A View from LATHR No. 22

POVERTY AND INEQUALITY IN LATIN AMERICA AND THE CARIBBEAN DURING THE 70s AND 80s: An Overview of the Evidence

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Preface

It is a commonly held belief that, during the economic recession of the eighties, Latin American countries experienced an increase in the incidence of poverty and a worsening of income distribution. Yet the attached compilation of available statistics proves how difficult it is to make generalizations in this respect.

Limited survey coverage, narrow definitions of "income", arbitrariness of the poverty line, and inconsistent data collection techniques over time render intercountry and intertemporal comparisons extremely dangerous, to say the least.

Given this state of affairs, a regional study is now under way in LATHR attempting to update and make comparable poverty and income distribution statistics in the region.

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ABSTRACT

The economic recession which engulphed practically all Latin American and Caribbean countries in the first half of the 1980s followed a period of almost universally strong growth in the region. This paper examines the available evidence on the effects of economic growth and recession on the poor and the distribution of income in LAC. A number of serious data inadequacies are identified. Compounding the relative paucity of quality household survey data at the national level, secondary sources often fail to provide sufficient documentation on primary data sources and on methods used to calculate summary measures of poverty and inequality. Although data problems and country outliers make generalizations difficult to defend, certain reasonably robust inferences are possible. Countries with higher average incomes tend to have lower poverty and better social indicators. The exceptions are at least partly explained by the existence of public social and health programs and/or the degree of income inequality. The headcount index of poverty is found to be responsive to short run economic change. All the available country evidence indicates a decline in poverty in the pre-1980 period and an increase during the recession. The same is not as true of the social indicators, such as infant mortality rates, which appear to have been buffered from these income changes at least in the short-run. Social indicators appear to be heavily influenced by non-income factors. No clear picture emerges on the effects of growth and recession on inequality. Finally, the surveyed data reveal considerable regional and urban-rural disparities.

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I. INTRODUCTION

The majority of countries in Latin America and the Caribbean (LAC) have experienced extreme macroeconomic difficulties over the last decade. Annual growth rates of GDP per capita in the LAC region averaged -2.0 percent during the first half of the 1980's, though 1986 saw some recovery to a rate of 1.6 percent (World Bank, 1988a). It is worth noting that such averages mask great diversity among the specific country experiences. This can be seen in Table 1 which presents compound annual growth rates between 1980 and 1986 for 20 LAC nations. The economic recession affected individual countries in varying degrees and at different times. In Chile, for example, GNP per capita declined at a compound annual rate of -9.9 percent from 1980 to 1986, while in Panama it increased at a corresponding rate of 4.4 percent over that period (calculated from World Bank, 1988a).

The crisis brought in its wake a combination of hyperinflation, food price rises, wage and salary stagnation, and in
many countries a sharp curtailment in the provision of public
social services. The general economic deterioration in the 1980s
followed closely on the heels of several decades of steady and at
times impressive national income growth throughout the continent.
There appears to be widespread agreement that an improvement in
social welfare, as reflected in various social indicators, had
been taking place during these decades. Less of a consensus
exists concerning the time trend of poverty and income inequality
during the same period. There has been recent concern about the
recession's impact on poverty and social indicators (for example
see Cornia, Jolly and Stewart, 1988, and Albanez et al., 1989).

The objectives of this paper are to 1) survey recent evidence, 2) attempt to draw conclusions about levels of living of the poor and how they may have changed in as many LAC countries as possible and 3) point to some of the data problems which may impose limitations on those conclusions.

Key questions of interest concern what has happened to aggregate absolute and relative poverty in the LAC countries over the 1970s and 1980s, and also to the regional sectoral composition of that poverty. Did the poor benefit during the boom years? Have they lost as a result of the slump? How does this vary between countries? Have some countries been able to protect their poor and vulnerable more than others? How have intracountry disparities been affected? And finally, what has been the effect of growth and recession on social indicators? This paper attempts to answer these questions using the available secondary source evidence. Some of the latter is of unreliable quality and a lack of data uniformity across both countries and time mean that it is difficult to convincingly deduce

Compound Annual Growth Rates 1980 To 1986 in Twenty LAC Countries

	Country	Compound annual growth rates 1980 to 1986
1.	Argentina	3.14
2.	Bolivia	0.67
3.	Brazil	-2.02
4.	Chile	-9.88
5.	Colombia	0.80
6.	Costa Rica	-4.28
7.	Dominican Republic	-5.55
8.	Ecuador	-1.80
9.	El Salvador	1.73
10.	Guatemala	-1.07
11.	Honduras	3.13
12.	Jamaica	-4.68
13.	Mexico	-3.27
14.	Nicaragua	0.94
15.	Panama	4.44
16.	Paraguay	-4.88
17.	Peru	2.53
18.	Trinidad and Tobago	2.25
19.	Uruguay	-6.15
20.	Venezuela	-2.25

Growth rates are calculated according to growth rate = 100(GNP86/GNP80)^{1/6}-1) where GNP is per capita US\$.

Source: Data is taken from World Bank (1988a).

intertemporal trends, and that one must also be wary of crosscountry comparisons.

The next section points to various data problems and the kind of additional information needed to answer the questions posed. The paper then discusses what light the available evidence throws on the above questions about poverty and inequality in the LAC countries.

II. THE DATA: PITFALLS FOR THE UNWARY

The empirical evidence on absolute poverty and income inequality in Latin America is fragmentary and often contradictory. Data problems are twofold. On the one hand, inadequacies arise at the primary data level. Few countries systematically collect data on the size distribution of consumption or income at the household or individual level. Estimates of relative and absolute poverty should ideally be calculated from national household level budget surveys. practice, such surveys are frequently not available either because they have not been undertaken or because governments are reluctant to release them publicly. Instead, estimates must often be derived from surveys designed for other purposes. include population censuses. For example, much of the original debate on income inequality and poverty in Brazil was based on a comparison of the 1960 and 1970 (and later the 1980) population censuses. Estimates from this source referred to monetary incomes of the economically active population with positive incomes only. Researchers made assumptions and various adjustments for underreporting and omitted data. Unsurprisingly, different overall distributions resulted (see Fishlow, 1972, and Langoni, 1973). The controversy was further fueled by contradictory distributional evidence emerging from the 1974-75 national household expenditure survey (ENDEF) and various PNAD household surveys whose income concept and coverage were considerably different. 1 Other surveys which have often been used to derive poverty and inequality estimates are labor force surveys which gather information on wage and salary incomes of employees, but typically exclude the unemployed, the self employed, and various sources of income, such as income in kind, imputed property incomes and imputed income from own production. Such surveys exist for various years for urban Argentina, urban Bolivia, Brazil (PNAD), urban Ecuador, urban Guatemala, El Salvador, urban Mexico, urban Nicaragua, Panama, urban Paraguay, Peru, Montevideo in Uruquay and urban Venezuela (see Altimir, 1987). Many available poverty estimates are based on these

¹ On the debate see, for example, Fishlow, 1972; Langoni, 1973; Fields, 1977; Bacha and Taylor, 1978; Fox, 1983; Pfeffermann and Webb, 1983; and Denslow and Tyler, 1984.

sources.

The above surveys not only employ a variety of income and income unit concepts, their sample designs often differ and geographical coverage is rarely comprehensive. Major metropolitan areas appear to be the most frequently surveyed in many Latin American countries including, until recently, Argentina, Bolivia, Columbia, Ecuador, Peru, Uruguay and Venezuela. The foregoing implies that the income distribution information which can be extracted is likely to be biased in a variety of ways. Certainly, the data are generally unreliable for intertemporal and cross country comparisons and should be interpreted with extreme caution.

One promising new data source is that offered by the Living Standards Measurement Surveys (LSMS) set up by the World Bank and conducted in three LAC countries so far: Peru, Jamaica, and Bolivia, and soon to be implemented in Venezuela. These surveys are devised expressly with a view to improving household level data collection and quality and to elucidate questions concerning levels of living and welfare at the national level.

The use of secondary sources tends to add to the difficulties already inherent in the primary data. One obvious drawback for readers interested in the national picture, but constrained to secondary sources, is that those sources often focus on a particular region or group of individuals relevant to addressing some question of interest. Dependence on secondary sources thus imposes a partial view. But this is far from the major problem. In processing and presenting the data, much of its definitional and contextual information is lost in the secondary sources. In a surprising number of cases, researchers fail to provide adequate information on primary data sources, such as on the income concept used ("full" income, total expenditures, wage and salary income), the recipient unit (household, individual, earner) and the methodological procedures used in constructing summary tables and indicators (poverty line, methods of interpolation, price indices). For example, the comprehensiveness of the income term is frequently unclear. is often impossible to tell whether it is gross or net (pre or post welfare benefit receipts and taxes), or whether non monetary income such as income in kind, imputed rents, income from own production have been accounted for. Some authors report having adjusted for such omitted total income components but provide few details on what form this adjustment has taken. Poverty is usually measured in terms of the headcount index. But, the underlying poverty line is rarely defined. This might amount to a minor detail were it not for the fact that one is confronted with widely disparate poverty estimates for similar dates. that this also occurs for size distributions of income.) not usually possible to uncover the reasons for the discrepancies and an assessment of the reliability of the estimates is difficult given the lack of background information. Studies even reach conflicting conclusions on what has happened to relative

and absolute poverty over time. For example, see the discussion of the evidence for Costa Rica and Mexico in Fields (1989a).

The lesson here is that the measurement of poverty may be extremely sensitive to the type of data used, the concept on which poverty is operationally defined (in most instances an income based concept) and finally, to the delineation of the poverty threshold. The last is essentially arbitrary. country poverty lines tend to reflect specific national priorities and normative conceptions of welfare and rights as well as average income levels of different countries (usually found to be positively correlated with the latter). illustrate consider the example of Colombia. Not long ago, its' most recent definition of poverty was based on housing related This is explained by the fact that the 1985 Housing Census provided the most recent nationwide source of information at the household level (World Bank, 1988b). According to this definition, 40 percent of Colombian households lived in poverty. In contrast, if a previous official poverty line based on minimum nutritional requirements was used, 20 percent were found to be poor (World Bank, 1988c). Examples like this one abound. small movement in the poverty line (particularly if it is near the mode of the income distribution) can translate into a significant change in the headcount index of poverty. depend on the underlying distribution of households by income In order for a poverty estimate to be at all informative or operationally useful, it is therefore imperative to define exactly how the estimate was obtained. Sadly, that information is frequently lacking.

Several additional factors which may be important for making interhousehold comparisons of welfare and deciding who is poor, should be mentioned. Both demographic factors: household size and composition, and spatial price variations should be taken into account. Too many studies compare incomes with unequal purchasing power and households with different demographic profiles.

Finally, a comment is in order about approaches to the construction of "poverty profiles". Most of the available profiles for LAC give distributions of poor households across various characteristics (e.g. this answers the question: what proportion of poor households live in rural areas?). For many purposes this is not the most convenient way of presenting data on poverty. In order to get an idea of the relative poverty incidence among those with various characteristics, it is then necessary to compare the distribution for the poor with that for the population as a whole. The alternative, which is both simpler and more useful for policy purposes, is simply to give the incidence of poverty among households with various characteristics (e.g. what proportion of those households who live in rural areas are poor?). This provides the policy maker with information on how successful poverty alleviation policies which target those characteristics are likely to be in reaching

the poor. Unfortunately, rarely is sufficient information given to calculate one representation of the poverty profiles from the other.

An alternative to examining household level income and expenditure surveys is to rely on socio-economic indicators such as life expectancy, infant and child mortality rates, literacy, school enrolment levels and nutritional status. There is a general consensus that these may reflect important and diverse aspects of living standards and access to social services. It should be noted, however, that social indicators are often presented as national averages thereby hiding potentially important disparities. What is more, the primary data is infrequently collected so that presented annual figures are often extrapolations between two dates. They are thus time dependent variables which fail to show fluctuations taking place between survey years. Spurious correlations with other time dependent variables (such as is the case for many macroeconomic variables) can readily arise.

In this study, many sources are rejected for some of the reasons discussed above. An attempt is made to include data and evidence for which at least some source and methodological details are given. Unless it is unavailable, presented data is the most recent which could be found.

III. INEQUALITY AND POVERTY: THE EVIDENCE

A. Overview

In view of the questions which have been raised above, it is of interest to get an overview of the relationship between poverty and the level of income across LAC countries. The available data are not adequate for making broad cross country comparisons of a wide range of social indicators. For example, comparisons of the headcount index of poverty across countries raise a number of difficult questions concerning the comparability of the income concepts used, the choice of exchange rates and the choice of a common poverty line. Among the available aggregate statistics, the infant mortality rate (IMR) stands out as a social indicator which can reasonably be used to provide a consistent comparative picture across countries.

