

CEPAL

Review

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Notes and explanation of symbols

The following symbols are used in tables in the *Review*:

Three dots (...) indicate that data are not available or are not separately reported.

A dash (—) indicates that the amount is nil or negligible.

A blank space in a table means that the item in question is not applicable.

A minus sign (-) indicates a deficit or decrease, unless otherwise specified.

A point (.) is used to indicate decimals.

A slash (/) indicates a crop year or fiscal year, e.g., 1970/1971.

Use of a hyphen (-) between years, e.g., 1971-1973, indicates reference to the complete number of calendar years involved, including the beginning and end years.

Reference to "tons" mean metric tons, and to "dollars", United States dollars, unless otherwise stated.

Unless otherwise stated, references to annual rates of growth or variation signify compound annual rates.

Individual figures and percentages in tables do not necessarily add up to corresponding totals, because of rounding.

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Review

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Twenty-third session of the Economic Commission for Latin America and the Caribbean

Between 3 and 11 May of this year, ECLAC held its twenty-third session in Caracas, Venezuela. The following pages contain the texts of the addresses delivered on that occasion by the Executive Secretary of ECLAC, Mr. Gert Rosenthal, when opening the Ministerial-level phase of the session on 9 May; the President of Venezuela, Dr. Carlos Andrés Pérez, at the closure of the session on 11 May; the Minister of the Economy of Chile, Mr. Carlos Ominami, speaking on behalf of the Chilean delegation on 10 May; the Minister of Planning and the Budget of Mexico, Dr. Ernesto Zedillo, likewise on 10 May, and the EEC Director of Relations with Latin America, Mr. Angel Viñas (Spain), speaking on behalf of the Commission of the European Communities, on 11 May.

*At the session, ECLAC presented two working documents, entitled **Changing production patterns with social equity and Latin America and the Caribbean: Options for reducing the debt burden**, which are summarized in the section "Recent ECLAC publications" at the end of this issue of CEPAL Review.*

Gert Rosenthal
Executive Secretary of ECLAC

New circumstances, fresh challenges

This is a most moving occasion for me. I remember that one of my first direct contacts with ECLAC was in May 1967, when I had the honour to attend the twelfth session—likewise held in Venezuela—as a government official of my country. Being here now at a new session, but this time at the head of the ECLAC Secretariat, brings the past back to me with a good deal of nostalgia, although of course the reason for this meeting is above all to explore the present and the future.

This is also a significant moment for our institution. ECLAC has kept up a considerable presence in Venezuela from that time up to the present, but it is twenty-three years since our supreme intergovernmental forum met here, in the native land of the Liberator, so this is a particularly happy reunion.

This new meeting is all the more propitious because of the solid backing we have always

received from the government authorities for our activities in general and for the organization of this conference in particular, to say nothing of the warm welcome we have been given. The support we have received from President Carlos Andrés Pérez, from you yourself, Mr. Chairman, from the Minister in charge of CORDIPLAN and from all your respective collaborators merits our undying gratitude.

This solemn ceremony is also a very appropriate moment to recall the memory of one of my illustrious predecessors who was also a distinguished son of this land, José Antonio Mayobre, as well as that great Venezuelan in whose honour this hall is named, Manuel Pérez Guerrero, whose life was also closely linked with the fortunes of our Organization.

Furthermore, this meeting is taking place at a moment of very special importance. The transition from one decade to the next—and

moreover to a decade which marks the threshold of a new millennium— is taking place against the background of the titanic efforts being made by the governments and societies of Latin America and the Caribbean to surmount the daunting restrictions on their development which emerged in the previous decade, the rapid changes taking place in our external economic environment, and now also the expectations generated by the transcendental changes occurring in the world. Thus, the countries of the region are not only faced with the urgent need to correct a mass of shortcomings inherited from the past but must also cope with events which a little while ago would have been considered unthinkable. How can we adapt to all these changes and even turn them to our advantage in order to improve the way Latin America and the Caribbean fit into the world around us? ECLAC's long-standing concern with this topic must now express itself within a context which is radically different from that of only a few short years ago.

It is worth looking more closely at some of these changes. With regard to the international economic order, we have been witnessing the gradual transformation of its very bases along lives very different from the way they were originally conceived soon after the war. Over the last decade, these changes have been taking place at a dizzy speed. In the field of trade, we have seen the increasing erosion of multilateralism, the frequent application of trade barriers (both tariff and non-tariff), the emergence of great preferential trade blocs, and a marked adverse trend affecting trade in the majority of basic commodities.

In the monetary and financial sphere, the disappearance of fixed exchange rates has been accompanied by the internationalization of capital markets, which, far from providing resources for our region, have come to be poles of attraction which often divert those resources to other parts of the world. In addition, there are serious fiscal and trade imbalances in the leading economies of the industrialized world, while a further problem is that of the external indebtedness of many developing countries and the oft-mentioned massive transfer of financial resources from the debtor countries to their creditors.

In the field of technology, for its part, particular mention must be made, *inter alia*, of the rapid advances in methods of organization and management, based on the development of the areas of microelectronics and computation, which have enormous implications for productivity.

Finally, momentous cultural and social changes are taking shape in the industrialized nations and are opening up fresh gaps between the new outlook of the North and that of the South. Merely by way of illustration, for example, the demographic phenomenon of population aging in the industrialized countries contrasts with the situation in Latin America and the Caribbean, where the population is predominantly young. As a result of the loss of relative importance of growth or employment as the dominant objective of social life in the industrialized countries, our region is suffering serious shortcomings and lags.

The changes in our external environment, however, go much further than the phenomena referred to above. They are also reflected in the profound transformations taking place within the group of countries which, up to only a few months ago, formed one of the two pillars of the world geopolitical order that emerged after the war. In some respects, these changes are reminiscent of one of the outstanding features of contemporary Latin American novels, in that truth is now more astounding and imaginative than any fiction could be. The transformations which have taken place in the political and economic model that prevailed in one of the great superpowers, together with the significant changes in its policy towards the countries closest to its sphere of influence, are bound to have incalculable consequences, especially in the field of international relations.

On the one hand, we are witnessing a breakdown of bipolarity which has dispelled the main source of tension in the international system, causing it to progress from the so-called "cold war" to a situation marked by political détente, disarmament, and the redefinition of alliances. This opens up new spaces for international relations.

On the other hand, a major utopia has lost the power to convince. For some, this means a final defeat at the hands of another utopia: the

proverbial "end of history". For others, it means a quest for new alternative utopias and the emergence of new contradictions. At all events, there can be no denying that change has also reached the world of ideas. In different areas and different societies, there has been a rediscovery of the virtues of pluralistic, representative and participative systems. This seems to confirm Winston Churchill's assertion that "democracy is the worst system of government there is — except for all the others". In the economic sphere, the view that the market should be the main means of allocation of resources is gaining ever-increasing legitimacy, even though this does not rule out an important role for the State.

In short, living through these months which mark the end of the 1980s and the beginning of the 1990s gives the impression that we are at a turning point in the history of mankind. Moreover, as in every process of rapid change, there is puzzlement as to its meaning, although in our circles two opposing feelings clearly prevail. On the one hand, there is a feeling that, all in all, these changes in the world political order are likely to have consequences that favour democracy, peace, prosperity and social justice, even though there may be no shortage of new problems such as those deriving from damage to the ecology and the environment. On the other hand, on looking at the changes in the international economic order, it is also usually felt that there is a blemish on this heartening picture, in that the favourable effects in question will not be felt with equal force in all parts of the world and by all its inhabitants, or —still worse— the developing world in general and our region in particular will run a serious risk of remaining permanently on the sidelines.

This is the context in which Latin America and the Caribbean are facing the complex challenges of the 1990s and beyond. The enormous changes which are taking place in the world involve risks as well as opportunities for the countries of the region. Only the future can tell which of these will prevail on balance. Here and now, however, our Secretariat stands up in front of the Commission to assert without hesitation that in spite of the extraordinary mass of demands that must be fulfilled in order to surmount the crisis, there *is* a way out for our countries, and the question of how to reach it is,

in the final reckoning, the reason why we are here.

This heartening picture is not just the result of a mere voluntaristic assertion, although a vital factor in it is the unremitting concentration of the will of peoples and governments. It has as its starting point the recognition that not all the legacy of the 1980s is negative. The marked trend towards pluralistic democratic processes, understood as the free election of governments and the consolidation of democratic institutions, was also a fundamental part of the history of the 1980s, and it has been further strengthened as the present decade opens. Even in the few months of the present year which have elapsed, we have witnessed orderly transfers of authority in Brazil, Chile, Costa Rica, Honduras, Nicaragua and Uruguay, and in a few weeks the same will occur in Peru.

At the same time, the 1980s brought with them painful but valuable lessons. Thanks to the sum of the main lessons taught by the economic crisis of the 1980s, there is now a much clearer awareness than before of the path that needs to be followed in order to adapt to the changing international setting and to surmount the constraints on our development. Albeit with ups and downs and differences of degree, a good number of Latin American enterprises have put their finances in order, raised their productivity, and begun to enter more confidently into world markets. Governments have followed the same path by putting their finances on a sounder basis, eliminating non-essential expenditure, and observing strict investment priorities. Moreover, the most painful social adjustments have now been assimilated, fortunately without affecting the advance of democracy.

In particular, there is a growing conviction in the region that we must set about all these necessary tasks ourselves, for if we do not, no-one else will do the job for us. In the light of this conviction, we have put forward three main lines of action in order to enable the countries of Latin America and the Caribbean to attain development.

Firstly, everything confirms that our countries will have to tackle the problems of international competitiveness and seek external financial resources primarily through their own efforts, either individual or collective. The

external environment is becoming increasingly competitive and complex as regards penetrating markets and attracting capital. There is intense competition among the main industrialized economies, and in recent years an increasingly long list of countries which industrialized at a later date have begun to compete too. Great economic blocs are tending to be consolidated in Europe, North America and the Pacific Rim. The restructuring process which is gaining force in Eastern Europe means that there will be new potential competitors for both markets and financial resources. In saying this, I am not overdramatizing the situation but merely underlining the fact that, in view of the complex new circumstances prevailing in the external environment, the need for internal efforts is increasingly pressing. In this respect, it may be noted that that environment will undoubtedly condition the transformations in production patterns in our countries, but it can never become a pretext for avoiding changes.

Secondly, an international setting which is less tense and less ideologized creates a more fertile field for originality and creativity. The breakdown of the model based on the idea of a centrally planned economy, for example, has given rise to an apparent consensus on the need to heed the market signals, but there is as yet no sign of consensus on the conceptual approaches required in order to attain development. Contrary to the view held by some people that the use of "correct prices" will cause all problems to automatically settle themselves, there are still any number of long-standing dilemmas that need to be solved, but now within a new context. Thus, the effort to unite the objectives of efficiency and equity, or to reconcile the objective of growth with that of defending the environment, demands an innovative approach. The need for a dynamic and creative interaction between the public and private agents also points in the same direction. Thus, Latin America and the Caribbean once again have an opportunity to construct their own road to development in the light of the special features and circumstances prevailing in each of the countries. We would like to think that our proposals, which are inspired by the intense debate on development going on in the region and the many rich experiences contributed in recent times, will help to trace out that road.

Thirdly, joint action (including of course economic integration) continues to be a vital instrument for the countries of Latin America and the Caribbean. This is not only because greater economic interdependence diversifies the risks that each country must run in a highly competitive international economy, nor because integration serves as a defence when other great blocs of countries act together. Equally or even more important is the possibility of acting together to explore the limits of the new external environment, in the context of transition from a world organized on a bipolar basis to another whose form of organization is still in the process of definition. In this state of affairs, considerations of security will tend to lose importance as the guiding force behind the regional policies of the main power in our hemisphere, and this means that it will be necessary to explore, in a creative manner, the new potential offered to all parties by inter-American co-operation.

At the same time, Latin America and the Caribbean must demand a bigger share in the process of taking decisions that help to shape the world trade, monetary and financial order. There are encouraging prospects in this respect. Collective action will improve the region's capacity to influence world events. Moreover, it is to be hoped that a less rigid international order will give our region more room to manoeuvre in both international relations and in economic co-operation. Such greater leeway, I maintain, can only be exploited to the full if the countries of the region act together.

Finally, while emphasizing the importance of internal effort and intra-regional co-operation in tackling development in the 1990s, I would not like to leave the impression that the industrialized countries can evade their responsibility to support the efforts of the developing countries. Even though it is obvious that the traditional arguments in favour of international co-operation seem to have lost force *vis-à-vis* the public opinion and government authorities of the developed countries (especially at times of fiscal difficulties), international co-operation still has a crucial role to play in supporting the efforts of the Third World countries to urge forward their own development, as was confirmed at the special session of the United Nations General

Assembly held just a week ago. In this respect, the developed world must understand that the eradication of poverty from the face of the earth is bound to benefit all sectors of the world community.

If the foregoing idea really takes root in the world conscience, then it will mean that the potential for renovating international co-operation really does exist. Some of the changes which have taken place recently offer at least a possibility of reversing the negative resource transfer. There is now a possibility of diverting resources from defence to welfare —what has been called “the dividend of peace”— and economic and social development should be one of the leading beneficiaries of this. It should be noted that the “dividend of peace” is not something which is confined to the industrialized countries and hence only affects the levels of international financial co-operation: it will also have its counterpart in the developing countries themselves, where it will permit the reallocation of resources —hitherto spent on arms, for example— to the improvement of social services.

Moreover, if internal efforts to foster the development process are continued and strengthened and programmes like those suggested in the Secretariat proposal are further

consolidated, the countries of the region will win a new right to demand that the international community too should assume its responsibilities in the task of making the Latin American and Caribbean economic crisis of the 1980s a thing of the past. This approach includes, for example, our proposals concerning the elimination of the debt overhang, which is one of the major obstacles to the development of the countries of the region.

The above-mentioned topics form the central concern of our agenda. Despite the economic crisis of the 1980s, they bring with them a message of hope, as well as a warning that the road ahead of us will be long and arduous. In urging the governments and societies of the region to embark on a deliberate and sustained effort to change production patterns while safeguarding the seriously eroded cohesion of our societies, we must not lose sight of the enormous potential offered by intra-regional integration and co-operation. For our part—in the best traditions of the United Nations— we place at the service of the governments of our member States, both developed and developing, new mechanisms and renewed forms of international economic co-operation in order that this vision of peace, democracy, prosperity and social justice may truly.

Carlos Andrés Pérez
President of Venezuela

Five basic issues for the region

It is a pleasure for me to be participating with you today in the closing meeting of this event which has brought together those associated with the institution that has played the most significant role in the economic thinking and evolution of Latin America over the last five decades.

The Economic Commission for Latin America and the Caribbean—ECLAC— has been an extraordinary source of ideas, theories and proposals which, although in many cases

needing to be adjusted or modified in line with the changing international conditions and our own Latin American experience, continue to be indispensable points of reference for the development of theories and concepts at the regional level. It is the duty of all of us to do everything we can to strengthen ECLAC.

I should like to take this opportunity to pay an affectionate tribute to a man who was one of the greatest thinkers and promoters of that organization: Raúl Prebisch. The development

of his economic philosophy, his message and his unshakeable faith followed a path which led to an understanding of the more complex reality underlying apparently simple facts and situations. It is now our duty to continue this quest without fear or self-doubt, without any commitment to the past, and with a willingness to make all the changes that may be necessary in order to renew our ideas and practices so as to forge ahead.

This twenty-third session of ECLAC is being held in particularly momentous circumstances for Latin America and the Caribbean, for we are witnessing the end of a decade which has been described as a lost decade for the development of the region, and which I myself would go so far as to term a totally perverse decade.

It is enough to look at the most important economic and social indicators of our recent performance—which are all too familiar to all of us here—to conclude that during these years our difficulties and problems generally got worse. This was so in the case of the external debt, the fiscal deficit, unemployment, stagflation and critical poverty, to name only a few. However, although to experts in economic matters this might seem to be the most negative side of the 1980s, the fact is that—without wishing to belittle it—this evaluation falls short of reality.

The most dramatic feature of this perverse decade was in fact the abrupt resurgence of selfish national interests and the loss or deliberate abandonment of the will to integrate, callously discarding the efforts, schemes and policies achieved in the past. This led to the undermining of the vigorous and optimistic intentions and plans for Latin American and global concertation and integration which the developing countries had been pursuing, and weakened or helped to weaken not only our own incipient integration schemes but also such multilateral agencies as ECLAC, UNESCO and UNCTAD. The Group of 77 also suffered the impact of this perverse decade.

Now, however, at this meeting we are attending in Caracas on the threshold of the last decade of the present century, the circumstances are rather more special. It would seem that we have learnt a bitter lesson and that there is now renewed hope and a stronger will to progress because of the profound political and economic

changes that are taking place in the world. These changes, many of which would have been unthinkable only a few months ago, are truly impressive both in their depth and their rapidity.

It is the direction of these changes which gives rise to our optimism. Mankind is clamouring for democracy, and the developing nations are renewing their determination and faith to make up for lost time and get back onto the right road, but with a desire to take advantage of experience and correct the errors and omissions of the past.

We are witnessing a marked process of globalization of the world economy. The nations which until recently were known as the "Socialist bloc" are rapidly integrating into the world market, which is thus attaining the greatest dimension ever known in the history of capitalism. This is taking place simultaneously with the formation of great economic blocs, such as the European Common Market, North America and South-East Asia, which confront Latin America with the need to take truly transcendental decisions regarding our region.

As if these great changes were not enough, an intensive technological revolution is also under way which is radically altering modern production functions. This revolution is imparting increasing importance to human resources, their level of intelligence, and their capacity for inventiveness, adaptation and organization. Latin America should have nothing to fear from this new situation, however.

The challenges raised by the economic situation of Latin America and the Caribbean are the greatest in the recent history of our region. Faced with the economic totalitarianism that characterizes the activities of the transnational enterprises, we must design bold strategies to cope with the crisis, both at the domestic level (with regard to the production structures of each of our countries) and internationally (with regard to the role of Latin America and the Caribbean on this new world scene).

Gentlemen: the changes which are taking place in the world are truly spectacular, and our own economic and social performance in the last ten years has been too poor for us to pretend that we fully understand as yet that we are faced with

a historical need for a profound overhaul of all our existing concepts and practices with regard to growth and development.

If Latin America is to emerge victorious from the economic challenge facing us, we must be able to solve five fundamental issues which are closely linked with each other.

Firstly, we must transform our systems of production so as to make them more specialized, efficient and internationally competitive.

Secondly, we must link together our economic and social policies so as to achieve growth accompanied by equity and social justice.

Thirdly, the role of the State in the economy must be redefined in order to set free the whole productive potential of our societies.

Fourthly, we must find an external financing policy which relieves us from the external debt overhang and assures us the flow of resources we need for stable, non-inflationary growth.

Fifthly, we must set up a broad common market in the region which will allow us to achieve economies of scale and successfully face international competition: in other words, we must speed up the process of Latin American integration.

I should now like to refer briefly to each of these aspects in turn.

For many years —indeed, whole decades— we in Latin America believed that we could ensure economic development through intensive and prolonged protectionist practices which, it was claimed, would also make possible a process of industrialization through import substitution. We set out along this road, but when the time came we were not able to turn off it towards a more open type of economy which could adapt progressively to the very demanding conditions imposed by international competition.

There is no question today of denying the importance of import substitution as a valid option for generating industrialization, economic growth, employment and riches. What is involved is rather the need to approach such substitution properly as part of a global strategy, so that it is not practiced —as was often the case in the past— as an artificial way of sustaining artificial industrialization processes.

Import substitution is perfectly legitimate when it is practiced in areas where the country in

question has, or can attain, competitive advantages.

It must reflect real economic potential and advantages, as well as export possibilities, and must not depend on lavish fiscal incentives, severely undervalued exchange rates, or any other mechanism which is artificially created and is therefore not sustainable in time.

Transforming our structures of production means advancing towards greater specialization, without discriminating between domestic and external markets but with a firm determination to get rid of the anti-export bias which has characterized us in the past. The idea of autarkic and enclosed economies must once and for all be made a thing of the past.

This transformation of our structures of production will have substantial social costs. Industrial reconversion often means higher unemployment in the short term. The restructuring of the entire economy means dismantling those enterprises which were only able to survive with State aid, in its most negative forms of protectionism and unwarranted subsidies.

These social costs must not be allowed to become so high that they can stand in the way of the proposed changes, however. It is not possible to carry out any worthwhile changes in the midst of social chaos. The economic reform policy must be organically linked with broad social programmes aimed at three basic objectives: cushioning the impact of the adjustment; making a real effort to combat critical poverty (which is not an exclusively economic phenomenon); and developing our human resources, because they are the most valuable capital our nations possess.

We could not even dream of entering the developed world without first of all making very intensive and substantial investments in our human resources. In this respect, education is clearly the great strategic line along which we must advance, because it is the gateway to research, science and technology.

Despite the concern expressed in various regional forums to the effect that co-operation in scientific and technical matters is urgently needed, this is precisely the area where the most serious weaknesses are to be observed in Latin American actions. Most of the decisions which

have been adopted so far at the regional level have as yet failed to give rise to any concrete initiatives which effectively tackle the interaction between scientific knowledge and industrial development.

The adjustment and stabilization programmes through which the Latin American countries are having to pass must not mean a further deterioration in the conditions and potential for assuring our future. The people, their well-being, and their health and education must not be the main victims of the economic adjustment.

There must be close links between economic and social policies. It is recognized that the public sector accounts must be kept in balance, but this must be achieved, not by reducing social expenditure, but rather by effecting a full and integral repositulation of the role of the State in the economy.

It is a recognized fact that there has been over-expansion of the orbit of action of the State in our economies. What we need today is a State which acts much more strategically and selectively, strengthening its capacity for macroeconomic and sectoral regulation and gradually giving up its detailed administrative intervention at the microeconomic level.

We need a State which, if it intervenes in the economy, does so through market-compatible mechanisms. We cannot accept the concept of the State as the negation of the market. It is the State's responsibility to guarantee that the market does not indulge in monopolistic or oligopolistic practices which end up by distorting it. We must get away from the false dichotomy between the State and the market. At the same time, however, we must recognize that in our developing societies with their stunted economies the market is often governed by monopolies and oligopolies, and the State cannot stand by and ignore its responsibility, to regulate the market when necessary until it reorganizes its operations.

At the level of production proper, the State in our countries must gradually give up any involvement in the direct production of those goods and services which, by their nature, can be supplied by the private sector. This will give us a stronger and more flexible State apparatus, concentrated on those activities which it cannot delegate.

There is also now a consensus —extending even to the dominant actors in the world economy— that the external financing terms under which our countries have been operating make it impossible for us to get back on to the path of stable and healthy growth. Unless there is a reduction in the debt and its service, our countries will not be able to discharge their responsibility for their peoples' economic and social development.

This is the area in which we Latin American leaders feel most frustration. In spite of all the efforts which have been made, our nations still appear as a scattered archipelago of isolated small and medium-sized economies. Our common origins and our very similar problems have not been enough to bring us together. The lack of Latin American unity is a fact which we must unhesitatingly acknowledge.

I am convinced that this apparent failure of Latin American integration is merely an extension of our other misguided practices and cannot be tackled successfully unless we correct them too. The modernization of each of our economies is also the first real step towards integration.

We have tried to integrate economies running on artificial lines, but these efforts were naturally doomed to failure. We were trying to integrate economies that were too alike in their shortcomings —insufficiently specialized; over-protected— in other words, we were trying to integrate the unintegratable.

Today, there is a glimmer of light on a far-off horizon. Reforms are being made which aim in the same direction, and real, solid foundations are being laid for Latin American integration.

ECLAC can make a valuable contribution here, with its experience and its capacity for diagnosis, and it can act as a driving force in regional integration. The consolidation of the Latin American and Caribbean bloc in response to the creation of the decision-making centres of the industrialized countries is the only viable option for our nations from the political, economic and social point of view. The urgency of Latin American integration must be the guiding idea when formulating the new strategies for Latin America, and the planners must bear this clearly in mind. I have already said, and I repeat now, that a Latin American Economic Community must be consolidated

within this decade, and it must already be taking its first steps by 1992: a year which we must make the symbol of our continued vigour and will to progress, exactly 500 years after our first meeting with the Western world.

It is therefore a matter of great satisfaction to me that this session should have adopted the transcendental and historic resolution on changing production patterns with social equity, an issue analysed so responsibly and feelingly by the ECLAC Secretariat, together with the

resolution on the International Development Strategy.

The challenges facing us are clear. We must transform and modernize our economies, compete at the international level, further perfect our democratic systems, develop better and more effective policies for social solidarity, advance rapidly in the field of science and technology, and not delay one instant more the process of Latin American integration.

And now, to work!

Carlos Ominami
Minister of the Economy of Chile

Growth is compatible with social equality

The democratically elected government of Chile, headed by President Patricio Aylwin, is taking part in this twenty-third session of ECLAC with interest and high hopes. Our mandate stems from the Chilean people's decision to put an end to an authoritarian régime which has lasted for over one and a half decades, choosing instead a democratic road towards economic, political and social development.

Our basic objective is to restore democracy in our country. To this end, in addition to the indispensable need for the democratization of public institutions, we are striving to clear up the dramatic problem of human rights, to improve the living conditions of the poorest sectors of the community, and at the same time to progress towards the modernization of our social and productive structure.

We are also a government which is trying to re-enter the international community and which sets great store on the development of links of solidarity and co-operation among all the nations of this continent. In this respect, our government considers that the contribution which ECLAC has been making to the region's development for decades past is of the greatest importance.

Our government's economic strategy has been prepared on the basis of a judicious review of everything that has taken place in recent

decades. We take a positive attitude to the development of a climate of economic discipline in the country, the achievement of greater trade openness *vis-à-vis* the rest of the world, the emphasis on the development of exports, and the existence of an entrepreneurial spirit which takes as one of its goals the attainment of capacity to compete both on the domestic and the international markets.

At the same time, however, it is evident that these achievements have had enormous costs, associated with the profound restructuring of Chilean industry and of ownership in the agricultural sector. Up to 1984, there were many enterprises which went bankrupt, subsequently giving way to more technically advanced initiatives. This fact —aggravated by the world crisis— resulted in labour unemployment rates in Chile that exceeded 30%, with a drastic fall in real wages which has still not been made good.

Likewise, the poorest sectors were virtually abandoned in such vital areas as health, education, housing, family allowances and social security benefits.

This process was accompanied by a very marked concentration of investment in fields connected with primary export activities, thus causing some imbalance between the various sectors of production.

In view of these facts, our government is putting into practice policies designed to tackle these problems directly in a forward-looking manner. It would, of course, be absurd to try to turn the clock back in such matters as macroeconomic discipline, trade openness, the new awareness of the contribution made by the entrepreneurial approach, or the proper functioning of the market.

What we do want to achieve is to show that democracy is compatible with efficiency and that growth can go hand in hand with a major effort to increase social justice. In this respect, our strategy is based on three main pillars:

—Guaranteeing macroeconomic stability through fiscal, financial and exchange policies based on strict management of the public finances and the maintenance of a high real exchange rate, thus preventing upsurges of inflation and the appearance of an anti-export bias in the country.

—Restoring social justice by promoting an economic and social programme which will make it possible to significantly reduce the current levels of poverty and marginalization, while at the same time seeking an improvement in labour/employer relations.

—Developing the productive capacity of the country through economic policies designed to impart greater solidity to the various sectors of production, and especially those connected with international trade.

This latter challenge basically means increasing competitiveness. In seeking this objective, however, it is not enough merely to rely on the free play of market forces, because the market suffers from too many imperfections which prevent the proper exploitation of all the potential associated with our natural and human resource endowment. The policies which the government will put into practice are designed to make good these shortcomings, within the democratic context which we are striving to reconstruct.

Against this background, we have designed a modernization policy which covers three substantive aspects.

The first of these corresponds to the deliberate and systematic incorporation of technical progress into the nation's production processes. Although the country's research and

development effort has increased in recent years as a percentage of the gross domestic product, we still have a long way to go before reaching the levels of the fastest-growing nations in this respect.

Consequently, one of the government's central objectives is to substantially increase the capacity for technological innovation in the various production activities. We view this concept in a broad sense, as meaning any change in products, production processes, organization of production or use of inputs which is reflected in commercial applications.

To this end, a technological development fund will be set up to help provide financial resources for the execution of innovative projects. Likewise, the establishment of productivity centres for the various lines of activity will be promoted, with a leading role being assigned in them to the enterprises concerned. Another effort in this direction will be the provision of resources for the preparation of pre-investment projects.

As well as encouraging technical progress on the part of the enterprises, the government has also committed itself to further the training and recycling of the existing labour force. It will only be possible to aim at ambitious targets as regards world market shares if we can substantially increase the productivity of our workers, for this is the fundamental means of achieving a significant increase in our competitiveness.

Finally, we consider that a process of modernization of production aimed at attaining a greater presence on increasingly complex international markets must be based, *inter alia*, on an ever-broader base of businessmen and businesses, in terms of both number and entrepreneurial capacity. By doing this, we will be in a better position to cope in a decentralized manner with the challenges posed by rapid technological change, the dynamism of world markets, and the need to satisfy the more varied and sophisticated demands of a growing population.

We believe that these are necessary conditions for progressing towards development with social justice, in a democratic framework which is in the process of consolidation. As Gert Rosenthal, the Executive Secretary of ECLAC, already noted, there are

some who maintain that growth and equity are mutually antagonistic objectives. For the government which I represent, however, not only is it necessary to reconcile these two purposes, but equity must be seen as an intrinsic element in the sought-for changes in production patterns.

We have noted with great satisfaction the high quality and soundness of the documents prepared for discussion at this twenty-third session of ECLAC. I refer, of course, to the papers entitled *Latin America and the Caribbean: options to reduce the debt burden* and *Changing production patterns with social equity*.

As we embark upon a new decade, after one which has come to be known as "the lost decade", we are all faced with the shared need to take actions which will ensure an international environment that will facilitate our development.

The development process, which is difficult in itself, cannot be undertaken in a hostile environment in which serious financial problems persist and there is no guarantee of smooth access for our exports to the great international markets.

In our opinion, the document *Latin America and the Caribbean: options to reduce the debt burden* represents a good statement of the problems assailing the region in this field and the ways they could be tackled.

We agree with ECLAC on the need to seek ways to strengthen the Brady Plan and correct its shortcomings. We also agree that the developed nations must make a bigger effort to provide public resources for debt reduction and supply additional financing to the nations affected, for flexible allocation in the renegotiation of their commitments to the creditor banks. This effort to reduce the debt should also extend to commitments with the Paris Club.

Likewise, we believe that it would be an important step forward if measures were taken to eliminate the legal, regulatory, accounting and tax obstacles standing in the way of debt reduction.

We must, however, take care with regard to proposals which could give rise to certain rigidities in the conduct of some of the actors in this process, such as the IMF. We must also avoid any measures which could affect the flow of

development resources from multilateral agencies such as the World Bank and IDB.

With the same determination that we must show in trying to secure a less restrictive environment, we must also assume our own responsibilities in the creation of conditions and the definition of policies to improve our situation.

It is no use restricting ourselves to merely denouncing the international obstacles that stand in the way of our development. In this respect, we are in full agreement with the view, expressed in the document *Changing production patterns with social equity*, that development calls for a long-term effort in a number of directions.

These directions include the maintenance of macroeconomic discipline, the pursuit of social equity, concerted action by the various actors in the economic process, and of course an ongoing effort to increase our competitiveness. This in turn calls for the existence of a properly articulated production structure with great capacity to adapt to changing technological trends.

We consider that the ECLAC proposals make substantial contributions in all these areas. It is therefore important to disseminate and further develop them in order to adapt them to the characteristics of the different economies of the region. My country is particularly interested in working with ECLAC and the other member governments in this direction.

On behalf of President Patricio Aylwin's government, I wish to take this opportunity to officially confirm our offer that Santiago should be the venue of the twenty-fourth session of ECLAC in 1992.

We wish to join with the other countries of the region in a commitment to growth, modernization and social justice. We do not believe that a country can or should go it alone in seeking to integrate into the world economy.

It is our firm will to co-operate with the countries of Latin America and the Caribbean. However, we do not want to get bogged down in rhetorical pronouncements which serve only to bring new frustrations. Integration must be based on a quest for concrete results. The rapid industrial and technological changes which are taking place in the world undoubtedly offer

possibilities for both integration and co-operation at the regional level, and we must make every effort to take advantage of these.

The difficulties through which Latin America and the Caribbean are passing make it difficult to advance towards our great goals. Even against the background of its recent political and economic crisis, however, Latin America has achieved some useful results which could serve as a guide in our common quest.

In this respect, we are completely in agreement with ECLAC's view that integration should provide net benefits for all those participating in it, be reflected in the national political projects, and win the support of the various strata of the population.

A first aspect in which we have made some progress is that of achieving greater political homogeneity. Past experience of integration processes shows that they are more feasible when the participating countries not only share similar problems and geographical locations but also have common values and political objectives. Latin America's advance towards democracy at both the national and regional levels is the underlying foundation that makes possible the political co-operation and the dialogue which are essential for integration.

Secondly, I believe we are moving forward arduously but steadily towards the achievement of greater compatibility between our economic policies. If the nations desiring greater integration do not have proper control over their macroeconomic variables, if the conditions in which they carry on their domestic production are too disparate, and if there are still artificial

barriers between them which hinder trade and the free circulation of goods and services, then all the talk about integration will be mere empty rhetoric.

The adjustment effort in which our countries are engaged, each according to its own needs, represents the first step towards a situation where the economies are capable of being integrated at the regional level.

Thirdly, what has happened in the last few decades has served to give Latin Americans a greater sense of realism. The co-operation and increasing integration of our economies can only be based on real expectations of mutual benefits for all the participants. If the businessmen, transport firms, workers, exporters and bankers of our countries do not see clear benefits for themselves in integration, then integration will not take place, no matter what fine speeches politicians and intellectuals make on the subject. If it is to win support, co-operation must bring concrete results quickly, even though they may be only modest.

Our role, then, is not to design great plans for complementation but to use all our imagination to break down barriers, do away with red tape, and expand markets to the regional level. This will be possible in so far as we stabilize our economies at the domestic level, but it is not necessary to wait until then in order to set out on the road towards integration.

Only if we do these things will we be in a position to close the gap that separates our continent from the industrialized world and advance towards the twenty-first century in democracy.

Ernesto Zedillo Ponce de León

Minister of Planning and the Budget of Mexico

The Mexican road to change

On behalf of the Government of Mexico, I should like to express to the Venezuelan Government our heartfelt appreciation for its having offered this beautiful city, founded by Diego de Lozada, as the venue for the twenty-

third session of the Economic Commission for Latin America and the Caribbean.

Caracas epitomizes much of our common history: its foundation as a colony furthered the mingling of races and cultures of which we Latin

Americans are now so proud, while its location near the Atlantic coast recalls the gateway through which our Hispanic culture entered and points to the potential for the integration of the continental mainland with the Caribbean and the opportunities that the oceans hold out for us.

The ground of Caracas is permeated with the uniting force of Simón Bolívar, while the urban landscape of this capital city still reflects many of our virtues as Americans and quite a few of our long-standing problems. Some feature of every one of us is present in this magnificent city which is at once of the Caribbean and of the inland plains; a neighbour of both the Andes and the Orinoco; modern and yet colonial; a university town yet also a mighty industrial city; cosmopolitan yet tranquil; up to the minute, yet proudly conscious of its great traditions: in a word, a city which is a worthy reflection of Bolívar himself. It is with the deepest satisfaction that the Mexican delegation is participating in this meeting here in Caracas, at which the long-standing fraternal bonds between the countries of Latin America and the Caribbean will be further strengthened.

There is something both generous and miserly in the shared history of Latin America. Nature was bountiful indeed as regards the size of our continent and the richness and variety of its resources, and in the nineteenth century our just ambition to be independent came to a head, albeit in conditions which placed us at a disadvantage compared with those countries which had industrialized more rapidly. Thus, the process of building our Nation-States has had to face internal divisions and threats from outside the region.

The fate which the twentieth century reserved for us has been contradictory: while other continents had to settle their regional conflicts or clear up the dilemmas of their own development, here in Latin America we enjoyed decades of relative peace in which we applied models that seemed as though they would incorporate us into the booming contemporary civilization. However, these models were soon exhausted without having brought either full development or the elimination of poverty and inequality. In contrast, great industrial powers arose from the ashes of the European and Asian battlefields, and there, where it had seemed that

the world was being rent asunder and there was a climate of deadly confrontation, we now see a community of remarkably strengthened nations and the outlook is one of a level of integration without any precedent in world history.

With the end of the present century already in sight, Latin America continues to be marked by ambivalence. On the one hand, the democratic political processes which are under way in our societies are most encouraging, but on the other, the economic situation of the region continues to be very adverse. Thus, the report of this Commission on the economic performance in 1989 continues to reflect problems which were already present throughout the 1980s: low growth; decline of the per capita product; intolerably high rates of inflation and unemployment; a drop in real wages, and an increase in the region's external debt burden which, though a little less marked than before, nevertheless involves a heavy transfer of resources to the exterior.

The region's efforts to overcome its serious economic problems are still taking place in an unfavourable and inequitable international context: interest rates on the external debt are still very high; the terms of trade with the rest of the world are far from being at fair and equitable levels, and indeed, the prices of some of the region's export products have registered a steady decline. In Mexico, the movement in favour of social justice and the desire to build a solid and prosperous economy ran up against the exhaustion of the development model and the outbreak of a severe economic crisis. Only the force of our political institutions and the collective toughness of our people have permitted the maintenance of social peace, liberty, and the continued enjoyment of political rights.

In the space of 50 years, we had increased our per capita gross domestic product fourfold, and for several decades we kept up an average annual growth rate of over 6%. Our economic and social structure changed substantially: from being a fundamentally agricultural and rural country we became a predominantly urban society. Year by year there was a noticeable improvement in our indicators of well-being, and this further fuelled our optimism. The generalized progress of Mexican society, together with some particularly

outstanding achievements, attracted the attention of researchers of the most diverse schools, for the Mexican economy had grown to the point where it occupied the fourteenth place in the world.

However, limitations in the structure of production and serious social shortcomings remained. Our economy was excessively concentrated in just a few cities, leading to heavy costs for the provision of the necessary services; regional development and the development of the various sectors of production were very disparate; there were still areas of critical poverty, and for a long time our competitiveness was below par. The successes achieved in import substitution became a decoy which distracted attention from the need to make profound changes. Thus, attempts were made to compensate for the weakening of productive activities by taking some measures to increase demand, such as the proliferation of public enterprises in fields previously limited to the social and private sectors, or the acquisition by the State of private firms which were in financial difficulties. It was sought to relieve the structural weakness of the economy through the generalized application of all kinds of subsidies. Moreover, the population growth rate only aggravated the difficulties assailing the almost moribund economic model, for the population was increasing at the same time that the capacity of the economy to satisfy its needs was steadily shrinking.

The country began to register increasingly intermittent and ever-briefer periods of growth, followed by longer and longer periods of economic recession. At the same time, the sudden sharp adjustments of the exchange rate and of the prices of public goods and services which were applied every time the imbalances reached unmanageable proportions gradually undermined the stabilization capacity of the economy until rates of inflation with as many as three digits were recorded: something hitherto unknown in Mexico in this century.

