



Center for Economic Policy Analysis

**Macroeconomic Policy, Poverty, and Equality
in Latin America and the Caribbean**

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Working Paper Series I
Globalization, Labor Markets, and Social Policy
A Project Funded by the John D. and Catherine T. MacArthur Foundation

Working Paper No. 6

February 1998

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1. Introduction

The papers in this volume take up a question frequently raised but rarely addressed empirically -- do macroeconomic policy changes and exogenous macro shocks have significant impacts on poverty and income inequality more generally? For 15 countries in Latin America and the Caribbean over the past two decades, the answer is unequivocally "Yes." Specifically, poverty reduction appears to be generally associated with increases in GDP and GDP per capita, reductions in unemployment, reductions in inflation, increases in the minimum wage, reductions in overall inequality, and increases (or at least stability) of the share of social expenditures in GDP. Changes in poverty are also linked to rural-urban and intersectoral migration and specific developments within large "one-digit" sectoral aggregates such as agriculture and services, some of which are affected by shifts in the overall macro environment.

As discussed in section 3 below, the foregoing relationships are observed over macro "episodes" (typically bounded by substantial economic disturbances and/or major realignments in policy) as defined by authors of the country papers; there are more detailed narrative discussions in section 4 and in the papers themselves. Countries and overall time periods examined include Argentina, 1974-96; Bolivia, 1980-96; Brazil, 1985-96; Chile, 1974-96; Colombia, 1978-95; Costa Rica, 1989-96; Cuba, 1989-96; Dominican Republic, 1981-96; Ecuador, 1970-96; Jamaica, 1960-95; Mexico, 1984-94; Nicaragua, 1980-93; Paraguay, 1970-96; Peru, 1985-95; and El Salvador, 1980-96.

Within this data set, the authors identify 49 episodes. Poverty incidence is estimated for 45 of them: it stays stable or rises in 26 and decreases in the remaining 19 cases. The sample appears to be large enough to provide insight into distributional processes which operate across nations, or at least developing countries in the Western Hemisphere. In the following discussion, we elaborate on such linkages, concentrating on "headcount" measures of income poverty. Complementary analyses of poverty incidence and its changes over time are presented in Chapter 2 (wherein interpretations of some factors, especially the significance of economic "reforms," differ from those presented here) while Chapter 3 takes up gender effects on poverty.

* This paper is the introductory chapter to *Políticas Macroeconómicas y Pobreza en América Latina y el Caribe, 1980-96*, edited by Enrique Ganuza, Samuel Morley, and Lance Taylor. Fondo de Cultura Económica, Mexico, D.F., 1998.

Before going into empirical detail, it makes sense to present brief sketches of major strands of received theory regarding mechanisms via which macroeconomic change can affect income distribution and poverty. Four such approaches are discussed in the following section.

2. Theoretical Priors

One analytical tradition, exemplified in a famous paper by Kuznets (1955), puts emphasis on productivity levels and changes within broad sectors of the economy, and movements of people (including specific population groups such as youth or women) among them. One broad theme is migration from rural to urban areas, or from agriculture to non-agriculture. Kuznets thought that population shifts from low income/egalitarian to high income/inegalitarian sectors would be associated with initially rising and then falling inequality as per capita income grew. Recent evidence (Bruno, Ravallion, and Squire, 1996) puts such a simple pattern in doubt, but the underlying vision remains influential.

An important finding of the studies herein, in fact, is that poverty (especially extreme poverty) remains a rural phenomenon in many countries. It is not being rapidly reduced by migrations toward cities. In some cases, rural poverty is exacerbated by exclusion of certain groups from the fruits of productivity and employment growth, e.g. indigenous populations in the Andes or Guarani speakers in Paraguay. Greater intensity of poverty in female-headed households, however, appears to be important in only a few countries and in some cases such households appear to have differentially improved their positions recently due to receipts of external remittance income or increased employment in maquiladora-type activities.

A second theoretical orientation relates distributional changes to macro developments such as those noted above -- faster output growth and lower unemployment, slower inflation, and effects of directed policies such as minimum wage hikes and increases in social spending. What are the forces that have influenced such developments recently in Latin America and the Caribbean? We can distinguish two stylized scenarios.

In the first, output and employment increase due to expansionary fiscal policy and/or relaxation of foreign exchange constraint. Inflation speeds up and/or the balance of payments worsens. A go-stop cycle ensues, with the slowdown resulting from devaluation aimed at reducing a growing trade gap, and contractionary fiscal and monetary policies targeted toward both the external deficit and inflation. Effects on poverty depend on differential impacts of changes in employment and inflation. In many countries in 1980s poverty deepened because of large output cuts induced by the debt crisis and real wage reductions related to devaluation. Accelerating inflation emerged as a mechanism to reduce effective demand to foreign exchange-limited levels of supply. It further worsened the distributional mix.

The second scenario is more relevant to the 1990s, when large capital inflows together with liberalization of current and capital accounts of the balance of payments permitted visible output and employment expansions. Inflation rates went down (dramatically, in some cases) in response to exchange rate-based stabilization programs. In the 1970s, favorable external factors (better terms of trade, higher exports, access to bank credit) went together with similar phenomena.

Poverty typically declines in such episodes because of faster output growth as well as slower inflation and/or increases in real minimum wages which price stabilization permits. However, residual domestic price increases often lead to real appreciation (especially if the nominal exchange rate is pegged as an anti-inflation "anchor"), with possibly favorable effects on real wages but adverse impacts on output in traded goods sectors. Ultimately, the authorities may be driven toward contractionary policies (fiscal cuts, high interest rates exacerbated by attempts at "sterilization" of capital inflows) to attack widening trade deficits. A return to go-stop cycles is a real and present danger, especially if external conditions deteriorate as during the "Tequila crisis" of 1994-95.

A third, recent line of analysis ties changes in payments to low income people to shifts in trade orientation. Following the Stolper-Samuelson (1941) theorem, for example, it is often argued that trade liberalization induces a relative price shift toward traded goods with production intensive in the use of highly skilled labor, thereby harming the poor. Alternatively, there may be a "skill twist" against low wage workers due to biased technical change.

These issues are addressed by some papers in the current collection with varying conclusions. One finding is that in some countries trade liberalization along with real appreciation led to productivity increases in traded goods sectors, with adverse effects on employment and wages of the low-skilled. A related outcome is that liberalization can reduce inequality while provoking substantial income losses in previously protected sectors, e.g. agriculture in Colombia. Finally, it bears emphasis that initial conditions can affect matters significantly. Export growth intensive in relatively skilled labor may result from foreign investment drawn by existing industrial capacity and infrastructure rather than changes in policy orientation per se.