Figure 1 plots the 1980 IMR (log scale) against 1980 per capita GNP (log scale) for 20 LAC countries, while Figure 2 does the same using 1986 figures. These years are taken as representative of the beginning and end of the main period of economic recession in Latin America. The plots show evidence of a negative relationship between the two variables for both points in time. But, one observes a lot of variability around that

relationship. More can be learned by regressing the log of the IMR against the log of GNP per capita. 2 The first thing to note is that in both cases, the elasticity of the IMR to income is significantly negative. The absolute elasticity is lower in 1986 than in 1980. This suggests that the relationship between the two variables is "flatter" (in the sense of less elastic) at the later date. Differences in IMRs are thus less strongly associated with differences in income in 1986 than in 1980. is broadly what we would expect with improvements in health care and publicly provided services, on the assumption that when improvements are made, the poor are better "protected" from national income changes. This result is not obviously consistent with the view that such services deteriorated sufficiently to raise mortality rates in most countries during the recession (see, for example, Cornia, Jolly and Stewart, 1988). However, the difference between the elasticity in 1986 and 1980 is probably not statistically significant. (For example, it may be noted that, each coefficient is less than one of its own standard errors away from the other.) Even so, the regressions do not suggest a rise in the cross country elasticity of the IMR to GNP.

Next, note that both the slope of the relationship and the intercept have fallen. The infant mortality rate is lower in 1986 for any given level of income. This is again inconsistent with a significant deterioration in non income factors such as education, health and social services. Finally, it is instructive to look at the largest deviations around the regression line. Bolivia and Peru remain stable over the two years as the countries with high IMR given per capita GNP, which are in both years more than one standard error from the fitted relationship across countries. Of the outliers with low IMR, given income, two remain so over both years: Costa Rica and Jamaica, while Chile replaces Panama as an outlier with low IMR in 1986.

To sum up, both average incomes and average IMRs fell between 1980 and 1986. Since the decline in income can be expected to put upward pressure on IMRs (and this is suggested by

LIMR80 = 8.43 - .615 LGNP80 ,
$$R^2$$
 = .473; N = 20 (1) (7.53) (4.02)

LIMR86 =
$$7.17 - .481$$
 LGNP86 , $R^2 = .303$; N = 20 (2) (5.78) (2.80)

Where LIMR80 and LIMR86 stand for the log of the IMR in 1980 and 1986, while LGNP80 and LGNP86 denote the log of GNP per capita in \$US in 1980 and 1986. All variables are taken from the 1988 World Tables. Absolute t-ratios are given in parentheses under the coefficients. Also see Sen, 1981.

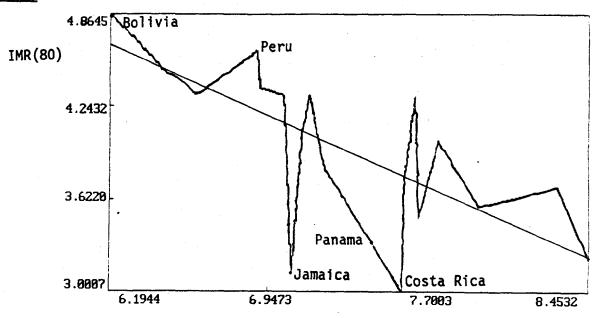
¹² The results are as follows for both years.

F = 16.1; SEE = .402; mean dep.var.= 3.94; st.dev.=.538

F = 7.82; SEE = .437; mean dep.var. = 3.72; st.dev.= .509

FIGURE 1

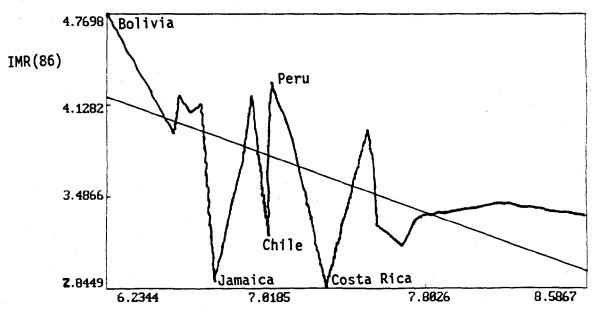
INFANT MORTALITY (LOG) AND GNP PER CAPITA (LOG): 1980



PER CAP GNP(80)

FIGURE 2

INFANT MORTALITY (LOG) AND GNP PER CAPITA (LOG): 1986



PER CAP GNP(86)

Note: Under the log scale distances are approximate percentage

changes.

Source: Based on data taken from the 1988 World Tables for the 20 countries listed in Table 1.

the above regressions) it seems likely that other, non income factors, sufficiently improved during this period to compensate for the falling incomes.

B. Inequality in Latin America and the Caribbean

Table 2^{/3} presents income distributions for Latin America and the Caribbean. These are grouped into five categories, A to E, according to the standard of living indicator which was used to rank recipient units. The comparability of distributions across such subgroups is questionable. Even within each grouping one must excercise caution in drawing distributional comparisons. There are various factors other than the living standard indicator which may affect distributional outcomes. (For example, spatial price differentials as mentioned earlier.) van Ginneken and Park (1984) claim to have adjusted their income distributions (Panel A) so as to make them comparable. Thus comparisons within the A group in Table 2 are probably valid. Comparisons within the other panels of Table 2 are more questionable.

It is possible to rank from lowest to highest inequality by the Lorenz dominance criterion the countries for which van Ginneken and Park (1984) provide comparable distributions of income. (When country A's Lorenz curve lies everywhere below (above) country B's, inequality is greater (lower) in country A as measured by all well behaved inequality measures. B is said to "Lorenz dominate" A. When the Lorenz curves intersect, the inequality ranking is said to be "ambiguous" in that some measures will rank the distributions differently to others, see Atkinson, 1970.)

Based on the van Ginneken and Park data in Panel A, Argentina, Chile, and Trinidad and Tobago exhibit the lowest income inequality. (Within this group Argentina has slightly less inequality than Chile; the ranking of Trinidad and Tobago within the group is ambiguous.) Honduras, Brazil, and Peru are found to have the highest inequality although because their Lorenz curves intersect one cannot say which is highest. Closer inspection shows that Honduras' income is consistently more equitably distributed at the lower end, and less equitably so at the top of the distribution than in these other countries. Costa Rica has greater inequality than either Argentina, Chile, or Trinidad and Tobago, and less inequality than Honduras, Brazil or Peru.

^{/3} Notes on and definitions of variables/indicators reported in the tables are given at the beginning of the Appendix.

TABLE 2: Latin America: Distributions of Income and Expenditures

% Share of Indicator by Population Quintile								
Indicator		•	•	`	•		Тор	
Country	Year	1	2	3	4	5	Decile	Source
A. Household inco	ome adjusted by	y van G	inneke	n and	Park:			
Argentina	1970	4.4	9.7	14.1	21.5	50.3		(a)
Brazil	1972	2.0	5.0	9.4	17.0	66.6	50.6	(a)
Chile	1968	4.4	9.0	13.8	21.4	51.4		(a)
Costa Rica	1971	3.3	8.7	13.3	19.8	54.8	39.5	(a)
Honduras	1967	2.3	5.0	8.0	16.9			(a)
Peru	1972	1.9	5.1	11.0	21.0	61.0	42.9	(a)
Trinidad & Tob	pago 1975/6	4.2	9.1	13.9	22.8	50.0	31.8	(a)
B. Household inco	ome:							· , • · ·
Chile	1985	4.4	8.7	12.9	19.9	54.0	37.4	(b)
Colombia	1971	3.6	7.1	11.4	19.2	58.6	42.4	(c)
	1978	4.3	8.7	13.6	21.0			(c)
	1988	4.1	8.7	13.5	20.8	53.0		(c)
Costa Rica	1983	4.5	9.3	13.8	20.6	51.8	36.7	(d)
	1986	4.3	9.5	14.4	21.9	49.9	33.7	(g)
Guatemala	1979/81	5.5	8.6	12.2	18.7	55.0	40.8	(e)
Venezuela	1982	5.3	10.3	15.8	23.6			(f)
	1987 1989	5.2 4.7	10.0	15.2 14.0	22.8 21.5	46.8 50.4	30.2 34.5	(f) (f)
C. Household per	capita income	:						
Brazil	1981	2.7	6.0	10.4	18.3	62.6		(g)
	1983	2.6	5.7	9.9	18.1	63.7	47.0	(g)
	1985	2.5	5.7	9.9	18.0	63.8	47.4	(g)
	1987	2.4	5.6		18.1			(g)
	1988	2.2	5.2	9.5	17.4	65.8	49.5	(g)
Venezuela	1982	4.6	9.1	14.3				(f)
	1987	4.7	9.2		21.5			(f)
	1989	4.7	9.4	14.2	20.5	51.2	35.5	(f)

	·	% Share of Indicator by Population Quintile								
Country	Year	1	2	3	4	5	Top Decile	Source		
. Household expen	ditures:									
Peru	1971/2	3.3	7.6	13.0	21.9	54.2	36.8	(h)		
. Per capita hous	ehold expendit	ures:								
Jamaica	1988 1989	5.4 5.1	9.9. 9.6	14.3 14.3				(i)		
Peru	1985/6	5.4	10.0	14.3	21.2	49.1	33.4	(±)		

Sources:

- (a) van Ginneken and Park (1984). In an attempt to make them internationally comparable, the authors have based these income distribution estimates on household income drawn from household level surveys, adjusted them for income in kind and the inputed values of owner occupied dwellings and home production, as well as for inconsistencies with national accounts.
- (b) Haindl and Weber (1986) p.56. Data are from CASEN national household survey.
- (c) Chan (1990a) pp. 14-17. Quoted from Londono, 1989. Data are from DANE national household surveys, agriculture, manufacturing, and construction wage surveys and the National Accounts.
- (d) Berry (1990) p. 71. 1983 data from Trejos and Elizalde (1985) and 1986 data is from unpublished sources.
- (e) Chan (1990b) p.35. Data are from Encuesta National de Ingresos y Gastos Familiares.
- (f) World Bank (1990c) p 21. Quoted from Garcia and Newman (1988) and OCEI Household Surveys, 1982-1989.
- (g) Country Operations Department, Brazil. Data are from PNAD labor force household surveys.
- (h) Webb (1989) p. 132. Data is from ENCA household survey.
- (i) World Bank, Living Standards Measurement Surveys. <u>Jamaica</u>: Statistical Institute of Jamaica and the World Bank (1988) p. 28 and (1989) p.16. <u>Peru</u>: Glewwe (1988) p.76. These data are adjusted for household composition using equivalent scales.

A few more cautious observations can be made about the other, more recent, distributional data in panels B to E, Table The poorest 20 percent of the population received no more than 5.5 percent of total household income (Guatemala, 1979/81) and as little as 3.6 percent (Colombia, 1971) (Panel B). quintile receives from 58.6 (Colombia, 1971) to 45.1 percent (Venezuela, 1982) (Panel B). As was found for the 60s and 70s data in Panel A, the income shares of the top and bottom vary quite a lot between countries, though we are not sure how much of this is due to differences in measurement practices. interesting to look at distributions of income on a per capita basis since this is generally a preferred indicator of welfare. We are able to make this comparison for two countries only: Brazil and Venezuela. The results certainly reinforce Brazil's reputation for having exceptionally high inequality. In 1988 those in Brazil's poorest quintile received 2.2 percent of total per capita income compared to 4.7 percent received by the poorest Venezuelans in 1989. Similarly, the rich in Brazil accounted for 65.8 percent versus 51.2 percent of per capita income accrueing to the top quintile in Venezuela. Panel E gives distributions of per capita consumption for Jamaica and consumption adjusted for equivalent adults for Peru. These are probably the best monetary indicators of individual welfare we have. However, since the Peruvian distribution of consumption has been adjusted for household size and composition rather than just size as the Jamaican one, comparing them is not advisable.

C. Changes in Inequality

Unfortunately, comparable cross country data on the size distribution of income are rarely available. Intra-country data for consistent intertemporal comparisons is also scarce. Some of the individual country distributions listed in Table 2 cannot be meaningfully compared, as they refer to different definitions of income. However, several years for Brazil, Colombia, Costa Rica, Jamaica, and Venezuela do appear comparable. According to the Lorenz criterion, inequality in Colombia declined considerably from 1971 to 1978, while slightly increasing between 1978 and 1988. In Costa Rica, the direction of the change in inequality between 1983 and 1986 is undeterminable. Brazil experienced an unambiguous worsening throughout the 80s, while in Jamaica small changes over the course of one year make for an ambiguous verdict. Finally, it is interesting to note that while the inequality of household incomes in Venezuela worsened over 1982, 1987, and 1989, if per capita incomes are considered the change in inequality over this period is ambiguous by the Lorenz criterion.

What has happened to inequality over time (as measured by

TABLE 3: Latin America: Gini Coefficients For Selected Countries

Country	Year	Gini	Income Concept and Recipient Unit
Bahamas	1973	0.44	Income among households
	1975	0.52	
	1977	0.48	
	1979	0.63	
Brazil	1976	0.60	Total gross personal income among households
	1978	0.56	•
	1980	0.56	
	1983	0.57	
Chile	1968	0.46	Family income
	1971	0.46	
Costa Rica	1961	0.50	Income among households
	1971	0.43	
	1977	0.49	
	1979	0.45	
	1982	0.42	
El Salvador	1976/77	0.40	Household income
Honduras	1967/68	0.62	Income among households
Jama i ca	1968	0.63	Wage income among wage earners
	1973	0.65	
	1980	0.66	
Mexico	1958	0.53	Family income after tax
	1963	0.55	•
	1969	0.58	
	1977	0.50	
Panama	1970	0.57	Adjusted gross available income among households
Peru	1985/86	0.43	Per capita household consumption
Puerto Rico	1953	0.42	Family income
	1963	0.45	
	1969	0.52	
	1979	0.46	
Trinidad and Tobago	1971/72	0.54	Monthly income among households
-	1975/76	0.47	•

Note: The above Gini coefficients were selected by Fields because they are calculated from data which are national in coverage, drawn from either a household survey or census and use a constant income concept and recipient unit over time.

