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ECONOMIC DECLINE AND CHILD SURVIVAL:  
THE PLIGHT OF LATIN AMERICA IN THE EIGHTIES

by

Teresa Albanez a/, Eduardo Bustelo b/,  
Giovanni Andrea Cornia c/ and Eva Jespersen d/

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a/ UNICEF-Bogota; b/ UNICEF-Buenos Aires; c/ UNICEF International Child Development Centre, Florence, Italy; d/ UNICEF Headquarters, New York

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## I. INTRODUCTION AND SCOPE OF THE ANALYSIS

In the 1980s the Latin American economy has suffered the most severe setback of the last fifty years. In most countries of the region per capita incomes are now at or below the 1980 level, while investments and imports per capita barely equal the levels of twenty years ago. In eight years most of the progress realized during the "economic boom" of the late 1960s and of the 1970s has been wiped out, while substantial disequilibria in the domestic and external sectors of the economy have made the resumption of long-term growth highly problematic.

These growing imbalances led in the early 1980s to the introduction on a massive scale of adjustment policies aimed at the generation of consistent surpluses in the trade account (to face growing debt servicing obligations), at the control of inflation and at the creation of the conditions for resumed growth.

To gauge the extent of such a phenomenon, it is enough to note that each year between 1981 and 1986 there were on average fifteen countries in which a Stabilization Programme was being implemented with the assistance of the International Monetary Fund (IMF), while the number of Structural Adjustment Programmes of the World Bank has been growing rapidly since the mid-1980s. The experience with adjustment programmes, however, has not been satisfactory. While these programmes should not be seen as the cause of the economic decline of the 1980s, they clearly have not been able to reverse the adverse developments in the living standards of the poor, nor in most cases have they led to resumed economic growth. In addition, these adjustment programmes have generally made no explicit efforts to prevent deteriorations in human conditions. Thus there is still considerable debate on the possibility of continuing progress in health, nutrition and education under these adverse economic conditions and on the nature of the macroeconomic policies and health measures needed to foster such progress.

There is no doubt that, in view of the extent of the decline and of the inadequacy of the policies adopted, the Latin American populations involved have suffered substantially. Data on wages, earnings and household incomes show that the living standards of the poor and - for the first time in recent history - of the middle class have continued to decline in the majority of the countries of the region throughout the 1980s. It has been argued, however, that health and nutritional status and educational achievements may not have worsened, since the average levels of income per capita and social service coverage prevailing in the

region are relatively high and/or because of the adaptability shown by many households in adopting "survival strategies" which have generated additional resources in the informal sector - if measured only in part in the national accounts - and in rationalizing the use of existing ones.

There is still considerable controversy therefore as to the extent of the deterioration in human conditions caused by the economic dislocations of the 1980s and as to the aggravating or alleviating role of adjustment policies in this process. Most of the views arrived at, however, lack analytical clarity, since they have generally been formed without making systematic use of a comprehensive analytical framework linking economic, social and biological variables in a coherent way. Moreover, because of the paucity of global data on human conditions, most of these viewpoints lack empirical substantiation.

This paper aims at bringing some clarity to the debate by trying to overcome - if only in part - some of these shortcomings.

After a brief introduction on the nature of the economic crisis, the paper deals with three main topics.

First, from a theoretical perspective it discusses the mechanisms and modalities through which economic declines may affect - if at all - the health and nutritional status of the populations involved. The discussion is carried out making use of a detailed analytical framework linking a set of indicators of (mostly) health and nutrition to their immediate as well as underlying determinants. As the mechanisms of transmission of the crisis can vary with the adjustment policies adopted, particular attention is placed on the effects of alternative "policy mixes" which can substantially alleviate or aggravate the negative effect of the economic recession.

Second, the paper examines the empirical evidence for the 1980s on trends in infant mortality and malnutrition (two indicators which are supposed to reflect broader changes in human conditions) and on their determinants. As there is still considerable disagreement on the health impact of the economic crisis, alternative data sources, whenever available, are compared.

Third, the paper discusses a series of adjustment measures for the economy as a whole and for the health sector in particular to ensure continued progress even in the light of an adverse economic environment.

## II. THE ORIGINS OF THE ECONOMIC CRISIS

Although a discussion of the nature and origins of the economic crisis is not central to this paper, a brief reference to it is nevertheless necessary in order to place the discussion of changes in human conditions within a broader context and to draw lessons for the articulation of a policy approach aimed at sustaining progress in health and nutrition in spite of adverse economic conditions.

The first oil shock of 1973, with its attendant disequilibria in external payments, was largely overcome by a massive recycling of the surpluses of the oil-exporting countries toward Latin American (and other) countries with large payment deficits. Borrowing conditions were very favourable, with real interest rates so low that even oil-exporters such as Mexico and Venezuela borrowed heavily in the expectation that oil prices would remain high. The beneficial aspects of such massive recycling meant that economic growth could continue up to about 1980.

However, the inefficient policies implemented by the Latin American authorities in the 1970s and the laxity of international banks led to the gradual build-up of the "debt crisis", which appeared officially to the public view with the suspension by Mexico in August 1982 of payments on its large foreign debt. To start with, in the course of the 1970s, international banks relaxed the standard appraisal procedures adopted to assess the profitability of projects, thus often leading to the financing of doubtful investments. On the domestic front, most countries let their currencies appreciate, making exports less competitive and stimulating imports, thus worsening their trade balance and giving rise to the need for further financing. In addition, the decision taken by many countries (such as Chile and Argentina) to liberalize domestic capital markets facilitated massive capital flights that according to some estimates now equal about one third of the outstanding foreign debt of the region. Lastly, a considerable part of the foreign exchange borrowed was allocated to the importation of military hardware. In this way a considerable share of the resources borrowed during the 1970s was used for relatively unproductive or even destructive purposes or left the region in the form of capital flights, while proportionately little was added to the capital stock of the region.

These developments led to the accumulation of a large stock of debt, mostly with very short maturities and at variable interest rates, making the burden of interest payments extremely sensitive to changes in interest rates in creditor countries. Similarly, changes occurring in the

1970s in the international financial system - such as the replacement of the fixed exchange rate regime with a new system of free currency floats and the rapid privatization of international capital flows - set the stage for the growing financial and monetary instability of the 1970s and 1980s.

These latent contradictions exploded in the early 1980s because of:

- The payment disequilibria and deflationary tendencies generated by the oil shock of 1979.
- The adoption in the United States, the United Kingdom and other industrialized countries of stringent monetarist policies, consisting of tight restrictions on domestic monetary and credit expansion, the pruning of government expenditure and large increases in real interest rates. These policies have also favoured - at home and abroad - a reduction in the role of the State in the economy and a neo-liberal position in the area of foreign trade.
- The decision of international banks to reduce their exposure vis-à-vis Third World debtors.

Because of these and other developments, the Latin American economies have been hit by four powerful external shocks:

- The volume of world trade has increased so far in the 1980s at about half the rate of the previous decade (around 2.5 percent against 5 percent).
- With commodity prices remaining depressed throughout the period under consideration, the terms of trade of the region deteriorated markedly. Over the 1981-1988 period their overall decline was 22.2 percent (ECLALC 1988).
- Nominal interest rates reached levels of 18 percent to 20 percent during the 1980-1982 period, while remaining high by historical standards throughout the 1980s. The decline in nominal rates observed between 1981-1982 and 1986 was not paralleled by a commensurate decline in real interest rates, while since 1986 nominal rates have started rising again.
- Private net lending to Latin America fell from about \$30 billion in 1980 to \$3 billion in 1983, \$4 billion in 1985, \$13 billion in 1987 and \$4 billion in 1988 (see Table I).

To tackle this sudden decline in net capital movements and the sharp

	1980	1981	1982	1983	1984	1985	1986	1987	1988
Exports of goods	89.1	95.9	87.5	87.5	97.6	92.2	78.2	89.2	102.0
Imports of goods	90.5	97.6	78.4	56.0	58.3	58.1	59.7	67.4	74.2
Trade balance (goods)	-1.4	-1.7	9.1	31.5	39.3	34.1	18.5	21.8	27.8
Net payments of profits & int	17.9	27.1	38.8	34.4	37.0	35.0	31.9	30.5	33.1
Balance on current account	-28.1	-40.1	-41.0	-7.3	-0.8	-3.0	-15.4	-9.8	-7.6
Net capital movements	29.5	37.3	20.2	2.9	10.2	2.2	8.3	13.9	4.3
Net transfer of resources	11.5	10.4	-18.6	-31.5	-26.7	-32.8	-23.6	-16.6	-29.9
Gross global external debt	222.5	277.7	331.0	352.2	369.9	376.7	389.4	410.5	401.4
GDP/pc growth rate (%) */	2.6	-1.2	-3.5	-4.7	1.4	1.4	1.6	0.3	-1.3

Source: ECLALC (1987) and (1988)

\*/ GDP/pc = gross domestic product per capita

rise in interest rates and because of the inability to increase the value of exports over the short run, Latin American countries have been forced to massively curtail their imports, mostly of investment goods and intermediate inputs. Starting in 1982-1983 large surpluses have been obtained in the trade balance, thus permitting the servicing of growing debt obligations (which increased from \$17.9 billion in 1980 to \$38.7 billion in 1982 and have remained above the \$30 billion mark since then). Equilibrium in the current balance has been broadly achieved. While the external debt has almost stabilized, the region - which was still benefitting from a positive net transfer of resources of \$11.5 billion from the industrialized countries in 1980 - has become a net exporter of resources to the industrialized countries since 1982.

External balance has been achieved at the cost of serious disequilibria in the domestic sector of the economy. The growth of Gross Domestic Product (GDP) per capita declined from an average of 2.9 percent per annum over the 1976-1980 period to -0.8 percent over the 1981-1988 period. The decline in Gross National Product (GNP) and national income per capita has been considerably larger, owing to the massive transfer of resources abroad referred to above. Urban unemployment for the region as a whole increased from 6.9 percent in 1980 to 10.9 percent in 1984, while slowly declining over the last three years. Although domestic savings as a proportion of GDP have not declined, investment activity has fallen precipitously with the drastic reduction in the importation of investment goods and spare parts. A vicious circle has emerged: investment cuts to

improve the current account balance in the short run make potential foreign exchange shortfalls more severe in the future. "Descapitalización" is possibly the most serious problem currently faced by the overwhelming majority of Latin American countries. With roads, communication systems, equipment and social infrastructure falling into disrepair, overall efficiency is declining. In addition, any attempt to stimulate growth through demand management policies rapidly collides with stagnant productive capacity in key sectors. As Table I shows eloquently, the savings in investment-intensive imports realized since 1982 have been used for higher interest payments on foreign debt, owing to the higher rates prevailing between 1981 and 1988 and to the ballooning of the debt. In this way, between 1982 and 1988 Latin America suffered the drainage of about \$180 billion from the region, a true economic aberration.