The final theoretical line is based on "human capital," or the universally observed positive correlation between education and income (and presumably productivity) levels across individuals and households active in the labor force. Two macroeconomic qualifications apply to this micro level observation.

First, increased investment in human capital (more schooling, better health provision, etc.) will infallibly be associated with faster income growth and reductions in poverty only when an economy's labor force is nearly fully employed. If there are output and employment shortfalls, better levels of human capital overall will not benefit the segments of the population that are unemployed or forced into jobs (or subsistence strategies) beneath their skill levels. Throughout the "lost decade" of the 1980s, for example, slow GDP growth (due essentially to scarcity of foreign resources) meant that extra schooling could not produce income gains.

Second, during that decade, fiscal stringency led to reduced social spending. Hence, when the external constraint was lifted by increased capital inflows in the 1990s, earnings capacities of many people were lower than they might have been. The interaction of provision of human "capabilities" (Sen, 1992) on the supply side and their realization through adequate levels of aggregate demand is complex, and figures in most country papers.

3. A Typology of Country Episodes and their Poverty Correlates

The recent macroeconomic histories of most countries in the sample can be analyzed in terms of the two stylized scenarios discussed above along with more specific local developments.

The "general" pattern would be the "go" segment of scenario one in the 1970s, a "stop" segment until the late 1980s, and scenario two as capital inflows returned thereafter. Broadly speaking nine countries followed these dynamics -- Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, Mexico, and Peru. Of the remaining six countries, Cuba went through a socialist version of scenario one after the late 1980s, with recuperation in the mid-1990s. The Dominican Republic has had largely fiscally driven output fluctuations since the early 1980s. Jamaica has been mired in negative growth of GDP per capita since the early 1970s. Growth overall (but not per capita) in Paraguay has been generally positive, driven by massive investments prior to 1980 and then entrepot trade and service expansion as well as agricultural export growth into the 1990s. The macroeconomic scene in both El Salvador and Nicaragua has been strongly influenced by wars and massive political changes.

Table 1 presents more detailed summaries of the countries' histories in the form of episodes as identified by the authors. As the descriptive lines indicate, these periods are demarcated by shifts in the orientation of economic policy, macroeconomic (largely external) shocks, and major political realignments. In this section, we discuss directions of change within episodes of poverty indices on the one hand and broader distributional and macroeconomic indicators on the other. The goal is to discover relationships among the movements of these variables within macroeconomically homogeneous time periods. The analysis is informed by the theories sketched above and supplemented by narrative discussions in section 4 and (especially) the country chapters. Its purpose is not to "test" theories or causal relationships per se, but rather to follow Geertz (1973) in providing "thick descriptions" of how poverty and macroeconomic movements interact.

Directions of movements of distributional and macroeconomic indicators are signalled by the (+), (=), and (-) entries in the table, with details explained in the notes. Years for which estimates of poverty incidence are available are also indicated. Directions of changes in the incidence of "moderate" (or "relative" in the usage of some of the papers) and "extreme" poverty are given, along with incidence levels of moderate poverty in key years (usually at a \$60 per month poverty line for income per capita for each member of a household). Directions of movements of up to 16 macroeconomic variables during episodes complete the presentation.

Table 2 summarizes directions of change in the incidence of moderate poverty during episodes, along with associated shifts in 11 key macroeconomic indicators. Poverty estimates are available for 45 of the 49 episodes in Table 1. Incidence remained unchanged or increased in 26 episodes, and decreased in the other 19. The following observations can be read from the table.

There is a strong inverse relationship between changes in poverty incidence and changes in GDP per capita: in 36 (or 80%) of the cases these indicators move in opposite directions. The relationship is stronger between decreases in poverty incidence and increases in GDP per capita

(18 episodes of a total of 19). In a macro linkage well-known from two- and three-gap models (Taylor, 1994), increases in output often go together with falling trade balances. Decreases in poverty incidence are associated with rising trade deficits in 11 cases. In nine of them GDP per capita increased.

In 73% of the episodes for which information is available, there was an inverse relationship between changes in minimum wages and poverty incidence. The same relationship, with almost the same intensity, exists between movements in incidence and real average wages.

Also in 73% of the cases, unemployment and poverty incidence move in the same directions. The relationship is stronger between increases in unemployment and poverty.

Increases in poverty incidence and Gini coefficients are strongly related (16 of 18 cases for which data are available). The relationship is considerably weaker for decreases in both variables.

There is a positive relationship between changes in poverty and the inflation rate in 70% of the episodes. The linkage is stronger between reductions in these two indicators.

There is a weak inverse relationship across episodes between changes in poverty incidence and movements in social expenditure as a share of GDP. The nature of the periodization makes it impossible to examine links between shifts in poverty incidence and social spending changes some years previously, although several country authors discuss such relationships.

There are no strong correlations between incidence and movements in real interest and exchange rates. Gender, defined in terms of male/female household headship, is not a relevant explanatory variable for changes in relative poverty in 23 of a total of 42 episodes.

4. Important Relationships at the Country Level

The next step is to add history to these correlations by examining macroeconomic developments and poverty changes in more detail for each country. The following summaries were put together on the basis of the country papers and were reviewed by their authors.

Argentina. Macroeconomic history in Argentina has been complicated by repeated attempts at stabilizing inflation. In the period covered by the paper, there was a phase of trade liberalization combined with a pre-announced (or "active") reduction in the pace of exchange rate depreciation in the late 1970s; the subsequent breakdown of this attempt due to real appreciation capital flight; the onset of the debt crisis (a rapid scenario one "stop") followed by the Austral wage and exchange rate freeze of the mid-1980s; the failure of that package and a run-up to hyperinflation in the late 1980s; a switch to scenario two and liberalization combined with stabilization based on an exchange rate freeze and free "convertibility" of the peso; and finally the Tequila crisis and recuperation.

Data are only available for poverty in Greater Buenos Aires, where the share of households receiving less than \$60 per month per capita income has risen steadily from 3% in 1974 to 13% in 1996. Of the countries discussed in this volume, only Jamaica shows a comparable secular rise in the population share of the poor. Much of Argentina's poverty increase in the 1980s can be attributed to falling incomes and a worsening distribution overall -- the results of the debt crisis and frustrated attempts at controlling inflation.

Poverty incidence was stable in the early 1990s, mainly due to rising unemployment despite vigorous output growth (there was rapid productivity growth in formal sector activities). The recent recession again increased poverty incidence, adding falling real wages to even higher unemployment. Among different social groups, poverty is concentrated among the poorly educated, the retired, and the unemployed. Although women's incomes vary across sectors between 50% and 80% of men's, there is no important difference in poverty rates between male- and female-headed households.