Source: From various sources as compiled by Fields (1989a).

Gini coefficients) can also be seen for a few countries in Table 3 as well as in several Appendix tables. The Ginis gathered in Table 3 are from among a worldwide series compiled and judged fairly comparable by Fields (1989a). The picture which emerges is again far from consistent across Latin American countries. the pre-1980 period, an overall decrease in inequality is evidenced in Brazil (1976-80), Costa Rica (1961-79), Mexico (1958-77) and Trinidad and Tobago (1971-72 - 75-76). An increase is indicated during this same period in the Bahamas (1973-79), Jamaica (1968-80) and Puerto Rico (1953-79). In Chile, the Gini is the same in 1968 and in 1971. Fewer Ginis are given for the post 1980 years. Inequality is now deemed to rise in Brazil (1980-83) and to continue to fall in Costa Rica (1979-82). A few of the country specific tables presented in the Appendix also tell us something about inequality changes over time. corroborates the above trends in Brazil from 1980 to 1983 and shows that the Gini coefficient rose in every region. Similarly, Table A.8 presents Ginis which indicate small but steady increases in inequality throughout the 80s. In Colombia (Table A.18), on the other hand, the Ginis suggest that inequality declined during the 70s and continued to do so overall in the 80s despite a slight increase in rural areas between 1978 and 1988. Inequality of household incomes in Costa Rica is steady at a Gini of .42 in 1977, 1983, and 1986 (Table A.21). Both land and rural household income is shown to become less equally distributed between 1961 and 1975 in El Salvador (Table A.31), and rising inequality is indicated in the distribution of labor income from 1968 to 1974 in Jamaica (Table A.40). Table A.56 gives the proportion of Uruguayan households below a relative poverty line in the period from 1967 and 1984. This is a rather crude measure of inequality which shows a stable 30 percent of households remaining in relative poverty (although a rise occurred between 1967 and 1976).

The extent of regional and urban/rural inequality in Latin American countries is well documented in the tables. Brazil, for example, is well known for its regional income disparities. Table A.5 highlights this feature. A comparative per capita income index which sets the national average at 100, ranges from 60 in the Northeast to 116 in the Southeast. Table A.51 exhibits the high regional and urban-rural inequalities in per capita expenditures found in Peru in 1985. In all cases mean expenditures are lowest in rural regions with the lowest being 366.8 Intis per month in the Sierra Rural which also has the largest population concentration. The highest, 792 Intis per month, is in the Selva Urban. (Also see Tables A.6, A.13, A.18, A.21, A.23, A.35, A.49, A.53 and A.54 for other country examples). Again, however, it is hard to generalize. For example, data for Guatemala show that rural family income is more equitably distributed than income in urban areas (Table A.35). In Peru, the opposite is indicated (Table A.54).

TABLE 4: Latin America: Poverty Estimates Around 1970, 1980 and 1986

Percentage of Households Below the Poverty Line

	Urban				Rural			Country Total		
	1970	1980	1986	1970	1980	1986	1970	1980	1986	
Argentina	5	7	12	19	16	17	8	9	13	
Brazil	35	30	34	73	62	60	49	39	40	
Colombia	38	36	36	54	45	42	45	39	38	
Costa Rica	15	16	21	30	28	28	24	22	25	
Mexico	20	*	23	49	*	43	34	32	30	
Peru	28	35	45	68	65	64	50	46	52	
Uruguay	10	9	14		21	24		11	15	
Venezuela	20	18	25	36	35	34	25	22	27	
Latin										
America	26	25	30	62	54	53	40	35	37	

<u>Note</u>:

(*) Urban/rural breakdown not available

Source:

CEPAL (1990), p.62. based on Altimir (1982) for 1970 and CEPAL's Division de Estadistica y Proyecciones for 1980 and 1986.

TABLE 5: Latin America: Poverty Estimates In Selected Countries

	% house	holds with		Y famil	ies with
<u>Brazil</u>	Income below poverty line			Income below NCz\$3.3	Income below 1/4 of minimum wage
1960 1970 1980	72 64 -	52 44 -	61 55	38.9 37.9 21.7	- 44 18
Costa Rica			with real incomes nstant £	earr Co	come recipients ning below the onstant real inimum wage
1961 1971 1979 1982		20 10 -	65 30		25.5 32.5
	<u>Jamaīca</u>	x	labor force incomes bo (1973 p		

		Households with		
<u>Mexico</u>	(urban), \$179 (incomes below \$185 average urban) and 970 US\$/per capita) Adjusted incomes	Real incomes below 1977 minimum wage	% families in poverty (poverty line not given)
1958	-	-	_	45
1963	53	36	57.1	45 35
1968	39	27	44.7	-
1969	-	•	•	30
1975	-	-	-	20
1977	-	-	39.6	-

Duranta Dian	% families with in Official US poverty line 1.	ncomes below_
Puerto Rico		
1969 1979	59.6 58.0	67.6 67.1

Source: From various sources as compiled by Fields (1989a).

<sup>Notes:
1. There are major non-comparability problems within as well as across countries (see text).
2. Adjusted income refers to monetary (wage) income adjusted for other sources of income. These adjustments can differ as shown by the Brazil poverty estimates (a) and (b) by different authors.</sup>

D. The Incidence of Poverty

Rural, urban, and national poverty estimates for years close to 1970, 1980, and 1986 are given for 8 Latin American countries in Table 4. The widely cited 1970 estimates are due to Altimir (1982). In this study, country specific poverty lines were constructed based on the costs of a typical low income diet satisfying minimum nutritional requirements plus an allowance for non food needs in each country (Altimir, 1982; also see critical discussion in Kanbur, 1987). The estimates are therefore reasonably comparable across countries. The 1980 and 1986 measures were calculated by CEPAL (1990) following essentially the same methodology. The main difference between the studies lies in the construction of the basket of goods on which the poverty lines are based (for details see CEPAL, 1990). causes some concern about making comparisons over time, yet it can be argued that the estimates are sufficiently similarly derived for such a discussion to be meaningful.

Concentrating for now on the 1986 estimates, the following observations can be made. According to Table 4 close to 40 percent of the total population of the eight covered countries lived in poverty in 1986. Without exception, the incidence of poverty is highest in the rural areas of Latin America. true even in highly urbanized countries like Argentina, Uruguay and Venezuela where 84, 85, and 85 percent of the respective populations lived in urban areas in 1985 (World Bank, 1988h). The overall incidence of poverty is most pronounced in Peru (52 percent) and in Brazil (40 percent). However, Brazil has by far the largest numbers of absolute poor given its large population. Only Peru has a greater proportion of its rural population (64 percent) living in poverty than Brazil (60 percent). The urban headcount of poverty is also highest in Peru (45 percent) followed by Colombia (36 percent). The lowest proportion of poor urban, rural, and national are found in Argentina and Uruguay (13 and 15 percent nationally in 1986).

E. Changes in Poverty

An indication of whether poverty increased or decreased in the years leading up to the 1980s is given in Table 5 for a few LAC countries. All the estimates are based on national household survey data and the country specific estimates use the same income and recipient unit concepts across years (Fields, 1989a). For these reasons, they may be deemed more comparable than many other reported estimates. Fields does, however, warn against intercountry comparisons.

A few observations can be made. Except in Jamaica, poverty appears to have been on the decline in all included countries in the pre 1980 years. The only later data shows a rise in the percent of income recipients earning below the constant real Turning back minimum wage in Costa Rica between 1979 and 1982. to Table 4, a similar trend is revealed. The percentage of households below the poverty line fell in all countries between 1970 and 1980 with the exception of Argentina where it rose by one percentage point. In contrast, from 1980 to 1986 poverty increased in the majority of included countries. Only Colombia and Mexico experienced modest improvements in the headcount index of poverty (a drop of 1 and 2 percentage points respectively). Some additional information on intertemporal changes in poverty can be garnered from the country tables in the Appendix. Data for Brazil during the 1980s indicate a rise in the headcount index between 1981 and 1983 (Table A.8) also evidenced for every region in Brazil (Table A.3). (Note that the 1980 data also included in Table A.3 is not likely to be as comparable as the 1981 and 1983, which are both based on the PNAD household surveys while the former is based on the demographic census.) subsequent data points to a slight decrease in poverty over the next few years to 1987, followed by an increase in 1988 (Table A.8). As already mentioned, increasing inequality as measured by the Gini coefficient is also apparent throughout the 80s (Table A.8).

Table A.21 indicates a decline both in the proportion and the numbers of individuals in poverty in Costa Rica between 1970 and 1986. However, the intervening survey dates exhibit considerable variation in poverty incidence. Again, poverty is seen to fall during the 70s, rise impressively during the early 80s and subsequently decline. In Panama (Table A.47), the percentage of rural households in poverty appears to have fallen in the second half of the 70s, while the proportion of urban poor households appear to have simultaneously risen. An important causal factor may be migration of poor rural households to urban areas (Pinnock and Elton, 1983). Table A.47 also shows that the severity of poverty declined for many urban and rural households Finally, Tables A.58 and A.59 compare the in this period. incidence of poverty in 1982, 1987, and 1989 (Table A.59 only) in The percentage of households in both critical and Venezuela. extreme poverty is seen to rise countrywide (the Andes and South regions are exceptions for the period between 1987 and 1989).

On the basis of this rather fragmentary information, it is possible to conclude that poverty was generally on the decline in the period before the recession (with Jamaica excepted), and shows a tendency to worsen during the recession and improve following it. Jamaica, it should be mentioned, experienced economic deterioration and stagnation starting in 1974 and continuing through till 1980, much earlier than most LAC

countries (real GDP declined by 16 percent between these dates). This may partly explain its' different poverty trends.

F. Who Are the Poor?

Although it is difficult to generalize about poverty, the evidence gathered in the Tables provides some indication of who the poor are, and what characteristics they share across LAC countries. The incidence of poverty is highly regional in all countries for which data is recorded. (See Tables A.4, A.5, A.6, A.13, A.14, A.21, A.22, A.23, A.27, A.35, A.36, A.38, A.41, A.42, A.47, A.49, A.51, A.53, A.54, A.58 and A.59). Furthermore, it is considerably more common and more extreme in rural areas. is evident in the data for Chile (Table A.14), Costa Rica (A.21, A.22), the Dominican Republic (A.25), Honduras (A.36), Mexico (A.42), and Panama (A.47). Among rural households, poverty is concentrated among those engaged in agricultural work and is most severe for the self employed. In Costa Rica in 1984, for example, 77.6 percent of the labor force in poor districts was agricultural, as compared to only 25.1 in non poor districts and 31.4 at the national level (Table A.22). 1980-81 data for Guatemala (Table A.34) show that 74 percent of household heads in extreme poverty were engaged in agriculture; this was so of only 28 percent of the non poor. 54 percent of the extremely poor were self employed as compared to 33 percent of the non poor. similar characterization appears to hold in Mexico (Table A.41) in 1975 where 52.4 percent of all poor were employed in agriculture and 46.8 percent were self employed (though the source does not give corresponding proportions for the non poor or population as a whole). Table A.42 indicates that in 1977 the bottom three deciles were entirely comprised of rural households of which more than half (all in the bottom two deciles) were self employed. The others were mostly wage earners. Similar pictures emerge for Nicaragua (A.46), Peru (A.53), and Venezuela (A.60). Other data indicate that, at least in El Salvador and Nicaragua for which this data was collected, rural household income is highly positively correlated with landholdings (Tables A.31 and A.46).

Education is another factor which is shown to be closely linked to the incidence of poverty. The poor are more likely to be illiterate and without schooling than other subgroups of the population. Whereas Costa Rica's overall rate of illiteracy stood at 6.9 percent of the population in 1984, it was 16.1 percent in poor districts (Table A.22). Data collected by the LSMS in Peru in 1985 clearly show that average monthly household consumption expenditure rises with the educational attainment of the household head (Table A.52). The data also indicate that 84 percent of those households whose head had no education were also

classified amongst the poorest 30 percent of the Peruvian population (Table A.53). In Mexico, 47.7 percent of poor households were headed by persons with no education and around 87 percent of these were rural in 1975 (Table A.44). (The source does not, however, give population proportions.) The situation in Venezuela is qualitatively similar (Table A.60). Besides the low level of education often found to be associated with household heads of poor households, their children are also less likely to attend school (Tables A.37 and A.61). The level of educational attainment also appears to vary regionally and to be lower in rural areas. It should be noted that the causal relationship between education and poverty is far from clear. What can be said is that poverty, agricultural employment, rural location and low education are all highly intertwined.