### III. THE ANALYTICAL FRAMEWORK

A thorough analysis of the effects on human conditions of the economic decline of the 1980s first requires the specification of a framework describing, from a theoretical perspective, the most important causal linkages among those social, economic and biological factors which influence child survival and development. Failure to take this first step could easily lead to spurious or partial correlations and inaccurate conclusions. In addition, because of the paucity of data on health and nutritional conditions, such a theoretical framework would make it possible to speculate on changes in health and nutritional status on the basis of the intervening changes in their determinants.

#### Levels of Variables and of Analysis

The framework presented here is the result of the integration of the two predominant approaches to research on child survival and development, the social science approach and the medical science approach. The variables included in this framework can be broken down into three sub-sets:

- Outcome variables, i.e. variables measuring changes in child welfare. Among them are infant mortality, malnutrition and child abandonment.
- Process variables, i.e. variables which might be the immediate

cause of changes in outcome variables. The main process variables include food intake and the availability and utilization of key social services. In the case of infant and child death for instance, the immediate causes are environmental contamination, inadequate personal illness control, injury, dietary deficiencies and maternal and delivery factors.

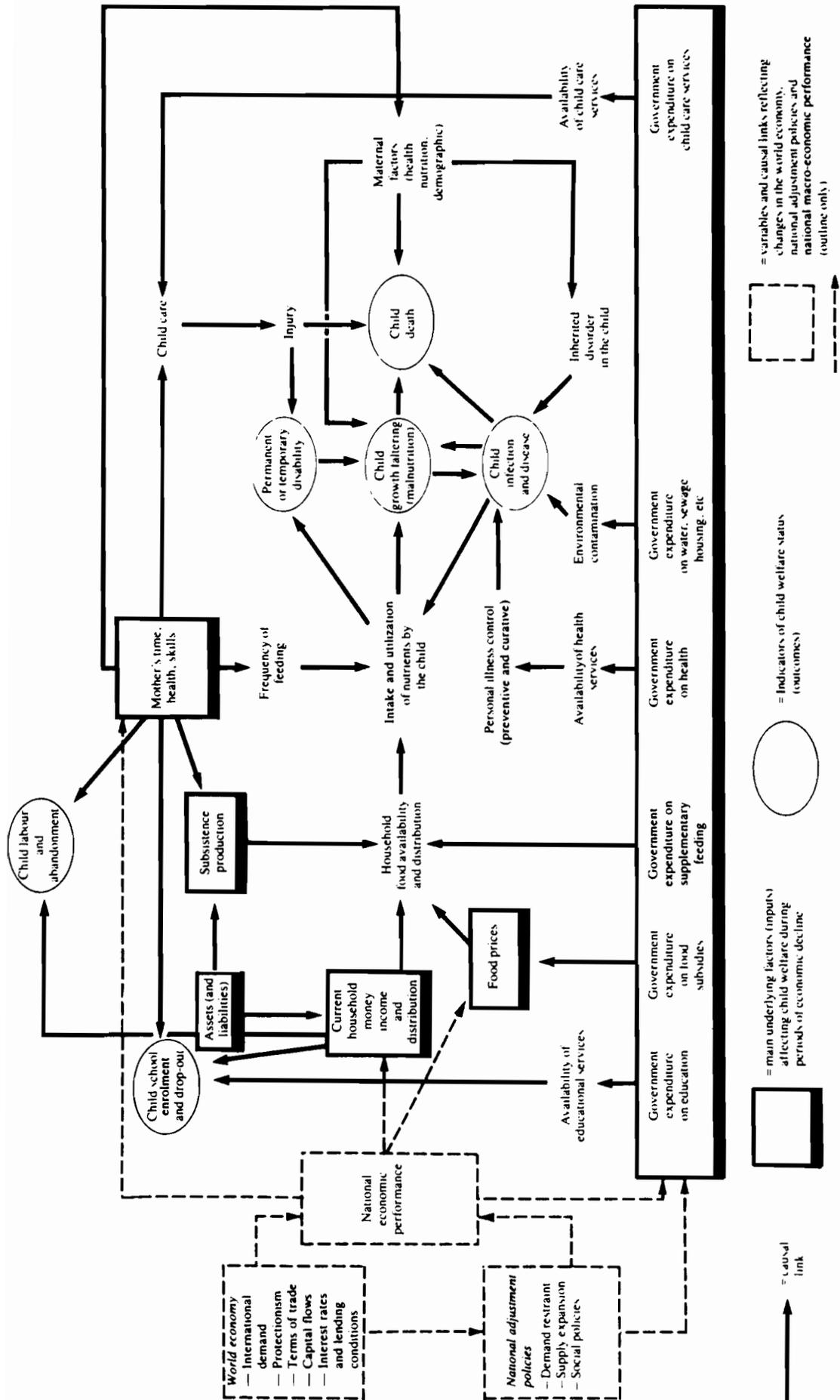
- Input variables, i.e. variables which exert a direct influence on process variables and which reflect the impact of underlying causes. They broadly measure the availability of resources for children through, for example, household income or government social expenditure (see later). Following on the previous example of infant and child death for instance, inadequate personal illness control (a process variable) depends largely upon input variables such as government expenditure on health and sanitation, as well as the structure and the degree of targeting of such expenditure on the poor.

Figure 1 describes graphically the interrelations between outcome variables (circled), process variables and input variables (boxed).

Although the distinction between welfare outcomes and their immediate and underlying determinants adds clarity to the analysis, the relationships between "outcomes and immediate causes" and between "immediate and underlying causes" should not be seen in too mechanical a fashion. Policy choices (on the distribution of government expenditure for instance), behavioral changes (such as the rationalization of household expenditure), or technological progress (which increases the cost efficiency of interventions in health, nutrition and water supply) do almost always offer the possibility of obtaining somewhat different results, given the same impulse. Indeed, from a policy perspective it is essential to examine closely how to arrive at the best health outcomes given a set of unchangeable restrictions, so as to articulate an efficient and equitable response to downward economic pressures.

#### Main Determinants (Input Variables) of Human Welfare

Although the underlying determinants of child welfare are numerous and highly interrelated, they are normally grouped in six sets representing different kinds of inputs for the "production" of child welfare:



**Fig. 1** An analytical framework linking changes in selected economic determinants and changes in selected indicators of child welfare

1. Human, physical and financial assets are at one and the same time important preconditions for the generation of income and, in the case of private assets, buffers that ensure - if liquidated - a minimum consumption during sharp and lasting declines in current income. Equally, the existing amount of social capital stock - both physical and human - can ensure for some time the preservation of adequate health conditions even in the face of reductions in health expenditures.

2. Household incomes in cash or kind. These include subsistence production and money incomes, whether from wage, self-employment or transfers. Household incomes are possibly the main determinant of the level of consumption of food, housing, clothing, transport and, to an extent, particularly during periods of contraction of public spending, also of health, water and sanitation, education and child care.

3. Price changes (i.e. increases), particularly for essentials, provoke negative "demand effects" and therefore depress the real level of consumption. In addition, changes in relative prices can generate important "substitution effects", altering the composition of household consumption and government expenditure.

4. Government expenditure on health, education, child care, water and environmental sanitation, supplementary feeding and food subsidies. Although private expenditure in these areas is far from negligible in most developing countries, these services are mainly provided by the government. As will appear clearly later on, the structure and targeting of such expenditure are as important as its level.

5. Family and community characteristics. Three elements that strongly influence child and overall human welfare - at the household and, to a lesser extent, the community level - are the time, health and skills (typically measured by education) of parents, particularly mothers.

6. Values, attitudes and practices. Societal values and attitudes (affecting, for instance, sex and/or generational biases in the family allocation of food and health care, or the nature and stability of the family union within which the child is born), as well as traditional health and nutritional practices, deeply influence the access to and the management of existing resources.

#### Transmission of Economic Decline to Human Welfare

Income declines. Drops in GDP (whether due to recession or adjustment) are associated with a decline in average real incomes. This drop in incomes will be shared by each category unless there are

significant distributional shifts. The distribution of a fall in GDP among socio-occupational groups varies according to the structure and "monetization" of the economy, the nature of the shocks leading to the recession, the relative price changes triggered by stabilization measures, the existence of buffering mechanisms (transfer payments), etc. Broad generalization on how income distribution changes during a recession is therefore difficult (Addison and Demery 1985, Helleiner 1985). While the poor in the less-monetized subsistence sector of the economy may not be overly affected by general economic decline, experience shows that those people at the bottom or near the bottom of income distribution in the monetized sector of the economy tend to suffer disproportionately. Indeed, because of the increase in excess labour supply that occurs in most developing country labour markets, recession tends to depress minimum wages in excess of the drop in employment and GDP (Tokman 1986, PREALC 1985). Self-employment incomes in the informal sector often follow this trend, since in many developing countries this sector generally produces non-tradeables (mostly services), the demand for which is largely a function of the level of income in the formal sector, while the number of people seeking a livelihood within it rises as formal sector employment falls.

Confronted with sharp declines in the current money incomes of employed family members, households can temporarily maintain previous levels of consumption by reducing their savings rate, liquidating their assets, expanding the family labour supply or running into debt. These responses, however, are less frequently available to very poor households, for which a drop in purchasing power is often reflected in a substantial reduction in food expenditure. For those households spending 60 percent to 80 percent of their incomes on food, a 10 percent drop in income may result in a 6 percent to 8 percent reduction in food expenditure.

Price changes. As shown in Figure 1, food availability at the household level is also influenced by food prices. Higher food prices depress the real level of consumption. During periods of economic decline there is a tendency for food prices to increase faster than the average inflation rate does. This is particularly the case during periods of adjustment, when pressures to reduce food subsidies, increase producer prices for food and (in food-importing countries) devalue currency lead to increases in consumer prices for food. Large increases in nominal and real interest rates - invariably part of an adjustment programme - also

have direct inflationary effects, since they increase production costs, or indirect ones, since they augment the budgetary cost of servicing the domestic debt. This either crowds out resources for health and nutritional services (see later) or generates inflationary pressures.

Price elasticities of demand for food are quite high (Pinstrup-Andersen 1986), and increases in food prices cause much larger percentage reductions in demand among the poor (who spend a higher share of their incomes on food) than they do among the rich. Besides causing a reduction in food expenditure (in real terms), higher food prices produce a negative income effect, which may adversely affect the ability of households to meet other basic needs (e.g. water, medicines and transport).

Food availability at the household level is also strongly influenced by direct food distribution (food rations, supplementary feeding, etc.), whose positive nutritional and income transfer effects have long been recognized (World Bank 1986b). During periods of recession and budgetary austerity, however, this form of food supplementation tends to be reduced or eliminated.

As a result of these three factors (decline in money incomes, rapid increases in food prices and declining food subsidies), food expenditure declines at the same rate as the decline in real income. Similar responses occur with respect to other important non-food health items (medicines, etc.).