Bolivia. During the period 1970-76, the economy grew almost 6% per year, but then output expansion slowed dramatically as raw material exports tailed off and capital inflows declined. The increasingly binding foreign constraint, increasing income inequality, and rising social tensions kicked off a hyperinflation, which was stabilized in orthodox fashion after 1985. With prices steadied, big steps were immediately taken toward economic liberalization, making Bolivia an "early reformer."

The fruits of the effort were modest -- registered exports have been increasing slowly while since the late 1980s per capita GDP has been growing about 1.3% per year on average, without major shifts in output composition across sectors. There is a steady rural-urban migration, with about 40% of the population still rural and agriculture accounting for 15% of GDP. The real wage index (urban) grew 2.2% per year during the 1990s, while the agricultural terms of trade fell by about 6% per year. Although it has increased in per capita terms, income has become somewhat more concentrated in urban areas. In the countryside, a dual economy has become increasingly visible, with the emergence of a modern agroexport sector along with coca commercialization in the lowlands around Santa Cruz and the persistence of deep poverty among the indigenous population of the Andes. Per capita income may have deteriorated recently in the Altiplano, and its residents in many ways are excluded from the modern economy.

Detailed information on income poverty is available only for major cities in 1980s and 1990s. On the basis of unadjusted household survey data as reported in the country paper, it appears that between 1990 and 1994, the urban poverty headcount fell from 52% to 45%, according to national poverty lines, with the major cause being overall growth of income. Other studies such as the one by Vos, Lee, and Mejía (1997) use data on household consumption or income adjusted for under-reporting, and conclude that poverty incidence stayed stable or even increased (that is, worsening urban inequality offset per capita income growth). Among population groups, the poor are concentrated in households which are large, and in which the head is poorly educated, unemployed, and/or does not speak Spanish. The gender of the head of household has no significant bearing on poverty incidence.

Brazil. The macro narrative resembles Argentina's, with recession combined with inflation setting in after the debt shock. After the failure of the Cruzado stabilization plan in 1986, inequality increased (the Gini coefficient was 0.605 in 1985 and 0.62 in 1995), output per capita grew at about 0.2% per year, and inflation accelerated to very high levels in the early 1990s. The Real plan marked a successful inflation stabilization along scenario two lines, beginning in mid-1994.

Looking at specific population groups, overall poverty incidence (or the share of the group's members who are poor) appears to be the highest among black and indigenous peoples, inhabitants of rural areas and/or the North and Northeast regions, female-headed households, and illiterates. In a large and diverse population, the largest numbers of poor people are found among blacks and the poorly educated. About one-quarter of the poor live in rural Brazil, with the rest in urban and metropolitan areas.

Regression equations based on monthly labor force surveys for six metropolitan areas suggest that increased minimum wages raise incomes of the poor. Detailed analysis of the effects of the Real plan provides a fascinating illustration. In mid-1994, the impact effect of dramatically lower inflation rates on poor households' incomes through reduction of the inflation tax and other mechanisms of forced saving was small, although there was a surge in aggregate consumption from a "wage-led" aggregate demand function (as had been anticipated). Poverty rates dropped substantially, however, after a 43% minimum wage hike in May 1995. The true distributional benefit of the Real stabilization is that it made the large minimum wage increase possible without strong inflationary repercussions. Whether a subsequent go-stop cycle along the lines sketched in connection with scenario two above and/or skill-twist effects associated with trade liberalization will make further poverty reduction difficult are important questions for the future.

Chile. After a difficult transition period beginning in the early 1970s, by the mid-1980s Chile had settled into a pattern of fairly stable, rapid growth led by diversified raw material exports. Growth got underway after a 25% annual inflation rate earlier in the decade was slowed when formal wage indexation was abolished, i.e. money wages as opposed to the exchange rate in our scenario two narratives served as the "nominal anchor" (real minimum wages fell from already low levels through 1987 and returned to 1984 levels only in 1989). The economy had been substantially deregulated over the preceding decade. Associated foreign exchange support from international agencies (as well as substantial export revenues from publicly-owned copper mines) helped offset the worst fiscal and balance of payments impacts of the debt crisis. In the 1990s the authorities erected barriers against capital inflows, so that Chile was not so adversely affected as other countries in the region by exchange rate appreciation.

With sustained output and employment growth accompanied by minimum wages increasing more rapidly than labor productivity (on average 4.9% vs. 3.7% respectively between 1987 and 1996), the poverty headcounts (with a \$60 per month poverty line) in urban and rural areas fell from 44% to 28% and 51% to 29% respectively between 1987 and 1994. By sectors of occupation, however, the outcomes were rather different. In 1987 32% of the poor and 25% of the total population were in the primary (largely agricultural) sector; in 1994, the numbers were 41% and 27%. Services, meanwhile, had a stable share of total population (48% in 1987 and 46% in 1994), but the its share of the poor population fell from 39% to 33%.

The apparent paradox of rising agricultural and declining rural poverty is probably explained by migration of people who retain jobs on the farm from the countryside to small urban centers which provide better social services. During the 1990s agricultural value-added grew at 4.8% per year and employment fell at a rate of 0.8%. Despite rising minimum wages, these job losses and the failure of real labor payments in agriculture to keep up with its rapid labor productivity growth help explain persistence of poverty in the sector. Whether employment growth in non-agricultural sectors will alleviate this problem over time remains to be seen.

Colombia. During the 1980s, Colombia was more successful than most Latin American countries in avoiding the worst impacts of the debt crisis. GDP growth was on the order of 2% per year during the first half of the decade but then picked up thanks to a short-lived coffee boom in 1986 and rising mineral and non-traditional exports thereafter. Widespread economic reform began in 1990, along with increases in social expenditure. Output growth accelerated (especially in non-traded sectors as the real exchange rate appreciated) with a consequent deterioration in the external trade account. A "stop" phase "a la Colombiana" (2% output growth) ensued in 1995-96.

Along broadly Kuznetsian lines, these macro fluctuations underlay strong but partly self-offsetting changes in income generation and distribution at the sectoral level. In the period 1978-88, income inequality widened in rural and narrowed in urban areas (the latter partly in response to an expanded educational effort in the 1970s and rising female participation rates). Incomes per worker fell, but employment growth and more jobs for women permitted household income levels to go up, especially for the poor in urban areas. At a \$60 per month poverty line, the urban headcount ratio fell from 16% in 1978 to 8% in 1988, while the rural ratio rose from 31% to 36% as trade protection benefited well-off agriculturalists.