Table A.7 provides evidence that in Brazil female headed households are more likely to live in poverty than male headed ones and also suggests no life cycle aspect to poverty incidence for male headed households. There is some sign of poverty concentration for young female heads. But 1987 data for urban Ecuador show that absolute poverty is only slightly higher for female headed households (Table A.29). Finally, although data appear to be scarce, there is strong evidence that the indigenous peoples of Latin America are prominent among the poor and that the poor are frequently concentrated in ecologically fragile regions (FAO, 1988).

G. Social Indicators

An indication of levels and trends in the quality of life and of access to social services is provided by social indicators. These can help give a more complete view of poverty and its consequences.

Tables 6 and 7 reveal unambiguous improvements in infant and child mortality rates and in life expectancy between 1960 and 1987; in literacy rates between 1970 and 1985; and in primary school enrollment ratios for both males and females between 1960 and 1984-86. This is true for all countries in the region for which data is reported. From these tables it is possible to conclude that overall trends in social indicator improvements are positive.

One can also ask whether the pace of improvement has been affected by the economic downturn and/or structural adjustment programs. This question has given rise to much debate.

^{*}See, for example, Musgrove, 1987; Cornia et al., 1988; Kakwani et al., 1989; Hill and Pebley, 1989; for a review of this literature see World Bank, 1990a.

TABLE 6: Latin America: Child Mortality And Life Expectancy, 1960 AND 1987

Country	Infant mortality rate (under 1)		Child mortality rate (under 5)			
					Life expectancy	
	1960	1987	1960	1987	1960	1987
Argentina	61	32	75	38	65	71
Bolivia	167	111	282	176	43	54
Brazil	116	64	160	87	55	65
Chile	114	20	142	26	57	72
Colombia	93	46	148	69	55	65
Costa Rica	84	18	121	23	62	75
Cuba	62	15	87	19	64	74
Dominican Rep.	125	66	200	84	51	67
Ecuador	124	64	183	89	53	66
El Salvador	142	60	206	87	50	64
Guatemala	125	60	230	103	46	63
Guyana	69	31	94	39	60	70
Haiti	197	118	294	174	42	55
Honduras	144	70	232	111	47	65
Jamaica	62	18	88	23	63	74
Mexico	92	48	140	70	57	69
Nicaragua	140	63	210	99	47	64
Panama	69	23	105	35	61	72
Paraguay	86	42	134	63	56	67
Peru	. 142	89	233	126	48	63
Uruguay	50	27	56	32	68	71
Trinidad & Tobago	54	20	67	24	64	71
Venezuela	81	36	114	45	60	70

Note: Child mortality rates subsume the infant mortality rate.

Source: UNICEF (1989), Tables 1 and 5.

TABLE 7: Latin America: Education Indicators

•	Adult literacy rate male/female		Primary school enrollment ratio male/female		7 of grade l enrollment completing	
	1960	1987	1960	1967	primary school 1980-86	
Argentina	94/92	96/95	98/99	109/109	66	
Bolivia	68/46	84/65	78/50	93/82	32	
Brazil	69/63	79/76	97/93	108/99*	20	
Chile	90/88	97/96*	111/107	110/109*	-	
Colombia	79/76	89/87	77/77	112/115	37	
Costa Rica	88/87	94/93	97/95	103/101	75	
Cuba	86/87	96/96*	109/109	108/101	86	
Dominican Republic	69/65	78/77	99/98	131/135	88	
Ecuador	75/68	85/80	87/79	117/117*	50	
El Salvador	61/53	75/69	-/-	69/70	68	
Guatemala	51/37	63/47	50/39	82/70	38	
Guyana	94/89	97/95	107/106	101/99*	84	
Haiti	26/17	40/35	50/42	83/72	45	
Honduras	55/50	61/58	68/67	103/102	27	
Jamaica	96/97	-1-	92/93	106/107*	80	
Mexico	78/69	92/88	82/77	115/113	66	
Nicaragua	58/57	-1-	65/66	93/103	27	
Panama	81/81	89/88	98/94	109/104	7.3	
Paraguay	84/75	91/85	105/90	102/97	48	
Peru	81/60	91/78	95/71	125/120	51	
Uruguay	93/93	93/94*	11/111	111/109	88	
Trinidad & Tobago	95/89	97/95	89/87	93/96	78	
Venezuela	79/71	88/85	100/100	110/10	68	

Notes:

- Adult literacy rate is defined as the percentage of persons 15 and over who can read and write. The most recent figure for Chile is for 1984; Cuba: 1981 (persons aged 10 and over); Uruguay: 1975.
- 2. Primary school enrollment ratios are gross and defined as the total number of children enrolled in school--whether or not they belong to the relevant age group for that level--expressed as a percentage of the total number of children in the relevant age group for that level. The latest figure given refers to 1983 for Brazil, Ecuador and Jamaica, and to 1980 for Guyana.

Source: UNICEF (1989), Table 4.

<u>TABLE 8</u>: Latin America: Prevalence Of Underweight In Children (Age \leq 60 Months) In Selected Countries

		Z under		Z under	
Country	Year	weight	Year	weight	Source
Bolivia (La Paz)	1985	23.0	1987	20.1	HC
Colombia	1977	20.6	1986	11.9	NS
Costa Rica	1966	13.7	1982	5.3	NS
Chile	1984	2.1	1986	2.4	HC
Cuba	1984	1.4	1987	0.9	HC
Guatemala	1980	43.5	1987	33.5	NS
Guyana	1974	12.8	1986	10.7	HC
Jamaica	1978	7.8	1985	8.0	ns
Nicaragua	1966	17.1	1982	27.1	ns
Peru	1984	9.5	1987	13.2	HC
Uruguay	1980	13.4	1987	9.3	HC
Venezuela	1982	9.8	1986	7.4	HC

Note: HC = health center, NS = national survey. Underweight is defined as less than 2 standard deviations of weight-for-age using WHO-adopted standards.

Source: United Nations (1989), p. 30.

TABLE 9: Latin America: Prevalence Of Low Birth Weight, 1970s And 1980s In Selected Countries

Country	Year	% under 2.5 kg	Year	% under 2.5 kg
Chile	1984	6.5	1987	6.9
Costa Rica	1976	8.7	1985	6.7
Cuba	1984	7.9	1987	7.9
El Salvador	1980	8.7	1986	8.6
Uruguay	1981	7.9	1985	7.9

Source: United Nations (1989), p. 30.

Annual time series data are available but there exists the aforementioned problem that they are often not actual observations but interpolations between observations. important disagreements remain, more methodical investigations based on more recent data have supported the view that, baring a few country and specific indicator exceptions, progress in social indicators remained remarkably steady. Hill and Pebley (1989), for example, provide a careful review of the evidence for child mortality. Using actual observations only, they do not find the pace of child mortality decline to have slowed during the 70s or Yet, there is also general agreement that aggregate social sector spending has declined overall as a consequence of the economic crisis. In many cases, governments have done this by cutting investment spending while maintaining recurrent expenditures. Various authors have warned that the consequences may be felt only in the longer run. Some argue that deterioration of physical infrastructure in education, health and sanitation are resulting in rising malnutrition and morbidity which will in time show up in social indicators. For example, Lustig (1989) finds signs of health and education standards deterioration in Mexico.

Child nutritional status is also seen to ameliorate during the 1980s for eight out of the twelve countries listed in Table 8. However, as the second year is for most countries a recovery year it may not be picking up the effects of recession on undernutrition. From this point of view it is notable that for Nicaragua, one of the exceptions, the final figure is for 1982, not an economic recovery year. The deterioration in Peru appears to be quite significant; in Chile and Jamaica, it is probably too small to be considered statistically significant. The prevalence of low birth weight, presented in Table 9 for 5 countries, exhibits considerable stability between the dates given.

Tables 6, 7 and 8 underline the enormous intercountry variations which exist in social indicator levels. Infant mortality rates for 1987 vary from the Cuba low of 15 per thousand live births to 118 in Haiti. The average Costa Rican's life expectancy at birth was 75 years in 1987 while the Bolivian's was only 54 years. It is also worth noting the low prevalence of underweight children in Chile and Cuba and the relatively high prevalence in Guatemala.

The country specific data reported in the Appendix, generally reinforces the impressions given by the cross country evidence. Considerable regional (within) country differentials in social indicators are found to characterize most Latin American countries. This is likely to be a reflection of the sharp regional inequalities documented earlier. The performance of social indicators tends to be highly positively correlated with the level of regional urbanization. Both facts can be

observed for life expectancy in Brazil (Table A.11), literacy rates in Bolivia, Brazil, Colombia and Peru (Tables A.2, A.12, A.20, and A.49), infant mortality rates in Bolivia and Chile (Tables A.2 and A.16 where regions 1, 2, and RM (Region Metropolitana de Santiago) are the most urban), and Venezuela (Table A.62), and malnutrition in Bolivia and Peru (Tables A.1 and A.50). This suggests an "urban bias" in social and health services provision, though it should be recalled that average incomes are also higher in urban areas; it is not clear if such a bias exists independently of differences in average incomes.

Within rural and urban areas the variations in social indicators can also be wide; for example, see Table A.26 for rural Ecuador and Table A.9 for Brazil's relatively urbanized state of Sao Paulo (refering in both cases to infant mortality rates). Table A.30 which indicates the differential access to certain public services between Ecuador's urban and rural areas for 1974, highlights what is likely to be an important factor underlying the differences in urban and rural socio-economic indicators in many countries. It should be noted that although indicators often perform better in urban aggregates it does not mean that they do so for all urban residents. Table A.32 suggests that in El Salvador even though a greater proportion of children were malnourished in rural areas in 1976, the proportion in urban slums was by no means negligible.

Social indicators are found to vary cross sectionally according to other characteristics as well. One study finds that in Peru in 1984, close to 60 percent of all malnourished preschool children lived in households economically dependent on the agricultural sector. Day laborers and subsistence farmer households suffered the highest levels of malnutrition. addition, nutritional problems were closely associated with very low incomes, large family size, lack of adequate water and sanitation, high morbidity and low levels of schooling (Harrell et al., 1989). In the Appendix tables, 1970 life expectancy in Brazil is seen to rise monotonically as a function of household income in all regions (Table A.11). Regional disparities in life expectancy thus tend to be wider when dissagregated by income Infant mortality appears to be highly correlated with the level of mothers education in Chile (Table A.15). In 1980, the infant mortality rate was 95.2 for the 2.7 percent of mothers without any education and 23.8 percent for the 41.3 percent with one or more years of high education. Note that this correlation does not control for other variables that may be important, such as household income or exposure to unhealthy environments.

Although the specific country time series data indicate overall improvements in social indicators, intertemporal fluctuations are evident particularly in post 1980 data. The

decline in infant mortality rates between 1979 and 1982 in Brazil's Sao Paulo state is clearly not monotonic in all regions (Table A.9). For most regions in the early 1980s there was a decrease in the rate of improvement in mortality over 1979 and mortality actually increased in some regions. Table A.17 shows that in 1983 the percentage of undernourished children in Chile rose in every age group. The rate of decline in malnourishment is also found to be steeper in pre 1981 than post. These figures seem to reflect effects of the economic recession in Chile which was most severe between 1981 and 1983. Table A.20 provides the only intertemporal education data covering the economic recession years. Illiteracy in Colombia is shown to have continued to decline from 1981 to 1985 and relatively more so in rural areas. Differential rates of improvement in other social indicators are also evidenced elsewhere. For example, in Table A.9, the rate of decline in the IMR between 1979 and 1982 in Sao Paulo state varies from a high of .287 in Vale Paraiba to a low of .026 in Bauro. Even larger variances are exhibited in Table A.26 for IMRs in rural Ecuador between 1960 and 1977. Some of the relatively low figures for 1960 look rather suspicious and may be due to underreporting (Luzuriaga and Zuvekas, 1983). The reported increases in IMRs from 1975 to 1977 in some regions may also be suspect and beg further explanation.

Another exception to the picture of general social indicator amelioration relates to the nutritional status of children. Table A.10 shows that an increasing percentage of children born underweight died before they reached 12 months each year between 1979 and 1983 in Sao Paulo state.

IV. CONCLUSIONS

This paper has reviewed some of the available evidence on levels and trends in poverty, income inequality, and social indicators in the LAC region during the recent consecutive periods of economic growth and recession. No strong, clearcut conclusions on overall trends can be drawn from the reviewed data. This is partly due to data inadequacies (both availability and quality) which place severe limitations on making intertemporal and cross country comparisons. In addition, throughout, the analysis reveals key countries whose experiences significantly differ from those of the rest of the region. It is, thus, necessary to be wary of generalizations in the LAC region and particularly about the effects of growth and recession on inequality and poverty.

