Social Costs of Adjustment:

The Case of Latin America and the Caribbean

Prepared for the U.S. Agency for International Development under a subcontract to Consulting Assistance for Economic Reform, contract number PDC-0095-Z-00-9053-03.

PROVISIONAL REPORT

Elliot Berg
Graeme Hunter

February 1992

7250 Woodmont Avenue, Suite 200, Bethesda, Maryland 20814

PREFACE

This report was prepared in response to a request from the U.S. Agency for International Development for a review of the empirical evidence on the impact of structural adjustment policies on the poor during the 1980s. The present report presents a review of the findings for Latin America. A second report will examine the evidence for Africa.

Elliot Berg
February 1992

TABLE OF CONTENTS

SECTION FIVE

THE IMPACT OF STRUCTURAL ADJUSTMENT PROGRAMS ON THE POOR 31

LIST OF TABLES AND FIGURES

SECTION ONE

INTRODUCTION

It is widely believed that the 1980s were a disaster for the poor in Latin America and Africa — a "lost decade" of deepened poverty and declining social conditions. There is a parallel belief that in those countries that undertook structural (market-oriented) policy reforms, the poor fared worse than other groups.

Plenty of reasons exist to lead the observer to expect that these perceptions of how the poor fared accurately reflect Latin American social reality in the 1980s.

- The world recession of the early 1980s hurt most of the economies in the Latin American and Caribbean (LAC) region.[1] After growing by 3.3 percent a year between 1971 and 1980, per capita GDP in the LAC countries fell by 1.2 percent a year between 1981 and 1990. The growth of the 1970s reduced poverty; the decline of the 1980s should have increased it;

- Debt burdens soared. LAC's total debt stock nearly doubled from over $240 billion in 1980 to $445 billion in 1987, before declining slightly to $434 billion in 1989. The region is home to 12 of the World Bank's 19 "severely indebted" countries; 85 percent of the region's population live in these indebted countries. Heavy debt burdens sharply constrain the capacity to invest in long-term, poverty-reducing actions in sectors such as education and health; and

- Terms of trade worsened. Collapsing commodity prices in the 1980s pushed Latin America's terms of trade some 15 percent below their average level in the 1970s.

To these recession-related reasons to anticipate generalized increases in poverty and worsened social conditions for the poor have to be added the expected impacts of economic stabilization and adjustment policies. Cutbacks in public employment, subsidies and bank credit, liberalization of markets, reform of state enterprises can all impact negatively on the poor.

In fact, the perception that poverty has spread in the 1980s is not without some foundation in reality. The economic evolution of the decade has been unfavorable for the poor in many countries. But neither a priori expectations nor empirical evidence is enough to explain how this idea of generalized deterioration in the condition of the poor has come to be so widely embraced. Thus, while a priori reasons exist to anticipate policy-induced deterioration for low income groups in developing countries, there are reasons also to anticipate improvement for these groups as a result of economic stabilization and market-oriented structural reforms. For example, small farmers can be expected to benefit from the higher producer prices usually associated with exchange rate adjustments and agricultural policy reform. More important, and more directly to the point, empirical evidence about what was happening to the poor in the 1980s was very sparse until recently, so nobody really knew, except in piecemeal fashion, how they had been affected by the economic transformations of the decade.

---

[1] Text references to "Latin America" include the Caribbean in their scope.

The main reason for the spread of this idea, the idea that the 1980s saw generalized and severe deterioration in the welfare of the poor in developing countries, is the spectacularly successful selling job carried out by a few eloquent propagandists, often under the sponsorship of the United Nations Children's Fund (UNICEF). These spokesmen managed to convince the intellectual and political community concerned with development problems that the welfare of the poor had truly deteriorated — even before there was much evidence one way or another. Moreover, they succeeded in keeping the idea alive through much of the decade, in the face of growing evidence to the contrary.

The argument was launched as early as 1984, well before many economic reform programs had been adopted, and certainly before many impacts of policy reforms were observable. A UNICEF study published that year asserted: "the present crisis . . . has severely aggravated the situation of several social groups . . . [since] child welfare indicators . . . **are unambiguous** (our emphasis) in pointing to a deterioration in indicators of nutrition, health status, and school achievements."[2]

In 1987, the UNICEF-sponsored volume *Adjustment with a Human Face* appeared, and elaborated through case studies the basic themes set out in 1984. The book argued forcefully that the social costs of adjustment were considerable, and were being borne disproportionately by the poor.

This was surely one of the most influential books of the decade, perhaps of many decades. Its basic arguments quickly became received doctrine. Not many months later, the World Bank would make public mea culpas; its representatives, for example, pleaded guilty at a January 1988 conference in Khartoum to the charge that in their adjustment programs they had neglected social costs and impacts on the poor. Soon afterward the Bank introduced its Social Dimensions of Adjustment Program with United Nations Development Programme (UNDP) support, and many other aid donors reshaped their programs, giving greater priority to poverty-focused actions. Representatives of the European Development Fund, the aid agency of the European Economic Community, spoke of their role as becoming "the social firemen of adjustment lending."

What is astonishing about all this is that evidence presented in support of the UNICEF thesis was extremely sparse. As one reviewer pointed out, the remarkable fact about the studies in the 1984 UNICEF pamphlet was that they provided so little evidence of deterioration in children's status in the countries studied; to the contrary, the available data showed continuing improvement in nutrition, mortality, and school attendance.[3]

Nor was the evidence presented in the 1987 volume, *Adjustment with a Human Face*, any more convincing. Strong statements are made in the introduction and conclusion asserting the existence of deteriorating social conditions among the poor. But the case studies that made up the bulk of the book provide only scattered support for these assertions. As one reviewer noted: "A set of studies that seem to lead to the conclusion of little, or at least unproven, systematic impact of recession and economic

---

[2] In R. Jolly and G. Cornia, *The Impact of World Recession on Children: A Study Prepared for UNICEF*, Oxford, 1984.

[3] Samuel H. Preston, Review of Richard Jolly and Giovanni Andrea Cornia, editors, "The Impact of World Recession on Children," in *Journal of Development Economics*, May 1986.

adjustment on health and nutrition is summarized as finding that adjustment policy usually multiplies negative recessionary impact on the poor and vulnerable."[4]

None of these criticisms prevented repeated and continuing assertions of deteriorating social conditions due, at least in part, to market-oriented stabilization and adjustment programs. Thus, UNICEF's Richard Jolly wrote in 1988:

> The 1980s will almost certainly be recorded by future development historians as a decade of rising poverty and malnutrition in many if not most countries of the world. Certainly this is true for the vast majority of countries in Africa and Latin America. . . . What has been happening in the majority of countries is a widespread and marked **deterioration** in the human condition. Poverty and malnutrition are worsening, not merely persisting as for so long before. Nor, as often before, is it a matter of worsening poverty in some countries with improvements in others. The early 1980s have produced a strong, sustained, and systematic set of downward international pressures on the majority of developing countries, with the consequences that living standards have very seriously deteriorated.[5]

And the 1989 UNICEF report, *The State of the World's Children*, opens dramatically:

> Large areas of the world are sliding backward into poverty. . . . The average weight-for-age of young children, a vital indicator of normal growth, is falling in many of the countries for which figures are available. In the 37 poorest nations, spending per head on health has been reduced by 50 percent and on education by 25 percent. And in almost half of the 103 developing countries from which recent information is available, the proportion of 6-11-year-old children enrolled in primary school is falling.

Supporting evidence for these kinds of cosmic assertions remained very thin. On occasion, evidence was nonexistent (as in the 1989 UNICEF report, where no evidence is given to support the assertion about cuts in spending for health and education).[6] This did not prevent their widespread acceptance by the public at large as well as by the development community. The vision of a world sliding backward into poverty became the prevailing view of social reality in the late 1980s, and it is still widely held.

Important consequences have followed. The belief that poverty was deepening and that market-oriented reforms worsen the situation of the poor nurtured the argument that stabilization and structural reform programs have given rise to heavy social costs of adjustment. The belief fueled the widespread uneasiness about market-oriented reforms and International Monetary Fund-type stabilization programs. It probably led to a softening of terms in formal adjustment lending, though this is difficult to prove.

---

[4] J. Behrman, "The Impact of Economic Adjustment Programs," in *Health, Nutrition, and Economic Crises: Approaches to Policy in the Third World*, Auburn House, 1988.

[5] From "A UNICEF Perspective on the Effects of Economic Crises and What Can be Done," in *Health, Nutrition, and Economic Crises* . . . , ibid., p. 81.

[6] The statement is repeated on page 17 of the text, but with no supporting information, and with the estimates for the percentage drop in health and education spending **switched!**

It generated the multitude of aid donor programs aimed at cushioning these costs — programs grouped under the heading of "social dimensions of adjustment."

Given the impact of the idea that the 1980s were characterized by worsening conditions for the poor in developing countries, it is essential to ask: is it true? Specifically, is it true as UNICEF spokesmen asserted and so many people believe, that the 1980s were ". . . a decade of rising poverty and malnutrition in . . . the vast majority of countries in Africa and Latin America."? Is it true that there took place " . . . a widespread and marked deterioration of the human condition . . . "?

This is the set of questions we address in this paper, in the context of Latin America. We are concerned only with empirical results, and with the evidence on changes in poverty, in social indicators (such as consumption expenditures, nutrition, and infant mortality), and in public expenditures, especially in the poverty-sensitive sectors (education and health). We review these results in two ways: first, without reference to country differences in policy evolution; and, secondly, in a comparative framework, to see whether the condition of the poor has evolved differently in adjusting and nonadjusting countries.

This is a tall order, especially since the path to better understanding of what happened to Latin America's poor is strewn with obstacles and pitfalls. It is not easy to define who the poor are — whose welfare we should study, nor to trace changes in their number. Data limitations are severe; although more abundant than a few years ago, they still contain vast gaps and are generally soft. Indirect or proxy measures of welfare have to provide much of the evidence. Serious conceptual and methodological problems bedevil all efforts to distinguish the impact of changed policy regimes — dealing with the so-called "counterfactual" case; for example, what might have happened in the absence of policy reform; and taking into account long-term, postadjustment differences in performance.

For these reasons, we have concentrated on the question of the overall situation of the poor in the 1980s, and only secondarily on the adjusting-nonadjusting distinctions. And we do no econometric analysis, but focus instead on the neglected task of assembling and assessing existing data, and extracting limited generalizations from them.[7]

Nonetheless, we believe the empirical evidence gives some clear messages that have not been sufficiently recognized. We will try to show in this paper that by most available measures of human welfare the 1980s have **not** witnessed a general deterioration in the condition of Latin America's poor. Compared to the 1970s, in the 1980s Latin Americans on the average probably consumed more calories, suffered less malnutrition, lived longer, were more fully immunized against infectious diseases, and saw more of their infants and young surviving to adulthood. And in most countries of the region access to primary education did not decline, though real public spending per pupil did fall.

Most other poverty indicators are mixed, and some are negative. But the overall pattern is not one of general deterioration, as asserted by the UNICEF publications and elsewhere. Improved social indicators are of course based on national averages and therefore do not say anything directly about the

---

[7] We have benefited from several recent studies that have looked at many of the same questions, notably, Jacques van der Gaag, Elaine Makonnen, and Pierre Engelbert, "Trends in Social Indicators and Social Sector Financing," World Bank Staff Working Paper # 662, May 1991; Margaret Grosh, "Social Spending in Latin America: The Story of the 1980's," World Bank Discussion Paper # 106, 1990; and Dominique van de Walle, "Poverty and Inequality in Latin America and the Caribbean during the 70s and 80s: An Overview of the Evidence," Human Resources Division, Technical Department, Latin America and the Caribbean Region, The World Bank, September 1991.

poor. But with much of Latin America's middle and upper classes already enjoying a relatively high standard of living, for most indicators it is extremely unlikely that improved national averages would not imply improvements for the poor.

We will try also to show, with respect to the "social costs of adjustment" issue, that the evidence does not support the view that economic stabilization and policy reform efforts have hit the poor harder than other groups. Given the sparsity of direct information on household impacts within countries, direct evidence does not exist to reject that proposition. But indirect evidence, involving the comparison of measures of poverty, welfare indicators, and poverty-focused public expenditures in adjusting and nonadjusting countries, suggests strongly that the 1980s witnessed no general tendency for a relative worsening of the poor's status in the adjusting countries.

We proceed as follows. In Sections Two, Three, and Four, the data are presented and discussed without reference to whether or not countries have adopted economic reform programs. Section Two considers income and expenditure measures: headcount poverty estimates, both absolute and relative; average per capita consumption expenditure from national accounts data; and some scattered data on real wages. Section Three looks at public expenditures, and Section Four reviews outcomes by looking at social indicators or indirect measures of welfare. Section Five directly addresses the "social costs of adjustment" question by considering differences in the behavior of social indicators in countries that have or have not adopted stabilization or structural adjustment programs.

SECTION TWO

POVERTY TRENDS: INCOME AND EXPENDITURE MEASURES

In this section we examine poverty indicators based on income or expenditure measures. The most important is the direct indicator: the incidence of poverty as defined as households with incomes below some poverty line. The others are indirect: personal per capita consumption as derived from national accounts data, and real wages. In the discussion of trends in absolute poverty we briefly consider changes in income distribution.

TRENDS IN ABSOLUTE POVERTY

According to the World Bank's 1990 *World Development Report*, in 1985 roughly 70 million Latin Americans (19 percent of regional population or some 7 percent of the estimated total poor population) had an annual income below an international poverty line of $370 (1985 purchasing power parity [PPP] dollars). Of that 70 million, roughly 50 million (12 percent of regional population) had an annual income below $275 (1985 PPP dollars), making them "extremely poor" on an international standard.

The estimate seems reasonable. Although average per capita incomes are higher in Latin America than in the countries from which the World Bank poverty line was derived — for example, Bangladesh, India, Indonesia, Kenya, and Morocco — the $275 line may do a fairly good job of capturing the "extreme" poor in Latin America. Rough calculations of the current dollar value of a country's per capita extreme poverty lines show Colombia's at $310, Jamaica's at $260, Venezuela's at $230, and Mexico's at $100. These lines are all based on estimates of the lowest costs of a nutritionally balanced food basket only, with no additional funds for other necessary expenses.

These international estimates provide some general guidelines as to the extent of poverty, and allow some interregional comparisons. But they are too crude and irregular to be of much help in answering the questions about trends that concern us here: has there been a significant increase during the 1980s in the number and percentage of those who live in absolute poverty in Latin America and the Caribbean? And has income distribution shifted, with smaller shares going to the poorest groups?

Answers to these questions have to be highly tentative. It is not easy to define who the poor are and where they are, nor how many of them there are, and how their number has changed over the past decade. Studies of absolute poverty and of trends in income distribution are scattered and of uncertain quality, and there is especially little covering the years after 1985. Annex 1 reviews the most common terms and definitions encountered in the extensive literature on poverty and its measurement.

Problems of Definition

Most government and private analysts define poverty as a level of income that does not allow the purchase of some minimum basket of consumer goods. National definitions vary. Typically, countries distinguish between "extreme" or "absolute" poverty, and "critical" or "moderate" poverty. The most common approach to identifying the extreme poor is to fix a poverty line based on some

estimate of a least cost, nutritionally adequate basket of common food items. The poverty line for moderate poverty is then calculated as some multiple of the extreme poverty line. The multiple varies widely, from a low of 1.25 (Jamaica) up to 2.0 (Venezuela), and is meant to account for expenditures on clothing and shelter.

The **absolute poverty** line can make some slight claim to being objective and scientific, because of its link to nutritional requirements. In reality, however, it reflects country standards and preferences, and its content usually differs from actual consumption patterns.

- Estimates of minimum calorie requirements vary from 2,250 per adult equivalent (FAO/WHO measure, used in Mexico) to 2,900 (Costa Rica) and 3,000 (Colombia). Adult equivalence conversions that standardize children's nutritional requirements also vary.

- In Mexico, analysts have argued that the basic food basket is composed of foods that are more expensive than alternative foods that would be acceptable to the public (Levy, 1990).

- Because analysts in Jamaica feel that the food basket used in fixing the official poverty line overestimates the consumption needs of the poor, they fix the absolute poverty line at 80 percent of the value of the official basket.

- In Bolivia, when poverty is measured according to an International Labour Organization (ILO)-defined basic needs basket, 80 percent of households have incomes insufficient to cover 70 percent of the basket (extreme poor). The Government of Bolivia defines the extreme poor as households that cannot finance 30 percent of the cost of a basic basket of food items only.

- Brazil has fixed its absolute poverty line as a fraction of its minimum wage.

- The Government of Colombia determines poverty based on five shelter-related indicators. Any household lacking one of the indicators is judged "poor," a household that lacks two or more is estimated to be in "misery."

The definition of **moderate poverty** is even more subjective and tends, in practice, to be more a measure of relative poverty. For instance, in Mexico, the market basket used to determine the moderate poor includes TV sets, refrigerators, and vacation costs. According to this poverty line, 80 percent of Mexico's population can be classified as poor.

Measures of the number of households in absolute poverty that are based on costs of "minimum baskets" thus contain much that is arbitrary. They are also extremely sensitive to the decisions as to where to locate the level of income that determines the poverty line, especially in countries with highly skewed income distributions. For example, a study in Brazil found that if the poverty line was raised by 20 percent, the population classified as poor increased by 50 percent.

Data Limitations

Uncertainties in the definition of the poor present serious obstacles to precise analysis of their condition in the 1980s. But this problem pales in significance next to the data problems involved in measuring **trends**, the evolution of poverty during the decade, which make such assessments singularly frustrating and unsatisfying exercises.

Primary data on the income and expenditure of low income groups are particularly sparse. Few Latin American or Caribbean countries have done nationwide household income or consumption surveys that could yield poverty profiles describing who the poor are, where they are, how they earn their living, and how they budget it — the kinds of studies that generate firm data on absolute and relative poverty. Fewer still repeat such studies periodically; it is rare to find more than one in a decade. Even in these best cases, therefore, hard information on year-to-year variations is extremely scarce.[8]

Such primary data as exist are often derived from surveys aimed at other objectives — population census, for example, or labor force surveys. These surveys use different samples, different definitions of income and income units, and partial, variable geographical coverage.[9] Because even these are sparse, most estimates use secondary sources. But these are usually limited in scope: they cover regional not national samples. They are often concerned with particular sectional groups (urban wage earners or house renters, for example). And to a surprising extent, researchers putting together these secondary data fail to give primary data sources, poverty definitions, and so forth.

Several special difficulties plague the Latin American data. Over the past 20 years, quite a few Latin American countries — for example, Argentina, Bolivia, Chile, Ecuador, Honduras, Peru, and Uruguay — have restricted their household data collection to certain urban areas. Income changes in rural areas thus remain obscure. The frequent bouts of high inflation rates in Latin America also make data analysis particularly difficult, since they raise margins of error in estimates of trends in real expenditures and incomes. Also, LAC's lower income countries, where poverty rates are extremely high — Bolivia, Guyana, and Haiti — all have less data than others.

Changes in the Incidence of Poverty

Working from this highly imperfect database, we outline here the discernable trends in absolute poverty, using the headcount measure (population below some poverty line) as derived mainly from household surveys. Typically, the surveys focus on expenditures. (This is a less misleading indicator than income, which is more variable and more difficult to measure because the incomes of the self-employed are particularly hard to estimate.)

Annex 2 summarizes the information on trends in poverty as indicated by household expenditure levels that we have pieced together from recent studies.[10] All of these data should be treated with care,

---

[8] Insight into poverty and its impacts would be much enhanced by longitudinal studies of household behavior. These would give better understanding of how macro-level reforms affect household coping or livelihood strategies. Unfortunately, this is an understudied area. There seems to be only one such study of low-income households in Latin America. It was conducted in Guayaquil, Ecuador, between 1978 and 1988, and provides a wealth of insights on how households cope with economic recession.

[9] This paragraph and the following draw on van de Walle, ibid., pp. 4 ff.

[10] We draw heavily on Gary Fields, "Poverty and Inequality in Latin America: Some New Evidence," Cornell University, October 1990, and on several World Bank country-focused papers.

and inferences from them regarded as very fragile.[11] The caveats duly noted, here are the main points that come out of the data.

- Of the 16 countries for which data are given in Annex 2, 12 have more than one data point in the 1980s to allow for some comparison. Of these 12, we found 7 instances of an increase in the rate of poverty: Argentina (urban), Chile (urban), El Salvador, Guatemala, Peru (urban), Uruguay, and Venezuela. Lima, Peru, shows the most dramatic increase in poverty; the percent of the Lima population with earnings below the cost of a basic food basket skyrocketed between 1985 and 1990, from 0.5 percent to 17.3 percent. The portion of the population with income below the absolute poverty line jumped from less than 10 percent to 22 percent in Venezuela between the early and late 1980s, and in Guatemala it grew from 33 per cent to 43 per cent.

- In some of these cases, the conclusion that absolute poverty has increased has to be modified or qualified. Thus the El Salvador data cover only the years 1985 and 1988. And the data for Chile could easily be interpreted to indicate reduced poverty rather than the opposite; we need only compare the 1985 figures with those for 1976 instead of those for 1979.

- Of the other five countries with multiyear data, in one the proportion of households in absolute poverty seem to have declined (Panama). In the remaining four (Colombia, Brazil, Costa Rica, and Mexico) the trend is not clear or consistent, though in some cases their data lean toward a conclusion of less absolute poverty in the middle or late 1980s than at the beginning of the decade.

- Costa Rica provides an example of the sorts of problems one encounters in trying to estimate trends. In Costa Rica, the data suggest quite a large increase in poverty between 1977 and 1983 — from 13 percent to 30 percent of households. But, the real poverty line used to calculate those figures increased from 1,402 1986 Colones in 1977 to 2,228 in 1983. Some of this increase may reflect higher relative inflation for food or changes in consumption patterns, but it seems likely that the two lines are not equivalent.

TRENDS IN INCOME DISTRIBUTION

What happened to income distribution in the 1980s is less central to our inquiry than the question of what happened to absolute poverty levels. What concerns us most is whether the condition of the poor deteriorated in an absolute sense, as the conventional wisdom argues. That the rich may have garnered more of the income pie is interesting but less relevant for present purposes. The income distribution question is pertinent with respect to the question: did the burdens of recession and adjustment fall more heavily on the poor than on the rich in the 1980s?

---

[11] As noted earlier, in most countries, data are not strictly comparable from one survey to the next; definitions and collection techniques change frequently. In Fields' country data sections, there is often more than one analysis of a given major data collection effort. Each defines poverty differently. As a final cautionary note, most of our data measures **households** in poverty. Generally, household data will underestimate the number of **individuals** in poverty because of the larger average size of low income households.

The conceptual and data problems in defining and measuring relative poverty are no less forbidding than those described earlier for absolute poverty. They need not be rehearsed again. The data problems are if anything worse, because extremely few studies cover the latter half of the 1980s, the most pertinent period for assessing impacts of adjustment.

Annex 2 shows data for nine countries, of which seven allow some assessment of trends. The seven include over two-thirds of Latin American population. Some general conclusions emerge:

- Trends are mixed for the 1970s. Measured by national income, low income groups in two countries — Colombia and Venezuela — appear to have garnered a greater share; while those in three others — Argentina, Chile, and Costa Rica — maintained or lost ground;

- Income distribution did not improve for any country during the 1980s.

- Gini coefficients indicate that three countries — Argentina, Chile (greater Santiago only), and Guatemala — saw a significant worsening of distribution at least into the mid-1980s; and

- Data on the share of income received by the lowest income decile is patchy. We have something close to a usable time series for five countries. For Jamaica, only data for 1988 and 1989 exist; those data show some slight improvement. The other four countries — Brazil, Colombia, Costa Rica, and Venezuela — all show a reduction in the share of national income received by the lowest income quintile.

According to these limited data, no pronounced trend is evident in the 1980s, though there is a slight tendency toward greater inequality.

PRIVATE CONSUMPTION

Private consumption is the market value of all goods and services purchased or received, including income in kind, by households and nonprofit organizations. It has some problems as a measure of welfare because it can include residuals of various kinds, and because it is sensitive to public-private sector mixes; for example, a system where education is privately provided will have higher consumption but not necessarily higher welfare. It is nonetheless a common and useful measure of individual economic welfare, superior in some ways to per capita GNP. Table I presents information on trends in real per capita private consumption for the period 1980 to 1988.

During the 1980s, average real per capita consumption declined in most of the countries in Latin America. Of our sample of 21 countries with data, only six saw an increase in per capita consumption over the period 1980-1985. Only two of them — Ecuador and Paraguay — were able to sustain the increase over the period 1985-1988. Most countries experienced their lowest levels of per capita expenditure not during the first half of the decade, as might have been expected, but during the period 1985-1987.

But signs of improvement have appeared during the second half of the decade: over the period 1985-1988, seven countries — Colombia, Ecuador, Mexico, Panama, Paraguay, and Venezuela — had average real per capita consumption levels above their level in 1980. Also, in eight countries, falls in per capita consumption were held to within 90 percent of 1980 levels. In only two countries — Bolivia and Nicaragua — did private consumption per head drop below 80 percent of their 1980 levels. With

the end of the recession in the mid-1980s, consumption trends shifted as rates of decline slowed or rates of increase rose for 15 of the 20 countries with data.

TABLE 1

REAL PER CAPITA PRIVATE CONSUMPTION
(1980=100)

	Average Value		Average Annual Percent Change	
	1980-1985	1985-1988	1980-1985	1985-1988
Argentina		92.4		-5.2%
Bolivia	84.9	70.1	-7.7%	3.2%
Brazil	95.6	96.6	-0.3%	-2.0%
Chile	95.3	91.8	-2.1%	2.4%
Colombia	101.2	100.7	-0.1%	1.6%
Costa Rica	88.3	83.4	-3.1%	1.1%
Domin. Rep.	93.5	94.0	-1.4%	0.8%
Ecuador	103.2	106.9	0.8%	2.0%
El Salvador	94.0	94.0	-0.7%	-0.3%
Guatemala	94.2	86.0	-2.2%	-1.0%
Haiti	95.2	88.1	-2.2%	-1.4%
Honduras	96.9	92.9	-1.6%	1.6%
Jamaica	102.7	95.2	-0.3%	-1.1%
Mexico	98.1	101.0	0.8%	-4.0%
Nicaragua	74.8	56.2	-12.7%	12.9%
Panama	105.1	104.7	2.9%	-7.7%
Paraguay	103.4	102.5	0.6%	1.3%
Peru	106.4	119.1	1.4%	5.1%
Trin.&Toba.	112.3	95.4	0.3%	-4.3%
Uruguay	88.3	81.3	-4.1%	1.3%
Venezuela	100.4	105.0	-1.0%	6.8%
AVERAGE	96.4	93.3	-1.8%	0.9%

Source: IMF

WAGES AND EMPLOYMENT

General labor market trends seen in the LAC region in the 1980s feature an erosion of real wages, a rising informalization of employment, and greater labor force participation rates. Some countries have seen a marked decrease in public sector and manufacturing employment, sometimes accompanied by an increase in agricultural employment. In the early 1980s, there is some evidence of increased open unemployment among urban heads of households.

Data are sparse for all aspects of labor market changes in the late 1980s. But it is clear that, at least until 1986, urban populations in the region experienced declines in income and welfare.

Real wages, first of all, fell in most places until 1986. Brazil is an important exception. A recent study on labor markets and adjustment in five countries found that real formal sector wages were flexible and had adjusted downward rapidly in most instances.[12]

Table 2 summarizes household survey data on wages from the study. It shows that in Costa Rica the average real wage fell sharply until 1982, but then recovered quite rapidly. Brazil's wages have increased through the 1980s, thanks, to a large extent, to the widespread indexation of wages. In Argentina, on the other hand, the real wage rate has been stagnant since the mid-1970s. Bolivia and Chile have both experienced severe drops in their average real wage. Bolivia's decline dates back to 1978, while Chile's began in 1982. Falling real wages had strong negative effects on aggregate demand in the Latin American countries studied, and was not balanced, as in some Asian countries, by elastic demand for labor.

Secondly, **the informal sector's share of total employment rose, and average incomes in that sector fell.** In Brazil, Chile, and Costa Rica, it is believed that layoffs in the formal sector in the early 1980s led to a "crowding" of the informal sector, which depressed average informal sector wages.