Towards the end of the 1970s, it looked as though oil was the answer to all these problems. The income from oil exports, together with a huge injection of financial resources based on optimistic estimates of the probable evolution of hydrocarbon prices, was used to relieve the

distortions which had built up, thus putting off the necessary corrections of an outmoded structure. When the bright prospects of the oil industry did not materialize and the resource inflow was reversed into an outward flow, however, the Mexican economy entered a crisis situation characterized by over-indebtedness, extremely high fiscal and balance-of-payments deficits, and serious structural imbalances.

In response to this situation, the Mexican Government initiated a process of change designed to transform the production apparatus, raise the general level of efficiency of the economy, and build up an export sector capable of generating the resources needed for development. Measures were taken to put the public finances on a sounder basis, including the reform of the para-State sector. The economic stagnation and pressing social demands made thorough-going changes imperative, but these efforts had to be deployed against the background of the worst external conditions since the war and an unfavourable domestic situation made still worse by the earthquakes in 1985. Even so, however, our economy began to be more competitive, our public finances were placed on a sounder basis, and the size and productivity of the public sector have begun to be more consonant with the needs of growth and the gradual promotion of general well-being.

It is in this context that the country received the proposals for change made by President Carlos Salinas de Gortari. On taking power, the President called upon the people of Mexico to enter into three basic National Agreements to extend our democratic way of life, achieve economic recovery with price stability, and raise our standards of living on the basis of productive improvements. He also instructed the Ministry of Finance to seek a renegotiation of the external debt in line with the objectives of our economic policy.

The Mexican Constitution imposes upon the State the duty to organize a democratic system of national development planning which will ensure solid, dynamic, lasting and equitable economic growth on which the independence and political, social and cultural democratization of the Nation may be based. It was with these duties in mind that the National Development Plan for the period 1989-1994 was prepared.

This is the guiding document of our Democratic National Planning System, and for the six-year period in question it contains four fundamental goals:

- Defence of Mexico's sovereignty and promotion of its interests in the world;
- The extension of democracy;
- Economic recovery with price stability; and
- Raising the standard of living of the population on the basis of productive improvements.

In order to achieve these four objectives, the National Development Plan takes modernization as its general strategy. Modernization means changing our forms of organization to produce riches and well-being and distribute them in an equitable manner; taking an optimistic approach to the changing opportunities offered by the present situation, and liberating the energy of the whole of society so as to make it more efficient and productive. The modernization strategy assumes that there is a need for change and that such change must be carried out in directions and degrees which are in keeping with our ideals of sovereignty and peace, democracy and freedom, and well-being and justice.

The Development Plan which guides Mexico's efforts in this field, like the document prepared by the ECLAC secretariat, seeks to change production patterns while attaining greater equity. In this respect, I should like at this point to express our appreciation to the Executive Secretary for the effort which has gone into the preparation of the documents serving as the basis for the discussions of the present session. Mexico is pleased to note that the realistic, pragmatic and constructive tone of these documents shows that ECLAC is clearly capable of meeting the challenges facing Latin America and the Caribbean at the present time.

The necessary changes in production patterns will only be possible through the recovery of firm, steady growth based on economic stability, the expansion of the resources available for investment, and modernization of our economies.

Recovery of growth on an equitable basis will only be possible if we consolidate the reduction of inflation. Latin American experience has convincingly shown that high

rates of inflation concentrate income, divert the attention of the production sector to activities of little or no social value, lead to a deterioration in the role of money, seriously complicate production and investment decisions by distorting relative prices, and endanger peaceful social coexistence.

Mexico has made important advances as regards economic stability. Inflation has been brought down from 160% in 1987 to a little under 20% in 1989, thanks mainly to the great fiscal and monetary adjustment effort made since 1983. This effort really began to bear fruit in 1988, however, when it was combined with the social concertation which we are still pursuing. Thus, the reduction in the planned expenditure of the public sector, as a proportion of the product, amounted to 9 percentage points between 1983 and 1989; the financial deficit of the sector went down from 16.9% of the product in 1982 to only 5.8% in 1989, while the operating or real deficit on the public finances, which had reached a level equivalent to 10% of the gross domestic product in 1981, was less than 2% in 1989.

The fiscal adjustment effort made in Mexico has been a fundamental element in initiating and pursuing the changes which the country requires. It was clear that unless the public finances were placed on a sound basis, any efforts to secure a lasting reduction in inflation would be in vain. Such an effort is necessary in order for modernization of the economy to be successful and bear fruit, but it is not of itself enough. For this reason, the Government called upon the peasant, labour and business sectors to enter into a concerted agreement to reduce and control inflation while avoiding the cost of a severe economic recession. We Mexicans have found this concerted agreement to be a valuable instrument of shared responsibility which enables us to share out the burden of resuming growth with price stability. Through this concertation, the Government has also confirmed its legitimate authority for carrying out numerous measures of structural change and has strengthened its arguments *vis-à-vis* the country's international creditors in favour of the renegotiation of the external public debt.

Economic stability is an indispensable condition for ensuring that the resources of the

economy are assigned to productive investments. In Mexico, however, just as in other Latin American countries, the present situation demands that such resources should be expanded. Consequently, our country has applied policies designed to stimulate public and private domestic saving and increase the availability of external savings.

Public spending is now directed more precisely towards the execution of those tasks which are the strict responsibility of the State, while the new tax policy seeks to expand the tax base and further increase the equity of the tax system. The financial system, for its part, is being substantially reformed to enable it to recover and enhance its capacity to generate, retain and effectively channel the flows of savings of the population. The compulsory deposits previously required from the banks have been replaced by a system of liquid reserves of a preventive nature, thus eliminating compulsory credit for specific activities; bank interest rates have been freed, and other financial institutions have been given greater flexibility of action. All these measures have increased the level of competence and efficacy of the Mexican financial system.

A few days ago, the President sent to Congress a Bill proposing the restoration of a mixed-economy system with regard to the ownership of banking and credit institutions. The State takeover of the banking system in 1982 took place against the background of an acute financial crisis and a steady deterioration in the economy. Now, however, the circumstances have changed. Mexico has corrected its most serious imbalances and is making decisive progress in changing its production patterns. Today, the main foreseeable needs require the State to concentrate its attention on its basic, fundamental responsibilities, where its presence is not only a political obligation but also the will of the people.

If approved by the Legislature, this Bill will make it possible to assign additional public funds to the solution of broad social problems, while the capitalization and modernization of the banking institutions will open them up to society as a whole so that, in an atmosphere of co-responsibility, it can impart a new rhythm to their activities. There will be no departure from

the State's obligation to ensure that the banking and credit services comply with the objectives of national development and are in keeping with the public interest. Nor will there be any reduction in the attention paid to those production activities which require special credit conditions and technical assistance support, since in the case of the Development Banking System the majority ownership by the State will not only be maintained but even increased.

The resources obtained from the sale of the State's share in the banking system equity must be used to help strengthen the economic stability of the country, to increase the potential for lasting development, and to take care of the pressing demands of the least-privileged members of society. These additional resources will make it possible to reduce the fiscal deficit, relieve the external debt burden, and consolidate the economic recovery process. The Mexican State will increase the facilities for new investments in development infrastructure and for priority action in line with its social aims.

It goes without saying that an item of the greatest importance in establishing suitable conditions for reactivating and promoting development is the renegotiation of the external debt. The strategic importance of this is clear if we recall that for more than a decade Mexico transferred to the exterior resources equivalent to some 6% of its gross domestic product: indeed, the figure came to some US\$70 billion over only eight years.

It is worth looking carefully at the scope and complexity of the terms on which Mexico renegotiated its external debt.

The International Monetary Fund has recognized that external financial commitments must be subordinated to national economic growth objectives. It has also acknowledged that an excessive debt burden is an obstacle to economic growth with price stability. Consequently, the Fund accepted Mexico's proposal that its net transfers should be reduced in line with the country's economic growth objectives, and it authorized the provision of resources totalling US\$4 135 million over a period of three years, with the possibility of using part of this sum for debt reduction operations.

The World Bank also accepted Mexico's economic programme and offered credit of over

US\$2 billion per year during the period 1989-1992, likewise with the possibility of using part of this sum for debt reduction.

The Paris Club, for its part, agreed to restructure US\$2.6 billion dollars of capital and interest maturities over a period of 10 years, with six years' grace, and its members confirmed the availability of guarantees and/or credit for financing their exports to Mexico.

A package totalling some US\$48 billion, equivalent to nearly 50% of the Mexican external debt, was renegotiated with the commercial banks. Specifically, 42.5% was converted into 30-year bonds with a reduction of 35% in the principal; 47% was converted into 30-year bonds with an interest rate of 6.25% per year in dollars or the equivalent in other currencies, and the remaining 10.5% was committed for the contribution of fresh additional funds amounting to US\$1 091 million.

Economically and financially, the package renegotiated with the banks means a reduction of US\$15 billion in the principal of the Mexican external debt, so that, if we also take into account various other debt reduction operations carried out in 1989, together with exchange rate variations and amortization payments totalling some US\$5 billion altogether, the Mexican external debt finally went down from US\$100 billion in December 1988 to less than US\$80 billion on 31 March 1990. This is undoubtedly an amount more in line with the size of the Mexican economy, as it now represents 40% of the GDP and brings the annual net transfers abroad down to less than 2% of the product, compared with an average of 6% in previous years.

The results are beginning to be clearly noticeable in the country. Little by little, a climate of confidence and security has been growing up which has led to the repatriation of a substantial volume of capital.

Likewise, foreign investment is also beginning to take advantage of the important advantages offered by Mexico's domestic conditions, its close links with international markets, and its advantageous geographical location, all this being further facilitated by the updated regulations now adopted. The new rules make the mechanisms for the implementation of direct foreign investment projects clearer and

more flexible, while measures of expansion and liberalization have been taken with regard to the areas where such investments can be made as well as the possibilities for ownership by foreign investors.

Modernization of the economy is an essential requirement in order to attain the goals we have set ourselves. Not only is it necessary to obtain more resources and create the conditions for them to be effectively channelled to investment and growth, but they must also be used more efficiently.

Mexico has gone a long way in its process of structural change, and the process of trade modernization has been one of the main elements in this. This process of change is prompted by a desire to reach trade agreements which bring concrete benefits for the people of Mexico, strengthen national industry (especially small and medium-scale industry), and promote a sustained increase in real wages and employment so as to act as real vehicles of social development.

The kinds of trade agreements we are seeking are in line with the principles of multilateral international trade and aim to further cement our position in the Latin American sphere, with which we are united by our common origins and the similarity of our form of development. We also seek a fruitful combination of these agreements with the terms of our trade negotiations with other markets and financial, technological and industrial centres such as the European Economic Community, the Pacific, and North America.

With the aim of attaining conditions of reciprocity which will favour the development of our economies, Mexico has freed over 80% of the total value of its imports from the requirement for prior import licenses. Such imports are now subject only to *ad valorem* tariffs whose weighted average is less than 10%.

During the present administration, a review has been initiated of the domestic regulations affecting a considerable number of activities, with the aim of eliminating market practices which militate against productivity and competition. The areas thus being subjected to various forms of deregulation range from regulations on industrial packaging and on the acquisition of foreign technology to federal

regulations on public freight transport, and they extend from the operation of the coffee, sugar and fishery industries to the areas of telecommunications and petrochemicals. The task of promoting modernization in order to raise the efficiency of the productive apparatus is far from over, and there is ongoing examination and analysis of new areas where changes in the existing regulations could mean an increase in industrial productivity or the elimination of unwarranted privileges.

Another crucial aspect of the modernization process in Mexico is the privatization of public enterprises and bodies which were set up in the past when it was believed that increasing the direct activity of the State in the production of goods and services was of itself an appropriate response to the recurrent trends towards economic stagnation.

Past history teaches us that beyond any doubt the determined action of the State in the field of its primary functions is of fundamental importance for promoting development. More recent economic history also teaches us, however, that when there is a departure from the real priorities of State activity, this usually weakens the State's impact in those areas where it is socially indispensable. We have learnt that when the action of the State is diluted, it loses effectiveness and discourages the collective effort to further the development of the country as a whole, promotes economic weakness and fuels fiscal deficits and financial crises, and ending up by doing much deeper and more lasting damage which far outweighs the partial and transitory benefits it seemed to promise. In short, we have learnt that development cannot be achieved through a single sector, but only by the sum total of comprehensive efforts, which means respecting and stimulating the action of each of the sectoral components of the country.

In Mexico, the State is engaged in a profound redefinition of its functions. Until the end of 1982, the State participated in numerous sectors of the economy, through 1 155 public bodies. Now, however, 870 of these have been either sold, liquidated, eliminated or transferred to other sectors. Fiscal transfers to public enterprises have gone down from 8.1% of the product in 1982 to less than 4% in 1989. In all cases, the changes of status were carried out in

strict compliance with the relevant laws or other legal provisions. These measures have been particularly marked in respect of public enterprises in the areas of telephones, mining, iron and steel, air transport, shipbuilding, tourism and the secondary petrochemical industry.

The Government of President Carlos Salinas de Gortari, convinced that a huge and all-embracing State is not necessarily the same thing as a strong, just State, has pressed on with the process of bringing the size of the public sector in line with the demands of world change. The Mexican State, strengthened by its political pluralism, in no sense renounces its duty to lead the economy in the right direction, as laid down in our Constitution. On the contrary, it seeks to make its participation more efficient, flexible and just by promoting civil initiative and furthering the interests of the people.

My delegation has tried to express the domestic effort made by all the people of Mexico. All the other countries of Latin America and the Caribbean, in line with their own particular political, economic and social conditions, have been making similar efforts to further their development.

It is necessary to mobilize international co-operation in order to create the minimum conditions which will permit the success of each of the measures which the Latin American governments are applying and the overall set of efforts which are being made to secure changes in production patterns with social equity in the region. The International Development Strategy which is to be designed for the coming decade is a basic component in this co-operation. For economies which are in the process of opening up, the international economy becomes a critical variable in their development process. Stability of commodity prices, assured access to markets for their exports of goods and services, a positive resource transfer, appropriate solutions to the external debt problem, access to suitable technology in the fields of greatest importance for their international competitiveness, and support for their programmes designed to help the poorest strata and combat the narcotics problem are just a few of the basic requirements in this international component of Latin American development.

We have adopted a resolution on support for the people of Haiti, and we hope to adopt very soon another one on co-operation among the countries of Latin America and the Caribbean. We can therefore say that we have clearly shown that we of Latin America and the Caribbean believe that co-operation among the countries of the region is necessary in order to achieve development, and we hope that all the member countries of the Commission will show their willingness to carry out all the international measures of development co-operation that will be necessary.

As the documents before us at this twenty-third session of ECLAC make clear, economic change and growth in our countries must be propelled on the basis of equity and justice. Sustained economic development is necessary for the creation of more jobs with better wages, the eradication of poverty and the protection of the environment. Growth in a climate of stability and confidence is a necessary condition for correcting the structural distortions and doing away with the social lags which still persist in our countries, sometimes to a dramatic degree.

The social inequality and heartrending misery which still exist in some cases demand attention that cannot be delayed. Consequently, the Mexican Government has put into effect a National Solidarity Programme which seeks to bring immediate relief to the problem of extreme poverty in our country. Far from imposing the criteria of the central administration, this programme is closely adapted to the most pressing needs of the communities concerned, through their active participation in both the formulation and the execution of the projects. One of its aims is precisely to involve the communities in the solution of their own specific problems by providing not only for the contribution of financial resources but also for intense community participation in the execution of social improvement programmes. Thus, it is the members of the community themselves who are given the always welcome responsibility of taking part in assigning social expenditure and sharing in the effort. To put it briefly, the National Solidarity Programme is allowing us to reconcile the implementation of an ambitious social policy with the maintenance of balanced public finances.

It is obvious from the foregoing that the reforms introduced under the Mexican Government's economic policy are fully in line with the principles now proposed by ECLAC. It is a matter of great satisfaction to us to be engaged in the task of safeguarding the Latin American heritage of justice and equity while harmonizing it with the common concern to renew our structures of production in line with world realities of the coming century.

At the present time, the tendency towards integration is a phenomenon which is to be seen in the various regions of the globe. The structure of the international economy is undergoing changes which promote the creation of great economic blocs, giving rise to a more demanding and competitive market. Various examples of this phenomenon are taking place with great rapidity before our very eyes, both in Greater Europe and in the immense Pacific area, as well as along the mighty industrial frontier between the United States and Canada.

The Old World already has an exceptionally rich past history of integration, and it is expected that by 1992 it will have consolidated its position as one of the great poles for economic negotiations. A basic element in the European achievement has been the elimination of tariff and non-tariff barriers to trade in that region. This has stimulated trade and been singularly effective in bringing the more backward economies of the continent up to the general level of development.

In the face of this definition and consolidation of blocs which increase the economic might and strength of their members, Latin America must not lag behind. It is absolutely necessary to promote the integration of Latin America and the Caribbean in order to share in the potential offered by world evolution. It is therefore necessary to prepare a wide-ranging economic project for the region by joining together to identify the patterns and strategies which can hold out the greatest social benefits for our peoples. In this respect, ECLAC has carved out for itself a distinguished place in the systematic study of our common problems and the judicious and objective recommendation of the policies to be applied. ECLAC is therefore called upon to play a decisive role in facing up to the new challenges to Latin America and the Caribbean.

President Salinas de Gortari has instructed me to confirm to you in the clearest possible terms that Mexico remains true to its historic commitment to the development of the Latin American region. Today, as in the past, we are deeply interested in further increasing our links with the whole of Latin America and the Caribbean. In this respect, we believe that in order best to respond to the changes in the international environment it is necessary to speed up our efforts at Latin American integration. The evolution of the world economy makes it extremely desirable to eliminate tariff and non-tariff barriers between our countries, to simplify the machinery for granting trade preferences, and to supplement them with an

agreement limiting the rates of protection of the Latin American economies. At the same time, it is desirable to facilitate transport and communications between the nations of our area and seek a gradual but determined opening-up of the region to the rest of the world so that we can promote our exportable supply.

On behalf of the Mexican government I wish to express my heartfelt desire that this twenty-third session of ECLAC may mark another fruitful stage in the promotion of Latin American cohesion, inspired as always by the goal of the future development of our nations and by the undying ideals of Sucre and San Martín, Morelos and Bolívar.

Angel Viñas

Director of Latin American Relations of the Commission of the European Communities

European co-operation can and must help the development of the region

For the European Commission, which is the executive organ of the European Community and is an observer of ECLAC's activities, it is a great satisfaction to be participating in the work of this twenty-third session.

ECLAC has been one of the boldest repositories of Latin American economic thinking, as the Foreign Minister of Venezuela reminded us yesterday.

Yesterday, too, the European Commission solemnly celebrated the fortieth anniversary of the declaration by Robert Schumann which opened the way for the establishment of the European Iron and Steel Community and, ultimately, set afoot the process which has resulted in the European Community of the present time.

Both Latin America and the Community are currently living in a time of challenges.

The report presented by the Executive Secretary of ECLAC at this session, entitled

Changing production patterns with social equity, identifies and classifies the challenges facing Latin America and proceeds to analyse them in detail.

The Community, for its part, has already begun to tackle the issues of the post-1992 era: in December of the present year, the Intergovernmental Conference on Economic and Monetary Union will begin its work, and it is likely that at a forthcoming meeting of the Council of Europe it will be decided to organize another conference, on political union. At all events, the developments in Eastern Europe and the imminent reunification of Germany have given rise to broad consensus in the Community on the need to speed up measures to achieve still greater cohesion, narrow the gap between economic integration and political co-operation, stimulate the overall growth of the Community and redefine the relative roles of its institutions so as to secure still greater and more manifest democracy.

This Community of the future, whose features are already beginning to take shape, is being courted at the international level, and some European countries have already asked to join it. The Community has assumed new responsibilities for helping to guide change in Eastern Europe. The exercise of liberalization, deregulation and greater openness which characterizes the internal market of the 1990s is accompanied by parallel activities aimed at strengthening the multilateral trade system and improving the international economic environment. Mr. Chairman:

How will the challenges facing Latin America fit in with this climate of change now prevailing in the European Community?

In the last few months, at least three notable documents have analysed in depth the challenges facing your region:

- The report prepared by a seminar of the Inter-American Development Bank in October 1989;
- The report of the meeting organized by the Institute for International Economics in November 1989;
- The ECLAC report which is before this session of the Commission.

All these reports have touched upon the problems facing Latin American development, placing them within the broad framework of the evolution of the international economy. Moreover, all of them (and especially the latter two) have referred to the notable change of attitudes and perceptions of Latin American policy-makers during the 1980s: the lost decade, as it has come to be called, or—in the words of ECLAC—the period in which there was a painful process of learning the national and international economic realities, already experienced by other recently industrialized countries, including my own.

Page 81 of the ECLAC document puts the matter very clearly: "Criticism of the substitutive industrialization process of Latin America takes two very different forms: one school of thought sees the slowness of economic growth as being the result of problems related to external factors (chiefly the trends in international trade and the external debt), while the other regards this lack of vitality as being the consequence of an inefficient structure developed during a wave of overprotectionism".

It is not surprising to find these two opposing viewpoints reflected at this twenty-third session.

On behalf of the European Commission I would like first of all to congratulate Gert Rosenthal and his team on having prepared a lengthy report which analyses the situation and makes proposals without lapsing into the Manichaeian simplifications so frequently found in polarized views.

At no time does this ECLAC document overlook the fundamental role which the external environment plays in the performance of the Latin American economies, but neither does it overlook the fact that the external conditions mingle with and strengthen others of domestic origin. This is why ECLAC places marked emphasis on the need to make internal efforts too, in order to reverse the effects of the crisis of the 1980s.

We have no desire whatever to fall into the temptation to shift specific responsibilities to the exterior, and in this connection I suggest a detailed perusal of page 61 *et seq.* and page 81 *et seq.*

As John Williamson noted in the summary of the November 1989 conference which I already mentioned, the great task facing Latin America in the 1990s will be to complete the transition from the State-oriented populism of the past to the new realism which has begun to make its way ahead in the region in the 1980s. In this respect, ECLAC is quite right to stress that now, on the threshold of the 1990s, there can be no question of slavishly reproducing the prevailing orthodox approaches of the 1950s and 1960s or those of the 1980s (see page 98 *et seq.*).

Among the many key issues, the ECLAC report raises one which is of importance to the European Commission in its capacity as the executive organ of the Community. Thus, ECLAC says: "The absence of even a single case in the region in which economic growth has been combined with social equity raises the question as to whether this state of affairs might not be consubstantial with recent industrialization and whether the exacerbation of the situation during the crisis of the 1980s might not be attributable to the international context".

ECLAC itself hastens to note, however (page 61) that there are other countries of relatively

recent industrialization (Spain, Portugal, Yugoslavia, Hungary, Korea, the People's Republic of China and Thailand) where the results have been different.

Inasmuch as the basic relations between the European Community as such and Latin America operate on the two vital planes of international trade and co-operation, it might be interesting to make a brief disquisition in these two fields.

Clearly, Latin America has lost some of its previous share in the international market and in that of the European Community. There is no disagreement about this diagnosis. There are disagreements, however, about the reasons behind it.

In 1970, Latin America's share in world exports was 5.6% if oil is included and 4.7% if it is excluded. By 1986, however, the figures had gone down to 4.2% and 3.6% respectively, according to the UNCTAD Trade Yearbook.

The composition of Latin America's exports is dominated by the food sector, although the importance of this has gone down somewhat. In the 1970s, minerals were the region's second most important export commodity. In spite of its diversification, Latin America's export model continues to be heavily dominated by basic commodities, which makes it extremely vulnerable to price fluctuations. In particular, Latin America has not managed to latch on to the dynamic growth pattern enjoyed by exports of manufactures. In 1986, only 31.7% of Latin America's sales involved these products, compared with an average of 61% for the developing countries as a whole (UNCTAD figures).

The level of allocation of resources to the Latin American manufacturing sector is high, however, and undoubtedly exceeds that for developing Asia as a whole or its subregions (ASEAN and South and South-East Asia).

If, on the contrary, we look at the proportion of manufacturing production exported, Latin America's figures are abysmally low compared with the newly industrialized countries of Asia or even the ASEAN countries as a whole. As ECLAC points out (page 21) "there is a basic discrepancy between the structure of demand, production and technology of the international economy and the composition of Latin American exports".

As far as the Community market is concerned, the percentage of Latin American exports of manufactures has gone down between 1970 and 1987, since in the first-named year 37.5% of the Community's imports from Latin America consisted of manufactures, whereas by 1987 the figure had gone down to 22%. Over the same period of time, the South and South-East Asian countries increased their exports of manufactures to the Community from 14% to 36%. This disparate performance does not have much to do with Community policy, which is applied in an even-handed manner to both Latin America and Asia.

According to recent studies made by the European Commission, even in sensitive sectors of the Community market the index of penetration of imports from developing Asia is much higher than those from Latin America. Indeed, 40% of Asian exports to the Community are concentrated in sensitive products.

With regard to the myth that the poor performance of Latin American exports to the Community is to be blamed on alleged protectionism, pages 82 and 84 of the ECLAC report are mandatory reading.

The European Commission wishes to emphasize in the most uncompromising manner the critical role played by external economic policy, and especially external trade policy, in development strategies. The policy followed by Latin America in the 1960s and 1970s has given unsatisfactory results, and the structure of Latin American incentives has had a marked anti-export bias.

Not long ago, *UNCTAD Review* published a study showing that the mean nominal tariff and para-tariff levels amounted to 66% in Central America and 51% in South America, while for manufactures the respective figures were 71% and 55%. At that same time, however (1985), the figure for Asia was of the order of 25%.

The effective levels of protection must have been much higher than these figures: indeed, in its report ECLAC says that in certain branches of industry levels of protection amounted to over 1 000%. It is hardly surprising that the effects of these strategies were particularly negative at a time when other countries were actively applying exogenous development strategies in direct competition with the same kind of goods produced by the Latin American economies.

As the great operational objective, Gert Rosenthal's team puts forward a priority which is also the alpha and omega of the recommendations made by the European Commission in our dialogue with Latin American decision-makers: *the need to strengthen the capacity of the Latin American system of production to fit in with the international economy.*

Now, it is obvious that such strengthening cannot be carried out by each country on its own. International co-operation can and must play a decisive role in furthering this task.

This is the second level on which the Community proper can help to facilitate the economic development of Latin America. Naturally, it is already doing so inasmuch as the action of the Community is a factor of growth and stability, strengthens the system of multilateral trade and reduces tariff and para-tariff barriers, and helps to solve problems such as those of the environment and drug abuse which have clear international dimensions.

So far, our work has been carried out in accordance with the guidelines laid down by the Council of Ministers on 22 June 1987 with regard to the strengthening of relations between the Community and Latin America.

Events affecting Latin America since that year can only serve to heighten the importance of those relations, reflected in many requests for co-operation and for aid in strengthening civil and political institutions. This very week, the Commission has just approved a communication to the Council of Ministers and the European Parliament on the main lines of its policy for co-operation with the developing countries of Latin America and Asia.

In doing this, the Commission has followed up the invitations made to it by both the Council and the Parliament after the presentation last year of two reports on the evolution and appraisal of the co-operation policy followed from 1976 to the present. It is the desire of the European Commission that both the Council and the Parliament should make a critical appraisal of this communication in order to formulate a set of operational principles around which Community co-operation can revolve in the 1990s: in other words, a vehicle for the implementation of the various instruments provided for in the Community's budget.

Attentive reading of the noteworthy report on changing production patterns reveals an exciting convergence between the ECLAC proposals and the views of the European Commission. Thus, for example, the report prepared by Gert Rosenthal's team stresses exports and investment as key factors in changing production patterns and identifies as urgent requirements the correction of the weaknesses in the process of incorporation of technical progress and the raising of the levels of training and development of human resources.

The European Commission feels that there are many other recommendations in the ECLAC report which fit in —except for a few points of detail— with our own proposals, such as:

- The need to reduce the ideological elements in the topic of public intervention in the development process;
- The need to link together the agents operating in systems of innovation;
- Strengthening of facilities for the creation of enterprises;
- The reworking of the links between the agricultural, industrial and natural resources sectors;
- Changes in the financial system;
- Promotion of efficiency and decentralization in the public administration;
- Refence of the environment and of natural resources in sustainable development schemes;
- The need for congruence between the form of insertion in the international economy and the freeing of inter-regional trade.

The Commission's document assigns great importance precisely to the new concept of advanced economic co-operation with the economic operators. This is an appropriate moment to quote the extremely interesting appraisal made by ECLAC:

"A process of change in production patterns whose aim is increased competitiveness must necessarily be accompanied by the participation of a growing contingent of entrepreneurs. These are the agents who directly seek new opportunities and turn them into concrete production activities; they develop new goods and incorporate innovations into the production processes. A weak entrepreneurial base, whether its weakness is due to the fact that the number of entrepreneurs is small or because the action of

those entrepreneurs is characterized by an aversion to risk of the kind implicit in innovation or in the establishment of new businesses, constitutes a paramount obstacle to the advance of the process of change. This, however, is the situation which prevails in the region, especially in the spheres of small and medium-sized businesses”.

In the view of the European Commission, the actions to be carried out should therefore have an impact in raising the competitiveness of businesses, improving the economic environment of the beneficiary countries, and securing the transfer of economic, scientific and energy-related know-how.

The Commission is well aware that, even in a situation where the European Community is increasingly being wooed on the international scene, assumption of the responsibilities arising from the changes taking place in the East cannot be effected at the cost of reduced support for the changes taking place in the West.

In both Central and Eastern Europe and in Latin America, the winds of freedom are now blowing, there is ever-keener anxiousness for reforms in production systems and institutions, and there is encouragement for a long-throttled process of modernization.

A more integrated, more modern and more cohesive Latin America which brings to bear its undoubted economic, political and diplomatic weight on the international scene is an indispensable partner for the European Community of the future.

The 1990s will be years of change for both Latin America and the Community.

In the dialectic between chance and necessity, it is no mere chance that, without any kind of prior contacts, ECLAC and the European

Commission have produced during the same period of a few months—the early months of the 1990s—two documents whose philosophy and orientation are strikingly similar.

Let us not speak of mere chance, then. On the contrary, this similar result of profound analytical reflections on the problems and trends of the world economy and of our two regions is due to the demands of necessity. It is the beginning of a solidly based exercise involving calculated wagers on the future.

ECLAC does not speak on behalf of the Latin American governments. The European Commission, for its part, has the right to take initiatives and is responsible for the execution of the Community's decisions. Other institutions will also collaborate in the final definition of these matters.

In this respect, as the representative of the European Commission, I can only hope that the recommendations made by ECLAC will be converted as soon as possible into the political and economic practice of the Latin American governments. Within the Community, the Commission also has a clear awareness of its responsibilities.

When the Uruguay Round is over, when the great single market is a reality, when the Generalized System of Preferences has been brought up to date, and when the scope of the policies of Community responsibility has been expanded, it would be gratifying to think that this twenty-third session and the changes in trade and Community co-operation policies had set afoot a process designed to cover in a mutually satisfactory manner the needs of both Latin America and the Community.

Meanwhile, may I offer my sincerest congratulations to Gert Rosenthal and his team.

Mexico's stabilization policy

*Jorge Eduardo
Navarrete**

This paper discusses Mexico's stabilization efforts over the last two years, as related to the wider framework of the country's economic behaviour and the major elements in the external sector of the economy.

It is divided in three sections. First, a general look is taken of the country's economic evolution in the late 1970s and most of the 1980s, leading up to the inception of the current stabilization drive in December 1987. This overview of past events is rather sketchy, since it has no other purpose than to provide information which might be useful in appraising the design and implementation of the stabilization policy. The second section comprises a rather detailed but, I hope, not over-lengthy analysis of the main elements in the stabilization policy and its evolution from December 1987 to December 1989. Attention is given both to the process of policy formulation and to the actual implementation of the agreed measures and their consequences on prices (including labour and capital prices) and output. Some of its major social implications are discussed, albeit briefly. Finally, the third section deals with the future, trying to present the main perspectives that are now perceived for the Mexican economy as a whole and, in particular, for the stabilization policy objectives.

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I

The Mexican economic experience: 1976-1987

1. *An overview of long-term trends*

Nearly all studies of Mexico's post-war economic evolution used to emphasize the seemingly miraculous combination of rapid, sustained growth and price stability, with no exchange restrictions. For 20 years up to the mid-1950s, the economy grew at an average annual rate of 5.8%, the real value of production trebled while the per capita product doubled, and prices increased at a yearly average of around 3% (Solís, 1970). During the 12-year period between 1959 and 1970, the annual rate of growth of the GDP averaged 6.8% while the inflation, measured by the GDP deflator, stood at 3.6% per annum. From 1971 to 1975, however, the rate of economic growth decreased to 5.6%, while inflation accelerated to 12.3% annually (Nafin, 1977). The rate of exchange remained unchanged for a long period, standing at Mex\$12.5 to the US dollar from 1954 to 1976.

Over that long period, rapid population increases meant that fast economic growth translated into moderate but sustained gains in per capita output and income levels. Growth was uneven, however, both among sectors and among regions. Both in the dynamic and the traditional sectors, it was concentrated in a relatively small number of large industrial and services conglomerates and around a few development poles. Substantial areas remained largely outside the development process. Modern, efficient agriculture was concentrated in the irrigated lands, mainly in the Northwest, while low-productivity subsistence farming remained dominant in the backward rural areas. Regional development gaps appeared and rapidly got worse. Income and wealth distribution remained very uneven and worsened in the long run. All in all, this sustained but uneven growth produced, in the view of some scholars, the emergence of two, or even many, Mexicos.

The total population increased by 100% between 1940 and 1965 and doubled again in the

following 20 years. A very rapid process of urbanization also took place. In the mid-1970s, nearly two-thirds of Mexico's population lived in cities, as opposed to about one-third in the early 1940s (Nafin, 1977). High population growth was the result of rapidly diminishing mortality rates (particularly infant mortality), as a consequence of greatly improved sanitary conditions. Public expenditure brought about enormous increases in educational and health services, and standards of living improved for all: slowly for the majority and very fast for the privileged.

In the external sector, the import-substituting industrialization process succeeded in augmenting domestic supply of final-use goods, but resulted in increased needs of imported inputs, spare parts, equipment and technology. At the same time, the export supply remained weak, since manufactured production was mainly directed towards meeting demand in a protected domestic market. Thus, imports increased fast while exports lagged behind. Exports, which used to cover more than four-fifths of imports in the early 1950s, were equivalent to less than half in the mid-1970s. Net income from services transactions, mainly tourism, also weakened and the current account deficit widened constantly. Exchange rate overvaluation became a major factor in the worsening of the external payments position.

For all practical purposes, the long period of sustained stability and growth, usually referred to as "stabilizing development", which started soon after the Second World War, came to a close in September 1976, with the first devaluation of the Mexican currency in 22 years.¹

2. 1976-1982 from bust to boom —and back

The end of exchange rate immobility in 1976 came about amidst a strong deceleration of economic growth and a spurt of inflation. In 1975-1976, growth was no more than half the

average rate of earlier in the decade, and since 1973 the inflation rate had reached two digits. This also marked the start of a period of acute instability. The economy went from bust to boom conditions, registering from 1977 to 1980 the highest rates of growth in recent history, only to fall back into recession in 1981-1982, with decreases of -0.5 and -5.3% in the real GDP. Inflation followed a steep upward trend, going into three digits in 1983, and devaluation cut the value of the Mexican currency by more than six: from 12.5 to 96.48 pesos to the dollar at the close of 1982 (Nafin, 1988).

The main factors behind the economic boom of the late 1970s were the big oil discoveries, which allowed a very rapid increase in crude oil exports. The resulting ample foreign exchange receipts, complemented with a large inflow of capital, financed high levels of public spending and, consequently, an important expansion of aggregate demand. In this way, for a few years at the close of the 1970s, Mexico attained very high levels of investment, production, employment and social welfare.

However, the boom was not sustainable because of increasing dependence on oil revenues, both for financing public expenditure and balancing external payments, and decreasing domestic resource generation. The expansionary policy relied too much on external demand and external borrowing. Domestic inflation ran well ahead of periodic exchange rate corrections, producing long spells of serious overvaluation of the Mexican currency, and the economy became vulnerable to external shocks.

These came, by mid-1981, in the form of falling international oil prices, unprecedented high levels of international interest rates, and a severe recession in the industrial countries which further curtailed non-oil exports and tourism income. The current account balance position became untenable: the deficit almost doubled every year between 1977 and 1981, reaching a total of US\$16.1 billion in the latter year.

The initial reaction to the external shocks was to delay adjustment and engage in unprecedented levels of foreign borrowing. In 1981, for instance, public external debt increased by US\$19.9 billion, and in the following year public debt service reached US\$10.6 billion or

¹ Among many others, the overviews of Mexico's long-term development offered by Vernon (1963), Solís (1970) and Hansen (1971) are particularly noteworthy. The pioneering study on income distribution is that by Martínez (1960) and a more updated analysis of inequality is to be found in the essays collected by Cordera-Tello (1984). A brief summary of the development imbalances in this decade is to be found in Navarrete (1971).

nearly 40% of current account revenue (Banxico, 1987). By August 1982, the situation became untenable, forcing the suspension of debt service payments—a step which marked the beginning of the current phase of the debt crisis.

3. 1983-1987: *incomplete adjustment and external shocks*

The onset of the crisis in August 1982 elicited a strong policy response by the Mexican government, particularly by the new administration which took office in December that year and "introduced a comprehensive three-year programme which contemplated a structural reform of public finances, a moderate wage policy, a tight monetary policy, flexible exchange rate and interest rate policies and the liberalization of trade and exchange rate controls" (Banxico, 1987).

The objectives were, in the short term, to reduce inflation and cut down the public and external deficits and, in the medium term, to promote savings and investment, restore price stability, enhance economic efficiency and reduce the dependence on foreign financing. Additionally, a more manageable external debt situation was sought, through a series of renegotiations.

This basic two-pronged policy approach—combining short-term adjustment measures and longer-term structural reform policies—remained in force until late 1987. At several points in time, mainly at mid-1985 and in early 1986, the policy was strengthened to respond to unfavourable external factors such as the collapse of international oil prices, the sharp increases in international interest rates and the drying-up of international financial flows.

Over the five-year period, short-term adjustment policy brought about a turnaround in some major variables in the Mexican economy:

- First, it produced impressive current account surpluses. These were a result, initially, of a major restriction on the import expenditure, which severely affected the growth prospects of the economy. Later, they reflected an equally impressive expansion of export receipts, coming mainly from non-oil exports, *maquiladoras* and tourism.
- Secondly, it resulted in spectacular

improvements in the public finances. The primary economic deficit disappeared and a sizeable economic surplus, which reached between 2% and 5% of the GDP, was generated.

- Thirdly, despite initial partial successes, the adjustment was not able to reduce inflation in a significant way.

To implement the adjustment policy throughout the period, two major tools were consistently used: on the one hand, very aggressive exchange rate and interest rate policies remained in force, keeping the former undervalued and the latter substantially positive, in order to fulfil the balance-of-payments goals; on the other, a policy of virtual indexation of the prices of public sector goods and services was followed, in order to fulfil the public finance goals.

These policies were implemented in a situation in which both the nominal levels of exchange and interest rates and the inflation floor continued moving up most of the time. For this reason, at any given moment a greater undervaluation of the currency was needed to achieve the same degree of incentive to export; a higher real interest rate was needed to keep the same degree of incentive to save and to repatriate capital; and a fuller indexation of prices of public sector goods and services was needed to avoid erosion of the public revenues. Additionally, the adjustment was sustained over a period far longer than originally envisaged.