Such large declines in real expenditure on food do not necessarily imply large changes in the intake of calories, since households substitute more expensive food by cheaper food with the same caloric content. Using cross-sectional aggregate data from thirty countries, Behrman and Deolalikar (1986) have found, for instance, that average food expenditure decreases 8 percent for every 10 percent decline in income, but caloric intake decreases only by 3 percent. However, while middle- and low-income households can maintain their nutrient intake almost unchanged through such a process of substitution, this opportunity is certainly not available to the ultra-poor (Lipton 1983), i.e. those who have already exhausted the possibility of substitution and who, with 80 percent of their incomes already spent on food, do not manage to satisfy 80 percent of their minimum caloric requirements. For these people - already without enough calories for active working lives or, worse, without enough calories to prevent stunted growth and serious health risks - declining incomes, rising food prices and the elimination of food subsidies do result in dangerous declines in food intake and in dietary

deficiencies. The World Bank (1986a) estimates that there were respectively 730 and 340 million people living under these latter circumstances in 1980.

Cutbacks in government expenditure. The insufficient intake of nutrients and/or their inadequate utilization, eventually leading to growth faltering among children, can be triggered by factors which have nothing or little to do with food availability at the household level.

It is well known that various forms of infection or, more generally, of pathogenic invasion (diarrhoea and other intestinal affections, worm infestation, acute respiratory infections and communicable diseases) either depress the appetite (particularly among children under five years of age) and therefore reduce food intake, or - as in the case of diarrhoea - provoke serious losses of nutrients. In both cases the net effect is an increase in malnutrition. The extent of pathogenic invasion or infection (see Figure 1) depends largely on the level of environmental contamination and on personal disease control factors, both preventive and curative. Apart from climatic and geological considerations, environmental contamination depends to a very large extent on expenditure - both capital and recurrent - in sectors such as potable water supply, sanitation and sewage, and public housing. Often, during periods of protracted economic decline government and private expenditure on such items contracts. Capital expenditure and expenditure on maintenance and supervision in particular are key areas in which financial retrenchment often takes place. As a result, water pumps fall into disrepair, water sources become contaminated, garbage disposal deteriorates and the drainage of sewage systems becomes more erratic.

The ability of individuals to take preventive and curative health actions for themselves and their children depends on the availability of health services, generally but not exclusively provided by the state. In this case, too, protracted recession and adjustment policies can depress government expenditure, with negative effects in terms of service availability and ultimately of morbidity, malnutrition and, in extreme cases, mortality.

Particularly in the Latin American context the ability of governments to sustain the provision of adequate services in health and other key sectors should be seen in relation to the policies followed in the fiscal and debt-management areas. These policies, in fact, affect in a formidable way the creation of public resources and their allocation to different uses. It is well known that during periods of economic crisis

fiscal revenue drops because of the shrinking of the tax base. Whenever the recession is accompanied by two- or three-digit inflation, it is also common that the fiscal load (i.e. the ratio of tax revenue to GDP) declines, owing to a faster erosion of the real value of taxes, the granting of special tax incentives to production or exportation, or the breakdown of the administrative machinery. Whenever fiscal base and fiscal load drop, the availability of budgetary resources drops, too.

Policies affecting debt management substantially influence the availability of resources for health. Three such policies need to be pointed out here. First, the decision to provide public guarantees to debts originally contracted by the private sector: with a large number of bankruptcies, typical of a recessionary period, the onus of servicing such private debts is shifted to government budgets. Second, currency devaluation proportionately increases the value in the national currency of the foreign debt. Third, a rise in domestic interest rates increases the cost of servicing that part of the debt contracted in national currency at variable rates.

Decisions along these lines, regardless of their consistency and merits from other perspectives, tend to crowd out large proportions of government resources and reduce - at times drastically - the availability of fiscal resources for health and related interventions in nutrition, sanitation, water supply and low-income housing.

Here, too, however, it should be pointed out that changes in health status are not simply a function of what happens to public health expenditure. Much depends on whether health delivery systems become more, or less, efficient when total resources are reduced. Indeed, the real output of health care services is strongly affected by:

1. Changes in the relative prices of inputs, such as a decline in real wages for medical personnel or a rise in imported drug prices.

2. Changes in the composition of expenditure. Cutbacks in drugs and supplies, for instance, provoke imbalances in the composition of the services offered, with the result that real health care output declines by more than the expenditure figures indicate.

3. The targeting of health (and other) services by region and social groups and in particular by level of care. As a recent survey has shown (Robertson 1985), outpatient care and primary care are less expensive than hospitalization by a factor of two to twenty. The shift of a growing share of health resources to primary health care could increase total health output even if total resources are reduced.

Changes in the time use and health conditions of women. It has been clearly established that the time availability, health, skills and reproductive behaviour of a mother affect her child's mortality, growth, development, school attendance and performance, and adjustment in later life (Caldwell 1981, Zerilin and Manzoor 1985). As noted earlier, the level of education and skills of the mother does not generally change much because of economic decline even over a prolonged period. Recession does, however, affect the level of education and skills of future mothers. Young girls in fact are normally the first to be withdrawn from school so that their families can save on school fees and books or because they are needed to work in the fields, take care of younger siblings, or perform various domestic tasks in the absence of their mothers. The workload of the latter is often increased to compensate for the decline in incomes of the heads of household. While the increased participation of women in the labour force may partially offset the income decline of the heads of household, their absence from home can substantially reduce the time dedicated to child care and food preparation. It is possible for women to try to compensate for the increase in the number of hours worked outside the household by reducing the time devoted to rest and social activities (Leslie et al 1986). Time-use studies (Popkin 1980), however, show that the number of hours available to women for such activities is generally quite limited - between one and three hours - so that the capacity of women to substitute work for leisure is rather limited particularly in very poor households.

Community and governmental services in child care centres provide a substitute for child care and food preparation by mothers. But in those cases where government and community structures are lacking it is possible that the frequency of feeding (i.e. the number of meals a day) and child care in general may decline with an increase in the work of mothers outside the home. This can have an adverse effect on child nutritional status, particularly among younger children, and may also lead to greater risk of injury. Increasing claims on the time of mothers, coupled with declining incomes and cuts in government expenditure on education, also tend to have negative effects in terms of child abandonment, child labour and school dropout rates, particularly among girls.

Lastly, child nutritional status and mortality rate are directly influenced by the nutritional and health status and reproductive behaviour of the mother. An increase in maternal malnutrition due to insufficient food intake, overwork and inadequate prenatal care, all

events related to increasing economic hardship, is immediately transmitted to the foetus, which suffers from growth faltering. This in turn produces an increase in the number of still births and the number of low birth-weight babies.

The other maternal factors - age, parity and birth spacing - that influence the risk of death and the health status of the child are not known to change according to the various phases of the economic cycle. They depend on more structural variables, such as female literacy, socio-cultural values and urbanization. There seems to be some evidence, however, that fertility tends to decline (or to decline faster than the trend) during periods of economic depression. As the births so avoided are generally high-risk ones (usually those with high parity and at close intervals), such declines in fertility trigger - *ceteris paribus* - a more than proportional decline in infant mortality and low birth weights. In this sense the system would tend to be self-correcting. Similar phenomena have been observed clearly during war years and famines, and there is firm evidence - at least in poor agrarian societies - that the cycle of procreation is strongly influenced by seasonal fluctuations in food availability at the household level (Chambers 1979).

#### Speed of Change: Short- Versus Long-term Effects

Generally speaking, about half of the input variables (see above), i.e. those that for convenience are called here "flow variables", show relatively rapid changes during periods of recession and indiscriminate economic adjustment. Money incomes, government expenditure, food prices and the time availability and health of mothers respond quickly to changes in macro aggregates and adjustment policies. Subsistence production, on the other hand, is influenced more by structural variables (land quality and concentration, access to inputs and climatic factors) than by fluctuations in the monetized sector of the economy. By contrast, "stock variables" change only very slowly over the short-run, since they reflect accumulated investment over time; thus it would take years of depressed economic conditions to affect them appreciably. The current level of the education of mothers, for instance, is generally unaffected by short economic crisis, but might be negatively influenced (relapse to illiteracy) among those women with a minimum level of literacy if economic hardship is protracted over several years. Equally, a one-year to two-year recession may not significantly affect the stock of physical and human capital in the health sector (though it may affect the

availability of recurrent inputs), the availability of safe water supplies and sanitation or the availability of public housing for low-income groups.

Other structural determinants of child welfare, such as cultural and social values which influence health practices, sex bias, etc., are also expected to vary only imperceptibly, if at all, even during periods of pronounced economic fluctuations. For them, a *ceteris paribus* assumption is generally appropriate. However, important modifications can occur in social values, nutritional habits and health practices whenever the economic decline and policy shifts are so pronounced as to provoke major changes in the economic organization and social environment within which household decisions are made - the case, for instance, of rural-to-urban migration and shifts from subsistence to cash cropping.

Changes in these six main input variables (identified graphically with boxes in Figure 1) affect child welfare with different intensity and at different speeds depending on the welfare indicator selected. There are short- and long-run effects. Negative developments in money incomes, inflation and current government expenditure have immediate and commensurate effects on health and nutrition. However, the limited decline in the stock of physical, human and social capital observed in the short run generally helps to preserve pre-existing health standards. Because of this "stock effect", therefore, the impact of economic decline may not be significantly felt over the short run, particularly in those countries with relatively high levels of income per capita and a well-developed human and physical social infrastructure, or in which appropriate counterbalancing policies are adopted.

A crisis of longer duration, however, affects health and nutritional status also through a reduction in the stock of financial, physical, human and social capital, as savings are depleted and health, water, drainage and housing facilities fall in disrepair for lack of maintenance and new investment, as no new skilled personnel is formed to replace those who have retired or left in search of better remuneration and as social capital - the relations of solidarity within the community - is weakened by the persistence of the crisis. Longer-term effects tend therefore to be far more pronounced and to grow in intensity in an exponential way with the progressive decline in the stock of capital.

In this way - and in the absence of specific efforts to correct these negative trends (see later) - it is plausible to submit that considerable time-lags exist between the inception of economic decline and the actual deterioration in health status. This relation, however, applies also in

the opposite direction, since it takes sustained accumulation over several years to redress the damages of years of "descapitalisaci6n" on health conditions. So, while the impact of recession on health will appear only gradually, the effects of recession may extend several years beyond the beginning of economic recovery.

In general, crises would be expected to show their effects first in terms of increasing child labour and school drop-outs, while more acute forms of social stress, such as malnutrition, morbidity and, eventually, mortality, become evident only after severe and cumulative declines have occurred.

Thus nutritional status - which is dependent on current income and food prices - will be the first to deteriorate, particularly if large numbers of people have been living on barely adequate diets even before the crisis began. A substantial reduction in nutrient intake or a worsening of the utilization of nutrients are initially associated with changes in body heat and energy expenditure, particularly in the case of small reductions in the intake of nutrients (Sukhatme 1982). Decreases in body weight, worsening health status and, eventually, increasing risk of death follow greater reductions in nutrient intake and utilization. Because of its dependence on the accumulated stock of medical personnel, knowledge (including that of mothers) and physical facilities, health status may deteriorate more slowly. The "diseases of poverty", such as gastro-intestinal and acute respiratory infections, will likely be the first to increase. As groups become poorer, they experience only a limited increase in the incidence of congenital malformation, cancer, diabetes and cardiovascular diseases or in the likelihood of contracting any of the vaccine-preventable diseases. Conversely, economic deprivation can be expected to increase the severity, if not the prevalence, of diarrhoeal and respiratory diseases, mental disorders, hypertension and alcoholism.