[12] Susan Horton, Ravi Kanbur, and Dipak Mazumdar, "Labor Markets in an Era of Adjustment, An Overview," WPS No. 694, The World Bank, May 1990. The five countries are Argentina, Brazil, Bolivia, Chile, and Costa Rica.

TABLE 2

WAGE AND UNEMPLOYMENT DATA

REAL WAGE INDICES* (1980 = 100)

Country	1980	1981	1982	1983	1984	1985	1986	1987
Argentina	100	91	80	97	108	87	82	72
Bolivia	100	80	56	42	36	56	34	42
Brazil	100	109	122	113	105	113	122	106
Chile	100	114	103	95	89	76	73	71
Costa Rica	100	85	[illegible]	77	92	95		

UNEMPLOYMENT RATES

Country	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Argentina	3.3	3.3	2.5	2.5	4.8	5.3	4.7	4.6	6.1	5.2	5.8	6.1	
Bolivia			7.5	6.2	7.5	8.2	6.6	5.7	4.2	5.9	11.5	10.7	
Brazil		6.8	6.4	6.3	7.9	6.3	6.7	7.1	5.3	3.6	3.8		
Chile	16.9	17.9	17.0	16.0	26.0	28.2	21.4	19.0	13.6	10.3	7.2		
Costa Rica	6.2	4.6	4.5	4.9	5.9	8.8	9.4	9.0	6.9	5.9	5.6	5.5	

*Data are from household surveys and cover all sectors.

Source: Horton, Kanbur, and Mazumdar (1990)

Studies in Bogota and Montevideo found that the trend towards greater informalization of employment, coupled with an increasing labor force, pushed down both formal and informal sector wages. In Bolivia, between 1980 and 1988, informal sector employment grew from 54 percent to 64 percent of total urban employment.

Some of the privileges associated with formal sector jobs were taken away during these years. For example, as Colombia tumbled into a severe recession between 1980 and 1984, white collar employment fell by 8 percent and blue collar employment by 20 percent. Many of those laid off were then rehired under service contracts that allowed employers to reduce benefits. In Brazil, labor shifted into the unprotected employee sector — in other words, into a sector in which they were without a signed contract and, thus, without a claim on certain benefits.

Finally, **labor force participation rates increased.** Two forces seem to be at work here; one is a secular trend towards increased female participation in the work force. The other appears to be a short-term response as secondary workers sought to compensate for income losses of primary earnings. The two forces are difficult to disentangle. In Bolivia, women's participation in the labor force increased from 36 percent in 1980 to 40 percent in 1988. In Costa Rica, trends varied with economic conditions. There was a notable increase in the rate of entry into the labor market during the first years of the economic recession. The labor force grew at a rate of 4.3 percent per year between 1979 and 1982 while formal employment grew by just 2.6 percent. When real wages increased sharply in 1982, the secondary

worker entry rates fell back to their lower historic levels. In Colombia, labor force participation increased from 38.9 percent in 1981 to 44.3 percent in 1984.[13]

Few firm general conclusions about the evolution of poverty can be drawn from these data, given their limited scope, their frequent ambiguity, and their sparsity for later years. Several generalizations do nonetheless emerge.

First, the income-expenditure measures show a clear pattern of falling real incomes, at least in the first half of the decade. This shows most clearly in the data on real private consumption expenditure, less clearly in wage data (which are, however, limited to only six countries), and in headcount measures of the poor.

Secondly, the extent of the declines seem relatively modest, given the severity of the recession of the early 1980s and the debt burden. In only a few countries did private consumption fall by more than 10 percent on average, though the decline may have been greater for the poor. Seven countries (of 12 with data) show relatively clear increases in percentages of the population below the poverty line.

---

[13] There is evidence from studies in Ecuador and Mexico that family labor market participation patterns may be changing. Nuclear family structures are giving way to arrangements based more on extended family ties, with fewer dependents and more and younger income-earners. These changes spring primarily from short-term factors (economic adversity), but longer-term trends (more female education, smaller families, greater acceptability of female wage-earning) must also play a role. Thus, between 1978 and 1988 in Guayaquil, Ecuador, Caroline Moser found a marked decrease in the percentage of households with just one income earner (from 49 percent to 34 percent), coupled with an increase in the percentage of households with three or more workers (19 percent to 32 percent). These new entrants were generally women and teenagers. In Guadalajara, the average number of workers in a sample of households increased from 2.13 to 2.69 between 1982 and 1985. In Guayaquil, it was also noted that there was a notable increase in female-headed households (12 percent to 19 percent) as well as de facto female-headed households resulting from the temporary migration of men to rural areas to take up employment in the expanding tradeables sectors there. (Caroline Moser, "Adjustment from Below: Low-Income Women, Time and the Triple Role in Guayaquil, Ecuador," to be published in Afshon and Dennis, eds., *Women, Recession and Adjustment in the Third World*, Macmillan Press, 1991.

SECTION THREE

EVOLUTION OF PUBLIC EXPENDITURES

In this section we focus mainly on expenditures for education and health. These are of special importance for the poor: better health and wider access to education are major instruments of poverty reduction. As noted earlier, many observers have feared that recession and economic stabilization and adjustment programs would result in cutbacks in public spending in these social sectors, with harsh negative effects on the poor. To put social sector spending in context, we begin with a brief review of trends in total public expenditures and in expenditures on debt servicing.

TOTAL EXPENDITURES

All sectors of public expenditure can influence the welfare of the poor. Infrastructure and urban services, agricultural research and extension, housing, credit, and many other expenditure items have obvious impacts on the income earning capacity and the welfare of the poor For reasons suggested above, most treatments of the impact of government expenditures on the poor focus exclusively on education and health: these are human-capital-creating expenditures that are generally regarded as critical in equipping the poor to climb out of poverty. It is worth noting, however, that a major information gap exists with respect to the impact of other expenditures on the lowest income groups.

Throughout the 1980s, debate raged over the appropriate size and role of the public sector. In many countries, expenditures at levels prevailing in the late 1970s and early 1980s were clearly unsustainable; they involved run-downs of reserves and debt accumulation that could not endure. In many cases, also, efforts were made to reduce inefficient or unaffordable subsidies and to increase the effectiveness of public expenditures.[14]

Significant reduction in the role of the state, measured by expenditure to GDP ratios, should therefore be observable in the data for the 1980s. But surprisingly, this did not happen. The public sector remains substantial in most LAC economies; consolidated central government expenditures in the region average one quarter of GDP, varying from a low of 9 percent of GDP (Paraguay) to 30 percent

[14] Food subsidies are usually justified as a mechanism for protecting the buying power of low income groups. In practice, they achieve this objective very partially and imperfectly, and often at high cost. Higher income groups, because of their greater consumption levels, frequently receive the lion's share of the benefits of subsidies. In recent years, countries have worked to retarget subsidies more precisely. Information on progress is hard to find. It is less difficult to find estimates of costs of subsidies to governments: in Mexico, for example, the total cost in 1989 of public nutrition interventions was US$1.4 billion, of which US$900 million to untargeted subsidies. The World Bank estimated that more than 80 percent of the value of the general subsidies went to families earning more than 1.5 times the minimum wage.

in Brazil, Chile, and Mexico.[15] Public expenditures as a percentage of GDP peaked in the region over the period 1982 to 1984. In 1988, the average — 21 percent — was what it had been in 1980.

There was thus no overall downward trend in total expenditures as a percentage of GDP over the 1980s. Nor is any general trend evident in real expenditures. More countries reduced their expenditures than increased them, but the differences may not be significant. It is true that most governments have had to reduce services; the differences between countries show up mainly in how large a portion of their expenditures went to debt servicing.

By 1988, expenditure levels in Argentina, Chile, Costa Rica, Ecuador, Mexico, and Uruguay had all regained or surpassed their high 1980 levels. Brazil increased its expenditures steadily throughout the decade. And, although the real value of their expenditures fluctuated a bit, Colombia and Jamaica never experienced a decline. The government expenditure pie shrank steadily only in seven countries, most of them small (Bolivia, El Salvador, Guatemala, Paraguay, Peru, Trinidad and Tobago, and Venezuela).

INTEREST EXPENDITURES

Although there is no clear trend in total expenditures, it is clear what the trend is in interest payments as shown in Table 3: they rose. For 15 of 16 countries, interest's share of total expenditures increased most rapidly over the period 1980-1985. After starting the decade with a share averaging 8 percent of total expenditures, interest expenditures averaged 14.5 percent of total expenditures from 1986 through 1988 (the last year with adequate data).

Reductions in real noninterest expenditures began before total expenditures showed declines. By 1982 — as debt burdens and high interest rates began to bite — central government nondebt expenditures began to fall sharply throughout the region. Only Brazil, Jamaica, and Colombia were exceptions. In its 1990 *World Development Report*, the World Bank estimated that real per capita noninterest expenditure fell by 16 percent between 1980 and 1985, while real per capita social expenditure fell by 18 percent over the same period.

For this study, we have chosen to use total expenditures, including interest payments, as the denominator in comparisons of spending shares and in other comparisons. Total expenditures are the best indicator of the global budget constraint within which governments make their allocation decisions. But it should be kept in mind when looking at how sectoral shares evolved in the 1980s that since the share of interest in total public expenditures rose so sharply through the decade, the expenditure shares of all other sectors were likely to fall.

EDUCATION EXPENDITURES

Three measures are relevant for assessing whether the evolution of education expenditures has been harmful to the poor: changes in real per capita education expenditure; changes in the efficiency with which sectoral resources are used; and changes in their equity impact — whether the sectoral allocations

---

[15] Nicaragua in the 1980s was an outlier, with the central government rising to 68 percent of GDP before declining to 47 percent.

shift in favor of the poor. Data on education's share of total expenditure are given lots of attention in the literature but are helpful only for the insights they give as to government priorities.

We begin with some comments on shares, then focus on real spending per head. Efficiency and equity issues are considered later.

Education spending shares have fallen on average, and in the majority of countries with data. In some cases, declines were substantial — for example, over 25 percent between 1980-85 in six countries. Annex 5 shows that IMF data for 1987 or later are available for only 13 countries. Of these, five had by 1987 maintained or increased their 1980 shares: Argentina. Guatemala, Panama, Peru and Venezuela. Brazilian federal education expenditures also rose, but much spending there is at nonfederal levels. On the other side, the sharp decline in Chile's public spending share (it fell over 30 percent between 1982 and 1988) was associated with structural changes — greater privatization of education, and reallocations from higher education to primary schooling, most of which lessened negative impacts on the poor.

TABLE 3

INTEREST AS A SHARE
OF TOTAL EXPENDITURES
(in percent)

	Average		Percentage Change	
	1980-85	1985-89	1980-85	1985-89
Argentina	13.6	8.7	14.4	-12.1
Bolivia	19.4	6.8		
Brazil	21.6	44.4	38.3	7.5
Chile	3.4	7.4	33.9	17.2
Colombia	5.1	8.7	15.9	19.5
Costa Rica	8.5	9.1	0.5	3.7
Domin. Rep.	6.7	0.4	12.2	
Ecuador	8.6			
El Salvador	7.1	8.4	26.1	10.6
Guatemala	6.0	11.7	14.9	18.4
Mexico	24.2	51.3	38.6	9.7
Nicaragua	6.8	2.0	-6.4	
Panama	19.6	17.0	2.7	-21.3
Paraguay	3.7	7.3	12.0	17.2
Peru	21.5	16.3	7.0	-11.5
Trin&Tobag	2.9	8.9	12.9	47.6
Uruguay	4.9	7.6	52.7	-11.7
Venezuela	9.0	11.0	9.2	

Source: IMF

Although education shares fell by about 12 percent on average between 1980 and 1985, they rose by roughly the same amount between 1985 and 1988. The net average decline (unweighted) for the 1980-88 period was thus only 1 percent.

Moreover, education proved to be a relatively protected sector during the 1980s. Grosh's analysis of the data in nine countries for the period 1980-88 shows that when government expenditures were cut, education expenditures were cut on average by less than half as much.[16] This confirms earlier findings of a larger set of countries, which found a similar "coefficient of vulnerability" for social sector spending in general; in 24 countries that experienced falls in government expenditure of more than 5 percent

[16] Grosh, 1990, ibid. The countries are Argentina, Bolivia, Brazil, Chile, Costa Rica, Dominican Republic, El Salvador, Jamaica, and Venezuela.

between 1978 and 1984, social sector spending fell by one-third less than government expenditures in general.[17]

Real per capita expenditure data show a general decline (Table 4). These national expenditure figures give only a partial picture. In Brazil, for instance, state and local expenditures play a major role. In Ecuador, private funding of both education and health care is roughly equal to public expenditure.

TABLE 4

REAL PER CAPITA EDUCATION EXPENDITURE
(1980=100)

	Average		Average Change (percent)	
	(1980-85)	(1985-88)	(1980-85)	(1985-88)
Argentina	92.3	77.7	-25.2	
Bolivia	96.9	51.9	-19.2	32.1
Brazil	176.2	280.1	136.3	64.9
Chile	89.8	76.9	-7.1	-17.4
Costa Rica	91.0	89.1	-42.9	21.9
Domin. Rep.	89.8	72.7	-23.1	1.7
Ecuador	88.5	75.6	-31.1	-16.1
El Salvador	89.3	62.5	-36.8	-33.7
Guatemala	66.9	86.7	-3.6	78.6
Mexico	84.4	68.8	-1.1	
Panama	108.1	116.9	20.7	-10.0
Paraguay	93.5	70.9	-28.7	1.8
Peru	84.2	79.2	-18.6	1.3
Uruguay	83.3	79.2	-38.9	45.5
Venezuela	86.4	73.9	-25.2	

Source: IMF

Nonetheless, there is no doubt about the story on real expenditures: from 1980 to 1985 they fell everywhere except in three countries — Brazil, Guatemala, and Panama. The declines were substantial in many countries of the region — over 25 percent, for example, in eight countries. Over the course of the decade, real expenditures in both Bolivia and El Salvador fell by over 50 percent. There were also steady declines in Argentina, the Dominican Republic, Ecuador, Mexico (through 1986), Paraguay, and Venezuela. There was a general improvement after 1985; between 1985-1988, spending per capita rose in eight of the 12 countries with data. But the level of real educational expenditures per capita in the late 1980s remained significantly below the 1980 level — 20 percent or more below in 10 of the 15 countries listed in Table 4 and in Annex V.

HEALTH EXPENDITURES

Health sector expenditure **shares** were generally less protected from budget cuts than was education. Table 5 shows that in only six of 15 countries for which the IMF's IFS Yearbook gives figures did the sector not suffer in budget allocations relative to total spending: Argentina, Ecuador, Guatemala, Panama, Peru, and Venezuela. In Ecuador, Panama, and Venezuela, health's share of expenditures actually increased. But shares fell in the majority of cases, in a few instances dramatically: in Bolivia, for example, from 12 percent in 1980 to 1.4 percent in 1984.

[17] Norman Hicks, "Expenditure Reductions in Developing Countries Revisited," draft, World Bank, 1988. Hicks' sample is worldwide.

Between 1980 and 1985, the mean share of health in total government expenditures in the 12 countries analyzed by van der Gaag et al. fell moderately — from 10.08 percent to 9.24 percent.[18] But in Grosh's nine-country sample, health spending shows itself extremely vulnerable when governments actually cut expenditures.[19]

In real per capita terms, health expenditures fell almost everywhere. Of the countries we reviewed, only Panama and Brazil increased real per capita health expenditures, while Ecuador managed to maintain them. In Grosh's sample, 1985 mean expenditures were 85 percent of their 1980 level.

TABLE 5

REAL PER CAPITA HEALTH EXPENDITURE
(1980 = 100)

Average		Average % Change	
80-85	85-88	80-85	85-88
136.6	157.7	-14.1	
231.1	134.4	-105.1	368.3
97.0	124.9	3.2	26.9
92.1	85.9	-15.7	5.4
105.6		11.2	
103.9	92.6	-40.7	20.2
98.5	89.6	-28.9	32.2
94.1	104.2	-2.6	23.0
107.9	68.7	-44.4	-31.2
105.0	100.9	-79.1	90.6
91.2	84.0	-14.8	
98.2	102.0	25.8	-4.3
108.3	72.5	39.9	-40.9
106.9	95.3	-14.9	-12.7
96.1	103.9	-31.8	35.4
87.7	79.5	-21.7	

Source: IMF

[18] van der Gaag, Makonnen, and Engelbert, ibid., p. 123.

[19] In her sample, health expenditures fall by 25 percent more than government expenditures when general cutbacks occur (Grosh, p. 19).

SECTION FOUR

OUTCOMES: SOCIAL INDICATORS AND WELFARE MEASURES

Up to now the analysis has focused on inputs. The income and expenditure measures of poverty — how household income evolved relative to some poverty line, and how private consumption and real wages have changed — are close to but not the same as outcomes. Outcome indicators tell how people have fared, measured by the ends of economic activity: are they healthier, are they and their children better protected against disease, are they eating better, do they enjoy greater access to opportunity as measured, say, by school enrollment ratios?

To seize these realities we would have to have direct data on trends in outcome measures for the poor. But these usually do not exist. To get some sense of trends and performance, then, we are forced to work with national averages. Implicit in our analysis is the assumption that marginal changes in the outcomes — either positive or negative — will generally reflect changes in the status of the more vulnerable, lower income groups.

We consider in turn trends in the following indicators: per capita daily calory intake, nutritional status, child mortality estimates, vaccination rates, and primary school enrollment rates.

PER CAPITA DAILY CALORIE INTAKE

Per capita calorie intake figures are approximate and rarely indicate distribution by income levels, regions, or within households. But they offer the benefit of wide coverage, and provide insights on trends in food availability.

Overall, U.S. Department of Agriculture data indicate that per capita calorie availability increased in Latin America in the 1980s. This finding corroborates the conclusion of a recent World Bank study that used FAO data to calculate an "index of undernutrition" (apparently the gap between national calorie requirements and calorie availability).[20] Their data indicate that Latin America enjoys a calorie surplus, with the exception of Bolivia, Peru, Haiti, and Central America. Even these deficit areas show some improvement between 1980 and 1985.

TABLE 6

PER CAPITA DAILY CALORIE INTAKE*

	Avg Level		Avg Annual % Change	
	1980-85	1985-88	1980-85	1985-88
Argentina	3275	3178	-0.3%	-0.3%
Bolivia	2133	2211	1.6%	3.7%
Brazil	2576	2641	0.0%	1.3%
Chile	2650	2587	-0.8%	0.2%
Colombia	2501	2478	0.3%	-0.7%
Costa Rica	2643	2774	1.6%	2.1%
Domin Rep.	2253	2386	0.9%	0.7%
Ecuador	2139	2260	0.8%	4.3%
El Salvador	2168	2316	2.0%	4.1%
Guatemala	2140	2328	1.3%	3.5%
Haiti	1991	2094	3.9%	3.1%
Honduras	2135	2086	-0.5%	-0.3%
Jamaica	2531	2574	0.0%	1.0%
Mexico	2986	3151	1.0%	2.0%
Nicaragua	2272	2420	0.7%	1.7%
Panama	2367	2465	1.7%	2.1%
Paraguay	2768	2644	0.0%	-1.7%
Peru	2127	2260	-0.3%	3.6%
Trin&Tob	2946	2947	0.7%	-2.1%
Uruguay	2775	2768	-0.1%	1.8%
Venezuela	2563	2526	-1.1%	1.0%

* No data for 1984. 1986 data are from FAO, others USDA.

[20] Jacques van der Gaag, et al., ibid.

Table 6 shows that calorie availability improved through the 1980s. Declines occurred in only six countries; in all cases except Honduras and Argentina, declines in the first half of the decade were reversed after 1985. For 20 LAC countries, average per capita calorie availability for the period 1985-1988 was higher than in 1980-1985, and was growing at a faster rate (averaging 1.5 percent versus 0.6 percent). Overall, 13 of the 20 countries had better per capita calorie availability in the second half of the decade, and 3 of the 6 that experienced a drop — Chile, Uruguay, and Venezuela — showed strong and positive growth in the second half of the decade. Only three countries experienced a fall in the second half of the decade: Colombia, Paraguay, and Trinidad and Tobago.

NUTRITIONAL STATUS

No country in LAC conducts annual nationwide surveys of malnutrition. Thus, year-to-year fluctuations in the nutritional level are generally not known. But general trends are clear and positive. A United Nations 1987 study estimated that the undernourished population of Central America and the Caribbean fell from 20 to 15 percent of the total between 1969-1971 and 1983-1985, and in Latin America from 9 to 8 percent.[21] The undernutrition index recorded in van der Gaag et al. (pp. 101 ff.), which is calculated from World Bank data, shows a reduction of 14 percent in the weighted index of malnutrition (calory deficiency) and 10 percent in the unweighted index in 1985. This is a bigger decline in malnutrition than is recorded for any other five-year period since 1965. The decline was general: it occurred in 20 of the 26 countries with data.

Data from the Pan-American Health Organization (PAHO) confirm this steady reduction in malnutrition in Latin America (Table 7). In country after country, surveys of children's weight for age show clear improvement over time. Using data from nationwide surveys, we find only one case in which severe malnutrition increases (Jamaica, between 1978 and 1985), and this very slightly and temporarily: data from Jamaica's *1989 Survey of Living Conditions* show that the situation had improved dramatically by 1989 and malnutrition rates had fallen to a new low — 9.2 percent. Data from health service centers — subject

TABLE 7

TRENDS IN NUTRITIONAL STATUS
(weight for age, WHO)

Country	Year	Malnourished	Year	Malnourished	Other Classification
Colombia	1977	20.6%	1986	11.9%	
Domin. Rep.	1969	75.0%	1987	25.5%	cutoff: 1 S.D.
Ecuador	1965-1969	10.5%	1986	9.7%	Gomez
El Salvador	1975	17.9%	1985	15.4%	
Guatemala	1965-1967	36.5%	1987	33.5%	
Honduras	1965-1967	28.5%	1987	20.6%	
Jamaica	1975	14.3%	1985	14.6%	
Panama	1982	23.1%	1986	18.6%	Height/Age
Peru	1975	10.7%	1984	8.1%	Gomez

Data are from national surveys of nutritional status.

Source: PAHO

[21] United Nations, Administrative Committee on Coordination, Subcommittee on Nutrition, "First Report on the World Nutrition Situation," November 1987, cited in van der Gaag et al., ibid., p. 35.

to unpredictable sampling biases — show declining rates of malnutrition in Bolivia (between 1985 and 1987), Costa Rica (1978-1987), Guyana (1974-1986), Uruguay (1980-1987), and Venezuela (1982-1986). PAHO data show a slight increase in malnutrition in Chile, from a low of 2.1 percent to 2.4 percent between 1984 and 1986.

These data of course do not mean that malnutrition has disappeared from the region. Pockets — both large and small — of severe malnutrition can and do exist in countries with overall low rates. For instance, in Guatemala, nationwide malnutrition (weight for age, all categories) was last estimated at 33.5 percent. But, the rate in the highlands region of the country is nearly twice as high — an estimated 59.2 percent. Many similar examples can be found. But the generality of the improvement and its rate is undeniable, and presents an extraordinary contrast to the claims of nutritional deterioration put forward with such certainty by many observers only a few years ago.

CHILD MORTALITY RATES

The child mortality rate (CMR), defined as deaths per 1,000 children under five, is usually preferred to the infant mortality rate (IMR) defined as deaths per 1,000 children under one, because it avoids the IMR's sensitivity to local weaning practices. UNICEF considers the CMR to be the best overall indicator of children's social development.

Since 1960, Latin America has experienced a rapid decline in child mortality rates. The regional median has fallen from 105 per 1,000 in 1960-1965 to 42 per 1,000 in 1980-1985.

There is strong and compelling evidence that CMRs have continued to improve through the 1980s. In some cases — for example, Brazil and Chile — the rate of decline appears to have increased.

Data on CMRs is generally an untraceable mix of survey findings, interpolations, and extrapolations. A recent article (Hill and Pebley, 1989) reviews the international CMR database and weeds out everything except national estimates with strong empirical support. That process leaves 16 LAC countries, those shown plus Cuba and Puerto Rico — representing 88 percent of live births — with data through 1985.

TABLE 8

CHILD MORTALITY ESTIMATES
(Birth to age Five)

	U.N. 1975-1980	Hill & Pebley 1975-1980	U.N. 1980-1985	Hill & Pebley 1980-1985	U.N. 1985-1990
Argentina	48	28	42	42	38
Bolivia	221	197	171		
Brazil	107	107	96	86	86
Chile	52	52	28	28	24
Colombia	83	64	75	42	68
Costa Rica	35	35	24	24	22
Domin Rep.	111	98	94	88	82
Ecuador	116	116	96	90	87
El Salvador	114		98		84
Guatemala	139	139	118	118	99
Guyana	63		45		37
Haiti	207	207	189	189	170
Honduras	147		126		106
Jamaica	32		27		23
Mexico	87	87	77	77	68
Nicaragua	140		115		93
Panama	47		37		33
Paraguay	74		67		61
Peru	156	147	143	112	122
Trin&Tob	32	32	28	28	23
Uruguay	49	49	34	34	30
Venezuela	56		47		43

Source: United Nations, Hill and Pebley (1989)

Of those countries, there is not a single instance of a reversal in CMR improvement. In seven countries, the rate of improvement actually accelerated between 1975-1980 and 1980-1985. Of the remaining nine, four had CMRs below 30 per 1,000 in 1980-1985. The deceleration that they

experienced may well represent the normal slowing down that occurs as the CMR approaches its natural limit.

As with most outcome measures in the region, urban-rural differences are significant. In Ecuador — where the IMR is estimated at roughly 50 per 1,000 — the rate is estimated at 30 per 1,000 in urban areas and roughly 70 per 1,000 in rural areas.

VACCINATION RATES

Vaccination rates are as much inputs as measures of outcomes. A truer outcomes measure would be morbidity and mortality figures for infectious disease. These are unavailable or are unreliable, usually limited to data gathered in a few main hospitals.[22]

In any event, improved vaccination coverage is a good indicator of health status. It is also an area of strong improvement during the 1980s in Latin America. The concerted efforts of governments, certain donors, and nongovernmental organizations (NGOs) have dramatically increased national vaccination rates. As shown in Table 9, for the period 1985-1989, the rate of vaccination against the four targeted childhood diseases (tuberculosis, polio, measles, and whooping cough) for the region averaged 61 percent, and showed a median value of 66.5 percent. Although many of the poor are undoubtedly still uncovered, it is virtually certain that they are better protected now than at the beginning of the decade.

Vaccination coverage is unstable; every year an entirely new population must be reached. In addition, statistics usually indicate the volume of vaccines distributed; losses on route to infants' arms are not accounted for. Nonetheless, improvements in coverage have been

TABLE 9

VACCINATION COVERAGE

	Average Value (1980-85)	Average Value (1985-89)	Average Annual Percent Change (1980-85)	Average Annual Percent Change (1985-89)
Argentina	67	79	4.7%	4.6%
Bolivia	20	34	13.3%	27.9%
Brazil	71	66	2.1%	-3.4%
Chile	93	93	0.8%	-0.7%
Colombia	43	68	22.2%	10.2%
Costa Rica	79	83	0.4%	3.5%
Domin. Rep.	32	50	3.2%	-40.0%
Ecuador	48	60	14.5%	3.0%
El Salvador	44	59	6.8%	17.6%
Guatemala	32	33	-5.4%	24.7%
Guyana	57	69	12.7%	10.0%
Haiti	24	34	33.9%	24.2%
Honduras	48	66	14.6%	12.6%
Jamaica	45	72	11.3%	11.5%
Mexico	51	65	-2.6%	12.6%
Nicaragua	48	70	27.8%	7.0%
Panama	65	78	9.5%	3.5%
Paraguay	45	67	30.2%	-0.7%
Peru	36	52	16.0%	13.1%
Trinidad&Tob.	51	67	18.3%	11.8%
Uruguay	69	80	5.7%	3.1%
Venezuela	61	59	-4.1%	2.0%
UNWEIGHTED AVERAGES				
BCG	58	62	4.5%	1.1%
DPT3	45	58	8.2%	8.2%
OPV3	54	66	5.3%	5.0%
Measles	41	57	11.7%	8.8%
AVG	50	61	6.9%	5.4%

[a] Data are averaged annual coverage for BCG, DPT3, OPV3, and measles

[b] There are no data for 1988. Percent change was calculated between 1987 and 1989.