That said, some reasonably general inferences can be drawn. Across countries it is clear that those with higher average incomes also tend to have lower poverty levels and better social

indicators. Other things being equal, growth does appear to alleviate poverty. But, there are exceptions. Non income factors are clearly of importance here. Countries where the development of social and health services is a priority are likely to perform unusually well given their per capita incomes, relative to the cross country norm. For example, this is found to be the case for IMRs in Costa Rica, Jamaica and Chile (in Both Costa Rica and Chile expanded coverage (or improved quality) of health and nutrition programs while economic conditions sharply deteriorated in the 1980s (Hojman, 1989; UNICEF, 1989). Jamaica had had a long tradition of government funded social services before considerable curtailment towards the mid 1980s (Boyd, 1988). Thus, government policy can successfully intervene to redistribute incomes to those unable to share in the fruits of economic growth, or to protect vulnerable groups in times of economic contraction. The overall <u>distribution</u> of national income can also be very important. example, high inequality appears to partly explain relatively elevated rural poverty levels in Brazil despite an impressive per capita income level.

As regards the effects of the recent boom and slump on inequality, no clear pattern emerges. According to the (admittedly less than ideal) data, experiences differ enormously across countries. The data permit very few convincing comparisons of inequality over time, and, among those where such comparisons can be made, no consistent pattern emerges.

The paper presents some evidence that poverty declined in the pre-1980 period. Jamaica, whose economic difficulties predated that of other LAC countries provides an exception to this finding. While the proportion of the population found below the poverty line tends to be responsive to short run income changes (see Fields, 1989a and b, for a survey of empirical evidence), social indicators such as infant mortality rates, life expectancy and literacy levels, do not as a rule. These exhibit positive overall improvements for the period. Paradoxically then, declining living standards for the poor can coexist with improvements in social indicators. The evidence suggests that the latter are relatively insensitive and may in fact be mildly impervious to short run factors. (Child nutritional status could be an exception.) Again, this observation may reflect important non income factors such as previously attained levels of education, nutrition, and health. It is also probable that these variables follow their own complex dynamic. A better understanding of the non income determinants of social indicators is an important topic for future research. Further work should perhaps concentrate on the relative lack of progress on social indicators (though progress was made in various countries) during times of short run economic hardship. The effects of long run income changes could be quite different and should also be

explored.

The surveyed evidence repeatedly highlights considerable urban-rural and regional inequalities within the LAC countries. Poverty is shown to be both more prevalent and concentrated in rural areas. The performance of social indicators tends also to be significantly worse rurally. As expected, the rural poor are predominantly found to be engaged in agriculture and to be self employed. The strong poverty characterization which emerges from the data studied here, certainly suggests that there are unexplored opportunities for regional and sectoral targeting to the poor. Devising and implementing the most cost effective and efficient ways of doing so are important and pressing tasks.

A further issue which requires attention is the collection of consistent and careful socio-economic surveys following now well developed and established methods. The LAC nations are generally lagging on this front relative to even quite poor parts of Asia. Better data would enable a much clearer perspective on the effects of growth and recession on the living standards of the poor.

APPENDIX: STATISTICAL TABLES

The following country specific tables present estimates of poverty and inequality along with data on a variety of socioeconomic indicators widely deemed to be indicative of prevailing standards of living. It must be emphasized again that these estimates are often non comparable either intertemporally within countries or cross-sectionally between countries as discussed in the text. In addition, common information is unfortunately not often available for many countries.

The data is often presented by population quantile (deciles and quintiles). Quantile 1 always refers to the poorest percentage group of the population. When the size distribution of income is presented by quantile, the percentage share of income going to each population quantile is given not the cumulative share. Unless noted otherwise, the presented social indicators are defined consistently as follows. The infant mortality rate denotes the annual number of infants under one year of age who die per 1000 live births. The child mortality rate is defined as the annual number of deaths of children aged between one and five years of age per live births. Life expectancy represents the number of years a new born can be expected to live given the mortality risks operating at the population cross section at the time of birth. The <u>literacy rate</u> refers to the percentage of persons 15 and older who can read and Finally, malnutrition is most commonly delineated following the Gomez classification which measures deviations from what is presumed to be "normal body weight" for a specific age. Gomez malnutrition degrees 1, 2, and 3 occur when weight is 75 to 90 percent, 60 to 75 percent and less than 60 percent of desirable weight for age respectively. Although the determination of the appropriate weight for age and even the idea that such a norm exists finds little agreement among nutritionists, the Gomez criterion is the most widely reported in the Latin American literature.

TABLE A.1: Bolivia: Nutritional Status of Children Under 5 Years by Location, 1981

Location	Sample Size	Normal (Z)	Malnourished
Altiplano	1,941	49.5	51.5
Valles	1,928	61.0	39.0
Llanos	1,894	68.0	32.0
Bolivia	5,763	59.0	41.0
Urban	2,671	66.0	34.0
La Paz	896	54.0	46.0
Cochabamba	890	71.0	29.0
Santa Cruz	885	72.0	28.0
Rural	3,092	53.0	47.0
Altiplano	1,045	44.0	56.0
Valles	1,038	52.0	48.0
Llanos	1,009	64.0	36.0

Note:

Malnutrition is measured by Waterlow's classification.

Source:

National Institute of Food and Nutrition, Bulletin No. 1, March 1985 as quoted in World Bank (1988g) p. 4.

TABLE A.2: Bolivia: Selected Social Indicators for Urban and Rural Areas, 1988

	Total	Urban	Rural
nfant mortality rate	102	83	120
literacy rate (% > 14 Years)	19	8	31
fant mortality rate literacy rate (% > 14 Years) nool attendance (% 6 - 19 Years) Households with	74	84	64
piped water	60	89	31
sanitation	23	42	3

Source: World Bank (1990d) p.13, using 1988 data from Bolivia's National Institute of Statistics.

TABLE A.3: Brazil: The Distribution of Income by Region, 1980-83

	Gini	Income 7 Bottom	Going to: Top	7 of Individuals Earning Less Than	Absolute Poverty
	GIIII	402	102	Minimum Wage	(2)
Brazil					
1980	.583	9.20	46.76	38.6	20.3
1981 1983	.579 .579	9.35 8.06	45.33 46.23	37.1 40.1	19.6 22.0
North					
1980	.533	11.82	42.72	37.0	17.9
1981 1983	.525 .561	12.45 10.57	40.93 42.50	28.6 30.8	14.2 15.1
North Eas					
1980	.583	10.84	48.79	64.4	36.1
1981 1983	.572 .601	10.79 9.32	46.72 49.69	58.3 61.9	32.8 36.6
South Eas					
1980	.565	10.95	44.19	27.5	13.6
1981 1983	.567 .581	10.36 9.49	43.54 44.25	28.6 31.1	14.2 16.2
South			77000		10.2
1980	.556	11.36	45.09	32.9	16.8
1981 1983	.548 .566	11.42 10.37	43.03 43.83	31.2 33.1	15.8 17.2
Center We			70.00		1,42
1980	.593	9.18	49.08	39.3	19.8
1981	.574	10.33	46.12	34.5	17.4
1983	.588	9.47	46.54	35.6	18.3

Source: Maia Gomes, Osorio and Irmao (1986) pp. 269-70. Data is from the 1980 Demographic Census and the PNAD household surveys of 1981 and 1983.

TABLE A.4: Brazil: Population (2) Earning Less than one Minimum Salary, 1980

Amount of Minimum Salary	Brazil	Northeast	Southeast
up to 1/2	11.6	24.2	6.6
1/2 to 1	19.8	30.2	15.0
l or less	31.4	54.4	21.6

Source: SUDENE (1985) "Aspectos do Quadro Social do Nordeste" as quoted in World Bank (October 27, 1988d).

TABLE A.5: Brazil: Comparative Income Per Capita 1984

	Bottom 50%	Top 10%	Total
Brazil	27	467	100
Northeast	18	289	60
Southeast	32	524	116
South	32	492	110
Center West	31	512	108
North	36	491	114

Note: National Average = 100.

Source: IBGE. PNAD as reported in World Bank (May, 1988d) Vol. 2 p. 52.

TABLE A.6: Brazil: Urban Households (%) With Income Below Poverty Line, 1985

	Povert	y Line	
Urban Area	Up to 1/2 of Minimum Salary	l Minimum Salar	
Belem	9.1	19.0	
Fortaleza	10.9	25.9	
Recife	12.4	28.7	
Salvador	8.1	19.4	
Belo Horizonte	8.0	20.8	
Rio de Janeiro	6.4	17.7	
Sao Paulo	6.5	12.6	
Curitiba	5.8	14.8	
Porto Alegre	5.0	13.8	
Total Urban	7.1	16.7	

Source: PNAD (Household survey) 1985, as quoted in World Bank (May 1988d), Vol. 2, p. 53.

TABLE A.7: Brazil (%) Households in Poverty by Age and Sex of Household Head, 1985

Age	Male	Female
<30	32.8	59.0
30-39	36.7	43.8
40-49	34.3	35.0
50-59	28.9	29.8
60 +	34.8	37.6

<u>Source</u>: do Valle Silva (1987), p. 23, quoted in World Bank (May 1988d), Vol. 1, p. 17.

TABLE A.8: Brazil: Poverty and Inequality Since the Early 1980's

	1981	1983	1985	1987	1988
Headcount index (%) Poverty gap index (%)	_	-		24.2 9.5	
Gini	0.580	0.591	0.593	0.597	0.615

Note:

The poverty gap index is defined as the aggregate income shortfall of the poor expressed as a proportion of the poverty line times the population size; Calculations are based on household income per capita from the PNAD surveys.

Source:

Ravallion and Datt (1990).

Brazil: Mortality Rates in Sao Paulo State 1979-82 TABLE A.9:

Region	1979	1980	1981	1982
State	59.3	51.8	50.3	48.5
Sao Paulo	62.5	53.6	54.7	52.0
State Interior	57.7	50.8	48.1	46.8
Greater Sao Paulo	64.9	55.9	56.4	53.3
Coast	53.9	57.3	49.5	48.9
Vale Paraiba	52.3	45.3	40.2	37.3
Sorocaba	71.1	67.1	59.6	63.1
Ribeirao Preto	42.9	35.7	36.7	33.5
Bauru	54.0	48.6	53.7	52.6
Sao Jose Rio Preto	48.3	40.9	38.8	35.5
Araraguara	44.0	39.1	34.1	33.0
Presidente Prudente		42.1	41.7	39.7
Marilia	59.1	57.1	52.8	52.6
Campinas	52.4	41.3	37.8	39.7

Note: 1982 figures include January 1983.

Source: Fundação SEADE (Statistical Agency of State of São Paulo) as quoted in Macedo (1984) p. 213.

TABLE A.10: Brazil: State of Sao Paulo Regions: Percentage of Children with Low Birth Weight Who Died Before First Birthday, 1979-1983

	State of Sao Paulo	Greater Sao Paulo	City of Sao Paulo
1979	17.1	19.3	19.7
1980	18.2	21.6	22.2
1981	19.9	22.0	23.1
1982	20.3	22.7	25.8
1983	21.6	25.5	26.4

Fundação SEADE, as quoted in Macedo (1988), p. 45. Source:

TABLE A.11: Brazil: Life Expectancy by Region for 1950 and by Region and Household Income for 1970

Region			Average Monthly Income in Cruzei			
	1950	1970	1-150	151-300	301-500	501+
Amazonia	42.7	54.2	53.4	53.9	54.8	58.2
North	43.7	50.4	50.0	50.8	52.7	55.7
Northeast	34.0	44.2	42.8	46.1	50.3	54.4
Bahia	39.2	49.7	48.9	50.3	51.9	54.9
Minas Gerais	46.1	55.4	53.8	55.4	55.6	62.3
Rio-Guanabara	48.7	57.0	54.1	54.8	57.6	62.1
Sao Paulo	49.4	58.2	54.7	56.1	58.7	63.9
Pasana	45.9	56.6	54.8	56.5	59.3	63.7
South	55.3	61.9	60.5	61.2	63.4	66.9
Central West	49.8	57.5	56.5	57.1	58.2	63.3
Brazil	43.6	53.4	49.9	54.5	57.6	62.0

Source: Carvalho and Woods (1978) and Merick (1974) as reported in Pfefferman and Webb (1983), p. 121.

TABLE A.12: Brazil, Average Literacy Rates by Location 1970-1980

	<u>Pe</u>	rcentage c	f Populat:	lon 5 Year	rs or Olde	r
Region	Ur	Urban		Rural		al
	1970	1980	1970	1980	1970	1980
Northeast Southeast	58.0 79.0	63.5 83.4	24.0 54.0	31.1 65.1	39.2 71.1	47.7 79.3
Frontier Brazil	71.1 73.0	74.1 78.3	37.0 40.0	48.3 47.9	55.9 59.4	63.3 68.7

Source: Knight et al, (1979), and IBGE, 1970 and 1980. Brazil Demographic annexes as reported in Denslow and Tyler (1984), p. 1020.