After an interregnum 1988-91, these tendencies reversed themselves under reform and rapid growth of effective demand. The urban Gini coefficient rose by 4 or 5 percentage points between 1988 and 1995, partly in response to skill-twist and/or Stolper-Samuelson effects associated with trade liberalization. The rural Gini fell by 13 points! Urban household incomes grew at 3.1% per year while rural incomes fell at a 2.5% rate as agriculture went into crisis due to trade liberalization and exchange rate appreciation. The urban poverty headcount ratio jumped to 11% in 1991, but then declined back to 7% in 1995 in response to household income growth. The rural ratio fell steadily to 25% in 1995, due to increased income equality in agriculture; the rural middle class paid the price of trade liberalization.

Costa Rica. The economy suffered the biggest impact of the debt shock in the years 1980-82, when GDP growth averaged -2.9% per year in contrast to a historical rate of 6.1%. With renewed access to foreign resources (the bulk coming from the US in response to the Sandinista victory in neighboring Nicaragua), the economy then grew at about 3.9% annually, 1983-85, and at 4.6% thereafter. The agricultural share of output fell from 22% in the early 1980s to 16% in the mid-1990s, with the service share expanding to pick up most of the difference (the industry share held steady at about 20%).

Costa Rica has long practiced enlightened social policies, and poverty has responded accordingly. Overall incidence rose in the early 1980s in response to the debt shock, but then

steadily declined. With a \$60 per month poverty line, urban incidence fell from 10.2% to 7.5% between 1987 and 1996, and rural incidence from 31.0% to 23.6%. The real minimum wage grew steadily over the same period. Thereby, poverty incidence and the minimum wage bear a strong inverse correlation. In agriculture, real wages grew at 0.7% per year during the period, as compared to 0.3% in the non-agricultural private sector. Along with rising prices for traditional agroexports (coffee and bananas especially) which are partly produced by smallholders, this wage trend helped reduce rural poverty. Finally, increases in public transfers (mostly pensions) raised incomes of both the poor and non-poor during the 1990s.

Cuba. The socialist model provided a basis for visible output growth through the mid-1980s -- average rates were 6.5%, 1971-80, and 8.5%, 1981-85. Thereafter, a tightening external constraint and rising fiscal deficits were associated with only 0.7% growth per year between 1986 and 1989. The big external shock came between 1989 and 1992 when the import share of GDP fell from 29% to 12% while GDP per capita declined by 24%. The authorities chose to maintain both employment and nominal wages stable, so that the impact of the crisis would be more fairly distributed. As a consequence labor productivity and real wages declined in tandem with GDP per capita. With a substantial basket of "essential" goods provided through the pre-existing rationing system, prices of freely traded commodities had to jump to force the real wage reduction. The price index for informal markets rose in the city of La Habana from 100 in 1987 to 510 in 1992 and 1553 in 1993.

Greater access to foreign exchange through tourism and other exports permitted a gradual recovery of GDP per capita after 1993 -- its growth rate was 3.2% per year, 1993-96. Prices in informal markets declined (the index was 555 in 1996 in La Habana) as commodity supplies increased. Household incomes rose due to the transfer of state lands to farmers, the rise of self-employment, opening of free markets, and access of more Cubans to foreign exchange from remittances and tourism.

Cuba has long enjoyed high and steadily improving social standards. The vast majority of the population is supported by the social safety net, so that "poverty" as observed in the rest of the hemisphere does not have much relevance. Nonetheless, people with low incomes can be said to be "at risk", in the sense of not being able to satisfy some of their basic needs. Concretely, the authors of the Cuban study compared household incomes with the price of a basket of food composed from different markets, to identify population shares at risk. Their "risk lines" per person were 33 pesos in 1989, 112 pesos in 1995, and 93 pesos in 1996 (in comparison to a notional peso/dollar exchange rate of unity, and parallel market rates of about 32 and 20 in the latter two years).

Headcount ratios for people at risk in urban areas rose from 6.3% in 1988 to 14.7% in 1996. Incidence was greater in Eastern region, and among the less educated and the unemployed (there were no significant differences by gender). In the city of La Habana, risk incidence was 4.3% in 1988, 20.1% in 1995, and 11.5% in 1996 -- in line with the macroeconomic and household income trends discussed above.

Dominican Republic. The level of economic activity appears to be driven by a public investment cycle, along scenario one lines. An upswing leads to rising inflation and a worsening

external deficit, with the real wage moving counter-cyclically. Over the recent period, 1982-85 were stabilization years, 1986-89 saw expansion, 1989-93 stabilization, and 1994 a brief expansion followed by more stabilization. While these fluctuations took place, the economy gradually shifted its export orientation away from agriculture toward labor-intensive tourism and assembly operations in free trade zones.

Poverty rose in the late 1980s as the income distribution became more concentrated with rising inflation. Thereafter, headcount ratios at an approximately \$60 per month poverty line declined to 21.3% in rural areas (48% of the poor) and 9.6% in urban centers (52% of the poor). There are no strong gender differences in poverty incidence, although poverty among female-headed households dropped in the 1990s, perhaps due to better employment opportunities in the new export industries. In terms of overall macro linkages, poverty appears to increase with inflation, and decrease with increases in the minimum wage and the level of output.

Ecuador. Macroeconomic performance has been driven by external forces in a country which remains highly dependent on primary product exports. A petroleum boom allowed per capita GDP (in current prices) to rise to about \$1700 in the early 1980s. After the boom ended, output per capita fell back to less than \$1100 in 1988 and then steadily recovered to \$1600 in 1996. As a means to limit effective demand, inflation rose to 75% per year in the late 1980s and has subsequently dropped to around 25%.

Real wages moved roughly inversely to the rate of inflation, and were the key mechanism for macro adjustment. On the one hand falling wages pushed people into the informal sector and on the other helped maintain profitability in protected industries which survived both real depreciation in the 1980s and trade liberalization after 1992. Labor payments also responded to higher minimum wages in the 1990s. Along with renewed growth of oil exports, increased labor income may have been partly responsible for the recuperation of aggregate demand. Trade liberalization, so far, has been associated with exchange appreciation and some growth of non-traditional exports (shrimp, vegetables, and flowers).

Data regarding poverty are scanty. Based on consumption estimates, the incidence of rural poverty dropped from 53% to 32% between 1979 and 1995, in association with migration from the highlands to the coast and areas of new settlement in the Amazon. On the basis of income data, urban incidence fell from 20% in 1975 to 17% in 1995, with most of the gain taking place during the oil boom and perhaps some deterioration in the 1980s. Real per capita income rose 100% (53%) between 1975 (1979) and 1995, so that the rural and urban estimates are not incompatible, especially in the presence of rural-urban migration. Urban poverty appears to have increased during the 1990s, a phenomenon which may be explained by very slow output growth masked by real appreciation.