#### Distributing the Burden: Negative Multiplier Effects

An evaluation of the health impact of an economic crisis requires a careful examination of how the loss of incomes and other resources is distributed among different social groups. Even small economic losses may have significant consequences for health if they affect primarily the poor, whereas much more severe recessions can have little impact if their burden is equitably shared or affect mostly the non-poor. With few exceptions there is a tendency for the bottom 20 percent to 40 percent of

the urban population (a considerable proportion of the total population in Latin America) to be hit the hardest. This is due to the operation of a series of negative multipliers, which reflect the fact that minimum wages drop faster than do average wages, that the prices of essentials are subject to greater increases than is the Consumer Price Index (CPI), that the newly unemployed frequently also suffer the loss of health coverage and that cuts in public expenditure are typically asymmetrical. In terms of child welfare, these biases are further aggravated by the fact that poorer families generally have a larger than average number of children.

If one takes into account the combined effect of these multipliers, it is easy to see that, in the absence of deliberate policy efforts to correct these biases, for a child of a low-income family a 5 percent to 10 percent decline in GDP may result in a net drop in resources three to four times larger.

#### IV. THE EMPIRICAL EVIDENCE

This section analyses the empirical evidence of changes in child welfare - and in its determinants - in Latin America up to 1988. To the extent possible, the analysis is carried out following the approach illustrated in Part III.

##### Income Changes

The foregoing discussion has shown that over the 1981-1988 period GDP per capita declined at an average yearly rate of about 0.8 percent for the Latin American region as a whole. Even assuming a perfectly equal distribution of this decline, the impact would have been considerable for the 20 percent to 40 percent of the population near or below the poverty line. There is evidence, however, that the poorer groups (such as most of the unemployed, or most of those who are part of the informal sector), as well as sections of the lower-middle class (such as skilled and semi-skilled workers and government employees), had to bear a disproportionate share of the decline in GDP.

This was basically due to three main changes which occurred on the labour market as a result of the economic crisis.

First, overall employment creation slowed down considerably between

1980 and 1985. About four million fewer jobs were created than would have been created had pre-crisis trends continued. Open unemployment, however, increased by only one million, owing to the decline in labour force participation rates.

Second, there was a deterioration in the quality of the new jobs. Between 1980 and 1985 five million low-productivity jobs were created in the informal sector, which by 1986 accounted in this way for 32 percent of non-agricultural employment, as against 29 percent in 1980. Private modern sector employment, conversely, was stagnant throughout the period.

Third, there was a drastic reduction in the remunerations of the employed labour force.

Put summarily, the evidence shows that, while real salaries in manufacturing - traditionally the sector with the highest wages and the strongest bargaining capacity - declined at a rate slightly faster than that of the regional GDP per capita, salaries in sectors more subject to the whims of the business cycle (such as construction) suffered a decline almost three times as large (see Table II). Average minimum salaries also declined faster than did average GDP per capita. In most large countries, including Brazil, Peru, Mexico, Chile and Venezuela (accounting for about two-thirds of the Latin American population), the loss over the 1981-1988 period was appalling, with cumulative drops in real minimum wages of up to 45 percent (see Table III).

Between 1980 and 1985 informal sector earnings declined by around 27 percent (Tokman 1986), i.e. even faster than the decline in average minimum salaries for the region. Indeed, a growing number of job-seekers

TABLE II: <u>EVOLUTION OF AVERAGE REAL SALARIES AND GDP PER CAPITA</u> (Percentage Changes)						
	1981	1982	1983	1984	1985	1980-85
GDP/pc	-1.2	-3.5	-4.7	1.4	1.4	-6.6
Real Salary:						
- Manufacturing	1.0	-2.6	-6.6	1.0	-1.3	-8.4
- Construction	-0.7	-0.6	-6.8	-3.3	-9.4	-19.4
Minimum Salary	-5.5	-4.2	-4.0	1.0	0.9	-11.4
Informal Sector Earnings	..	..	..	..	..	-27.0

Source: Table I and Tokman (1986)

had to share the limited market opportunities and productive potential of the informal sector.

No systematic information is readily available for rural incomes. While it is likely that the incomes of wage labourers employed in the estate sector declined during the period under examination because of the weakening of international commodity prices, the incomes of farmers on small (as well as large) farms producing food for domestic consumption should have benefitted from the increases in producer prices introduced in many Latin American countries as part of standard stabilization packages. Farm incomes may have also increased in those countries which - as a result of the recent wave of Structural Adjustment Programmes - have managed to increase the output of non-traditional agricultural exports. Evidence on the first case is available for a number of countries, including Peru (Figueroa 1987) and Mexico (Lustig 1987), while data on Chile (ECLALC 1987) corroborate the second hypothesis. Initial shifts in the domestic terms of trade in favour of agriculture, however, have often been neutralized by currency devaluations (generally also part of adjustment packages), which substantially increase the cost of imported inputs, or by rapid inflation (Lustig 1987).

With the exception of the incomes of small farmers in a few countries, there is therefore evidence that labour incomes have been declining faster than have GDP per capita and other types of income. Relative income distribution has thus worsened in many countries in the

TABLE III: EVOLUTION OF URBAN REAL MINIMUM WAGES, 1981-1988  
(Percentage Changes)

	1981	1982	1983	1984	1985	1986	1987	1988	1981-88
Argentina	-2.2	0.0	40.0	22.5	-30.2	-5.1	10.1	-21.8	-4.2
Brazil	4.4	0.5	-11.3	-7.5	3.3	-1.9	-18.3	-7.4	-32.9
Chile	15.6	1.3	-19.6	-14.4	-5.3	-3.6	-6.1	6.1	-26.6
Colombia	-1.1	4.8	4.1	5.2	-3.6	4.4	-0.1	-3.0	11.3
Costa Rica	-9.6	-5.1	15.7	5.2	7.4	5.8	0.0	-2.5	16.5
Ecuador	-13.8	-11.9	-16.2	-1.3	-3.8	7.6	-5.5	-12.6	-46.4
Mexico	1.9	-9.0	-17.4	-5.6	-1.7	-8.8	-6.6	-11.6	-46.4
Paraguay	3.9	-1.9	-7.5	-0.5	6.2	8.7	13.2	9.5	34.2
Peru	-15.8	-7.6	14.7	-22.7	-12.6	3.6	2.5	-3.1	-39.9
Uruguay	3.4	1.2	-14.3	0.3	4.7	-6.2	3.2	-6.0	-14.4
Venezuela	-14.1	-8.9	-5.9	-10.0	45.5	-4.7	3.4	-22.2	-23.8

Source: ECLALC (1988)

region (Altimir 1984, Cornia et al 1987a), a main contributing factor in the observed rise in the proportion and absolute number of people in poverty.

Data on the evolution of consumption per capita by income level can be obtained from household expenditure surveys. Unfortunately, such information is available for only very few countries and years. For an analysis of consumption trends, it is therefore necessary to rely on the aggregate data on consumption per capita included in national accounts. On the basis of these data, it appears that average consumption per capita in the 1980s has declined less than GDP, investment and imports per capita have, although in some countries - including Argentina, Bolivia, Chile, El Salvador, Mexico, Peru and Uruguay - this has still meant a return to the average levels of consumption per capita of 1970, while in virtually all countries it has meant a return to the 1980 levels (Musgrove 1987). The slower decline in average consumption per capita can in part be explained by a lowering of household saving ratios and by the liquidation of assets.

Average per capita consumption data, however, conceal the large changes in income distribution referred to earlier. Data for Chile show, for instance, that, while consumption per capita of the bottom and intermediate 40 percent of the population (broadly speaking, the poor working class and the middle class) declined respectively by 30 percent and 21 percent over the 1980-1986 period, that of the top 20 percent of the population increased by 8 percent. Data from the Instituto Nacional del Consumidor of Mexico (1987) show a drastic reduction in overall consumption expenditure over the period 1985-1987. Most worrisome of all, however, is evidence of large contractions in the average real expenditure of poor households on food, with declines of 23 percent for low-income wage earners and 13 percent for low-income informal-sector employees over an eighteen-month period. Lower-middle class households in the formal and informal sectors suffered declines in the 16 percent to 30 percent range. Because of the substitution of more expensive foods with cheaper foods, however, actual daily calorie availability at the household level declined between 3 percent and 14 percent.

The situation of those employed at the minimum wage is particularly alarming. Minimum wages were already low in 1980 and - as seen above - declined by almost 50 percent between 1980 and 1988. The number of hours of labour at the minimum wage necessary to feed a family increased by between 70 percent to 110 percent in Costa Rica, Mexico, Peru and Brazil during the period under examination (UN Sub-Committee on Nutrition 1987).

Whenever employment at minimum wage was insufficient, these large declines were translated into commensurate reductions in household expenditure on essential items. A sizeable proportion of the Latin American population was thus affected by a considerable reduction in the expenditure on food and other basic needs (transport, health, water, etc.). Indeed, traditional adjustment mechanisms at the household level - reductions in the level of saving, borrowing, the liquidation of assets (including consumer durables), the gradual elimination of all superfluous expenditures, the pooling of resources to seek economies of scale and the substitution of "more expensive" with "cheaper" calories - were not able to compensate for the extent and distribution of the income decline and the adverse changes in prices (see later).

#### Price Changes

During the period under examination inflation steadily accelerated for most countries of the region. On a regional level the CPI increased from 56 percent in 1980 to 275 percent in 1985; in 1986 it declined to 65 percent, owing to the introduction of wage-price controls in several of the largest countries (Brazil, Argentina, Peru and, later, Mexico). The benefits of the "heterodox approach" to the control of inflation, however, were short-lived, and in 1987 and 1988 there was another price explosion, with the regional CPI increasing respectively by almost 199 percent and 473 percent. With the exception of Honduras and Panama, all countries of the region experienced two- or three-digit inflation in at least some of the years between 1980 and 1988, while in 1985 Bolivia experienced the first case of hyperinflation (over 8,000 percent) in the history of Latin America (ECLALC 1987 and 1988). Serious doubts can thus legitimately be raised on the efficiency of the stabilization policies adopted in the region to control inflation.

Besides indirectly affecting child welfare by causing capital flights, the erosion of government revenues and disruptive changes in relative prices, the strong inflation of the 1980s has directly affected the nutritional status of the population via a sharp reduction in purchasing power. The computation of wages, salaries and informal-sector incomes in real terms (by deflating money incomes through the CPI: see Table II) offers a way to take into consideration the joint effect of inflation and changes in money incomes. However, this effect has been underestimated on three accounts.

First, money wages are normally adjusted to inflation ex-post, with

monthly, quarterly or even annual periodicity. With inflation running at times in the 5-to-20-percent-a-month range, this means additional losses of purchasing power.