Source: PAHO

[22] In line with its worldwide recrudescence, malaria rates seem to be on the rise. Reported cases in Venezuela rose from over 4,600 in 1982 to over 44,000 in 1989. In Costa Rica, malaria incidence is still low but rose by five times between 1982 and 1984. In Brazil, also, recorded deaths from malaria increased between 1983 and 1986.

steady and seem sustained. In only three countries did coverage decline in the 1980-1985 period (Guatemala, Mexico, and Venezuela). Between 1985 and 1989, it increased in these three but fell in four others — Brazil, Chile, Dominican Republic, and Paraguay.

ENROLLMENT RATES

We focus here on net primary enrollment rates — the percentage of primary-school-age children in primary school. Primary education has been found to have high social rates of return and it gives assets to the poor that help them move out of poverty. In addition, there is evidence that many poor households do not keep children in school past the primary level.

TABLE 10
NET PRIMARY SCHOOL ENROLLMENT RATIOS

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	Average (1980-1985)	Average (1985-1989)
BOLIVIA	77				81		79	83			79	81
BRAZIL	81	79	82	83	83	82		84	84		82	83
CHILE			98	92	92				90	89	94	90
COLOMBIA			78		76	75	73				76	74
COSTA RICA	90	91	89			87	85	85			89	86
DOM. REP.		70	71	73	72	70	73				71	72
EL SALVADOR		56		64	62			71	72		61	72
GUATEMALA	58	61	58	62							60	
HAITI	33	38	42	39	51	55	47	44			43	49
HONDURAS	76		85	86	87						84	
JAMAICA	94		99	94		98	99	95	97		96	97
MEXICO					97	100	100	100	99		99	100
NICARAGUA	74	75	73	73	72	76	75	76			74	76
PANAMA	88	88	87	87	87	89	89	91	90		88	90
PARAGUAY			90			87	87	88	90		89	88
PERU	86	93	92			97					92	97
TRINIDAD & T	88	90			91	90	86	88			90	88
URUGUAY				88		91	92	91			90	91
VENEZUELA	86	87	88	86	86	86	89	89			87	88

Source: 1980-1984, UNESCO Yearbook 1986; 1984-1989, UNESCO Yearbook 1990

To examine enrollment trends we take countries with at least one year of data between 1980 and 1982 and one year from 1987. Table 10 contains 11 such countries. In only one of these (Trinidad and Tobago) did net primary enrollments fall over the decade. And in this case it fell very slightly and from a high level (90 percent to 88 percent).

Other sources show similar results. For 21 countries, van der Gaag et al. show 14 countries with increased enrollments, and 7 with declines between 1980 and 1985.[23] But the (population-weighted) average enrolment rate for the 21 countries rose from 88.7 in 1980 to 91.5 in 1985, while the unweighted average went from 85.7 percent to 88.3 percent.

[23] The declines are in Bolivia, Chile, Colombia, Costa Rica, and Trinidad and Tobago.

We can also look at gross enrollment rates. Gross enrollment rate changes, however, have one significant ambiguity: a reduction, if gross enrollments are at or over 100 percent, can be interpreted to imply greater efficiency; it is possible the shrinkage occurs in part because overage or less capable pupils are leaving school. More effort can then be given to those who remain. It is still worthwhile, however, to look at gross primary enrolment rates.

In light of the last point, these in fact tell an optimistic story in two respects. In 1985, they were over 100 percent in 15 of 22 countries with data.[24] And between 1980 and 1985 they decreased significantly (over 5 percentage points) in only four countries (Colombia, Costa Rica, Cuba, and Trinidad/Tobago). Secondly, in 1987, female enrollments, according to van de Walle (p. 22), were over 100 percent in 15 of 23 countries and were 99 percent in two others. Only in Bolivia, El Salvador, Guatemala, and Haiti were female primary school enrollments far from 100 percent

SUMMARY OF EMPIRICAL EVIDENCE

Tables 11 and 12 summarize the empirical findings outlined above. The following are the main points.

1. The income/expenditure indicators (headcount poverty measures and private consumption) provide the most compelling evidence for a spreading incidence of poverty in Latin America in the 1980s. The information at hand suggests that there has been a measurable increase in the incidence of poverty. However, in one country poverty appears to have diminished, and in four it at least did not get worse. Per capita private consumption shows stronger and clearer trends: it was lower in 13 of the 20 countries with data.

2. The public expenditure indicators are mostly negative in the sense that resources made available in poverty-sensitive sectors declined in most countries in the region over the decade. Real government expenditures per capita on both health and education fell through the decade. The decline was more general in education but more severe in health.

3. The outcomes/social indicators are invariably and highly positive:

- **Calorie availability** improved or was maintained in 14 of 21 countries. In none of the nine national surveys of nutrition documented by PAHO were there increases in the incidence of malnutrition.

- **Every** country for which we have data shows a reduction in its **child mortality rate** between 1980 and 1985. Data for the **infant mortality rate** — more comprehensive, but a bit less firm — also show a uniform improvement. **Life expectancy** also increased everywhere in the region.

- Progress in **vaccination coverage** is nearly as good. Eighteen of 20 countries improved their rate of coverage against the four childhood diseases targeted by UNICEF in its Expanded Program of Immunization.

---

[24] This is according to van der Gaag et al, p. 81. van de Walle uses UNICEF data and shows gross enrolment rates for males over 100 percent in 17 countries out of 23.

TABLE 11: SUMMARY OF TRENDS/1

Key: "+" = improving trend
"−" = worsenind trend
"0" = no chnage
( ) indicates weak trend

COUNTRY	WELFARE			PUBLIC EXPENDITURES/2					OUTCOMES					
	Absolute Poverty	Relative Poverty	Consumption/Cap	Total Exp/GDP	Health Share	Health/Cap	Education Share	Edcuation/Cap	Calorie Intake	Malnutrition/3	CMR/4	Life Expectancy	Vaccination	Primary Net Enrol
Argentina	−	−		+	+	+	−	−	−		+	+	+	
Bolivia			−	−	+	−	+	−	+			+	+	+
Brazil	0	0	+	+	−	+	+	+	+		+	+	−	(+)
Chile	−	−	−	−	−	−	−	−	−		+	+	0	−
Colombia	0	0	(−)	−					−	+	+	+	+	−
Costa Rica	0	0	−	+	−	−	−	−	+			+	+	−
Dominican Rep.			(+)	+		−	−	−	+	+	+	+	+	(+)
Ecuador	−		+	(+)	+	+	−	−	+	+	+	+	+	
El Salvador	−		0	−	−	−	−	−	+	+		+	+	+
Guatemala	−	−	−	−	+	−	+	+	+	+	+	+	(+)	
Haiti			−						+		+	+	+	+
Honduras			−						−	+		+	+	
Jamaica			−						(+)	+		+	(+)	(+)
Mexico	0		+	+	−	−	−	−	+		+	+	+	(+)
Nicaragua			−	+					+			+	+	+
Panama	+		(−)	−	+	+	+	+	+	+		+	+	+
Paraguay			(−)	−	−	−	−	−	−			+	+	(−)
Peru	−		+	−	(+)	−	+	−	+	+	+	+	+	+
Trinidad&Tobago			−	(−)					0		+	+	+	−
Uruguay			−	−	+	+	(+)	−	(−)		+	+	+	(+)
Venezuela	−	0	+	−	+	−	+	−	(−)			+	+	(+)
TOTALS														
Total + or (+)	2	0	6	7	8	5	7	3	13	9	12	21	18	12
Total "0"	4	4	1	0	0	0	0	0	1	0	0	0	1	0
Total − or (−)	7	3	13	11	6	10	8	12	7	0	0	0	2	5

/1: Table shows trends between average values of indicators from '1980-1985 and their average valuse from '1985-1989.

/2: For expenditures, "+" indicates increase, "−" indicates decrease.

/3: For Central American countries, Malnutrition data show trend from '1985-87 to '1986-87.

/4: CMR data compare rate at 1980 with rate at 1985.

Source: Annex and Previous tables

TABLE 12: ABSOLUTE VALUES OF POVERTY AND SOCIAL INDICATORS IN THE 1980s

	CMR		Life Expectancy Rate		Vaccination Rate		Primary Enrollment Rate		% of Population in Absolute poverty		Income Distribution		Per Capita Calorie Intake		Consumption Per Capita	
Country	75-80	80-85	1980	1988	1980	1989	80-85	85-90	1980	1985	1980	1988	1980-85	1985-88	1980-85	1985-88
Argentina	28	42	69.3	70.8	63	82					.417	.460	3275	3178	92	
Bolivia	197		49.9	53.4	17	58	79	81					2133	2211	85	70
Brazil	107	86	62.8	65.2	63	67	82	83	17	18	.597	.615	2576	2641	96	97
Chile	52	28	69.5	71.7	89	94	94	90	12	15	.518	.537	2650	2587	95	92
Colombia	64	42	65.9	68.4	23	83	76	74			.481	.476	2501	2478	101	101
Costa Rica	35	24	72.4	74.8	78	89	89	86	6	8	.420	.420	2643	2774	86	83
Dominican Rep	98	88	63.3	66.3	31	48	71	72					2253	2386	94	94
Ecuador	116	90	63.1	65.6	32	66							2139	2260	103	107
El Salvador			57.3	62.6	47	68	61	72					2168	2316	94	94
Guatemala	139	118	58	62.3	36	53	60		33	43	.480	.530	2140	2328	94	86
Guyana			61	63.5	48	75										
Haiti	207	189	51.9	55	10	43	43	49					1991	2094	95	88
Honduras			60.2	64.2	31	80	84						2135	2086	97	93
Jamaica			70.8	72.7	35	85	96	97					2531	2574	102	95
Mexico	87	77	66.6	69.1	54	82	99	100	10	10			2986	3151	98	101
Nicaragua			58.4	63.7	21	74	74	76					2272	2420	75	56
Panama			70.3	72.2	52	77	88	90	19	16			2367	2465	105	105
Paraguay			66.3	67	20	64	89	88					2768	2644	103	103
Peru	147	112	57.9	61.8	27	58	92	97					2127	2260	106	119
T&T	32	28	68.8	71.1	21	71	90	88					2946	2947	112	95
Uruguay	49	34	70.4	72.3	55	84	90	91					2775	2768	88	81
Venezuela		47	68.5	69.8	68	60	87	88	7	9	.327	.374	2563	2562	100	105

Note: data is for year stated or for nearest year with data. Income distribution indicators are Gini coefficients.
Source: previous tables and annexes.

- **Net primary enrollments** increased in 12 of 17 countries for which we have data.

These findings raise several questions, of which two are most intriguing. First, how can we explain the surprising paradox they reveal? Per capita GDP fell, private consumption fell, the proportion of the population living below poverty lines apparently increased in several countries, and public resources allocated to health and education fell significantly on a per capita basis. Yet conditions of life continued to improve in all countries of the region by almost every measure, and access of the poor to primary education did not decline.

Secondly, how can we explain the rise and wholesale adoption of the UNICEF vision of a Latin America "sliding into poverty" in the 1980s, in the face of the strong presumption to the contrary that emerges from these numbers? After all, most of these data were known in broad outline by the middle of the decade, and certainly by 1988.

These questions will be considered in the concluding section. But the matter of structural adjustment and the poor has to be addressed first.

SECTION FIVE

THE IMPACT OF STRUCTURAL ADJUSTMENT PROGRAMS ON THE POOR

Part of the received doctrine of the late 1980s was that the conditions of life of the poor in Latin America and Africa, including their chances for better health care and access to education, were harmed by the adoption of stabilization programs and market-oriented structural reforms. The strong form of this proposition was that the poor suffered **disproportionately** from these public policies.

The previous analysis, though done without reference to policy regimes, casts some doubt on these propositions.[25] Because market-oriented reforms were introduced fairly widely, and general trends in welfare outcomes remained favorable, there is a quite strong presumption against the idea of significant and general deterioration in the condition of the poor as a result of adjustment.

But this is only an inference from the general data, an indirect implication. The question has to be considered directly and in more detail: have the poor in adjusting countries fared better or worse than the poor in nonadjusting countries?

Much of the literature surrounding this question has been addressed to the question: how can or how might policy reform affect the poor? But this is not much help in answering the question at hand, since reforms can either hurt or help the poor, depending on initial conditions, the structure of the economy being analyzed, and similar factors.[26]

In principle, the question could be answered for any country if a fully specified dynamic general equilibrium model could be constructed. But this is not feasible for many countries and, given the uncertainties of the data in most countries, the results would hardly be robust.

---

[25] The term "structural adjustment" covers "stabilization" (programs introduced to restore internal and external macroeconomic stability) and "structural" reforms, which aim at increased competitiveness — market liberalization, changes in relative prices, changes in the public-private mix, and so on.

[26] Thus, it is easy to see that the typical stabilization/adjustment package might hurt the poor as a result of its reductions in public expenditure (needed to control inflation or restore fiscal balance), which take the form of cutbacks in public employment, in real public sector salaries, in public service provision, and in imposition of new or higher user charges for health, education, and other services vital to the poor. Food prices may rise because of higher import costs, increased producer prices, or subsidy reduction. Liberalization of trade regimes and measures to restore balance of payments equilibrium might mean import cutbacks, declining industrial production, and increased industrial unemployment. But higher producer prices, reduced regulatory controls, open access to foreign exchange, reform of public enterprises, more evenhanded fiscal systems, removal of restrictions on private provision of services — all will probably bring benefits to the poor, even in the short run. And in the long run, structural changes presumably will bring faster and more even growth. The actual impact on the poor, then, depends on the extent and intensity of these negative and positive potential effects. It must be determined empirically.

In practice, assessment of impacts — on the poor as well as the economy in general — is done by classifying countries into "adjusting"/"reforming" or "nonadjusting"/"nonreforming" categories, or into more finely divided categories along the same lines, and comparing average performance of the different country groupings by various measures.

ANALYTICAL PROBLEMS

Methodological Issues

Serious methodological problems are inherent in this general approach. Most of them have received attention in the literature. Here we review only the main points.

- The biggest problem is how to deal with the counterfactual case — the fact that whatever happens after countries adopt reforms, their economies and their poor might be worse off if they had continued prereform policies. So it is always of uncertain meaning to say that the poor or anybody else were "hurt by policy reform."

- Several considerations related to sample bias and phases of the nonreform cycle reduce the meaningfulness of comparisons of reformers and nonreformers.

  - All countries have to adjust sooner or later to internal and external imbalances, in the absence of a foreign benefactor who picks up the bills. But they do so at different phases of the nonreform process. In the early phases of nonreform, reserves can be drawn on, and external borrowings or aid flows increased. Imports and public expenditures can thus be sustained, despite basic imbalances. Comparisons of social indicators (or indeed economic outcomes) of such nonreformer countries with those of reforming countries would tend to yield results favorable to the nonreformers. This is especially so when — as happens frequently in Latin America — the reluctant reformers are regimes with a populist flavor. The fact that these relatively favorable social indicators are unsustainable does not show up in short-term comparisons.

  - The reforming-nonreforming categories probably contain biased samples of countries. The countries that adopt reforms are usually at the final phases of the nonreform process; almost always, countries adopt reform programs when all else has failed. The reformers thus are in deep economic trouble at the outset, with large budget and balance of payments deficits, high rates of inflation, depleted external reserves, and no creditworthiness. It is hard to put these economies in order; they have to climb out of so big a hole. So stabilization and adjustment measures may have to be especially severe and social indicators might be expected to deteriorate.[27]

- Related to the point about the need for a fully specified general equilibrium model is the difficulty of isolating the impact of policy changes from other changes, short term and

---

[27] It is theoretically possible that there is a different kind of selection bias at work. The reforming country group might be biased positively, in that it consists of countries whose leadership has correctly assessed needs and prospects for successful adjustment. This is not likely, however.

secular, domestic and external, that have taken place over the period being examined. While domestic policies are being reformed, relative prices are changing on world markets; macroeconomic distortions in neighboring economies are increasing or declining, with important consequences for informal trade and capital flows; labor force participation rates are changing; and drought cycles or rainfall patterns are shifting.

Some of these factors can be controlled for, as in the World Bank's 1990 report, *Adjustment Lending Policies for Sustainable Growth* — generally referred to as RAL II. But many internal and external events cannot be captured.

- **Classification** presents further problems. First, by what criteria should adjusters/reformers be distinguished from nonadjusters/nonreformers? As we will shortly see, the World Bank uses the adoption of a formal adjustment program as its criterion. But the classification could be done by more qualitative, intuitive means — by reliance on expert opinion, for example; this is close to John Williamson's method in his recent review of Latin American reform results, which we discuss later. In any case, every method has an element of arbitrariness.

- There also are some sticky issues related to time.

  - One is the choice of start-up date: when can "reform" or "adjustment" be said to have begun. The date of approval of a formal adjustment loan can be misleading. So-called "prior actions" may have been taken many months before. It may be many months before an approved policy loan becomes "effective."

  - How long a lag is appropriate before results of policy change should be anticipated? Production structures differ: primary producers normally would need longer for supply response to be seen. Heavily controlled economies do not shed regulatory obstacles after a few decrees about liberalization. Social indicators are unlikely to show quick changes in response to changed policies.

- More fundamental perhaps is that classification is done on the basis of a dichotomous variable: country impact or performance is compared based on the two-valued distinction: reformers or nonreformers. They may be further classified into "intensive" or "early" reformers and others, as the World Bank does in its 1990 evaluation of adjustment lending, or into reforming, partly reforming, and others, as Williamson does. But this does not deal adequately with the reality of reform gradations.

In practice, reform efforts can range from comprehensive and immediate revamping of economic policy (for example, Bolivia in 1985) to a slower, sector-by-sector approach (Guatemala or Ecuador), to the stop-start reform programs of Brazil, Mexico, and Argentina. They are also of vastly differing intensities or depth. After all, some policy reforms involve a more or less symbolic removal of formal controls on a market that has long been competitive in practice, while others entail true market liberalization. Some trade policy reforms lower tariff structures from stratospheric to merely highly protective levels, without significant increase in openness, while others involve genuine dismantling of protection. **Differences in degrees of implementation** are also widespread and not accounted for in these classification schemes.

Worldwide Data

Probably because the methodological difficulties are so formidable, little work has been done comparing the evolution of social indicators in reforming and nonreforming countries. In the few studies that exist, the Latin American sample within the pool of countries being analyzed is small, so results from analysis of worldwide data are of uncertain applicability at the regional level.

The main work has been done by the World Bank, notably its second (1990) report on adjustment, RAL II.[28] They look first at changes in poverty incidence in 12 countries during the 1980s. The data are fragmentary; often only three years are covered. The world-wide results show few differences between adjusters and nonadjusters.[29]

Only four of the 12 countries are Latin American, of which three are what the Bank classifies as "Early Intensive Adjustment Lending" countries (Brazil, Chile, and Costa Rica), while one (Venezuela) is a nonadjuster. Poverty is recorded as declining in Venezuela and Chile and rising in Brazil and Costa Rica.

A more extensive comparative analysis is done for changes in private consumption expenditure and social indicators between 1980 and 1986. In this analysis, the universe is divided into four categories: early-intensive adjusters (EIAL), other adjusters (OAL), nonadjusters who did not have to adjust because they were not in economic trouble (NAL+), and nonadjusters who needed to adjust but didn't (NAL-). The main results can be summarized as follows:

- With respect to **private consumption expenditure**, the 24 early and intensive adjusters (EIAL) did substantially better than the 15 nonadjusters that needed adjustment (NAL-). The gap in performance widened later in the decade (1985-1988). Consumption in these EIAL countries was also protected in real terms; it fell in the early 1980s, but recovered to 1970-1980 levels by 1985-1988.

- **Nutrition** indicators improved throughout the period in all classes of countries, but much more in the EIAL than in the NAL- group. Improvement was greatest in middle-income EIAL countries.

- **Infant and child mortality** continued to decline in the 1980s. The average decline for the EIAL countries was greater in the 1980s than in the late 1970s.[30] Of the 10 EIAL countries with good data on **child mortality**, four showed faster improvement in the 1980s than in the 1970s. Of the 10 NAL countries in the sample (+ and -), four increased their rate of improvement in the 1980s while in six the rate slowed.

---

[28] World Bank, Country Economics Department, "Adjustment Lending Policies for Sustainable Growth," 1990.

[29] Of the five "intensive" adjusters, two had a reduction in poverty (Chile and Thailand); two of the four "other adjusters" had reduced poverty (China and Yugoslavia), and two had an increase (Hungary and Indonesia), the latter between 1984 or 1985 and 1987. Two of the three nonadjusters (Poland and Venezuela) had reduced poverty incidence, while Malaysia experienced an increase.

[30] This is true when Chile is removed from the comparison. Chile had a 13 percent decline in its infant mortality rate from 1982 to 1987, but it had dropped by 50 percent between 1977 and 1982.

- With respect to **social sector public expenditures:**

  - In these 10 EIAL countries, shares of social sector spending in total central government expenditures rose from 22.3 percent in 1970-1980 to 24.4 percent in 1981-1984, then fell to 22.4 percent in 1985-1987. In five NAL countries shares rose.

  - **Real education spending per capita** continued to rise in 1981-1987 in the EIAL countries, though much more slowly than in the 1970s; in three NAL countries it rose more decisively. **Real per capita health expenditure** fell in the early part of the decade in the EIAL countries, but rose after 1984. It did not fall in the three NAL countries, and rose faster in after 1985.

- **Gross primary enrolment ratios** fell on average between 1980 and 1985 in the 24 EIAL countries. They rose in all other country groups.

These are worldwide comparisons, of limited direct relevance for Latin America. There are, for example, only three LAC countries in the sample of 10 EIAL (Chile, Costa Rica, Mexico), two in five OAL (Panama and Uruguay), and one in the NAL sample (Venezuela).

Nonetheless, the general results are of much interest, not least because they reveal so little overall or worldwide evidence for the proposition that the poor suffered general deterioration in social conditions in the 1980s, and for the proposition that the poor in adjusting countries suffered especially badly. The RAL II data do show that the averages were better for adjusting countries in some key respects: measured by averages of national averages, adjusters had better "social performance" than nonadjusters as measured by changes in average private consumption per capita, nutrition, and infant and child mortality.

TWO APPROACHES

Two main methods are used to measure the impact of policy reforms: before and after comparisons, and control group comparisons. Fairly sophisticated approaches have been developed to control for external shocks and other variables in studies of economic impacts, and classification schemes have been worked out, as noted above, to provide control groups. The attempts to measure and compare social impacts are less complicated.[31]

World Bank Approach

In the World Bank assessments, social indicators are examined before and after the introduction of reforms, and average performance of adjusting and nonadjusting countries is compared using a simple classification scheme.

---

[31] See for example, Annex 2.1 of World Bank, "Adjustment Lending Policies for Sustainable Growth," 1990 (RAL II), and methodological references cited in that work.

A background paper written for RAL II provides more detailed data for different country groups and some insights into the LAC situation.[32] Annex 4 shows their classification and draws on their data; the annex presents the World Bank approach and shows how countries are classified. These classifications have the advantage of relative objectivity. They are based on the number and timing of SAL and SECAL countries that began to receive adjustment lending at an early date (pre-1985); those that have had repeated recourse to it since then are classified as "intensely adjusting."

World Bank structural adjustment lending to the LAC region started slowly (just one loan between 1980 and 1982) but picked up quickly.[33] Over the period 1980 to 1989, the LAC region received the greatest amount of adjustment lending of any region, for a total share of 36 percent (The Middle East and North African region [EMENA] was next with 25 percent). The high level of lending to the LAC countries reflects the problems of the highly indebted countries (HICs), which received 48 percent of all adjustment lending.[34] In any event, this criterion for classification generates an easily specified set of countries for comparisons.

Classification by Expert Opinion — the Williamson Approach

Reliance on the presence or absence of adjustment loans to distinguish adjuster/reformers from nonadjusters/nonreformers has some strong disadvantages. It yields some results that fly in the face of common sense; whether to classify Brazil as an early intensive adjuster is certainly highly debateable. It also relies on formal agreements, with no attempt to distinguish intensity of reform or seriousness of implementation.

Another way to get at the classification problem is to rely on the judgement and opinion of experts. This is in effect what John Williamson does in his recent book on Latin American adjustment.[35] He makes judgements on which countries could be classified as reformers based upon the actual policies they adopted and maintained. This approach seems more sensible than the World Bank approach. At the expense of losing the objectivity of the Bank approach, it allows some differentiation between those countries that accepted IMF and World Bank stabilization and adjustment lending but did not sustain the reforms that were to accompany them, and those countries that, in a measurable sense, did reform their economies.

To systematize his classification of countries, Williamson enumerates nine policy areas around which much of "Washington" — the IMF/World Bank and the U.S. executive branch, as well as the Inter-American Development Bank, Congress, and think tanks — could come to agreement on what Latin

---

[32] Kakwani, N., Elene Makonnen, and J. van der Gaag, "Structural Adjustment and Living Conditions in Developing Countries," World Bank, PRE Working Papers, WPS # 467, August 1990.

[33] Annex 3 shows Structural Adjustment Loans (SALs), Sectoral Adjustment Loans (SECALs), and IMF stabilization lending (stand-bys and EFFs) received by borrowers in Latin America between 1979 and 1989.

[34] To put this in perspective, adjustment lending totaled no more than 10 percent of official disbursements to the LAC region in the 1980s.

[35] Williamson, John, *Latin American Adjustment: How Much Has Happened?* Institute for International Economics, Washington, D.C., April 1990.

America should be doing. The policy areas are fiscal discipline, public spending priorities, tax reform, financial liberalization, competitive exchange rate, trade liberalization, foreign direct investment, privatization, and deregulation.

Williamson then rates countries on a subjective, five-point scale in each of the nine areas, coming up with a summary rating of countries as "reforming," "partially reforming," and so on. The subjectivity of this approach allows the use of substantive knowledge and intuition in setting country classifications — for instance, in recognizing reform efforts by countries that have not worked with the IMF/World Bank — but at a cost of introducing more room for debate, particularly between the classifications of "reforming" and "partially reforming." The Williamson assessments also leaves the start date of serious reform efforts imprecise. Annex 4 also presents the Williamson approach and the resulting LAC country classifications. For the purpose of our data analysis, we assigned start dates based on our understanding of the each country's reform program.

HOW DID ADJUSTMENT AFFECT THE POOR IN LAC?

Tables 13 and 14 show the same data that were given earlier, in Tables 11 and 12, only organized differently. Here the LAC countries are categorized as adjusting or nonadjusting according to the two classification schemes outlined above — those of the World Bank and Williamson. Comparisons are made between adjusters and nonadjusters, using each of the classifications. In the summary totals, intensive and pre-1986 reformers are combined as "adjusters" in the World Bank table, and "policy reformers" and "partial reformers" are combined in the Williamson table. Several points emerge.

- Using the headcount poverty measure (proportion of total population in absolute poverty), the adjusters performed better than the nonadjusters or late adjusters. In all cases where data show that poverty incidence has changed, they show an increase in poverty for the recent or nonadjusters. Under the Williamson approach, two of six adjusting countries show an improvement (reduction in poverty), and one shows no change. Under the World Bank approach, one improves and four show no change. Although there is no evidence here that adjustment has reduced poverty in Latin America, there is some indication that nonadjustment has increased it, and that, perhaps, adjustment has prevented it from increasing.

- The tendencies noted for changes in absolute poverty are not seen in the more comprehensive data on trends in per capita private consumption. Under the World Bank grouping, the adjusters and the nonadjusters are equally — and highly — likely to experience a fall in consumption expenditure. Under the Williamson classifications, the adjusters are far more likely to have experienced some decrease over the course of the decade (9 of 10 adjusters versus 4 of 9 nonadjusters). This measure may be particularly sensitive to the "nonadjustment cycle" problem mentioned earlier: nonadjusters can run down reserves for a time, or borrow, and thereby sustain employment, wage levels, and private consumption.