Jamaica. The economy grew rapidly with increasing industrialization during the 1950s and 1960s. Thereafter, inflation and stagnation were accompanied by rising poverty for 20 years, under first populist and then more pragmatic statist regimes. Washington-style reform was pursued in the 1990s, without great enthusiasm. The agricultural sector had declined to 6.5% of GDP in 1989, but then rebounded to 8.6% in 1995; finance and other service sectors also increased their output shares during the recent period.

Early, incomplete studies suggest that the overall poverty ratio (with reference to a national line) fell from 55% in 1958 to 34% in 1974-75. The same line gives 75% poverty on the basis of a household income and expenditure survey in 1989! Not much significance can be attributed to the numbers, but the tendencies seem clear. The country author uses expenditure estimates and a \$63 per month poverty line to discuss developments after 1989. Overall incidence that year was 45.5%, 28.2% in urban areas and 58% in rural.

During 1989-91 poverty worsened. This trend seemed to reverse in 1991-93, but subsequently reversed again to increase the headcount ratio to 50.2% in 1995 (35.7% urban and 65.1% rural). The macroeconomic correlates of poverty changes appear to be output growth and (inversely) inflation. Nominal wages are not indexed to inflation, so accelerated price increases hurt formal sector wage earners with fixed-term contracts; informal workers may be better protected by ad hoc indexation. Enough formal workers fall below the poverty line to make the headcount ratio rise. They do not seem to benefit from increases in the minimum wage. Gender differences are not large, and the threshold level of education required to break out of poverty appears to be completion of secondary school.

Sectoral data show that 82.5% of the poor depend on either non-traded agriculture or non-traded services for their livelihoods; 64% of the poor live in rural areas (as compared to about half of the population overall). The poor appear to have "migrated" from agriculture to the services during the 1990s. Although the exchange rate appreciated after liberalization, the implicit income transfer toward non-traded activities does not appear to have benefited the poor.

Mexico. Macroeconomically, the general picture in Mexico since the debt crisis of 1982 features slow output growth, with falling GDP per capita in 1983-1988, a slight recuperation in 1989-92, negative per capita growth again in 1992-95 (dramatically worsened by the Tequila shock in 1995), and visible recovery more recently. Widespread liberalization took place in the late 1980s and early 1990s, accompanied by massive capital inflows, high interest rates, and exchange appreciation. Post-Tequila, a maxi-devaluation, a robust American economy, and (possibly) the adoption of NAFTA have stimulated export growth.

On the basis of several poverty lines, the headcount ratio rose by three or four percentage points during 1984-89, fell by one point during 1989-92, and was nearly stable during 1992-94. With an approximately \$60 per month poverty line, the ratio in 1994 was 31.8%. These changes, however, mask growing polarization of the Mexican economy, in several dimensions.

First, poverty incidence in the primary sector and in the South and Southeast regions (including the state of Chiapas, the site of the Zapatista insurrection) increased by almost four percentage points. Explanatory factors included exchange appreciation, decreases in export prices for coffee and cocoa, and the reduction of state subsidies implicit in the old ejido (village common property) system of agricultural tenure. Privatization of the ejidos was the final blow to an established system of social support.

Second, wage differentials between skilled and unskilled workers widened by almost 30% between 1985 and 1990. Along with rising profits, this anti-Stolper-Samuelson or skill twist

effect meant that overall inequality increased in the late 1980s, leading to more poverty. The headcount ratio stabilized but did not decline thereafter.

Finally, if steady, export-led growth is possible over the next 5-10 years, it may be sufficient to reduce the incidence of moderate poverty. Eradicating extreme poverty, however, could take four decades even if the economy grows steadily at 5% per year.

Nicaragua. Dramatic shifts in political regimes have been at the root of equally striking macroeconomic changes. Under the Sandinistas, there was fairly rapid growth supported by official capital inflows early in the 1980s. This trend reversed brusquely, however, with the contra invasion after 1983. Rising military outlays financed by monetary emission led to hyperinflation and output losses in the late 1980s. A new government took power in 1990. After a pause, an exchange rate-based stabilization combined with liberalization got underway in 1991. Output remained stagnant until 1993, but with renewed external support it increased at an annual rate of about 4.5% thereafter.

Household survey data are available for 1985 and 1993 -- after the end of the Sandinista growth period and at the bottom of the subsequent slump.¹ They show an improbably large distributional deterioration, with the income share of the bottom decile dropping from 2.4% to 0.24% and the share of the top decile rising from 27.1% to 51.5%. The only solid conclusion, perhaps, is that income concentration worsened at the same time as per capita income fell. The incidence of poverty surely increased in a period of sociopolitical upheaval.

At a \$60 per month poverty line, the 1993 data give a headcount ratio of 68%. Poverty incidence is 88% in rural areas; 55% of the poor live in the countryside. Policy under both regimes has not been effective in reaching the rural poor. The Sandinistas adopted somewhat contradictory land reform and cheap food policies while successor governments have mostly been concerned with stabilization and the implantation of a liberal policy mix. Its growth and distributional benefits (aside from opening access to foreign resources) have been modest to date.

Paraguay. Macroeconomic cycles in Paraguay have had temporal and sectoral patterns independent of broader changes in Latin America. There was an investment boom in the 1970s, based on construction of the Itaipu dam on the border with Brazil. After 1980, however, GDP per capita remained essentially flat, despite fairly rapid growth in agriculture and active service trade with Argentina and Brazil (some perhaps not strictly legal), centered around Asuncion. The advent of Mercosur will adversely affect the latter activities. The government has been small, although its social spending did increase from 2.6% to 6.6% of GDP between 1990 and 1995.

In this relatively stable macroeconomic environment, urban poverty incidence (at a \$60 per month poverty line) declined steadily from 14% to 2.4% between 1983 and 1996 (or from 4.3% to 1.9% in metropolitan Asuncion if household income and expenditure surveys are adjusted for underreporting). With stable GDP per capita, falling urban poverty already suggests that polarization of the economy has been rising.

¹ In order to make the available household surveys comparable, the authors utilized only income figures from main sources of income. Secondary sources of income, available for the 1993 survey, were disregarded. The analysis, in this way, underestimates the total income of the individuals and, conversely, overestimates the poverty incidence.