The policy mix for short-term adjustment, the context in which it was implemented and the fact that it was applied over a long period—together with a worsened external environment—² produced some undesirable results:

- First, the growth potential of the economy was severely curtailed. The reduction of import expenditure and public investment

²The main negative external factors, present throughout the period, can be summarized as follows: a) Access to foreign markets for Mexican exports, mainly non-oil exports, was obstructed by protectionist and other trade-restrictive measures adopted by many developed countries and by the imposition of "graduation" and reciprocity criteria for the GSP and in wider areas—including the linking of trade with investment and intellectual property issues; b) The constant worsening of the terms of trade, arising mainly out of the wide fluctuations in commodity prices, including

affected growth prospects. Several years of negative or nil growth —interwoven with years of hesitant recovery— abruptly altered the expectations of the economic agents. A “culture of stagnation” emerged, replacing the “culture of growth” associated with the epoch of sustained development in previous decades. As a final result, real economic growth in the whole 1983-1988 period was virtually nil, averaging only 0.1% for the five-year period (Banxico, 1989 a).

- Second, a heavy social price was paid: real wages greatly diminished, high inflation meant even more unequal income distribution and social public expenditure was curtailed. In short, per capita income levels dropped and standards of living fell.
- Third, financial investment was privileged over productive investment. Towards the close of the period, the very short-term financial assets turned out to be the most attractive and a strong bias against long-term capital formation emerged.
- Fourth, the amount of financial expenditure tied up by the servicing of domestic and external debt reached inordinate and towering levels —over a fifth of the GDP for 1988. The primary economic surplus was totally absorbed by, and resulted insufficient to cover, this financial burden.
- Finally, a new sort of inflation arose, as the adjustment policies, acting in a perverse way, fuelled it and kept it at high levels. This was worsened by the destabilizing effect of sharp fluctuations in foreign exchange receipts and public revenues, as a consequence of external factors like the collapse of the oil price in 1986. Other factors also came into play: the rigidities and bottlenecks in distribution worsened and speculative behaviour was stimulated.

the price of oil, sharply curtailed foreign exchange receipts and public revenues; c) Repeated increases in the level of international interest rates —until late in 1987, when the crisis in the stock exchanges forced them in the opposite direction— made the debt service burden heavier and maintained at very high levels the transfer of resources for this purpose; d) Long delays in the provision of new financing agreed with the banks (particularly at times in which other sources of foreign exchange income were also affected, as was the case in 1985-1986) aggravated the financial difficulties and led to costlier domestic borrowing (Navarrete, 1988).

Along with the short-term adjustment, a longer-term process of structural reform was consistently pursued. It was implemented principally through the rationalization of protection and a gradual but relatively fast opening of the market; a more open attitude towards direct foreign investment; the reduction of the size of the public sector, through liquidation, merger or sale of non-essential public entities, and a sustained effort to modernize the country's industrial base and to enhance its productivity.

By their very nature, these structural reform policies were bound to produce results over the long term. It was expected that they would help to increase competitiveness in the economy and improve its overall efficiency. Towards 1987, it appeared that the trade policies were already producing positive results and that the impressive expansion of non-oil exports compared with previous years was, at least partially, a result of the improvement in competitiveness due to a more open market.

As 1987 drew to a close, it became evident that, despite the adjustment measures and the structural reform policy followed consistently over the previous five years, inflation remained the most pressing problem. Mexico's Central Bank summarized the situation as follows:

“In spite of the strengthened public finances, the depreciation of the exchange rate, the deterioration of the terms of trade with respect to the levels prevailing at the beginning of the eighties, the modest growth of financial savings and the lack of net external credit, made the control of inflation increasingly difficult, since the combination of all these forces enhanced inflationary expectations. This, coupled with a growing indexation of key prices in the economy, placed Mexico on the brink of hyperinflation and substantially limited the possibilities of success of the gradualistic stabilization approach. Under these circumstances, a new strategy to attack the roots of inflation and to break inflationary inertia became necessary. At this juncture, a concerted program based on coordinated and decreasing price adjustments was considered viable” (Banxico, 1989 a).

II

A "socially concerted" approach to stabilization policy

1. *First stage: the Economic Solidarity Pact, 1987-1988*³

Towards the end of 1987, controlling and reducing inflation became the top economic priority as well as the major social demand. The response came through a new programme concerted among labour and peasants' unions, employers' organizations and government representatives: the Economic Solidarity Pact. This was to be implemented in two phases: first, from mid-December to February, and second, starting in March, in successive monthly periods.

The implementation of the stabilization programme was preceded by a set of measures designed to increase its viability, to correct distortions in the existing price structure, and to allow time for the anti-inflation drive to gain momentum. This package included:

a) A 22% depreciation of the controlled exchange rate of the Mexican peso, to 2 198.5 to the US dollar, restoring a comfortable margin of undervaluation.

b) An increase in the prices of goods and services produced by the public sector, which had lagged behind inflation, to recover the lost ground, to realign major relative prices and to obtain a very significant and "front-loaded" increase in public sector income. Major price increases were: petrol, 85%; electricity 89%; fertilizers, 82%, and air fares, 26%.

c) An increase in domestic interest rates, by about 45 points, to reach a level close to 160% yearly, in order to "dry out" liquidity in the market and to continue attracting back flight capital.

d) A 38% increase in wages to partially restore the purchasing power lost as a result of inflation.

After implementing these measures, the authorities felt that the main preconditions for the success of a stabilization programme had

been fulfilled. These preconditions include very moderate public finance operational deficits, which could be financed by non-inflationary means; availability of external resources or very high international reserves, to support the implementation of the programme; close linkages between domestic and external prices; a competitive real exchange rate; absence of major distortions in relative prices; a sound current account position, and a widespread social desire to participate in the anti-inflationary campaign (Banxico, 1989 a).

The new programme combined elements of an orthodox or conventional demand-curbing approach with some heterodox elements. Among the former were measures to increase public sector revenues and to reduce public expenditures so as to strengthen public finances, and to curtail credit, in order to absorb excess liquidity and reduce aggregate demand. The latter elements included the commitment by all sectors of society to contain and bring down inflation, through a new socially concerted income policy approach. Additionally, through the accelerated opening-up of the economy, international competition would limit domestic price increases.

The measures specifically aimed to curb demand were related mainly to public expenditure and credit policy. A major reduction of public expenditure was envisaged for the first months of the year, with the aim of achieving a primary economic surplus of about 10% of GDP. Credit ceilings on banks were established for January and February 1988, equivalent to 90 and 85%, respectively, of the level of credit granted in December 1987. This amounted to a reduction in total credit of about 25% in real terms.

The socially concerted anti-inflationary programme for January and February 1988 included the following elements:

a) Minimum wages, prices of public-sector-produced goods and services, and prices of about 80 basic consumer-good items, included in the so-called "basic commodities basket", were to remain frozen.

³This section is based on Navarrete 1988 and updated with information from Banxico (1989) and Banxico (1989 b).

b) No authorization would be given to increase the prices of a wider range of products subject to the administered prices régime.

c) Restraint would be exercised in fixing other non-controlled private sector prices.

d) Interest and exchange rates would keep their flexibility.

The socially concerted anti-inflationary programme was formally agreed among the labour and entrepreneurial sectors and the government. The labour sector was represented by the major unions, both those of urban workers,⁴ and those of rural workers and small landholders.⁵ The management sector was represented by organizations of agricultural, industrial, commerce and services entrepreneurs.⁶ Finally, the Ministers of the Economic Cabinet participated on behalf of the government.⁷ The basic intention was to involve the most representative bodies of workers and employers in the process of concertation, to ensure wide acceptance and firm commitments to follow the agreed measures.

The initial set of corrective measures, implemented in mid-December 1987, brought about high inflation rates both in that month and in January 1988, with the consumer price index increasing by 14.8 and 15.5%. Interest rates reached very high nominal levels. For instance, the average annual rate of interest for the 28-day Treasury bills rose more than 30 percentage points, from 121.8% in December to 154.1% in January. The depreciation of the peso deepened in both months, with the exchange

rate reaching Mex\$2 281 to the US dollar at the end of February.

Then, as the results of the concerted stabilization programme started to be felt, inflation began to drop significantly during February (to 8.3%), allowing both interest and exchange rates to remain, on average, at levels similar to those of the previous month.

The second phase of the stabilization policy was launched in March, through the implementation of the concerted incomes policy agreed by the parties to the Economic Solidarity Pact.

Towards the end of February, labour, management and government representatives met to decide about the measures to be implemented in the following month. It was agreed:

- a) to extend the freeze of the prices of public sector goods and services and the prices of the "basic commodities basket" goods for a month;
- b) to maintain the administered prices;
- c) to increase minimum wages by 3%;
- d) to prevent this increase from being transferred to non-controlled prices;
- e) to keep the controlled exchange rate unchanged and to reduce interest rate levels *pari passu* with the lower inflationary expectations.

The results obtained in March were encouraging: the inflation rate, measured by the consumer price index, came down to 5.1% and, as a result, year-on-year inflation fell for the first time since very early in 1987. There was also a substantial unprecedented reduction in interest rate levels: the average yearly rate for 28-day Treasury bills fell from 151.4% at the end of February to 67.9% in the first week of April, reflecting sharply reduced inflationary expectations. As planned, the controlled exchange rate remained frozen, at the level of Mex\$2 282.00 to the US dollar, without noticeable pressures on the foreign exchange market.

The parties to the Pact met again towards the end of March and, this time, they decided to set measures and objectives for the following two months. The lengthening of the period was designed to preserve and widen the effect of the change of direction of the inflationary inertia, noticeable in the behaviour of prices in March,

⁴The Labour Congress, the Mexican Workers' Confederation, the Revolutionary Confederation of Workers and Peasants, and the Mexican Regional Labour Confederation.

⁵The National Peasant Confederation and the National Confederation of small Agricultural, Livestock and Forestry Landholders. Later, the National Confederation of Livestock Breeders also took part.

⁶The Entrepreneurial Co-ordinating Council, the Confederation of National Chambers of Commerce, Services and Tourism, the Confederation of Chambers of Industry, the Employers' Confederation of the Mexican Republic, the National Chamber of Processing Industries, the Mexican Businessmen's Council, the Mexican Association of Insurance Institutions, the National Agricultural and Livestock Council, the Mexican Association of Stockbroking Companies and the Mexico City National Chamber of Commerce.

⁷The Ministers of Labour and Social Welfare, Programming and Budget, Commerce and Industrial Development, Finance and Public Credit, Agriculture and Water Resources, and the Interior. The President of Mexico chaired the main concertation meetings.

and to provide a slightly longer horizon for short-term decisions.⁸

It was agreed that during April and May: a) official and controlled prices would not be increased; b) administered prices would remain unchanged; c) the utmost restraint would be applied in fixing the other private sector prices, which should not be increased, because labour and input costs had been largely stabilized and financial costs were decreasing fast; d) wages would be kept at the prevailing levels, and e) the controlled exchange rate would not be further depreciated and interest rate levels would continue to be adjusted to reflect the lower inflationary expectations.

The results of the implementation of the programme in April and May continued to be encouraging: inflation registered a further drop, larger than expected, moving down to 3.1% in April and to 1.9% in May. Continued stability of the exchange rate did not erode foreign exchange reserves in a significant way, and both interest rate levels and inflationary expectations continued to decline. The average yearly rate for 28-day Treasury bills in May was 50.7%: more than 100 points less than in February and more than 40 points less than two months earlier.

Encouraged by these results, the labour, management and government representatives agreed at the end of May to extend the programme, this time for a further three-month period (June-August). The main decisions were: a) to continue the freeze of the minimum and other wages, prices of public sector goods and services and prices of products included in the "basic commodities basket"; b) to continue denying authorization for increasing the administered prices; c) to apply certain price reductions, given the sharp fall in production costs accumulated over the previous three months; d) to maintain the controlled exchange rate unchanged at the level at which it had been frozen since the beginning of March (Mex\$2 281 to the US dollar), and e) to continue

reducing nominal interest rates, in line with the sharply reduced inflationary expectations.

The consumer price index increased by 2% in June, 1.7% in July and 0.9% in August. At the end of this three-month period, in August, the average yearly rate for 28-day Treasury bills stood at 41.3%: nearly 10 percentage points less than in May. The international reserves kept a healthy level, despite the freeze of the exchange rate.

The fifth round of concertation among labour, management and government representatives was held in mid-August and an agreement was reached to extend the programme for a further three-month period. Later, in mid-October, it was agreed to carry it over for an additional month until the end of the year, thus covering a four-month period. On this occasion, they not only ratified the by then already usual measures relating to immobility of the prices of public sector and "basic basket" goods and the wage and exchange rate freezes but also agreed on several additional measures:

a) Tax reductions aimed to benefit low-income consumers, such as the elimination of the 6% value-added tax on processed food and medicines and a 30% reduction of income-tax rates applicable to taxpayers earning no more than four times the legal minimum wage.

b) The lowering, by an average of 3% of the prices of goods not subject to control, particularly in the food and apparel sectors.

The behaviour of prices in this four-month period was uneven. In September and October, the consumer price index showed very moderate increases (0.6 and 0.8%), fully in line with the downward trend that had started with the inception of the stabilization programme at the beginning of the year. In November and December, however, the monthly increases were 1.3 and 2.1%. Similarly, the prices of the "basic commodities basket" items, which were formally frozen, actually went down in the first two months of the period (-1.1% in September and -0.5% in October), but increased by 1.3% in November and 1.7% in December. This behaviour, at odds with the objectives formally agreed upon, provoked intense debate: entrepreneurs were accused of not respecting the established commitments, and labour demands to end the wage freeze grew louder.

⁸ A political motivation was also involved: if the longer-period programming (say two months) should become the rule, there would be no need for a concertation round towards the end of June, just a week or so before the Presidential and Congressional elections.

Reflecting the evolution of prices, interest rates stopped falling as of September and increases were recorded. For instance, the average yearly rate for 28-day Treasury bills stood at 52.3% in December: 11 points higher than four months before. Additionally, significant erosion of the international reserves started to be felt: at the close of the year, their level was US\$6.6 billion: less than half the US\$15 billion reached at the end of 1987.

Looking at the situation at the end of 1988, it seems safe to argue that the stabilization programme succeeded in reversing the inflationary inertia. The factors that had pushed up inflation in previous years started to work in the other direction: by the end of the year, public sector prices had remained unchanged for a full 12-month period; the controlled exchange rate had been frozen for 10 months, without significant departures from the free-rate level; nominal interest rates had been dramatically reduced, although the real rates remained high and attractive; and public sector expenditure had been reduced and further adjusted in line with the diminished inflationary expectations. The target of less than 2% monthly inflation—originally envisaged for the end of the year—was achieved as early as May, and the monthly inflation rate averaged 1.1% in the third quarter and 1.4% in the last. Year-to-year inflation dropped from 159.2% in 1987 to 51.7% in 1988.

The general evolution of the economy in 1988 was largely determined by the successful implementation of the stabilization programme. Real economic growth was 1.1% (only 0.4 points less than in 1987), because the restrictive effects of the stabilization policy were partially offset by the increase of exports (especially non-oil products), the positive reaction of private investment (which augmented 10.1% in real terms) and the decrease in the prices of imported goods brought about by the trade liberalization measures.

2. The second stage: from stabilization to growth, 1989

The new Mexican administration which took office on December 1988 decided to continue the socially concerted approach to the stabilization

policy, taking advantage of the experience accumulated over the previous year.⁹

In mid-December, the representatives of labour, business and government decided on a new programme, the Pact for Stability and Economic Growth, and designed the policies to be followed over the first seven months of 1989. (Banxico, 1989 a and "Pact, 1989). The new programme was similar in design to the previous one, but it entailed important alterations. One, particularly noteworthy, was the lengthening of the period over which the agreed policy measures were to be implemented. The aim was to reduce the uncertainty generated by the shorter-term approach used in 1988 and to give the economic policy better overall direction.

The main objectives of the stabilization drive were also reviewed, stressing the need to consolidate price stability, to establish the basis for a gradual and firm economic recovery, to protect the purchasing power of salaries and employment levels, and to reduce the net transfer of resources abroad (basically linked to the external debt service).

To launch the new programme, several initial measures were adopted in relation to public sector prices, the exchange rate and wage levels.

a) Recognizing that the year-long freeze of public sector prices was eroding public revenue levels and that on the other hand a sharp, generalized adjustment would reignite inflation, it was agreed to adjust the prices of some goods and services, sold mainly to industrial and commercial enterprises, and maintain the freeze on those with the greatest incidence on consumer expenditure, such as gasoline, electricity and gas for domestic use.

b) As it was clear that the 10-month freeze of the rate of exchange was eroding the level of international reserves but that reaching inflation levels similar to those prevailing in

⁹As the new Pact for Stability and Economic Growth was being announced at the beginning of 1989, there was a strong feeling that, if the stabilization drive were to continue being successful, the only major restriction on restoring economic growth might well be the very heavy burden of debt service payments, which in 1988 reached US\$14.2 billion, equivalent to 43.6% of current account income and representing a net financial transfer abroad of 6.4% of the GDP.

Mexico's major trading partners would still take some time, it was agreed to depreciate by one peso daily the rate of exchange of the Mexican peso *vis-à-vis* the US dollar, between 1 January and 31 July 1989. Accordingly, the rate would move from Mex\$2 281 to Mex\$2 491 to the dollar. This preannounced devaluation of about 9% would dispel uncertainty about the exchange rate level, removing the fear of a major devaluation without pushing inflation up too much.

c) Since it was realized that the 10-month freeze of minimum wages had translated into a further reduction of real wage levels, it was agreed to increase the minimum wage level by 8% with the aim of avoiding further losses of purchasing power. This increase was deemed compatible with the stabilization objectives.

Other elements in the new programme, to be followed during the first seven months of 1989, were the following:

a) The representatives of business organizations agreed to recommend their members to absorb the wage increase, the adjustment in the exchange rate and the higher prices of public goods and services, without raising final prices to consumers.

b) However, in cases where the maintenance of steady prices despite increases in production costs would create shortages, price revision would be allowed. Moreover, the government announced a national programme of deregulation, aimed at removing barriers that generate unjustified upward pressures on the costs of private enterprises.

c) The government committed itself to follow a fiscal policy fully consistent with price stability and the gradual and sustained recovery of the economy.

d) The import tariff structure would be adjusted in order to reduce rate dispersion and eliminate distortions.

Additionally, the major tools of economic policy would be closely linked to the new stabilization programme. In this way, discipline in the management of the public finances would be strengthened. The overall aim for the year would be to achieve a drop of 5 percentage points in public sector borrowing requirements: from 12.3% of GDP in 1988 to 7% in 1989. Interest rate policy would be aimed at continuing to

provide investors with positive yields in real terms, in order to stimulate savings. However, it was foreseen that later in the year —after an adequate agreement on debt had been reached and as a result of the continued success of the stabilization policy— real interest rates would start to fall.

The new stabilization programme succeeded in keeping inflation under check in the first seven months of 1989, without provoking any serious shortages. The consumer price index registered an average monthly increase of 1.4% and the accumulated inflation in the seven-month period was 10%. The prices of the "basic household commodities basket" registered an average monthly increase of 0.8% and an accumulated increase of 5.4% over the seven-month period (Banxico, 1989 c and SRE, 1989).

Thus, the behaviour of both consumer prices and those of the basic basket over the period was fully consistent with the initial objective of keeping inflation below 20% for the year as a whole.

The inflation rate in January 1989 (2.4%) reflected the impact of the selective public sector price adjustment introduced at the beginning of the year.

The average rate in the following six months (1.3%), however, demonstrated that the impact of both the initial wage increase and the daily depreciation of the Mexican currency were absorbed without major inflationary implications.

After the increase observed in interest rates in the last few months of 1988, small fluctuations within a general downward trend were registered in the first seven months of 1989. The average yearly rate for 28-day Treasury bills stood at 47.0% in July 1989: the lowest level since October and more than 5 percentage points below the December level.

On 31 May 1989, the National Development Plan 1989-1994 was launched.¹⁰ The Plan's

¹⁰The Plan sets an economic growth target of 2.9 to 3.5% annually for 1989-1991 and of 5.3 to 6.0% yearly for 1992-1994. In 1983-1988, the annual rate of economic growth was 0.1% on average. Additionally, the Plan sets average annual growth rates for total investment of 6.3 to 7.3% in 1989-1991 and 8.8 to 9.7% in 1992-1994. In 1983-1988, investment averaged a negative annual growth rate of 4.4%. Accordingly, the rate of investment, which averaged 19.1% of the GDP in 1983-1988, should increase to

economic strategy has two main objectives: to reach an economic growth rate of about 6% yearly and to reduce inflation to levels similar to those prevailing in Mexico's major trading partners. To attain the latter objective, stabilization is seen not as a policy to be implemented only over a given period, but as a continuous endeavour. The socially concerted approach to stabilization, adopted both for the Economic Solidarity Pact in 1988 and for the Pact for Stability and Economic Growth in 1989-1990, is thus incorporated into the long-term development planning process.

In mid-June 1989 the labour, management and government representatives met to evaluate the implementation of the Pact for Stability and Economic Growth and decided to extend it for an eight-month period: from August 1989 until March 1990 (Pacto, 1989 a). Again, it was felt that a decision to keep in force the socially concerted approach to stabilization, adopted well in advance at the end of the concertation period and covering a longer new one, would help to consolidate the stabilization policy objectives, strengthen confidence in the future course of economic policy, discourage speculation and provide a firmer framework for investment decisions.

The new eight-month extension was based on a set of reciprocal commitments by the government, labour and business sectors, as well as on concrete policy measures. The main agreements were the following:

- a) The public sector would keep its prices and rates unchanged.
- b) The business sector committed itself to respect and not raise prices, as well as to provide sufficient and timely supplies.
- c) Wages would be set through negotiations between the labour and management sectors. It was agreed to increase the minimum wage by 6%.
- d) The daily one peso depreciation of the exchange rate would be continued until 31 March 1990, "without abandoning the aim of

stabilizing the exchange rate as soon as circumstances permit". For the end of the period, the rate would be Mex\$2 734 to the dollar: a devaluation of 9.8% over the eight months.

e) The strict discipline in public finances would be maintained in order to achieve the objectives established, particularly the primary surplus and the lowering of the PSBR.

On 23 July 1989, the President of Mexico announced to the Nation that agreement had been reached in principle with the banks regarding Mexico's external debt. This agreement followed those concluded earlier in the year with the International Monetary Fund, the World Bank and the Paris Club. Taken together, these agreements removed the major restriction for the resumption of economic growth, namely the inordinate amount of net transfers of resources abroad due to the external debt service. It was estimated that, once the agreements were in full operation, the net transfer of resources abroad would diminish from 6.4% of the country's GDP in 1988 to less than 3%.¹¹

¹¹In mid-April 1989 Mexico signed an Extended Facility Agreement with the IMF covering a period of three years and providing resources for 2.8 billion SDRs (US\$3.64 billion). It was agreed that up to 30% of these resources could be used to finance debt reduction operations. Additionally, Mexico obtained 453.5 million SDRs (US\$590 million) compensatory, financing loan. Agreement was reached with the World Bank on 18 May 1989 on a credit package of US\$1.96 billion. The package has four components, with US\$500 million being used to support Mexico's financial sector and its anti-inflationary strategy; a portion of these resources could be used for debt reduction operations. A second US\$500 million credit will support modernization of the industrial and commercial sectors; a third tranche of the same amount, will finance restructuring of the State-owned sector, and, finally, US\$ 460 million will be channelled to the construction of two hydroelectric projects. The agreement with the Paris Club, signed on 30 May 1989, allows for the rescheduling of US\$2.1 billion in principal and US\$ 500 million in interest of official and officially-guaranteed credits, due between June 1989 and June 1992, over a period of 10 years with a six-year grace period. Export credit financing will continue to be available for Mexico. The agreement with the banks' Advisory Committee foresees that the existing debt will be exchanged for new 30-year-maturity Mexican government bonds. It provides three options for the banks: either to accept new bonds with a face value 35% less than the nominal value of the old debt and carrying a market rate of interest, or to accept bonds with the same face value as the old debt but carrying a fixed, below-market interest rate of 6.25%. (Both the principal and some of the interest of the new bonds will be guaranteed by resources obtained by Mexico from the multilateral financial bodies and from the Government of Japan.) The third option allows the banks to provide new money over four years, starting in

22.7/23.1% in 1989-1991, and 25.6/26.0% in 1992-1994. According to the Plan, the net transfer of resources abroad, which averaged 6.1% of the GDP in 1983-1988, should decrease to 1.7/2.1% in 1989-1991 and further decrease to 1.5/1.7% in 1992-1994 (Mexico, Presidencia de la República, 1989).

Both in August and in September inflation stood at a monthly rate of only 1%, bringing the accumulated rate for the first nine months of the year to only 12% despite the wage increase and the continued depreciation of the Mexican peso.

A major factor in keeping inflation at bay was the substantial drop in interest rates. The average yearly rate for 28-day Treasury bills (used throughout this text as representative of interest rate movements) dropped by more than 12 percentage points in August compared with the previous month, to stand at 34.9%: the lowest level since 1982. It fell still further, to 34.2%, in September. It is clear that this substantial drop in interest rates was a direct result of the debt deal, which removed the main factor of uncertainty about Mexico's economic prospects.

In the last quarter of 1989 some warning lights started to blink. According to preliminary estimates, inflation in October amounted to 1.3%, in November it reached 2.1%, and in the first half of December prices rose by 1.8%, raising fears that an "inflationary bubble" was in the making, despite the continued implementation of the stabilization programme. Since October, interest rates rose moderately. The average yearly rate for 28-day Treasury bills moved up slightly, to 37.6%, in the first half of that month, and continued edging upwards, reaching 41.3% in early December. The news on the external front was not encouraging, as the rate of increase of manufactured exports declined and the current account deficit increased. On the public finances front, the additional expenditure brought about by the interest rate increases started to exert pressure, particularly after the nearly two-year freeze of prices of major public sector goods and services. All these factors stimulated an intense public debate, occupying ample spaces in the Mexican press, about the prospects of the stabilization programme and, particularly, about the

transition from the stage of socially concerted stabilization policies to an open and free play of market forces towards the early Spring of 1990.

Early in December, the labour, management and government representatives met again to evaluate the implementation of the stabilization programme. They decided to extend the implementation of the Pact, on the terms agreed in June 1989 and in force since August, for an additional period of four months, until the end of July 1990. In this way, the actual period of concertation, originally envisaged for eight months, would cover a full year. Addressing the session, the Mexican President stressed that the objective of the stabilization policy was "not to immobilize or freeze all prices, but to guarantee general price stability and to insure against increases not agreed to by the parties" ("Pacto, 1989 b).

Accordingly, two major modifications were introduced:

a) An increase averaging 5% was made in the prices of gasoline and other public sector goods and services such as electricity rates, in order to avoid further erosion of public revenues and a deterioration of the financial position of the public enterprises involved.

b) A 10% increase in the minimum wage was agreed upon, to be implemented as from 1 December, in order to maintain the objective of generally preventing further decreases of the workers' purchasing power.

In closing this analysis of the formulation and implementation of the stabilization policy in Mexico over the last two years, reference should be made to the mechanism established to oversee the policy's actual performance and to ensure that any adjustments needed were made in a timely manner. Ever since the inception of the Economic Solidarity Pact in December 1987, a system of permanent evaluation has been in place, with the parties to the concertation process —workers, businessmen and government representatives— forming part of a Follow-up and Evaluation Commission.

This body met regularly at least twice a month and held many extraordinary meetings. It heard views on the way in which the agreed measures were being applied and, particularly, it

1989, for an amount equivalent to 25% of the nominal value of the Mexican debt with each bank. The Mexican Finance Ministry envisages that the first option will allow for a permanent reduction of 35% in the value of the debt (in repaying its debt Mexico will cover only 65% of the original nominal value), and the second option provides for a reduction of about 40% in the annual debt service transfers, and the third one will provide additional resources on a multi-year basis (Salinas de Gortari, 1989 a).

heard complaints about violations of the agreed commitments. The Commission was empowered to adopt corrective measures and, even more, acted as a forum to constantly review the behaviour of the economic agents involved in the implementation of the stabilization policy. Both the government's spending policy and the private decisions on fixing prices were

closely scrutinized during the Commission meetings.

To co-operate in this process, state-level commissions were established in the 31 entities (provinces) of the country. These state-level commissions also met regularly and presented their findings and recommendations to the national Commission.

III

Looking into the future: the prospects for stabilization and growth in Mexico

At the close of the 1980s, the behaviour of the Mexican economy is reflecting the results of the stabilization effort maintained over the last two years. The primary aim of the stabilization policy to —bring down inflation and keep it low— has been largely achieved. It seems that the economic agents have abandoned the "inflationary frame of mind" in which they were trapped for several years. For 22 months, from November 1986 to August 1988, the year-to-year inflation rate stood at levels of three digits and the country was on the brink of hyperinflation. The socially concerted approach chosen to implement the stabilization policy showed that, as the Mexican President put it in his first annual report:

"Mexicans have rejected the option of living with high inflation. [They] found a strategic answer to this problem in the Pact. It has not been an easy or flattering answer, but it is working because we have been able to complement concerted social agreement with fiscal discipline" (Salinas de Gortari, 1989 b).

Information available so far is still insufficient and does not allow for a full balance of the relative contribution of each one of the three sectors involved in the stabilization policy. However, the following indications seem appropriate:

a) From 1982 to 1987, real wages, measured by deflating the nominal minimum wage with the consumer price index, decreased 35.4%. In

the 19-month period from January 1988 to September 1989, the minimum wage was increased on five occasions (as mentioned above) and, despite falling inflation, real wages deteriorated by a further 18.7%. However, there is a trend towards diminishing real wage erosion: all the recent purchasing power loss occurred in 1988, while from January to September 1989, real wages improved, although only very slightly: 1.2%.

It seems indisputable that wage restraint has been a major factor in the stabilization process and that the contribution of the labour sector to it has been of paramount importance.

b) During the first half of 1989, according to estimates included in the President's annual report, the public financial deficit declined by 60% in real terms, as compared with the deficit a year before. The primary balance —which does not include debt service payments— showed a surplus 31% larger in real terms than a year before. Public spending continued to be strictly controlled. To alleviate the impact of the stabilization policy on lower income groups, public expenditure allocation was oriented towards social priorities.

The prices of public sector goods and services, which were adjusted in December 1987 to lay the basis for the stabilization policy, remained unchanged for a full year. Then in December 1988, a selective increase was introduced, which did not apply to those of greatest incidence in consumers' expenditure, after which all remained unchanged for another

year. Only in December 1989 was an increase which averaged 5% introduced.

Consequently, the government contribution to the stabilization policy, both through financial discipline and direct restraint in fixing prices, has been a major one.

c) The reduction of the nominal levels of interest rates and, lately, a small reduction in real rates has contributed decisively to the lowering of inflation. However, through most of the period of implementation of the stabilization policy, real rates have been positive and, in some months, highly positive. The real yearly yield of major short-term saving instruments was between 21.9 and 28.3% at the close of 1988 and between 12.7 and 20.7% in September 1988 (SRE, 1989).

It is clear that interest income-earners are among those making the least sacrifice towards the stabilization objectives —to put it very mildly.

In more general terms, it seems that the major strategic decisions behind the success of Mexico's stabilization policy were the following:

a) The decision to put an end to the negative process of cumulative causation in which some elements of the traditional adjustment policies —particularly the management of interest and exchange rates and public sector prices— were perversely fueling inflation, although apparently they were contributing to the adjustment objectives by stimulating savings and exports, discouraging capital flight and avoiding the worsening of the public deficit.

This aspect of the Mexican experience is of paramount importance, as traditional adjustment recipes continue to be prescribed, without due regard to the specific situation in which those policies are to be applied.

b) The decision to launch a process of social concertation as the basic instrument to design, implement and oversee the stabilization policies.

A larger objective of the stabilization effort was, of course, to lay the basis for the resumption of economic growth. Here the initial results are also encouraging. It has already been noted that in 1988 the Mexican economy actually grew by 1.1%. In the first half of 1989, according to figures contained in the President's first annual report, Mexico's economy grew 2.4% in real

terms compared with the same period of the previous year. Accordingly, it is expected that economic growth in 1989 as a whole will be between 2.5% and 3%: well above the initial estimates of about 1.5% (Presidencia, 1989 d). For the first time since 1985 economic growth will be higher than the population growth rate, leaving room for improvement (albeit very slight) of the per capita product.

In assessing this situation, the Presidential report strikes a note of caution:

"We are resuming growth at a faster rate than expected and even at a faster pace than is desirable. We cannot force the rate of recovery, because the lack of investment in infrastructure during the years of the crisis would now lead to bottlenecks and inflationary pressures" (Salinas de Gortari, 1989 d).

Precisely this question —growth and stability— is now at the centre of the economic policy debate in Mexico: how to ensure a safe landing for the stabilization policy which took off two years ago.

There seems to be a growing consensus to the effect that, even after the Pact for Stability and Economic Growth concludes, at the end of July 1990 or at a later date, some sort of socially concerted approach to formulation and implementation of economic policy will be needed. The greater predictability of the behaviour of the different economic agents that this approach provides will be particularly important in a period in which uncertainty about other factors, specially in the external sector of the economy, is bound to increase.

However, if the socially concerted approach is to remain credible and generally acceptable, a fairer distribution of the costs and benefits than that prevailing so far is clearly needed. If the stabilization effort has been borne mainly by the labour sector, then the workers and peasants should benefit directly from the resumption of economic growth that the stabilization itself made possible.

Falling back into problems that seemed to have been overcome has not been alien to the Mexican experience in the last decades. At this juncture, it is essential to avoid this danger, which is clearly present in an over-precipitate

recovery. On the other hand, the prolongation of the years of economic stagnation or, even worse, the relapse into acute instability, is socially and politically unacceptable.

In the 1990s, Mexico needs a growing economy, matched with price stability and

sufficient employment generation; a dynamic society, in which inequalities are lessened; and an increasing capacity to respond to the expectations of its people in terms of political participation, standards of living, social advancement and cultural enrichment.

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A pragmatic approach to state intervention: the Brazilian case

*Luiz Carlos Bresser
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This article examines State intervention in the Brazilian economy, in an attempt to elucidate why the State ceased to play a decisive part in the country's development. The primary explanation lies in the cyclical nature of State intervention. In the beginning, intervention tended to be very successful, especially when the country was launching its industrialization phase. Gradually, however, the distortions inherent in intervention without some form of market control began to accumulate, leading the State into fiscal crisis. The current neoliberal wave and its success in advocating privatizations can be understood in these terms. The State had become bloated, not only in Brazil but also in other countries, giving rise in the past 20 years to the need to shrink it and reorganize its finances. In view of these circumstances, the author observes that the pragmatic attitude adopted by East Asian and South-East Asian economists to this problem, i.e., favouring a basic market orientation and fiscal discipline without hesitating to resort to State intervention when necessary, could be very useful.

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Introduction

State intervention is certainly one of the most intensely debated economic and political subjects in this century. There are two reasons for this, one factual, the other ideological. As a matter of fact, State intervention in the economy is relevant for the simple reason that governments all over the world, in rich and poor countries, in capitalist and statist countries, are continuously intervening in the market. For ideological reasons, State intervention is important because to favour or oppose some degree of State intervention is a basic criterion for distinguishing the Right from the Left, conservatives from liberals, neoclassical or neoliberal economists from progressive or Keynesian economists.

At certain times limited State intervention becomes a relatively acceptable practice. This clearly occurred in the 1950s and 1960s, when a Keynesian consensus prevailed; in others, as in the last 20 years, the conservative attack on State intervention becomes dominant. Whereas earlier the failures of the market were contrasted with the possibilities of policy-making and planning, now the inverse type of reasoning is the new truth of a "new Right", whose ideas are based in economics and the market, rather than in the political philosophy and ideas about tradition and hierarchy that defined the "old Right" (Bosanquet, 1983).

In macroeconomics the appearance of monetarism in the 1960s and of the "new classical" school based on rational expectations in the 1970s are the best symptoms of this conservative wave. Behind the rise of the new Right in the macroeconomic field we have the collapse of the Keynesian consensus: on the one hand, the State had become too big and inefficient, plagued by a fiscal crisis (O'Connor, 1973); on the other, standard Keynesian economic policies based on the assumption of chronic insufficiency of demand failed to cope with rising unemployment and increasing rates of inflation. In development economics, the failure of the "big push" industrialization theories, which were behind the dominant import substitution model of industrialization of

the 1950s and 1960s, gave rise, in the 1970s, to an export-led, market-oriented theory of growth, whose basic tenets were and continue to be privatization and trade liberalization. The fact that countries which adopted the export-led strategy, such as Korea and Taiwan, did so in combination with aggressive industrial policies rather than leaving the fate of the economy to the market did not hinder the followers of the new credo to use these countries as examples of their ideas. Finally, in comparative economics, the failure of statist economies to maintain the high rates of growth achieved in the 1950s and the 1960s throughout the 1970s and 1980s served as a powerful ideological argument favouring neoliberal theory. The launching of *perestroika* in the Soviet Union and the subsequent breakdown of the communist governments in Eastern Europe were presented as the empirical demonstration of neoliberal ideas. The neoliberal rhetorical strategy was to view support for limited State intervention in the same way as the extreme State control of the economy prevailing in the statist countries.

More recently this neoliberal wave is coming under attack. The insufficiencies of monetarism and rational expectations are becoming manifest. The status of State intervention in economic theory is again changing. The simplistic idea held by the new Right that "the market is good, and government bad" cannot be sustained on theoretical and practical grounds.

Changes in the way that market and State intervention are viewed are related to its recurrent successes and failures. As long as the practice of State intervention is functioning successfully, the theories that support limited intervention are in favour. Yet as soon as they stop working or prove dysfunctional for some reason, the voices of conservatives or neoliberals become louder. In another paper (Bresser Pereira, 1988 b) I discussed the cyclical and ever-changing nature of State intervention. In this paper I will apply the theory to the Brazilian case. In addition, taking Asian economists as a reference point, I will argue in favour of a more pragmatic or dialectical approach to State intervention in market-oriented economies.

I

The cyclical character of state intervention

State intervention in modern times has assumed three forms, corresponding to three historical models of development: i) the State as a substitute for the market in the co-ordination of the economy (statist or Soviet model); ii) the State as a decisive agent in promoting capital accumulation and technological development (the historical German and Japanese model of industrialization adopted in varying degrees by most developing countries in this century); and iii) the State as macroeconomic policy-maker, promoter of welfare, microeconomic regulator of the influence business enterprises have on the market and the environment, fiscal stimulator of technological growth geared toward international competitiveness, and bargaining agent for international trade on behalf of their respective countries (present OECD-countries model). The first historical model of State

intervention falls outside the scope of this paper. I will discuss State intervention in Brazil, taking for granted that we are dealing with a capitalist, market-oriented economic system, in transition from the second to the third model of intervention.