TABLE 13: SUMMARY OF TRENDS - WILLIAMSON /1

	WELFARE		EXPENDITURES						OUTCOMES					
	Absolute Poverty	Relative Poverty	Consumption/Cap	Total Exp/Cap	Health Share	Health/Cap	Education Share	Education/Cap	Calorie Intake	Malnutrition/3	CMR/4	Life Expectancy	Vaccination	Primary Net Enrol
Policy Reformers														
Bolivia			-	-	+	-	+	-	+			+	+	+
Chile	-		-	-	-	-	-	-	-		+	+	0	-
Costa Rica	+	0	-	+	-	-	-	-	+			+	+	-
Ecuador	-		+	(+)	+	+	-	-	+	+	+	+	+	
Jamaica			-						(+)	+		+	(+)	(+)
Trinidad & Tobago			-	(-)					0		+	+	+	-
Uruguay			-	-	+	+	(+)	-	(-)		+	+	+	(+)
Partial Reformers														
Colombia	0	0	(-)	-					-	+	+	+	+	-
Guatemala	-		-	-	+	-	+	+	+	+	+	+	(+)	
Panama	+		(-)	-	+	+	+	+	+	+		+	+	+
Recent Reformers														
Argentina	-	-		+	+	+	-	-	-		+	+	+	
El Salvador	-		0	-	-	-	-	-	+	+		+	+	+
Mexico	0		+	+	-	-	-	-	+		+	+	+	(+)
Paraguay			(-)	-	-	-	-	-	-			+	+	(-)
Venezuela	-		+	-	+	-	+	-	(-)			+	-	(+)
Non- Reformers														
Brazil	0	-	+	+	-	+	+	+			+	+		(+)
Dominican Rep.			(+)	+		-	-	-	+	+	+	+	+	(+)
Haiti			-						+		+	+	+	+
Honduras			-						-	+		+	+	
Nicaragua			-	+					+			+	+	+
Peru	-		+	-	(+)	-	+	-	+	+	+	+	+	+
Totals - Policy Reformers and Partial Reformers														
Total + or (+)	2	0	1	2	5	3	4	2	6	5	6	10	9	5
Total - or (-)	3	0	9	7	2	4	3	5	3	0	0	0	0	3
Totals - Recent Reformers and Non- Reformers														
Total + or (+)	0	0	5	5	3	2	5	1	7	4	6	11	9	7
Total - or (-)	4	2	4	4	4	6	3	7	4	0	0	0	2	2

Key:
+ = improving trend
- = worsening trend
0 = no change
() = indicates weak trend

/1 Table shows trends between average values of indicators in 1980-1985 and their average value in 1985-89.
/2 For expenditures, "+" indicates increase and "-" indicates decrease.
/3 For Central American countries, malnutrition data show trend from 1965-1967 to 1986-1987.
/4 Completion and CMR data compare rate at 1980 with rate at 1985.

TABLE 14: SUMMARY OF TRENDS - WORLD BANK /1

	WELFARE		EXPENDITURES/2						OUTCOMES					
	Absolute Poverty	Relative Poverty	Consumption/Cap	Total Exp/Cap	Health Share	Health/Cap	Education Share	Education/Cap	Calorie Intake	Malnutrition/3	CMR/4	Life Expectancy	Vaccination	Primary Net Enrol
IAL														
Bolivia			-	-	+	-	+	-	+			+	+	+
Brazil	0	0	+	+	-	+	+	+	+		+	+	-	(+)
Chile	-	0	-	-	-	-	-	-	-		+	+	0	-
Colombia	0	0	(-)	-					-	+	+	+	+	-
Costa Rica	0	0	-	+	-	-	-	-	+			+	+	-
Jamaica			-						(+)	+		+	(+)	(+)
Mexico	0		+	+	-	-	-	-	+		+	+	+	(+)
PRE - 1986														
Ecuador	-		+	(+)	+	+	-	-	+	+	+	+	+	
Panama	+		(-)	-	+	+	+	+	+	+		+	+	+
Uruguay			-	-	+	+	(+)	-	(-)		+	+	+	(+)
POST - 1985														
Argentina	-	-		+	+	+	-	-	-		+	+	+	
El Salvador	-		0	-	-	-	-	-	+	+		+	+	+
Honduras			-						-	+		+	+	
Venezuela	-	-	+	-	+	-	+	-	(-)			+	-	(+)
NAL														
Dominican Rep.			(+)	+		-	-	-	+	+	+	+	+	(+)
Guatemala	-	-	-	-	+	-	+	+	+	+	+	+	(+)	
Haiti			-						+		+	+	+	+
Nicaragua			-	+					+			+	+	+
Paraguay			(-)	-	-	-	-	-	-			+	+	(-)
Peru	-		+	-	(+)	-	+	-	+	+	+	+	+	+
Trinidad & Tobago			-	(-)					0		+	+	+	-
Totals - IAL and PRE - 1986														
Total + or (+)	1	0	3	4	4.	4	4	2	7	4	6	10	8	6
Total - or (-)	2	0	7	5	4	4	4	6	3	0	0	0	1	3
Totals - Post - 1985 and NAL														
Total + or (+)	0	0	3	3	4	1	3	1	6	5	6	11	10	6
Total - or (-)	5	3	6	6	2	6	4	6	4	0	0	0	1	2

Key:
+ = improving trend
- = worsening trend
0 = no change
() = indicates weak trend

/1 Table shows trends between average values of indicators in 1980-1985 and their average value in 1985-89.
/2 For expenditures, "+" indicates increase and "-" indicates decrease.
/3 For Central American countries, malnutrition data show trend from 1965-1967 to 1986-1987.
/4 Completion and CMR data compare rate at 1980 with rate at 1985.

- With respect to government expenditures:

  - Total expenditure as a percentage of GDP was reduced in more of the adjusters than of the nonadjusters or late adjusters: expenditure fell in 7 of 9 of the Williamson adjusters versus 5 of 9 of the World Bank adjusters. Under the World Bank classifications, more of the nonadjusters reduced the share of expenditures in total GDP than did adjusters. Some of the increase in expenditures by adjusters can, no doubt, be explained by the sharp increase in the interest payment burden of the adjusting countries. Under both classification systems, about three out of four adjusters increased the share of their expenditures going towards interest payments, while only about half of nonadjusters were compelled to do so.

  - Whether adjusters were better able to protect the budget shares of health and education than were nonadjusters is not clear. In the Williamson grouping, the adjusters seem to have done significantly better on this score. But a similar trend is not apparent when adjusting countries are grouped by World Bank definitions.

  - Per capita real expenditures on health and education do not seem to have behaved differently as between adjusters and nonadjusters, at least in the Williamson grouping. The World Bank system reveals a slightly better performance by adjusters in increasing per capita expenditures on health.

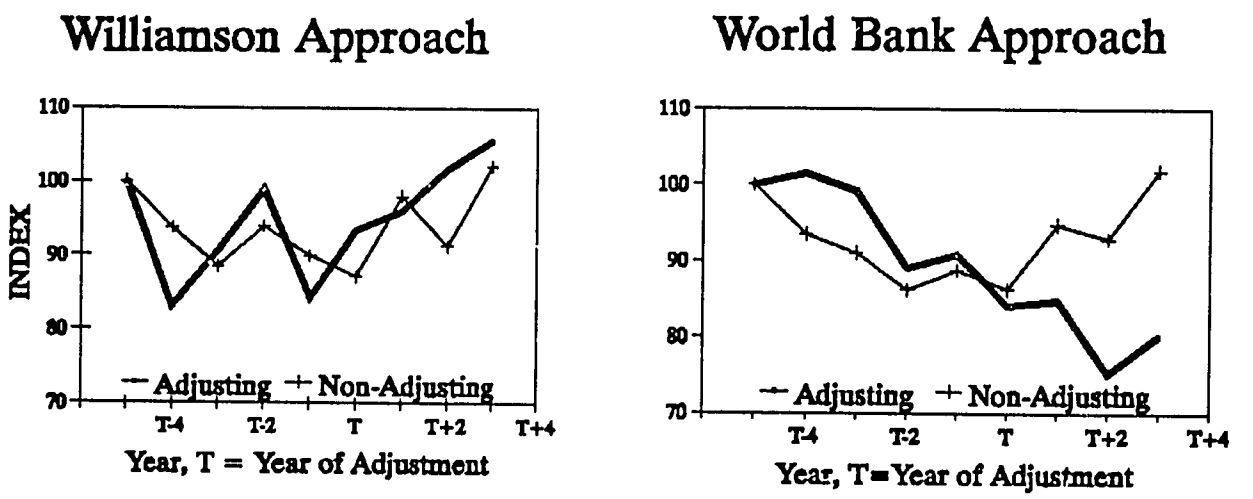
With respect to outcome measures or social indicators, there is little observable difference between the adjusters and nonadjusters, however grouped.

  - Adjusters and nonadjusters alike perform well on the two indicators of nutritional status. There is no discernible difference between the two groups.

  - The performance of nonadjusters and adjusters were identical in reducing child mortality rates and increasing net primary enrollment rates. Under both systems, nonadjusters were more likely to have increased their net primary enrollment rates over the course of the decade.

  - The Williamson criteria yield slightly better performance by adjusters in improving vaccination coverage, but this difference is not apparent under the World Bank divisions.

FIGURE I:
EDUCATION EXPENDITURE AS A SHARE OF TOTAL EXPENDITURE
LATIN AMERICA



Source: IMF

The above graphs show education as a percentage of total government expenditure, classified by adjusting and nonadjusting countries according to the Williamson and World Bank approaches to classification. They show that when the two different approaches are used to determine when and if a country has adjusted, vastly different results are obtained. Although the Williamson approach finds that education's share of the total budget grew after adjustment began, the World Bank approach shows that they fell precipitously after adjustment.

The summary data for LAC from Tables 13 and 14 do not show many significant differences in "social performance" between adjusters/reformers and nonadjusters/nonreformers. Absolute poverty measures seem to indicate some tendency in favor of the adjusters. But by other measures, and especially the outcomes-social indicators, the differences are small and not consistently in favor of either adjusters or nonadjusters.

It is worth repeating that the data are sparse and thin; there is much that they cannot tell us. Moreover, they are fragile, and subject to many different kinds of possible errors or biases. One example of how classification differences can result in widely different results in comparisons of performance is shown in Figure 1.

Yet despite sparse and weak data, the pattern of evidence on adjuster/nonadjuster differences in social performance points to one firm and important generalization. The available numbers give no support for the argument that adjustment is responsible for reducing the quality of life of the poor in adjusting countries in Latin America. The data show no systematic evidence of superior social performance by the non-adjusting countries. If anything, there is some evidence to support the idea that

performance overall is better — from the perspective of meeting the needs of the poor — in the adjusting countries. But this comes out more clearly in worldwide comparisons, as in the World Bank's RAL II report, than in the LAC data.

EXPLAINING THE PARADOX: IMPROVING OUTCOMES AMIDST DECLINING INPUTS

Of the many questions suggested by the evidence assembled above, one of the most intriguing was mentioned earlier and demands attention now. It is the paradox of reduced inputs and improved outcomes. National income per head fell in the 1980s, poverty seems worse by headcount measures in several countries, private per capita consumption clearly fell, real wages went down in the early part of the decade, unemployment rose, and non-debt-service public expenditures went down as did real per capita spending on education and health. Yet almost all outcome measures or social indicators show continuing improvement, in some cases at a rate faster than in the 1970s.

The paradox has a number of possible explanations.

1. The Outcome Indicators are Wrong

Many of the data are indeed extremely weak. The could be giving false signals. But these are the best data to be found, the same data that everybody uses in debates about the evolution of the human condition. Moreover, much of it is getting better. It is unlikely that errors are so big and so consistent that overall tendencies are affected.

- Infant and child mortality rates are notoriously imprecise. The series most commonly used — produced by the United Nations — is rife with unidentified interpolations and extrapolations. But, a recent effort at weeding out everything except reliable, data-based estimates yielded data for the period 1975-1980 and 1980-1985 that show the same strong decrease.[36] Such cleaned data are not available for the period since 1985. But United Nations data continue to show a declining trend for all of the countries in the region.

- UNESCO is the major source for enrollment data supplied by either governments or UNESCO itself. UNESCO warns that enrollment data show a good deal of sensitivity to the month of collection because of dropouts. And other warnings are in order. But these data are among the most reliable in many countries, generated by statistical units that are stronger than in most other sectors. They are checked and processed by numerous international agencies — the World Bank, UNESCO, and UNICEF, for example.

- The output data, or quasi-output data used as proxies, hide important negative effects. Thus declining real expenditures on education means lowered quality of instruction and less competent or educated graduates. And for health, numbers of medical personnel and

---

[36] Kenneth Hill and Anne Pebley, "Child Mortality in the Developing World," in *Population and Development Review*, Vol. 15, No. 4, December 1989.

consultations may show positive increases, but the quality of care shrinks as health workers lose motivation because of low salaries and medicine becomes scarce.

These certainly seem reasonable expectations. But there is very little information on changes in educational quality. Test score data exist for scattered years for only a few countries (see M. Grosh, 1990, Appendix 7). Test scores for Chilean fourth graders declined between 1984 and 1988, by 4-10 percent. In Jamaica some scores were slightly lower in 1985 than in 1980. But no trend is visible. Teaching materials are a smaller share of the current education budgets in most of the eight countries with data, but it has always been low. A recent World Bank study found that 70 percent of the primary schools had no teaching materials. And increases in the ratio of pupils to teacher have been common in the 1980s, but in most countries of the region the increase has been moderate; most primary schools have fewer than 35 pupils per teacher (data for nine countries), and in six countries secondary school ratios were under 30 pupils per teacher.[37]

- For vaccination rates, the primary source of error is that many countries report distributed volumes instead of volumes of live vaccine consumed. The difference can be large in countries with weak distribution systems. But the increases in coverage over the 1980s, even discounted for this factor, remain large.

2. The Outcome Measures are Correct, but Lagged

Because a good deal of physical infrastructure — in the form of schools, water systems, primary health care posts, and so forth — was put in place in prior decades, there is a reservoir of facilities and services that have been drawn from and not replenished or maintained in the 1980s. Other lagged effects are cumulative: earlier expenditures on education of girls, for example, pays off in healthier children, increased use of health services, and better educated children, all of which are correlated with education levels of mothers.

The only attempt to explain the performance of social indicators in the World Bank's RAL II is along these lines. The report states (p. 26): "Short-run indicators of living conditions have not deteriorated in the early intensive adjustment lending (EIAL) countries, and long-run indicators have continued to improve **because of past investments**" (emphasis ours). But the report gives no further elaboration.

One implication of these explanations is that the social costs of the decade have simply been deferred. Declining real expenditures in education, for example, will show up in reduced numbers and quality of graduates in the 1990s, and smaller maintenance expenditures for physical infrastructure will mean reduced output (or increased investment requirements) in the future.

3. Some Outcome Measures (Health) Reflect Success of Low-Cost Interventions

Two relatively low-cost interventions have had an enormous and quick impact on health in the developing world:

---

[37] Grosh, 1990, pp. 48-9.

- **Oral Rehydration Therapy** (ORT). In 1982, diarrhea was estimated to cause 4 to 5 million deaths per year. In 1989, UNICEF estimated that ORT was saving three quarters to 1 million lives per year. ORT use has spread at an astounding rate. In 1984, in Latin America and the Caribbean, fewer than one-third of children under five had access to ORT and just 12 to 15 percent of children were using it. Three years later, in 1987, more than 60 percent of children under five had access to ORT and it was being used by nearly 40 percent of them.

- **Vaccinations**. In 1977, at the start of the Expanded Program of Immunization in the LAC region, fewer than 30 percent of children were immunized. By 1989, over 60 percent of children were fully vaccinated against DPT, polio, measles, and tuberculosis.

4. The Public Expenditure Measures are Incomplete

As repeatedly noted, there are important gaps in data. With respect to expenditure data, information is incomplete on non-central-government sources of finance for health and education. There are other important providers of social services that may buffer the impact of a reduced public role. These providers include:

- State and local governments. Our data are for central government expenditures only. In some countries — Brazil, for example — state and local governments provide a substantial share of total finance in the social sectors.

- NGOs are important throughout Latin America in both the health and education sectors. Fixing an order of magnitude is difficult, but, as an example of their potential importance, Grosh cites the case of Bolivia, where it was found that NGOs channeled $19 million — independent of PL-480 funds — into the health sector, while the Ministry of Health had a budget of $22 million.

- Private sector provision of services. Aside from NGOs, there are many other private actors in the social sectors, particularly in the higher income LAC countries. Where public services deteriorate, private provision increases and private expenditures rise, offsetting some of the reductions in public expenditure. Private service providers, of course, require a fee, which some low income people cannot or will not pay. But diversion of higher income groups to the private sector reduces demand on the public sector, which can concentrate more of its resources on the poor and vulnerable.

5. Improved Efficiency and Equity of Expenditures

It is conceivable that outcomes have not deteriorated, or have even improved despite reduced inputs (public expenditures, notably), in part because resources are being used better — more efficiently, "internally," in the sense of more overall output for each dollar of spending, and more equitably, in the sense that resources have been targeted better to serve the poor.[38]

Indicators of internal efficiency in the social sectors include such measures as cost per graduate or cost per medical intervention on the macro level; and on a more micro level, repetition rates in school, ratio of spending on materials (or medicines) to total spending, hospital occupancy rates, and nurse-doctor ratios.[39]

Very few such indicators exist, and fewer still that are comparable over time.

- High primary school repetition rates are a significant drain on the resources of numerous countries in Latin America and the Caribbean.[40] The patchy data available on trends in repetition rates show declines (improvements) in six countries, increases in four, and no change in one in the first half of the 1980s. Most changes were small. The only significant worsening occurred in Costa Rica, where the repetition rate rose from around 7 percent to around 10 percent between 1981 and 1984, and then stayed at the higher level at least through 1988.

- van der Gaag, Makonnen, and Engelbert (1991) find that for the nine countries with data in 1980 and 1985, five show an improvement in primary completion rates, three a decline, and one shows no change. Of the declines, two — in Nicaragua and in Guatemala — were in countries that started the 1980s with very low completion rates (roughly 40 percent). In five

---

[38] Many writers distinguish between internal and external efficiency of public expenditures. The former refers to cost-effectiveness — achieving given objectives optimally, or maximizing output from given inputs. External efficiency means allocating resources between different uses so as to maximize output. In education spending, external efficiency is usually served by allocating (or reallocating) marginal resources to primary levels, since social rates of return are highest there. (For 10 LAC countries, it was estimated in the 1980s to be 26 percent, compared to 18 percent for secondary education and 16 percent for postsecondary (George Psacharopoulos, "Returns to Education: A Further International Update and Implications," World Bank Reprint Series # 362, 1985.). We consider only internal efficiency in this paper, and include most of what is usually discussed under the heading of external efficiency as an equity issue: notably the allocation of resources to services such as primary, rural, and female education and preventive, rural health care that benefit lower income groups.

[39] The problem of efficiency measurement is complicated by uncertainties about output quality. It is risky to use pupil-teacher ratios as an efficiency measure, for example, since less learning may go on in a crowded classroom than in one with fewer pupils. For this reason, we earlier used pupil-teacher ratios and spending on supplies as measures of output quality, not efficiency of input use.

[40] For example, Ecuador's rate of roughly 21 percent means that it takes the average student 8.5 years to complete the 6-year primary school cycle and just 36 percent of students are in the correct grade for their age. Brazil and Costa Rica's repetition rates mirror Ecuador's, and Peru's is estimated to hover around a high 28 percent.

years, Nicaragua's dropped to under 20 percent. Uruguay shows a slight decline from an initially high level (88 to 86 percent) but maintains the highest level of the sample. Both Costa Rica and Panama show a nearly 10 percentage point increase.

- According to PAHO statistics, the ratio of nurses to doctors in the public health sector is less than one and falling in most LAC countries. According to PAHO norms, the most efficient ratio is roughly three or four to one. Data for 1980 to 1984 show the ratio of nurses to doctors declining from 0.26 to 0.17 in Argentina, 0.53 to 0.25 in Chile, and 0.54 to 0.37 0.37 in Venezuela.

We could find no other relevant data on trends in internal efficiency. The evidence available is so patchy that not much can be said that is general. Nonetheless, it seems reasonable to conclude that more efficient use of social sector resources does not seem to have been a significant factor in explaining the paradox of the 1980s.

Proper evaluation of changes in the equity of public expenditures requires analysis of total spending to identify beneficiaries by income group, and the tracing of changes in levels and beneficiaries over the appropriate time period. Little information of this kind exists in LAC countries, even for social expenditures alone. We look at three shorthand measures here: changes in shares of education budgets going to primary education, changes in shares of health budgets going to preventive or rural care, and examples of increased attention to targeting the poor.

Grosh (1990) found, for the eight countries with data, an overall trend towards increased allocations for primary education. Using data from the International Monetary Fund's *Government Financial Statistics*, it was possible to get information on combined primary and secondary education expenditures for five additional countries: El Salvador, Guatemala, Panama, Paraguay, and Uruguay. The general trend is toward increasing shares for primary and secondary.[41]

There is evidence also that countries try to target their primary education expenditures "progressively" — in other words, towards the lowest income groups. Grosh found that for the six countries with data, five distributed the benefits of their primary education expenditures fairly

[41] Guatemala and Uruguay both show some trend downward through the decade. Costa Rica did not succeed in protecting primary education expenditures during the period of severe budgetary reductions: they fell from 37 percent of total expenditures in 1980 to roughly 33 percent from 1982-1988. At the same time, Costa Rica increased the share of its education budget going to higher education from 34 percent to 49 percent.

progressively in this sense.[42] But neither she nor other recent writers present much information on trends in progressivity of primary level spending in the 1980s.[43]

Information on internal allocation of health expenditures between curative and preventive or urban and rural is very thin. Too little is available to give any clear sense of trends. However, of the five countries for which we do have information, there does not appear to have been much reallocation. Jamaica was able to increase expenditures on both primary and secondary care by reducing expenditures on administration. El Salvador maintained the composition of its budget. Argentina, Bolivia, and Venezuela all reduced the allocation for primary care; both Bolivia and Venezuela show a sharp increase in allocations for hospital care. Expenditures appear to be allocated fairly progressively.[44]

With respect to our final indicator of change in the equity of social sector spending — better targeting on the poor — much scattered evidence of an anecdotal kind suggests that such targeting may be part of the explanation for the paradox. Box 1 on Chile summarizes a dramatic example. Numerous other examples exist.

- In Jamaica, food stamps are given to all pregnant women and children under five. To reduce leakage, participants are required to go to public clinics for these stamps. In the late 1980s, as a result, 72 percent of the women in the lowest consumption quintile of the population were receiving food stamps, compared to 4 percent in the highest group; and about two-thirds of poor households with children benefitted, as against 11 percent in the richest 20 percent of households.

- In Costa Rica, health and nutrition programs have been targeted to the 30 cantons with highest infant mortality rates. Average rates have fallen, and regional differences narrowed.

- Mothers' clubs are used to target food aid in Bolivia. Attending women receive food supplements and training for better health and nutrition.

---

[42] Grosh, ibid. Argentina, Chile, and Costa Rica reported an allocation of roughly 60 percent of their primary education budget for the poorest 40 percent. The most regressive system was Brazil's in 1980, when the poorest 40 percent of the population received just 15 percent of expenditures on primary education. Higher education tends to be less progressive. Benefits for the poorest 40 percent range from 0 (Brazil, 1986 and Venezuela, no date) to 32 percent (Dominican Republic, 1989).

[43] Evidence exists for the Dominican Republic, where the share of primary education expenditure that goes to the poorest 40 percent of the population increased between 1980 and 1989 from 32 percent to 60 percent. In higher education, Costa Rica shows a decrease in progressivity between 1980 and 1986, while Venezuela apparently increased the access of low income groups to higher education.

[44] Argentina, Chile, Costa Rica, and the Dominican Republic all deliver more than 40 percent of benefits to the poorest 40 percent of the population. Only Brazil has a lower incidence (30 percent). The Dominican Republic, which started the decade with a highly progressive system — 71 percent of benefits going to the poorest 40 percent — allowed a steep decline in progressivity by 1984 (to 57.4 percent) that was maintained through the rest of the decade. In Costa Rica, the per capita benefit in the bottom income decile is twice that of the top decile. In Colombia, primary care receives only 10 percent of the budget and the health system touches only about half the population.

BOX 1

PROTECTING THE POOR
Chile during the 1980s

Chile is frequently held up as an example of a country that has successfully adopted market-oriented reforms. It is also a country that has been successful in targeting its social expenditures towards vulnerable groups. During the 1970s and 1980s, the government introduced several social reforms. Some of these were adaptations of ongoing social policies, but with an important difference: before 1970, the government provided unusually high levels of support for health and education, but beneficiaries were often well-organized segments of the middle or upper class. The very poor were usually excluded.

In the 1970s, the government sought to eradicate extreme poverty and malnutrition by targeting those groups that were previously at the margin. To do this, the government set up new social programs targeted at mothers, children, and the poorest in general. The most important of these were emergency employment programs, child care centers, a school lunch program, and rehabilitation centers for severe child malnutrition. These programs were in place to cushion vulnerable groups during the severe recession that struck in the early 1980s. The emergency employment programs were on a massive scale, employing up to 500,000 people at their height. Chilean authorities also refined their food subsidy arrangements. Formerly, for example, powdered milk was made available, but much was used by adults for baking and coffee. Cereal was mixed in with the milk, restricting its use and leading to its consumption more as infant gruel. Furthermore, intensive surveys better identified the poor, and they have been made more aware of services and programs useful to them.

In addition to targeted programs, general social policy promotes efficiency and equity. In 1981, Chile reformed its educational subsidy system in the direction of a uniform per capita subsidy with gradations for rural schools, vocational, university, and so on. The effect is to make the incidence of benefits more even among different income groups. Between 1974 and 1986, primary education's share of the education budget rose from 37 percent to 51 percent, while the share of benefits going to the poorest third of the population rose from 28.6 percent to 37.5 percent. Housing benefits also shifted to favor the poorest third, rising from 21.9 percent in 1974 to 46.7 percent in 1986. In health there was a decline in expenditures on hospital costs and a shift to preventative care. In sum, the role of the government in the social sectors was effectively reoriented towards meeting the needs of those who could not afford privately supplied services.

These are only examples from what is undoubtedly a large body of experience in the 1980s. They suggest that increased concern with targeting the poor may be a significant factor in explaining the paradox, at least in some countries. The slight shift in favor of primary education budgets may also be a factor. Overall, however, there is slender evidence for increased efficiency and equity of public expenditures during the decade.

It remains to ask, finally: is there any evidence that efficiency and equity improvements took place more systematically in adjusting and reforming countries than in nonadjusting and nonreforming ones? The presumption has to be that no such differential performance occurred, since the limited data for all countries in the region exhibits so few clear trends in any direction.

Despite occasional claims to the contrary by some observers, there is no evidence of systematic improvement in the efficiency or equity of health and education expenditures by the adjusting countries.

Indeed, as classified by Williamson, nonadjusters were found to be much more likely to improve the equity of their education expenditures — measured as the share of education expenditures for primary education — than were adjusters. This trend is less strong using the World Bank system. Its meaningfulness is in any case unclear.

This is true of the other findings. Thus, primary school repetition rates have declined in the nonadjusting countries, and may have increased in the adjusting ones. The adjusters have been more successful in increasing the nurse-to-doctor ratio, as well as in increasing completion rates. None of this is easy to interpret and its significance is doubtful. None of these factors provide convincing orsatisfactory explanations for the paradox of improving social conditions in the face of declining national income and of declining personal and public sector social expenditures. As more data become available and more research and analysis is focused on this question, better explanations will emerge.

HOW DID THE "DEEPENING POVERTY" IDEA TAKE HOLD?

According to the UNICEF vision, the 1980s would be a decade of deepening poverty for the poor of Latin America and Africa. Under the impact of world recession and heavy debt burdens, their conditions of life would deteriorate. And under the impact of market-oriented structural reforms, the poor would suffer more of the costs than other groups.