This observation is underlined by changes in rural areas. About 50% of Paraguayans live in the countryside, and 50% of them are poor. The main agricultural products are soybeans and cotton, the former produced with capital-intensive technology, and the latter labor-intensive. Cotton is the cash-crop of the campesino economy. Its producers who hold less than 10 hectares of land and/or speak Guarani are overwhelmingly poor. Moreover, cotton yields have fallen off since the 1980s, due to drought and the arrival of the boll weevil from Brazil. There is no visible public effort to confront these challenges, nor is empty land available to be brought into production. The implication is that rural poverty in Paraguay is an endemic structural problem, with no obvious solutions in sight. Rural-urban migration will not help if Paraguay's "absolute" service trade advantage disappears under Mercosur, and the institutional modernization demanded by the new trade regime will be economically painful at least in the short run.

Peru. GDP per capita has fluctuated violently over the years. It dropped steadily throughout the 1980s, as a "go" cycle along scenario one lines which was spurred by expansionary policies collapsed into hyperinflation at the end of the decade. After the GDP index had fallen from 114 in 1987 to 78 in 1992, the present government's stabilization/liberalization program led to renewed economic growth until 1995 when the external constraint reappeared. In terms of the functional income distribution, the 1990s package was regressive. By 1996 GDP per capita had almost regained its 1985 level, while the real wage index was 56 as compared to 100.

Data on changes in poverty over time are hard to come by, with available survey results for 1985-86 and 1994 not capturing the major macro dislocations that occurred around 1990. The most striking pattern shows high concentrations of poverty in the Sierra Rural and Selva Rural regions. Their incidence rates are on the order of 60%, with 69% of the poor living in those two zones in 1985 and 44% in 1994. Such data suggest substantial rural-urban migration, and indeed the share of the poor population residing in metropolitan Lima rose from 5% to 14% over the period.

For people not excluded in the hinterlands, the expectation is that poverty should vary counter-cyclically, with employment and the real wage increasing with the level of economic activity. Both tendencies have been absent in the recent upswing, with productivity increases apparently preventing employment growth and higher profits eroding real wages. Overall poverty incidence, therefore, rose from 26% to 34% between 1985 and 1995.

El Salvador. The macroeconomy has gone through three phases since around 1980: the war decade of the 1980s with strongly negative GDP growth in the early years and stagnation thereafter; an expansion between 1990 and 1995 supported by external resources and a rising volume of emigrant remittances (now amounting to 10% of GDP, as compared to a 4% share of traditional primary product exports); and a slowdown with a reduction in inflation beginning in 1995. Over the period, the primary product share of GDP fell from 23% to 10%, with the manufacturing and service shares both increasing. Between 1970 and 1990, the rural-urban percentage population split went from roughly 60/40 to 50/50.

Given these sectoral trends, it is not surprising that poverty remains a rural problem. With national, official poverty lines (in monthly Colones), incidence is on the order of 30% in both

parts of the country, but in 1996 60% of the poor lived in the countryside. Reactivation of the agricultural sector and/or development of rural infrastructure could be possible solutions, but their feasibility is open to doubt.

In terms of time trends, slumping output and accelerating inflation in the 1980s both contributed to increased poverty. The war and an anti-agricultural policy bias added to the pressure. In the 1990s, remittance inflows have helped the poor. However, they were also associated with exchange rate appreciation and a consumption boom, which were the targets of a policy-induced recession at mid-decade. If a period of slow output growth follows, poverty will probably remain near its current levels.

5. Summary and Some Policy Implications

Both the correlation analysis of section 3 and the country vignettes in section 4 suggest that the forces influencing poverty incidence are complicated and differ across countries to a significant extent. A great deal depends on inter- and intra-sectoral patterns of production and income generation and their changes over time, along with institutional factors influencing how income gets distributed.

At the macro level, the main policy "recommendations" for reducing poverty would be to maintain steady output growth with low inflation and to raise the minimum wage (perhaps more rapidly than productivity growth of low skilled workers for a time, to offset shifts in the functional distribution toward returns to capital which have occurred in some countries). Unfortunately, the checkered macroeconomic history of the Latin American and Caribbean region over recent decades suggests that such macroeconomic outcomes are not easy to attain.

If jobs are available, raising educational levels at the low income end of the population helps reduce poverty, as discussed more fully in Chapter 2 and several of the country papers. More generally, broad social safety nets such as Cuba's can in principle be erected even in relatively poor countries, but whether such a degree of social engineering is politically feasible in present times is an open question.

One can consider interventions such as transfer programs and manipulation of input or output prices to benefit particular groups of poor people, but their feasibility and effectiveness will vary widely. From Chiapas through the Altiplano to the flatlands of Paraguay, indigenous groups have been systematically excluded from the benefits of modern economic growth for centuries. Such exploitation is not easily removed and can be worsened, as the recent ejido experience in Mexico demonstrates. On the other hand, targeted programs for poor female-headed or -maintained households (see Chapter 3) may make sense.

One can also inquire about the effects of change in the overall economic environment: specifically, have recent "reform" packages helped the poor? Chile and the perpetual outlier Colombia excepted, it is certainly true that reforming economies in the region have not returned to their per capita income growth rates of the 1970s, despite slower population growth. The principal engine for poverty alleviation is not running at high speed.

Where they can be traced, the specific impacts of the reforms have been mixed -- slow per capita growth and a roughly stable poverty headcount ratio in "early reforming" Bolivia vs. distributional improvements in "late reforming" Colombian agriculture; steady poverty elimination through social welfare programs, a minimum wage, and adequate growth in "early" Costa Rica vs. almost three decades of negative per capita income growth under varying policy regimes in almost equally "early" Jamaica; poverty reduction through inflation stabilization and minimum wage increases in "late" Brazil vs. a secular increase in urban poverty exacerbated recently by rising unemployment and falling wages in "early" Argentina. It is too soon to draw definite conclusions about the implications of the reforms, but the contrasts just drawn and many others suggest that there will be a mixture of favorable and unfavorable results; the balance may not be apparent for years.

In a historical time span measured in decades, events that are almost certain to happen are a waning of enthusiasm for liberal reform as its mixed blessings and curses become more visible, and a pause or reversal in foreign capital inflows in the region. The slow growth implicit in the latter development will not be helpful to the poor; the sociopolitical consensus that will replace neoliberalism may or may not be. It is not too soon to start thinking about eventualities. The evidence collected in this volume may prove very helpful to that process.

References

Bruno, Michael, Ravallion, Martin, and Squire, Lyn (1996): "Equity and Growth in Developing Countries". Policy Research Paper 1563, The World Bank. Washington, D.C.

Geertz, Clifford (1973): "Deep Play: Notes on the Balinese Cockfight", *Daedalus* 101:1-37.