My general contention is that some degree of State intervention is necessary to run capitalist countries. Without it economic growth and social well-being will suffer. The market is by far the best co-ordinator of the economy, and yet it is not able to allocate resources and guarantee growth in an optimal way. On the other hand, the market is a very poor institution for achieving income distribution. That is why the neoliberals' radical stand against State intervention is essentially ideological. This does not mean, however, that their position is simply incorrect. On the contrary, their views may be

quite functional. Their constant contention that State intervention, in trying to cope with the insufficiencies of market co-ordination of the economy, finally provokes worse distortions should not be too readily dismissed.

In practical terms State intervention in a given sector of the economy tends initially to be effective, i.e., tends to correct the co-ordinative insufficiencies of the market; however, since public officials seldom know when to stop the intervention process, it eventually ends up being inefficient. Regulations become casuistic, the protection offered to certain industries ceases to be transitory —as it should always be— and tends to become permanent, State expenditures and State tax reductions tend to increase at a higher rate than State revenues, public deficit and public debt increase and the threat of a fiscal crisis becomes increasingly present.¹

If State intervention were not necessary and efficient in its early stages, it would not occur with such frequency. It is always possible to explain State intervention as an irrational result of interest-group pressures striving for some kind of protection, but the resulting government

policies are just one type of State intervention. Even if we acknowledge, following Mancur Olson's suggestion (1975, 1982), that organizations which represent large groups are less effective in producing public goods than small interest groups, the fact is that most State regulations are oriented to the general interest rather than to particular or sectoral ones. This was a clear advance of modern democracies, which should not be dismissed by conservative thought.

To say that State intervention is, in principle, efficient or inefficient makes no sense. State intervention may be efficient or inefficient, necessary or unnecessary, should be reduced or increased, depending on each specific situation. In general terms, State intervention will be necessary and efficient in the initial phase of the intervention cycle, whereas it will become excessive and inefficient in its final phase. In this phase the State probably will already be inflated and will have become increasingly unable to act, given the interests of external (lobbying) and internal (technobureaucratic) constituencies that led the State into fiscal troubles if not into fiscal crisis.

II

The Brazilian case

In the Brazilian case the cyclical and changing character of State intervention is quite clear. In the past, from the 1930s to the 1970s, the State performed a decisive role in promoting economic growth; in the 1980s, given the fiscal crisis, the State lost its capacity to promote economic growth and became a basic obstacle to it.²

Some economists and political scientists in Brazil, who previously supported State intervention for the protection of local industry

and the creation and development of State-owned enterprises in those sectors where private capitalists were unable or unwilling to invest, today favour *tarde* liberalization and privatization. This does not mean that they have become conservative. It only means that Brazil is in a different phase of the State intervention cycle —one where it is necessary to reduce, streamline and tighten the State organization in order to overcome the fiscal crisis and create the conditions for a new stage of economic development. In this new phase the State will have a different but necessarily important economic role.

Between the 1930s and the 1970s the pattern of State intervention in Brazil was permanently changing, but was effective in promoting economic development. Data on the growth of

¹The classical analysis of the tendency of modern capitalist economies to fall into a fiscal crisis was made by James O'Connor (1973).

²The literature concerning State intervention in Brazil is quite extensive. See, for instance, Wilson Suzigan (1976, 1988), Luciano Martins (1985), Peter Evans (1979), Fernando Rezende da Silva (1972).

the gross domestic product in this period demonstrate this quite clearly. In the 1930s the State began a long-term and initially successful industrial policy of import substitution. In the 1940s and the 1950s State-owned enterprises were established in the basic sectors of the economy: steel, oil, electrical power and transportation.

The 1960s represented a period of transition and fiscal adjustment, but the change in industrial policy was quite limited. The basic innovation of the technobureaucratic and authoritarian government that came to power at that time was a clear export-oriented policy. The objective was to export manufactured goods. But the protection of local industry, a basic characteristic of import-substitution industrialization, was maintained. And direct investment by the State was resumed, as it nationalized the telephone industry and completed the nationalization of the electrical power industry.

Finally, the 1970s were the years of the economic miracle (1968-1978) and the years of the Second National Plan of Development 1974-1979 (II PND). This plan was characterized by the promotion of a new wave of import

substitution in the basic sectors of the economy (steel, non-ferrous metals, oil, petrochemicals) under the direct control of State-owned enterprises, and also by the decision to promote full import substitution in the private, mostly nationally-owned, capital goods industry. The 1970s were also the years when Brazil acquired its huge international debt and began the process of State domestic debt.

During these 50 years we may distinguish two cycles. The first came to an end in the mid-1960s, when the military government resulting from the 1964 military coup was able to overcome the fiscal crisis and the recession that followed the excesses of President Kubistchek's *Plano de Metas*. Between 1964 and 1967 the Brazilian State was submitted to a fiscal macroeconomic adjustment and to structural reforms (indexation system, tax reform, financial reform, housing financial system reform) that re-established the State's capacity to promote forced savings and to channel them to direct State investments or to subsidized private investments. The second cycle is not yet complete, given that the country has not yet been able to overcome the fiscal and economic crisis of the 1980s.

III

The crisis of the 1980s

The crisis of the 1980s, defined by stagnation of per capita income and extraordinarily high rates of inflation,³ was the result of a series of errors made by the government, particularly at the end of the 1970s, combined with adverse changes in the international economy (second oil shock, interest shock and recession in the United States) in 1979. Between 1967 (a date that could be chosen as the first year of the new expansion cycle) and 1973, State intervention was successful in promoting economic growth. The

mistakes began in 1974 and became very serious in 1979.

In 1974, just after the 1973 oil shock that led most industrialized countries to introduce severe adjustment processes, the Brazilian government decided to engage in an ambitious programme of economic development. My personal views about the II PND have changed over time. I was initially critical of it as being overly ambitious. I became favourable to it after Barros de Castro and Souza's analysis (1985) demonstrated that this plan was effective in consolidating a strong industrial infrastructure and in warranting a structural trade surplus for the country. Recently I have again become more critical of this plan. The decision to grow by taking advantage of the

³I have made two broad analyses of this crisis, one emphasizing its fiscal aspects and its foreign debt origins (1989a) and another which seeks to build a macroeconomic model out of it (1989b).

enormous supply of foreign loans at very low interest rates was quite understandable, although risky. But the decision to use this money primarily for investment in capital-intensive import-substitution industries was a mistake, just as it was a mistake to maintain a high degree of protection for local industry. That would have been the right moment to use the foreign loans to increase the international competitiveness of Brazilian industry. It would have been the time to move towards an export-oriented and technology-intensive model of growth, while beginning to liberalize foreign trade gradually.

Meanwhile, Korea was making quite similar mistakes, becoming externally indebted in order to invest in import-substitution basic input industries (Koo and Nan, 1989). But at that time, Korea was also oriented to exports and starting a process of trade liberalization that fostered its basically export-led industrialization model. And in 1979, precisely the year Brazil was engaging in a new—and short-lived—populist “miracle”, the Korean government was able to correct its industrial policy while promoting a rigorous fiscal adjustment, which led to a 5% reduction in the gross domestic product.

In Brazil the “growth cum debt” strategy of State intervention turned into a disaster in 1979,

when the three above-mentioned external shocks hit its fragile—because already highly indebted—economy. At the time there was no other alternative but to adjust. However, the military government decided to do precisely the opposite. It held down the exchange rate, made the domestic interest rate negative and increased wages and consumption. The consequences of this populist yet conservative economic policy were disastrous. The foreign debt/export ratio, which at the beginning of 1979 had already reached a dangerous 2-to-1 relationship, had increased two years later to 3-to-1. In 1979 a strong adjustment policy would have counterbalanced the indebtedness policies of the Second National Plan of Development. Two years later, adjustment alone was not enough; it became self-defeating. Now fiscal adjustment had to be combined with some form of debt reduction (see Bresser Pereira, 1988 and 1989b).

After the populist policies of 1979-1980, efforts to adjust the economy, from 1981 to 1984 and from 1987 to the present, became ineffective. Their only consequence was to reduce the investment rate and worsen the fiscal crisis. Between these two periods we had a new cycle of populist policies, beginning in 1985 with the New Republic and ending in 1986 with the disaster of the Cruzado Plan.⁴

IV

Paralysis of the State

In the 1980s, the basic consequence of the economic crisis was the paralysis of the State with regard to long-term economic policy. With the fiscal crisis and its basic consequences—acceleration of inflation and stagnation of the economy—the State became increasingly unable to define and implement long-term objectives. And nothing is more important for developing countries than an effective overall strategy of economic development.

Such a deep economic crisis as that of the 1980s is a clear signal that the old strategy of economic development is exhausted. The fiscal crisis is an indication that the model of State

intervention in Brazil is exhausted as well. In other words, if crises are always signals of illness and an opportunity for change, it is clear today in Brazil that the form of State intervention that was crucial to the extraordinary pace of industrialization between the 1930s and the 1970s must now undergo a complete overhaul.

This crisis is also a signal that, more than the model of State intervention, it is the model of society in Brazil that is exhausted. Brazilian society is characterized by a very high degree of

⁴See Jeffrey Sachs (1988) on the populist nature of the Cruzado Plan.

income concentration. As long as the country was developing quickly, income concentration was not a major problem. But once that development stopped, it became a major source of continuous and worsening social conflict — a conflict that underlies the public deficit and the acceleration of inflation.

The translation into practical terms of the need for change in the development strategy or in the form of State intervention was reduced (particularly by World Bank economists) to the proposal of "structural reforms" that should be adopted by the developing countries. These reforms have a clear liberalizing intent. They are based on trade liberalization, deregulation and privatization. This is not the appropriate time to discuss these proposals.⁵ Although they are sometimes exaggerated in their demand for reduced State regulation and do not always consider the size of the countries, their general orientation is correct. They correspond to a given moment when State intervention, after a phase of excessive expansion, must now be reduced and its priorities changed.

The three basic strategies used by the Brazilian State for promoting industrialization were i) trade protection; ii) subsidies oriented either to import substitution or to export promotion, and iii) direct State investments in public services and basic input industries (electricity, oil, steel, communications, railroads). As these strategies are ceasing to be functional in promoting economic growth, an increasing consensus is emerging for a new strategy that should be based on three fundamental policies: i) elimination of generalized subsidies and incentives; ii) trade liberalization and case-by-case subsidies to technical progress in order to stimulate international competitiveness, and iii) privatization, which will help to solve the fiscal crisis of the State,⁶ besides increasing the efficiency of resource allocation.

Given the fact that Brazil is a large country, trade liberalization will be necessarily limited in

comparison with smaller countries, but there is no doubt that a substantial degree of liberalization will form an essential part of any future industrial policy. State-owned enterprises had a decisive role in the first phase of industrialization, but now, when efficiency is becoming crucial and the State urgently needs financial resources to balance its accounts, privatization is a natural solution. The elimination of subsidies is essential to overcoming the fiscal crisis, but once stabilization is achieved a new industrial policy where an export orientation is tied to direct and indirect subsidies to technological development will be necessary.

An increasing consensus is being reached in Brazil in relation to the need for these structural reforms. Yet they are not materializing. Why? Several reasons may be listed: the resistance of industrialists, who are afraid to lose subsidies, incentives and administrative and tariff protection, or the resistance of bureaucrats and of the traditional nationalist Left, who insist on defending State-owned enterprises. But the fundamental reason why little or nothing has been achieved in this area is the public sector's paralysis due to the crisis. The government tries to establish a new long-term industrial and development strategy and makes agreements with the World Bank towards structural reforms, but the results are clearly unsatisfactory. Reforms are not implemented because one of the basic characteristics of an economic crisis, and particularly of a fiscal crisis, is the paralysis of economic policy.

A fiscal crisis means that the State has no funds to finance a new economic policy; that policy-makers have neither the time nor the willingness to formulate and implement the new strategy. If in addition to fiscal crisis there is also a social crisis due to excessive income concentration, the consequence is a legitimacy crisis that permanently threatens the political system and aggravates the State's paralysis.

⁵For a critique of the unrealistic nature of radical trade liberalization reforms sponsored by the World Bank, see Jeffrey Sachs (1987).

⁶It is relevant to note that Ignacio Rangel, one of the outstanding Brazilian economists who helped to formulate the indus-

trialization strategy via protection and direct State investment, has been speaking in favour of privatization of public services in order to promote needed investments in this area since he wrote the "Postface" of the third edition of *A Inflação Brasileira* (1978).

V

Statist and neoliberal responses to the crisis

The question now, after almost 10 years of economic stagnation and high rates of inflation, is how to get out of this crisis. Specifically, what we are discussing in this paper is the role State intervention plays in overcoming the crisis and in resuming growth.

Neoliberals would respond to these two questions very simply. The crisis is to be overcome by fiscal adjustment. In order to have fiscal adjustment it will be necessary to privatize State-owned enterprises and deregulate the economy, reducing the size of the State apparatus. The objective will be the minimal State, given that "the State serves a double role, that of enforcing constitutional order and that of providing *public goods*" (Buchanan, 1974).

Given that they are conservative and generally unable to distinguish old-time nationalism from the national interest, their understanding is that the foreign debt should be fully paid.⁷

The response that statist or the old Left would give is quite different. They would suggest that to overcome the fiscal crisis it is necessary to increase taxes and reform the State organization and State-owned enterprises, eliminating inefficiencies and fighting corruption, but not reducing the size of the State. On the contrary, it should be increased in order to resume growth and achieve a less unequal distribution of income than the one existing in Brazil. Reduction of the debt should be a condition of repayment.

VI

The pragmatic and dialectical approach

The response that pragmatic and dialectical economists would give is again different. By pragmatic I mean those economist-technocrats who work within the State organization and define economic policy in most countries today. They are not theoretical economists, nor are they ideological economists.⁸ They are practical economists, directly involved in government.

These economist-technocrats have existed for a long time. In Brazil, however, they have come under attack since the 1970s.⁹ As a defence mechanism, they have tended to disguise themselves, to make their existence as unnoticed as possible. Thus I was surprised to see, when I

participated in an international seminar in Tokyo in the summer of 1989,¹⁰ that most of the Asian economists present were members of their respective governments and defined themselves without embarrassment —on the contrary they seemed quite proud of it— as pragmatic technocrats in opposition to theoretical and ideological economists.¹¹

It is well known that the role of the State in the development of the East Asian and South-East Asian countries, starting with Japan and then Korea, Taiwan, Singapore, Malaysia and, more recently, Thailand and Indonesia, was and continues to be very important.¹² During the

⁷This approach is well represented in Brazil by the weekly columns written by former ministers Roberto Campos and Delfim Neto, in *O Estado de São Paulo* and *Folha da São Paulo*, respectively.

⁸It should be remembered that it is very difficult to distinguish theoretical from ideological economists.

⁹This attack on the technobureaucracy was part of the long Brazilian transition to democracy. The alliance between the bourgeoisie and the military and civilian technobureaucrats was first

broken in Brazil in the mid-1970s. In my book, *O Colapso de uma Aliança de Classes* (1979), I analysed this political process.

¹⁰"The Tokyo Symposium on the Present and Future of Pacific Basin Economy - A comparison of Asia and Latin America", sponsored by the Institute of Developing Economies, Tokyo, 25-27 July 1989.

¹¹Actually, some were also very competent theoretical economists.

¹²On this point see, among others, Seiji Naya (1989).

1980s, while the Latin American countries have stagnated, the East Asian and South-East Asian countries are booming. Whereas per capita income actually decreased in the Latin American countries in this decade, it grew about 4% annually in these Asian countries.

One explanation for this difference in economic performance is that Asian pragmatic economists combine a very strong fiscal discipline with a high degree of State intervention. But their discourse carefully avoids reference to State intervention, while they praise as much as they can their "market-oriented economies". They do believe in a market-oriented economy, but they also believe in and practice a permanent State intervention. A good example of this general attitude is expressed by Seiji Naya:

"The NIEs and the ASEAN-4 countries have largely allowed the market to work and have adopted a private sector approach to economic development... This does not mean that they are *laissez-fair* economies; in fact, governments intervene strongly... In East Asia there is a hierarchical relationship under which the government may directly influence the conduct of private enterprises for the benefit of the public good and in turn is expected to assist and protect them" (1989: 5 and 7).

This oriental economic pragmatism includes a certain degree of pragmatic dissimulation. The members of the capitalist dominant class want to hear that their economies are market-oriented, and they say so. In Japan, for instance, government economists insist that the economic role of the public sector is currently a very small one. Only after a lot of questioning will they admit that the Japanese State presently dispenses large sums of money to subsidize technological development. This attitude is not dissimulated, however: it is dialectical. They indeed believe in the benefits of a market-oriented economy and, at the same time, they know full well that the State continues to play a decisive role in economic development and income distribution — a distribution which, by the way, is extremely less unequal in their countries than in Latin America.

The response that pragmatic and dialectical economists would give to the question of how to overcome the Brazilian economic crisis is quite clear. In the short run, given that the economic crisis is essentially a fiscal crisis, they would ask for fiscal discipline, for an effective fiscal adjustment that would eliminate the public deficit. However, given that the origin of the fiscal crisis is the foreign debt crisis and that it is practically impossible to eliminate the public deficit while honouring all interests related to this debt, they would demand debt reduction, which will be achieved only by a combination of negotiations and unilateral measures. In the medium term, they would privatize as many State-owned enterprises as possible and they would begin a process of trade liberalization. But their objective, in contrast with that of the neoliberals, would not be the "minimal State", but to reform the State so that it once again becomes capable of formulating and implementing effective economic policy.

The new strategy adopted by pragmatic economists would not be based on direct State investment, much less on protection to inefficient import-substitution industries, but rather on the support of technological development to gain international competitiveness. On the other hand, they would support income distribution by increasing spending on education and health in a decentralized way. It is becoming increasingly clear that the high degree of income concentration which exists today in Brazil is a major obstacle to economic growth and price stability, as it permanently feeds a high degree of distributive conflict.

This approach to State intervention and to solving the Brazilian economic crisis is dialectical as well as pragmatic for two reasons: i) because it simultaneously supports a strongly market-oriented economy and State intervention in the critical areas that the market is unable to co-ordinate and ii) because it acknowledges the cyclical nature of State intervention. Sometimes, as at the present moment, it is necessary to reduce the State and reshape it in order to render it more effective (able to implement public policies) and efficient (able to implement these policies at low cost).

But what I am suggesting is a dialectical rather than a pragmatic approach to economics and to State intervention. While rejecting the ideological pitch of neoliberal or statist economists, I am arguing in favour of economic theory and transparency of ideological

influences. A dialectical strategy rejects the dissimulation of State intervention as much as the radical affirmation or the radical negation of it which respectively dominates statist and neoliberals' rhetoric.

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Sustained development for the Caribbean

*Trevor Harker**

Looking back over the fading decade some of us will remember it with fascination, as a turbulent decade in which changes came at an accelerating pace, stretching our capacity to cope. Yet, as these changes contained within themselves challenges as well as opportunities, our fascination is usually tinged with equal parts of hope and apprehension. Various regions have displayed differing degrees of success in coping with these changes, and within the regions, countries have demonstrated varying degrees of skill in managing change, based on their resource endowments and their capacities to formulate appropriate policies. If we project from the present to the immediate future, however, we see that the rate of change is accelerating, so that we will need to be even more responsive to change in the coming decade than in the past. Moreover, in the Caribbean we will have to redouble our efforts if we are not to be left behind, since we cannot hope for a return to the *status quo*.

This article consists of two parts. The first of these seeks to provide as complete a picture as possible on social and economic developments in the decade of the 1980s. Based on these facts, it is then sought to derive some lessons from the 1980s and set the framework for the second part of the document, which aims to provide a set of proposals to assist in reflections on the requirements for sustained development of the Caribbean in the decade of the 1990s.

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I

Some reflections on the economic performance in the 1980s

If we take stock of what has been achieved in the 1980s, we see that firstly, the rate of growth of the economies, as outlined at table 1, has varied quite significantly over the period 1983-1988.

For convenience, the economies may be placed in five main categories. Foremost amongst these, in terms of rate of growth, are the *small high-growth economies* comprising the Organization of Eastern Caribbean States (OECS) and the British Virgin Islands. As a group, they recorded an annual average growth in GDP of 5.7%, although within this group those specializing in tourism, such as Antigua and the British Virgin Islands, had above-average performance, growing in excess of 7% per annum. The Bahamas, the other economy specializing in tourism, also grew steadily, but at a slower pace, no doubt due to the fact that its tourist industry was more mature, thus having less headroom to grow than was available to the newer entrants to the market. For the Windward Islands, growth was dependent not only on tourism but also on the rapid expansion of banana exports: factors which provided the necessary foreign exchange to sustain increased domestic activities such as construction, commerce and banking, insurance and real estate.

The category of *large high-growth economies*, consists only of Puerto Rico, with an average growth rate of 5% propelled by the manufacturing sector (which increased by about 12% per annum) and by tourism. Export earnings were fastest growing in categories such as chemicals, drugs and pharmaceuticals.

The next cluster of countries, the *moderate-growth economies*, had average growth rates of 2-3% and comprised Barbados, Belize, Cuba¹

¹Care should be exercised in making comparisons between Cuba's Global Social Product and the Gross Domestic Product of the other countries, since the methodologies used to calculate them differ.

Table 1
CARIBBEAN COUNTRIES: PERCENTAGE CHANGE IN GDP
(At constant prices)

Country	1980	1983	1984	1985	1986	1987	1988	Average ^a
Antigua and Barbuda	6.7	6.9	7.5	7.7	8.4	8.8	7.6	7.8
Bahamas	6.7	3.2	6.4	5.2	1.4	4.6	4.7	4.3
Barbados	4.3	0.4	3.6	1.2	5.1	2.5	3.5	2.7
Belize	2.4	0.8	0.8	2.3	1.5	5.0	7.6	3.0
Cuba ^b	-0.5	4.9	7.2	4.6	1.2	-3.5	2.3	2.8
Dominica	16.5	3.0	5.0	1.7	6.8	6.8	5.6	4.8
Dominican Republic	6.0	4.6	0.3	-2.6	2.0	8.1	0.9	2.2
Grenada	...	1.4	5.4	4.9	5.5	6.0	4.3	4.6
Guyana	1.9	-9.3	2.1	1.0	0.2	0.7	-3.0	-1.4
Haiti	6.7	0.6	0.4	0.5	0.5	0.1	-0.8	0.2
Jamaica	-5.4	2.3	-0.9	-4.7	1.9	5.2	1.5	0.9
Saint Kitts and Nevis	3.9	-1.1	9.0	5.6	6.3	6.8	4.7	5.2
Saint Lucia	-1.0	4.1	5.0	6.0	5.9	2.0	5.0	4.7
Saint Vincent	3.3	5.8	5.3	4.6	7.2	5.7	8.4	6.2
Suriname	-6.6	-4.1	-1.9	-2.3	-2.0	-6.6	-	-3.4
Trinidad and Tobago	-6.5	5.2	-7.1	-4.5	-1.0	-6.1	-4.7	-3.0
British Virgin Islands	14.0	5.9	5.6	0.2	4.2	16.0	10.0	7.0
Montserrat	9.4	-5.3	2.8	5.4	5.1	10.8	12.1	5.2
Puerto Rico	1.6	1.7	6.6	2.2	7.0	7.6	5.2	5.0

Source: ECLAC estimates derived from country data.

^a Average relates to period 1983-1988 (1983-1987 in the case of Suriname).

^b Global social product at 1981 prices.

and the Dominican Republic. All these countries have relatively diversified economies and the performance of the various sectors was mixed. All have significant tourism sectors which recorded growth, with the newer entrants—Belize, Cuba² and the Dominican Republic—recording rapid growth, while tourism in Barbados, for reasons similar to those applying to the Bahamas, grew somewhat more modestly. All suffered stagnant or falling returns from agricultural exports, primarily sugar, and all suffered from weak manufacturing performance.

Jamaica and Haiti made up the *low-growth economies*, with an average growth rate of 0-1%. In the former case the declining minerals sector was most noteworthy, particularly in the years 1985-1986, given the importance of minerals in export performance. Notable also was the resuscitation of traditional agricultural exports up to 1988, especially in the case of bananas, after their poor performance during

² New in the sense that Cuba has only recently re-entered the tourism industry in a serious way.

the period 1984-1986. Jamaica was also severely affected by the cost of servicing its domestic debt, since over 40% of total expenditure had to be diverted to repay principal and interest. A similar proportion of the earnings from exports of goods and services needed to be diverted for servicing the external debt.

In Haiti, the major declines were in manufacturing and commercial activities. While agriculture retained its position, generating about 33-34% of GDP from 1980-1988, export earnings from the sector fell steadily from 1983, amounting to only 32% of total exports in 1988, compared with 65% in 1980. Earnings from the free zones increased over the survey period from 25% to 50% of exports between 1980-1988, but the rate of increase might have been faster without the recent political disturbances, which caused some firms to relocate elsewhere in the region. Services were up, particularly basic services such as electricity, gas and water and government services.

The last category comprises *the contracting economies*: of Guyana, Suriname and Trinidad and Tobago, which registered declines in their

GDP. All are minerals producers affected by the declines in minerals prices, but all suffered declines in *output* of minerals as well, either due to management deficiencies in the industry, or social unrest, or both. None of these countries benefited from the tourism boom experienced by other Caribbean countries, since their tourism sectors are small, and in some cases their tourism earnings declined. Both Guyana and Trinidad and Tobago also suffered declines in export earnings from sugar, while increases in banana

earnings were insufficient in Suriname to compensate for declines in other sectors. Reduced export earnings adversely affected domestic economic activities in all these countries, since domestic consumption had to be sharply curtailed in sectors related to construction, distribution, finance, insurance and real estate. Stringent measures also had to be taken to curtail government activities, although this was a pervasive trend in most countries in the region.

II

The global setting

The 1980s will be remembered as the decade of adjustment. It will have demonstrated once and for all, that economics is a dynamic discipline which must be seen as an ongoing process. The efforts, of developed and developing countries alike to adjust have been complicated not only by the effects of steep increases in energy prices in the 1970s and early 1980s but also by the rapid evolution of new technologies and changing patterns of consumer demand. Countries have adjusted to these developments at differing rates and with varying degrees of success, and they have achieved differing relative rates of investment, productivity and foreign exchange accumulation, with consequent rapid changes in relative exchange rates.

Greater access to information and increased mobility of capital ensured that good performance was rewarded in greater measure than in the past, while poor performance or poor policies were penalized accordingly. While these developments had an uneven impact on the developing countries, the performance of the latter was further differentiated by varying degrees of indebtedness and, more importantly, by varying capacities to service the debt incurred in the previous decade.

In the initial years of the 1980s the concerted effort by the developed countries to contain inflation by increasing interest rates ushered in a period of economic contraction. This in turn affected the developing countries which are exporters of primary products, with reduced

demand for their exports cutting their export earnings, while at the same time climbing interest rates increased the cost of servicing their debt. These twin effects gave birth to the "debt crisis" of 1982, as many of these countries became incapable of servicing the debt incurred at low interest rates in the 1970s.

For the remainder of the decade many of these problems were to persist and become even more intractable. It was not until 1987 that this conjuncture of adverse developments was somewhat ameliorated, with a slight increase in developed country demand and an increase in primary product prices serving to bolster export earnings. This fillip to the developing countries was sufficient to reduce the debt service ratio in 1987, although it was to increase again for the next two years as interest rates resumed their upward climb and minerals prices fell again in 1987-1988.

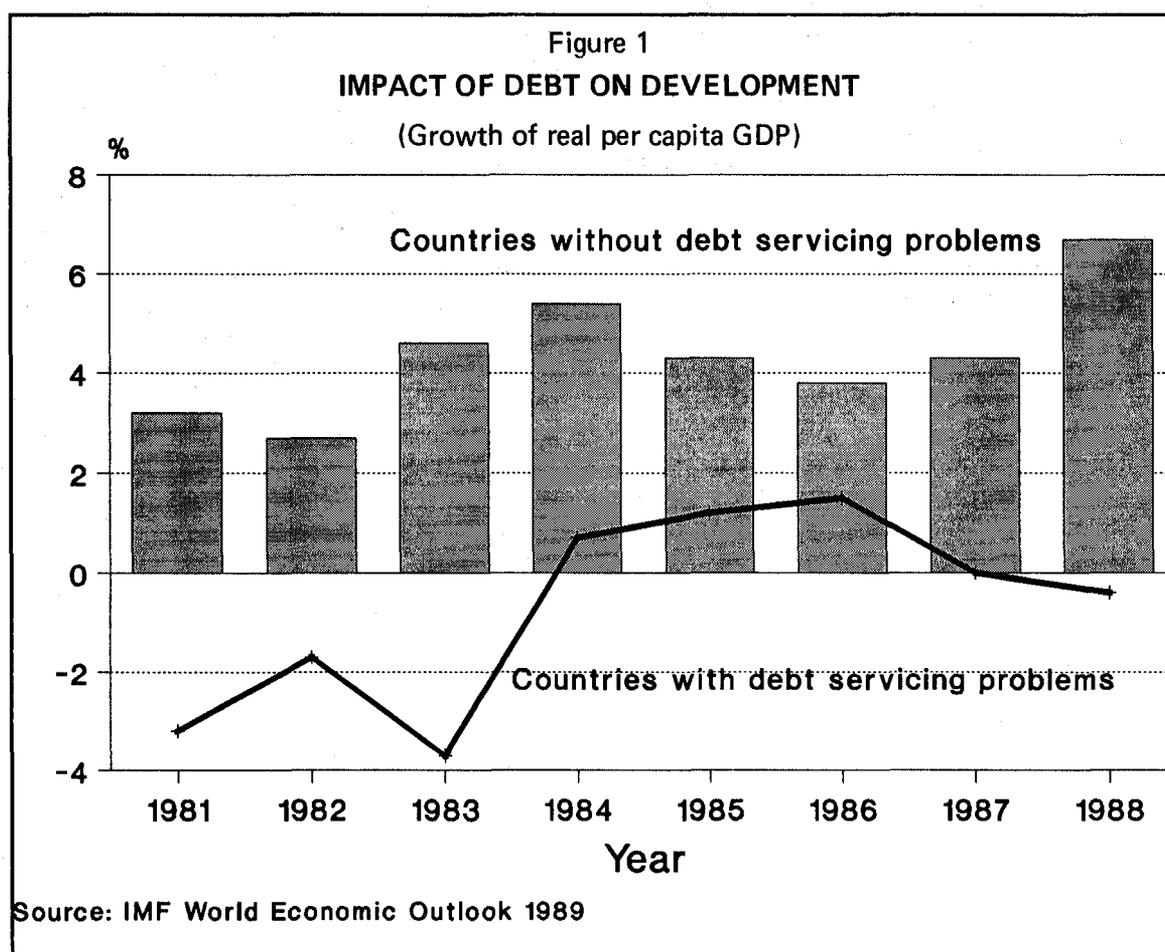
For the developing countries whose economies are driven essentially by export performance, reduced earnings from trade necessitated stringent adjustment policies which impacted adversely not only on their current living standards but also, for many, on their future standards of living, due to falling levels of investment. Those able to expand their trade in manufactures, such as the so-called "Newly Industrializing Countries", were able to adjust more rapidly than those countries — mainly in Latin America and Africa — which depended on the export of primary products and raw

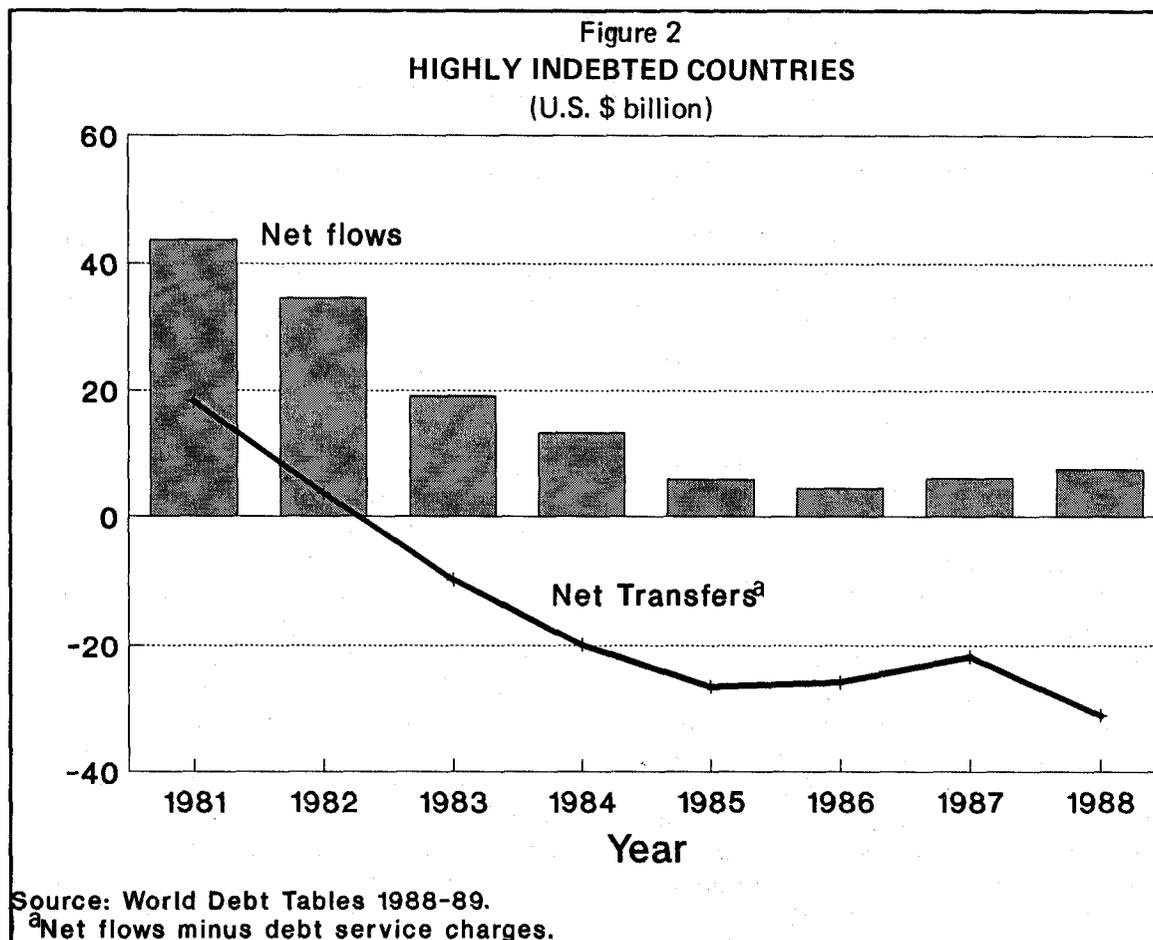
materials. Raw materials producers were particularly hard hit, especially in the case of oil exporters, and they began to show lower growth from the turn of the decade. This was exacerbated by the decline in oil prices in 1986 which was of a magnitude comparable with the increases of the second oil shock of 1979-1980.

But differing policy stances also affected the speed and efficiency with which they were able to adjust. The most significant of these factors was the use made of external loans obtained cheaply, but at variable interest rates, in the previous decade. Where these resources were productively used, particularly for the production of innovative manufactures, the task of adjustment was relatively simple when compared to those countries which had used the funds for public or private consumption.

For many of the latter countries, some of which were also oil exporters, the debt became the major policy issue of the decade, with efforts to meet repayment conditions adversely affecting policy options. For the whole decade debt service problems were to bedevil these countries as from 1982 they dominated all other economic issues. The rate of growth of GDP and more importantly of per capita GDP was accordingly significantly lower for those countries having debt servicing problems than for countries which managed to escape them (figure 1).

While various measures have been tried to resolve the debt problem, it has proven to be more intractable than expected, especially in a period which is regarded by some as having been propitious for the debtors' external





performance. In part, the problem is exacerbated by the fact that net capital flows to the highly indebted countries have been declining as creditor banks seek to reduce their exposure in these countries (figure 2). As a consequence of their massive repayments, net transfers to those countries have been negative for the past six years. Debt servicing has been possible for most of these countries only by severe economic contraction so that the current growth rates of those having debt-service problems have stagnated, while their future growth has been jeopardized as investment has been deferred.

The hope of growing out of the debt crisis has not materialized for these countries.

For the coming decade, therefore, the issue of debt relief will be even more pressing than it has been in the past, since debt fatigue seems to be increasing, while there is a growing belief by the debtors that adjustment policies are primarily geared to the interests of the creditors. In this scenario the probability of defaults is increasing and there is a growing danger that needed adjustments will be held hostage to the debt issue.

III

The sources of regional prosperity

The relative performance of individual Caribbean countries was conditioned by the mix of products contained in each country's export basket and the fortunes of each product in local and foreign markets over the decade. To provide an explanation of country performance in the 1980s and form an idea of the prospects for the 1990s we should therefore briefly examine the performance of the various export products, such as sugar, bananas, manufactures, minerals and tourism, which are the principal sources of regional prosperity.

The *sugar* industry remains chronically ill, surviving only on a life support system provided by the European Community and the United States, or the Council for Mutual Economic Assistance (CMEA) in the case of Cuba. The value of sugar exported declined over the survey period by about 6%. Declines were evident in all countries (with the exception of Jamaica, which recorded some growth), although annual performance fluctuated quite widely. The picture regarding earnings was somewhat different, in that price increases limited the loss of earnings to about 2%. This overall picture is, however, somewhat distorted by the influence of Cuban exports since Cuba benefited from higher prices than the other countries. The decline in earnings for the rest of the region, at 21%, therefore exceeds the decline in volume of production.

The industry has been making efforts to phase out its operations, and while these efforts are steady, they are nevertheless slow and not very orderly.

The *banana* producers reaped windfall gains due to the change in relative parities between sterling and the United States dollar, maximizing their good luck by increasing output as well. The most notable expansion in bananas took place in St. Lucia, although rapid expansion was also achieved in most other producing countries.