TABLE A.13: Chile: Regional Income Distribution, 1985

	Region	Gini	% National Population	7 of National Income	<pre>7 Illiterate in Population (15 and over)</pre>
I	De Tarapaca	.379	2.51	2.22	4.9
II	De Antofagasta	.393	3.02	2.61	3.9
III	De Atacama	.385	1.58	1.30	8.3
IV	De Coquimbo	.444	3.67	2.55	13.8
V	De Valparaiso	. 489	10.61	9.81	15.5
VI	Del Libertador General	.414	5.15		
	Bernardo O'Higgins			3.94	6.3
VII	Del Maule	.448	6.29	4.96	18.3
VIII	Del Biobio	.452	13.18	11.91	13.4
IX	Del La Araucania	.517	5.92	5.30	16.5
X XI	Del Los Lagos Aisen del General Carlos	.468	7.14	6.85	13.4
XII	Ibanez del Campo De Magallanes y de la	.442	0.56	0.47	12.5
	Antartica Chilena	.398	1.10	1.21	4.3
R.M.		.498	40.26	46.49	6.3
	Gran Santiago	.507	33.43	42.27	-
Chile		.481	100	100	8.1

Note: Gran Santiago is included in R.M.

Source: Reported in Haindl and Weber (1986) p. 44 and based on 1985 CASEN (household survey). Illiteracy rates from Ministerio de Educacion, 1980, quoted in Rodriguez Grossi (1985) p. 48.

TABLE A.14: Chile: Percentage Households Below Poverty Line by Region, 1983

Region	Mean	Urban	Rural
North	31.5	26.6	59.0
Metropolitan VI Parcial	22.8	22.8	-
VI Parcial	38.2	31.4	42.4
South	49.7	45.5	57.1
Chile	30.3	27.1	55.0

Note: Poverty line is based on the cost of a "minimum basket" which includes minimum daily food requirements at June 1983 prices (urban 1.887 pesos; rural 1.415 pesos)

Source: Rodriguez Grossi (1985) p. 38, using household survey data

collected by ILADES and Rodriguez.

TABLE A.15: Chile: Infant Mortality Rates by Mother's Education

	Child	Infant		Mother's Educ	cation
Year	Mortality Rate (1-4 yrs)	Mortality Rate	None	Primary	Intermediate and higher
1970	3.44	82.2	164.8	86.7	41.9
1971	2.97	73.9	155.5	76.6	41.5
1972	2.87	72.7	153.9	76.8	41.3
1973	2.38	65.8	144.6	70.1	38.2
1974	2.61	65.2	157.3	68.0	38.5
1975	2.22	57.6	133.5	60.7	37.4
1976	2.10	56.6	136.5	60.3	38.1
1977	1.70	50.1	133.2	54.3	32.6
1978	1.61	40.1	97.4	43.6	28.2
1979	1.49	37.9	107.9	41.7	26.2
1980	1.24	33.0	95.2	36.8	23.8
1981	1.13	27.0	75.3	24.8	16.8

Note: In 1970, 8.9% of mothers who gave birth had no formal education, 66.9% had one or more years of intermediate and 24.2% one or more years of higher education. In 1980 the percentages were 2.7, 56.0 and 41.3 respectively.

Source: Instituto Nacional de Estadisticas (INE), Anuario de Demografia for each year as reported by Foxley and Raczynski (1984) p. 230.

TABLE A.16: Chile: Infant Mortality Rates by Region, 1976-1986

Region	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
1	44.5	32.6	36.6	35.5	28.0	21.1	23.3	19.9	17.4	16.6	16.6
II	56.5	52.9	36.8	37.8	35.2	27.8	26.7	29.4	25.2	18.8	19.1
III	59.7	54.1	45.0	52.0	32.2	30.0	29.3	24.3	18.9	19.3	22.4
IV	69.2	66.7	50.4	46.3	50.4	36.3	29.4	26.6	25.1	22.9	23.5
V	51.7	43.9	35.0	35.8	31.9	25.5	23.4	20.3	18.4	19.7	18.9
VI	65.6	56.9	45.6	45.0	40.8	31.2	21.9	18.8	19.3	19.6	19.1
VII	64.5	57.8	46.8	45.8	39.0	34.3	27.6	26.2	22.8	24.7	22.7
/III	89.0	69.4	59.6	50.3	46.0	37.0	33.6	31.8	26.1	26.8	23.2
IX	93.8	98.3	71.6	66.2	60.0	47.3	40.0	36.8	30.6	32.1	31.7
X	73.0	78.1	60.5	58.2	45.5	41.0	38.4	31.3	27.7	25.9	26.4
XI	112.6	70.2	69.8	81.1	45.9	37.1	35.7	35.7	26.4	30.5	25.1
XII	50.0	27. 9	30.8	32.8	23.8	23.7	21.8	21.8	19.3	12.6	14.2
R.M.	38.4	34.4	27.3	26.2	23.3	19.3	17.7	17.7	15.5	15.6	16.2
Chile	56.6	50.1	40.1	37.9	27.0	27.0	23.6	21.9	19.6	19.5	19.1

Note: Region names are given in Table A.14.

Source: INE, Compendio Estadistico, 1981, 1983 and 1988.

TABLE A.17: Chile: Low Weight Live Births and Nutritional State Under 5 Years Old, 1975 - 1985

	Z Births		7 of Unde	rnourished	Children	
Year	under 2.5 kgs	0 - 5 months	6 - 11 months	12 - 23 months	2 - 5 years	Total
1975	11.6	12.3	18.0	19.0	14.5	15.5
1976	11.4	11.2	18.5	19.4	15.2	15.9
1977	10.9	9.6	16.9	18.5	14.3	14.9
1978	9.8	6.5	13.5	16.0	13.0	13.0
1979	8.8	5.4	11.9	15.6	12.3	12.2
1980	8.2	5.0	11.5	14.3	11.7	11.5
1981	7.6	3.9	9.8	12.3	10.1	9.9
1982	6.8	3.3	9.4	11.9	8.6	8.8
1983	6.0	3.4	10.3	13.4	9.4	9.8
1984	6.0	2.9	8.9	10.8	8.4	8.4
1985	6.3	2.8	8.8	11.9	8.6	8.7

Note: Undernourishment is measured by the Sempe weight for age criterion. The sample is made up of under 5s under surveillance in Ministry of Health establishments. This includes an average of 73.5% of total under 5s for each year.

Source: INE, Ministerio de Salud and Anuario de Demographia, all years.

TABLE A.18: Colombia: Gini Coefficients for Urban and Rural Areas, 1971, 1978 and 1988

	1971	1978	1988
Country	.532	.481	.476
Rural	.531	.483	.495
Urban	.519	.470	.454

Note: Ginis are based on the distribution of income among earners.

Source: Berry (1990) quoting from Londono (1989).

TABLE A.19: Colombia: Household Income and Food Expenditures by Income Quintile, 1981

	1	2	3	4	5
Average monthly household income	6,049	9,485	11,244	14,347	35,666
Average monthly household food exp.	5,507	8,512	9,386	10,496	11,583
Share of food exp. in household income (%)	91.0	89.7	89.7	73.2	32.5

Note: Figures are in 1981 Colombian Pesos.

Source: DANE - DNP - DRI - DAN, survey of Food, Nutrition and Housing, 1981, as quoted in World Bank (December 1988b) p. 15.

TABLE A.20: Colombia: Illiteracy Rates (%), 1973 - 1985

		Total	Male	Female
73	Total	24.9	24.9	25.0
	Urban	16.1	15.6	16.6
	Rural	39.3	38.3	40.4
81	Total	21.5	21.4	21.6
	Urban	13.8	13.3	14.3
	Rural	36.5	35.9	37.1
85	Total	17.7	18.0	17.3
-	Urban	12.2	12.1	12.2
	Rural	29.2	29.7	30.1

Note:

The figures are expressed as percentages of the populations aged 5 years and older within each subgroup who are literate (e.g. 38.3% of rural males are illiterate in 1973). 1981 figures do not

include national territories.

Census (1973, 1985) and National Household Survey (EH - 33, 1981), as reported in Urdinola and Carrizosa (1989), Table H - 1.5. Source:

TABLE A.21: Costa Rica: The Incidence of Poverty, 1970 - 1986

	Individuals					
	1970	1977	1983	1986		
Total poor ('000s)	564	333	874	529		
Incidence:						
Total	30	16	35	20		
Urban	20	10	26	12		
Rural	37	21	42	25		
		House	holds			
	1970	1977	1983	1986		
Total poor ('000s)	78	55	154	101		
Incidence:						
Total	25	13	30	17		
Urban	14	8 17	23	11		
Rural	33	17	37	22		

Source: World Bank (1990e) p. 8 and p. 73, quoted from Sauma and Trejos (1990)

TABLE A.22: Costa Rica: Characteristics of Poor Districts, 1984 (7)

	Dist		
Population	Poor	Non-poor	Costa Rica
Population	12.9	87.1	100.0
Rural population	94.5	49.7	55.5
Labor force in agriculture	77.6	25.1	31.4
Illiterate population 10 yrs + Population 12 yrs + with primary	16.1	4.6	6.9
schooling or less	89.3	61.0	64.7
First - graders with low size/age	12.0	8.4	8.9

Source: Quoted in Gonzalez - Vega and Cespedes (1989) p. 91.

TABLE A.23: The Dominican Republic: Distribution of Household (H) and Household Per Capita (PC) Income Within Sectors, 1976 - 77

Sector		Bottom 20%	Bottom 40%	Top 20%	Top 107
Urban	(H)	4.94	14.08	51.66	35.0
	(PC)	4.60	13.35	53.29	36.4
Rural	(H)	5.87	16.30	48.51	33.0
	(PC)	5.42	15.52	49.04	32.8
Rural: agricultural incomes only	(H)	0.15	3.83	60.80	42.6
	(PC)	0.16	3.70	62.18	44.2
Rural: non-agricultural incomes	(H) (PC)	0.93 0.85	3.90 3.75	64.24 65.70	46.4
Illiterate head of	(H)	6.46	17.97	44.26	28.69
household	(PC)	6.23	17.37	44.45	28.0
With primary schooling	(H)	5.73	15.94	48.04	32.2
	(PC)	5.02	14.70	49.11	32.8

Source: Compiled from 1976-77 National Family Income and Consumption Survey, as quoted in Musgrove (1986), pp. 361-374.

TABLE A.24: The Dominican Republic: Population Characteristics (7)

Urban	41.9
Rural	58.1
Employed: agriculture	48.3
other	51.7
Illiterate	32.9
Primary schooled	59.1

Source: Musgrove, (1986) pp. 381-82.

TABLE A.25: The Dominican Republic: Poor Households as a Percentage of Total Households in Poverty Found in each Sector, 1976-77

		(%)	
	Urban	22	
•	Rural	78	
	Unemployed	18	
	Employed in agriculture	19	
	Self-employed in agriculture Employed outside agriculture Self-employed outside agriculture	38	
	Employed outside agriculture	13	
	Self-employed outside agriculture	9	
	Illiterate	47	
	With primary schooling	49	

<u>Note</u>: The poverty line is defined at 20 Dominican pesos per person/month (equivalent to \$.55 per person/day).

<u>Source</u>: Musgrove (1986), pp. 383-84.

TABLE A.26: Ecuador: Infant Mortality in Rural Areas by Province, 1960, 1975, and 1977.

Region and Province	1960	1975	1977
Sierra			
Carchi	120.7	81.1	71.4
Imbabura	146.2	98.6	82.3
Pichincha	96.4	67.5	69.9
Cotopaxi	108.8	108.6	83.3
Tungurahua	209.5	92.0	84.4
Bolivar	107.2	82.9	64.7
Chimborazo	158.6	113.9	69.0
Canar	60.4	60.2	55.1
Azuay	105.3	80.3	61.4
Loja	31.3	38.0	37.0
Coast			
Esmeraldas	31.8	48.0	67.8
Manabi	41.4	37.0	34.1
Los Rios	48.4	54.6	59.3
Guayas	77.2	74.1	56.1
El Óro	31.5	37.5	42.5
Oriente			
Napo	6.1	30.0	65.0
Pastaza	39.6	48.5	72.0
Morona Santiago	33.9	44.2	55.1
Zamora Chinchipe	14.7	67.1	76.3
Galapagos	103.4	33.3	18.9
Ecuador	-	64.7	58.7

Source: Data from INEC, Anuario de Estadisticas Vitales (1960, 1975) and Proyeccion del Censo National de 1974; Ministerio de Salud Publica Departamento de Estadisticas (unpublished data), reported in Luzuriaga and Zuvekas (1983) p. 75.

TABLE A.27: Ecuador: Urban and Rural Poverty Indicators, 1975

Urban Ecuador	1975 (\$)	
	· · · · · · · · · · · · · · · · · · ·	·
Per capita income	921	
Absolute poverty line	269	
Quito	317	
Guayaquil	242	
Cost of recommended diet	175	
Quito	212	
Guayaquil	157	
Relative poverty line	307	
Population (%) below:		
Absolute poverty line	40	
Relative poverty line	50	
Rural Ecuador	1975	
	(\$)	
Per capita income	232	
Absolute poverty line	183	
Cost of recommended diet	110	
Relative poverty line	77	
Population (%) below:	• • • • • • • • • • • • • • • • • • • •	
Absolute poverty line	65	
Relative poverty line	40	

Note: Absolute poverty line represents the cost of the minimum recommended diet plus other basic services. Relative poverty is here defined as 1/3 of average per capita income.