Kuznets, Simon S. (1955) "Economic Growth and Income Inequality," *American Economic Review*, 45: 1-28.

Sen, Amartya K. (1992): "Inequality Reexamined", Harvard University Press, Cambridge, Massachusetts.

Stolper, Wolfgang F., and Paul A. Samuelson (1941) "Protection and Real Wages," *Review of Economics and Statistics*, 9: 58-73.

Taylor, Lance (1994) "Gap Models," *Journal of Development Economics*, 45: 17-34.

Vos, Rob, Lee, Haeduck, and Mejía, José Antonio (1997): "Structural Adjustment and Poverty in Bolivia", INDES Working Papers, Working Papers Series I-3, Inter-American Development Bank, Washington, D.C.

Table 1: Changes in poverty and in other macroeconomic variables, by macroeconomic episode

Country	Macroeconomic episode	poverty line	GDP	GDP/cap	Gini	poverty incidence	extreme poverty	w min	w real	unemploy.	real exch rate	soc exp/ GDP	gender	inflation	real inter rate	Inv/GDP	Con/GDP	labor productiv	capacity utilization	Xp-Mp	poverty incidence (%)			
																					1980	1985	1990	1996
Argentina	1974-80 stabilization and liberalization	74, 80, 86	(+)	(=)	(+)	(+)	(+)	(-)	(-)	(-)	(-)		si	(+)		(=)	(=)	(=)	(=)	(-)	13.9	17	17.5	20.8
	1980-86 chaotic adjustment and stabilization	91, 94, 96		(-)	(+)	(+)	(+)	(-)	(-)	(+)	(+)	(+)	si	(+)	(-)	(-)	(+)	(-)	(-)	(+)				
	1986-91 towards hyperinflation		(=)	(-)	(+)	(=)	(=)	(-)	(-)	(+)	(-)	(=)	si	(-)	(+)	(-)	(+)	(-)	(=)	(=)				
	1991-94 stabilization and structural reform		(+)	(+)	(=)	(+)	(+)	(-)	(+)	(+)	(-)	(+)	si	(-)	(+)	(+)	(-)	(+)	(+)	(-)				
	1994-96 Tequila and recovery		(=)	(-)	(+)	(+)	(+)	(-)	(-)	(+)	(=)	(=)	si	(-)	(+)	(-)	(-)	(-)	(-)	(+)				
Cuba	1989-93 external shock and adjustment	88, 95, 96	(-)	(-)	(+)	(+)	(+)	(-)	(-)	(-)	(+)	(-)	no	(+)	(=)			(-)	(-)	(-)		4.3	20.11	11.5
	1993-95 structural changes		(+)	(+)	(-)	(-)	(-)	(+)	(+)	(+)	(-)	(-)	no	(-)	(+)			(+)	(+)	(+)				
	1995-96 consolidation		(+)	(+)	(-)	(-)	(-)	(+)	(+)	(-)	(-)	(+)	no	(-)	(+)			(+)	(+)	(+)				
Colombia	1978-91 crisis and recovery in the 80s	78, 91, 95	(+)	(+)	(+)	(+)	(-)	(-)	(-)	(+)	(+)	(+)	no	(+)	(+)	(=)	(-)	(+)	(-)	(-)	57.7		58.5	52.5
	1991-95 opening and structural reform		(+)	(+)	(+)	(-)	(-)	(+)	(+)	(+)	(-)	(+)	si	(-)	(+)	(+)	(+)	(-)	(+)	(-)				
Brasil	1985-88 Cruzado stabilization	76, 80, 81	(+)	(+)	(+)	(-)	(-)	(+)	(+)	(-)	(-)	(+)	no	(+)	(-)	(=)	(+)	(=)	(+)	(-)		62.4	58.4	61
	1988-90 inequality	82, 85, 86	(=)	(-)	(+)	(+)	(+)	(-)	(-)	(+)	(=)	(-)	no	(+)	(+)	(-)	(-)	(+)	(=)	(+)				
	1990-92 recession	87, 88, 89	(-)	(-)	(-)	(+)	(+)	(+)	(+)	(-)	(-)	(-)	no	(+)	(+)	(-)	(-)	(+)	(-)	(+)				
	1993-95 high inflation	90, 91, 92	(+)	(+)	(+)	(=)	(=)	(-)	(-)	(-)	(-)	(-)	no	(+)	(=)	(+)	(=)	(+)	(+)	(-)				
	1995-96 Real plan	93, 94, 95	(+)	(+)	(-)	(-)	(-)	(+)	(+)	(+)	(=)	(=)	no	(-)	(+)	(=)	(+)	(+)	(+)	(-)				
Mexico	1984-89 adjustment	84, 89, 92	(+)	(-)	(+)	(+)	(+)	(-)	(-)	(+)	(-)	(=)	si	(+)	(+)	(-)	(+)	(-)	(-)	(+)	34.0!	28.5	32.6	31.8
	1989-94 frustrated recovery	93, 94	(+)	(+)	(-)	(-)	(-)	(-)	(+)	(-)	(+)	(+)	si	(-)	(-)	(-)	(-)	(-)	(-)	(-)				
Chile	1974-85 reforms	87, 90, 92	(+)	(=)	(-)	(+)	(+)	(=)	(+)	(+)	(+)	(+)	no	(-)	(-)	(=)	(+)	(-)	(-)	(+)		45.1	38.6	23.2
	1986-96 growth	94, (96)	(+)	(+)	(=)	(-)	(-)	(+)	(+)	(-)	(-)	(-)	no	(-)	(=)	(+)	(-)	(+)	(+)	(-)				
Ecuador	1970-82 poverty and Dutch-disease	75, 79, 88	(+)	(+)	(-)	(-)	(-)	(+)	(+)	(-)	(+)	(+)		(-)	(-)	(+)	(-)	(+)	(+)	(-)	78			62
	1983-91 adjustment with no stability and no reform	89, 90, 91	(+)	(-)	(+)	(+)	(+)	(-)	(-)	(+)	(-)	(-)	si	(+)	(-)	(-)	(+)	(-)	(-)	(+)				
	1992-96 liberalization with no structural transform	92, 93, 94, 95	(+)	(=)	(+)	(-)	(-)	(+)	(+)	(+)	(+)	(+)	si	(-)	(+)	(-)	(-)	(+)	(+)	(-)				
Costa Rica	1980-82 crisis and unplanned adjustment	80, 81, 82	(-)	(-)	(=)	(+)	(+)	(-)	(-)	(+)	(+)	(-)	no	(+)	(-)	(=)	(-)	(-)	(-)	(+)	28.4	33.8	27.1	21.5
	1983-85 stabilization and expansionary adjustment	83, 84, 85	(+)	(+)	(=)	(-)	(-)	(+)	(+)	(=)	(+)	(+)	si	(-)	(+)	(-)	(=)	(+)	(+)	(-)				
	1986-90 adjustment in the structure of production	86, 87, 88	(+)	(+)	(=)	(-)	(-)	(-)	(+)	(-)	(+)	(+)	si	(+)	(-)	(+)	(-)	(+)	(+)	(+)				
	1991-95 structural adjustment and state reform	89, 90, 91, 92, 93, 94, 95	(+)	(+)	(=)	(-)	(-)	(+)	(+)	(-)	(+)	(-)	si	(=)	(+)	(+)	(-)	(+)	(+)	(+)				
Jamaica	1960-72 industrialization by invitation	89, 95	(+)	(+)		(-)							si	(+)							34.2!		37.5	50.2
	1973-80 state populism		(-)	(-)	(+)					(+)	(-)		no	(+)										
	1981-88 state pragmatism		(+)	(-)	(+)					(-)	(+)		no	(-)	(+)									
	1989-95 economic reform		(+)	(-)	(+)	(-)	(+)	(+)	(=)	(+)	(+)		no	(+)	(+)									
Republica Dominicana	1981-86 stabilization	86, 89, 92	(+)	(-)	(+)			(-)		(+)	(+)	(-)	si	(-)	(-)	(-)				(-)		22	30.9	18.2
	1987-89 expansion and crisis		(+)	(+)	(+)	(+)	(+)	(-)	(-)	(+)	(=)	(-)	si	(+)	(-)	(+)				(-)				
	1990-96 stabilization		(+)	(+)	(+)	(-)	(-)	(+)	(-)	(-)	(-)	(+)	si	(-)	(+)	(+)				(-)				
Peru	1985-90 Garcia	85/86, 94	(-)	(-)		(+?)		(-)	(-)	(+)	(-)	(-)	no	(+)	(-)	(-)	(+)			(+)		25.8		33.5
	1990-95 Fujimori		(+)	(+)		(+?)		(-)	(+)	(+)	(-)	(+)	no	(-)	(+)	(+)	(-)			(-)				
Paraguay	1970-80 investment led growth	80, 92, 95	(+)	(+)				(-)	(-)	(-)	(+)			(+)	(-)	(+)	(=)				50.8	46.5	31.5	20.8
	1982-83 BoP crisis due end investment boom		(-)	(-)	(=)					(+)	(+)			(+)	(-)	(-)	(-)							
	1984-90 slow recovery and stable macroec balance		(+)	(+)	(+)	(-)	(-)	(+)	(+)	(-)	(-)	(-)		(-)	(-)	(=)	(=)							
	1990-96 urban slowdown, loss comparative advant.		(+)	(=)	(+)	(-)	(-)	(-)	(-)	(+)	(+)	(+)		(-)	(+)	(+)	(+)							
Bolivia	1980-85 model exhaustion and crisis	76(NBI)	(-)	(-)	(+)	(+)	(+)	(-)	(-)	(+)	(-)			(+)	(-)	(-)	(+)			(-)		51.5	53.3	45.1
	1985-87 stabilization and adjustment	92(NBI)	(=)	(-)	(+)	(+)	(=)	(=)	(+)	(-)	(=)	(+)		(-)	(+)	(=)	(+)			(-)				
	1987-92 structural reform	90, 91, 92	(+)	(+)	(-)	(=)	(+)	(+)	(+)	(-)	(+)	(-)	si	(=)	(-)	(+)	(-)			(=)				
	1992-96 recovery	93, 94	(+)	(+)	(+)	(-)	(-)	(+)	(+)	(-)	(+)	(-)	si	(-)	(-)	(=)	(-)			(=)				
El Salvador	1980-90 war economy and economic crisis	85, 91/92	(-)	(-)		(+)	(+)	(-)	(-)	(+)	(+)	(-)	no	(+)	(-)	(-)	(-)			(-)	50	44.2	31.5	30.3
	1990-95 peace and expansionary adjustment	96	(+)	(+)		(-)	(-)	(-)	(-)	(-)	(+)	(+)	no	(-)	(+)	(+)	(+)			(-)				
	1995-96 new strategy/exhaustion inward look growth		(-)	(=)		(+)	(+)	(-)	(-)	(+)	(+)	(+)	no	(-)	(+)	(-)	(-)			(-)				
Nicaragua	1980-85 Sandinist expansionary policy	85, 93	(+)	(+)				(+)	(-)	(-)	(-)	(+)	no	(+)	(-)	(+)	(+)	(-)	(+)	(-)		42.8	68.3	
	1985-90 unsuccessful Sandinist adjustment		(+)	(-)	(-)	(-)	(-)	(-)	(-)	(+)	(-)	(-)	no	(+)	(-)	(+)	(-)	(-)	(-)	(-)				
	1990-93 orthodox adjustment with no growth		(-)	(-)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(-)	no	(-)	(+)	(-)	(-)	(+)	(-)	(-)				