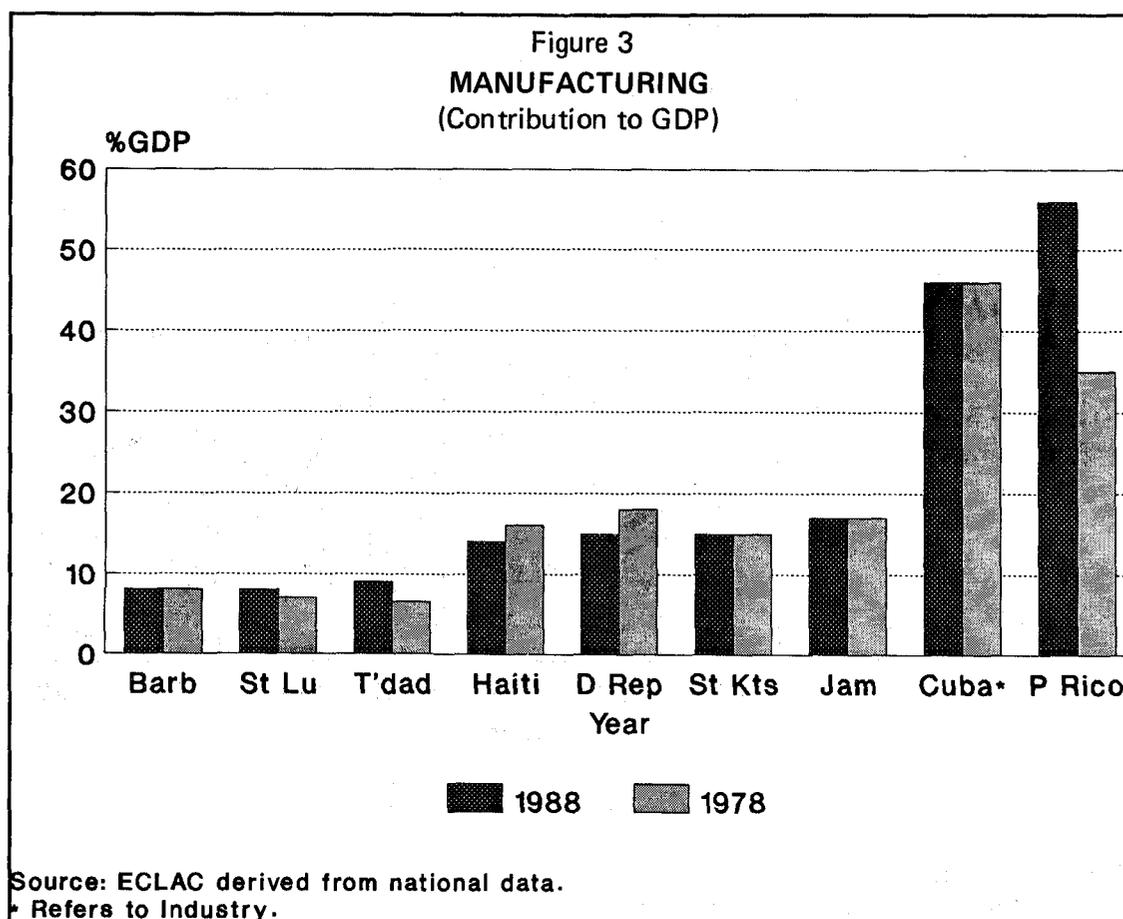
Yet, while the growth performance of the banana industry was one of the highlights of the period under review, it is well to recall that in the three years prior to 1980 banana exports

averaged 225 000 tons: a figure which was not surpassed until 1985. It is also noteworthy that banana production is still not efficient enough to compete on the open market. The picture remains fairly good as long as the United Kingdom market continues to be reserved for Caribbean producers, but this is an uncertain prospect.

Manufacturing remains at a crossroads and has, in general, stagnated over the survey period. Producers are aware of the need to reorient their production to global markets, yet so far the means to do so seems to have eluded many of them. Over the survey period Puerto Rico has shown the greatest growth in manufacturing and the greatest shift towards an economy based on manufactures (figure 3). A similar shift has also taken place in Trinidad and Tobago where the sector grew by almost 12% between 1983 and 1987. Jamaica, Cuba and Barbados have recorded no growth in the sector, while it has contracted in the Dominican Republic and Haiti.

For the OECS (Organization of Eastern Caribbean States) countries, manufacturing contributes a relatively small percentage of GDP: not more than 5% in all the countries with the exception of St. Kitts and Nevis. The sector has, however, increased its contribution to GDP in Dominica, Grenada and the British Virgin Islands.

The development and growth of export processing zone (EPZs) or free zones also need to be recognized, mainly for its contribution to employment. Nevertheless, the linkages of these zones to the rest of the economy are few and they do not yet contribute significantly to GDP, since the value added by these activities is not high. EPZs have been a source of much debate in the countries in which they have been introduced, but they are nevertheless expanding quite quickly in some of them. In general they seem to be the only immediately viable option in this sector, given the current level of our manufacturing productivity. But there is no compelling reason why these enterprises need remain as low-wage, low-value-added activities, if workers and managers alike are able to



upgrade their skills and move to more elaborate processes. This prospect will be discussed in greater depth later.

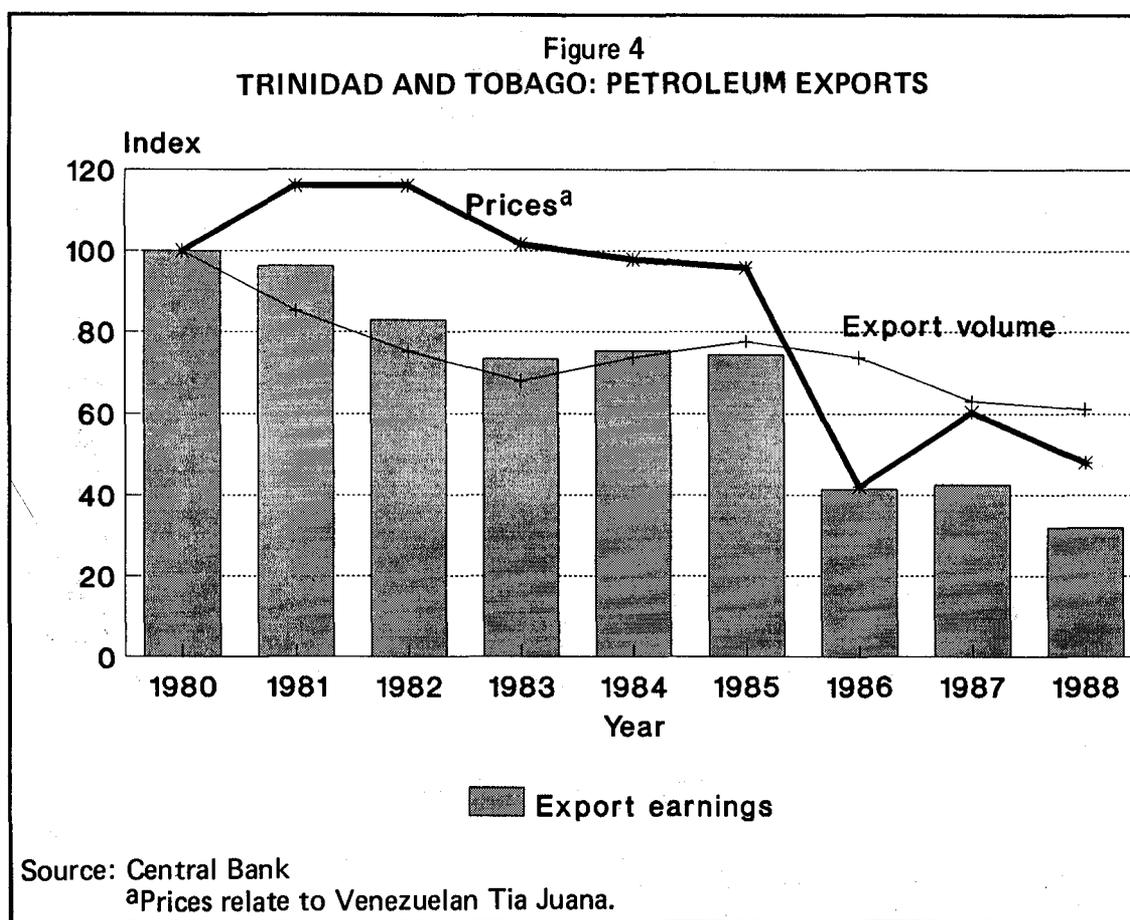
Minerals producers have fared badly over the survey period. As energy importers, the metals producers in the Dominican Republic, Haiti, Guyana and Jamaica were particularly hard hit by energy price rises. Conversely, they were beneficiaries as energy prices fell and regional producers regained some of their competitiveness. As a result there was some resuscitation of the industry over the survey period, although it was slow and halting. But in general the sector was buffeted by extreme uncertainty and consequent fluctuation in earnings.

While the metals producers benefited from the decline in oil prices, the *oil producers* were harmed. The situation in Trinidad and Tobago is

well known (figure 4). After 1982, prices fell and so did export volumes and consequently earnings. As a result, domestic activity has been reduced drastically, with consequences too familiar to readers to need repeating.

For the future, the long-run prospects of Caribbean minerals producers will be shaped by the rate of growth in the industrial countries (and consequently their demand for aluminium), the price of crude oil, and the extent to which Caribbean operations can be reconfigured to increase their energy efficiency. But in the final analysis, a development path cannot be predicated upon minerals exports alone. The terms of trade have been against minerals since 1950³ and the amounts of minerals used to

³It is estimated that in 1950, 100 units of minerals could buy 100 units of manufactures, but by 1986, they could only buy 14 units of the latter.



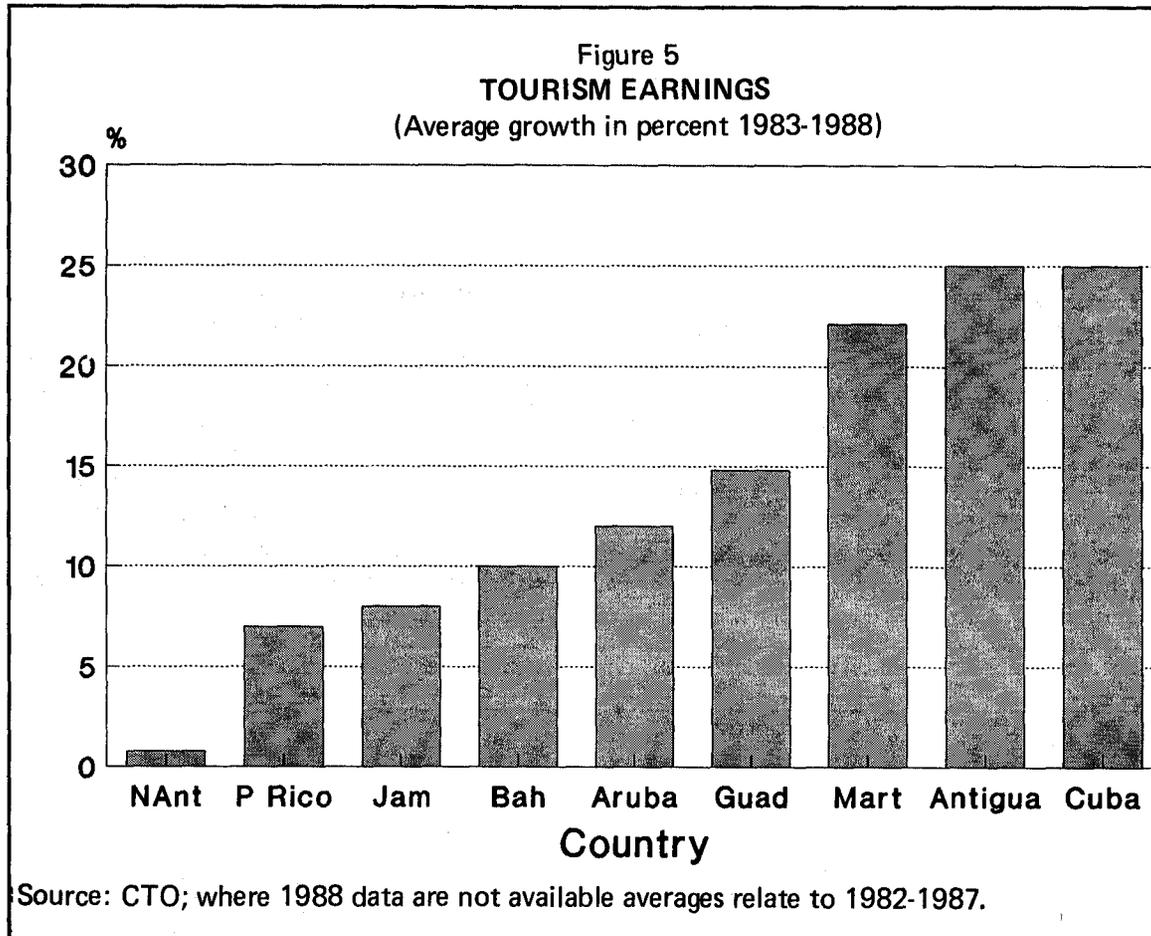
produce one unit of output have fallen steadily. In fact development is often measured by the quantum of value which can be added to each unit of raw materials. Minerals producers globally have grown much more slowly than, for instance, those countries specializing in manufactures. The expectations of those who supported the concept of materials-based development, fashionable in the 1960s and 1970s, have not been met in the 1980s and we might need to look to our other resources to provide an engine of growth for the future.

Such prosperity as has been experienced in recent years has come from a steadily growing *tourism sector*. In the period under review all the countries in the region either already had a tourism sector or were trying to initiate one. For the region as a whole, growth in tourism earnings accelerated after 1985, with greatest growth recorded in 1987 at 17%. For the period

1983-1988⁴ growth averaged 10% per annum. The fastest growth (figure 5), was recorded by relatively new entrants to the market, such as Antigua, Dominica, the Dominican Republic, the British Virgin Islands, Martinique, St. Lucia, St. Kitts, and St. Vincent and the Grenadines, all averaging 15% or more, or by established destinations recovering from a past decline, such as Cuba and Grenada. Among the established destinations growth was average in the Bahamas, Barbados and Guadeloupe, and below average in Jamaica, Puerto Rico, Haiti and the Netherlands Antilles. Declines were recorded for Suriname and Trinidad and Tobago.

Note should be taken, however, of the warning signals provided by loss of the North

⁴Where data are not available for 1988 averages relate to 1983-1987.



American market share and declining productivity and profitability of many regional hotels. The spectre of inadequate regional competitiveness and productivity rears its ugly head even in tourism, which is also showing some rigidity in adjusting to changing leisure patterns.

In summary, the fact is that all our major merchandise export activities are in decline. Sugar is being phased out. Bananas have staged a comeback in output, but still depend on the preferential market in the United Kingdom. Since this market might not be guaranteed for long after 1992, the industry will need to develop

the means to stand on its own internationally. Minerals are of declining global importance, have unstable earning capabilities, and in the long run cannot be expected to sustain our economies. Only tourism has shown steady growth over the last five years.

This summary describes, in a nutshell, the cause of our difficulties in the recent past. It explains why over the survey period the fortunes of the Caribbean nations have not been as good as in some other regions. And indeed, their fortunes have varied even more significantly than would appear from the simple changes in GDP.

IV

The impacts on people

While an analysis of the economic indicators provides a useful picture of economic trends, it is nevertheless incomplete and says little about the distribution of the costs and benefits of such economic performance. To the varying fortunes of the economies need to be added differing rates of population increase from country to country and varying impacts of economic contraction, especially that of the reduction of government services on varying groups within each country. Table 2 illustrates the changing fortunes of Caribbean economies, but it has not been as easy to illustrate precisely how the poorest have been affected by these changes.

It is nevertheless possible to conclude that the people in six countries —the Dominican Republic, Guyana, Haiti, Jamaica, Suriname and Trinidad and Tobago— have become poorer in the past five years. The decline in personal wealth is made still harder to bear by the reduction in government services in all of these countries, given the high levels of public expenditures which prevailed and the need in some of them to earmark large portions of public resources for the repayment of the debt.

The decline in economic activity has quite obviously affected the lives of people in these countries. Jobs have been lost, and even for those

Table 2

CARIBBEAN COUNTRIES: SELECTED INDICATORS

Country	Size km ²	Population (1988)	Average growth population	GDP ^a	GDP capital (1974)	GDP capital (1988)	Debt capital (1988)
Antigua and Barbuda	440	82	0.8	7.8	689	3 399	2 915
Aruba	193	65	...	...	...	*7 500	...
Bahamas	13 942	243	1.8	4.3	3 362	11 447	607
Barbados	431	254	0.2	2.7	1 296	5 747	62
Belize	22 960	180	2.8	3.0	614	*1 226	78
Cuba ^c	110 860	10 414	1.1	2.8	2 112	2 582	661
Dominica	750	82	0.9	4.8	378	1 550	*71
Dominican Republic	49 000	6 888	2.5	2.2	639	810	220
Grenada	345	106	2.4	4.6	346	1 346	65
Guadalupe	1 780	300	...	...	...	*3 151	...
Guyana	214 970	756	-0.1	-1.4	538	455	2 249
Haiti	28 000	6 285	2.2	0.2	125	330	*121
Jamaica	11 424	2 374	1.0	0.9	1 038	1 219	318
Martinica	1 110	300	...	...	...	*3 717	...
Saint Kitts and Nevis	269	47	0.5	5.2	634	2 199	36
Saint Lucia	616	145	2.0	4.7	448	1 400	*26
Saint Vincent	388	114	1.3	6.2	310	1 210	*31
Suriname	163 265	404	1.0	-3.4	1 100	2 510	...
Trinidad and Tobago	5 128	1 234	1.4	-3.0	1 778	3 782	2 012
British Virgin Islands	150	12	1.4	7.0	...	9 492	...
Montserrat	102	12	0.5	5.2	886	3 997	...
Puerto Rico ^d	8 800	3 294	0.2	5.0	2 465	5 574	...

Source: ECLAC on the basis of official data.

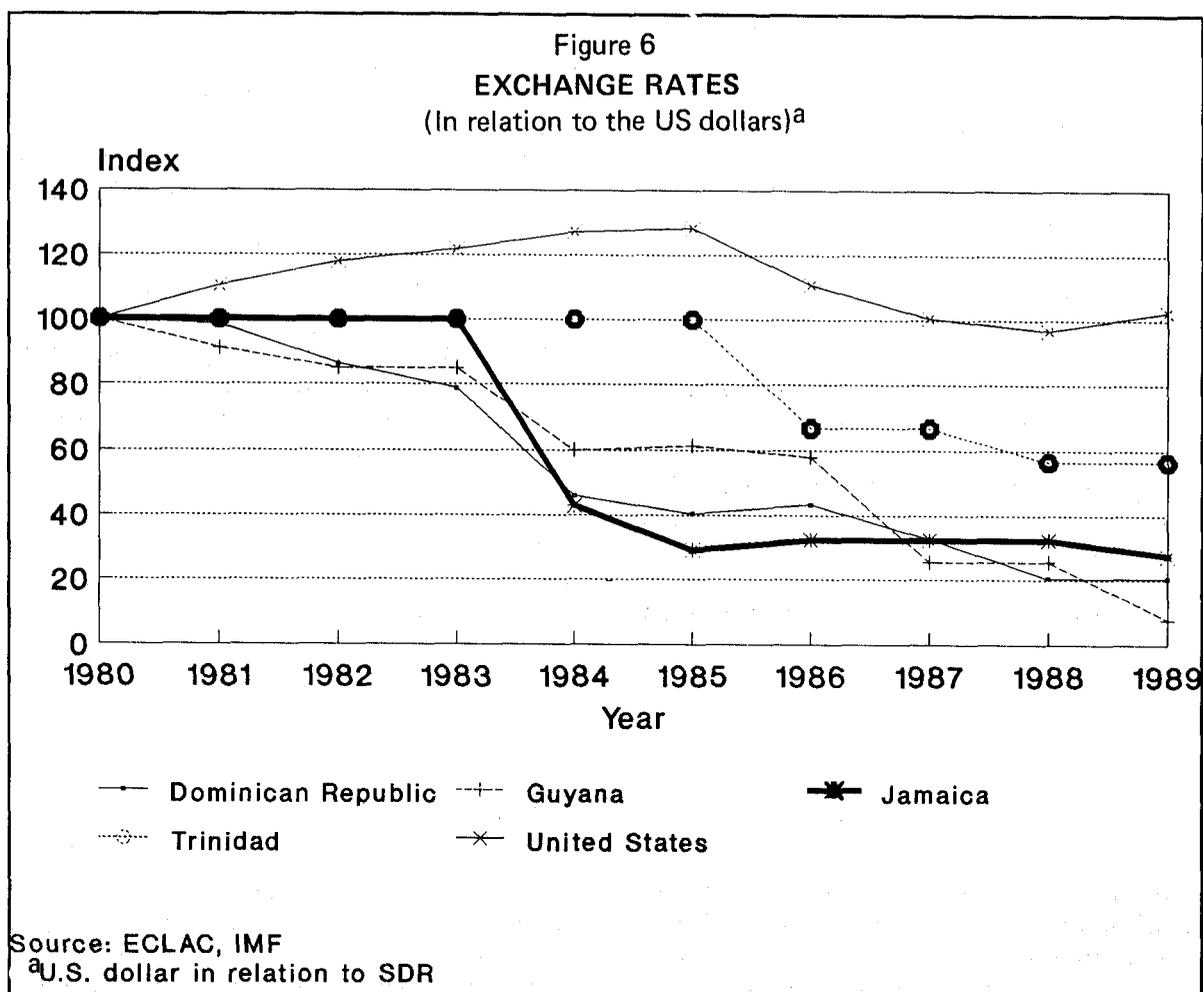
^a Average growth rate of real GDP for period 1983-1988; Suriname 1983-1987.

^b In current US dollars.

^c Global Social Product in millions of United States dollars.

^d GDP per capita figures relate to 1975 and 1988.

* Denotes latest data available, typically 1986 or 1987.



fortunate enough to retain their employment, standards of living have fallen. The most evident symptom of this decline has been the steady depreciation of the currency, which in small, open economies has a much greater impact on all sectors than in larger countries having a large reservoir of domestic production.⁵ The rate of depreciation for some of the low-growth or contracting economies is illustrated in figure 6. All the currencies are shown in relationship to the United States dollar, and the relationship of that currency to Special Drawing Rights is also illustrated for the period 1980-1989.

Just at a time when personal standards of living were falling in these countries, the

⁵In Jamaica, for instance, domestic food production meets only an estimated 10% of domestic food needs.

capacity of governments to provide a social safety-net for the poorest was also diminishing, due to a contracting revenue base. In order to reduce growing fiscal deficits and the accumulating debt burden, public expenditures had to be reduced, with a consequent reduction in the delivery of social services in areas such as health, education, housing and, in some cases, nutrition.

Any attempt at evaluating the social impact of expenditure cuts has nevertheless to be treated with care. While the quantum of funds has in some cases been reduced, the proportions allocated for personnel emoluments and materials have also been skewed in favour of the former, further reducing efficiency. At the same time, new means might be used to deliver traditional services in a more efficient manner or

to a more precisely defined target group so that a mere evaluation of expenditure might not signify reduced delivery. Finally, the backlog of social services might not be immediately quantifiable, as the deficiencies in health or education might not become observable until after a large lag; by then, however, rectification—if still possible—might be protracted. Attempts therefore had to be made to discern social trends despite the lack of precise data to measure them.

Bearing in mind the caveats noted above, it is nevertheless possible to come to a few tentative conclusions. In some of the countries listed as having contracting economies the vulnerable target groups among the poorest are pregnant and lactating mothers, children and the aged. Where contraction has taken place for a period longer than the decade, signs of social erosion

are discernible in health, education and nutrition, so that relative standards have fallen as compared with comparator countries having broadly similar incomes per capita. But absolute standards have also fallen in some instances, implying declining indicators in the same country over time.

For most countries in the area the backlog in housing is quite considerable, leading to urban slums and often illegal squatter settlements. While high levels of unemployment have been endemic, the growth of the informal sector is a manifestation of the effort of the unemployed to devise and implement their own survival strategies. Yet the concentration on low-productivity activities, such as itinerant petty peddling and the provision of simple services, attests to the low levels of skills possessed by the hard-core unemployed.

V

Some lessons from the 1980s

In terms of policy management, this decade of global uncertainty forced upon policy makers a new awareness of the need to adopt more effective measures for short-term economic management. However, they also realized, somewhat belatedly, the need to adjust to longer-term trends, such as changing patterns of tastes and dynamic shifts in comparative advantages. The ability to minimize the contradictions between short, medium and long-term planning was, however, uneven and especially difficult for those countries experiencing debt-service problems.

The small size of the economies also makes the region more vulnerable and complicates the adjustment process, since it ensures that production is concentrated on few products. Accordingly, fluctuations in the price of any one product have a greater impact on short-term economic performance, while longer-term adjustments to shifts in comparative advantage are protracted and painful.

Smaller countries are also denied some of the macroeconomic options available to larger countries and the policy framework will need to

be constrained accordingly. As a general observation, it is noted that the most open economies and those least subject to restrictions on the movement of goods and capital had the fastest growth. Those pursuing the most moderate fiscal and monetary policies, either through voluntary restraint or where central bank statutes required this, also had the most moderate rates of price increases, the most stable currencies and the lowest debt. The converse was also true.

In most countries the social consequences of economic activities have been treated as a residual. This is partly due to the fact that the Caribbean countries have a tradition of extensive participation by government in the delivery of social services and, perhaps as a consequence, their social indicators relate favourably to comparator countries globally. Yet as some of them experience protracted economic decline, the deterioration in social indicators is becoming evident.

Many years of effort are in danger of being eroded. Yet one of the main lessons of the decade has been the importance of blending human

skills and information in order to provide a flexible response to a rapidly changing environment. Any policies which downgrade the improvement of human resources will, therefore, render citizens less capable of facing the challenges of future decades.

Moreover, as the consequences of contraction are not evenly spread, there is a danger that income disparities will widen, further eroding social cohesiveness and public order. These concerns have no doubt been partly responsible for the reluctance of policy-makers to initiate adjustment measures. As a result, their efforts to disguise the underlying economic weaknesses through increased government expenditures have complicated the adjustment process by increasing the debt, on the one hand, and postponing adjustment until it has to be especially severe.

The decade has seen an increased awareness of the finite nature of the environment. The

Caribbean region is also becoming painfully aware of its own environmental degradation, which afflicts in particular the high-growth economies, through the unsatisfactory disposal of solid and liquid waste. These practices threatened health standards, and the very growth which causes such degradation, since in the Caribbean growth is predicated on earnings from travel and leisure services.

Yet the low-growth economies are no less immune from environmental degradation, which often takes the form of denuded and eroded hillsides, resulting from unscientific cultivation practices and the need to use wood as a source of fuel. All countries are affected alike by population pressures, inadequate land use policies, the effects of oil spills, and the potential dangers caused by the dumping of toxic wastes. Most of our countries are incurring an environmental deficit which cannot be allowed to continue.

VI

Sustained development in the 1990s

For development to be sustained in the coming decade, emphasis will have to be placed on enhancing economic efficiency with the accent on vastly improved human skills; building social cohesion; and adherence to a development path that is environmentally sustainable.

In the past, rigidities and the sluggish response of our economies to change have caused us to view rapid global change with anxiety. Major efforts have therefore been made to protect and preserve existing and sometimes declining industries. This has often been done, however, at the expense of new and possibly more remunerative activities and we have seldom used the breathing space provided by these special arrangements to bring on stream new means of wealth.

As a consequence, many of our resources remain idle, despite efforts to utilize them. Much of our scarce land remains unutilized, while some land which had been used for export crops has fallen into disuse as these crops are no longer profitable. Domestic savings are low and often

not productively invested. But the most intractable problem and the most obvious indicator of our reduced potential remains the underutilization of manpower, since in some cases 30% of the labour force is unemployed, with a significant portion of the remainder underemployed or employed only in low-productivity occupations.

1. *Enhanced economic efficiency*

In order to reverse current trends and better fulfill our potential for the coming decade, economic efficiency will need to be increased so that the region can capture a growing share of global trade. To do so will require a diligent search for non-traditional industries or activities that are sufficiently specialized to be remunerative in relatively small-scale trading operations appropriate to Caribbean capabilities. We will also need to have a better knowledge of global market trends, to show

greater flexibility in phasing-in and phasing-out activities, and to apply greater knowledge, skills and technologies in the items we produce. In order to penetrate the global market, we will need to increase the productivity of the economy as a whole, since this is the only sustainable way to increase living standards.

Enhanced productivity is not currently a popular subject. Productivity increases can often only be obtained in the short run by reducing the returns to labour. As a consequence, especially in our region, this objective is identified with the impoverishment of workers through currency devaluation, or with exhortations to work harder and longer hours. While it is true that these are only ways to buy time for declining industries, such policies should be regarded, at best, only as way-stations on the route to recovery.

An evaluation of the factors of production leads us to conclude that many of our islands do not possess an abundance of highly arable land, neither do we have a surplus of cheap capital. Expectations of rapid growth predicated on the exploitation of raw materials have not been rewarded, partly because the region does not possess an abundance of raw materials, but also partly because rapid growth areas are now in services or in light manufactures which are sparing in the use of raw materials but intensive in the use of knowledge.⁶ This leaves us with the other two factors, labour and technology, which can usefully be linked as the latter is operationalized by labour through the use of tools.

Throughout history, productivity increases have been associated with the mastery of tools. Rates of pay have been linked with the worker's mastery, in the first instance of tools that had greater strength than man, and latterly those that had greater speed or consistency or greater endurance. But as machines become more intelligent and sensitive, so they encroach more on the domain reserved for unskilled people. As a result, the skills needed to master them have become more complex and so the educational qualifications of people need to increase.

⁶A laptop computer using 20 lbs of plastics and silicon can cost as much as a 3 000 lb automobile today, or much more than a 5 000 lb automobile just one decade ago.

We need, therefore, to take a more positive and optimistic approach to the question of productivity and change. High productivity in this context is understood to mean the rearrangement of those two components of work, the mental and the physical, to place increasing emphasis on the former. Curiously, we have now gone beyond the mere acquisition of more efficient machines to the acquisition of tools developed to help the mind to work more effectively, to take much of the routine out of certain types of mental work. From this concept is derived the admonition to "work smarter", where previously emphasis was merely on working harder.

As we are in the throes of what is being referred to as the information revolution, it is well for us to bear in mind one of the unique features of information, which, unlike most material goods, increases when it is shared. Those working with information, or "mind workers", therefore have to be more co-operative than before. They also have to be more alert to learning things on the job and to be more flexible in changing jobs within the team.

This shift will demand from us greater creativity, autonomy and skills, but in the process it will provide greater awareness of the work process, enhanced job satisfaction, as well as better returns for enhanced productivity. It will also provide a better working environment for those skilled enough to hold their own in it.

A greater premium therefore needs to be placed on human resource development. This is understood to mean the continuing process of improving skills and knowledge throughout one's productive life and to apply to *all* people. But it is something over which each of us has some measure of control, both for ourselves and our personal skills development as well as for coming generations. This has implications for our educational process, and requires a shift in attitudes not only of teachers and students but also of society at large, in the sense of making increased demands on the educational system.

The available evidence seems to indicate that those countries which have moved fastest to achieve productivity increases have been able to do so through good basic general education which simultaneously provides the foundation for the necessary high level of job flexibility. It

goes without saying that computer skills should begin at the earliest level and be regarded simply as an indispensable mind tool. They are also one of the keys to storing, sharing and, therefore, increasing information.

Links also need to be made early between the world of education and the world of work. Emphasis needs to be placed on helping young people to shoulder the responsibility for making themselves viable adults, and the educational process should be seen as preparation for viability.⁷ Good general education is also beneficial in widening career prospects and providing operational flexibility.

The best examples available to us show that specialized education is job-specific and often comes as on-the-job training. Team work, the sharing of information and job flexibility⁸ are also important components of the new high-productivity paradigm.

⁷In the Federal Republic of Germany education is, in principle, compulsory until the age of 18 years. In practice, 40% of the 15-18 years age group attend school full-time. The rest undergo a dual system of professional training through apprenticeship, financed by private firms and federal grants. The purpose of apprenticeship is primarily to "teach correct behaviour, accuracy, neatness, reliability, punctuality" —in short to inculcate a work culture. Apprenticeship is the usual route to professional success; nine out of 10 apprentices end up with a diploma and 15% pursue higher education. Over 90% go beyond the diploma and a further 15% of those pursue higher formal education.

For the German, "professionalism is made up of knowledge, skill and behaviour, the ability to learn how to learn, how to work in a team, a sense of method —doing one thing at a time— and a concern for quality —doing a job well". Generally, workers do not get to upper management until their forties and they get there by proven performance rather than by diplomas. Close ties also exist between companies and universities: board members are usually graduates and university élites choose careers in industry in preference to government (Godet, Michel: "West Germany: A paradoxical power"; *Futures*, August 1989).

⁸Flexible specialization is a further model which features networks of small firms competing with each other, yet co-operating in sharing information and expertise. Knowledge is rapidly diffused both between firms and within them, giving rise to mutual adjustment, learning and innovation, so that workers, firms and entire districts are able to respond quickly to changed markets and technologies. (The basic concept which emphasizes the issue of flexibility is valuable for all enterprises of the future and puts a new emphasis on vertical disintegration spin-off activities and new start-ups and was developed by M. Piore and C. Sabel.) The model is, however, particularly attractive for the Caribbean since flexible specialization is especially useful where consumer demand becomes disaggregated and diversified and where small-scale operations and diversified products are involved (see A. Poon, "Flexible specialization and small size: the case for Caribbean tourism", presented at the Second Conference of Caribbean Economists in May 1989).

Enterprises will need to be more alert to the types of skills and structures they will need to put into place, just as they will need to be aware of the technologies they need and how to get them. They will need to explore more effective forms of organization and collaboration with research, financial and technical institutions and with the trades unions.

But it is equally the responsibility of the worker to advise on the best and most effective ways of doing things and to exert continuing pressure for improved skills and responsibilities. This implies ongoing investment by the firm in training and the acquisition of technologies, in order to enhance productivity.

The foregoing elements, when brought together, will contribute to the development of a culture of entrepreneurship which should pervade public and private sector workers, technicians and professionals as well as institutions such as trades unions, chambers of commerce and manufacturers' associations. This culture will be receptive to new ideas and the incorporation of technological change and make productivity increases a self-generating process.

In the prevailing anxiety to address the pressing problems and find the "key" to development, many models have been evaluated, sometimes in their purest and most theoretical forms, yet common sense will tell us that a judicious mix of elements will need to be used, based on an empirical evaluation of what will work. One such element which is currently in vogue is deregulation. It is often prescribed as the remedy for rigid and unresponsive economies. It is indeed undeniable that a network of overlapping regulations have rendered regional economies unresponsive to change and have often created contradictions in policy. Moreover, the more impersonal mechanism of price might be the only viable solution where social disharmony, policy inertia, or vested interests oppose the removal of policies which discriminate against trade and a rational approach to planning, or in those areas where knowledge and foresight are limited and change is rapid and unpredictable. But deregulation is not a panacea; it should therefore not be applied indiscriminately and it must not be seen as an excuse to abdicate responsibility for development.

However, government/public sector intervention, where necessary, will need to be applied with restraint and humility. It might prove to be necessary to preserve a measure of equity in the delivery of those social services needed to improve social harmony and develop all the human resources to their fullest potential. It will be necessary to create and preserve a stable legal and economic climate to encourage enterprise and to strengthen the educational system at all levels.

At the national level, the adoption of appropriate macroeconomic policies to maintain competitiveness so as to increase the country's share of international markets is a necessary, though not sufficient, condition for growth. The role of provider of infrastructure remains, with renewed emphasis on the educational and communications infrastructure. But there is need for an appropriate industrial policy too. Selective interventions might need to be made to identify prospective sectors with a high value-added potential realizable at the national level and to encourage their growth. The public sector also has a role to play in encouraging an industrial atmosphere that is harmonious and co-operative rather than conflict-oriented.

Investment is the process through which ideas are transformed into productive output. It is the vehicle for increased growth and structural transformation. Yet if investment is the vehicle for increased growth, then savings provide the fuel for that vehicle. Nevertheless while savings are necessary they are not a sufficient condition for achieving investment. A propitious investment climate and adequate investment institutions are also necessary if the stream of savings is to flow into productive investments.

It is generally conceded that the rate of investment in the region is low and this is believed to be as a result of low rates of saving. If individuals are to be persuaded to postpone spending in the present and to save, and if the investor is to take the risk of investing, the payoff will need to be sufficient to induce both sets of actors to do so and it will need to be reasonably assured. Optimism about the future is a necessary element to induce a long-term perspective and hence a healthy investment climate. Macroeconomic policies can be used to limit rates of inflation, ensure positive rates of

interest, and generally preserve a measure of stability in the economy at large.

Some honest introspection is needed by workers, entrepreneurs and governments if the region is to determine why investment is not taking place at the desired rate in some countries and why a significant portion of savings are stored abroad, without much chance of their being returned for regional development. Some analysts believe that if these funds were available to the region and used for productive investments, our development would be quickened. The policy maker will need to isolate those factors which are inhibiting savings and investment and take the necessary steps to eliminate them.

It goes without saying that the process of globalization which has accelerated so rapidly in the past two decades will continue.⁹ This region which has historically had a global orientation, will need to re-learn how to interface effectively with the wider world community. This knowledge is necessary in order to understand our markets, be sensitive to market shifts and be responsive to new intellectual and technological currents.

My comments are not meant to imply a diminished role for regional co-operation, although the last two decades have caused us to look skeptically at the concept of regional integration in the light of its failure to meet our perhaps unrealistic, expectations. Regional co-operation remains a viable option in the Caribbean despite a growing recognition that indigenous production is not broad-based enough to supply a sufficient range of domestic needs.

Co-operation can be beneficial to small producers in helping them to penetrate global markets. Regional competition can be used as a mechanism for strengthening enterprises to enable them to compete globally. Co-operation in joint marketing might also present a viable

⁹Peter Drucker, in an article entitled "The changed world economy", published in *Foreign Affairs* (Spring 1986), stated: "any country or business that wants to prosper will have to accept that it is the world economy that leads and that domestic economic policies will succeed only if they strengthen, or at least do not impair, the country's international competitive position". The comment was made in respect of both large industrial countries and developing nations.

option, especially in areas such as light manufactures and tourism. A policy to encourage regional joint ventures and interregional investment can also be useful in reducing the risk faced by the Caribbean investor who has to locate all his assets in one small territory. Since the perception of risk provides the strongest motivation for capital flight, such a policy might serve to increase the quantum of resources retained in the region.

Co-operation between small States can also be beneficial in helping them to perform those tasks which they have difficulty in performing well on their own. For the smallest of them, some form of integration may be chosen in order to reduce human and material costs through the delivery of joint services. But even for the region as a whole, there is much to be derived from co-operation at the level of public policy. Functional co-operation within CARICOM has been one of its successes, while in view of common producer interests, the development of joint strategies at the multilateral level has proven to be beneficial at the CARICOM level and is slowly being extended to the whole region.

But regionalism should not be used to provide us with the illusion of a safe haven where we can hide from the rapid developments in the wider global environment, for that is a prescription for continued stagnation.

2. Enhanced social cohesion

The discussion has focussed so far on the capacity to strengthen our economies, but that alone is not sufficient for sustained development. This can only be achieved in the long run if a basic measure of social cohesiveness is created and preserved. Consistent policies become more viable in a political environment having a broad-based social consensus, so that widely polarized interest groups have only a limited amount of discontent on which to thrive. In this way, issues can take precedence over interests, so that policies may be judged on their intrinsic merits.

At the level of ideas, the traditional dichotomy between growth and equity is slowly being reconciled by an emerging consensus that both growth and equity are essential and mutually supportive. Here, the real issue is how

to distribute the available wealth in a way that advances the goal of social cohesion. Questions of equity naturally become more acute in times of economic contraction, yet redistribution becomes politically more difficult with a shrinking pie. The resulting social antagonisms endanger the social cohesiveness necessary for a properly functioning economic system. Explicit policies are therefore needed to use contracting resources more efficiently, and to provide a safety net targeted precisely at the most marginalized segments of the population and focusing on areas such as health, nutrition, retraining and employment.

Many of the assumptions on which the social services in the region were built, and particularly that which emphasized the provision of free and comprehensive social services to all citizens, are currently being called into question. These assumptions are regarded by some as unrealistic, while others also regard them as an inefficient way of delivering social services to the public at large. At best such delivery will need to be held in abeyance while the economies are in a process of contraction and restructuring, and priority must be given to meeting the needs of the poorest people while those that have the capacity to do so will need to fend for themselves.

Primary and preventative health care is the most efficient form of expenditure on health. It also has its greatest impact on the neediest. Nevertheless, means will also need to be found to improve the performance of the physical facilities which have suffered from reduced maintenance as a result of economic contraction. This might take the form of improved management, better administration and improved referral systems, or, in appropriate cases, divestment. Where reduced funds have reduced the procurement of pharmaceuticals, more careful targeting and better cost-recovery programmes seem to be the only viable ways to ensure that scarce resources are directed to the neediest.