This was the view presented to the world by UNICEF spokesmen and others as early as 1984; a gloomy epitaph of the decade was written even while the decade was still young. The gloom thickened over the course of the decade. In 1988, UNICEF spokesman Richard Jolly deplored "rising poverty and malnutrition . . . " and the "widespread and marked deterioration in the human condition . . . " in the "vast majority of countries in Africa and Latin America."[45]

This general perception became the conventional wisdom of the late 1980s, and is still widely held.[46] Yet the review of the empirical evidence presented here and in other recent assessments gives very little support to the UNICEF vision. Although indicators of absolute poverty worsened in several countries, real personal consumption fell and real spending on health and education also fell, social indicators that reflect the quality of life of the poor (nutrition, mortality, primary school attendance) show steady progress through the decade.

Nor do the available data support the propositions that the poor in adjusting countries fared worse than the poor in nonadjusting countries, or that within countries the burdens of adjustment fell disproportionately on the poor.

It is true, of course, that these data show also that by many measures progress in the fight against absolute poverty was slower in the 1980s than in the previous 10 or 15 years. And they yield little direct

---

[45] See footnote No. 2.

[46] An article on political and economic reform in the December 30, 1991 issue of *Newsweek* makes the following statement (p.41): "Economic reform often entails the sort of austerity programs required by the World Bank and International Monetary Fund before they will grant loans. **The burden of these programs falls most heavily on the poor.**" (Our emphasis.)

BOX 2

DATA QUALITY AND INTERPRETATION
The Case of Malnutrition in Jamaica

UNICEF's *Adjustment With a Human Face* (in a case study by Derick Boyd) paints a grim picture of rising malnutrition among children in Jamaica. Boyd finds that, in the early 1980s, malnutrition rose nationwide and admissions for malnutrition nearly doubled at the main children's hospital. These findings are used to support the theses that social conditions worsened during structural adjustment and that the poor suffered disproportionately. But, when the evidence is examined more closely, conclusions become less apparent and the progression of malnutrition ambiguous at best.

For national malnutrition rates, Boyd uses the findings of national home surveys conducted in 1978 and 1985 by the Jamaican Ministry of Health. The quality of these surveys is high and the best available. The problem arises from how Boyd interprets the data:

- **Sensitivity of nutrition data.** The surveys show an increase in malnutrition from 26 percent in 1978 to 27 percent in 1985. Boyd takes that as proof of a clear increase in incidence. But, nutrition data are time-sensitive, with quarterly variations higher than 5 percent.

- **Choice of age cohort.** Boyd presents data on children 0-48 months. The data show an increase in malnutrition (weight-for-age below 90 percent of the norm) from 38 percent to 41 percent. But, for children 0-35 months, the trend reverses: malnutrition declines from 40 percent to 37 percent. And for children 0-59 months, the preferred cohort, there is no significant change: the rate rises from 39.0 to 39.4 percent, with some decrease in moderate and severe malnutrition.

Boyd bolsters his case with data from the national children's hospital on admissions for malnutrition and malnutrition-related gastroenteritis between 1978 and 1985. In "The Poor and the Social Sectors during a Period of Macroeconomic Adjustment: Empirical Evidence for Jamaica," Jere Behrman and Anil Deolalikar challenge Boyd's conclusions on the following grounds:

- The hospital also has records on admissions of children with "malnutrition and/or gastroenteritis." Records show that while admissions for malnutrition and malnutrition-related gastroenteritis rose in 1984 and 1985, those for malnutrition and/or gastroenteritis fell.

- Data from a single hospital are likely to be biased with respect to the national average, although the direction of the bias is unknown.

(continued)

evidence indicating improvements in the status of the poor. They do not show that the poor actually did better in adjusting countries than in nonadjusting, though some tendencies in that direction are observable. But they do show that based on average values of social indicators like nutrition and mortality, the UNICEF vision of the worsening condition of the poor is false.

Similarly, empirical evidence to support the assertion that structural adjustment has hurt the region's poor is sparse. Few national household income surveys were conducted in the LAC region in

BOX 2 (continued)

- Increased percentages of hospital admissions who are malnourished is a result both of increased absolute number of malnourished and a decrease in total admissions:

YEAR	TOTAL ADMISSIONS AT THE CHILDREN'S HOSPITAL	PERCENT OF ADMISSIONS FOR MALNUTRITION	PERCENT OF ADMISSIONS FOR MALNUTRITION/ GASTROENTERITIS
1983	4709	2.1	2.0
1984	4512	2.4	2.7
1985	3369	3.7	4.7

Total admissions for malnutrition rose from 98 to 110 to 124, and for malnutrition and gastroenteritis from 95 to 122 to 160.

Behrman's objections could be contested in turn and they do not disprove Boyd's conclusions, but they call into question the strength of his assertion. From the data available, it is not possible to conclude that child malnutrition worsened at the start of structural adjustment in Jamaica, much less that it worsened as a result of the adjustment process itself.

the 1980s, so our information base is limited. But, from the data available, it cannot be said that poverty was more likely to increase in adjusting than in nonadjusting countries. In terms of trends in government spending for the poor, it is difficult to tell the adjusters from the nonadjusters. This can be interpreted two ways: (1) adjustment has been incomplete, and (2) even nonadjusters have felt compelled to reduce nonsustainable spending levels.

How can we explain the large gap between widely held perceptions of reality and the messages suggested by the empirical evidence? Put differently, how did the "deepening poverty" idea take root and then spread despite its altogether unconvincing empirical foundations?

One reason is that cases of intensified poverty and negative adjustment effects certainly exist, and these were the focus in some of the basic studies of the decade — for example, the *Adjustment With A Human Face* (AWHF) report already cited. This is a two-volume work. The first volume is general, the second consists of 10 case studies. But the evidence patched together in the case studies is selective and limited, and it is on these that the general arguments in volume one are based. So selective choice of examples as the basis of generalizations is one factor.

Secondly, writers in this field tend to have strong feelings about the problem of poverty, and strong commitments to do something about it. They therefore look at the data with strong "priors," with a tendency, that is, to search for and underscore information that is consistent with the argument they wish to make. Nobody is free of this kind of bias. But in this case it is often especially pronounced. It is reflected, for example, in the interpretation of the Jamaica health situation as analyzed in AWHF (see Box 2).

Finally, the idea persisted and persists because many of those concerned with world poverty and with economic and social development have found it difficult to accept the unfolding evidence indicating

continued amelioration of social conditions in the 1980s. There is a tendency to downplay the good news, and put it in the context of how much remains to be done.

Take one example. In the 1990 World Bank working paper by Kakwani et al., ibid., the authors show that social conditions have generally improved, and note that few negative impacts of adjustment programs are observable. But here is the way this paper is summarized in the abstract:

> By and large, social indicators in developing countries improved in the 1980s, but progress was slowest in the countries that needed it most. The data show unacceptably high mortality rates, low school enrollment levels, and extensive undernutrition in many parts of the world. Of particular concern are the declining primary enrollment ratios in intensely adjusting countries. This erosion of human capital is inconsistent with the main objectives of adjustment: sustainable long-term growth.

Talk about Hamlet without the Prince of Denmark! Here the Prince is allowed on stage, briefly and rather grudgingly, in the opening sentence. But the play is then summarized as though he never existed. There is much of the same in the recent writing on poverty and adjustment. It goes a long way toward explaining the persistence of false perceptions about how recent economic history, including structural adjustment policies, has affected the poor.

ANNEX I

GLOSSARY OF KEY TERMS IN POVERTY

ANNEX I

GLOSSARY OF KEY TERMS IN POVERTY

Measures of Poverty

There are two general standards of measurement:

- Absolute measures, such as standard of living or consumption-based measures, are calculated based on an objective poverty line. The share of the population that is poor by this measure will vary over time. The measures, which include income in kind, generally fix a poverty line at some factor "Z" times the cost of a basket of goods that contains only food. In principle, if the same definition were used, cross-country comparisons of the absolute poor could be meaningful. In the developing country poverty literature, "Z" is frequently fixed at two (when "Z" is 1.2-1.5, the basket is usually defined to include clothing and shelter); for U.S. poverty, "Z" is three.

  A subcategory — historically, the most commonly used approach — is a nutrition-based measure, in which "Z" is the cost of the minimum nutritionally balanced diet.

- Relative poverty is based on national income distribution. Usually the bottom 30 percent of income distribution is judged "moderately poor," the bottom 10 percent are the "absolute poor." Cross-country comparison of the relatively poor is impossible, because of different standards of living.

  A subcategory focuses on minimum rights — poverty is defined as the inability to enjoy customary living conditions and amenities. Minimum rights can focus on either households or individuals. When it focuses on individuals, it can be a useful approach to studying issues such as the feminization of poverty.

From a theoretical standpoint, there is some consensus that the ideal poverty indicator would be monotonic and subject to the transfer axiom — it would increase when incomes of the poor decrease and increase when a poor household transfers income to a less poor household. Foster, Greer, and Thorbecke (1984) as cited in Ravallion and Huppi (1991, pp. 60-63) developed one such measure:

$$P_a = \frac{1}{n}\sum_{j=1}^{q}\left(\frac{g_j}{z}\right)^a$$

where z = poverty line
yj = consumption per capita for the jth household,
gj = z-yj
n = total population
q = number of poor

when a=0 headcount measure — the percent of the population below poverty line

a=1 income (or poverty) gap measure — the percent deviation of the average poor household's income from the poverty line (captures severity of poverty and changes in the conditions of the poor)

a=2 the theoretically preferred measure that gives greatest weight to those furthest from poverty line

Measures of Welfare

Analysts usually measure welfare using one of these indicators:

- Income is used to proxy living standards (access to health, education, status, as well as food and shelter). Income measures rescurces available, and it focuses on the budget constraint rather than consumption choices. Drawbacks are that income is likely to fluctuate more than consumption. In low income periods, households can spend savings to smooth consumption. Income can proxy consumption if the analysis focuses on permanent income rather than current.

- Consumption is conceptually preferred as a welfare measure because it includes all goods and services purchased or received, e.g., gifts or in-kind barter.

- Basic Needs is a multidimensional measure — including possibly consumption, primary school enrollments, IMR, and life expectancy — that captures the benefits from publicly provided services.

Unit of Analysis

The unit of analysis is the household or the individual. Usually, it is the household, but there is no standard definition of "household." Nor are there standard adult equivalence scales which are used to standardize households composed of one or more adults and children of various sexes and ages.

The tern household can mean (1) a common residence (some common housekeeping); (2) common spending (most spending decisions in common, may or may not be family); (3) blood or marital (cohabitation) relationship; and (4) dependence (individual or couple and dependent children).

Adult Equivalence Scales give the relationship between the poverty line for a family and that for an individual. Equivalence scales are meant to take into account differential food requirements and efficiencies of scale (e.g., for housing). Scales vary:

individual	=	1
couple	=	1.25-2.0 depending on country, averaging roughly 1.65
children	=	0.15-0.75 depending on age and country

Subgroups Within the Poor

Extreme or Ultra Poor[1]

In most developing countries, the ultra-poor will occupy the bottom 10 to 20 percent of the income distribution. Usually they are rural. Their poverty severely affects their quality of life; they suffer disproportionately from illiteracy, malnutrition, disease, short life expectancy, and high infant mortality rates. Distinguishing characteristics of the ultra poor include the following:

- They spend incremental income on more of the same low cost foods;
- They do not get enough food, and consequently suffer from a wide range of physical and mental problems. Their productivity is low; and
- They frequently depend on unskilled labor wages.

If the ultra-poor make up a large component of the poor, there cannot be a big productivity response to improved economic conditions. Participation rates of the ultra-poor are as high as possible already.

Borderline Poor

The borderline poor are low income and vulnerable groups — the old, children, pregnant and lactating women, and landless and poor farmers — who benefit from government subsidies and social programs. They are affected severely by changes in the availability and prices of major items of consumption, especially food, and expenditure cutbacks.

New Poor

The new poor are the direct victims of adjustment, e.g., retrenched civil servants and laid-off public and private enterprise workers who are caught by austerity measures or shifts in production. The new poor see a reduction in income that may or may not place them beneath a poverty line. The new poor may have been in the middle class prior to the recession. Depending on whether they can locate new employment and at what wage, they may become either less well off or poor on an absolute standard.

We know, in broad lines, some characteristics of poor households that make them distinctive from higher income households.

- Households tend to be larger and younger, with a higher dependency ratio. In Venezuela, the average household size of the extreme poor was estimated in 1989 at 6.0, while that of the non-poor was estimated at 4.0. In Mexico, the average number of children in households

[1] Terms are taken from Michael Lipton, "The Poor and the Poorest, Some Interim Findings," World Bank Discussion Papers no. 25, 1988; and E. Zuckerman, "Poverty and Adjustment, Issues and Practices," Central Evaluation Department, World Bank, March 1988.

in the bottom decile is roughly 3.25, in the top decile, it is 0.55. In Colombia, fertility rates in the lowest income groups are estimated to be three times those of the highest.

- Heads of households tend to be poorly educated. In Mexico, the average education level of the head of household for the poorest income decile was 1.3 years; for the top income decile it was 4.8 years. (Levy, Santiago, "Poverty Alleviation in Mexico," World Bank Staff Working Paper # 679, May 1991). In Brazil in 1980, 59 percent of low income heads of households had no formal education, compared to only 25 percent of heads of non-poor households.

- Households devote a higher percentage of expenditures to food. Estimates of the share of expenditures that go for food vary from 50 percent (Venezuela) to 90 percent (Colombia). Budget surveys show a systematic increase in food's budget share as level of income falls.

In addition, in Latin America, urban poverty increasingly overshadows rural poverty. In some countries — e.g., Venezuela and Brazil — the urban poor already outnumber the rural poor. (See M. Louise Fox and Samuel Morley, "Brazil: Who Paid the Bill? Adjustment and Poverty, 1980-1995," World Bank Staff Working Paper # 648, April 1991.) Rapid urbanization means that this trend will only continue.

Although the rural poor may still contain the "poorest of the poor," even that designation is fading as urban conditions deteriorate. The urban poor face a host of environmental obstacles — poor water and sewerage service, crime, traffic accidents — that can reduce their life expectancy and infant survival rates below those of the rural poor. For instance, in the slums of Port-au-Prince, Haiti, infant mortality rates are over 200 per 1,000, nearly three times the rural average.

Surprisingly, a considerable number of countries in Latin America collect no systematic data on rural incomes and expenditures. Argentina, Chile, Panama, and Peru — among others — have recent household budget information for their major urban areas, but nothing that is nationwide in scope.

ANNEX II

POVERTY INCIDENCE AND PREVALENCE AND INCOME DISTRIBUTION

POVERTY INCIDENCE AND PREVALENCE

				POPULATION		INCIDENCE		PREVALENCE	
	TOTAL	ABSOLUTE	MODERATE	RURAL	URBAN	RURAL	URBAN	RURAL	URBAN
Argentina									
1970 (CEPAL)				22%	78%		5%		
1980 (CEPAL)				17%	83%		7%		
1986 (CEPAL)				15%	85%		12%		
Brazil									
1970 (CEPAL)	49%			44%	56%	73%	35%		
1979 (CEPAL)	39%	17%	22%	32%	68%	62%	30%		
1980		22%							
1981		25%				47%	15%	43%	58%
1983		31%		29%	71%	54%	22%		
1985		25%		27%	73%	47%	17%		
1986		16%				34%	9%		
1986 (CEPAL)	40%	18%	22%			60%	40%		
1987		23%		26%	74%	46%	15%	46%	54%
1988		25%		25%	75%				
Bolivia									
1976	80%	60%	20%	58%	42%	99%			
Chile									
1976 (urban)	57%			21%	79%				
1979 (urban)	36%	12%	24%	19%	81%				
1985 (urban)	46%			16%	84%				
1988 (urban)	50%	23%	27%						
1989 (urban)	41%	15%	26%	15%	85%				
Colombia									
1970 (CEPAL)	45%			43%	57%	54%	38%		
1978	24%			37%	63%				
1980				36%	64%	67%			
1980 (CEPAL)	39%			36%	64%	45%	36%		
1985	38%	18%	20%	33%	67%	66%	26%		
1985 (1)							14%		
1986 (CEPAL)	38%					42%	36%		
1988	25%			31%	69%				
Costa Rica									
1971	25%			60%	40%				
1977	13%	7%	6%	56%	44%	17%	8%	75%	25%
1981 (CEPAL)	22%	6%	16%	54%	46%	28%	16%		
1983	30%	14%	16%	55%	45%	37%	23%	67%	33%
1986	17%	5%	12%	56%	44%	22%	11%	72%	28%
1988 (CEPAL)	25%	8%	17%	56%	44%	28%	21%		
Ecuador									
1980	65%			53%	47%				
1987 (urban)	46%	15%	31%	46%	54%				
El Salvador									
1985		26%		57%	43%	>26%			
1988		35%		56%	44%	>35%			

Guatemala									
1979/81	65%	33%	32%	67%	33%				
1986/87	68%	43%	25%	67%	32%				
Honduras									
1980		61%		57%	43%	>75%			
Jamaica									
1989	33%	22%	11%	56%	44%	29%	13%	73%	27%
Mexico									
1970 (CEPAL)	34%			41%	59%	49%	20%		
1977 (CEPAL)	32%	10%	22%						
1984	73%	19%	54%	31%	69%	37%	10%	67%	33%
1984 (CEPAL)	30%	10%	20%			43%	23%		
Panama									
1979 (CEPAL)	36%	19%	17%	50%	50%				
1979 (1)							19%		
1982 (1)				49%	51%		15%		
1986 (CEPAL)	34%	16%	18%	47%	53%				
Peru									
1970 (CEPAL)	50%			43%	57%	68%	28%		
1980 (CEPAL)	46%			36%	65%	65%	35%		
1985-86 (1)	30%	10%	20%	32%	68%	19%	3%	83%	17%
1985-86 (2)	13%	1%	13%						
1986 (CEPAL)	52%					64%	45%		
1990	72%	17%	55%	30%	70%				
Uruguay									
1980 (CEPAL)	11%			16%	84%				
1986 (CEPAL)	15%			15%	85%				
Venezuela									
1970 (CEPAL)	25%			18%	72%	62%	26%		
1981 (CEPAL)	22%	7%	15%	17%	83%				
1982	33%	10%	22%	16%	84%	25%	6%	56%	47%
1986 (CEPAL)	27%	9%	18%						
1987	44%	15%	29%	17%	83%	35%	11%	42%	59%
1989	54%	22%	32%	16%	84%	42%	18%	33%	67%

Sources:

(1) Data for rural/urban population shares are all taken from World Bank, *World Tables, 1991*, Baltimore: Johns Hopkins University Press, 1991.

(2) Entries notated with a "CEPAL" are all taken from CEPAL's "Magnitúd de la Pobreza en América Latina en los Años Ochenta" May 1990, as cited in Gary Fields, "Poverty and Inequality in Latin America: Some New Evidence," Cornell University, October 1990, and Dominique van de Walle, "Poverty and Inequality in Latin America and the Caribbean During the 70s and 80s: An Overview of the Evidence," World Bank LATHR no. 22, 1991. CEPAL calculates poverty levels using a fixed, nutrition-based definition of poverty lines.

(3) Additional country-specific data sources and definitions follow:

Argentina: Data are for urban households only.

Brazil: Absolute poverty line is defined as one-fourth of the 1980 minimum wage per capita, as calculated in Louise Fox and Samuel Morley, "Brazil: Who Paid the Bill?: Adjustment and Poverty 1980-1995," World Bank WPS no. 648, April 1991.

Bolivia: Poor are defined as households with income below 70 percent of a basic needs basket. The absolute poor are households with income below 30 percent of the cost of a minimum food basket, as described in World Bank, "Bolivia Poverty Report," World Bank report no. 8643 -BO, October 1990.

Chile: Data are for the Greater Santiago area only. Absolute poverty line is fixed at the cost of a basic food basket; moderate poverty line is fixed at twice that level. Source: Carol Graham, "From Emergency Employment to Social Investment: Changing Approaches to Poverty Alleviation in Chile," Brookings Occasional Paper, forthcoming.

Colombia: 1985 data show government measurement based on 5 shelter-related indicators. Households lacking one indicator were classified as poor; those lacking two or more were classified as absolute poor, as reported in International Monetary Fund, "Colombia: Economic Adjustment and the Poor," August 1991. Data for 1978 and 1988 are from the World Bank, "World Development Report 1990," and are based on an undefined expenditure-based poverty line. 1985 (1) data are national estimates of the percentage of the population with average daily food intake below 3,000 calories, reported in World Bank, "Colombia, Social Programs and Poverty Alleviation: An Assessment of Government Initiatives," December 1988.

Costa Rica: For 1971, 1977, 1983, and 1986 data, the absolute poverty line is fixed at the cost of a 2,900 calorie per capita basic food basket for a household of six (adult equivalent 4.28). Moderate poverty line is fixed at 1/0.63 times the absolute line; as reported in World Bank, "Costa Rica, Public Sector Social Spending," Report no. 8519-CR, World Bank Country Department II, May 1990.

Ecuador: World Bank. Poverty line is fixed as the cost of a basic needs basket; absolute poverty line is the cost of the food component only, in World Bank, "Ecuador: A Social Sector Strategy for the 1990's," World Bank document, Report No. 8935-EC, November 1990.

El Salvador: Absolute poverty line is the cost of a basic food basket, in World Bank, "Social Investment in Guatemala, El Salvador, and Honduras, Workshop on Poverty Alleviation, Basic Social

Services and Social Investment Funds within the Consultative Group Framework." World Bank report no. 8299-LAC, June 1990.

Guatemala: Data are for households, no definition of poverty line, in Fields, ibid.

Honduras: No information on measurement used, in World Bank, "Social Investment in Guatemala, El Salvador, and Honduras. . . ,ibid.

Jamaica: Poverty line calculated as the cost of a basic, but diversified food basket. Absolute poverty is fixed at 80 percent of the poverty line, in Derek Gordon, "Identifying the Poor: Developing a Poverty Line for Jamaica," Planning Institute of Jamaica, Kingston, Jamaica, November 1989.

Mexico: 1984 data are based on an absolute poverty line of the cost of a 2,250 calorie food basket. Moderate poverty is based on the expenditures of the 7th income decile; basket includes expenditures on appliances, vacations, etc. Rural areas include towns with a population up to 15,000; in Santiago Levy, "Poverty Alleviation in Mexico," World Bank WPS no. 679, May 1991.

Panama: No additional information.

Peru: 1985-86 (1) uses relative measure of adjusted per capita consumption, as defined in Paul Glewwe and Dennis de Tray, "The Poor in Latin America during Adjustment, A Case Study of Peru," LSMS Working Paper No. 56, 1989. 1985-86 (2) and 1990 data define absolute poverty line at the cost of a 2,170 calorie food basket and moderate poverty as 1.67 times the absolute poverty line, in untitled paper.

Venezuela: Absolute poverty line is based on the cost of a basic food basket for a family of 5.4 (average size); moderate poverty line is two times the absolute line, in World Bank, "Venezuela Poverty Study: From Generalized Subsidies to Targeted Programs," World Bank report no. 9114-VE, December 1990.

INCOME DISTRIBUTION

	Gini Coefficients	Income share of bottom quintile
Argentina		
1974-75	0.363	4.4%
1976-78	0.396	
1979-81	0.417	
1982-87	0.438	
1986	0.460	
Brazil		
1979	0.588	
1980	0.597	
1981	0.584	2.7%
1982	0.587	
1983	0.589	2.6%
1984	0.588	
1985	0.592	2.5%
1986	0.586	
1987	0.597	2.4%
1988	0.615	2.2%
Chile		
1972-74	0.440	
1975	0.470	
1976-80	0.518	
1981-87	0.537	
1986		4.4%
Colombia		
1971	0.532	3.6%
1978	0.481	4.3%
1988	0.476	4.1%
Costa Rica		
1971	0.440	
1971 (1)	0.440	
1977	0.420	
1983	0.420	4.5%
1983 (1)	0.470	
1986	0.420	4.3%

INCOME DISTRIBUTION

	Gini Coefficients	Income share of bottom quintile
Guatemala		
1979/81	0.480	5.5%
1986/87	0.530	
Jamaica		
1988		5.4%
1989		5.5%
Peru		
1985-86	0.430	5.4%
Venezuela		
1976	0.440	
1981	0.327	
1982		5.3%
1985	0.425	
1987	0.374	5.2%
1989		4.7%

Sources:

All data are taken from Gary Fields, "Poverty and Inequality in Latin America: Some New Evidence," Cornell University, October 1990, except as noted below.

Argentina: All data from Albert Berry, "The Effects of Stabilization and Adjustment on Poverty and Income Distributional Aspects of the Latin American Experience," World Development Report background paper, The World Bank, 1990.

Brazil: Gini coefficient of family income. Data on household per capita income shares as well as Gini coefficient data for 1988 (as well as some of the previous years also cited in Fields) from Dominique van de Walle, "Poverty and Inequality in Latin America and the Caribbean during the 70s and 80s: An Overview of the Evidence," A View from LATHR no. 22, The World Bank, 1991.

Chile: Gini coefficients are of household incomes in the Greater Santiago region, from Berry, ibid. Household income share data are from van de Walle, ibid.

Colombia: All data from van de Walle, ibid. Gini coefficients are based on the distribution of income among earners. Income shares are for household income.

Costa Rica: All Gini coefficients are of income inequality among households. Data marked by a "(1)" are also from Fields, but from a different source. Income share data are from Berry, ibid.

Guatemala: Gini coefficients are of family income. Income distribution is from van de Walle, ibid.

Jamaica: Per capita household expenditure data are from van de Walle, ibid.

Peru: Gini coefficient of per capita household consumption. Income share is per capita household expenditure, as shown in van de Walle, ibid.

Venezuela: Household income share data are from World Bank, "Venezuela Poverty Study: From Generalized Subsidies to Targeted Programs," World Bank report no. 9114-VE, December 1990.