Second, there is evidence (Cornia 1987) that in the 1980s the index of food prices, or the CPI calculated on a basket of goods consumed by the poor, has increased faster than has the CPI in Chile (1981-1985) and Sao Paulo, Brazil (1981-1984). For the poor, who spend a larger share of their income on food and other essentials, this has meant a decline in purchasing power greater than that indicated by the decline in real wages calculated on the basis of the average CPI.

Third, the price of subsidized food (such as wheat, rice and tortillas) has increased at much higher rates because of the reduction in the value of subsidies or because of their complete removal. In 1985 the value per capita of the Brazilian untargeted price subsidy for wheat was equal to 19 percent of its 1980 value. In Mexico in 1984 the value of the subsidy per capita for tortillas was 73 percent of that in 1980 (Pinstrup-Andersen 1987). Similar trends have been found in Colombia (ibidem), Jamaica (Boyd 1987), Peru (Figuroa 1987) and other countries. With the possible exception of Jamaica, these reductions in subsidies have not been accompanied by an increase in the efficiency of the food-subsidy programmes or by a more focused targeting on the poor. Although more than 50 percent of these subsidies accrued to the middle and upper classes, the negative effect of the reduction has been greatest for the poorer people, for whom the subsidy represented a greater share of their overall resources.

The inflationary process of the 1980s has thus severely affected the purchasing power of all Latin American households, but particularly of those households spending 60 percent to 80 percent of their incomes on food. The sharper and more sudden the price movements - as often happens in the case of large increases in producer prices, subsidy cuts and devaluations - the more profound and immediate the effects. In a sense "price shocks" are the most powerful and rapid way to reduce the living standards of a population.

#### Changes in the Time Use of Women

Little quantitative information is available on changes in the time use of women in the 1980s. Fragmentary evidence exists on trends in the rate of participation of women in the labour force (see Table IV). Although partial, these data seem almost unanimously to point to an

increase - if at times modest - in this rate. However, this is not a sufficient basis for general conclusions.

Nevertheless, the view that the economic crisis in Latin America has resulted in an increase in the participation of women in the labour force is consistently supported by a growing body of ad hoc studies. The studies also indicate that this trend is uneven and that it varies with the degree of urban industrial development (Spindel 1987, Oliveira 1987, Serrano 1987, Prates 1987, Feijoo and Jelin 1987, Arriagada 1987). Furthermore, the studies generally underscore the fact that, while the increase in participation began prior to the current recession, the crisis has sharpened this trend.

No comprehensive information is available on the type and remuneration of the new jobs held by these entrants in the labour force. Circumstantial evidence (Raczynski and Serrano 1985) obtained from interviews with women of low-income households in greater Santiago, Chile, reveals that during the years of the crisis the women had all engaged in some form of highly unstable and mostly part-time market production.

Although this phenomenon requires further investigation, there would thus seem to be some indication that in the 1980s women have been incorporated at a faster pace into market production, thereby spending more hours away from home. Additional claims on their time have probably also been made by the overall deterioration of the social and transport infrastructure, which has rendered access to health services, water sources, markets, etc., more difficult in terms of time, costs and effort.

TABLE IV: PARTICIPATION RATES OF WOMEN FOR SELECTED COUNTRIES AND YEARS (Percentages)							
	1980	1981	1982	1983	1984	1985	1986
Brazil	19.8	--	--	--	--	27.9	--
Chile	--	--	--	--	--	--	--
Costa Rica	--	--	--	--	14.5	18.5	--
Cuba	--	23.0	--	--	--	--	30.6
Guatemala	--	8.1	--	--	--	8.0	--
Peru	--	15.8	--	--	26.8	--	34.4
Uruguay	--	--	--	--	--	--	--
Venezuela	--	17.9	--	--	--	--	18.9

Source: ILO (1987), Leslie et al (1986)

As a result of the crisis, fewer time resources may have remained for child care, health and feeding, since the increased absence of women from the home has generally not been accompanied by a commensurate expansion of public child-care facilities. If anything, the number of such facilities has declined. In some cases community action may have partially compensated for the increased pressure on the time of women, as for instance in the case of the famous "comedores populares" (in Peru, Chile, etc.), which - among other advantages - freed a substantial amount of the time of women through the organization of food preparation on a collective basis (Lafosse 1984, Van der Linde 1984).

Although impossible to quantify, these tendencies may have exerted a distinct negative influence on child nutrition (see later), the risk of accidents and child abandonment, particularly for children of poor single-parent families. For instance, child abandonment and delinquency increased in the State of Sao Paulo between 1981 and 1985 and are often referred to as one of the most negative consequences of the crisis (Macedo 1987).

#### Changes in Government Expenditure

As seen above, adjustment in the external sector of the economy has been achieved at the cost of a marked recession, a sharp acceleration of inflation and a sudden increase in fiscal deficit. Indeed, in the 1980s most Latin American countries have faced a very severe fiscal crisis. Revenue from direct taxes has diminished with the drop in incomes, while indirect taxes, duties and tariffs have generated fewer resources because of the drop in consumption and imports. In most countries, moreover, government revenue has declined faster than has GDP. In Brazil for instance, the fiscal load declined from 26 percent to 22 percent in only a few years (Dain and Afonso 1987), mostly owing to strong inflation and the contraction of the formal sector of the economy.

No serious efforts have been undertaken in the 1980s to introduce long-needed fiscal reforms, which could alleviate the gravity of the fiscal crisis and correct the most glaring distortions of the tax systems in operation in Latin America through the extension of direct taxation on incomes, rent and wealth, more consistent taxation on the service sector and overhauls of the administrative system so as to reduce massive tax evasion. In a sense the fiscal measures introduced in the first half of the 1980s have reinforced the regressiveness of the Latin American tax system through undifferentiated hikes in tariffs and indirect taxes (IMF

1986).

With fewer fiscal resources at their disposal, the governments of the region have had to face increasing claims on their budgets, owing to the fast accumulation of foreign (and in a few countries domestic) debt, the rise in international interest rates and the effects of the adjustment policies introduced in the 1980s. These latter effects are worth noting.

To start with, responsibility for a considerable part of the private foreign debt, including that originally contracted without government guarantees, has been assumed by the State. It has been estimated (Martin and Guijarro 1988) that the share of public debt in the total debt increased in Argentina from 53 percent in 1980 to 83 percent in 1985, while in Brazil and Mexico the rise was respectively from 74 percent (in 1983) to 86 percent (in 1986) and from 65 percent (in 1981) to 72 percent (in 1986). Besides fueling inflation, the repeated devaluations of the 1980s have contributed to the increase in the real cost in national currency of debt servicing obligations. In addition, in those countries - such as Mexico and Brazil - with a large domestic debt, substantive hikes in interest rates - introduced as part of stabilization programmes to increase domestic savings and generate a more rational allocation of credit - have provoked large increases in the cost of servicing domestic debt. In Mexico in 1985 for instance, the interest on domestic debt alone represented 24 percent of total government revenue (*ibidem*).

As a result of these factors, the problem of foreign debt has ceased to be only a problem of balance of payments and the international transfer of resources. In debtor countries debt servicing has come to represent a serious dilemma in the allocation of fiscal resources and in fiscal policy in general.

Interest payments have thus been absorbing a fast-growing share of government fiscal resources in almost all countries of the region (see Table V), the only exceptions being those countries with a small debt, such as Colombia and Paraguay, or those which have drastically reduced payments on their foreign debt, the case of Bolivia and Peru. For the region, interest payments as a proportion of total government expenditure increased from 7 percent to 22 percent from 1980 to 1985, while in Mexico - the extreme case - the proportion is fast approaching 40 percent.

Interest payments on foreign debt have therefore been crowding out a growing amount of the government resources which could have been used for investment in human resources or physical infrastructure. The data in Table VI and Table VII provide an idea of this effect. Between 1980 and 1985 the share of government expenditure allocated to health suffered a

TABLE V: SHARE OF INTEREST PAYMENTS IN  
TOTAL CENTRAL GOVERNMENT EXPENDITURE\*/

	1980	1981	1982	1983	1984	1985	1986	1987
Western Hemisphere	7.69	9.59	12.40	16.42	19.55	22.37	....	....
Argentina	8.16	13.47	20.34	8.84	11.47	9.61	....	....
Belize	3.92	....	....	....	13.44	16.44	....	....
Bolivia	10.73	6.60	....	5.83	2.17	....	....	....
Brazil	7.29	7.28	10.90	14.11	23.45	29.35	....	....
Chile	2.76	1.34	1.71	4.11	4.36	6.26	5.78	....
Colombia	4.10	4.46	5.74	5.16	....	....	....	....
Costa Rica	8.61	7.71	8.90	8.03	9.36	8.44	8.89	....
Dominican Rep.	5.74	6.33	6.47	7.99	5.66	4.67	....	....
Ecuador	....	....	....	....	....	....	....	....
El Salvador	2.95	5.66	9.12	8.19	8.51	6.94	....	....
Guatemala	3.67	3.93	5.73	6.59	....	....	....	....
Guyana	....	....	....	....	....	....	....	....
Haiti	....	2.47	4.35	....	....	....	....	....
Honduras	....	....	....	....	....	....	....	....
Jamaica	....	....	....	....	....	....	....	....
Mexico	9.28	13.10	14.03	34.97	32.93	36.98	....	....
Nicaragua	7.63	9.68	10.98	5.94	....	....	....	....
Panama	18.05	19.43	19.54	18.66	18.25	20.78	....	....
Paraguay	3.03	2.64	3.01	3.13	4.13	....	....	....
Peru	19.31	21.29	16.22	....	....	....	....	....
Uruguay	1.61	1.32	3.31	4.83	8.25	9.23	7.93	....
Venezuela	6.50	5.72	6.58	7.86	8.10	10.53	....	....

Source: IMF (1987)

\* / "Central government expenditure" includes expenditure, plus lending and minus repayment by the central government. If interest payments are calculated as a share of central government expenditure alone, extremely similar results are obtained.

minor decline in the region as a whole. A more detailed examination, however, reveals that, out of the thirteen countries for which four or more observations are indicated, eight suffered a decline in the share of health expenditure in the total (for four of them the decline was 30 percent or more), two an increase and three (including Brazil) showed no change. Thus, the notion that the health sector has been "protected" (in relative terms) in comparison with other sectors (administrative, economic, defence, etc.) seems less valid as data for most recent years become available.

