.8
					7.0	6.0	7.0
b) Intermediate							
1. Poverty							
i) Constant PL		44.2	30.1		20.7		
ii) Shifting 0,3		35.9	23.9		20.7		
iii) Shifting 0,5		31.4	20.0		20.7		
2. Indigence							
		16.2	5.4		5.9		
c) US\$ 30 & 60 PPP							
1. Poverty							
i) Constant PL		23.5	9.9		8.2		
ii) Shifting 0,3		17.7	7.3		8.2		
iii) Shifting 0,5		14.4	5.9		8.2		
2. Indigence							
		6.1	2.1		1.7		

Table A.5 (cont.)

C. Rural Areas^{e/}

Alternative Lines	1950	1963	1967	1977	1984	1994	1998
a) CEPAL / INEGI							
1. Poverty							
<i>Benchmark Estimate</i>							
i) Constant PL		70.5	60.7		43.2	51.8	53.5
ii) Shifting 0,3		62.9	53.0		43.2	51.8	54.2
iii) Shifting 0,5		56.2	48.5		43.2	51.8	54.6
2. Indigence							
<i>Benchmark Estimate</i>							
		43.7	35.2		20.0	20.0	24.0
b) Intermediate							
1. Poverty							
i) Constant PL		63.8	51.9		34.6		
ii) Shifting 0,3		53.7	45.1		34.6		
iii) Shifting 0,5		46.8	41.3		34.6		
2. Indigence							
		36.3	25.3		12.2		
c) US\$ 30 & 60 PPP							
1. Poverty							
i) Constant PL		33.5	22.4		10.1		
ii) Shifting 0,3		26.3	16.9		10.1		
iii) Shifting 0,5		21.6	14.0		10.1		
2. Indigence							
		11.4	7.6		3.7		

^{a/} Except for 1950, estimates were obtained using distributions of income from income and expenditure surveys.

^{b/} Estimates were obtained using the information on income from the 1950 Population Census.

^{c/} Estimates were obtained using distributions of income from income and expenditure surveys.