Nutritional deficiencies have been identified in clearly defined groups, children and pregnant and lactating mothers. Across the board, food subsidies which are expensive and have been demonstrated to be of limited benefit to the poorest might need to be supplanted by programmes linked to schools and pre- and ante-

natal clinics or the outpatient departments of hospitals.

Employment has been a recurring concern in Caribbean countries, yet macroeconomic policies and institutional rigidities which provide incentives to substitute capital for labour continue to pervade our economies. These policies will need to be relaxed if any meaningful steps are to be taken to absorb the surplus manpower which is often endowed with only limited skills. Well-focussed training programmes can retrain persons for shifting demands in the labour market, while properly conceived public projects could have a limited applicability provided they are targeted to the hard-core unemployed, meet acceptable standards of economic return, and fit into existing sectoral priorities. But ultimately, the issue of remunerative employment will be addressed only through effective training, as discussed above.

Essentially, the proposal is to treat the delivery of social services in the framework of a systematic plan, especially where the economy is in contraction. By so doing, efficient ways can be found to deliver basic social services to the neediest and so minimize the negative social impacts to which they would be exposed.

3. Environmentally sustainable policies

One does not need to be an economist to understand that a society cannot for long consume more than it produces. Deficits result in a debt which has to be repaid by future generations, often at the cost of their own development. This relationship is common knowledge although, as we know, that knowledge is often ignored. Yet economists have been curiously silent about the rapid consumption of our natural environment. They have tended to regard development as a process of conquering nature and to correlate growth with the rate of consumption of our natural physical assets.

Fortunately, and perhaps just in time, we are becoming aware that the rapid exploitation of natural resources is neither the sole, nor even the best, way to produce growth. And as we destroy our hillside cover, erode our best lands, pollute our rivers with chemicals and dump effluent onto our best beaches we are slowly coming to the realization that we are taking more from the natural environment and faster, than it can heal itself. In fact, we have been incurring an environmental debt which will have to be repaid by our children. Indeed, even current generations are already paying for it in decreased yields and the increased incidence of various diseases, not to mention the aesthetic damage done regularly to our landscape.

As the pressure to relieve material constraints is lessened we will discover that factors other than material ones are necessary in order to insure our survival and to improve the quality of our lives. A healthy and pleasant environment ranks high on any list of such factors and is indispensable for the development of the high value-added recreational and leisure services which seem to hold good prospects for our future growth.

A number of issues need, therefore, to be placed high on the policy agenda for the coming decade, so as to restore our environment to health and to preserve it for future generations. They should include:¹⁰ orderly land use planning; measures to stop the degradation of the coastal and marine environment; prevention and mitigation of the effects of oil spills; solid and liquid waste management; prohibition of the dumping of extra-regional wastes; water quality and supply; forest and watershed management; preservation of genetic resources; and the preservation of historic and cultural resources.

¹⁰For a complete list of the issues defined as priorities see "The Port of Spain Accord on the Management and Conservation of the Caribbean Environment".

Latin America's place in world trade

Mattia Barbera*

This article analyses the role played in world trade by the main countries of Latin America during the period 1965-1987. The analysis is based on a reclassification of commercial trends which shows both the intensity of use of the factors concerned and the technological content of these trends. Also, by constructing an indicator showing the contribution to the trade balance, we can compare the patterns of international specialization of the region as a whole and of each country in particular, as well as the changes made in those patterns as a result of the trade and exchange policies applied during the last two decades.

With the data produced and assembled for this analysis, we can describe in detail the principal phenomena at the root of the current crisis. These phenomena include the technology gap in Latin America's specialization in relation to the developed countries and the newly industrialized countries, the bias against exporting on the part of the primary sectors and manufacturers who use natural resources intensively, the loss of dynamism towards the end of the 1970s by the sectors initially more successful, and the inefficiency of the mechanisms for allocating scarce resources.

The data obtained also reveal that these countries have been able to specialize and achieve major technological advances during recent decades. However, these trends could be reversed if they adopt policies of indiscriminate openness solely in order to improve the relative performance of the primary sectors and if they neglect the potential for regional integration, the generation of dynamic comparative advantages, and the experience acquired during the long period of inward-looking development.

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Introduction

The *neo-Schumpeterian* view of technological, organizational and entrepreneurial innovation as the most dynamic element in economic growth has become established in economic policy and entrepreneurial strategy in the immense majority of the countries of the world. It no longer applies only to the West. This new *dominant paradigm* could be summarized, from the viewpoint of the developed countries, as the functional relationship between the growth rate of income and the rate of introducing new products and technologies or new organizational techniques.

On the other hand, especially in the Latin American countries, the growth rate of the product has been related historically to the constraint on the balance of payments, the two main components of which—the trade balance and the capital account—have evolved in a highly asymmetrical fashion because of the region's external indebtedness. The *lost decade* of the 1980s has clearly shown the harmful effects of efforts to export accompanied by a decline in imports of capital goods and investment. It has also shown that, if the problem of the external debt is to be finally solved, the debt must be radically redefined.¹ Nevertheless, in view of the structural nature of this crisis, it would be wrong, in the medium and long term, to concentrate exclusively on the financial imbalances of the economic relations between Latin America and the developed countries. The main impediment to the reactivation of the Latin American economies continues to be the limit imposed on growth by the *real* component of external relations. Understanding and redefining that component is one of the high-priority tasks for public and private authorities in these economies.

Most interpretative theories of international trade have centred on the differences between countries with commercial relations. Thus, the

¹See ECLAC, *Latin America and the Caribbean: options to reduce the debt burden* (LC/G.1605 (SES.23/5)), Santiago, Chile, 1990, where it is stated that, in the absence of significant measures on the part of the creditor countries, the only solution would be for the debtors to declare a unilateral moratorium.

neo-classical tradition has emphasized the initial factor endowment of the different countries; the neo-Ricardian tradition has emphasized the differences in production costs and technology; the neo-Marxians and structuralists have emphasized the institutional differences that determine the specific structures of the labour and goods markets and the specific ways in which they operate and seek to achieve a *balance* (as well as their effects on income distribution); the neo-Keynesians have emphasized the differences in the income elasticities of the goods in which the different countries specialize.²

On the basis of this diagnosis and conceptual framework, the principal aim of this study is to examine, from a technological viewpoint the more important trends in the international trade of the main countries of Latin America, over a period of more than two decades. This examination will be systematic and integral; it will constitute a synthesis but will be rich in detail.

With the help of these new empirical elements, as well as their elaboration resulting from our analysis, we aim to examine a series of trends of crucial interest for qualitative evalua-

tion of economic progress in the Latin American countries. In particular, we shall consider the differences in factors and their costs, the technology gap and the different income elasticities of the products traded. The developing countries are exporting their technology —the values of which are *weighted* in the study with those of imports— mainly because of the following advantages:³

—Cost advantages implied by producing with the same process the same kind of product or service as the developed countries (for example, lower wages for equally skilled workers);

—Advantages based on the production of an adapted or obsolete good or of a technical service more appropriate for the needs of the user (for example, smaller scale and/or greater knowledge of a similar market);

—Advantages of experience derived from lower costs or greater knowledge, generally from a natural advantage, as, for example, the availability of a specific raw material;

—Advantages resulting from the introduction of technological innovations.

I

Methodology

Our study is based on a reclassification of trade flows in which different categories are introduced. Thus, besides the analytical categories that distinguish between trade in primary products and trade in manufactures, we use technological categories, which allow us to *combine* some of the different approaches to international trade.

The result, which can be seen in detail in table 1, was a classification⁴ which, in the first place, divides manufactures into two main categories: those based on natural resources and those that are not. This division reveals the existence of an intermediate stage between primary products and manufactures. It defines a border area between the two that would have

²Income elasticity is also one of the main elements of structural analysis, particularly the analyses of Prebisch and ECLAC.

³An excellent summary and bibliography of the principal theoretical contributions to this discussion can be found in Martin Fransman, "Conceptualising technical change in the Third World in the 1980s: an interpretative survey", *The Journal of Development Studies*, vol. 71, No. 4, London, July 1985. Also see Carl Dahlman and Francisco Sercovitch, "Exports of technology from

semi-industrialized economies and local technological development", *Journal of Development Economics*, vol. 16, No. 1-2, September-October 1984.

⁴For a detailed list of the breakdown by sectors and products of each category, see the study done by the author of this article, "América Latina: especialización y sector externo. Un análisis de las tendencias tecnológicas del comercio", which will be published soon by ECLAC.

otherwise remained unnoticed and that conceals the presence of crucial interdependencies in developing economies.

Second, for manufactures based on natural resources, we defined three subcategories that reproduce the structure of the classification of primary products; for the subcategory of agricultural products, we also indicated the use intensity of the factors of capital and labour.

In the category of manufactures not based on natural resources, we opted to apply classification criteria that take into account the criticism of the concept of the homogeneity of the productive factors, namely, the criticism arising from neo-factorial theories.⁵ By dividing the labour factor into two categories—skilled and unskilled—we introduced a new subdivision between established and new industries, which also incorporates a qualification that can be related to the product cycle theory.⁶ On the basis

⁵On the basis of the famous paradox of Wassily W. Leontief, "Factor proportions and the structure of American trade: further theoretical and empirical analysis", *Review of Economics and Statistics*, vol. 38, No. 4, November 1956, research has been developed that tends to distinguish the different qualities of the labour factor. Its main representative has been Donald B. Kessing, "Labour skills and comparative advantage", *American Economic Review*, vol. 56, No. 2, May 1966.

Investment in human capital as a determinant of growth has been incorporated by several models that postulate the existence of a sector specialized in producing that resource. See Patricio Mujica and Jorge Marshall (consultants), *Conocimiento y crecimiento económico. Un marco alternativo para el análisis de los determinantes del desarrollo económico*. (Knowledge and economic growth. An alternative framework for analysing the determinants of economic development) (LC/R.826), Santiago, Chile, ECLAC, 1989.

⁶The literature on this question is ample and well known. Therefore we will limit ourselves to the more important representatives of this international trade theory. M.V. Rosner, "International trade and technical change", *Oxford Economic Papers*, vol. 13, No. 3, London, Oxford University Press, October 1961; Raymond Vernon, "International investment and international trade in the product cycle", *Quarterly Journal of Economics*, vol. 80, No. 2, Cambridge, Harvard University Press, May 1966, and Raymond Vernon, *The Technology Factor in International Trade*, New York, National Bureau of Economic Research, 1970.

In the context of our classification, we should mention above all the work of Seev Hirsch, *Location of Industry and International Competitiveness*, 1967.

The sectoral groupings were elaborated on the basis of United Nations Industrial Development Organization (UNIDO), *International Comparative Advantage in Manufacturing. Changing Profiles of Resources and Trade*, Vienna, 1986, United Nations publication, sales No. E.85.II.B9. See also UNIDO, *Changing Patterns of Trade in World Industry: an Empirical Study on Revealed Comparative Advantage*, New York, 1982, United Nations publication, sales No. E.82.II.B.1.

of this subdivision, we divided each group of industries into two subgroups according to the degree of use intensity of capital and unskilled labour.

Finally, in an attempt to make a new distinction dealing more directly with the capital factor (in a broad sense) and the labour factor in its more skilled component, we divided each subgroup into three categories, according to research and development expenditures incurred by the different industries.⁷

Table 1 gives the final classification we are proposing. As can be observed, the 17 final categories represent a rather high degree of disaggregation we must therefore use indicators that summarize trade performance and make it possible to define the lines of specialization. At the same time we must be able to make a rapid comparison between different countries. This need was met by using a fixed scheme for elaborating and analysing the data, which in this paper was reduced to the indicator of the contribution to the trade balance.⁸

Obviously, this classification has selective elements because we are trying to make compatible and put into practice different theoretical frameworks. Nevertheless, it has the advantage of eliminating several of the limitations that affect each of the categories in itself, i.e., it does not constitute a simple algebraic sum of its parts. However, both for technical reasons (with reference, for example, to the type of trade classification, the disaggregation of the data base used, or to the empirical studies of Latin American technology and production), as well as for reasons dealing basically with levels of aggregation used

⁷For this purpose we used a classification of the Organization for Economic Cooperation and Development (OECD) which divides industrial activities into three groups (low, medium, and high) according to their technological content, which depends in turn on the effort they put into research and development (R&D).

Studies of the role of R&D in international trade began with the work of William Gruber, Dileep Menta and Raymond Vernon, "The R&D factor in international trade and international investment of United States industries", *Journal of Political Economy*, vol. 75, Part 1, Chicago, Illinois, University of Chicago Press, 1967.

⁸For an analytic discussion of this indicator, see Barbera (1990), *op. cit.* However, the field of variation of this indicator for each sector is between 100 (total specialization) and -100 (total external dependence).

Table 1

LATIN AMERICA: RECLASSIFICATION OF TRADE FLOWS

Variables Categories	Natural resources	Skilled labour	Capital unskilled labour	Research and development
Manufactures →	Industries not based on natural resources → Industries based on natural resources →	Established New	Labour-intensive Capital-intensive Labour-intensive Capital-intensive	— low technological content — medium technological content — low technological content — medium technological content — high technological content — low technological content — medium technological content — high technological content
Primary products →	Agriculture Non-combustible minerals Fuels	Agriculture Mining Petroleum derivatives	Labour-intensive Capital-intensive	

Source: Elaborated by the author.

(between three and four digits), this proposal⁹ is based on the assumption that, within each category, given the degree of disaggregation with which we worked, the products that belong

to each sector and the different sectors between themselves have homogeneous and stable technological characteristics throughout the period analysed.

II

Overall view of the region¹⁰

The external constraint on growth in the Latin American countries first became clear from the amount of freedom given to industrial-development policies by the foreign-exchange flows generated by exports of primary products.

Throughout the period studied, these products continued to comprise the largest share of exports from Latin America, while the manufacturing sector, the internal driving force of the substitution strategy, failed to generate an equivalent impetus on the external front, i.e., an export flow that would allow it to pay for its imports of inputs and capital goods. The manufacturing sector was also unable to reduce its technological dependence on the exterior nor the consequent outflows of capital (as payment for production services, royalties, patents and profits). The external quantitative dimension of this process can be represented by the trend between 1965 and 1983 in both the average annual nominal growth rate (in current values) and of the real growth rate (in constant values at 1980 prices) of the region's exports and imports.

The nominal values (figure 1a) indicate that the region's positive performance throughout the 1965-1983 period was the result of a *deficit-*

*based*¹¹ trend in the first two five-year periods considered, and of a *surplus-based* trend between 1975 and 1983. However, from 1982 onward, the trend is recessive; it is characterized by a sharp drop in both imports and exports. Consequently, it cannot be interpreted as a lasting modification of a historical trend but rather as a drastic short-term response of the trade balance to the need to make prompt factor payments on current account.

Considered in real values, the situation is quite different (figure 1b) and is explained to a large extent by the positive trend in the region's terms of trade as a net oil exporter.

In the 1965-1970 period, the average annual real growth rate of imports of the Latin American countries as a whole was almost treble the corresponding rate of exports. This structural imbalance acquired alarming dimensions between 1970 and 1975, a period in which imports reached an annual growth rate—in real terms—of 6.2%, while exports fell sharply by an annual rate of 8.7%. This situation began to change in 1975. That year saw the beginning of the reversal of the relationship between the growth rate of exports and that of imports (3.1% and -7.0% respectively), which accompanied the profound and lasting crisis of the 1980s.¹²

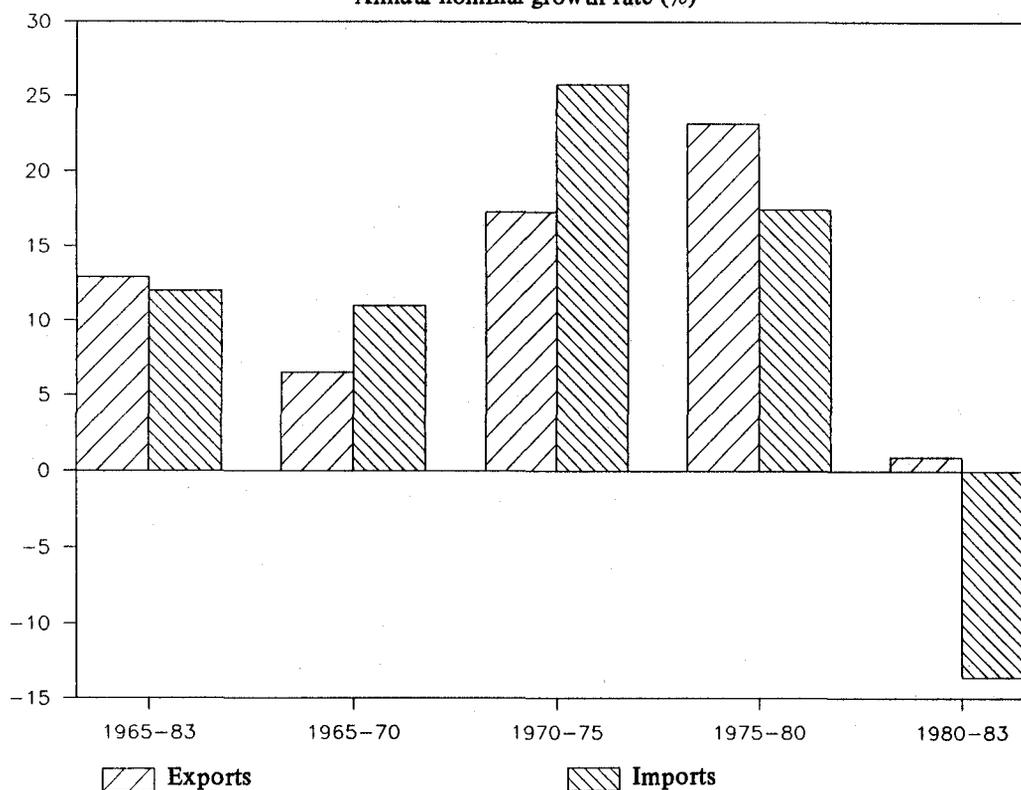
⁹Other taxonomy proposals for typologies were also used and attempts were made to render them compatible—particularly Keith Pravitt, "Sectoral patterns of technical change: towards a taxonomy and theory", *Research Policy*, vol. 13, No. 6, Amsterdam, December 1984. But, given the particular characteristics of the Latin American economic systems—which generate practically no technology—we concluded that they cannot be analysed with schemes elaborated on the basis of observations of developed economies and their technological circuits.

¹⁰All the statistics used in this study were elaborated by the author on the basis of data in current and constant 1980 values from the United Nations Statistical Information System (UNSI). The countries considered are Argentina, Bolivia, Colombia, Chile, Ecuador, Mexico, Paraguay, Peru, Uruguay, Venezuela. Data from 1965-1970 do not include Uruguay.

¹¹The term *deficit-based* (when in italics) refers to growth rates and does not necessarily imply a negative trade balance, but only a growth rate of imports higher than that of exports. The same is true, although in the opposite sense, for the use made in this paper of the term *surplus-based*.

¹²The data base used here does not allow us to aggregate data from the last years of any of the countries under consideration. Nevertheless, this trend has grown stronger, so that the data from 1980-1983 can be considered to represent an underestimation of the reversal of trade flows that took place in the region beginning with the external debt crisis.

Figure 1a
LATIN AMERICA: EXPORTS-IMPORTS, 1965-1983
 Annual nominal growth rate (%)



Source: Prepared by the author, on the basis of data provided by the United Nations Statistical Information System (UNSI).

As the comparison between the growth rates in real and nominal terms shown by the first two figures makes clear, during the period 1980-1983 the terms of trade, positive up till then, also declined. Thus, despite the tremendous effort to export made in order to confront the crisis, the growth in the value of exports was quite small. Later this increased the burden of the adjustment.¹³

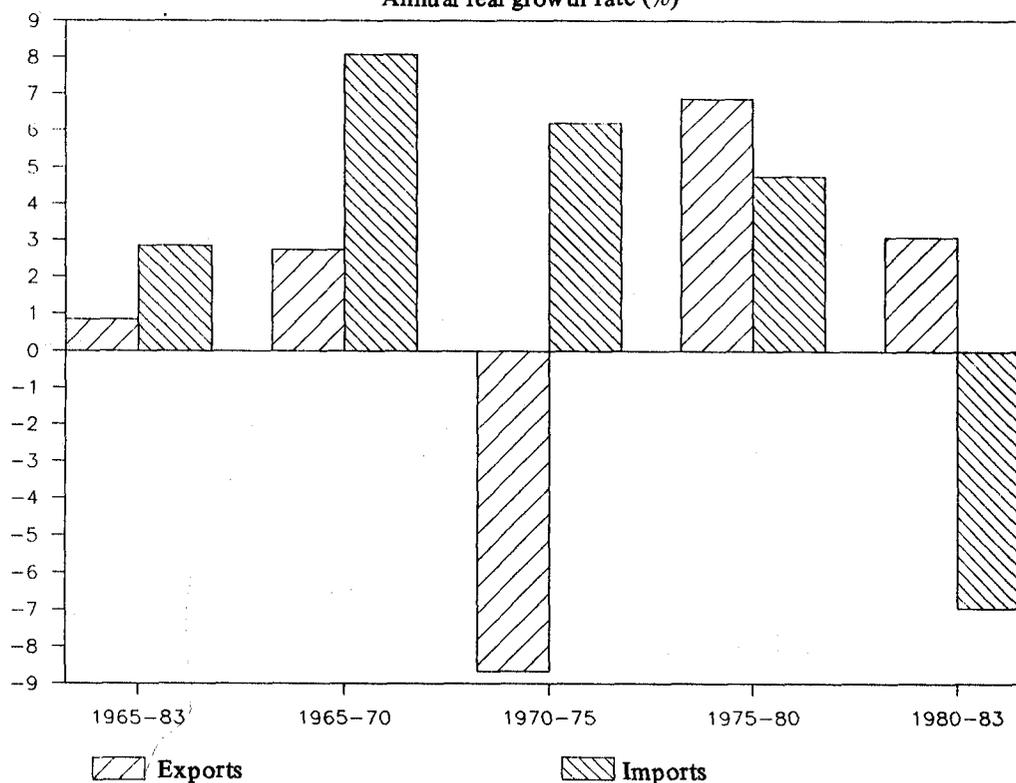
In short, it can be stated that between 1965 and 1980 —i.e., throughout the period that preceded the crisis— the development process of the Latin American economy generated a serious structural imbalance in the external accounts.

¹³ It should be remembered that the drop in the price of oil on international markets also contributed to the burden of the adjustment.

Figures 2a and 2b illustrate this same result in more detail. In figure 2a the average rates of nominal growth of the main technological categories are compared; in figure 2b, the same relations are given on the basis of constant values. A comparison of the two figures allows us to make some comments about the effect that the changes in the terms of trade have had on the balances of payments in the region.

Between 1965 and 1980, Latin American exports and imports, calculated in current values, evolved on the average in an almost identical fashion: exports grew at an average annual rate of 17.5%, while imports increased at an average annual rate of 18% (figure 2a). This equilibrium was the result of a positive trend in manufactures not based on natural resources and of a deficit-based trend on the part of primary products and manufactures based on natural resources.

Figure 1b
LATIN AMERICA: EXPORTS-IMPORTS, 1965-1983
 Annual real growth rate (%)



Source: Prepared by the author, on the basis of data provided by the United Nations Statistical Information System (UNSIIS).

Figure 2b, in turn, shows that for primary products imports constantly tended to increase and exports decrease, while for manufactures imports grew more rapidly than exports. From this viewpoint, then, the trade performance of Latin America was markedly *deficit-based*.

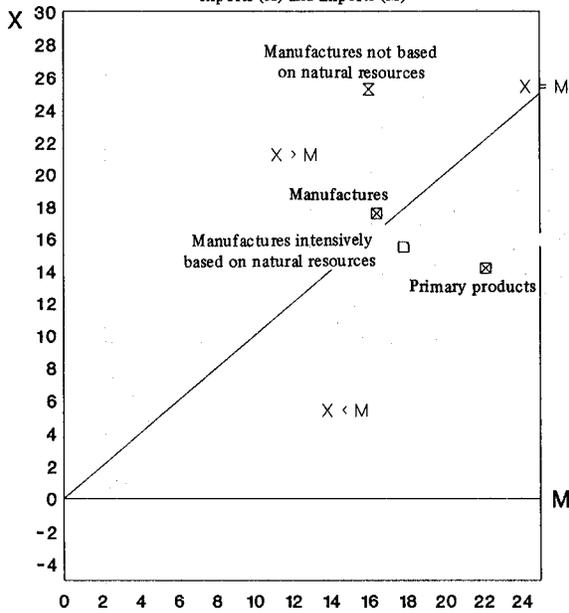
The terms of trade, which can be roughly deduced by comparing figures 2a and 2b, seem to have been favourable for all sectors of the region (with the exception of manufactures that use natural resources more intensively) and, in particular, for manufactures not based on natural resources.

Regional aggregate data represent the sum of different trends, and consequently conceal the marked disparities between the performances of the different countries. However, these differences can be seen diagrammatically in figures 3a and 3b, which were constructed according to the same logic used in figures 2a and 2b.

The average annual rate of growth calculated in nominal values (figure 3a) makes it possible to evaluate the *deficit-based* trade performance between 1965 and 1980 of the non-oil-exporting countries, plus Venezuela (a country which in any case was close to the line of external equilibrium). In this period, the countries with the most critical performance were Brazil (in spite of a strong growth in exports, equal to 18.3%), Paraguay and Argentina.

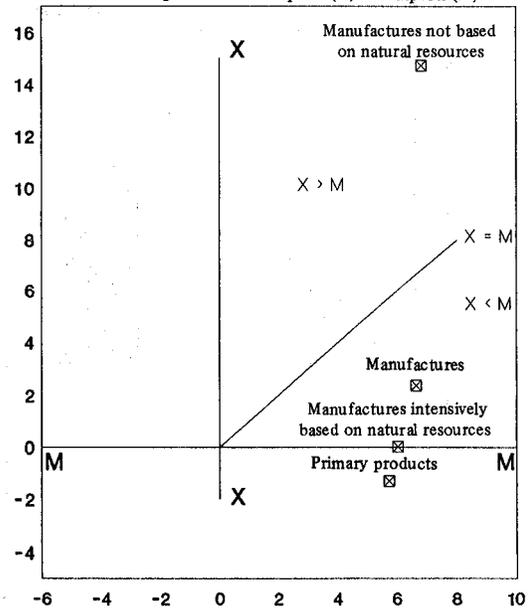
The real growth rates (figure 3b) show a situation very different from the previous one. A perusal of them leads to the conclusion that in most of the countries trade relations were not in critical areas (i.e., those on the right of the line $X = M$). This difference is explained by the evolution of the terms of trade, particularly because of the rises in the price of petroleum between 1973 and 1979.

Figure 2a
LATIN AMERICA: 1965-1980
Average annual nominal growth rate of exports (X) and imports (M)



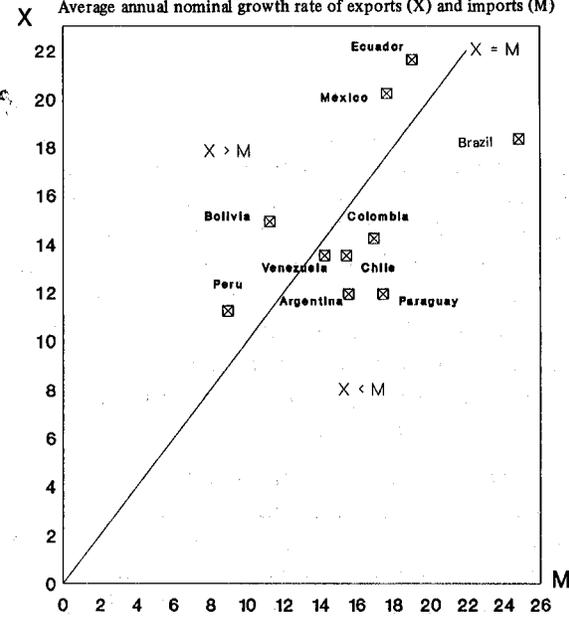
Source: Prepared by the author, on the basis of the series in current values of the United Nations Statistical Information System (UNSIIS).

Figure 2b
LATIN AMERICA: 1965-1980
Annual real growth rate of exports (X) and imports (M)



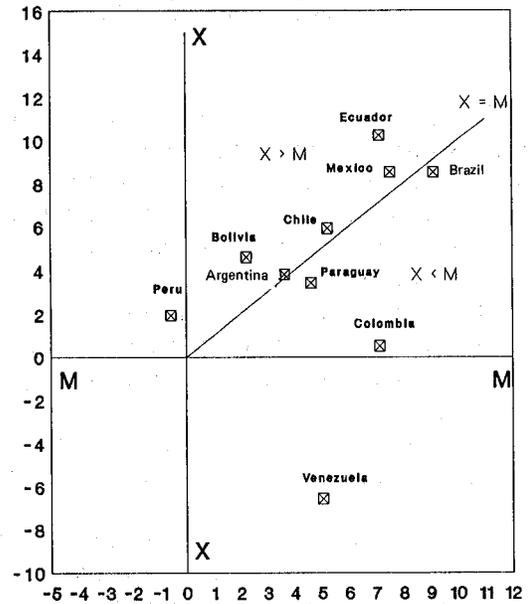
Source: Prepared by the author, on the basis of the series in constant values of the United Nations Statistical Information System (UNSIIS).

Figure 3a
LATIN AMERICA: 1965-1980
Average annual nominal growth rate of exports (X) and imports (M)



Source: Prepared by the author, on the basis of the series in current values of the United Nations Statistical Information System (UNSIIS).

Figure 3b
LATIN AMERICA: 1965-1980
Annual real growth rate of exports (X) and imports (M)



Source: Prepared by the author, on the basis of the series in current values of the United Nations Statistical Information System (UNSIIS).

III

The structure of Latin American trade

1. Imports

This section gives an overall picture of the commercial exchanges of 11 Latin American countries from 1965 onward. We will first consider the behaviour of imports.

Imports of manufactures (table 2) represented in 1965 85% of total imports, with the remaining 15% of imports of primary products.

Imported manufactures were concentrated in industries not based on natural resources (66%), and among these, in new labour-intensive (31%) and capital-intensive (19%) industries, and particularly in industries of medium technological content of each one of these subgroups (21% in labour-intensive and 13% in capital-intensive).

Industries based on natural resources, agricultural industries —labour- and capital-intensive— absorbed 8.8% of those imports.

Among primary products, agricultural products, with 8.6%, and fuels, with 4.7%, were the two largest items in that same year.

On the other hand, the growth of imports was accompanied by a change in their breakdown, so that in 1980, almost at the height of the substitution process, while the percentage of imports of primary products had increased, that of imports of manufactures had fallen by 11 points in relation to 1965, representing 74% of total imports. This decline affected almost exclusively the imports of the industries not based on natural resources, which declined from 66% in 1965 to 54% in 1980. Within this subgroup, the biggest drop was registered in new labour-intensive industries with medium technological content, whose imports fell from 21% to 15%. The decline in the other subgroups of low and medium technological content was quite homogeneous and widespread (except in capital-intensive established industries), while the imports of new industries of high technological content increased their share to 15% of total imports.

Imports of industries based on natural resources, to the contrary, increased their share

by one percentage point, as a result of an increase of mining and petroleum derivative imports, and of a drop in imports of labour-intensive agricultural industries.

During those same years, imports of primary products almost doubled their share (from 15% to 26%), exclusively because of the trebling of the weight of fuels, a change that derived both from the intensive process of industrialization undertaken by Brazil and the increases in the price of oil.

The external debt crisis and the adverse trend in transfers of financial resources from the developed countries towards the countries of the region inaugurated the period we are now experiencing, which is characterized by adjustment processes.

These processes centred initially on the imports variable, the primary means of establishing immediate equilibrium in the current account. Consequently, imports fell off abruptly, especially in the years immediately after the crisis, as was clearly shown by the drop in imports of manufactures of more than 40% in current values (table 2).

This reduction modified the breakdown of Latin American imports in relation to imports of primary products, which came to represent in 1983 a third of total imports, as opposed to much smaller percentages during the preceding period.

Among imports of manufactures not based on natural resources, the largest decline took place among capital-intensive industries, both established and new. The breakdown of new labour-intensive industries changed significantly due to a persistently strong decline of the component with medium technological content, which dropped to 13% in 1983, and to the increase of the component with high technological content, which reached 11% that same year, a modification all the more notable as the former was more than double the latter during the 1970s.

Table 2

**LATIN AMERICA: SPECIALIZATION AND EXTERNAL SECTOR IMPORTS
BY CATEGORY OF GOODS AND TECHNOLOGICAL INTENSITY**

		Millions of current dollars					Percentages				
		1965	1970	1975	1980	1983	1965	1970	1975	1980	1983
I	Manufactures	6 056	10 017	29 138	59 461	34 234	84.6	85.8	78.5	73.7	68.1
A	Industries based on natural resources	1 361	2 282	6 873	15 992	9 215	19.0	19.5	18.5	19.8	18.3
a1	Labour-intensive agricultural industries	385	516	1 312	3 329	2 032	5.4	4.4	3.5	4.1	4.0
a2	Capital-intensive agricultural industries	245	426	981	2 858	1 562	3.4	3.7	2.6	3.5	3.1
a3	Mining	608	1 172	3 927	8 219	4 527	8.5	10.0	10.6	10.2	9.0
a4	Petroleum derivatives	123	169	653	1 587	1 094	1.7	1.4	1.8	2.0	2.2
B	Industries not based on natural resources	4 694	7 734	22 266	43 469	25 020	65.6	66.3	60.0	53.9	49.8
b1	Established labour-intensive industries	349	437	929	3 001	1 473	4.9	3.7	2.5	3.7	2.9
b1.1	Low technological content	336	417	881	2 907	1 409	4.7	3.6	2.4	3.6	2.8
b1.2	Medium technological content	13	20	48	94	64	0.2	0.2	0.1	0.1	0.1
b2	Established capital-intensive industries	804	1 300	4 958	7 634	3 476	11.2	11.1	13.4	9.5	6.9
b2.1	Low technological content	637	979	3 964	5 296	1 942	8.9	8.4	10.7	6.6	3.9
b2.2	Medium technological content	167	321	994	2 338	1 534	2.3	2.7	2.7	2.9	3.1
b3	New labour-intensive industries	2 199	3 922	11 300	21 005	13 551	30.7	33.6	30.4	26.0	27.0
b3.1	Low technological content	138	258	625	1 546	1 363	1.9	2.2	1.7	1.9	2.7
b3.2	Medium technological content	1 507	2 491	7 670	11 939	6 745	21.1	21.3	20.7	14.8	13.4
b3.3	high technological content	554	1 173	3 005	7 521	5 443	7.7	10.0	8.1	9.3	10.8
b4	New capital-intensive industries	1 342	2 076	5 079	11 828	6 519	18.7	17.8	13.7	14.7	13.0
b4.1	Low technological content	104	157	402	818	717	1.5	1.3	1.1	1.0	1.4
b4.2	Medium technological content	949	1 358	3 475	8 223	4 213	13.3	11.6	9.4	10.2	8.4
b4.3	High technological content	289	561	1 203	2 788	1 589	4.0	4.8	3.2	3.5	3.2
II	Primary products	1 049	1 586	7 907	20 851	15 844	14.7	13.6	21.3	25.8	31.5
1	Agricultural	617	959	2 738	6 760	4 210	8.6	8.2	7.4	8.4	8.4
2	Non-combustible mineral	93	119	506	1 033	709	1.3	1.0	1.4	1.3	1.4
3	Fuels	339	509	4 663	13 059	10 925	4.7	4.4	12.6	16.2	21.7
III	Other	53	71	78	380	198	0.7	0.6	0.2	0.5	0.4
	Total	7 157	11 674	37 123	80 692	50 275	100	100	100	100	100

Source: Elaborated by the author on the basis of figures from the United Nations Statistical Information System (UNSI) and from the condensed data bank on foreign trade (COMTRADE).

Table 3

**LATIN AMERICA: SPECIALIZATION AND EXTERNAL SECTOR EXPORTS
BY CATEGORIES OF GOODS AND TECHNOLOGICAL INTENSITY**

		Millions of current dollars					Percentages				
		1965	1970	1975	1980	1983	1965	1970	1975	1980	1983
I	Manufactures	3 107	5 294	12 450	34 911	37 482	34.0	42.3	44.7	44.2	46.2
A	Industries based on natural resources	2 703	4 265	8 390	23 172	22 451	29.6	34.1	30.2	29.4	27.7
a1	Labour-intensive agricultural industries	753	1 260	2 358	7 374	7 105	8.2	10.1	8.5	9.3	8.8
a2	Capital-intensive agricultural industries	242	443	2 186	2 927	1 982	2.7	3.5	7.9	3.7	2.4
a3	Mining	898	1 585	1 163	5 812	4 997	9.8	12.7	4.2	7.4	6.2
a4	Petroleum derivatives	811	976	2 683	7 058	8 366	8.9	7.8	9.6	8.9	10.3
B	Industries not based on natural resources	403	1 029	4 060	11 739	15 031	4.4	8.2	14.6	14.9	18.5
b1	Established labour-intensive industries	90	266	1 264	3 362	3 434	1.0	2.1	4.5	4.3	4.2
b1.1	Low technological content	89	266	1 257	3 349	3 424	1.0	2.1	4.5	4.2	4.2
b1.2	Medium technological content	1	1	7	13	10	-	-	-	-	-
b2	Established capital-intensive industries	121	225	521	1 873	3 558	1.3	1.8	1.9	2.4	4.4
b2.1	Low technological content	109	206	427	1 566	2 953	1.2	1.6	1.5	2.0	3.6
b2.2	Medium technological content	12	19	95	307	605	0.1	0.2	0.3	0.4	0.7
b3	New labour-intensive industries	95	353	1 360	3 780	5 430	1.0	2.8	4.9	4.8	6.7
b3.1	Low technological content	28	64	195	631	733	0.3	0.5	0.7	0.8	0.9
b3.2	Medium technological content	43	148	697	2 010	2 015	0.5	1.2	2.5	2.5	2.5
b3.3	High technological content	24	140	469	1 139	2 681	0.3	1.1	1.7	1.4	3.3
b4	New capital-intensive industries	97	185	915	2 724	2 610	1.1	1.5	3.3	3.5	3.2
b4.1	Low technological content	9	25	82	193	246	0.1	0.2	0.3	0.2	0.3
b4.2	Medium technological content	54	100	683	2 259	2 017	0.6	0.8	2.5	2.9	2.5
b4.3	High technological content	34	60	149	272	346	0.4	0.5	0.5	0.3	0.4
II	Primary products	6 004	7 156	15 116	43 541	43 235	65.7	57.2	54.3	55.2	53.3
1	Agricultural	3 328	4 141	5 729	14 669	14 058	36.4	33.1	20.6	18.6	17.3
2	Non-combustible minerals	651	938	1 997	4 184	3 310	7.1	7.5	7.2	5.3	4.1
3	Fuels	2 024	2 078	7 390	24 688	25 867	22.2	16.6	26.6	31.3	31.9
III	Other	23	58	257	476	53	0.3	0.5	0.9	0.6	0.1
	Total	9 133	12 508	27 823	78 928	81 185	100	100	100	100	100

Source: Elaborated by the author on the basis of figures from the United Nations Statistical Information System (UNSIIS) and from the condensed data bank on foreign trade (COMTRADE).