Source: The World Bank (1979) p. 21.

TABLE A.28: Ecuador: Infant Mortality across the Sierra Region, 1974

Sierra Region	Infant Mortality Rate	
 Azuay	84.6	
Bolivar	71.7	
Canar	64.5	
Carchi	98.8	
Chimborazo	105.7	
Cotopaxi	122.1	
Imbabura	100.4	
Loja	45.4	
Pichincha	75.0	
Tungurahua	98.4	
Ecuador	70.2	

Source: World Bank as quoted by Selowsky (1979) p. 94.

TABLE A.29: Ecuador: (%) Population in Poverty in Main Urban Areas, 1987

	Non-Poor	Poor	Extreme Poor
Households	54.2	30.5	15.3
Female head of household	52.5	28.4	19.1
Male head of household	54.5	30.9	14.6
Individuals	48.8	33.3	18.0
Economically active:			
Formal sector	54.6	45.7	
Informal sector	45.4	54.3	

Note: The poor are those with total household income less than the value of the basic consumption basket as defined by INEC and the extreme poor those with less than the cost of the food component of that same basket. Income includes labor earnings only.

Source: Mezzera and Pisoni (1989) as quoted in World Bank (November 1990f), p.96.

TABLE A.30: Ecuador: Housing Units (7) with Access to Public Services, 1974

	Ecuador	Urban	Rural
Water	42.9	83.4	15.1
Toilet Facilities	32.4	72.0	5.2
Sewage Disposal	27.5	64.1	2.4
Electricity	41.2	84.3	11.6

Source: Data from Housing Census of 1974 reported in Luzuriaga and Zuvekas (1983) p. 70.

TABLE A.31: El Salvador: Average Rural Household Income, 1961-75

	196	1	1975		
Farm Size (hectares)	Households (%)	Average Households	Average Income		
Landless Less than 1 1 - 9.9 10 - 50	12 42 39 7	940 1,252 1,752 6,010	41 34 23 2	792 1,003 2,287 6,342	
Total	100		100		

Source: Quoted from UNDP sources by Deere and Diskin (1984) p. 7.

TABLE A.32: EL Salvador: Nutritional State of Children 6 to 59 Months Old in Four Regions, 1976

Regions	Sample			Gomez Grad	e
	Size	Normal (%)	Degree 1 (%)		Degree 3
Subsistence	1,447	23.5	53.8	21.0	1.7
Coffee	1,043	23.1	54.3	20.4	2.2
Intensive agriculture	1,489	37.2	48.8	12.5	1.5
Urban slums	1,369	33.6	51.1	14.0	1.3

Note:

<u>Subsistence</u>: refers to small holding, semi-proletariat farmers <u>Coffee</u>: refers to workers living on coffee plantations.

<u>Intensive agriculture</u>: refers to workers living on coastal cotton and sugar plantations.

Source: Valverde et al (1980) pp. 167-177.

TABLE A.33: El Salvador: Literacy Rates of Small Scale Farmers by Farm Size and Region, 1976

Farm Size (Hectares)	Percentage Literate
 0.5 - 1	34.4 37.9
3 - 4	45.8
5 - 10	50.3
10 - 20	55.4
All Farms 0.5 - 20	39.0
Region	
West	46.3
Central (West)	42.2
Central (East)	38.2
East	32.9

Source: Daines (1977), Table 10 as quoted in Deere and Diskin (1984) p. 14.

TABLE A.34: Guatemala: Labor Force Characteristics and Poverty, 1980-81.

	Household Heads				All Labor Force		
E	xtremely Poor	Poor	Non-Poor	Extremely Poor	Poor	Non- Poor	Total
Economic Sector (%)	•						
Agriculture	74	57	28	67	48	39	51
Manufacturing	. 7	12	17	12	16	14	14
Construction	4	6		4	5	5	5
Trade	7	10	8 15	9	15	16	5 13
Services	- 5	10	20	6	11	19	12
Other	5 3	5	12	2	5	7	12 5
Norker Type (2)	•						
Employer	-	1	2		_	5	2
Self-employed	54	46	2 33	43	39	30	2 37
Salaried:		, -					
Public sector	4	8	15	2	6	13	7
Private sector	42	45	50	37	45	45	43
		,-		- •	•-		
Unpaid Family Worke	rs -	-	•	18	10	6	11
Illiterate (%)	62	46	24	n.a.	n.a	. n.a.	n.a.

Note: The table shows the percentage distribution of both household heads and economically active persons across labor force categories and poverty or non-poverty status. Extreme poverty is delineated by income levels below that necessary to purchase the minimum food basket and poverty by income levels not sufficient to purchase a minimal goods and services basket.

Source: World Bank (1987b) p. 113.

TABLE A.35: Guatemala: Income Distribution and Poverty by Region, 1980-81

	Guatemala	Central Urban	Other Urban	Rural
Quintile 1	5.5	4.0	6.3	8.0
2	8.6	7.6	11.4	10.9
3 ,	14.9 18.7	11.8 18.6	14.8 22.0	15.4 23.1
Quintile 1 2 3 4 5	55.0	58.0	45.5	42.6
Gini	.48	.51	.37	.34
All households		*	,	
Average annual family income (Quetzales)	3,051	7,919	3,236	1,829
Households (no. in '000)	1,334.9	204.5	274.6	855.8
I of total income	100	39.8	21.8	38.4
% of total families	100	15.3	20.6	64.1
Poor households				
7 of total extreme poverty	32	17	28	36
Households (no. in '000)	422.2	35.7	76.7	309.9
7 of total in poverty	63	54	60	66
Households (no. in '000)	840.9	114.6	163.2	563.1

Note: For definitions of <u>poverty</u> and <u>extreme poverty</u> used in this Table see Table A.34.

Source: World Bank (1987b) pp. 111-112, using data from National Household Survey of Income and Expenditures 1979-81.

TABLE A.36: Honduras: Households Below the Poverty Line, 1978-79

	Poverty House		<u>Poverty</u> Househ	Line 2 olds	
Region	(No.)	(%)	(No.)	(%)	
Rural	267,798	75	243,172	68	
Urban	66,525	37	59,775	34	
Total	334,313	63	202,947	57	

Note: Poverty Line 1 delineates the income necessary to satisfy basic needs (housing, food, etc.). Poverty Line 2 denotes the income level sufficient to purchase essential food items only.

Source: Quoted in Peek (1984a) p. 25.

TABLE A.37: Jamaica: Household Characteristics by Consumption Quintile

Characteristics			Quintile	ntile		
	1	2	3	4	5	
Mean per capita expenditure (J\$	1,265	2,344	3,392	4,984	11,631	
Education of Head:			70.0	~. -	.	
Primary or Less	91.9	91.0	78.8	74.7	65.1	
Secondary (no exam)	4.2	7.7	14.5	14.3	14.7	
School Enrollment:						
Ages 3-5: Pre-primary	54.9	59.4	62.0	59.1	62.3	
None	41.0	38.3	27.0	29.0	20.9	
Ages 6-12: Primary	86.0	81.4	89.5	79.9	79.9	
Secondary	4.3	6.8	4.7	10.0	13.6	
None	1.2	1.7	0.4	0.4	0.0	

Note: A quintile contains 20% of the population not of households.

Source: Compiled from Jamaica Living Conditions Household Survey, Statistical Institute of Jamaica and the World Bank (1988).

TABLE A.38: Jamaica: Characteristics of Households by Location

		Jamaica	Kingston	Other Urban	Rural
% of population	n	100	36.1	8.7	55.2
Mean per capita	expenditure	4,722	6,000	5,211	3,811
Education of he	ead				
Primary or] Secondary (r		80.4 11.1	68.7 15.8	75.5 18.7	88.9 6.7
School enrollme	ents				
Ages 3-5:	pre-primary none	60.3 33.3	67.7 26.6	55.8 34.6	55.3 35.7
Ages 6-12:	primary secondary none	83.8 7.2 0.9	82.5 6.5 1.2	80.6 9.2 0.0	84.9 7.4 0.8

Source: Statistical Institute of Jamaica and the World Bank (1988).

TABLE A.39: Jamaica: Prevalence of Child Malnutrition, 1978, 1985, and 1989

Low Weight for Age	1978	1985	1989
Moderate	15.0	13.6	8.5
Severe		1.0	0.7
Total		14.6	9.2

Note:

Numbers are percentages of all surveyed children under five. The 1978 and 1985 surveys conducted by the Ministry of Health are deemed broadly comparable to the 1989 Survey of Living Conditions.

Source:

Statistical Institute of Jamaica and Planning Institute of Jamaica

(1989).

TABLE A.40: Jamaica: Distribution of Labor Income

Z of Households	Ir	come Share	
	1968	<u> 1972</u>	1974
0 - 60	25.0	20.0	16.0
0 - 80	47.2	39.3	32.0
0 - 90	63.3	57.0	48.3
0 - 95	75.0	65.0	60.0
0 - 100	100.0	100.0	100.0
Gini	.53	.60	.67

Source: World Bank (1976), Annex 2, p. 1.

TABLE A.41: Mexico: Poverty by Occupational Sector and Type of Worker, 1975

	No. of Poor Households (000)	% of Total Poor	% of Urban Poor	% of Rural Poor
Agriculture	2,410	52.4	1.7	50.7
Mining	26	0.5	0.3	0.2
Petroleum and electricity	6	0.2	0.2	
Manufacturing	491	10.7	4.5	6.2
Construction	135	3.0	1.9	1.1
Commerce, services, transpor		20.0	10.6	9.4
Government	_52	1.1	0.9	0.2
Unemployed/unspecified	558	12.1	4.3	7.8
<u>Total</u>	4,599	<u>100.0</u>	24.4	<u>75.6</u>
Unemployed	547	11.9	4.1	7.8
Owner	54	1.2	0.4	0.8
Self employed	2,153	46.8	6.2	40.6
Non-salaried in family	. ,			
business	13	0.3		0.3
Salaried employee	1,832	39.8	13.7	26.1

Note: The poor are defined as households with monthly incomes not exceeding 1,621 (1975) pesos, about half the estimated national mean.

Source: Bergman (1980) p. 21, as estimated from national household budget survey data.

TABLE A.42: Mexico: The Structure of Income Distribution, 1977

Decile	Population	Category	Sector	Relative Income
1	10.0	Self-employed	Rural	0.30
2	6.0	Self-employed	Rural	0.34
	0.5	Employer-owner	Rural	0.40
	3.5	Wage-earner	Rural	0.40
3	10.0	Wage-earner	Rural	0.40
3 4	0.5	Wage-earner	Rural	0.44
	9.5	Self-employed	Urban	0.50
5	2.2	Self-employed	Urban	0.54
	7.8	Wage-earner	Urban	0.60
6 7	10.0	Wage-earner	Urban	0.64
7	9.4	Wage-earner	Urban	0.67
	0.6	Employer-owner	Urban	0.70
8	0.1	Employer-owner	Urban	0.74
	0.5	Wage-earner	Urban	1.60
	1.2	Self-employed	Rural	1.80
	5.7	Self-employed	Urban	2.10
	2.5	Wage-earner	Urban	2.20
9	10.0	Wage-earner	Urban	2.24
10	8.1	Wage-earner	Urban	2.25
	0.2	Employer-owner	Rural	2.60
	1.7	Employer-owner	Urban	3.60
Rural	32.4	Total	Rural	0.40
Urban	67.6	Total	Urban	1.30

Note: Income is relative to national average income.

Source: National Statistical Institute, Income and Expenditure Household Survey (1977) reported in World Bank (1986).

TABLE A.43: Mexico: Distribution of Households by Multiples of Minimum Wage, 1983-84

Multiple of Minimum Wage	Households (%)
Up to 1 minimum wage	21.0
1 to 3	47.8
3 to 5	22.7
6 to 8	4.3
More than 8	4.2

Source: Household Income and Expenditure Survey, 1983-84, as quoted in World Bank (February 1989a) p. 7.

TABLE A.44: Mexico: Educational Attainment of Household Head and Poverty, 1975

Education	<u>7 of</u>	Poor Househo	olds
	Total	Urban	Rural
None	47.7	6.1	41.6
1-3 Years	30.6	7.7	22.9
4-6 Years	18.8	8.2	10.6
7 Years	2.9	2.4	0.5
Total	100.0	24.4	75.6

Source: Bergsman (1980) p. 25 as estimated from household budget studies.

TABLE A.45: Mexico Infant Mortality Rate in Central Region Provinces, 1971

Guanajuato	83.8
Queretaro	64.1
Hidalgo	60.6
Mexico	105.0
Distrito Federal	73.2
Morelos	39.2
Puebla	79.7
Tlaxcala	105.9
Mexico	63.3

Source: Anuario Estadistico, 1971, as quoted in Selowsky (1979), p. 94.

TABLE A.46: Nicaragua: Agricultural Income Distribution by Occupation, 1971

Occupation	Percentage Agricultural Workforce	Percentage Income
Owners of medium-sized and large farms	3.5	63.1
Owners of small farms	45.5	29.4
Agricultural wage workers	51.0	7.5
Total	100.0	100.0

Source: Quoted in Peek (1984b) p. 6.