A broadly similar picture is offered by an examination of trends in real central government expenditure per capita on health (see Table VII). Of the fifteen countries for which data could be compiled, ten show a

TABLE VI: SHARE OF HEALTH EXPENDITURE  
IN TOTAL CENTRAL GOVERNMENT EXPENDITURE

	1980	1981	1982	1983	1984	1985	1986	1987
Western Hemisphere	4.91	4.80	4.77	4.58	4.85	4.33	....	....
Argentina	1.75	1.36	1.08	1.37	1.81	1.28	....	....
Belize	8.97	8.89	7.12	9.29	9.74	8.99	....	....
Bolivia	11.86	7.08	....	3.08	1.48	....	....	....
Brazil	6.58	7.36	7.82	7.09	7.37	6.42	....	....
Chile	7.37	6.54	6.80	5.95	6.18	6.07	5.99	....
Colombia	....	....	4.09	4.40	....	....	....	....
Costa Rica	28.74	29.74	32.76	22.48	24.53	22.93	19.34	....
Dominican Rep.	9.30	9.70	10.66	10.55	10.29	8.99	....	....
Ecuador	....	....	....	....	....	....	....	....
El Salvador	8.97	8.39	7.14	8.40	8.12	5.87	....	....
Guatemala	....	....	....	....	....	....	....	....
Guyana	5.62	5.68	....	....	....	....	....	....
Haiti	....	4.51	7.39	....	....	....	....	....
Honduras	....	....	....	....	....	....	....	....
Jamaica	....	....	....	....	....	....	....	....
Mexico	2.37	1.86	1.29	1.20	1.52	1.38	....	....
Nicaragua	14.58	....	....	....	....	....	....	....
Panama	12.71	13.24	13.14	15.88	16.03	15.77	....	....
Paraguay	3.59	4.51	3.67	4.50	5.85	....	....	....
Peru	4.53	5.30	6.23	....	....	....	....	....
Uruguay	4.89	3.76	3.29	3.39	3.68	4.05	4.77	....
Venezuela	8.82	7.57	7.57	8.39	8.04	8.10	....	....

Source: IMF (1987)

decline (in seven countries the decline is 20 percent or more), four, no change, and one (Panama), an increase. Generally, the sharpest decline occurred in 1983, the year of most acute recession. Since then, expenditure per capita has levelled off or shown a modest recovery in about two thirds of the cases (with the 1985 or 1986 levels still below that of 1980), while in the remaining third the decline has continued.

In any analysis of trends in public expenditure, however, it must be remembered that the provision of many social services, especially in the larger countries, may have been increasingly decentralized to district, county, provincial and regional authorities, who are in turn partly or fully reimbursed by the central government. Indeed, one of the changes promoted as part of many structural adjustment programmes in the 1980s has been the decentralization of government services. A major reform in this direction was, for instance, started in Brazil in 1988. As a first attempt to evaluate the possible impact of such changes, the IMF data

TABLE VII: CENTRAL GOVERNMENT HEALTH EXPENDITURE PER CAPITA  
(In Constant US\$)

	1980	1981	1982	1983	1984	1985	1986	1987
Western Hemisphere	.....	.....	.....	.....	.....	.....	.....	.....
Argentina	18.49	15.52	10.71	14.45	14.86	13.91	.....	.....
Belize	26.63	29.41	25.24	29.26	.....	.....	.....	.....
Bolivia	15.31	8.27	3.91	2.97	4.36	.....	.....	.....
Brazil	25.67	28.09	32.05	26.45	27.36	30.68	.....	.....
Chile	51.07	49.44	50.33	40.25	44.60	42.36	41.30	.....
Colombia	.....	.....	7.89	8.28	8.81	.....	.....	.....
Costa Rica	15.45	12.99	11.38	10.02	11.25	10.14	10.12	.....
Dominican Rep.	19.17	19.38	17.57	18.13	15.97	14.03	.....	.....
Ecuador	16.11	18.27	17.08	14.66	14.87	15.33	.....	.....
El Salvador	12.18	11.17	9.09	9.32	9.68	7.37	6.25	.....
Guatemala	.....	.....	.....	.....	.....	.....	.....	.....
Guyana	22.94	26.22	28.85	23.91	.....	.....	.....	.....
Haiti	.....	.....	.....	.....	.....	.....	.....	.....
Honduras	.....	.....	.....	.....	.....	.....	.....	.....
Jamaica	.....	.....	.....	.....	.....	.....	.....	.....
Mexico	11.18	10.57	10.63	7.92	9.11	9.17	.....	.....
Nicaragua	33.64	.....	.....	.....	.....	.....	.....	.....
Panama	77.84	86.24	94.90	103.17	106.52	95.26	.....	.....
Paraguay	5.14	7.15	6.16	6.43	8.43	6.66	.....	.....
Uruguay	37.20	33.02	30.87	25.20	25.16	26.61	34.81	.....
Venezuela	76.33	85.59	81.88	75.06	61.95	65.54	.....	.....

Source: IMF (1987)

(IMF 1987) on unspecified transfers from central to lower levels of governments have been reviewed. A substantial part of these transfers are accounted for in the social sector, although this may also include outlays for the maintenance of infrastructure. The data (available for only eight countries to 1985 or 1986) do not permit the detection of a trend revealing increases in transfers to lower levels of government whenever central government expenditure on social services decreases.

It has not been possible to disaggregate the expenditure cuts of Table VII according to the composition of the expenditure (wages and salaries, materials and supplies, machinery and equipment, construction and maintenance and others). A Pan American Health Organization study (1987, quoted in Musgrove 1987) on health care spending in Central America and the Caribbean, however, provides information on the composition of expenditure over the 1980-1984 period. It shows that - except in Nicaragua - there was a tendency for fixed capital formation to decline sharply, while no cuts were apparent for wages, salaries and

inputs (including medicines). A more recent analysis of central government expenditure between 1980 and 1984, including that in fourteen Latin American countries (Pinstrup-Andersen et al 1987), comes to the same conclusion, i.e. capital expenditure was cut most and wage payments were most protected during expenditure cuts. There is some tentative evidence that the ways the cuts were apportioned (i.e. broadly protecting the level and composition of current expenditure) may have limited in the short run the negative effects of the overall decline in government health expenditure.

As argued earlier, however, this reduction in overall expenditure would have had even fewer negative effects if it had been accompanied by improvements in efficiency and targeting. It is, in fact, widely recognized (WHO 1987) that: (a) the shift of a greater share of overall health resources toward primary health care activities, (b) the rationalization (institutional and managerial) of secondary and tertiary care and (c) greater programme targeting on the poor would have had a very beneficial effect on total health output in spite of the observed decline in health resources.

Unfortunately, for lack of systematic information covering the whole region, it is very difficult to assess the extent of changes - if any - in the three directions indicated above. The ensuing discussion aims at examining the above issues on the basis of the limited evidence available.

IMF data on hospital expenditures (as a proportion of total central government health expenditure: see Table VIII) do not show any significant change between 1980 and 1985; if anything, one can observe in a few countries a tendency for the share of hospital expenditures to increase. As expected, hospital expenditures absorb a very high share of the total. This is partially explained by the role played by local government in providing primary and secondary care. The data, however, are worrisome, since in many Latin American countries central government expenditure represents 70 percent to 80 percent of total (central and local) government health expenditure.

Evidence from country studies seems to confirm that with few exceptions (possibly Chile and Costa Rica, i.e. countries with a long-standing tradition of public health) there have not been significant changes in the allocation of health expenditure by level of care. A recent in-depth study for Brazil confirms that 78 percent of all public spending on health in 1986 continued to be allocated to high-cost hospital care concentrated in urban areas, especially in the south (World Bank 1988).

TABLE VIII: EXPENDITURE ON HOSPITALS AS A SHARE OF  
TOTAL CENTRAL GOVERNMENT EXPENDITURE ON HEALTH

	1980	1981	1982	1983	1984	1985	1986	1987
Argentina	71.28	67.07	66.46	68.07	75.96	81.25	....	....
Belize	81.31	89.23	84.45	84.49	87.21	88.27	....	....
Bolivia	....	....	....	83.67	81.70	....	....	....
Brazil	79.39	83.11	89.71	86.93	87.47	83.63	....	....
Chile	83.78	93.02	93.81	94.63	95.70	93.58	92.68	....
El Salvador	93.93	100.00	100.00	99.93	99.94	99.94	....	....
Guyana	67.78	60.07	62.25	61.62	67.43	63.65	....	....
Panama	90.06	89.43	88.76	90.30	91.40	90.84	....	....
Uruguay	89.04	79.25	82.12	81.49	84.08	80.67	79.50	....
Venezuela	100.00	....	....	....	....	....	....	....

Source: IMF (1987)

Another way to assess changes in total health output consists in reviewing statistics for key health interventions. Table IX examines changes in rates of immunization against diphtheria, pertussis, tuberculosis, polio and measles (for children of less than one year of age) and tetanus neonatorum (for pregnant women) - interventions strongly promoted during the 1980s by international donors, including WHO and UNICEF. With the exception of tetanus, for which there is no evidence of progress, coverage in the 1980s has substantially expanded (by 10 to 20 percentage points on average) for all but a few of the twenty-two countries included in Table IX. The expansion in coverage has seldom been linear, often reflecting the "campaign approach" to immunization introduced in the 1980s, while in about 40 percent of the cases there has been a slight erosion over the last year or two from the levels of coverage reached in the mid-1980s. Although less dramatic, progress is evident also in the Programme for the Control of Diarrhoeal Diseases. By 1986 six countries had passed an oral rehydration therapy use rate of 25 percent as compared to near zero levels in 1980 (Goldstone 1988a). There is no doubt, however, that even such a relatively modest coverage has averted considerable mortality, morbidity and malnutrition.

#### Changes in the Situation of Children

The nutritional status of children seems to have deteriorated in a number of countries. To start with, the incidence of low birth weight

TABLE IX: IMMUNIZATION COVERAGE FOR SELECTED YEARS

	BCG a/			DPT III b/ (% of 12 Month-old Children)			POLIO III (% of 12 Month-old Children)			MEASLES			TETANUS II (% Pregnant Women)							
	81	84	85	86	87	81	84	85	86	87	81	84	85	86	87	81	84	85	86	87
W. Hemisphere	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Argentina	63	78	89	89	..	46	66	63	67	..	38	64	69	79	..	73	66	67	87	..
Belize	54	82	81	80	92	54	54	59	95	69	51	54	60	81	69	40	44	49	81	64
Bolivia	30	23	24	15	31	13	06	33	29	24	15	57	30	31	28	17	20	21	17	33
Brazil	62	75	58	56	67	47	67	62	52	56	99	89	86	89	88	73	80	63	55	54
Chile	100	96	92	99	97	97	94	91	92	93	96	96	90	86	95	93	100	92	91	92
Colombia	57	62	76	69	71	20	54	61	57	52	22	60	62	65	73	26	49	53	56	53
Costa Rica	81	85	85	61	81	83	71	75	94	91	85	81	75	94	89	71	76	81	55	67
Dominican Rep.	34	43	51	..	..	27	20	18	92	..	42	99	11	82	..	17	19	24	89	..
Ecuador	82	99	99	93	70	26	48	41	43	42	19	36	39	43	42	31	54	54	49	38
El Salvador	47	47	50	51	55	42	21	54	66	..	38	44	54	70	..	44	41	71	51	48
Guatemala	29	33	30	07	34	42	48	21	33	16	42	47	21	36	18	08	24	23	47	24
Guyana	..	49	98	76	69	45	70	75	64	67	37	41	77	67	77	..	56	40	42	52
Haiti	60	71	57	61	45	14	14	19	24	28	03	12	19	24	28	..	08	21	26	23
Honduras	46	37	65	72	66	38	41	59	63	58	37	84	58	63	61	38	44	53	60	57
Jamaica	..	48	51	73	92	39	57	60	74	81	37	56	58	74	82	..	60	64	36	62
Mexico	41	47	16	54	71	41	52	40	34	62	85	91	67	96	96	33	21	64	60	60
Nicaragua	65	88	97	99	93	23	30	35	55	43	52	73	70	89	85	20	42	49	61	44
Panama	77	77	94	91	89	49	59	73	70	73	50	70	71	71	74	53	65	83	73	78
Paraguay	42	80	99	51	66	28	67	54	52	58	26	59	97	99	42	16	62	46	46	56
Peru	63	63	70	54	56	18	28	48	50	38	18	26	47	50	39	24	35	53	41	32
Uruguay	76	93	92	92	..	57	62	63	70	..	58	83	58	83	..	95	66	59	82	..
Venezuela	77	92	..	86	..	54	33	49	58	..	75	59	59	67	..	43	41	56	48	..