ANNEX III

IMF/WORLD BANK LENDING FOR STRUCTURAL ADJUSTMENT

WORLD BANK AND IMF ADJUSTMENT LENDING THROUGH JUNE 1989

Donor	Country	Board date of bank program	Loan Type	Loan #	Amount $	Date of effectiveness	Date of closure
IMF	Argentina		Stand-by Arrangement			84-12	86-05
WB	Argentina	86	Agricultural Sector Loan	2675	350.0	86-07	89-06
IMF	Argentina		Stand-by Arrangement			86-07	89-06
WB	Argentina	87	Trade Policy Loan	2815	500.0	87-08	90-06
WB	Argentina	88	Banking Sector Loan	2923	400.0	-	-
WB	Argentina	89	2nd trade Policy Loan	2996	300.0	-	-
IMF	Bolivia		Stand-by Arrangement			80-02	81-01
WB	Bolivia	80	SAL 1	1865	50.0	80-06	81-06
IMF	Bolivia		Stand-by Arrangement			86-06	87-06
WB	Bolivia	86	Import Reconstruction Loan	1703	55.0	86-10	90-06
IMF	Bolivia		Structural Adjustment Facility			86-12	88-07
WB	Bolivia	87	2nd Import Reconstruction Loan	1828	47.1	88-03	90-06
IMF	Bolivia		Enhanced Struct. Adjust. Facility			88-07	91-07
WB	Bolivia	88	Financial Sector Loan	1925	70.0	89-04	90-06
WB	Chile	86	SAL I	2625	250.0	85-11	86-10
WB	Chile	87	SAL II	2767	250.0	86-11	87-12
WB	Chile	88	SAL III	2892	250.0	87-12	89-06
WB	Colombia	85	Trade and Export Divers. Loan	2551	300.0	85-06	88-06
WB	Colombia	86	Trade and Ag Policy Loan	2677	250.0	86-06	89-12
WB	Colombia	88	Energy Sector Loan	2889	300.0	88-06	90-01
IMF	Costa Rica		Extended Fund Facility			81-06	84-06
WB	Costa Rica	83	Export Development Loan	2274	25.2	84-03	85-06
IMF	Costa Rica		Stand-by Arrangement			85-03	86-04
WB	Costa Rica	85	SAL I	2518	80.0	85-08	86-06
IMF	Costa Rica		Stand-by Arrangement			87-10	89-03
IMF	Costa Rica		Stand-by Arrangement			89-05	90-05
WB	Costa Rica	89	SAL II	3005	100.0	89-11	91-01
IMF	Ecuador		Stand-by Arrangement			85-03	86-03
WB	Ecuador	86	Agricultural Sector Loan	2626	100.0	86-02	89-06
IMF	Ecuador		Stand-by Arrangement			86-08	87-08
WB	Ecuador	88	Financial Sector Loan	2897	100.0	87-12	89-12
IMF	Ecuador		Stand-by Arrangement			88-01	89-02
IMF	Guyana		Extended Fund Facility			79-06	82-06
IMF	Guyana		Extended Fund Facility			80-07	83-07

WB	Guyana	81	SAL I	1948	22.0	81-03	82-06
WB	Honduras	89	SAL I	2990	50.0	88-11	89-12
IMF	Jamaica		Extended Fund Facility			78-06	81-06
IMF	Jamaica		Extended Fund Facility			79-06	81-06
WB	Jamaica	79	Export Development Fund Loan	1715	31.5	79-08	82-12
IMF	Jamaica		Extended Fund Facility			81-04	84-04
WB	Jamaica	81	2nd Export Development Fund Loan	1978	37.0	81-08	83-12
WB	Jamaica	82	SAL I	2105	76.2	82-03	83-03
WB	Jamaica	83	SAL II	2315	60.2	83-06	84-05
IMF	Jamaica		Stand-by Arrangement			84-06	85-06
WB	Jamaica	85	SAL III	2478	55.0	84-11	85-06
WB	Jamaica	33	3rd Export Development Fund Loan	2320	30.1	85-04	86-12
IMF	Jamaica		Stand-by Arrangement			85-07	87-05
IMF	Jamaica		Stand-by Arrangement			87-03	88-05
WB	Jamaica	87	Trade and Finance Sector loans	2848	40.0	87-06	88-12
WB	Jamaica	87	Public Enterprise Sector Loan	2849	20.0	87-06	88-12
IMF	Jamaica		Stand-by Arrangement			88-09	90-05
IMF	Mexico		Extended Fund Facility			83-01	85-12
WB	Mexico	83	Export Development Loan	2331	352.0	83-12	89-06
IMF	Mexico		Stand-by Arrangement			86-11	88-04
WB	Mexico	87	Trade Policy Loan	2745	500.0	86-11	90-11
WB	Mexico	88	2nd Trade Policy Loan	2882	500.0	88-01	88-12
WB	Mexico	88	Agricultural Sector Loan	2918	300.0	88-03	90-11
IMF	Mexico		Extended Fund Facility			89-05	92-05
WB	Mexico	89	Financial Sector Loan	3085	500.0	89-06	91-06
WB	Mexico	89	Industrial Sector Loan	3087	500.0	89-06	90-06
WB	Mexico	89	Public Enterprises Reform Loan	3086	500.0	89-07	91-06
WB	Mexico	89	Industrial Restructuring Loan	3047	250.0	89-09	94-12
WB	Mexico	88	Fertilizer Sector loan	2919	265.0	89-11	93-12
IMF	Panama		Stand-by Arrangement			83-06	85-12
WB	Panama	84	SAL I	2357	60.2	83-12	84-12
IMF	Panama		Stand-by Arrangement			85-07	87-03
WB	Panama	87	SAL II	2768	100.0	86-12	87-12
IMF	Uruguay		Stand-by Arrangement			83-04	85-04
WB	Uruguay	84	Agricultural Sector Loan	2468	60.0	84-12	86-09
IMF	Uruguay		Stand-by Arrangement			85-09	87-03
WB	Uruguay	87	SAL I	2836	80.0	87-10	88-12
WB	Uruguay	89	SAL II	3081	140.0	89-08	90-12

IMF	Venezuela		Extended Fund Facility			89-06	92-06
WB	Venezuela	89	Trade Policy Loan	3092	353.0	89-11	91-06
WB	Venezuela	89	SAL I	3091	402.0	89-11	91-06

ANNEX IV

DEFINITIONS OF ADJUSTMENT LENDING

DEFINITIONS OF ADJUSTMENT LENDING

Source	Criteria
WORLD BANK APPROACH	
RAL I (1988)	**AL** = all countries that had received a structural adjustment loan (SAL) by 1988 **IAL** = countries that received 3 or more SALs before 1986 **pre-1985 AL** = countries that had received their first SAL before 1985 **NAL** = countries that had not received a SAL by 1988
RAL II (1990)	**EIAL** = countries that had received at least 2 SALs or 3 Adjustment Operations, starting before 1986 **OAL** = other countries that received adjustment lending **NAL** = countries that did not receive adjustment lending in the period 1980-1988; within NAL there is NA for countries that did not adjust although it was necessary for them to do so, and NN for other NAL countries.
Kakwani, Makonnen and van der Gaag (1990)	**IAL** = countries that received 3 or more SALs or had completed 2 SALs [by 1988]. Lending started before 1986 **pre-1986** = countries that received fewer than 3 SALs but were included in the program before 1986 **post-1985** = Countries that received adjustment loans after 1985 (1986-1988) **NAL+** = non-adjusting countries that had an increase in average annual per capita GDP growth during 1980-1987 **NAL-** = non-adjusting countries that had a decrease in average annual per capita GDP growth during 1980-1987
WILLIAMSON APPROACH (1991)	**Policy Reformers** = countries that have implemented major **reform programs** (adhering to the "Washington consensus" view laid out in the text) before 1988 **Partial Policy Reformers** = countries that have implemented policies for stabilization, but not liberalization before 1988 **Recent Policy Reformers** = countries that have implemented major reform programs on or after 1988 **Non-Reformers** = countries that have undertaken partial or half-hearted reforms

CATEGORIZATION OF LATIN AMERICAN COUNTRIES

Source: Category:	Country			
World Bank Approach	IAL	pre-1986	post-1985	NAL
	Bolivia ('80) BRAZIL ('83) Chile* ('85) Colombia ('85) Costa Rica ('84) Jamaica ('82) Mexico ('83)	Ecuador ('86) GUYANA ('81) Panama ('84) Uruguay ('84)	Argen. ('86) Honduras('88)	Dominican Repub.+ EL SALV.- GUATEM.- Haiti- Nicarag.- Paraguay+ Peru+ TRIN.& TOBAGO- VENEZ.-
+/- = NAL+/NAL-				
Williamson Approach	Policy Reformers	Partial Reformers	Recent Reformers	Non-Reformers
	Bolivia ('85) Chile ('83) Costa Rica ('82) Jamaica ('84) TRINIDAD & TOBAGO ('87) Uruguay ('85)	Colombia ('84) GUAT. ('86) Ecuador ('86)	Argen.('89) EL SALV.('89) GUYANA ('88) MEXICO('88) Paraguay('89) VENEZ. ('89)	BRAZIL Dominican Republic Honduras Nicaragua Peru

N.B. Countries whose classification differs significantly between the World Bank and the Williamson approaches are listed in all-caps.

Numbers in parentheses mark the year in which reform efforts are judged to have started. These dates form the basis for our analysis of the comparative performance of "adjusting" and "non-adjusting" countries.

For the World Bank Approach, we date the start of reforms to the first World Bank adjustment loan (SAL or SECAL). We note that Ecuador received its first SAL in 1986. We have found no reference to an earlier SECAL, and are unsure of why it is listed as a "pre-1986" adjuster. El Salvador and Venezuela began ambitious reform programs in 1989. They are listed as non-reformers under the World Bank Approach because of that approach's 1988 cut-off date.

For the Williamson Approach, we use as the start date the date of each country's most recent sustained reform effort — whether or not the program is supported by the World Bank/IMF. For our charts, we include the "Recent Reformers" with the "Non-Reformers" since their reform programs are so new that the countries are effectively non-reformers in the time frame of this study.

ANNEX V

STATISTICAL TABLES

REAL PER CAPITA PRIVATE CONSUMPTION

	1980	1981	1982	1983	1984	1985	1986	1987	1988	Average 1980-1985	Average 1985-1988	Average Percent Change 1980-1985	Average Percent Change 1985-1988
ARGENTINA	100	94.54	89.84	85.11						92.37		-5.23%	
BOLIVIA	100	97.77	90.59	81.28	72.92	66.95	68.54	71.37	73.66	84.92	70.13	-7.66%	3.24%
BRAZIL	100	93.07	97.78	90.87	94.08	97.62	102.00	95.37	91.46	95.57	96.61	-0.33%	-2.04%
CHILE	100	109.25	93.26	88.58	92.23	88.25	91.20	92.94	94.86	95.26	91.81	-2.12%	2.44%
COLOMBIA	100	103.42	102.81	101.10	100.38	99.21	97.49	102.26	103.86	101.15	100.71	-0.14%	1.57%
COSTA RICA	100	88.93	77.54	79.73	87.36	83.98	79.00	84.11	86.54	86.26	83.41	-3.07%	1.14%
DOMINICAN REP	100	93.41	97.69	93.90	84.20	91.99	91.67	98.28	93.87	93.53	93.95	-1.39%	0.79%
ECUADOR	100	104.33	104.97	103.53	102.10	104.15	108.31	104.71	110.40	103.19	106.89	0.84%	2.04%
EL SALVADOR	100	96.31	89.38	89.93	92.26	96.25	89.36	95.40	95.03	94.02	94.01	-0.67%	-0.26%
GUATEMALA	100	101.26	93.79	91.40	89.36	89.35	82.18	86.26	86.37	94.19	86.04	-2.18%	-0.98%
HAITI	100	102.27	94.16	93.77	91.62	89.39	88.05	86.87		95.20	88.10	-2.16%	-1.42%
HONDURAS	100	101.70	98.69	95.50	93.24	92.05	89.90	93.24	96.39	96.86	92.89	-1.63%	1.59%
JAMAICA	100	106.47	104.86	106.83	100.16	97.83	90.75	98.39	93.96	102.69	95.23	-0.35%	-1.11%
MEXICO	100	101.60	99.93	91.11	92.83	103.08	98.92			98.09	101.00	0.81%	-4.04%
NICARAGUA	100	89.93	79.11	67.04	62.48	50.30	55.78	49.80	68.98	74.81	56.21	-12.73%	12.89%
PANAMA	100	98.19	100.97	103.80	112.75	115.07	106.79	106.94	89.89	105.13	104.67	2.90%	-7.67%
PARAGUAY	100	105.26	106.01	104.43	102.12	102.62	101.64	99.39	106.50	103.40	102.53	0.55%	1.33%
PERU	100	112.43	109.72	102.83	107.29	106.26	119.79	127.88	122.51	106.42	119.11	1.42%	5.10%
TRINIDAD&TOBAGO	100	112.58	132.45	126.30	105.07	97.66	100.60	87.94		112.34	95.40	0.35%	-4.79%
URUGUAY	100	98.80	87.01	83.07	80.14	80.75	81.84			88.29	81.29	-4.09%	1.35%
VENEZUELA	100	102.27	111.02	99.59	95.38	94.23	108.95	103.34	113.56	100.42	105.02	-0.98%	6.78%

Source: International Monetary Fund, International Financial Statistics

PER CAPITA DAILY CALORIE INTAKE /1

	1980	1981	1982	1983	1985	1986 /1	1987	1988	avg (1980-1985)	avg (1985-1988)
Argentina	3,250	3,405	3,363	3,159	3,200	3,210	3,185	3,116	3275	3178
Bolivia	2,133	2,179	2,158	1,954	2,243	2,143	2,216	2,242	2133	2211
Brazil	2,598	2,529	2,623	2,533	2,597	2,656	2,644	2,665	2576	2641
Chile	2,656	2,790	2,669	2,574	2,561	2,579	2,611	2,598	2650	2587
Colombia	2,430	2,521	2,551	2,546	2,456	2,543	2,445	2,469	2501	2478
Costa Rica	2,586	2,686	2,635	2,556	2,750	2,803	2,771	2,771	2643	2774
Dominican Republic	2,228	2,192	2,179	2,368	2,298	2,477	2,342	2,426	2253	2386
Ecuador	2,213	2,100	2,072	2,043	2,265	2,058	2,337	2,379	2139	2260
El Salvador	2,208	2,146	2,060	2,060	2,365	2,160	2,359	2,381	2168	2316
Guatemala	2,185	2,045	2,115	2,071	2,286	2,307	2,351	2,368	2140	2328
Haiti	2,002	1,879	1,963	1,887	2,286	1,902	2,150	2,039	1991	2094
Honduras	2,130	2,171	2,136	2,135	2,084	2,068	2,081	2,112	2135	2086
Jamaica	2,521	2,643	2,489	2,493	2,509	2,590	2,599	2,597	2531	2574
Mexico	3,062	2,805	2,976	2,934	3,155	3,132	3,151	3,166	2986	3151
Nicaragua	2,293	2,184	2,268	2,268	2,349	2,495	2,415	2,420	2272	2420
Panama	2,329	2,271	2,498	2,275	2,463	2,446	2,487	2,463	2367	2465
Paraguay	2,619	3,005	2,820	2,811	2,584	2,853	2,548	2,592	2768	2644
Peru	2,190	2,183	2,114	1,997	2,150	2,246	2,348	2,295	2127	2260
Trinidad & Tobago	2,899	2,694	3,083	3,120	2,935	3,082	2,910	2,859	2946	2947
Uruguay	2,791	2,912	2,754	2,647	2,771	2,648	2,816	2,838	2775	2768
Venezuela	2,640	2,642	2,557	2,451	2,523	2,494	2,538	2,550	2563	2526

\1 No data for 1984. 1986 data are from FAO, others USDA.

REAL WAGE INDICES
(1980=100)

	1980	1981	1982	1983	1984	1985	1986	1987
Argentina	100	91	80	97	106	87	82	72
Bolivia	100	80	56	42	36	56	34	42
Brazil	100	109	122	113	105	113	122	106
Chile	100	114	133	95	89	76	73	71
Costa Rica	100	85	63	77		92	95	

Government Expenditures as a Percent of GDP
(percent)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	Average 1980-1985	Average 1985-1988	Average Percent Change 1980-1985	Average Percent Change 1985-1988
ARGENTINA	19.1	22.4	20.7	21.8	16.8	23.7	21.5			20.7	22.6	2.2%	
BOLIVIA	14.4	13.8	20.7	14.4	33.0		12.2	12.0	14.5	19.3	12.9	10.3%	7.7%
BRAZIL	19.0	19.5	20.7	20.9	20.2	24.9	27.5	24.1	29.5	20.9	26.5	4.9%	4.6%
CHILE	28.0	29.4	34.1	31.9	32.6	31.3	29.9	29.3	29.9	31.2	30.1	1.9%	-1.5%
COLUMBIA	13.4	14.0	16.0	15.2	15.2	14.9	13.3	13.7		14.8	14.0	2.0%	-4.6%
COSTA RIC	25.0	21.0	18.4	24.1	22.8	21.8	26.4	27.2	24.5	22.2	25.0	-4.0%	3.1%
DOMINICAN	16.9	16.2	13.5	14.0					18.9	15.1	18.9	-7.0%	
ECUADOR	14.2	16.1	15.5	13.2	13.1	15.1	15.8	15.5	13.3	14.5	14.9	0.6%	-4.7%
EL SALVAD	17.2	18.7	19.2	16.3	17.9	16.7	12.5	12.4	11.1	18.1	13.7	1.3%	-20.7%
GUATEMALA	14.3	16.1	14.4	12.9	10.7	9.4	9.5	11.2	12.0	13.0	10.5	-9.3%	7.5%
HAITI	17.7	19.7	18.2							18.5		1.0%	
HONDURAS													
JAMAICA	41.5	39.9	38.6	40.7	33.8					38.9		-5.7%	
MEXICO	17.5	20.1	30.0	26.1	23.5	25.8	28.7	30.9		23.8	28.5	5.7%	8.6%
NICARAGUA	30.4	39.3	49.4	67.7	63.9	59.6	52.3		46.9	51.7	52.9	11.4%	
PANAMA	32.7	34.1	37.7	34.6	36.2	32.2	33.5	33.2	28.9	34.6	32.0	-0.7%	-4.0%
PARAGUAY	10.1	10.7	11.8	10.7	10.8	9.1	8.1	9.0	8.3	10.5	8.6	-2.7%	-3.4%
PERU	19.4	18.3	17.5	19.4	18.4	17.4	16.1	14.6	12.0	18.4	15.0	-2.4%	-13.4%
TRINADAD	30.4	30.0	49.4	46.9	44.0	42.5	38.1	38.5		40.5	39.7	4.5%	-5.2%
URUGUAY	21.8	24.9	29.6	25.0	23.6	22.4	22.7	23.2	24.8	24.6	23.3	-0.3%	3.3%
VENEZUELA	22.0	29.6	29.0	25.3	19.7	20.3	21.5			24.3	20.9	-3.2%	

Source: International Monetary Fund, International Finance Statistics

Interest as a Share of Total Expenditures
(percent)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	Average 1980-1985	Average 1985-1989	Averge Percent Change 1980-1985	Averge Percent Change 1985-1989
ARGENTINA	8.7%	14.6%	21.7%	11.4%	13.6%	11.5%	7.8%	8.1%	7.4%		13.58%	8.69%	14.4%	-12.1%
BOLIVIA	10.8%	6.5%	58.7%		1.4%		5.0%	9.2%	6.5%	6.5%	19.38%	6.83%		
BRAZIL	9.0%	9.7%	14.5%	20.5%	32.5%	43.6%	43.4%	38.8%	51.9%		21.64%	44.44%	38.3%	7.5%
CHILE	2.8%	1.4%	1.6%	3.9%	4.3%	6.3%	5.7%	7.9%	9.7%		3.38%	7.39%	33.9%	17.2%
COLOMBIA	4.2%	4.7%	5.4%	5.0%	4.1%	7.3%	8.3%	10.4%			5.11%	8.68%	15.9%	19.5%
COSTA RICA	8.7%	7.6%	8.9%	8.1%	9.5%	8.5%	9.0%	8.4%	10.0%	9.6%	8.53%	9.10%	0.5%	3.7%
DOMINICAN REP.	5.8%	6.3%	6.4%	8.1%					0.4%		6.66%	0.45%	12.2%	
ECUADOR	9.4%	7.8%									8.60%			
EL SALVADOR	2.9%	6.1%	9.3%	8.4%	9.1%	6.6%	10.5%	8.4%	8.1%	8.7%	7.08%	8.45%	26.1%	10.6%
GUATEMALA	3.9%	4.1%	5.8%	6.7%	8.2%	7.3%	13.8%	12.4%	13.1%	11.8%	5.99%	11.66%	14.9%	18.4%
MEXICO	10.0%	14.3%	14.7%	35.9%	33.5%	37.0%	50.8%	59.6%	59.0%	50.3%	24.24%	51.34%	38.6%	9.7%
NICARAGUA	7.7%	9.7%	11.0%	5.5%	3.3%	3.9%	2.1%		0.2%		6.85%	2.04%	-6.4%	
PANAMA	18.1%	20.1%	20.4%	19.7%	18.9%	20.4%	21.0%	18.2%	8.5%		19.60%	17.03%	2.7%	-21.3%
PARAGUAY	3.2%	2.9%	2.9%	3.3%	4.3%	5.4%	6.5%	8.9%	8.4%		3.67%	7.31%	12.0%	17.2%
PERU	18.4%	19.7%	18.3%	23.2%	24.2%	25.2%	14.9%	11.9%	18.8%	10.7%	21.48%	16.30%	7.0%	-11.5%
TRINIDAD & TOBAGO	2.8%	3.7%	1.7%	2.2%	3.2%	3.6%	6.7%	7.3%	11.1%	15.9%	2.87%	8.93%	12.9%	47.6%
URUGUAY	1.6%	1.3%	3.4%	4.9%	8.4%	9.4%	8.1%	6.7%	6.4%		4.86%	7.65%	52.7%	-11.7%
VENEZUELA	7.8%	6.9%	7.5%	8.3%	12.1%	11.1%	10.9%				8.96%	10.99%	9.2%	

Source: International Monetary Fund, International Financial Statistics

Education Expenditures as a Percent of Total Expenditures

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Argentina	10.2%	6.0%	9.3%	13.1%	12.0%	10.9%	7.4%	8.5%	9.6%	8.3%	8.8%	7.3%	6.2%	7.4%	9.5%	6.0%	6.0%	6.9%	9.3%		
Bolivia			30.5%	26.1%	25.5%	23.7%	25.9%	25.7%	28.0%	30.6%	26.6%	24.4%	13.6%		11.6%		18.4%	24.8%	20.6%	20.3%	
Brazil	6.6%	6.3%	6.9%	7.6%	7.2%	6.8%	5.8%	6.1%	5.4%			2.0%	4.7%	3.6%	3.1%	3.0%	3.3%	4.8%	4.2%		
Chile			15.0%	13.9%	12.5%	12.1%	13.7%	14.6%	13.9%	14.7%	14.5%	14.7%	14.7%	13.7%	13.1%	13.2%	12.9%	12.0%	10.1%		
Colombia													19.1%	20.2%	19.6%						
Costa Rica					22.1%	22.0%	22.3%	24.2%	20.7%	20.9%	24.6%	23.7%	22.6%	19.4%	18.4%	18.8%	16.2%	22.1%	18.6%	17.0%	
Dominican Republic				14.2%	11.6%	10.3%	12.0%	12.0%	12.8%	13.7%	12.6%	13.9%	15.9%	15.3%					9.3%		
Ecuador				27.5%	23.1%	27.1%	23.2%	25.7%	27.0%	28.4%	34.7%	28.0%	26.5%	29.0%	27.7%	24.5%	25.1%	24.9%	23.4%		
El Salvador	22.3%	24.6%	21.4%	25.6%	26.6%	23.8%	21.1%	21.2%	20.7%	19.6%	19.8%	17.8%	16.9%	16.6%	15.5%	14.5%	17.5%	17.1%	17.1%	17.6%	
Guatemala					17.4%	16.1%	16.2%	12.7%	13.0%	12.6%		10.3%	3.4%	11.0%	12.8%	12.2%	14.6%	19.5%	18.6%	19.5%	
Honduras			22.3%	22.5%	22.6%	21.3%	20.7%	17.5%	15.3%	17.8%											
Jamaica						19.3%	19.8%	18.4%													
Mexico			16.6%	16.3%	15.8%	18.2%	18.2%	19.9%	19.7%	18.7%	17.9%	18.2%	13.1%	10.9%	12.4%	11.5%	9.1%	8.3%	9.1%	12.3%	13.9%
Nicaragua	17.6%	16.0%	16.6%	17.6%	14.5%	14.7%	16.9%	13.6%	13.1%	12.3%	11.6%										
Panama				20.7%	19.3%	16.9%	16.3%	17.7%	16.9%	13.5%	13.4%	12.8%	11.0%	14.1%	14.5%	16.0%	15.1%	15.6%	19.1%		
Paraguay			12.1%	14.1%	13.6%	13.3%	12.0%	13.5%	13.4%	12.6%	12.9%	11.8%	12.0%	13.2%	10.7%	10.9%	12.1%	11.4%			
Peru											15.6%	17.4%	16.4%	15.2%	15.9%	16.2%	21.4%	15.6%			
Trinidad and Tobago							16.8%	16.8%	12.4%	11.7%	11.8%	11.5%									
Uruguay			9.5%	12.2%	12.3%	11.5%	11.3%	10.9%	8.0%	9.4%	8.8%	7.7%	7.7%	6.5%	5.9%	6.4%	7.1%	7.8%	7.9%		
Venezuela	16.5%	16.4%	17.3%	17.6%	15.3%	16.5%	15.8%	15.1%	14.9%	18.1%	19.9%	16.0%	15.7%	19.8%	19.1%	19.7%	19.6%				

Source: International Monetary Fund, International Financial Statistics

Real Per Cap Education Expenditures, Indexed

	1980	1981	1982	1983	1984	1985	1986	1987	1988	Average 80-85	Average 85-88	Average % Change 80-85	Average % Change 85-88
Argentina	111.9	100	74.6	93.7	93.7	79.9	75.5			92.3	77.7	-25.2%	
Bolivia	116.8	100	79.0		91.8		42.8	56.2	56.6	96.9	51.9	-19.2%	32.1%
Brazil		100	253.8	177.6	155.5	194.3	255.6	325.4	345.0	176.2	280.1	136.3%	64.9%
Chile	90.3	100	98.0	83.3	84.5	82.6	80.3	75.9	68.9	89.8	76.9	-7.1%	-17.4%
Costa Rica	127.8	100	75.8	83.3	81.4	77.7	78.6	113.3	86.7	91.0	89.1	-42.9%	21.9%
Dominican Rep.	93.4	100	94.7	92.2	85.5	72.7	73.4	70.8	73.8	89.8	72.7	-23.1%	1.7%
Ecuador	108.5	100	89.5	79.1	75.9	78.1	84.0	74.9	65.3	88.5	75.6	-31.1%	-16.1%
El Salvador	113.4	100	90.4	77.6	77.9	76.6	60.7	59.6	53.0	89.3	62.5	-36.8%	-33.7%
Guatemala		100	27.7	76.4	72.1	58.2	68.7	108.1	111.7	66.9	86.7	78.6%	78.6%
Mexico	83.2	100	105.0	70.6	72.7	75.3	62.2			84.4	68.8	-1.1%	
Panama	98.3	100	98.4	113.5	119.1	119.5	118.6	122.4	107.1	108.1	116.9	20.7%	-10.0%
Paraguay	98.7	100	107.8	100.6	82.5	71.6	68.4	72.7		93.5	70.9	-28.7%	1.8%
Peru	90.7	100	87.3	76.1	77.4	73.5	96.8	67.4		84.2	79.2	-18.6%	1.3%
Uruguay	99.6	100	107.0	71.9	59.7	61.7	74.0	87.0	94.0	83.3	79.2	-38.9%	45.5%
Venezuela	95.1	100	93.4	91.3	68.1	70.7	77.0			86.4	73.9	-25.2%	

Percent of Health Expenditure to Total Expenditure

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Argentina	3.8%	3.7%	3.3%	3.7%	2.5%	2.6%	4.1%	2.7%	2.2%	1.7%	1.7%	1.4%	1.1%	1.3%	1.8%	1.3%	1.9%	2.1%	2.0%		
Bolivia			8.5%	7.8%	8.9%	8.4%	8.0%	8.0%	8.3%	8.6%	12.1%	7.2%	2.0%		1.4%		1.9%	9.0%	7.7%	6.5%	
Brazil	7.1%	6.6%	6.5%	6.7%	6.9%	6.5%	7.4%	7.8%	7.7%	0.0%	8.0%	8.0%	7.6%	7.2%	7.4%	6.4%	6.1%	9.5%	6.1%		
Chile			10.0%	8.6%	7.4%	7.0%	6.9%	6.9%	6.9%	6.5%	7.4%	6.5%	6.8%	6.0%	6.2%	6.1%	6.0%	6.3%	5.9%		
Colombia													3.9%	4.3%	4.5%						
Costa Rica				3.3%	4.3%	4.5%	5.0%	3.3%	25.4%	25.0%	28.7%	29.7%	32.8%	22.5%	24.5%	22.9%	19.3%	20.2%	24.7%	27.2%	
Dominican Republic				11.7%	10.9%	6.8%	8.9%	9.0%	9.4%	9.1%	9.3%	9.7%	10.7%	10.5%							
Ecuador				4.5%	7.1%	7.3%	7.2%	6.8%	8.2%	8.4%	7.8%	7.8%	7.7%	8.2%	8.3%	7.3%	7.3%	11.1%	9.8%		
El Salvador	10.9%	11.6%	10.9%	10.4%	10.3%	8.2%	9.2%	9.8%	8.9%	8.7%	9.0%	8.4%	7.1%	8.4%	8.1%	5.9%	7.5%	7.4%	7.1%	7.4%	
Guatemala					8.4%	8.6%	8.3%	7.6%	7.1%	7.6%		7.5%	5.0%	5.1%	6.6%	5.7%	6.7%	8.4%	9.9%	9.9%	
Honduras			10.2%	11.7%	15.7%	12.8%	14.7%	8.5%	8.5%	8.0%											
Jamaica											6.7%	7.1%	7.6%	7.0%	6.8%	6.9%	6.5%				
Mexico			5.1%	4.9%	3.8%	4.2%	4.1%	4.4%	4.0%	3.9%	2.4%	1.9%	1.3%	1.2%	1.5%	1.4%	1.3%	1.2%	1.3%	1.7%	1.9
Nicaragua	5.4%	6.4%	4.0%	5.7%	6.2%	8.4%	11.8%	9.6%	10.0%	10.3%	14.6%										
Panama				15.1%	13.8%	14.5%	13.2%	14.5%	15.1%	12.1%	12.7%	13.2%	13.1%	15.9%	16.0%	15.8%	15.1%	16.7%	19.8%		
Paraguay			3.5%	3.3%	3.0%	2.8%	2.8%	2.7%	2.6%	3.7%	5.6%	4.5%	3.7%	4.5%	5.8%	5.4%	3.0%	3.0%			
Peru											5.6%	6.0%	5.2%	5.4%	5.8%	6.0%	6.1%	5.5%			
Trinidad & Tobago							7.0%	7.8%	6.9%	6.4%	5.9%	6.1%									
Uruguay			1.6%	4.8%	5.7%	3.9%	3.9%	3.8%	5.0%	4.7%	4.9%	3.8%	3.3%	3.4%	3.7%	4.1%	4.8%	4.3%	4.5%		
Venezuela	11.5%	11.1%	11.0%	10.8%	8.8%	9.1%	9.1%	8.0%	7.8%	8.8%	8.8%	7.6%	7.6%	8.7%	8.7%	9.0%	10.0%				

Source: International Monetary Fund, International Financial Statistics

Indexed Real Per Capita Health Expenditures

	1980	1981	1982	1983	1984	1985	1986	1987	1988
Argentina	171.0	145.3	100	132.6	138.9	131.6	183.9		
Bolivia	465.1	258.7	100		100.6		38.6	179.9	184.7
Brazil	102.3	98.5	100	87.5	90.3	103.5	114.1	159.4	122.7
Chile	101.5	98.2	100	79.9	88.6	84.2	82.4	88.4	88.6
Colombia			100	105.3	111.5				
Costa Rica	135.9	114.3	100	88.0	98.7	86.4	85.3	94.0	104.6
Dominican Rep.	109.0	110.0	100	100.2	91.7	80.3	82.0	106.6	
Ecuador	94.3	107.1	100	85.9	87.1	89.9	93.6	128.2	105.0
El Salvador	134.1	122.9	100	102.6	106.5	81.1	68.2	67.3	58.0
Guatemala		180.3	100	86.6	91.0	67.2	76.9	113.8	145.7
Mexico	105.0	97.3	100	74.2	84.7	85.8	82.1		
Panama	79.6	88.1	100	108.7	112.2	100.6	101.3	111.5	94.6
Paraguay	83.5	116.5	100	104.4	137.1	108.2	51.8	57.6	
Peru	117.9	124.8	100	98.1	101.5	99.0	100.7	86.1	
Uruguay	120.6	107.3	100	81.8	81.6	85.2	108.5	105.1	116.9
Venezuela	93.3	104.6	100	88.6	68.5	71.6	87.4		

Distribution of Health Benefits by Income Group

Country	Year	Bottom 40% of Population	Top 20% of Popula
Argentina	1980	68.6	4.3
Brazil	1986	30.0	39.0
Chile	1985	63.7	5.2
Costa Rica	1986	51.2	10.8
Dominican Rep.	1980	71.9	11.8
Dominican Rep.	1984	57.4	9.0
Dominican Rep.	1989	57.3	6.7

Share of Primary Education in Total Education Expenditures

	1980	1986
Argentina	46.2	10.1 **
Bolivia	64 *	64 **
Brazil	18.4	49
Chile	45.7	51.1
Costa Rica	33	37
Dominican Rep.	43.4	53.6 ***
Jamaica	38	35 ***
Venezuela	28.3	43.5

*, 1981. **, 1985. ***, 1987.