2. Exports

Table 3 shows the evolution of Latin American exports during the period 1965-1983. A particularly striking change in their breakdown is the increase of exports of manufactures, which rose from 34% in 1965 to 46% in 1983.

At the same time, exports of primary products dropped from 66% to 53%, due to a reduction by half of the share of agricultural exports (from 36.4% to 17.3%), the sharp decline of mineral exports (from 7% to 4%), and the strong increase of the export quota for fuels (from 22% to 32%), especially due to the influence of Mexico's exports.

The increase in exports of manufactures was not prompted by an important change in the contribution of industries based on natural resources. This remained practically stable at

around 28%. It came rather from industries not based on natural resources which were the special concern of development policies. Their contribution grew more than four times, rising from 4% to 18% during the period. Among these industries, the biggest increases were in exports of the established industries with low technological content, both capital-intensive and labour-intensive (these latter developed very rapidly during the 1970s and stabilized around 4% the following decade), and to exports in all the branches of new labour-intensive industries.

The percentage of exports of new capital-intensive industries also rose in the branches with lower technological content, although with some symptoms of stagnation during the 1980s. On the contrary, exports of industries with higher technological content remained stable throughout the period studied.

IV

Trade balances and sectoral contributions

1. Regional breakdown

Figure 2a shows that the growth rates of exports and imports for the two main sectors of the Latin American economy —primary products and manufactures— tended to be *deficit-based* during the period 1965-1980.

First, while exports of primary products (traditionally the backbone of the balance of payments in the region) declined by an average annual real rate of 1.3%, imports of those products grew at a high annual real rate of 5.7%.

Second, manufactures, which begin with a deficit, grew much less than imports. This was the combined effect of an overwhelming real growth of exports of manufactures not based on natural resources, which reached an average annual rate of 14.7% as opposed to a growth of imports of 6.8%, and of a markedly *deficit-based* performance by manufactures based on natural resources, the imports of which grew at an average annual rate of 6%, while exports remained constant in real terms throughout those 15 years.

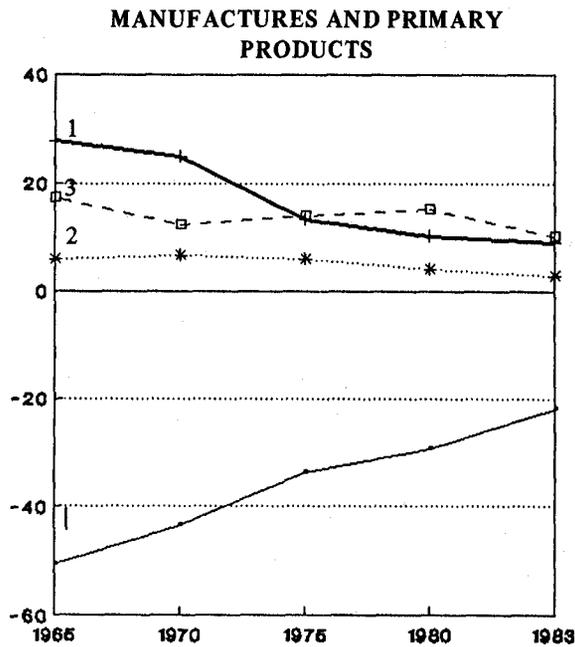
Figure 4 provides an overview of the contribution to the trade balance of the different sectors of the Latin American economies between 1965 and 1980. Some rough conclusions can be drawn from observing its four quadrants.

The first quadrant shows that the trade balance of the Latin American countries continued to be sustained by primary products, among which agricultural products (the most important at the beginning) and fuels came to have equal importance. Mineral products tended to decline slightly. If the contribution index is interpreted as the measure of the continent's external specialization, two clearly defined trends become immediately apparent: the noticeable decline in primary products and the evident and large increase in the contribution of manufactures.

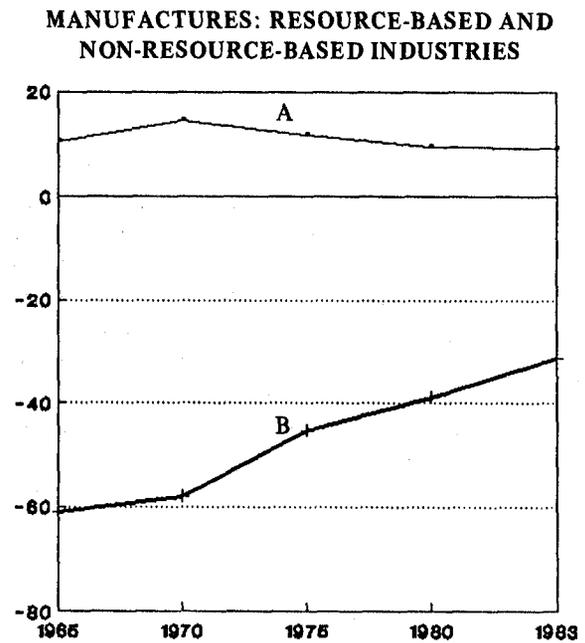
The second quadrant reveals that throughout the period the negative balances are concentrated in the sector of manufactures not based on natural resources, to such a degree that they determine an extremely negative index of sectoral contribution to global balance.

Figure 4

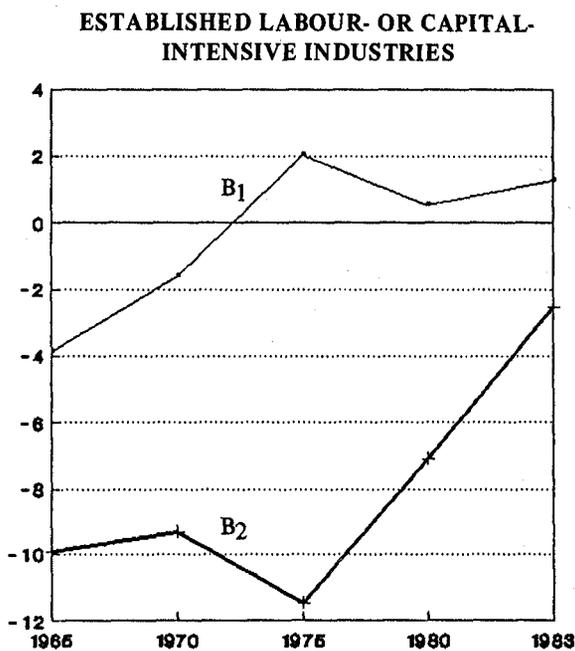
LATIN AMERICA: SPECIALIZATION AND EXTERNAL SECTOR, 1965-1983



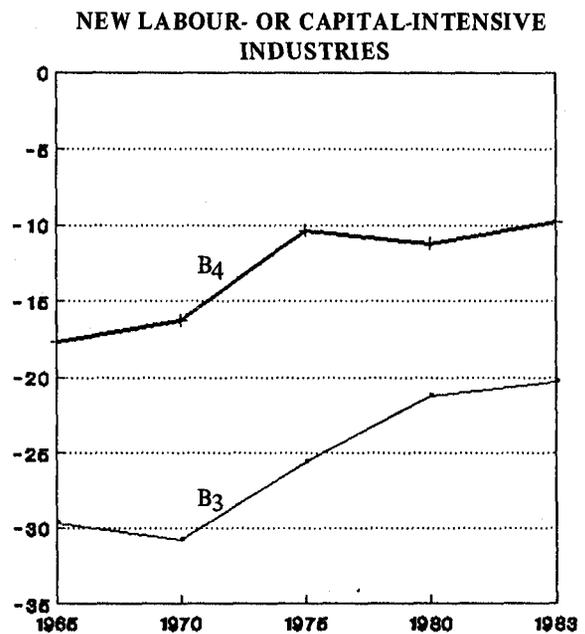
- | Manufactures
- 1 Primary products (agricultural)
- 2 Primary products (mineral)
- 3 Primary products (energy)



- A Manufactures based on natural resources
- B Manufactures not based on natural resources



- B1 Established labour-intensive manufactures
- B2 Established capital-intensive manufactures



- B3 New labour-intensive manufactures
- B4 New capital-intensive manufactures

Source: Prepared by the author, on the basis of data provided by the United Nations Statistical Information System (UNSIIS).

However, the magnitude of this index diminished noticeably with the years, explaining to a large extent the variation in the performance of the manufacturing sector as a whole.

Manufactures using natural resources intensively made a positive and stable contribution throughout the whole period.

The third quadrant, which concentrates on the contribution of established industries, reveals some important changes. On the one hand, there was a surge in labour-intensive industries, which became the one group with a positive balance and a positive contribution among manufactures not based on natural resources. On the other hand, in capital-intensive industries impressive growth marked the last two years, a fact which in 1983 was explained as a short-term result of the drop in imports following the crisis.

Nevertheless, the increase in the contribution of established industries did not come from the branches with higher technological content, whether labour- or capital-intensive.

New industries (fourth quadrant), despite their recovery during the 1970s, represented the weakest point of Latin America's external role and had most of the negative balances with the world market, especially in the labour-intensive branches with higher technological content (table 4).

2. Country breakdown

Figures 5 to 15¹⁴ show separately the specialization of each one of the 11 countries under consideration, in the 10 main technological categories proposed (three primary and seven manufacturing) during the period 1965-1987.

In the first quadrant of the figures, the contribution of the three primary sectors (agricultural, mining and energy) is compared with that of the manufacturing sectors taken together. The comparison brings out the disappointing technological and industrial role of trade in most Latin American countries, as

well as their persistent specialization as providers of primary products for the world economy. Only three countries (Brazil, Chile and Uruguay) achieved a positive contribution index in manufacturing during the period under study.

Brazil is the only country in which the manufacturing specialization became steadily positive and even far superior to that of the primary sectors during the 1980s, taking first place over agricultural products.

In Chile, in turn, manufactures achieved levels of positive contribution already during the 1970s (obviously due to the influence of the variations in the price of copper), which were maintained, although irregularly, up to the beginning of the following decade. At that point they were surpassed by agricultural products, which thus reached the top of the ascending curve they had followed from the beginning of the period and which led them to attain levels of contribution close to those of mining.

In the case of Uruguay, there is a clear rising trend of manufacturing specialization, which, however, reaches levels of positive contribution only in the years immediately after the crisis. Agricultural specialization, in turn, though showing signs of decline, continued to be the most stable structural element in the external trade of that country.

In two other countries (Argentina and Colombia), the contribution of the manufacturing sector, although constantly negative, tended to improve rapidly during the 1970s, but displayed clear symptoms of stagnation during the 1980s.

In some countries (Mexico up to 1985, Paraguay and Peru), the contribution of manufacturing grew during the 1970s only to fall during the next decade. In others it fell constantly (Bolivia), remained steadily negative (Ecuador), or barely improved (Venezuela) during the 1980s.

In the second quadrant of the corresponding figures, the contribution trend of industries based on natural resources is compared with that of industries not based on them.

First, if specialization in industries based on natural resources is examined, three main groups of countries can be distinguished:

¹⁴See the figures at the end of this article.

Table 4

**LATIN AMERICA: TRADE BALANCE AND CONTRIBUTION TO THE BALANCE
BY CATEGORIES OF GOODS AND TECHNOLOGICAL INTENSITY**

		Trade balance					Contribution to the balance				
		Millions of current dollars					Percentages				
		1965	1970	1975	1980	1983	1965	1970	1975	1980	1983
I	Manufactures	-3 006	-5 187	-17 465	-27 201	823	-50.6	-43.5	-33.7	-29.5	-21.9
A	Industries based on natural resources	1 213	1 845	1 358	6 262	12 597	10.6	14.5	11.6	9.5	9.3
a1	Labour-intensive agricultural industries	288	711	1 000	3 929	4 962	2.9	5.7	4.9	5.2	4.7
a2	Capital-intensive agricultural industries	-23	-22	1 184	10	415	-0.8	-0.1	5.2	0.2	-0.7
a3	Mining	257	354	-2 880	-2 810	247	1.3	2.6	-6.4	-2.8	-2.8
a4	Petroleum derivatives	691	801	2 053	5 134	6 974	7.2	6.4	7.9	7.0	8.1
B	Industries not based on natural resources	-4 218	-7 031	-18 823	-33 463	-11 774	-61.2	-58.0	-45.4	-39.0	-31.3
b1	Established labour-intensive industries	-243	-180	290	161	1 753	-3.9	-1.6	2.0	0.5	1.3
b1.1	Low technological content	-235	-165	323	240	1 807	-3.7	-1.4	2.1	0.6	1.4
b1.2	Medium technological content	-8	-15	-33	-79	-54	-0.2	-0.2	-0.1	-0.1	-0.1
b2	Established capital-intensive industries	-710	-1 163	-4 406	-6 127	-402	-9.9	-9.3	-11.5	-7.1	-2.5
b2.1	Low technological content	-561	-856	-3 512	-4 028	684	-7.7	-6.7	-9.1	-4.6	-0.2
b2.2	Medium technological content	-149	-307	-894	-2 099	-1 085	-2.2	-2.6	-2.3	-2.5	-2.3
b3	New labour-intensive industries	-2 114	-3 727	-10 231	-17 976	-8 899	-29.7	-30.8	-25.6	-21.2	-20.3
b3.1	Low technological content	-125	-210	-417	-1 016	-633	-1.6	-1.7	-1.0	-1.1	-1.8
b3.2	Medium technological content	-1 461	-2 449	-7 166	-10 351	-5 204	-20.6	-20.2	-18.2	-12.2	-10.9
b3.3	High technological content	-528	-1 068	-2 594	-6 609	-3 063	-7.5	-8.9	-6.4	-7.9	-7.5
b4	New capital-intensive industries	-1 152	-1 962	-4 476	-9 521	-4 226	-17.7	-16.3	-10.4	-11.2	-9.8
b4.1	Low technological content	-92	-137	-362	-684	-542	-1.4	-1.1	-0.8	-0.8	-1.1
b4.2	Medium technological content	-814	-1 314	-3 043	-6 142	-2 349	-12.7	-10.8	-6.9	-7.3	-5.9
b4.3	High technological content	-246	-511	-1 071	-2 696	-1 335	-3.7	-4.3	-2.7	-3.1	-2.7
II	Primary products	4 908	5 461	6 684	20 552	25 478	51.1	43.6	33.0	29.3	21.7
1	Agricultural	2 735	3 203	3 014	7 844	9 778	27.8	24.9	13.2	10.2	8.9
2	Non-combustible minerals	557	813	1 478	3 031	2 581	5.8	6.5	5.8	4.0	2.7
3	Fuels	1 616	1 445	2 192	9 676	13 119	17.4	12.3	14.0	15.1	10.1
III	Other	-43	-17	-29	-821	-863	-0.5	-0.1	0.7	0.1	-0.3
	Total	1 860	257	-10 810	-7 471	25 437	-	-	-	-	-

Source: Elaborated by the author on the basis of figures from the United Nations Statistical Information System (UNSI) and from the condensed data bank on foreign trade (COMTRADE).

Note: Contribution = $100 \cdot \left\{ \frac{(x_i - m_i)}{(X + M)/2} - \left\{ \frac{(X - M)}{(X + M)/2} \cdot \frac{(x_i + m_i)}{(X + M)} \right\} \right\} / \left\{ \frac{[X/(X + M)]}{1} \cdot \left[1 - \frac{(X - M)}{(X + M)} \right] \right\}$

X, M = Export, Import totals, x_i, m_i = Export, Import of sector "i".

—Those that present stable degrees or positive growth of specialization (Argentina, Bolivia,¹⁵ Brazil, Chile, Peru, Uruguay and Venezuela);

—Those that did not achieve positive contributions, despite improving their relative performance (Colombia and Ecuador);

—Those that have shown a trend opposite to that of the region as a whole, i.e., have gone from significantly positive indicators to others markedly negative (Mexico and Paraguay).

Second, for manufactures not based on natural resources, Brazil was the only Latin American country that successfully specialized internationally in this field during the 1980s.

All the other countries —with the exception of Bolivia, which worsened its relative performance, and Ecuador, which maintained it practically stable— reduced their almost absolute lack of specialization in this field, especially Argentina. This progress took place, however, within the framework of a severe stagnation during the 1980s, which particularly affected Chile, Paraguay, Peru and Uruguay.

The third quadrant compares the performance of the contributions of established labour-intensive manufacturing industries with that of the corresponding capital-intensive industries.

As mentioned above, the trend shown in figure 4, covering the whole region, conceals substantial differences between the countries studied. In fact, toward the end of the period, the positive contributions were concentrated, in descending order of size, in Uruguay, Brazil, Argentina,¹⁶ Peru and Colombia. Except for Peru, which joined this group later, the specialization process had in this case its most dynamic period during the 1960s and 1970s, clearly stagnating in the 1980s.

All the other countries, on the contrary, present negative indicators. Some do so, however, within a trend towards growth, such as Bolivia, Ecuador, Paraguay and Venezuela. Mexico, in turn, moves from a positive to a slightly negative contribution, especially due to the oil boom, while in Chile the indicators that

improve up to the 1970s begin to decline until they become negative, owing to an indiscriminate opening of its market together with an overvalued exchange rate.

Also, in the case of established capital-intensive industries, most of the results attained by the region as a whole may be attributed to the performance of Brazil. Brazil showed an impressive dynamism between the end of the 1970s and the beginning of the 1980s, but this appears to have quickly stagnated. However, Chile, owing to exports of mineral surpluses, had also reached, even before Brazil, a positive contribution in these branches, which was even able to recover after the sharp drop between 1975 and 1980.

Argentina, although its contribution was negative, showed a rising trend, with results very similar to those of the region as a whole. Ecuador and Bolivia —a country that followed a trend similar to that of Chile, but in the opposite direction— saw their specialization in these sectors plummet, while Colombia, Peru, Paraguay and Uruguay were unable to maintain the trend toward growth they had shown up to the debt crisis. Finally, Mexico, even in the midst of large fluctuations, was able to maintain and even slightly improve its initial level.

The fourth quadrant of figures 5 to 15 shows what has already been pointed out in the analysis of figure 4, which represents the whole region: the new industries, both labour- and capital-intensive, are the area of least specialization in the Latin American economies. Moreover, both on the regional and national level, the contribution indicators of capital-intensive industries are much less negative than those of labour-intensive industries. If we remember also the relative structural scarcity of skilled labour in relation to unskilled labour, so characteristic of Latin America, we may detect in the fourth quadrant of the figures a trend that is decisive for the style of development and its effect on the region's international role. We are referring specifically to the desire to allocate scarce resources precisely to the sectors that use them intensively. They are highly inefficient in the international sphere and are dominated by highly protectionist policies with strong transnational participation. This trend, although it helped to reduce the imports of these

¹⁵Bolivia always presents a positive indicator but, however, with a marked relative decline.

¹⁶With a significant turnaround in 1987.

sectors (a reduction which explains that the indicator for them was better than that for labour-intensive industries), displayed no capacity to generate a sustainable movement in terms of domestic equilibria (unemployment) nor in terms of external equilibrium (as seen from the greater dynamism of labour-intensive sectors).

Brazil represents in this respect an exception only insofar as it was able to cross—in 1980—the threshold of positive contribution in capital-intensive industries. This result was achieved, however, at the cost of serious fiscal

pressures, both direct—related mostly to the promotion of industry and to export subsidies—and indirect. It displayed moreover an early stagnation, especially as compared with the dynamism shown by those same sectors in world trade during the 1980s. These considerations are applicable to all the countries of the region which, even in a framework of emphatically negative contributions, have shown an initially positive trend in the performance of these sectors, as is the case of Argentina, Bolivia, Colombia, Chile, Mexico, Peru, Uruguay and Venezuela.

V

Evaluation and conclusions

This article concentrates on the period 1965-1987, which includes very diverse trends in both Latin American and world economic history, and ends on the threshold of a period which seems to presage important political and economic changes. Consequently, the region's trade performance during this time reflects to some extent the tremendous instability and enormous variations—of a magnitude perhaps still unknown—to which both economic agents and political planners have been submitted.

Without a doubt, the most dynamic element of this period was technological and organizational change. There is also no doubt, from the viewpoint of economic theory, that the speed with which these changes were disseminated disrupted the explanatory capacity of those theoretical models whose fundamental concepts were still based on the perfectly competitive market, homogeneity of factors, perfect and free access to technology and, in the final analysis on the incorporation of technology as an exogenous parameter.¹⁷

Despite industrial progress, the main obstacle to growth in Latin America during the

period under consideration was the external constraint, which is increasingly identified with the technology gap (seen in trade flows) that separates this continent from the developed countries, and to a lesser extent, from some newly industrialized countries (NICs).

It would be superficial to try to explain external performance, whose character seems to be more structural than short term, with reference exclusively to exogenous variables. This is so because in the medium term an open economic system¹⁸ should have the internal capacity to adapt to external changes, a capacity which supposedly would have to operate that much more quickly to the extent that the degree of openness was greater. Now the degree of openness is measured correctly not so much by the relative importance of trade in relation to production (which in most of the Latin American countries is not much), as by the decisive character of imports for the normal performance of all the activities of an economy, which is precisely what happens in the case of the Latin American economies.

Indeed, the decline in imports due to the debt crisis, particularly of capital goods, increased and prolonged indefinitely the imbalances generated

¹⁷ See Nathan Rosenberg, *Inside the Black Box: Technology and Economics*, Cambridge, Harvard University Press, 1982; Patricio Mujica and Jorge Marshall, *op. cit.*, and Martin Fransman (1985), *op. cit.*

¹⁸ This very characterization—openness—already represents an implicit acceptance of making the exogenous endogenous.

by the financial variables. This laid bare the vulnerability of the Latin American economic systems and the tremendous difficulties they have in trying to catch up with the vigorous technological progress of the last two decades in the world economy. The countries of the region, which had begun to consolidate their own industrial position within the world economy, saw their original objectives of developing their production become increasingly unattainable, since they were incapable of keeping in step with those changes.

The main effects of the extraordinary surge in the conception and application of technological and organizational innovations can be summarized very roughly on two principal levels. First, in the context of the *vertical* perspective of development, these innovations have broken down Rostow's sequential strategy of the stages of development. In terms of the hierarchy among countries, the rise of the NICs took place in a context of incorporation that extended the tendency of the terms of trade to deteriorate to certain products and industrial sectors and raised protectionist barriers in the developed countries.

On the other level, in a *horizontal* perspective, the more important one in our judgement, the magnitude and impact of the new technological development produced a profound qualitative modification of both the economic systems and their rules of the game as well as the behaviour that was predominant in those systems. Given their characteristics, the dissemination of the new technologies left nothing intact. They not only created new products and sectors, but also had widespread effects on all economic sectors (from the primary sector to services), on the sphere of production and its organization (the move from the enterprise system to a network system), on distribution (management of commercial networks, new warehousing techniques, etc.), and on reproduction. And above all, with regard to the education and training of human resources, labour was no longer considered as a cost component and came to be considered as an asset both from the microeconomic and macroeconomic viewpoint.¹⁹

There is a growing consensus that the main cause of Latin America's incapacity to handle

these changes is the fact that the region was for the last 40 years the most fertile ground for experimenting with import-substitution policies,²⁰ and also, that after a long and successful phase of growth, the costs of these policies began to outweigh their benefits.

In this regard, the most criticized aspects of import-substitution policies are the systems of multiple exchange rates; the levels and dispersion of the tariff and non-tariff barriers (which in fact gave most of the industrial sectors a good deal of protection during almost indefinite periods, while the primary sectors chronically faced negative effective rates of protection); the *systems* of exemptions constructed in such a way that in fact they institutionalized different treatment for distinct economic agents, thus lending themselves to strong manipulation, and finally, the incapacity of the public sectors to administer such complex systems.²¹

To sum up, these policies²² generated tremendous rents,²³ pressure groups and enormous possibilities for speculation. Consequently the economies suffered a premature sclerosis, since the development process was unable to stimulate technological

¹⁹For the concept of the network-enterprise, see Cristiano Antonelli, *L'impresa-rete*, CESPE Papers, No. 7, Padua, Italy, 1987, and by the same author, *Cambiamento tecnologico e teoria dell'impresa*, Turin, 1982. For a summary of the presentation and a brilliant historical analysis of the evolution of production systems (market-system, enterprise-system, network-system) and of the concept of economies of scale, see B. Di Bernardo, *Economie di scala, economie di scopo, economie di varietà. Il valore economico della complessità*, Economia e Politica Industriale, No. 61, Milan, 1989. In this regard, we should mention the growing criticism of the conceptual division between production and organization which the penetration of the new information technologies is introducing into present-day industry.

²⁰On the origin of this process, see Andrés Bianchi and Toboshi Nohara, *A Comparative Study on Economic Development Between Asia and Latin America*, Tokyo, Institute of Developing Economies, 1988.

²¹See ECLAC, *Estado y desarrollo: la necesaria reconversión del sector público de América Latina y el Caribe* (LC/R.824), Santiago, Chile, 1989.

²²For a lucid and penetrating exposition that also reconstitutes the basic stages of structuralist thinking, see Osvaldo Rosales, "An assessment of the structuralist paradigm for Latin American development and the prospects for its renovation", *CEPAL Review*, No. 34 (LC/G.1521-P), Santiago, Chile, April 1988.

²³See Anne Krueger, "The Political Economy of Rent-Seeking Society", *American Economic Review*, vol. 64, No. 3, June 1974.

innovation and dissemination among these productive systems. They were characterized by a high degree of concentration and accustomed to operating according to a static oligopolistic logic of defending acquired positions, which were moreover passed on almost by inheritance.²⁴

In time, the joint action of these elements created an entrenched economic system, i.e., a system that is defined both by barriers and by the immense complementary areas which remain outside of it. It is following the wrong path in the external pursuit of the fetish of development.²⁵

²⁴From a viewpoint of North-South international economic relations, this is problematic for a neo-Schumpeterian view of large oligopolistic enterprises as the main sources of research and innovation. Because in fact, even though transnational corporations have been the main source of modernization in developing countries, there is a clear asymmetry in the rate of dissemination of new technologies with the different subsidiaries of the same enterprises. In the context of the stagnation of many Latin American countries, this asymmetry has been accentuated, creating thereby a barrier to international markets, owing to the obsolescence of installed productive apparatuses. Also in some cases, the transnationals' capacity to appropriate more skilled human resources and innovations resulting from autonomous research has made it possible for them to reap the economic advantages, thus nullifying local efforts (and investments).

For the mechanisms of appropriating the economic advantages of technological innovations, see David J. Teece, "Capturing Value from Technological Innovation: Integration, Strategic Partnering, and Licensing Decisions", Berkeley, University of California, March 1986, *mimeo*. Teece shows how in introducing a determinate technological innovation different relations are established, relations which can be classified in three different categories: assets that are *cospecialized*, *specialized* and *generic*. The more or less decisive character of such assets depends on the phase of the *life cycle* in which the innovation is found. Since rents are generated especially in the second phase (*paradigmatic*), the availability of specialized assets (which have a relation of unilateral dependence with respect to the innovation), will determine to a large extent the possibility of appropriating the economic advantages of an innovation—in such a way that an imitator who disposes of the necessary complementary specialized assets can easily appropriate the rents, if the innovator disposes only of the cospecialized assets (which depend bilaterally on the innovation) and cannot then compete in that phase of development. In this context, the most important consequence of Teece's analysis is that both for promoting technological innovations and for attracting to a country a flow of such innovations, it is not necessary to concentrate efforts on only one research and development activity (which generates cospecialized assets), but especially on the complementary assets and their infrastructures, given that the presence of protective barriers in a country which offers no other complementary asset than access to its market, will in no way promote the innovation, but rather will only generate in the domestic market rents higher than those that would be generated in the world market (moreover prolonging them unnecessarily in time).

²⁵See Osvaldo Sunkel, "Capitalismo transnacional y desintegración nacional en América Latina", *El Trimestre Económico*, vol. 38, No. 150, April-June 1971.

This system was also one of the main obstacles to the establishment in Latin America of multilateral free-trade agreements. These have never gone beyond the experimental phase or bilateral negotiations by product. In the same way, the attempt to modify Latin America's international role by granting subsidies to production and exports²⁶ of non-traditional manufactured products, ended by increasing the burden of a public sector that already tended to incur deficits. It remained distorted after having made this effort in the midst of a blockade represented by high protectionist barriers and conspiratorial agreements to divide the rents generated by sales in domestic markets.

Within the perspective of our analysis, it is particularly important to emphasize that, owing to these rules of the game, technological development was incorporated only as an absolutely secondary variable in the strategies of the leaders of the Latin American economies. Thus, in several cases, the progress made in sectors of higher technological intensity turned out to be simply decorative, and not the result of technological research and development.

The previous model was seriously questioned for the first time in the 1970s, and since that time the notable uniformity that had characterized Latin America's trade and exchange policies began to break down. Several countries then attempted to apply *the monetary focus of the balance of payments*, which could well be compared to an 180 degree turn in relation to import substitution. One of the key themes of this focus was the emphasis it placed

²⁶For a description of the instruments of these policies in different countries, see ECLAC, *Políticas de promoción de exportaciones en algunos países de América Latina* (LC/G.1370), Estudios e Informes de la CEPAL series, No. 55, Santiago, Chile, 1985.

The models of export-led growth were developed especially in the 1960s. Among the more important representatives of this view of development are Beckerman, Caves, Cornwall and Kaldor. A very interesting model in this regard is that of Anthony Thirwall and R.J. Dixon, *A Model of Export-Led Growth with a Balance of Payments Constraint*, 1979. In its more simplified version, this theory holds that the growth rate of the product is equal to the ratio between the growth rate of exports and the income elasticity of the demand for imports. This analysis, within the framework of export-led growth, has the advantage of also incorporating the peripheral characterization of an economy—a kind of exogenous linkage—whose basic feature is expressed in the divergence between the high income elasticity of its demand for imports and the low elasticity of its demand for exports.

on the supposed direct relationship between export performance and economic growth and on the dependence of the former on government policies.²⁷ These techniques were initially applied by an extreme liberalization of trade policy along with a highly controlled exchange policy, which resulted in external crises and serious industrial deterioration, mostly because of freezing the exchange rate with a consequent overvaluation. Such errors obliged the governments to abandon this attempt to liberalize,²⁸ and to reintroduce mechanisms of controlled fluctuations of the exchange rate.

Finally, with the tremendous debt crisis, most Latin American countries were forced by both external and domestic pressures to abandon inward-looking development strategies. Indeed, once the *brief* parenthesis of artificially favourable external variables created by the rapid and excessive process of indebtedness²⁹ was over and the bill was presented, the Latin American countries faced the paradoxical need to become net exporters of financial resources.

The consequent pressure that this need exercised on the result of the trade balance was added to the difficulties the countries had in increasing and diversifying their exports to the developed countries, owing both to the trade barriers they met there³⁰ and the clear technological gap between their productive apparatuses and their managerial capacities. All this affected the validity of economic-policy

plans and their influence on the external sector.³¹

On the other hand, technological progress in the industrialized countries led to an unprecedented rate of depreciation of the physical and human capital of the countries that did not participate in this process. Consequently, they faced a severe loss of competitiveness, aggravated by their incapacity to carry out the structural modifications of an institutional character that would have enabled them to develop sources from which they could create and disseminate new technologies.³²

The preference given by the Latin American countries to a closed domestic market as the driving force of their economic development and the consequent mercantilistic logic of their international role had been consolidated as strategic elements in the decisions of their economic leaders, and particularly those of transnational corporations. They were thus excluded from the process of internationalizing integrated production, which boosted the development of the world economy throughout almost the whole post-war period.³³

³¹See ECLAC, *Economic Survey of Latin America and the Caribbean, 1988* (LC/G.1577-P), Santiago, Chile, 1989, particularly section X, which analyses the relationship between the transfer of resources, the absorption of private debt by part of the public sector, devaluations, inflation and fiscal deficit.

³²The experience of both public and private managers of operating within frameworks of economic policy imposed by dictatorial régimes made institutional asymmetries worse, particularly those corresponding to the labour market and organizational forms. By promoting authoritarian mental structures and limiting the freedom of most economic actors, this experience contributed to the frustration of development dynamics and the disposition to innovate and incorporate productive and organizational technologies that could have existed in those societies.

³³In saying this, we by no means wish to take away importance from the role—which is moreover fundamental—of the domestic market as an initial motor of development. We want to highlight the insufficiency and deficiency of a logical scheme that begins with a correct consideration but arrives at conceptions of autarkic policies, transforming a necessary condition into a sufficient condition. This limitation was also presented in liberal orthodoxy concerning export-led growth, with respect to the evaluation of free trade as a necessary and sufficient condition of development, as was clear, for example, in the first comparisons between the countries of Southeast Asia and Latin America. See, for example, Anne Krueger, "Export-led industrial growth reconsidered", *Trade and Growth of the Advanced Developing Countries in the Pacific Basin: Papers and Proceedings of the Eleventh Pacific Trade and Development Conference*, W. Hong and C.B. Krause, Korea Development Institute, 1981.

²⁷See for example, Bela Balassa, "Exports and economic growth: further evidence", *Journal of Development Economics*, vol. 5, No. 2, June 1978. Anne Krueger, "Trade Policies as an Input to Development", *American Economic Review*, vol. 70, No. 2, May 1980.

²⁸Except for Chile.

²⁹In addition, some countries benefitted from a considerable recovery in their raw material export process, leading to a substantial improvement in their external terms of trade.

³⁰See Sam Laird and Julio Nogues, *Trade Policies and the Debt Crisis*, Washington, D.C., World Bank, September 1988; and Sam Laird and Alexander Yeats, *Trends in Nontariff Barriers of Developed Countries 1966-1986*, Washington, D.C., World Bank, December 1988. Both studies show how openness and the export efforts of developing countries before and after the debt crisis were accompanied by more protection of the developed countries' markets. The studies make clear, in particular, that the non-tariff barriers of those countries have almost doubled in the last two decades, thus making it difficult for exports to those countries to grow, especially agricultural and labour-intensive products (textiles, footwear).

From these premises and the recession of the domestic markets (the main attraction for foreign investors), the Latin American countries were forced to compete with other developing countries for their own place in the world economy.

After the *shortcuts* taken as a result of the compression of real wages and the severe fiscal crises of the States, other possible roads to integrated development still have to be conceived, this time really viable, since in terms of dynamism, the technological revolution has also meant opening up new ways of participating in the world economy, increasing possibilities through greater market diversification and segmentation. Such possibilities are much more extensive than can be imagined on the basis of the sole aspiration—legitimate but limited—of returning to the primary sectors their previous importance by eliminating the distortions that had so powerfully blocked their development. This is true because a strategy of international participation based solely on the intensive exploitation of static comparative advantages (the vast majority of which are dependent on absolutely natural advantages and on a strong compression of real wages) can be viable in the short term—however, at what social and environmental cost?—but does eliminate the need to generate dynamic comparative advantages, the only ones which, given the current state of the world economy, can support a process of sustained and stable growth over time.³⁴

At the beginning of the 1990s, exchange and trade policies are once again among the top priorities of all the countries in Latin America. Similarly, most of the countries of the area have clearly modified—or are in the process of modifying—the basic principles that guide their policies, moving from protection to free trade.³⁵

As they strive to attain their two major objectives, democracy and modernization, which

symbolize their aspirations towards both social justice and sustained and stable economic growth, the Latin American countries uniformly accept the need to open up their economic systems. In the face of this unanimity, which may lead some countries to resolve all their uncertainty by adopting a new fatalistic dogmatism,³⁶ it is important to observe closely and remember what has happened to their trade over the last 20 years from the viewpoint of their external technological relations. Thus, we can understand that in reality there is no single answer (as is evident if, for example, we compare the performance of Brazil with that of Chile), and that each country has to find its own technological path and not follow the latest fashion.

In seeking to redefine these external relations, governments must have the real will and capacity to modify at least one of the more notable characteristics of their trade and exchange policies. This is their excessive complexity. Instead of achieving a superior rationality, this complexity is simply chaotic. This state of affairs, rather than the logical deficiencies of the import-substitution model, constitutes at this particular time the best reason for undertaking the urgent task of drastically revising the economic policies of the Latin American countries. Their policies can only be modified by respecting the basic principle of having economic-policy instruments that are manageable, known, and as transparent as possible. These features coincide moreover with the desire for democratization on the continent, since with an unintelligible system, the only ones who win are those who have a particular kind of knowledge that allows them to increase their rate of profit by damaging the efficiency of the economic system in general.

Nevertheless, even though clarity is needed to eliminate the recognized defects of previous policies, it is also necessary not to confuse simplicity with a vacuum, and to let this vacuum take the place of previous policies, thus leaving the function of guiding and planning the use of social resources to the State. Only by modifying, but also by capitalizing on existing resources and

³⁴See Fernando Fajnzylber, "International competitiveness: agreed goal, hard task", *CEPAL Review*, No. 36 (LC/G.1537-P), Santiago, Chile, 1988, and Ricardo Ffrench-Davis, *Generación de ventajas comparativas y dinamismo industrial* (LC/R.559), Santiago, Chile, 1988.

³⁵We should mention in this regard the parallel process of deregulating foreign investment and the growing use of debt-conversion mechanisms.

³⁶Read *laissez-faire*.

investing more in them, can the dangerous (and socially non-viable) temptation be avoided of beginning from zero.

In this regard, the developing countries can adopt two main technological strategies³⁷ for trying to close the gap that separates them from the developed countries, with respect not only to growth but also to well-being. The first aim is to try to reach the frontiers of technological development; the second is to use available technological advances without trying to generate them, except over the long term.³⁸

Even though the dissemination of innovations is indispensable for achieving any of these objectives, we must not only take full advantage of the national differences that facilitate a better international role, but we must also reduce the most characteristic asymmetries of the peripheral economic systems. These include particularly the internal duplications and the institutional framework of the labour and

goods markets in which there is direct competition with developed countries. Finally, we must ensure that productive structures (and not only demand) converge towards a better income elasticity.

Likewise, it will be of fundamental importance to condition the renegotiation of the external debt on a greater openness of the developed countries' markets.