(+/-/=) refer to direction of change; (!) most recent available information; gender indicates if male/female poverty (by head of household) is an important explanatory variable; Xp-Mp: saldo in BoP's current account; all variables are in real terms

Table 2: Changes in poverty incidence (relative poverty) per macro episode and their linkages to key macro variables

number/ type change	sign of correl	GDP	GDP/cap	w min	w real	unemploy	Gini	soc exp/ GDP	inflation	real inter rate	Xp-Mp	real exch rate
(+) 23	(+)/(=)	13	7	5	7	18	14	9	15	13	9	14
	(-)	9	16	15	14	5	2	9	8	8	13	9
	na	1	0	3	2	0	7	5	0	2	1	0
(=) 3	(+)	2	1	1	1	2	2	0	1	1	0	1
	(=)	1	0	0	0	0	0	1	1	1	2	0
	(-)	0	2	2	2	0	1	2	1	1	1	2
(+)/ (=) 26	(+)/(=)	16	8	6	8	21	16	10	17	15	11	15
	(-)	9	18	17	16	5	3	11	9	9	14	11
	na	1	0	3	2	0	7	5	0	2	1	0
(-) 19	(+)/(=)	18	18	13	14	7	11	12	5	11	5	10
	(-)	1	1	5	4	11	6	6	14	7	11	8
	na	0	0	1	1	1	2	1	0	1	3	1

Note: relative poverty/poverty incidence. Number of cases and direction of change

(+) 23

(=) 3

(-) 19

na 4

total 49