Distribution of Primary Education Benefits by Income Group

Country	Year	Bottom 40% of Population	Top 20% of Population
Argentina	1980	57.0	11.0
Brazil	1980	15.0	5.0
Chile	1985	59.0	9.0
Costa Rica	1986	57.0	8.0
Dominican Rep.	1980	31.5	20.6
Dominican Rep.	1989	59.0	4.0
Venezuela	ND	44.8	16.0

Distribution of Higher Education Benefits by Income group

Country	Year	Bottom 40% of Population	Top 20% of Population
Argentina	1980	17	38
Brazil	1986	na	48
Chile	1980	12	54
Chile	1985	17	52
Costa Rica	1980	17	42
Costa Rica	1982	17	42
Costa Rica	1986	15	43
Dominican Rep.	1980	2	76
Dominican Rep.	1989	32	33
Venezuela	ND	0	92
Venezuela	ND	23	34

Repetition Rates in Primary Education

	1980	1981	1982	1984	1985	1986
Argentina		11.2			8.1	
Bolivia		10.8			11.1	
Brazil		18.1			18.8	
Brazil 1	20.2				19.7	
Chile		16.5			14.5	
Costa Rica 2	7.9		6.8	11.5	10.6	9.8
Dominican Rep. 1	18				12.8	
Ecuador 3						
El Salvador 1		8.8		8.4		
Jamaica 1	3.9					3.9
Peru 4					28.5	
Venezuela		16.5			22.1	
Venezuela 5	9.8				9.4	

Sources: Grosh; 1 Grosh, UNESCO; 2, 3, 4, 5, individual country studies.

Share of Higher Education in Total Education Expenditures

	1980	1986
Argentina	15.7	25.1 **
Bolivia	10 *	18 **
Brazil	42	32
Chile	33.6	23.8
Costa Rica	33.7	40.3
Dominican Rep.	22.2	19.9 ***
Jamaica	19	24
Venezuela	NA	35.5 ***

*, 1981. **, 1985. ***, 1987.

Expenditures on Teaching Materials as a Percent of Current Expenditures

	1980	1981	1982	1983	1984	1985
Argentina	7.9		5.3			
Bolivia	0	0.8	0			
Chile	5.1	6				
Colombia				1		
Costa Rica	0.2		0.5	0.4	0.5	0
Dominican Rep.	0		0	0	0	0
Jamaica	2.2			3.8	3.1	2.6
Venezuela	1	0.8	1.1	1.1	4.5	

INFANT MORTALITY RATES

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
ARGENTINA	52	50	49	47	46	44	43	41	40	39	38	37	36	35	34	34	33	32	31	30
BOLIVIA	153	152	151	148	146	143	141	138	135	132	130	127	124	121	118	116	113	110	108	106
BRAZIL	95	93	91	89	86	84	81	79	77	76	74	73	71	69	68	66	65	63	62	60
CHILE	80	75	70	65	60	56	51	46	41	37	32	28	23	22	22	21	21	20	20	19
COLOMBIA	77	75	73	70	67	65	62	59	55	52	48	45	41	41	41	40	40	40	39	39
COSTA RICA	62	57	54	45	38	38	33	28	24	23	20	18	19	19	19	19	18	18	18	17
DOMINICAN REPUBLIC	98	96	94	92	90	88	86	84	82	80	79	77	75	73	71	69	67	65	63	62
ECUADOR	100	97	95	92	90	87	85	82	80	77	75	72	70	69	67	66	64	63	62	61
EL SALVADOR	103	100	97	94	91	88	85	82	80	77	75	72	70	68	66	63	61	59	57	56
GUATEMALA	100	98	95	92	90	87	85	82	80	77	75	72	70	68	66	63	61	59	57	56
GUYANA	80	80	79	77	74	72	69	67	66	65	65	64	63	62	60	59	57	56	55	53
HAITI	162	158	155	152	149	145	142	139	137	135	132	130	128	126	124	121	119	117	116	115
HONDURAS	115	113	110	107	104	101	98	95	92	90	87	85	82	79	77	74	72	69	98	66
JAMAICA	40	38	36	34	32	29	27	25	23	21	18	16	14	13	13	12	12	11	11	10
MEXICO	73	71	69	67	65	64	62	60	59	57	56	54	53	52	51	49	48	47	46	45
NICARAGUA	106	103	100	99	97	96	94	93	90	86	83	79	76	73	70	68	65	62	60	58
PANAMA	47	45	43	41	39	36	34	32	31	30	28	27	26	25	25	24	24	23	22	22
PARAGUAY	59	56	53	52	51	51	50	49	48	47	47	46	45	44	44	43	43	42	41	41
PERU	116	113	110	109	108	107	106	105	104	103	101	100	99	97	95	92	90	88	86	84
TRINADAD & TOBAGO	34	32	30	29	28	28	27	26	24	23	21	20	18	18	17	17	16	16	16	15
URUGUAY	46	46	46	45	44	44	43	42	40	38	37	35	33	31	29	28	26	24	23	22
VENEZUELA	53	51	49	48	47	45	44	43	42	41	41	40	39	38	38	37	37	36	35	35

SOURCE: World Tables 1991

87

VACCINATION COVERAGE

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	Average (1980-85)	Average (1985-89)	Average Percent Change (1980-85)	Average Percent Change (1985-89)
Argentina														
BCG	62	63	64	61	78	89	89	91		93	70	91	8.1%	4.6%
DPT3	41	46	61	57	66	63	67	75		74	56	70	9.9%	3.1%
OPV3	91	38	94	73	64	69	85			81	72	78	12.5%	15.5%
Measles	58	73	95	69	66	67	87	81		78	71	78	5.2%	5.2%
AVG	63	55	79	65	69	72	82	82		82	67	79	4.7%	4.6%
Bolivia														
BCG	31	30	31	27	23	24	15	31		70	28	35	-4.7%	49.8%
DPT3	11	13	12	10	6	33	29	24		40	14	32	80.8%	121.8%
OPV3	14	15	15	10	57	30	31	28		50	24	35	79.3%	6.2%
Measles	13	17	5	13	20	21	17	33		70	15	35	35.8%	48.0%
AVG	17	19	16	15	27	27	23	29		58	20	34	13.3%	27.9%
Brazil														
BCG	56	62	57	99	75	58	56	68		66	68	62	5.9%	-1.9%
DPT /*	40	47	51	61	67	62	52	57		51	55	56	9.6%	-6.1%
OPV /*	99	99	99	99	89	86	89	90		96	95	90	-2.7%	2.0%
Measles	56	73	68	67	80	63	55	55		55	68	57	4.0%	-8.5%
AVG	63	70	69	82	78	67	63	68		67	71	66	2.1%	-3.4%
Chile														
BCG	96	100	98	87	96	92	99	97		98	95	97	-0.6%	0.6%
DPT3	9[illegible]	97	100	83	94	91	92	93		94	93	93	-0.1%	0.0%
OPV3	77	96	100	94	96	89	86	95		94	92	91	3.5%	-0.3%
Measles	87	93	95	92	100	92	91	92		89	93	91	1.3%	-2.8%
AVG	89	97	98	89	97	91	92	94		94	93	93	0.8%	-0.7%
Colombia														
BCG	45	57	65	79	62		69	80		90	62	80	10.2%	14.2%
DPT3	16	20	26	42	54	61	57	58		75	37	63	31.6%	9.4%
OPV3	16	22	27	44	60	62	65	82		92	39	75	32.6%	11.6%
Measles	13	26	27	43	49	53	56	59		73	35	60	37.0%	10.7%
AVG	23	31	36	52	56	59	62	70		83	43	68	22.2%	10.2%
Costa Rica														
BCG	80	81	81	81	85	85	61	81			82	76	1.2%	1.5%
DPT3	86	83	81	84	71	75	94	91		88	80	87	-2.4%	6.1%
OPV3	86	85	78	84	81	75	94	89		91	82	87	-2.5%	3.7%
Measles	60	71	69	82	76	81	55	90		88	73	79	6.7%	9.0%
AVG	78	80	77	83	78	79	76	88		89	79	83	0.4%	3.5%
Dom. Republic														
BCG	12	34	52	41	43	51				40	39	46	47.7%	18.6%
DPT3	35	27	28	24	20	18		80		46	25	48	-12.0%	-28.3%
OPV3	46	42	37	22	99	11		79		75	43	55	40.0%	-47.0%
Measles	29	17	24	23	19	24		71		31	23	42	0.9%	-15.0%
AVG	31	30	35	28	45	26		77		48	32	50	3.2%	-40.0%
Ecuador														
BCG	75	82	99	84	99	99	93	85		91	90	92	6.6%	-1.9%
													44.7%	4.2%
DPT3	10	26	35	31	48	41	43	51		55	32	48	19.8%	15.2%
OPV3	19	19	36	32	36	39	43	51		63	30	49	21.4%	1.6%
Measles	24	31	44	34	54	54	49	46		56	40	51	14.5%	3.0%
AVG	32	40	54	45	59	58	57	58		66	48	60		

VACCINATION COVERAGE

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	Average (1980-85)	Average (1985-89)	Average Percent Change (1980-85)	Average Percent Change (1985-89)
El Salvador														
BCG	56	47	46	48	47	58	51	55		62	49	55	-1.9%	7.2%
DPT /*	43	42	42	21	21	54	66	53		64	37	59	21.0%	45.1%
OPV3	42	38	42	20	44	54	70	57		72	40	63	18.3%	15.0%
Measles	45	44	43	46	41	71	51	48		73	48	61	13.0%	22.8%
AVG	47	43	43	34	38	57	60	53		68	44	59	6.8%	17.6%
Guatemala														
BCG	36	29	28	24	33	30	7	34			30	24	-1.8%	100.0%
DPT /*	43	42	45	43	48	21	33	16		51	40	30	-8.8%	42.0%
OPV3	42	42	45	43	47	21	36	18		57	40	33	-8.7%	45.7%
Measles	23	8	12	9	24	23	47	24		52	17	37	24.5%	42.0%
AVG	36	30	33	30	38	24	31	23		53	32	33	-5.4%	24.7%
Guyana														
BCG	68		78	73	49	98	76	69		76	73	80	20.2%	19.6%
DPT3	35	45	53	56	70	75	64	67		77	56	71	16.8%	3.0%
OPV3	42	37	73	59	41	77	67	77		79	55	75	24.7%	23.1%
Measles			68	44	56	40	42	52		69	52	51	-12.2%	8.2%
AVG	48	41	68	58	54	73	62	66		75	57	69	12.7%	10.0%
Haiti														
BCG	19	60	58	62	71	57		45		40	55	47	42.8%	-15.4%
DPT3	3	14	13	9	14	19		28		50	12	32	84.0%	57.1%
OPV3	8	3	7	6	12	19		28		50	9	32	43.0%	68.5%
Measles					8	21		23		31	15	25	162.5%	98.6%
AVG	10	26	26	26	26	29		31		43	24	34	35.9%	24.2%
Honduras														
BCG	28	46	57	55	37	65	72	66		75	48	70	25.5%	22.9%
DPT3	31	38	53	52	41	59	63	58		77	46	64	16.6%	18.9%
OPV3	31	37	53	51	84	58	63	61		83	52	66	18.5%	2.6%
Measles	35	38	55	49	44	53	60	57		86	46	64	10.5%	19.9%
AVG	31	40	55	52	52	59	65	61		80	48	66	14.6%	12.6%
Jamaica														
BCG	38		27	56	48	51	73	92		99	44	79	33.1%	20.8%
DPT3	34	39	34	58	57	60	74	81		85	47	75	15.2%	10.7%
OPV3	34	37	68	57	56	58	74	82		84	52	75	15.6%	11.1%
Measles			12	15	60	64	36	62		71	38	58	110.6%	12.4%
AVG	36	38	35	47	55	58	64	79		85	45	72	11.3%	11.5%
Mexico														
BCG	48	41	50	52	47	16	54	71		80	42	55	-12.8%	53.9%
DPT3	41	41	38	41	52	40	34	62		65	42	50	0.9%	12.3%
OPV /*	91	85	85	88	91	67	96	97		96	85	89	-5.2%	4.2%
Measles	35	33	37	23	21	64	60	54		85	36	66	32.9%	61.5%
AVG	54	50	53	51	53	47	61	71		82	51	65	-2.6%	12.6%
Nicaragua														
BCG	33	65	82	80	88	97	99	93		90	74	95	28.2%	0.8%
DPT3	15	23	26	22	30	35	55	43		64	25	49	20.8%	25.2%
OPV3	21	52	50	75	73	70	89	85		82	57	82	37.4%	3.8%
Measles	15	20	40	38	42	49	61	44		61	34	54	31.1%	13.0%
AVG	21	40	50	54	53	63	76	66		74	48	70	27.8%	7.0%

VACCINATION COVERAGE

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	Average (1980-85)	Average (1985-89)	Average Percent Change (1980-85)	Average Percent Change (1985-89)
Panama														
BCG	68	77	83	81	77	94	91	89		90	80	91	7.2%	4.5%
DPT3	47	49	60	61	59	73	70	73		71	58	72	9.8%	5.3%
OPV3	45	50	61	60	70	71	71	74		71	60	72	9.9%	0.4%
Measles	47	53	63	60	65	83	73	78		75	62	77	12.7%	4.7%
AVG	52	57	67	66	68	80	76	79		77	65	78	9.5%	3.5%
Paraguay														
BCG	31	42	47	55	80	99	51	66		58	59	69	26.7%	-1.9%
DPT3	17	28	34	45	67	54	52	58		67	41	58	29.6%	1.0%
OPV /*	14	26	39	47	59	97	99	93		71	47	90	49.2%	9.2%
Measles	19	16	26	37	62	46	46	56		58	34	52	26.2%	-0.1%
AVG	20	28	37	46	67	74	62	68		64	45	67	30.2%	-0.7%
Peru														
BCG	57	63	65	61	63	70	54	61		61	63	62	4.4%	0.3%
DPT3	14	18	21	23	28	48	50	43		58	25	50	29.6%	24.1%
OPV3	16	18	21	22	26	47	50	45		59	25	50	26.6%	27.1%
Measles	21	24	28	28	35	53	41	35		52	32	45	21.5%	15.7%
AVG	27	31	34	34	38	55	49	46		58	36	52	16.0%	13.1%
T&T														
BCG														
DPT3	24	52	54	60	65	75	70	79		77	55	75	31.1%	4.8%
OPV3	38	55	59	61	66	74	71	80		77	59	76	15.1%	4.2%
Measles					10	32	42	68		59	21	50	220.0%	75.0%
AVG	31	54	57	61	47	60	61	76		71	51	67	18.3%	11.8%
Uruguay														
BCG	56	76	76	99	93	92	92	98		97	82	95	11.8%	1.1%
DPT /*	53	57	67	73	62	63	70	70		82	63	71	4.1%	7.5%
OPV3	59	58	72	77	83	58	83	70		82	68	73	1.4%	3.6%
Measles	50	95	52	65	66	59	82	99		75	65	79	12.1%	6.2%
AVG	55	72	67	79	76	68	82	84		84	69	80	5.7%	3.1%
Venezuela														
BCG	72	77	76	82	92		86			68	80	77	6.4%	
DPT3	56	54	53	58	33	49	58	54		55	51	54	1.9%	15.5%
OPV3	95	75	76	77	59	59	67	64		67	74	64	-8.4%	3.4%
Measles	50	43	45	42	41	56	48	57		49	46	53	3.6%	6.8%
AVG	68	62	63	65	56	55	65	58		60	61	59	-4.1%	2.0%
UNWEIGHTED AVERAGES														
BCG	49	51	60	63	63 /	60	59	62		66	58	62	4.5%	1.1%
DPT3	36	41	45	46	49	53	54	60		67	45	58	8.2%	8.2%
OPV3	47	47	56	55	63	59	65	66		76	54	66	5.3%	5.0%
Measles	31	35	41	40	47	53	50	58		65	41	57	11.7%	8.8%
AVG	40	44	51	51	56	56	57	62		68	50	61	6.9%	5.4%

/* Only two doses administered

Source: Pan American Health Organization

NET PRIMARY SCHOOL ENROLMENT RATIOS: Latin America

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	avg (1980-1985)	avg (1985-1989)
BOLIVIA	77				81		79	83			79	81
BRAZIL	81	79	82	83	83	82		84	84		82	83
CHILE			98	92	92				90	89	94	90
COLOMBIA			78		76	75	73				76	74
COSTA RICA	90	91	89			87	85	85			89	86
DOMINICAN REPUBLIC		70	71	73	72	70	73				71	72
EL SALVADOR		56		64	62			71	72		61	72
GUATAMALA	58	61	58	62							60	
HAITI	33	38	42	39	51	55	47	44			43	49
HONDURAS	76		85	86	87						84	
JAMAICA	94		99	94		98	99	95	97		96	97
MEXICO					97	100	100	100	99		99	100
NICARAGUA	74	75	73	73	72	76	75	76			74	76
PANAMA	88	88	87	87	87	89	89	91	90		88	90
PARAGUAY			90			87	87	88	90		89	88
PERU	86	93	92			97					92	97
TRINIDAD & TOBAGO	88	90			91	90	86	88			90	88
URUGUAY				88		91	92	91			90	91
VENEZUELA	86	87	88	86	86	86	89	89			87	88

Source: 1970-1974, UNESCO Yearbook (1976); 1975-1979, UNESCO Yearbook 1981; 1980-1984, UNESCO Yearbook 1986; 1984-1989, UNESCO Yearbook 1990

ANNEX VI

BIBLIOGRAPHY

BIBLIOGRAPHY

Addison, Tony, and Demery, Lionel. "The Alleviation of Poverty Under Structural Adjustment." World Bank, November 1987.

_____. "The Economics of Poverty Alleviation Under Adjustment." Overseas Development Institute, March 1988.

_____. "The Poverty Effects of Adjustment with Labor Market Imperfections." Economic Development Institute of the World Bank. May 1990.

_____. "Alleviating Poverty under Structural Adjustment, Is there Room for Maneuver?" *Finance and Development.* (December 1987): 41-43.

African Development Bank; United Nations Development Programme; The World Bank. *The Social Dimensions of Adjustment in Africa: A Policy Agenda.* Washington D.C.: The World Bank. 1990.

A.I.D. "A Survey of Conditionality in A.I.D. Economic Support Fund Programs." Bureau for Program and Policy Coordination. AID. February 1988.

Alderman, Harold. *Downturn and Economic Recovery in Ghana: Impacts on the Poor. Cornell: Cornell Food and Nutrition Policy Program. Monograph 10. 1991.*

_____. *Nutritional Status in Ghana and its Determinants.* SDA Working Paper no. 3. Washington D.C.: The World Bank. May 1990.

Alderman, Harold, and Gertler, Paul. *The Substitutionality of Public and Private Health Care for the Treatment of Children.* LSMS Working Paper no. 57. Washington D.C.: The World Bank. July 1989.

Altimir, Oscar, and Sourrouile, Juan. *Measuring Levels of Living in LAC. An Overview of Main Problems.* LSMS Working Paper no. 3. Washington D.C.: The World Bank. 1980.

Altimir, Oscar. "Poverty, Income Distribution and Child Welfare in Latin America: A Comparison of Pre- and Post-Recession Data." *World Development.* Vol. 12, no. 3 (1984): 261-282.

Akuoko-Frimpong, H. "Rebalancing the Public and Private Sectors in Developing Countries: The Case of Ghana." OECD technical paper no. 14. 1990.

Anand, S., and Kanbur, R. "International Poverty Projections." World Bank working paper no. 617. March 1991.

Assaad, Ragui, and Commander, Simon. "Labour Markets in an Era of Adjustment, Egypt: The Labour Market Through Boom and Recession." World Bank, Washington, D.C. May 1990.

Atkinson, Anthony. "Comparing Poverty Rates Internationally: Lessons from Recent Studies in Developed Countries" in *The World Bank Economic Review.* Vol. 5, no. 1 (1991): 3-21.

Boateng, E. Oti; Ewusi, Kodowo; Kanbur, Ravi; and Mckay, Andrew. "A Poverty Profile for Ghana, 1987-88." World Bank SDA Working Paper no. 5. June 1990.

Barnum, Howard, and Kutzin, Joseph. "Public Hospitals in Developing Countries: Resource Use, Cost, Financing." Population and Human Resources Department. The World Bank. November 1990.

Beaudry, P., and Sowa, N. K. "Labour Markets in an Era of Adjustment: A Case Study of Ghana." August 1990.

Behrman, Jere, and Deolaliker, Anil. "The Poor and the Social Sectors During a Period of Macroeconomic Adjustment: Empirical Evidence for Jamaica." *The World Bank Economic Review.* Vol. 5, no. 2 (1991): 291-315.

Behrman, Jere. "Macroeconomic Policies and Rural Poverty: Issues and Research Strategies." Research Paper Series, Department of Economics, Williams College. September 1990.

_____. "The Debt Crisis, Structural Adjustment, and the Rural Poor." Research Paper no. 146, Department of Economics, Williams College. September 1990.

_____. "The Impact of Economic Adjustment Programs" in *Health, Nutrition, and Economic Crises: Approaches to Policy in the Third World.* Auburn House, 1988.

Balassa, Bela. "The Adjustment Experience of Developing Economies After 1973." World Bank Reprint Series #265. 1983.

_____. *Policy Responses to External Shocks in Sub-Saharan African Countries.* World Bank Reprint Series: No. 270. Washington D.C.: The World Bank. Reprinted from Journal of Policy Modeling, vol. 5, no. 1 (1983): 75-105.

Beneria, Lourdes. "Structural Adjustment, the Labor Market and the Household: The Case for Mexico." Cornell University, presented at the workshop on Labor Market Policies and Structural Adjustment. ILO. December 1989.

Bennett, Lynn. "Women, Poverty and Productivity in India." World Bank. June 1991.

Berg, Elliot. "African Adjustment Programs, False Attacks and True Dilemmas." Development Alternatives Inc. March 1991.

Berry, Albert. "The Effects of Stabilization and Adjustment on Poverty and Income Distributional Aspects of the Latin American Experience." World Development Report background paper. The World Bank. 1990.

Betz, Joachim, "The Social Effects of Adjustment Policy in LDCs." *Intereconomics* (May/June 1990): p 125.

Bhalla, S. "Measurement of Poverty-Issues and Methods." World Bank draft. January 1980.

Birdsall, Nancy, and James, Estelle. "Efficiency and Equity in Social Spending: How and why governments misbehave." WPS no. 274. The World Bank. May 1990.

Blundell, Richard; Heady, Christopher; and Medhora, Rohinton. "Labor Markets in an Era of Adjustment: The Case of Cote d'Ivoire." November 1990

Bourguignon, Francois; de Melo, Jaime; and Suwa, Akiko. "Distributional Effects of Adjustment Policies: Simulation for Two Archetype Economies." World Bank Working Paper no. 674. May 1991.

Braun, Joachim von, and Kennedy, Eileen. "Commercialization of Subsistence Agriculture: Income and Nutritional Effects in Developing Countries." International Food Policy Research Institute. April 1986.

Buhmann, B.; Rainwater, L.; Schmaus, G.; and Smeeding, T. "Equivalence Scales, Well-being, Inequality, and Poverty: Sensitivity Estimates across Ten Countries using the Luxembourg Income Study Database" in *Review of Income and Wealth*. Vol. 34, no. 2, (1988).

Center for Development Technology, ISTI. "The Socioeconomic Impact of Macroeconomic Adjustment." December 1987.

Chatterjee, Meera. "Indian Women, Health, and Productivity." World Bank working paper no. 442. October 1990.

Collier, Paul. "Women and Structural Adjustment." Paper prepared for the World Bank. February 1989

_____. "Gender Aspects of Labour Allocation During Structural Adjustment." University of Oxford, Study of African Economies. May 1990.

Congressional Research Service, The Library of Congress. "World Bank/IMF Adjustment Loans and the Poor in Developing Countries." Foreign Affairs and National Defense Division. Report no. 91-176F. 1991.

Conway, Patrick. "How Successful is World Bank Lending for Structural Adjustment?" World Bank Working Paper no. 581. January 1991.

_____. "An Atheoretical Evaluation of Success in Structural Adjustment." World Bank Working Paper no. 629. March 1991

Cornia, Andrea, Frances Stewart, and Richard Jolly. *Adjustment With A Human Face.* A study by UNICEF. Oxford: Oxford University Press, 1987.

Cox Edwards, Alejandra, and Edwards, Sebastian. "Labor Market Distortions and Structural Adjustment in Developing Countries." National Bureau of Economic Research. January 1990.