Source: Goldstone (1988b)

a/ BCG = Anti-tuberculosis vaccine.

b/ DPT III = Combined diphtheria, pertussis and tetanus vaccine.

(LBW) increased between 1979 and 1986 in seven of the fifteen countries for which information was available, i.e. Barbados, Brazil (North-East and Sao Paulo), Colombia, Dominican Republic, El Salvador, Mexico and Surinam. In Jamaica there was an increase until 1982, followed by a decline. In six of the remaining seven countries LBW incidence declined, while in one there was no change (UNICEF 1988, United Nations 1987, Macedo 1987, Dias et al 1986). Moreover, evidence of growing malnutrition among children under five years of age is available for seven countries of the region. In Bolivia the nutritional status of children admitted to the main hospital of Cochabamba showed a marked deterioration between 1980 and 1983. While 45 percent of them were affected by some form of malnutrition in 1980, the proportion increased to 56 percent in 1983. In addition, three surveys carried out between 1983 and 1984 showed an increase in the proportion of children at risk of malnutrition (Morales-Anaya 1985). In Uruguay the number of malnourished children admitted to the National Nutritional Programme almost doubled between 1982 and 1984 (Terra and Hopenhaym 1986). In the Dominican Republic between 1984 and 1985 there was an increase from 40.8 percent to 41.4 percent in the number of children affected by moderate and mild malnutrition in rural areas (UNICEF Dominican Republic 1986). In the southern part of Peru the incidence of first-, second- and third-degree malnutrition rose from 42 percent to 68 percent between 1980 and 1983, years also characterized by severe drought (Figueroa 1987). Third-degree malnutrition, in particular, increased from 0.8 percent to 3.0 percent in only three years. An increase from 38.3 percent to 40.8 percent in the share of children affected by first-, second- and third-degree malnutrition (Gomez classification) was observed in Jamaica, where the number of hospitalizations for malnutrition and malnutrition-enteritis increased 13 percent a year between 1978 and 1985 (Boyd 1987). Finally, in Chile the downward trend in the incidence of malnutrition among pre-school children was reversed in 1983, when a 10 percent increase was observed concomitantly with a sharp reduction in a food supplementation programme for young children (Raczynski 1987). With the restoration of the previous levels of food assistance in 1984, progress continued as in the past (ibidem).

On a global level, estimates of the UN Sub-Committee on Nutrition (1987) indicate that the prevalence of severe and moderate malnutrition among children has stopped declining since 1979-1981 and has stabilized at 6 percent. Accordingly, the absolute number of malnourished children has increased in line with population growth.

Changes in the health status of children are best measured by the infant mortality rate (IMR) and by the child death rate. With the exception of a few countries (such as Chile) and years, data for the latter indicator are almost completely lacking. The following analysis is carried out therefore on the basis of the IMR alone.

IMR estimates produced by the United Nations Population Division for all Latin American countries for the three five-year periods from 1975 to 1985 are reported in Table X. A uniform decline in mortality rates is evident for all countries. The decline over the periods is of the same magnitude for middle- to high-mortality countries, while for low-mortality countries a certain deceleration in the rate of decline is evident. For Latin America as a whole IMR has declined by 7 points during each five-year period.

On the basis of these data one would conclude that the health status of children has not been affected by the sharp economic decline of the 1980s and the deterioration in the resource base of a large number of low- and middle-income families. Data in Table X, however, refer to five-year averages and have been obtained through adjustments of recent data to past trends and by assuming, for those countries for which there is no data, the mortality patterns observed in neighbouring or similar countries. This method is apt for a broad assessment of the level of infant mortality in a given country and for a description of mortality trends over the very long term. Due to sudden shifts in policies, severe economic dislocations, climatic changes and the spread of major epidemics and pandemics (such as AIDS), its validity is, however, considerably reduced in the assessment of changes in health status over the short or medium term. These data are therefore not much help for the purpose of this paper.

It is thus necessary to seek other sources of data on IMR. Two alternatives are considered here: data from national registries and data from ad hoc studies (sponsored by Ministries of Health, aid agencies and other organizations). Registry data also suffer from problems. Registry statistics are generally distorted by varying degrees of under-registration. If the under-registration error is not too big and if the bias does not change over time, however, they can still be utilized to measure changes in (as opposed to levels of) health status over a period of time. In addition, such data can show pronounced variations as a result of changes in data collection mechanisms, geographical coverage, etc. By contrast, data from special surveys and ad hoc studies are generally more reliable.

TABLE X: <u>INFANT MORTALITY RATES FOR SELECTED YEARS</u> (Per Thousand Live Births)			
	1975-1980	1980-1985	1985-1990
Western Hemisphere	70	63	56
Argentina	41	36	32
Bolivia	138	124	..
Brazil	79	71	63
Chile	46	23	20
Colombia	55	50	46
Costa Rica	30	20	18
Dominican Republic	84	75	65
Ecuador	82	70	63
El Salvador	82	70	59
Guatemala	82	70	59
Guyana	49	36	30
Haiti	139	128	117
Honduras	95	82	69
Jamaica	25	21	18
Mexico	60	53	47
Nicaragua	93	76	62
Peru	105	99	88
Uruguay	44	30	27
Venezuela	43	39	36

Source: UN (1986)

Data from these two sources have been compiled on a preliminary basis in Table XI. Information - if at times fragmentary - is available for nineteen countries. Information is lacking only for Haiti and Bolivia. Data in Table XI have been subdivided into two groups. The first group refers to countries for which the available data are relatively reliable, i.e. countries with an under-registration error for all deaths of less than 10 percent (Chackiel 1987, quoted in Bhem 1988) or for which special studies have been carried out. The second group refers to countries for which the available data are unreliable because of large under-registration errors. In Haiti, Bolivia, Nicaragua and Honduras, for instance, the extent of this error is more than 50 percent. Because of the unreliability of the available data, this second group of countries - generally those with higher IMRs - is excluded from the following analysis.

Of the ten countries for which relatively reliable data are available, only two, Cuba and Guatemala (see the registration data for Guatemala in Table XI), have shown an unambiguous decline in IMR since

TABLE XI: INFANT MORTALITY RATES, 1975-1987  
(Per Thousand Live Births)

	1975	1980	1981	1982	1983	1984	1985	1986	1987
<u>A. Countries for which relatively reliable data are available</u>									
Argentina	....	33.2	33.6	30.5	29.7	....	....	....	....
Brazil <u>a/</u>	104.3 <u>k/</u>	81.1	74.1	65.8	68.6	73.7	....	....	....
Brazil <u>b/</u>	....	76.2	69.7	62.7	63.8	68.2	55.0	53.0	....
Chile <u>c/</u>	57.6	33.0	....	23.6	21.9	19.6	19.5	19.1	....
Costa Rica	37.9	20.2	19.1	19.3	18.6	18.9	....	....	....
Cuba	....	19.6	18.5	17.3	16.8	15.0	16.5	13.6	13.3
Dominican Rep. <u>d/</u>	....	....	65.0	....	....	....	....	75.0	....
Guatemala	81.1	65.5	63.9	62.5 <u>e/</u>	....	....	....	....	....
	....	....	....	64.2 <u>e/</u>	65.7	55.4	56.0	....	....
Guatemala <u>f/</u>	....	....	76.0	....	....	....	....	80.0	....
Guyana <u>g/</u>	....	33.5	....	....	....	40.6	....	....	....
Uruguay	48.6	37.6	33.4	29.4	28.6	30.4	29.5	....	....
Venezuela <u>h/</u>	43.8	31.8	35.2	29.8	27.5	28.5	27.1	27.6	....
<u>B. Countries for which only relatively unreliable data are available</u>									
Belize	....	....	....	20.8	23.2	23.4	18.9	21.5	....
Bolivia	....	....	....	....	....	....	....	....	....
Colombia	46.7	....	....	....	....	20.3	....	....	....
Ecuador	65.8	....	....	....	....	54.1	50.6	50.4	....
El Salvador	58.1	42.0	44.0	42.2	....	35.1	....	....	....
Haiti	....	....	....	....	....	....	....	....	....
Honduras	33.7	....	....	....	17.4	....	....	....	....
Jamaica	23.2	....	....	10.0	....	....	....	....	....
Mexico <u>i/</u>	49.0	38.8	34.5	33.0	30.1	29.2	25.1	....	....
Nicaragua	46.4	....	....	....	75.2	....	....	61.7	....
Panama	31.6	....	....	....	....	....	21.8	....	17.5
Paraguay	....	....	....	....	....	....	51.5	41.8	....
Peru <u>j/</u>	....	....	....	95.2	104.6	135.9	90.8	....	....

General Sources:

Demographic Yearbook 1986, UN, 1988, pp. 305-306.

Demographic Yearbook 1985, UN, 1987, pp. 396-398.

Sources from Special Country Studies:

a/ Becker and Lechtig (1986).

b/ Chahad and Cervini (1988).

c/ Raczynski (1988).

d/ Survey data published by the National Council for Population and Family (see UNICEF Dominican Republic 1986).

e/ Break in series.

f/ UNICEF Guatemala Area Office (1987).

g/ UNICEF Guyana (1986).

h/ Cartaya and Garcia (1988).

i/ INEGI-SPP.

j/ Including an upward adjustment for under-registration.

k/ 1977.

1982. The case of Argentina, for which few observations are available, is uncertain. In contrast, for three countries, Venezuela, Costa Rica and Chile, there has been a marked slow-down, or even a leveling off, in infant mortality reduction relative to the reduction which took place in the second half of the 1970s and relative to the slow-down one would expect for countries at this stage of demographic transition. In the case of Costa Rica (for which reliable data are available) for instance, IMR declined between 1975 and 1980 by an average of 3.5 points a year, while between 1981 and 1984 there was no progress at all. Between 1983 and 1986 IMR remained completely stagnant in Venezuela, while between 1975 and 1980 it declined by 2.4 points a year.

In the remaining five countries, i.e. Brazil, the Dominican Republic, Guyana, Guatemala (see the UNICEF data for Guatemala in Table XI) and Uruguay, there was an increase in IMR. In the first three countries the increase was quite marked - between 10 percent and 20 percent - while in the others the rise was contained.