TABLE A.47: Panama: Households by Poverty Status and Region, 1975 - 1980

	Percentage of Total Population Within Region	
	1975	1980
Poor Households		
Rural Urban	83.1 33.3	71.6 46.7
Extremely Poor Households		
Rural Urban	63.5 21.9	56.1 14.0
Extremely Poor as Percentage of Poor Households		
Rural Urban	76.4 65.7	78.4 30.0

<u>Poor</u> households are those with incomes sufficient to cover the costs of basic needs and <u>extremely poor</u> households those with incomes insufficient to cover basic food expenditures. The two cutoff points are region specific and per capita. Note:

Source: Quoted in Pinnock and Elton (1983) p. 30.

TABLE A.48: Panama: Distribution of Rural Households by Income, 1975

Monthly Income Range	Percentage Total Household
Less than US\$75	 54.6
75 - 124	19.1
125 - 249	16.3
250 - 499	8.1
500 - 750	1.3
750 +	0.6
Total	100.0

Source: Bunge (1980) as quoted in Pinnock and Elton (1983) p. 31.

TABLE A.49: Peru: Indicators of Regional Inequalities and Poverty, 1981

	l Income	2 School	3 Illit.	4 <prim.< th=""><th>5 >Prim.</th><th>6 Elect.</th><th>7 Water</th></prim.<>	5 >Prim.	6 Elect.	7 Water
Apurimac	34.6	62.1	52.1	69.6	2.8		
Huancavelica	37.8	56.3	44.0	67.0	2.5	90.8	77.4
Ayacucho	38.9	61.0	45.0	65.3	5.7	82.9	67.0
Cajamarca	39.9	51.5	35.2	64.9	2.8	87.6	
Iuanuco	44.2	53.2	32.2	58.5	4.4	86.4	70.7
Cusco	43.4	65.3	37.1	56.4		77.5	
mazonas	58.1	62.1	26.7	58.3	2.3	90.9	57.0
Puno	43.4	63.3	32.5	57.6		88.4	23.7
San Martin	32.1	66.7	16.3	46.3	3.6	67.2	
Piura	57.9	62.5	21.9	48.6	5.6	71.9	
Ancash	55.3	69.4	28.2	51.4	4.5	68.6	41.8
Jcayali -	47.1	67.7	11.3	42.0	3.6	73.9	
coreto	51.9	64.7	14.9	46.5	4.9	62.2	
Madre de Dios	54.8	65.1	10.7	35.6	5.5	67.0	
Junin	56.8	71.3	18.6	39.5	7.6	57.1	53.4
Pasco	58.3	67.6	22.3	43.9	7.5	58.2	42.0
lumbes	65.0	77.2	8.5	38.8	7.1	14.3	69.4
.ambayeque	59.0	72.9	13.3	36.3	7.0	49.9	21.3
a Libertad	54.8		17.6	41.5	9.1	56.6	
loquegua	66.3	82.7	12.4	33.7	9.4	39.8	
Ca	71.6	85.1	15.9	28.6	11.2	43.8	
Arequipa	75.7		10.7	27.8	15.5	36.5	
Cacna	72.1	82.0	8.9	28.2	12.8	31.3	18.0
.ima	76.8		4.5	17.3		17.3	
Callao	81.0	86.2	2.9	14.6	13.4	11.3	9.8
Peru mean	60.1	70.3	18.2	38.2	9.9	54.0	36.9

Mean monthly income per employed person of 15 years and over in 1980 Intis. Note: Column 1:

Column 2: Column 3:

Z of population 5 to 19 attending school.
Z of illiterates in population 15 and over.
Z of population 15 and over without complete primary Column 4: education.

7 of population 15 and over with higher education.
7 housing without electricity.
7 housing without piped, well or basin drinking water. Column 5:

Column 6:

Column 7:

Source: Banco Central de Reserva del Peru, Subgerencia de Ingreso y Producto (1986) p. 24.

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TABLE A.50: Peru: Nutritional Status of Under 6s (%), 1984

2 of Total		Gomez Grade		
Under 6s	Normal	1	2	3
19	81	17	2	
11				2
8				
9			6	1
28	65	28	7	
12	35	44	17	4
10	44	38	15	6
		28	13	4
32	44	37	15	4
10	44	38	15	3
				3
21	38	41	18	3 3 3
100	56	31	11	2
	19 11 8 9 28 12 10 10 11 21	Under 6s Normal 19 81 11 54 8 72 9 71 28 65 12 35 10 44 10 55 32 44 10 44 11 32 21 38	Under 6s Normal 1 19 81 17 11 54 35 8 72 24 9 71 22 28 65 28 12 35 44 10 44 38 10 55 28 32 44 37 10 44 38 11 32 45 21 38 41	Under 6s Normal 1 2 19 81 17 2 11 54 35 9 8 72 24 4 9 71 22 6 28 65 28 7 12 35 44 17 10 44 38 15 10 55 28 13 32 44 37 15 10 44 38 15 11 32 45 20 21 38 41 18

Source: Ministry of Health (1984) as reported in Figueroa (1988) p. 169.

TABLE A.51: Peru: Regional Per Capita Expenditure Inequality, 1985

Region	% of Total Population	Mean Expenditure (Intis/Month)	Gini
Lima	26.8	770.9	.393
Coastal urban	15.2	569.8	.381
Coastal rural	7.2	421.3	.373
Sierra urban	11.0	649.9	.439
Sierra rural	30.5	366.8	.394
Selva urban	3.0	792.0	.485
Selva rural	6.3	413.5	.416
Peru	100.0	556.6	.430

Note: Expenditures are in June 1985 Intis.

Source: Glewwe (1988) p. 33.

TABLE A.52: Peru: Per Capita Expenditure Inequality and Education of Household Head, 1985

Education of Head	7 of Total Population	Mean Expenditure (Intis/Month)	
None	13.8	329.3	
Elementary	52.4	436.6	
Secondary (some)	11.1	576.0	
Secondary (degree)	12.2	760.6	
Post-secondary training	2.7	841.4	
University	7.8	1,298.8	
Other	0.1	2,935.6	
Peru	100.0	556.6	

Note: Expenditures are in June 1985 Intis.

Source: Glewwe (1988) p. 34.

TABLE A.53: Peru: Distribution of the Poor by Region and by Education and Occupation of Household Head, 1985

	Poorest 10 %	Poorest 30 %	All Peru
Region: Lima	3.4	8.5	26.8
Coastal urban	6.0	11.7	15.2
Coastal rural	9.3	9.6	7.2
Sierra urban	8.8	9.4	11.0
Sierra rural	59.7	48.7	30.5
Selva urban	2.3	2.2	3.0
Selva rural	10.6	10.1	6.3
Education: None	31.6	25.4	13.8
Elementary	61.7	62.9	52.4
Secondary (some)	4.1	7.0	11.1
Secondary (degree)	2.2	3.8	12.2
Post-second. training	0.0	0.4	2.7
University	0.4	0.5	7.8
Other	0.0	0.0	0.1
Occupation:			
None	5.5	4.7	5.9
Agriculture	70.8	61.2	40.0
Sales/Service	7.4	13.6	22.3
Industrial/craft White collar/	15.1	18.3	20.1
management	1.2	2.2	11.8
Other	0.0	0.0	0.0

Note: The poorest 10 and 30% of the population lie beneath poverty lines of monthly per capita consumption expenditures of 155 and 279.2 Intis at June 1985 prices.

Source: Glewwe (1988) pp. 38-42

TABLE A.54: Peru: Household Income Distribution by Location, 1972

	Per	Percent of Total Household Income by Quantiles					
Location	0-20	21-40	41-60	61-80	81-100	91-100	
Lima Big Cities	5.4 4.5	9.4	14.1 13.9	21.3	49.8 50.5	33.7 33.7	
Other Urban Rural	3.4 1.9	8.1 5.1	13.7 9.6	21.5 18.6	53.5 64.8	37.3 46.8	
Peru	3.1	6.9	11.6	19.9	58.6	41.4	

Source: Webb (1989) Table F-5, using data from National Survey of Food Consumption, ENCA 1972.

TABLE A.55: Uruguay: Rural Income Distribution (%) by Household Quintile, 1963, 1982, and 1984

Quintile	1963	1982	1984
1	4.1	5.7	6.0
2	9.1	10.5	10.2
3	14.4	15.3	14.8
4	22.7	24.7	22.0
5	49.8	45.8	47.0
Gini	.424	.398	.406

Note: Data are not necessarily comparable across years.

Source: Reported in Favaro and Bension (1989) p. 16.

TABLE A.56: Uruguay: Households Below Poverty Line (%), 1967-84

YEAR	Households 7
1967	30
1976	35
1982	30
1984	30

Note:

Poverty line is defined as 1/2 average income in each period so that it is a "relative" poverty line.

Source: Compiled from various sources by Favaro and Bension (1988) p. 20.

Uruguay: Infant, Neonatal and Post-Neonatal Mortality, 1970 - 1986 **TABLE A. 57:**

Year	Infant Mortality	Neonatal Mortality	Post-Neonatal Mortality
1970	50.2	24.3	25.9
1975	48.6	22.1	26.5
1980	38.2	15.2	23.0
1986	27.7	12.2	15.5
1987	23.8		

Note:

Neonatal mortality refers to death occurring within one month of birth, and post-neonatal mortality that occurring thereafter up to age one.

Source:

Ministry of Public Health, 1987, as reported in World Bank (March 1989b), p. 12.

TABLE A.58: Venezuela: Urban and Rural Poverty

		1982		-	1987	
	Urban	Rural	Total	Urban	Rural	Total
Z of all Households	· · · · · · · · · · · · · · · · · · ·					
Total poor	19.1	13.6	32.7	30.9	12.9	43.8
Extreme	4.5	5.8	10.3	8.9	6.3	15.1
Critical	14.6	7.8	22.3	22.0	6.6	28.6
Non-poor	57.3	10.0	67.3	51.1	5.2	56.3
of Rural and Urban Populations						
Total poor	25	58	33	38	71	44
Extreme	6	25	10	11	35	15
Critical	19	33	22	27	37	29
Non-poor	75	42	67	62	29	56

Note: Poverty is defined as extreme when monthly income is less than the cost of the minimum food basket (12.3 Bolivars/day/person in April 1987 prices) and as critical when monthly income covers the cost of one but less than two baskets. No adjustments are made for regional price differentials.

Source: Garcia and Newman (1988) p. 6.

TABLE A.59: Venezuela: Households in Poverty as a Percentage of Total Households in Each Region

	19	82	19	87	19	89
Region	% in Extreme Poverty	7 in Critical Poverty	% in Extreme Poverty	% in Critical Poverty	% in Extreme Poverty	7 in Critical Poverty
Caracas	2	10	4	15	7	22
Rest of Capita Central West Central Zulia	2 tal 3	19		9 26 21 34	18 19 28 36	33 32 36 40
	7	21				
	15	29	21			
	9	24 19 36	19			
Andes	23		34	27	30	
South	*	*	21	36	42	16
Northeast	18	30	23		35	36
Guayana	4	18	13	30	n.a.	n.a.
Venezuela	10	22	15	29		

Note:

* included in Guyana Region for 1982. For poverty definitions, see Table A.58.

Source: Garcia and Newman (1988) pp. 8-9 and World Bank (1990c) p. 19.

TABLE A.60: Venezuela: Distribution of Household Heads by Occupational Sector and Education, 1987

	Extreme Z	Critical Z	Non-Poor
Sector:			
Agriculture	31	17	6
Mining	1	1	2
Manufacturing	10	14	16
Elec., gas, and water	i	ì	i
Construction	7	$1\overline{1}$	10
Commerce	15	17	19
Transport	5	8	8
Pinance Pinance	1	8 2 20	6
Services	18	20	24
Unemployed/non-response	11	9	6
Education:			
None	28	17	7
Some primary	29	25	16
Full primary	25	29	25
Some secondary	10	18	22
Full secondary	2	4	11
Some university	1	2	6
Full university	0	1	9
Other	0	0	1
Non-response	6	4	3

Note: For poverty definitions, see Table A.58.

Source: Garcia and Newman (1988) pp. 11-12.

TABLE A.61: Venezuela: Percentage of Children in Age Category Attending School Across Poor and Non-Poor Households, 1987

		Rural			Urban	
Age	Extreme	Critical	Non-Poor	Extreme	Critical	Non-Poor
4 - 6	36	46	56	52	59	73
7 - 10 11 - 14	83 76	89 79	91	93 91	95 01	98 94
15 - 18	76 32	32	80 35	66	91 59	61

Note: For poverty definitions, see Table A.58.

Source: Garcia and Newman (1988) p. 11.

TABLE A.62: Venezuela: Infant Mortality by Region, 1985

	Infant Mortality Rate
Distrit. Federal	16.8
Anzoategui	19.8
Aragua	29.0
Carabobo	24.0
Meriela	33.0
Trujillo	37.0
Tachina	26.0

Source: Ministerio de Sanidad, as quoted in World Bank (1988e) "Public Policy Options for Venezuela" Section IV, p. 19.26.

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