Davis, Paul. "Evaluating the Distributional Impact of Macroeconomic Adjustment: The ISTI Report." AID PPC/EA.

de Janvry, Alain, and Sadoulet, Elisabeth. "Investment Strategies to Combat Rural Poverty: A Proposal for Latin America." Department of Agriculture, University of California. Working Paper no. 459. 1988.

Delgado, Christopher L. "Structural Adjustment and the Speed of Aggregate Agricultural Supply Response in Sub-Saharan Africa." CLD Price Policy Conference Brief. August 1988.

DeRosa, Dean A. "Protection and Export Performance in Sub-Saharan Africa." International Monetary Fund research department, JEL classification nos. 421, 422, 431. 1990.

Diwan, Tshac, and Verdier, Thierry. "Distributional Aspects of Debt Adjustment." World Bank Working Paper no.657. April 1991.

Dorosh, Paul A.; Bernier, René E.; and Sarris, Alexander H. *Macroeconomic Adjustment and the Poor: The Case of Madagascar.* Cornell: Cornell University Food and Nutrition Policy Program. Monograph 9. December 1990.

Englebert, Pierre, and Kane, Cheryl. "Empirical Studies on the Quality of Primary and Secondary Education: An Annotated Bibliography." PHREE background paper series no. PHREE/89/19. Education and Employment Division, Population and Human Resources Department. 1989.

Faini, Riccardo; de Melo, Jaime; Senhadji-Semlali, Abdel; and Stanton, Julie. "Growth-Oriented Adjustment Programs, A Statistical Analysis." World Bank Working Paper no. 426. June 1990

Feachem, Richard, and Jamison, Dean, eds. *Disease and Mortality in Sub-Saharan Africa.* A World Bank Publication. Oxford: Oxford University Press. 1991.

Fields, Gary. "Poverty and Inequality in Latin America: Some New Evidence." Cornell University, October 1990.

Fox, M. Louise; Amadeo, Edward; and Camargo, Jose Marcio. "Brazilian Labor Markets in an Era of Adjustment." The World Bank. 1991.

-9-

Fox, M. Louise, and Samuel Morley. "Brazil: Who Paid the Bill?: Adjustment and Poverty 1980-1995." World Bank WPS no. 648. April 1991.

Ghai, Dharam, and Hewitt de Alcantara, Cynthia. "The Crisis of the 80's in Sub-Saharan Africa, Latin America and the Caribbean: Economic Impact, Social Change, and Political Implications." *Development and Change*. Vol 21 (1990): 403-426.

Gindling, T. H., and Albert Berry. "Labor Markets and Adjustment in Costa Rica."Prepared for conference on Labor Markets in an Era of Adjustment. 1990.

Glewwe, Paul. *Efficient Allocation of Transfers to the Poor, The Problem of Unobserved Household Income.* LSMS Working Paper no. 70. Washington D.C.: The World Bank. June 1990.

Glewwe, Paul, and van der Gaag, Jacques. *Confronting Poverty in Developing Countries.* LSMS Working Paper No. 48. Washington D.C.: The World Bank. 1988.

Glewwe, Paul, and de Tray, Dennis. "The Poor in Latin America During Adjustment, A Case Study of Peru." World Bank, LSMS Working Paper No. 56, July, 1989.

_____. *The Poor During Adjustment. A Case Study of Cote d'Ivoire.* LSMS study Working Paper no. 47. Washington D.C.: The World Bank. April 1988.

Glewwe, Paul. "Improving Data on Poverty in the Third World: The World Bank's LSMS." World Bank Working Paper no. 416. May 1990.

Gonzalez de la Rocha, Mercedes. "Economic Crisis, Domestic Reorganization, and Women's Work in Guadalajara, Mexico." In Bulletin of Latin American Research, vol. 7, no. 2 (1988): 207-223.

Gordon, Derek. "Identifying the Poor: Developing a Poverty Line for Jamaica." Planning Institute of Jamaica. Kingston, Jamaica. November 1989.

Graham, Carol. "The APRA Government and the Urban Poor: The PIAT Programme in Lima's Pueblos Jovenes." The Journal of Latin American Studies. Vol. 23: 91-130.

_____. "The Politics of Implementing Pro-Poor Measures During Adjustment: Bolivia's Emergency Social Fund". submitted to World Development June 1991

_____. "From Emergency Employment to Social Investment: Changing Approaches to Poverty Alleviation in Chile." Brookings Occasional Paper, forthcoming

Green, Reginald. "The Struggle Against Absolute Poverty in Mozambique." SDA project. Republic of Mozambique. 1991.

Griffin, Charles C. *User Charges and Health Care in Principle and Practice.* EDI Seminar Paper no. 37. Washington D.C.: The World Bank. December 1988

Grosh, Margaret. "Social Spending in Latin America, The Story of the 1980s." World Bank Discussion Paper no. 106, 1990.

_____. "The Jamaican Food Stamps Program. A Case Study." Human resource Division, World Bank. 1990.

Grosh, Margaret; Fox, Kristin; and Jackson, Maria. "An Observation on the Bias in Clinic-based Estimates of Malnutrition Rates." WPS no. 694. The World Bank, April 1991.

Guillaumont, Patrick, and Guillaumont, Sylviane. "The Social Consequences of Adjustment in Africa as a Function of Exchange Rate Policy." Study for the Economic Development Institute of the World Bank. October 1989.

Gulhati, Ravi, and Nallari, Raj. *Successful Stabilization and Recovery in Mauritius.* EDI Development Policy Case Series Analytical Case Studies, no. 5. Washington D.C.: The World Bank. September 1990.

Guhati, Ravi. *The Political Economy of Reform in Sub-Saharan Africa.* EDI policy seminar report no. 8. Washington D.C.: The World Bank. 1988.

Haddad, Lawrence, and Kanbur, Ravi. "Is there an Intra-Household Kuznets Curve." World Bank Working Paper no. 466. August 1990.

Hagenaars, Aldi. "Poverty and Welfare in Eight European Countries." Paper prepared for the twenty-third international Atlantic economic conference. Munich, Germany. April 1987.

Heller, Peter; Bovenberg, Lans A.; Catsambas, Thanos; Chu, Ke-Young; and Shome, Partasarathi. *The Implications of Fund-Supported Adjustment Programs for Poverty Experiences in Selected Countries.* IMF Occasional Paper no. 58. Washington D.C.: IMF. May, 1988.

Heller, Peter, and Diamond, Jack. *International comparisons of Government Expenditure Revisited: The Developing Countries, 1975-86.* IMF occasional paper 69. Washington D.C.: International Monetary Fund. 1990.

Helwege, Ann. "Latin American Agricultural Performance in the Debt Crisis." Latin American Studies Association Meetings. March 1988.

Hill, Kenneth, and Pebley, Anne. "Child Mortality in the Developing World." In Population and Development Review. Vol. 15, no. 4 (1989): 657-685.

Holt, Sharon. "The Role of Institutions in Poverty Reduction, a focus on the productive sectors." WPS No. 627. World Bank, March 1991.

Hood, Ron; Altomare, Mary; Haddad, Lawrence; and Starr-McCluer, Martha. "Gender and Adjustment." report prepared for the Agency for International Development, 1990.

Horton, Susan; Kanbur, Ravi; and Mazumdar, Dipak. "Labor Markets in an Era of Adjustment, An Overview." World Bank Working Paper no. 694. May 1990.

Horton, Susan. "Labour Markets in an Era of Adjustment: Bolivia." Department of Economics, University of Toronto. March, 1990.

IFAD. "Poverty Alleviation: An IFAD Perspective." Report prepared for the World Bank's World Development Report 1990. Policy Review Division. October 1989.

International Monetary Fund. *Government Finance Statistics Yearbook.* Vol 1-14, 1977-1990. Washington D.C.: International Monetary Fund, 1990.

_____. *International Financial Statistics.* Vol. 27, 1990. Washington D.C.: International Monetary Fund.

_____. *World Economic Outlook.* A Survey by the Staff of the IMF. Washington D.C.: International Monetary Fund. 1990.

Jabara, Cathy. *Structural Adjustment and Stabilization in Niger: Macroeconomic Consequences and Social Adjustment.* Cornell: Cornell Food and Nutrition Policy Program. Monograph 11. 1991.

_____. *Economic reform and Poverty in The Gambia. A Survey of Pre- and Post-ERP Experience.* Cornell: Cornell Food and Nutrition Policy Program. Monograph 8. 1990.

Jaeger, William. "The Impact of Policy in African Agriculture, an Empirical Investigation." World Bank Working Paper no. 640. 1991.

Jamal, Vali, and Weeks, John. "The Vanishing Rural-urban Gap in Sub-saharan Africa." *International Labour Review.* ILO (1988): 271-292.

Jolly, Richard. "A UNICEF Perspective on the Effects of Economic Crisis and What Can Be Done." in Health, Nutrition, and Economic Crises: Approaches to Policy in the Third World. Auburn House, 1988.

Jolly, Richard, and Cornia, Giovanni. The Impact of World Recession on Children: A Study Prepared for UNICEF. Oxford University Press, 1984.

Kakwani, Nanak; Makonnen, Elene; and van der Gaag, Jacques. "Structural Adjustment and Living Conditions in Developing Countries." World Bank Working Paper no. 467. 1990.

Kakwani, Nanak, and Subbarao, Kalinidhi. "Rural Poverty in India, 1973-86." World Bank WPS no. 526. October 1990.

Kakwani, Nanak. "Growth Rates and Aggregate Welfare: an International Comparison."World Bank Working Paper no. 647. April 1991

Kanbur, Ravi. "Structural Adjustment and Poverty: A Methodology for Analysis." *World Development.* Vol. 15, December 1987.

_____. *Poverty and the Social Dimensions of Structural Adjustment.* SDA Policy Analysis. Washington D.C.: The World Bank. March 1990.

_____. "Children and Intra-household Inequality: A Theoretical Approach." World Bank WPS no. 685. May, 1991

_____. "Poverty and Development, the Human Development Report and the World Development Report, 1990." World Bank, WPS 618, March, 1991.

Kanbur, Ravi, and Ferroni, Marco. "Poverty Conscious Restructuring of Public Expenditures." World Bank, April 1990.

Kennedy, Eileen, and Alderman, Harold. *Comparative Analysis of Nutritional Effectiveness of Food Subsidies and Other Food-Related Interventions.* Joint WHO-UNICEF nutrition support programme. Washington D.C.:International Food Policy Research Institute. 1987.

Kennedy, Eileen, and Pinstrup-Andersen, Per. *Nutrition-Related Policies and Programs: Past Performances and Research Needs.* Washington D.C.: International Food Policy Research Institute. 1983.

Khan, Azizu. "World Bank Operations and the Alleviation of Extreme Poverty." World Bank, November 1986.

Killick, Tony. "The Developmental Effectiveness of Aid to Africa." World Bank working paper no. 646. 1991.

King, Elizabeth M. *Does Education Pay in The Labor Market? The Labor Force Participation, Occupation, and Earnings of Peruvian Women.* LSMS Working Paper no. 67. Washington D.C.: the World Bank. January 1990.

King Elizabeth M., and Bellow, Rosemary. "Gains in the Education of Peruvian Women 1940-1980." World Bank Working Paper no. 472. August 1990.

Koester, Ulrich; Schafer, Hartwig; and Valdés, Alberto. *Demand-Side Constraints and Structural Adjustment in Sub-Saharan African Countries.* Washington D.C.: International Food Policy Research Institute. 1990.

Konan, Mildred. "Development Assistance to Reduce Poverty: Defining and Measuring Progress." A publication of the Social Sector Policy Analysis Project, Academy for Educational Development. 1991.

Krueger, Anne; Schiff, Maurice; and Valdes, Alberto. "Agricultural Incentives in Developing Countries: Measuring the Effect of Sectoral and Economywide Policies" in World Bank Economic Review, Vol. 2, No. 3 (1988): pp. 171-255.

Lau, Lawrence; Jamison, Dean; and Louat, Frederic. "Education and Poverty in Developing Countries: an Aggregate Production Function Approach." World Bank Working Paper no.612. March 1991.

Lele, Uma. "Structural Adjustment, Agricultural Development and the Poor: Lessons from the Malawian Experience." MADIA discussion paper 9, World Bank, December 1989

Levine, Ross, and Renelt, David. "Cross-Country Studies of Growth and Policy, Methodological, Conceptual and Statistical Problems." World Bank Working Paper no. 608. March 1991.

Levy, Santiago. "Poverty Alleviation in Mexico." World Bank WPS no. 679, May 1991.

Lipton, Michael. *The Poor and the Poorest, Some Interim Findings.* World Bank Discussion Papers no. 25. Washington D.C.: The World Bank. 1988.

_____. *Land Assets and Rural Poverty.* World Bank staff Working Papers no. 744. Washington D.C.: The World Bank. August 1985.

Lopez, Ramon; Ali, Ridwan; and Larsen, Bjorn. "How trade and Economic Policies Affect Agriculture, A framework for Analysis Applied to Tanzania and Malawi." World Bank Working Paper no. 719. 1991.

Maasland, Anne. "Methods for Measuring the Effect of Adjustment Policies on Income Distribution." World Bank Working Paper no. 474. August 1990.

Marquez, Gustavo. "Informal Sector Policies in Latin America, An Economist's View." Institudo de Estudios Superiores de Administacion. February 1991.

Mazumdar, Dipak. *Microeconomic Issues of Labor Markets in Developing Countries, Analysis and Policy Implications.* EDI Seminar Paper 40. Washington D.C.: The World Bank. August 1989.

_____. "Malaysian Labor Markets Under Structural Adjustment." World Bank WPS no. 573. January 1991

McGuire, Judith. "Malnutrition: Opportunities and Challenges for A.I.D." A.I.D. November 1988.

Michalet, Charles-Albert. "Le Réequilibrage Entre le Secteur Public et le Secteur Privé: Le Cas du Mexique." Documents Techniques no. 4. OCDE. 1989.

Mills, Cadman A. *Ajustement Structurèl en Afrique Sabsaharienne.* Rapport sur un Séminaire de Politique Générale de L'IDE no. 18. EDI policy seminar report. Washington D.C.: The World Bank. November 1989

Milne, William. "Labour Markets in an Era of Adjustment." Revised draft. Institute for Policy Analysis, University of Toronto. October 1990.

Moser, Caroline. "Adjustment from Below : Low-Income Women, Time and the Triple Role in Guayaquil, Ecuador." To be published in *Women, Recession, and Adjustment in the Third World.* Edited by Afshon and Dennis. MacMillan Press. 1991.

Musgrove, Philip. "Fighting Malnutrition, an Evaluation of Brazilian Food and Nutrition Programs." World Bank staff Working Paper, No 60. August, 1989.

Nelson, Joan. "The Politics of Pro-Poor Adjustment Policies." ODC for the World Bank Symposium on Poverty and Adjustment. April 1988.

Newman, John; Jorgensen, Steen; and Pradhan, Menno. *How did Workers Benefit from Bolivia's Emergency Social Fund.* LSMS Working Paper no. 77. Washington D.C.: The World Bank. May 1991.

Noss, Andrew. "Education and Adjustment, A Review of the Literature." World Bank Working Paper No. 701. June 1991.

Obidegwu, Chukwuma. "Adjustment Programs and Economic Change in Sub-Saharan Africa." The World Bank SPR Discussion Paper no. 20. March 1990.

OCDE. Club du Sahel-OCDE. "Contribution à un Bilan Economique et Social des Pays du Sahel 1980-1990." Document no. 3 & 4. November 1990.

OECD; IADB. *The Impact of Development Projects on Poverty.* Development Centre Seminars. Paris: OECD. 1989.

Pan American Health Organization (PAHO). *Health Conditions in the Americas, Volumes I AND II.* Washington, D.C.: Pan American Health Organization. 1990.

_____. *Los Servicos de Salud en las Americas. Analisis de Indicores Basicos.* Cuaderno technico no. 14. Washington D.C.: Pan American Health Organization. 1988.

Pfeffermann, Guy, and Madarassy, Andrea. *Trends in Private Investment in Thirty Developing Countries.* International Finance Corporation discussion paper no. 6. Washington D.C.: The World Bank. 1989.

Pinstrup-Andersen, Per. "Food Subsidies in Developing Countries." *Food Policy Statement.* No. 9 (October 1988). International Food Policy Research Institute.

Pinstrup-Andersen, Per, ed. *Marcoeconomic Policy Reforms, Poverty, and Nutrition: Analytical Methodologies.* Cornell: Cornell Food and Nutrition Policy Program. Monograph 3. 1990.

Preston, Samuel. "Review of Richard Jolly and Giovanni Andrea Cornia, editors, The Impact of World Recession on Children." *Journal of Development Economics* 21 (1986): 373-376.

Psacharopoulos, George. "Poverty and Income Distribution in LAC Today" -- Initiating Memorandum. World Bank, International Finance Corporation. May 31, 1991.

Psacharopoulos, George, ed. "Recovering Growth With Equity, World Bank Poverty Alleviation Activities in Latin America." World Bank internal discussion paper. Report no. IDP-0033. 1989.

Ravallion, Martin, and Huppi, Monika. "Measuring Changes in Poverty: A Methodological Case Study of Indonesia during an Adjustment Period," in *The World Bank Economic Review.* Vol. 5, no. 1 (1991): 57-82.

Ravallion, Martin. "The Challenging Arithmetic of Poverty in Bangladesh." World Bank WPS no. 586 (background paper for 1990 WDR). February 1991.

Ravallion, Martin; Datt, Gaurav; van de Walle, Dominique; and Chan, Elaine. "Quantifying the Magnitude and Severity of Absolute Poverty in the Developing World in the Mid-1980s." World Bank Working Paper no. 587. 1991

Ribe, Helena, and Carvalho, Soniya. "World Bank Treatment of the Social Impact of Adjustment Programs." World Bank Working Paper no. 521. October 1990.

Ribe, H.; Carvalho, S.; Liebenthal, R.; Nicholas, P.; and Zuckerman, E. *How Adjustment Programs Can Help the Poor, the World Bank Experience.* World Bank Discussion Papers no. 71. Washington D.C.: The World Bank. Jan 1990.

Riveros, Luis, and Paredos, Ricardo. "Measuring the Impact of Minimum Wage Policies on the Economy." World Bank Working Paper no. 101. October 1988.

Riveros, Luis, and Sanchez, Carlos. "Labor Markets In An Era of Adjustment: Argentina." World Bank. April 1990.

Riveros, Luis, and Bouton, Lawrence. "Efficiency Wage Theory, Labor Markets, and Adjustment." World Bank Working Paper no. 731. 1991.

Sahn, David E. *Fiscal Exchange Rate Reforms in Africa. Considering the Impact Upon the Poor.* Cornell: Cornell Food and Nutrition Policy Program. Monograph 4. 1990.

_____. "Has Policy Reform Hurt the Poor in Africa?" Cornell University Food and Nutrition Policy Program, Washington. D.C. 1991.

_____. "Progress Report on the Cooperative Agreement to Assess the Impact of Policy Reform on Low Income Groups." Cornell University Food and Nutrition Policy Program. December 1990.

_____. *Malnutrition in Cote d'Ivoire, Prevalence and Determinants.* SDA working paper no. 4. Washington D.C.: The World Bank. 1990.

Sahn, David E.; Arulpragasam, Jehan; and Merid, Lemma. *Policy reform and Poverty in Malawi, A Survey of a Decade of Experience.* Cornell: Cornell Food and Nutrition Policy Program. Monograph 7. 1990.

Sarris, Alexander H. *A Macro-Micro Framework for Analysis of the Impact of Structural Adjustment on the Poor in Sub-Saharan Africa.* Cornell: Cornell Food and Nutrition Policy Program. Monograph 5. 1990.

Schwartz, Antione, and Stevenson, Gail. "Public Expenditure Reviews for Education, The Bank's Experience." World Bank Working Paper no. 510. October 1990.

Sheahan, J. "Reducing Poverty in Latin America: Markets, Democracy and Social Change." Williams College. The Center for Developmental Economics, Research Memorandum Series. March 1990.

Smith, Gordon, and Cuddington, John T., eds. *International Debt and the Developing Countries.* A World Bank Symposium. Washington D.C.: The World Bank. 1985.

Srinivasan, T. N. "Structural Adjustment, Stabilization and the Poor." March 1988.

Stevenson, Gail. "Adjustment Lending and the Education Sector: the Bank's Experience." PHREE Background Paper Series no. PHREE/91/42R. The World Bank. 1991.

Suzuki, Yuriko, and Bernard, Andrew. *Effects of Panterritorial Pricing Policy for Maize in Tanzania.* Washington D.C.: International Food Policy Research Institute. 1987.

Terrell, Katherine. "A Methodology for Analyzing the Effects of Stabilization and Structural Adjustment Policies on Labor Markets of Developing Countries." Graduate School of Public and International Affairs, University of Pittsburgh. June 1987

Tilak, Jandhyala. "Education and its Relation to Economic Growth, Poverty and Income Distribution." World Bank Discussion Paper No.46.

Turnham, David, and Eröcal, Denizhan. "Unemployment in Developing Countries, New Light on an Old Problem." OECD technical paper no. 22. 1990.

United Nations. *Mortality of Children Under Age 5. World Estimates and Projections, 1950-2025.* Population Studies no. 105. New York: United Nations. 1988.

United Nations Development Programme. *Human Development Report.* Vols. 1990, 1991. New York: Oxford University Press.

United Nations Development Programme Central evaluation Office. "The Social Dimensions of Adjustment (SDA) Project: An Interim Evaluation." Vols. I and II. The UNDP. 1990.

UNESCO. Annual Yearbook, various years.

UNICEF. *The State of the World's Children.* 1991. Oxfordshire, U.K.: Oxford University Press.

_____. *The State of the World's Children.* 1989. Oxfordshire, U.K.: Oxford University Press.

_____. *The State of the World's Children.* 1983. Oxfordshire, U.K.: Oxford University Press.

_____. *The State of the World's Children.* 1982. Oxfordshire, U.K.: Oxford University Press.

UNECA. "Statistics and Policies." ECA Preliminary Observations on the World Bank Report "Africa's Adjustment and Growth in the 1980s". From the 15th meeting of the ECA Conference of ministers. April 1989.

_____. "African Alternative Framework to Structural Adjustment Programs for Socio-Economic Recovery and Transformation." United Nations Economic Commission for Africa. 1989.

United States Department of Agriculture. *World Agriculture, Trends and Indicators 1970-89.* Washington D.C.: USDA, Economic Research Service, Statistical Bulletin no. 815. September 1990.

van der Gaag, Jacques; Makonnen, Elene; and Englebert, Pierre. "Trends in Social Indicators and Social Sector Financing." World Bank Working Paper no. 662. May 1991.

van de Walle, Dominique. "Poverty and Inequality in Latin America and the Caribbean During the 70s and 80s: An overview of the Evidence." A View from LATHR no. 22. The World Bank. 1991.

Vijverberg, Wim, and van der Gaag, Jacques. *Testing for Labor Market Duality, The Private Wage Sector in Cote d'Ivoire.* LSMS Working Paper 66. Washington D.C.: The World Bank. January 1990

Williamson, John. *Latin American Adjustment, How Much Has Happened?* Washington, D.C.: Institute for International Economics. April 1990

World Bank, and The United Nations Development Program. *Africa's Adjustment and Growth.* Washington D.C.: IBRD. 1989.

World Bank. *Adjustment Lending Policies for Sustainable Growth.* (RAL II). Country Economics Department, Policy, Research, and External Affairs. Washington D.C.: The World Bank. 1990.

_____. *Argentina Social Sectors in Crisis, a World Bank Country Study.* Washington D.C.: The World Bank. 1988.

_____. "Bolivia Poverty Report." World Bank report no. 8643-BO. October 1990.

_____. "Brazil, Public Spending on Social Programs; Issues and Options." World Bank report no. 7086-BR. May 1988.

_____. "Colombia, Social Programs and Poverty Alleviation: An Assessment of Government Initiatives." World Bank report no. 7271-CO. December 1988.

_____. "Costa Rica, Public Sector Social Spending." Report no. 8519-CR, World Bank Country department II. May, 1990.

_____. "Ecuador: A Social Sector Strategy for the 1990's." World Bank document.Report No. 8935-EC. November 1990.

_____. "Madagascar: Beyond Stabilization to Sustainable Growth." World Bank. Report no. 9101-MAG. June 1991.

_____. "Malawi: Growth Through Poverty Reduction." World Bank report no. 8140-MAI. March 1990

_____. "Malawi Food Security Report." World Bank report no. 8151-MAI. June 1990

_____. "Memorandum and Recommendation of the President of the International Development Association to the Executive Directors on a proposed Credit in the Amount Equivalent to US $20.0 Million to Burkina Faso for a Public Works and Employment Project." World Bank document. Report no. P-5565-BUR. 1991.

_____. "Memorandum and Recommendation of the President of the International Development Association to the Executive Directors on a proposed Credit in the Amount Equivalent to US $20 Million to the Republic of Zambia for a Social Recovery Project." World Bank document. Report no. P-5527-ZA. 1991.

_____. "Morocco: Reaching the Disadvantaged: Social Expenditure Priorities in the 1990s. World Bank report no. 7903-MOR. 1990.

_____. *Population, Health, and Nutrition: Fiscal 1990 Sector Review.* Population, Health, and Nutrition Division. Population and Human Resources Department. The World Bank Working Papers no 707. 1991.

_____. *Poverty in Latin America: The Impact of Depression.* Report no. 6369. Washington D.C.: The World Bank. August 6, 1986

_____. "Recent World Bank Poverty Studies: A Summary of Approaches, Coverage, and Findings." Policy Analysis and Review Division, Strategic Planning Department. August 1989.

_____. "Report on Adjustment Lending." (RAL I). IBRD, World Bank. 1988.

_____. *Social Indicators of Development, 1990.* Baltimore: Johns Hopkins University Press, 1991.

_____. "Social Investment in Guatemala, El Salvador, and Honduras, Workshop on Poverty Alleviation, Basic Social Services and Social Investment Funds within the Consultative Group Framework." World Bank report no. 8299-LAC. June 1990.

_____. "Social Reforms in Chile Since 1973 (an Experience in Infant Nutrition)." World Bank Symposium on Poverty and Adjustment. April 1988.

_____. *Sub-Saharan Africa: From Crisis to Sustainable Growth, A Long-Term Perspective Study.* Washington D.C.: The World Bank. 1989.

_____. "Preliminary Report, Living Conditions Survey, Jamaica." World Bank Statistical Institute of Jamaica. Kingston, Jamaica. October, 1988.

_____. "The Treatment of Social Impact in Adjustment Programs Supported by the World Bank." Policy and Review Department, July, 1990.

_____. Urban Policy and Economic Development, An Agenda for the 1990s. a World Bank Policy Paper, 1991.

_____. "Venezuela Poverty Study: From Generalized Subsidies to Targeted Programs." World Bank report no. 9114-VE. December, 1990.

_____. *World Development Report 1991.* New York: Oxford University Press.

_____. *World Development Report 1990.* New York: Oxford University Press.

_____. *World Development Report 1989.* New York: Oxford University Press.

_____. *World Development Report 1988.* New York: Oxford University Press.

_____. *World Development Report 1987.* New York: Oxford University Press.

_____. *World Development Report 1986.* New York: Oxford University Press.

_____. *World Development Report 1985.* New York: Oxford University Press.

_____. *World Development Report 1984.* New York: Oxford University Press.

_____. *World Debt Tables 1989-90, External Debt of Developing Countries.* Vol 1 Analysis and summary Tables. Vol. 2 Country Tables. Washington D.C.: The World Bank. 1989.

_____. *World Tables, 1991.* Baltimore: Johns Hopkins University Press. 1991.

Yang, Hongyu. "Government Expenditure on Social Sectors in Latin America and the Caribbean, Statistical Trends." A View From LATHR no. 13. The world Bank. 1991.

Zuckerman, Elaine. "Poverty and Adjustment, Issues and Practices." Central Evaluation Department, the World Bank. March 1988.

_____. *Adjustment Programs and Social Welfare.* World Bank Discussion Papers no. 44. Washington D.C.: The World Bank. 1990.