The clearest increase is evident for Brazil. Data from the Ministry of Health (Becker and Lechtig 1986) show that after several years of steady decline IMR increased between 1982 and 1984 from 65 to 73 (per thousand live births), owing to the severe economic downturn experienced between 1981 and 1983 and to the Draconian adjustment policies implemented between 1981 and 1985. These policies contributed to the continuous decline in wages (until the second half of 1985), the steadily falling employment opportunities (until the end of 1984) and the 20 percent drop in government per capita expenditure on health and education (Macedo 1987). Infant mortality increased in either one or both of the years 1983 and 1984 in all six main regions of the country. The greatest increases were recorded in the North and North-East, which also suffered during the same years from adverse climatic conditions. A disaggregation of the data shows that the mortality increase was due to a greater incidence of acute respiratory infections (in the North-East) and diarrhoeal and immunopreventable diseases (nationwide). Similar conclusions result from the use of data from IBGE, the central statistical office (Chahad and Cervini 1988).

A main general conclusion is evident. In the 1980s progress in the health and nutritional status of children has slowed down or completely ceased in most countries of the region, while in about a third of the region infant mortality and/or malnutrition have increased. Progress seems to have continued at the pace of the 1970s in only five or six countries.

Marked negative changes in the main determinants of child welfare are behind these adverse developments. Urban incomes, prices, government expenditure and the time availability of mothers for child care and feeding have all moved in a negative direction. Moreover, the burden of the decline has been shared inequitably. Minimum wages and informal-sector earnings have dropped in excess of GDP per capita, while the price of food and other essentials has increased faster than has the CPI. Fiscal systems may have become more regressive while real per capita government expenditure on health has declined in two thirds of the countries of the region. With the exception of an expansion in immunization coverage, the introduction of the Programme for the Control of Diarrhoeal Diseases and better targeting in a limited number of nutritional programmes, there is no overall evidence of more rational and equitable utilization of shrinking but still considerable health resources.

The situation is naturally not completely uniform. There are countries (such as Colombia and Panama) which have been little affected by the crisis. There have also been some positive developments. The incomes of the rural poor, for instance, have not suffered a decline comparable to that of the incomes of the urban poor; in several countries they have even increased. The fact that salaries and inputs have been cut less than has capital expenditure may have ensured - at least for a few years - the continuity of health services in those areas already served. In some cases community action - the pooling of food and time resources - for the care and nutrition of young children has partially offset the negative effects of higher prices and reduced parental presence at home.

However, the overall picture shows that long-term improvement in nutrition and health has been halted or slowed down - and in some cases reversed - by the current economic crisis. A trend toward improvement may be re-established if appropriate measures are introduced. This is discussed in the next section.

#### V. FOSTERING CHILD SURVIVAL IN THE YEARS AHEAD

The deterioration in the situation of children that has been observed in many parts of Latin America in the 1980s is due, to a considerable extent, to factors operating outside the health sector. The drop in minimum wages and informal-sector earnings and the increases in the prices of essentials have been far more pronounced - and harmful - than

the drop in health resources. While the decline in government expenditure has been an associated factor in the worsening of the situation of children, other developments within the health sector - such as the protection of current expenditure or the expansion of high-protection, cost-effective programmes, such as the Expanded Programme of Immunization and the Programme for the Control of Diarrhoeal Diseases - may have contributed to the containment of the social cost of the crisis. In any case they are indicative of the large gains for child health that would follow from the introduction of appropriate policies.

If the above is true, future interventions in favour of children will have to focus not only on the preservation and efficient use of resources within the health sector, but also on ways to protect the poor from sharp and sudden failures in their entitlements.

Action is therefore needed on three fronts.

To start with, it is necessary to adopt adjustment and long-term development policies which deliberately pursue growth with equity.

Second, and related to the first point, action must be taken to reduce the burden of debt servicing, which is responsible for the drainage of important resources from the region.

Third, substantial progress in child welfare can be achieved through better social policies, in particular through a sustained level of health expenditure and improvements in targeting and efficiency.

#### Macroeconomic Policies for Equitable Adjustment and Growth

Because of the inadequacy of the prevailing approach to adjustment (see Part II), an approach which combines the protection of those who are vulnerable and the restoration of economic growth over the short and medium term is required. Such an approach would entail less restrictive fiscal and monetary policies which would help sustain output, investment and human need satisfaction. It would also entail a more gradual schedule for the structural transformations of the economy that are needed to return to non-inflationary growth within the context of a viable balance of payments position. The larger amounts of medium-term external financing necessary to fund such an approach could be provided by new voluntary lending or, more likely, by reduced debt servicing (see later).

Such macro-policies will need to be complemented by sectoral policies for the priority allocation of "scarce resources" - such as credit, foreign exchange, subsidies, government expenditure and expertise - to those sectors and activities with the highest potential to enhance the

income-earning opportunities of poor and low-income households and to satisfy basic human needs. Examples of such policies implemented in Latin America during the 1980s include the opening of credit lines and the extension of technical assistance to small and marginal farmers (Peru) and to "micro-empresas" (Colombia), public works for the unemployed (Chile), the construction of large numbers of low-income housing units (Colombia), various types of income transfers (Argentina, Jamaica and Brazil) and the use of licensing to ensure the importation of food and other key items at preferential rates of exchange (Colombia). Although partially successful from a programme perspective, most of these schemes have not been part of organic plans to alleviate the impact of the crisis and at times have been flawed in terms of scope and efficacy. In addition, they have generally been unable to correct - even minimally - the profound distortions in income distribution existing in virtually all Latin American countries.

Over the longer-term this policy approach needs to be strengthened by measures designed to expand productive potential - particularly that of poorer groups - through capital accumulation, institutional reforms (such as land reform) and the enhancement of the skills and know-how of the labour force.

#### Reducing the Burden of Debt Servicing

The ability to expand imports of capital, intermediate and basic consumption goods (see Part II) and to sustain government social expenditure (see Part IV) is crucially influenced by the drainage of resources caused by the servicing of a foreign debt contracted under conditions (fast growth of world trade and low interest rates) substantially different from those that have been prevailing so far in the 1980s. Therefore the promotion of child health will also depend on the following two changes.

First, a substantial reduction in the cost of servicing foreign debt. There are innumerable ways to effect such a reduction. The one that for a variety of reasons seems the most advisable is a reduction in the value of the stock of debt in line with the "discounts" practiced on secondary markets. Interests would be paid therefore on the "discounted debt". Given the value of foreign debt on secondary markets - ranging from 8 cents on the dollar for Bolivia to about 50 cents for all major debtor countries - such an operation would have saved Latin America as a whole

about \$15 billion in 1987.

Second, direct measures (including debt for equity swaps) ought to be taken for the repatriation of at least part of the capital now held abroad by Latin American nationals. This repatriation would be eased if a climate of growth prevailed in the region.

While there is no automatic guarantee that they would be used efficiently, the resources generated in these ways could permit a substantial recovery in production and social services.

#### Changes in Social, Fiscal and Health Policies

Changes in social policies can go a long way in sustaining improvements in child welfare. The current debate on this topic emphasizes several key issues, such as decentralization, integration between economic and social policies, accountability of state institutions and better monitoring and evaluation of social-sector activities. Another important issue being discussed concerns the type of integration among the four main providers of social services, i.e. the State and the private, the voluntary and the informal sectors. While a wholesale reduction of the State's role in the provision of social services may be rejected, it is important to try to make these four sub-systems function in a progressive and coordinated way and also to try to mobilize human and financial resources outside of the State sector, which would remain the pivot of the overall system (Bustelo 1988). Within this general approach, four main lines of action in the specific areas of fiscal and health policies are proposed hereafter.

First of all, there is a case for trying to restore per capita health expenditure to the levels of the years prior to the crisis. If the role of health in the national economy is to be recognized, then health expenditure must be raised through the reduction of other, lower-priority items, such as defence, interest on foreign debt (see above), general administration and low-priority investment. Health expenditures can also be increased through measures which generate higher overall government revenue. While a few countries have rationalized their tax structure or created "special funds" fed by increases in indirect taxes, surcharges on income tax or foreign aid - as in the case of Brazil's "Finsocial" and Bolivia's "Fondo de Emergencia Social" - none has yet embarked on a thorough fiscal reform inspired by criteria of equity and

progressiveness. While often controversial and requiring time and administrative capacity, reforms along these lines would probably represent a permanent solution for the financing of social services.

Another way of increasing the flow of resources to the health sector would be through the payment of charges for services, typically either for drugs or for services through which drugs are provided. Recent experience suggests, however, that an indiscriminate introduction or transformation of fee systems may lead to a number of unforeseen inequities, particularly the contraction in the level of service use by the poor or the suppression of other necessary consumption items. Therefore, charges should be introduced according to the ability of users to pay.

Second, child health and nutrition can be efficiently promoted through the reorientation of shrinking but still considerable public health expenditures toward the provision of primary health care services and, within these services, toward a number of selected low-cost, high-efficiency interventions - such as universal immunization, oral rehydration and the control of acute respiratory infections - directed at all or most of the population. It is now universally acknowledged that there is scope to reduce hospital expenditure, or at least to slow its growth, without damaging total health output.

A third mode of promoting child health and nutrition would be to target services on specific population groups: those which are most vulnerable or most in need of particular interventions. Nutritional support is a case in point. In Chile infant mortality and malnutrition have continued to improve in the 1980s - despite growing poverty and an adverse economic environment - because of the focused targeting of nutritional support and rehabilitation measures on the children of very poor families and on those children most at risk (Raczynski 1987). In Brazil, in contrast, despite a \$1.9 billion expenditure on food and nutrition programmes - run by seven different federal ministries and agencies with overlapping targets and conflicting administrations - malnutrition is as serious today as it was in the mid-1970s, a fact which is substantiated by the increase in IMR experienced during the early 1980s. If the total amount of the subsidy could be targeted efficiently to the 19 percent of the Brazilian population in need, each person in need would receive a subsidy of \$74 a year, raising his or her income by approximately 60 percent (World Bank 1988).

Fourth, there is ample scope for the improvement of the health and nutrition of children in the years ahead through the rationalization and

increased efficiency of existing systems. Better management practices could generally save up to 40 percent of the recurrent budgets of most large hospitals. Appropriate drug procurement policies - making use, for instance, of the WHO-UNICEF Drugs Procurement Facility - could allow cost reductions of up to 40 to 50 percent of the essential drugs bill of a country (Forster 1988). This process of rationalization would be facilitated if changes in drug procurement were accompanied by a corresponding shift in demand toward fewer essential drugs. Another major way to reduce costs would consist in the rationalization of the provision of services which are normally delivered simultaneously by three or four major public-sector health providers (Social Security, Ministry of Health, Army and/or Trade Union Health systems and private providers). Duplications and overlaps could thus be eliminated and effective decentralization introduced.



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**International Child Development Centre**

Piazza S.S. Annunziata, 12

50122 Florence, Italy

Tel. 3955-234-5258 - Fax 3955-244817

Telex 572297 UNICEF I