Given the current situation in Latin America, it would seem advisable to adopt the second strategy. This would take advantage of existing innovations, accompanied by institutional measures —general and sectoral— and investment measures which would facilitate and increase the dissemination and adaptation of innovations.³⁹

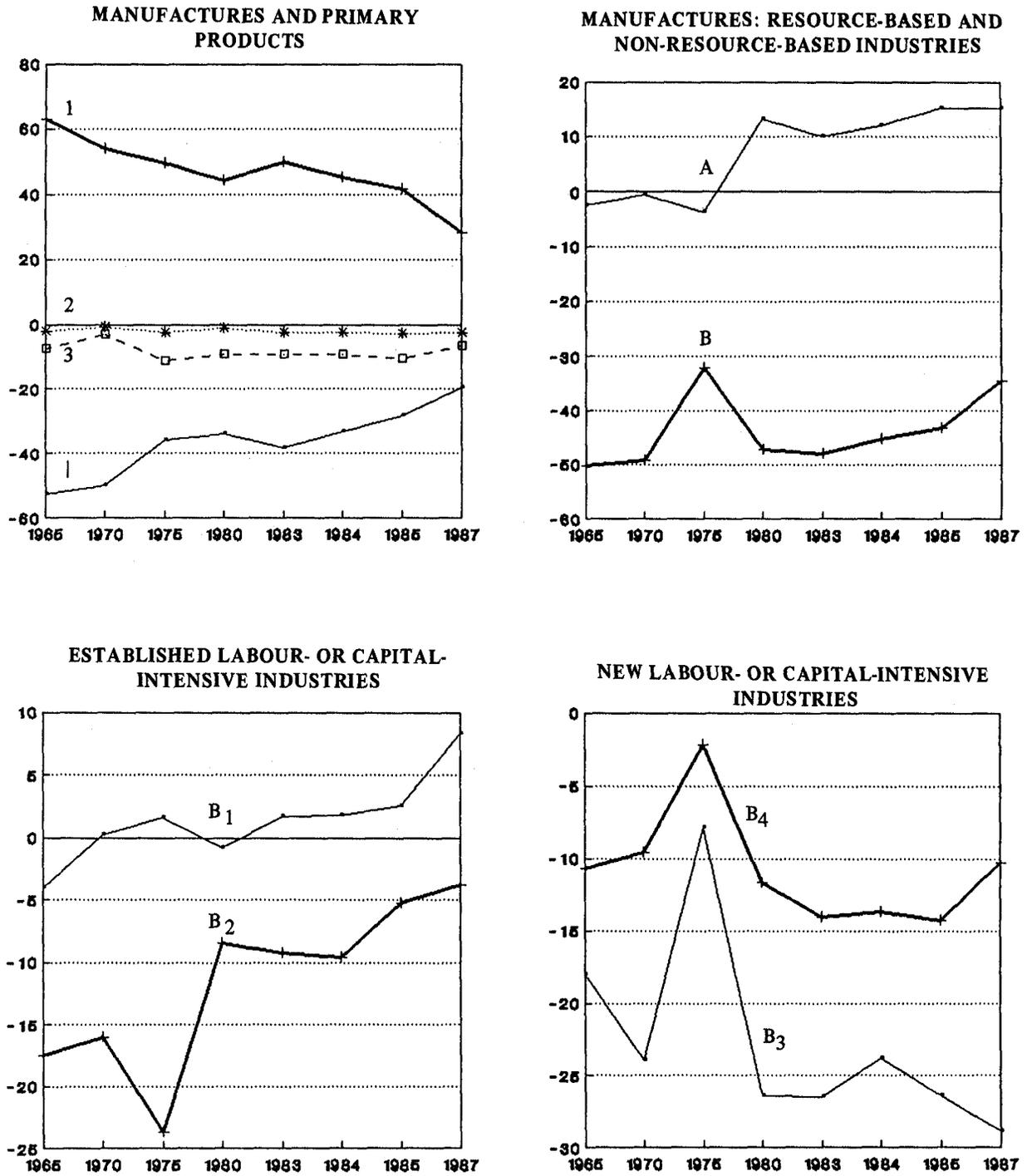
Even though the Latin American economic crisis will surely continue to be exceptional, both for its magnitude and duration, it is no less certain that Latin America has been able to elaborate over several decades of development its own learning curve, the fruit of a long process of accumulating knowledge. We can advance much more easily from this knowledge than from the depths of false dogmas.

³⁷ See J.S. Metcalfe and Luc Soete, "Notes on the Evolution of Technology and International Competition", Manchester University, *mimeo*, 1983, and David Teece (editor), *The Competitive Challenge. Strategies for Industrial Innovation and Renewal*, Cambridge, 1987, and the interesting model of M. Cimoli, G. Dosi and L. Soete, "Innovation diffusion, institutional differences and patterns of trade: a North-South model", *mimeo*, a document presented at the Conference on Innovation Diffusion, Venice, 17-22 March 1986.

³⁸ See also Dieter Ernst and David O'Connor, *Technology and Global Competition. The Challenge for Newly Industrialising Economies*, Paris, OECD, 1989.

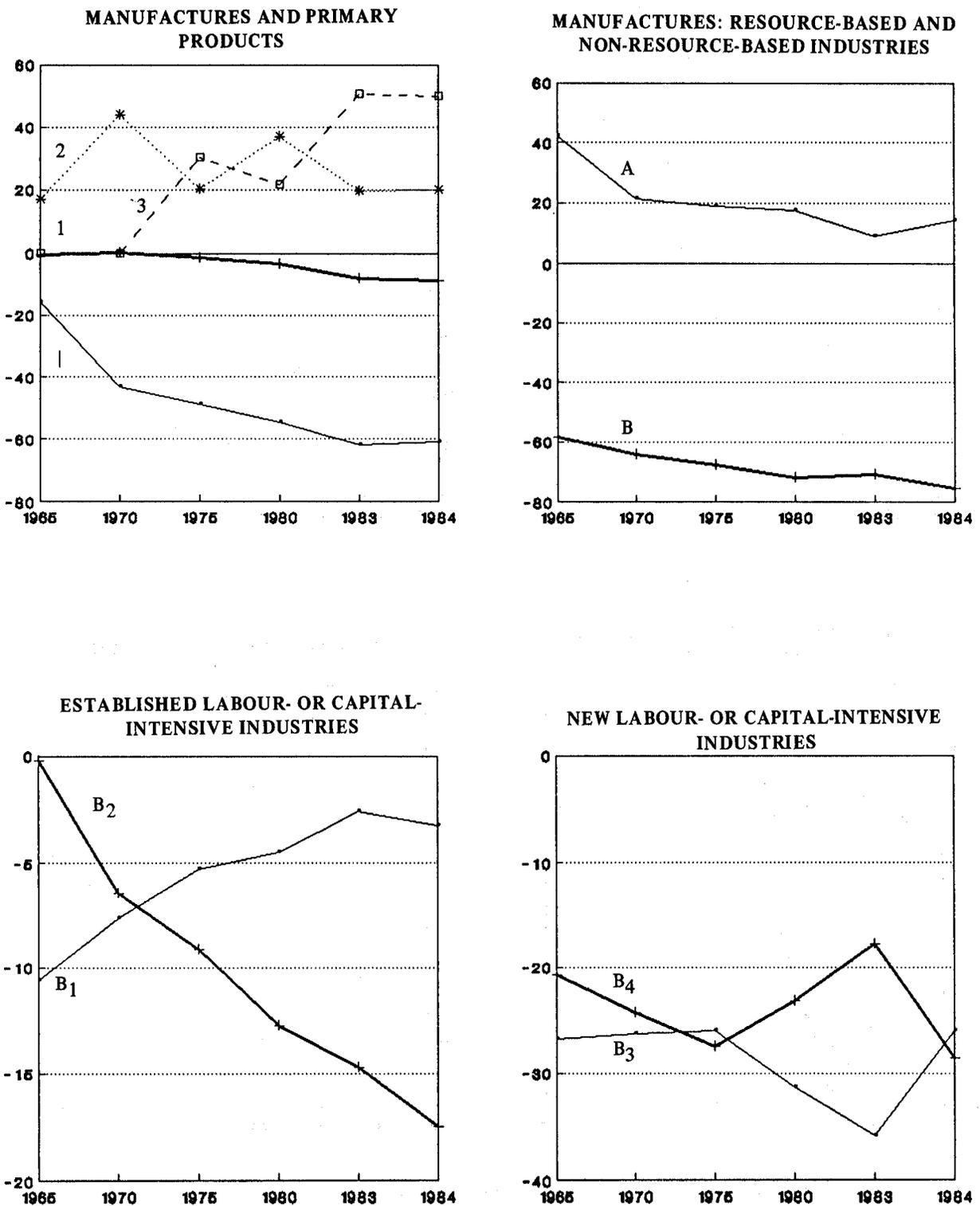
³⁹ For a more detailed discussion of the policies, see ECLAC, *Changing Production Patterns with Social Equity. The Prime Task of Latin American and Caribbean Development in the 1990s* (LC/G.1601-P), Santiago, Chile, 1990, United Nations publication, sales No. E.90.II.G.6.

Figure 5
ARGENTINA: SPECIALIZATION AND EXTERNAL SECTOR, 1965-1987



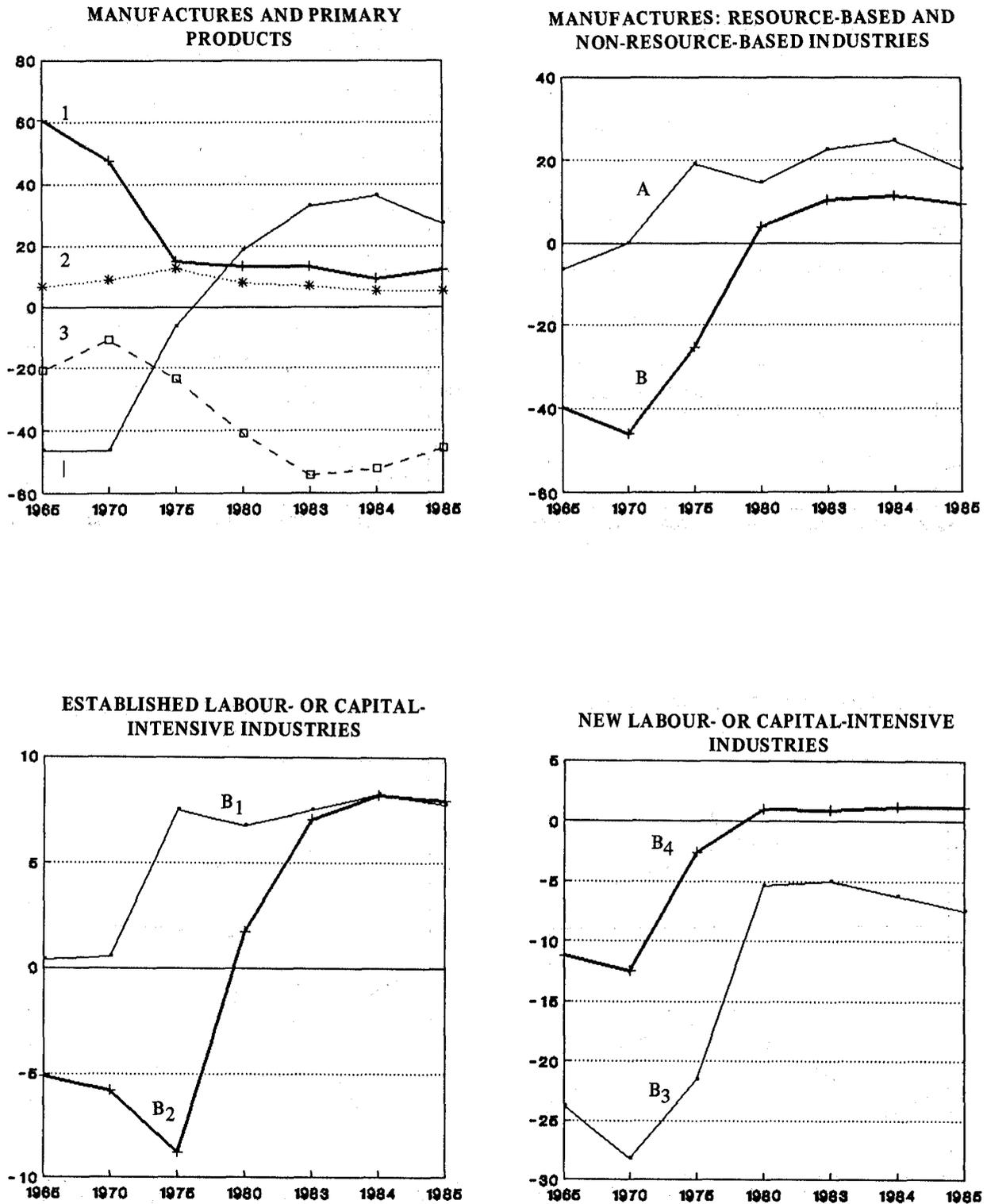
Source: Prepared by the author, on the basis of data provided by the United Nations Statistical Information System (UNSI).

Figure 6
BOLIVIA: SPECIALIZATION AND EXTERNAL SECTOR, 1965-1984



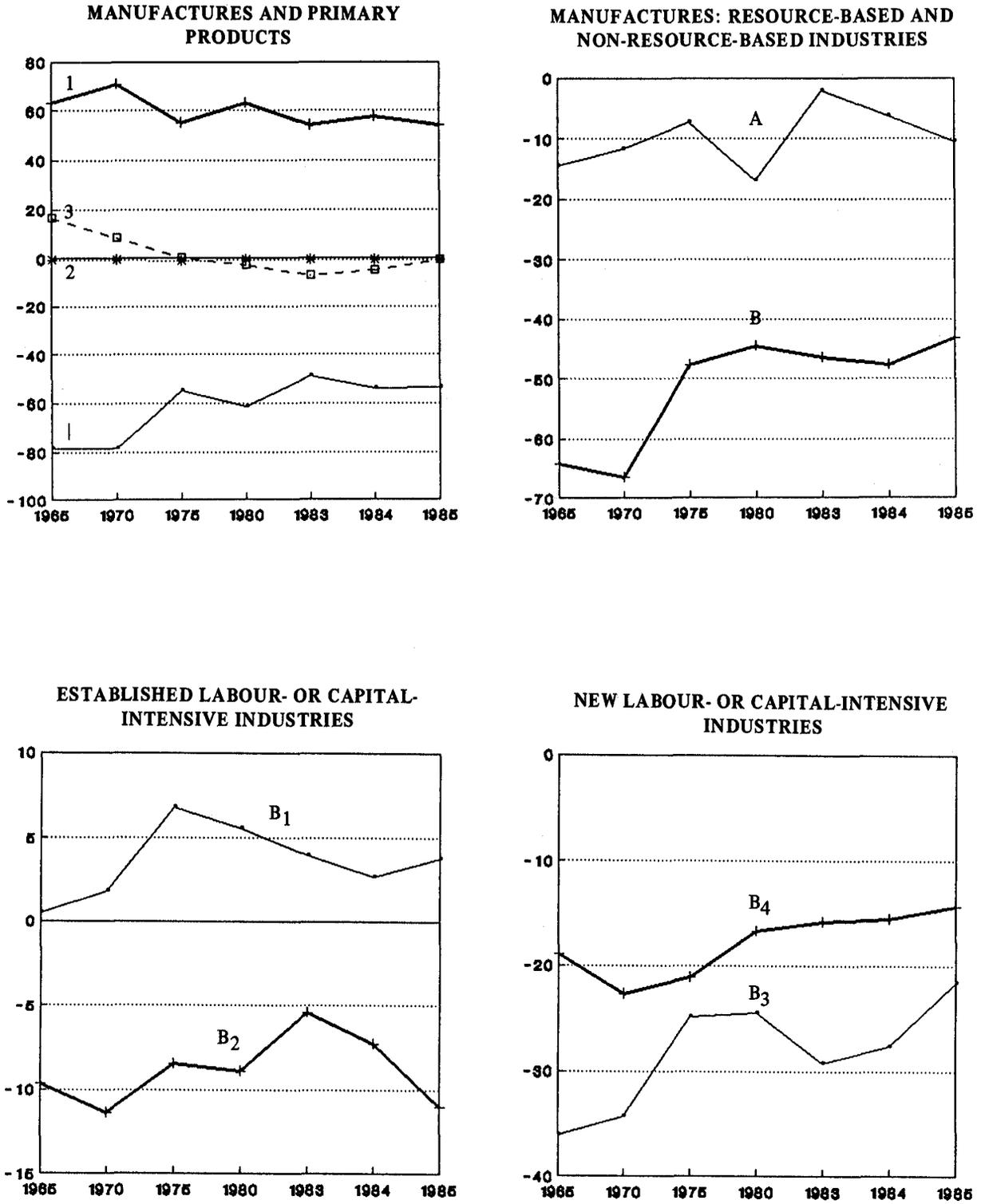
Source: Prepared by the author, on the basis of data provided by the United Nations Statistical Information System (UNSIIS).

Figure 7
 BRAZIL: SPECIALIZATION AND EXTERNAL SECTOR, 1965-1985



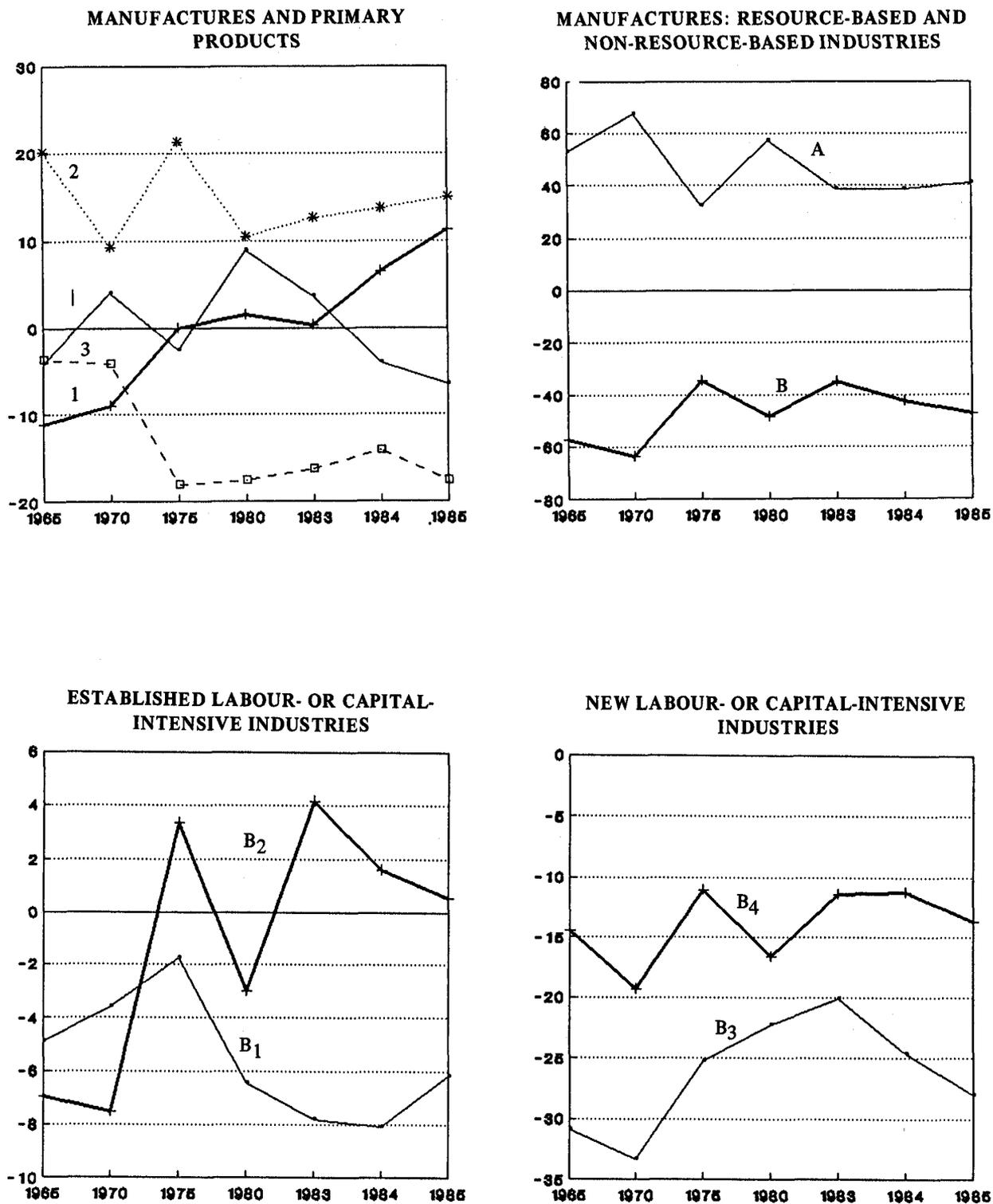
Source: Prepared by the author, on the basis of data provided by the United Nations Statistical Information System (UNSI).

Figure 8
COLOMBIA: SPECIALIZATION AND EXTERNAL SECTOR, 1965-1985



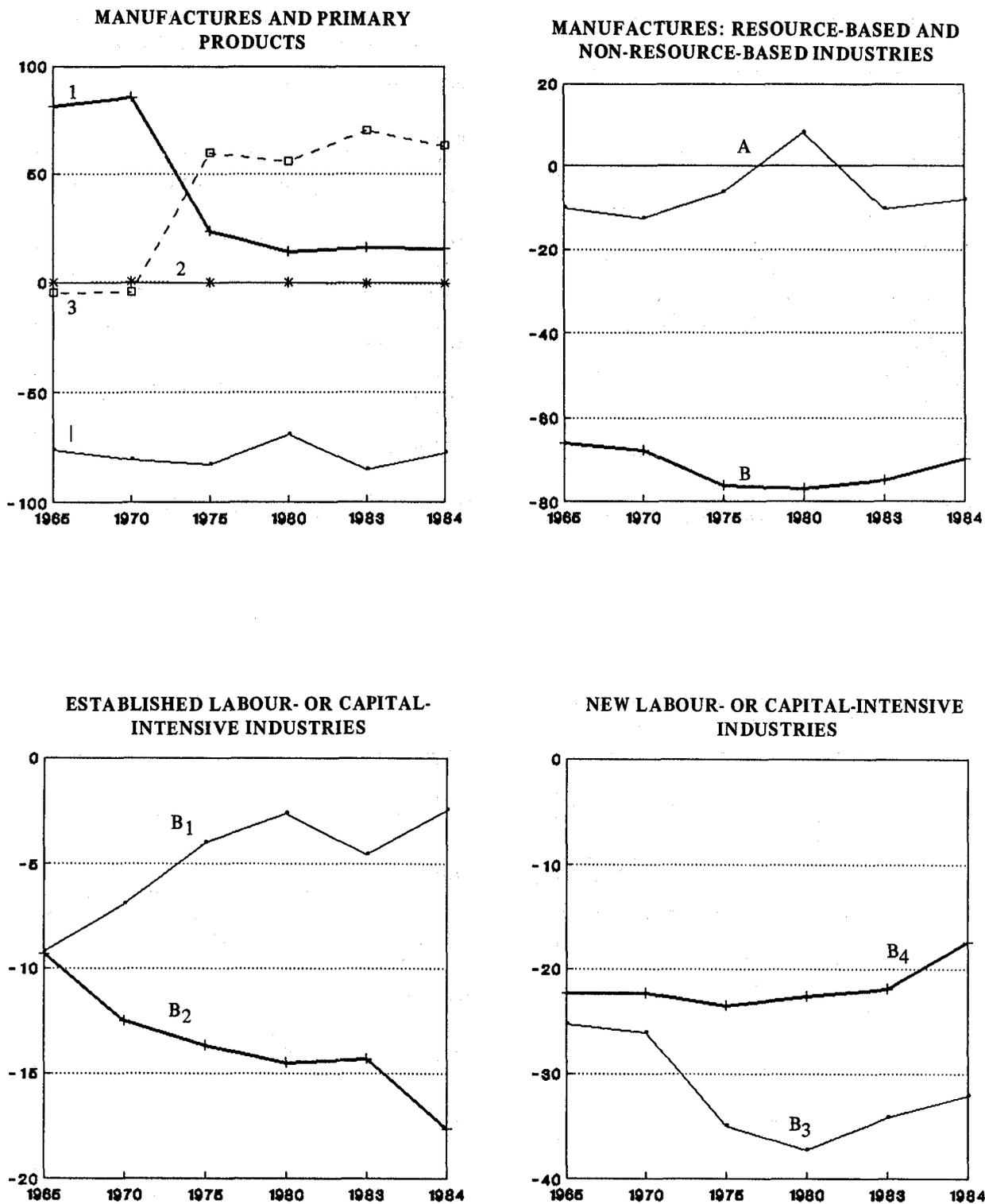
Source: Prepared by the author, on the basis of data provided by the United Nations Statistical Information System (UNSI).

Figure 9
CHILE: SPECIALIZATION AND EXTERNAL SECTOR, 1965-1985



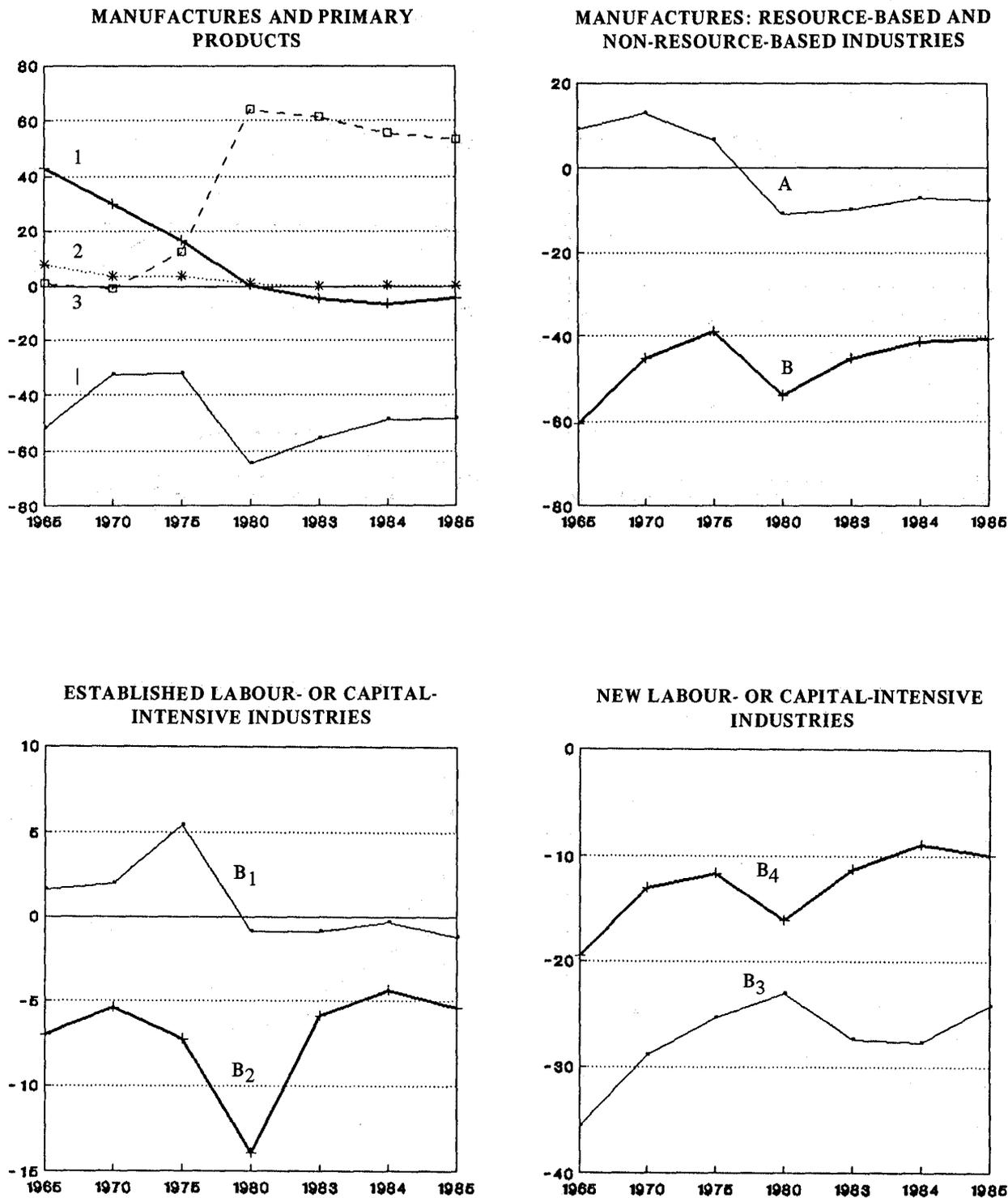
Source: Prepared by the author, on the basis of data provided by the United Nations Statistical Information System (UNSIIS).

Figure 10
 ECUADOR: SPECIALIZATION AND EXTERNAL SECTOR, 1965-1984



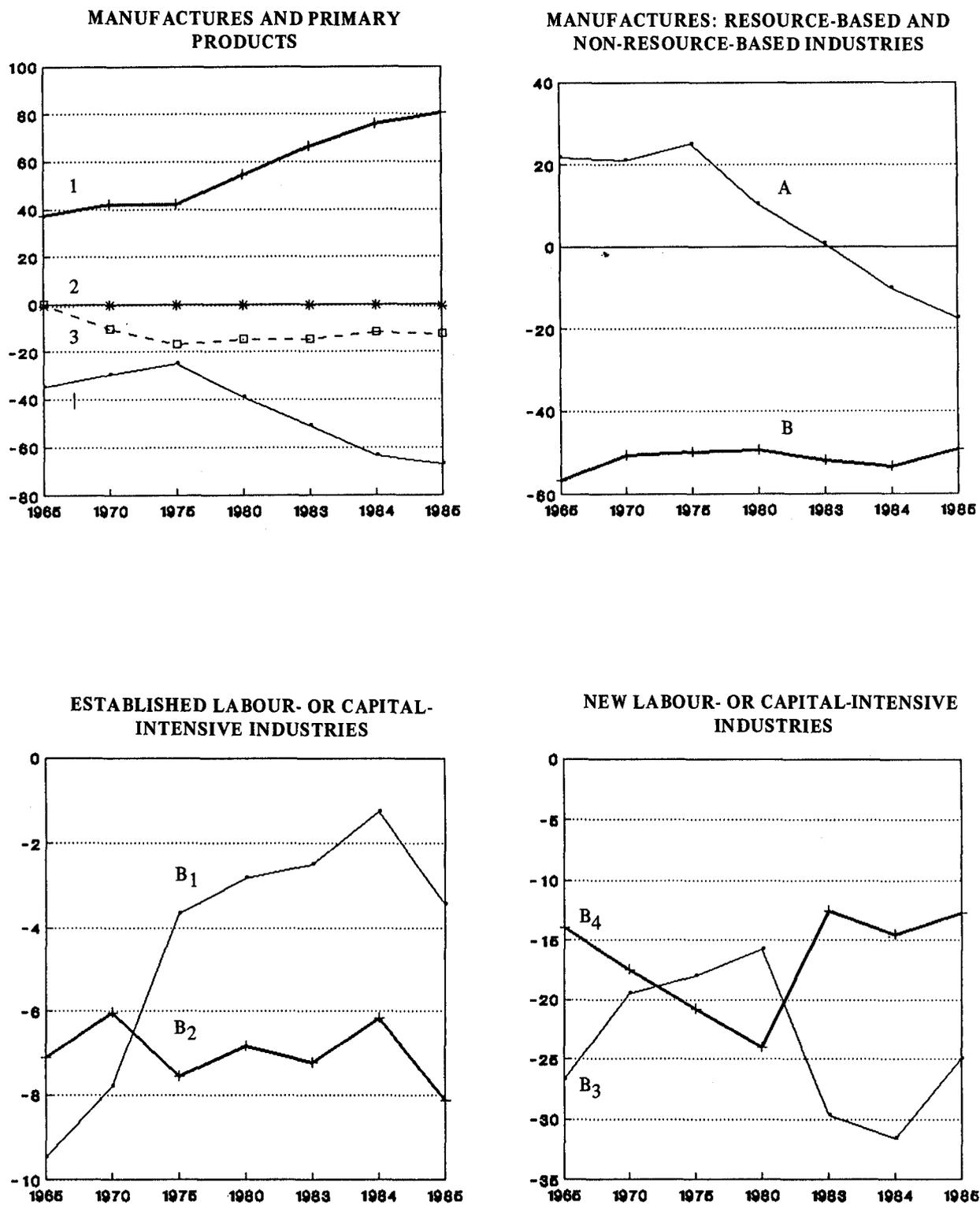
Source: Prepared by the author, on the basis of data provided by the United Nations Statistical Information System (UNSI).

Figure 11
MEXICO: SPECIALIZATION AND EXTERNAL SECTOR, 1965-1985



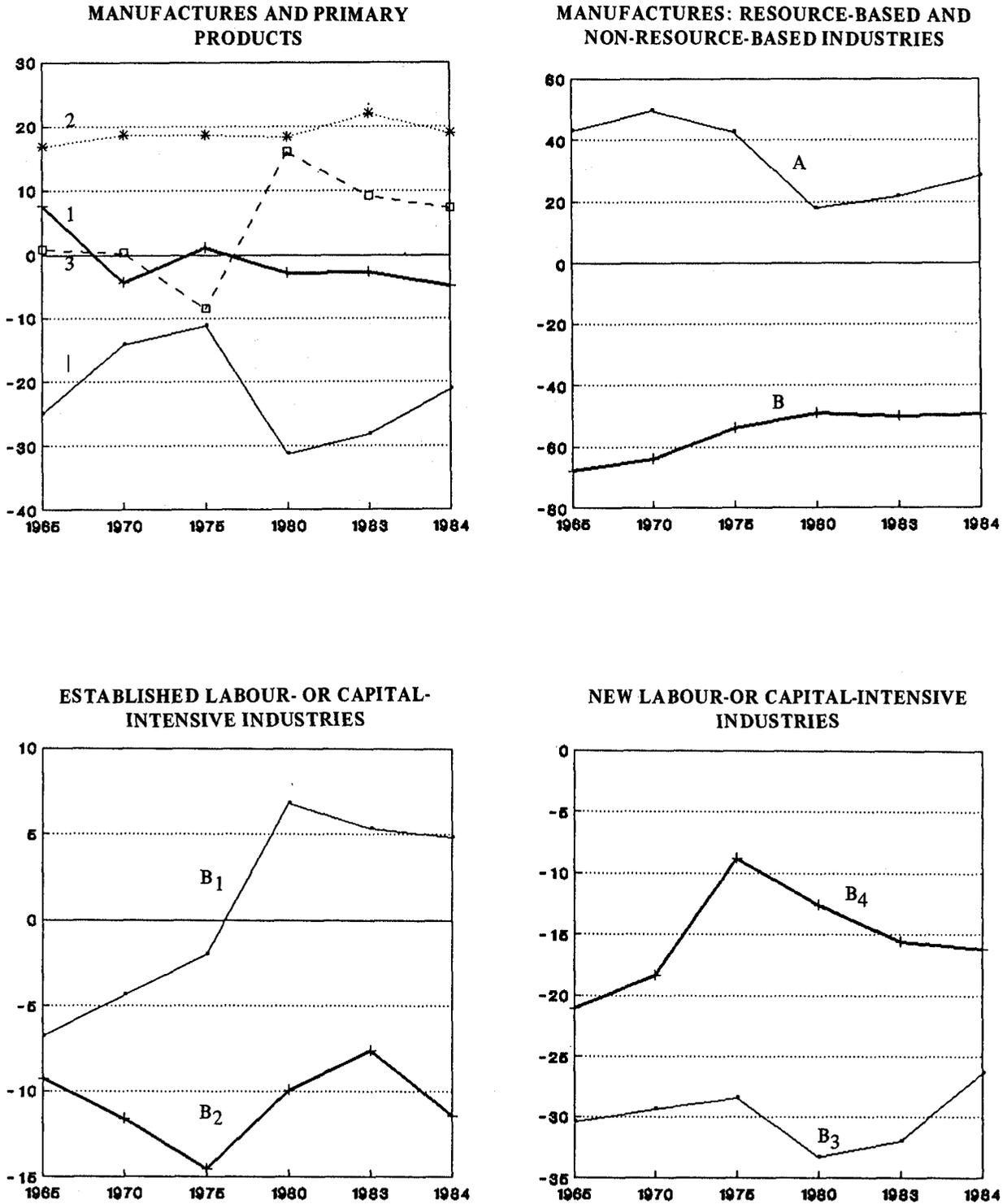
Source: Prepared by the author, on the basis of data provided by the United Nations Statistical Information System (UNSIIS).

Figure 12
 PARAGUAY: SPECIALIZATION AND EXTERNAL SECTOR, 1965-1985



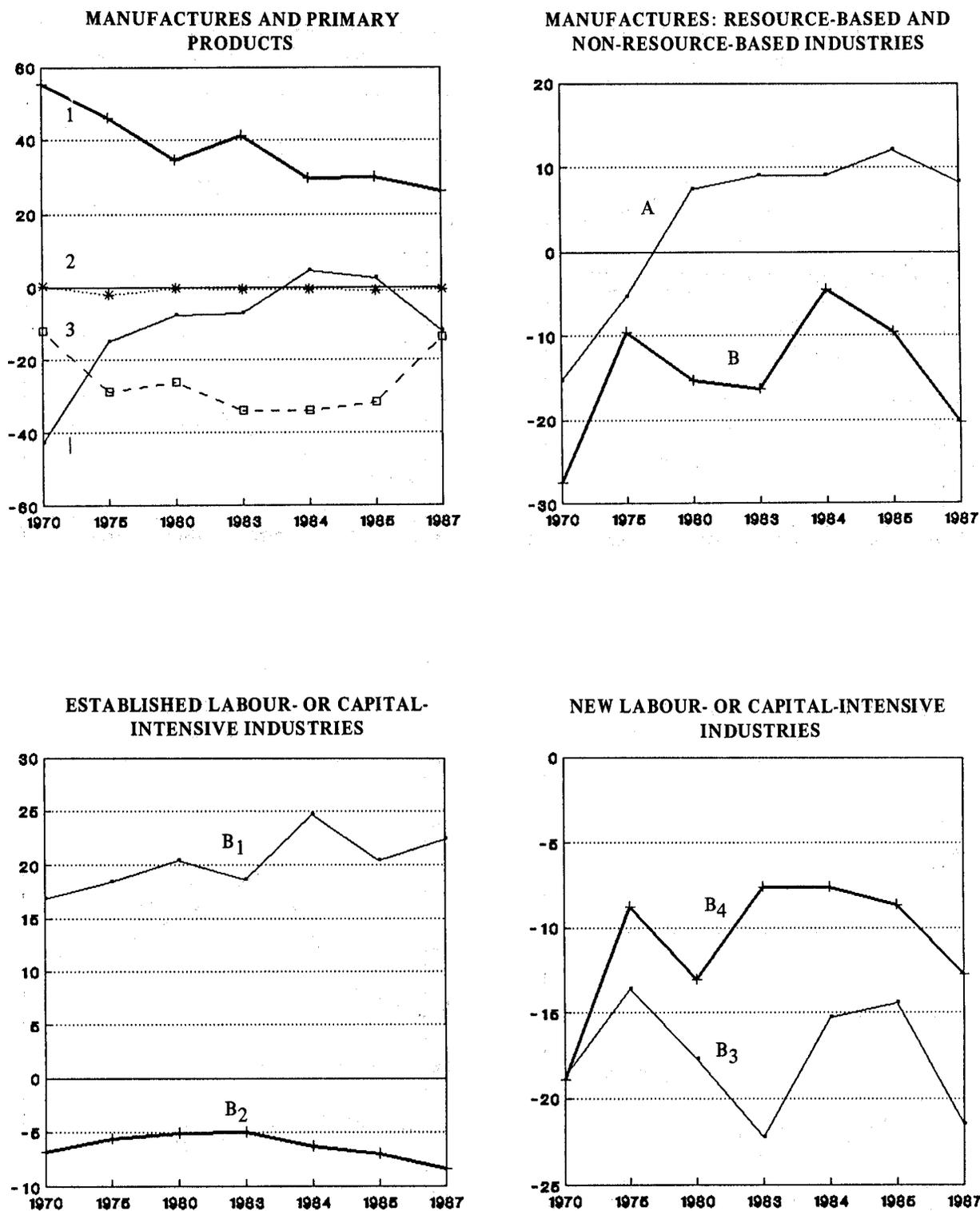
Source: Prepared by the author, on the basis of data provided by the United Nations Statistical Information System (UNSI).

Figure 13
PERU: SPECIALIZATION AND EXTERNAL SECTOR, 1965-1984



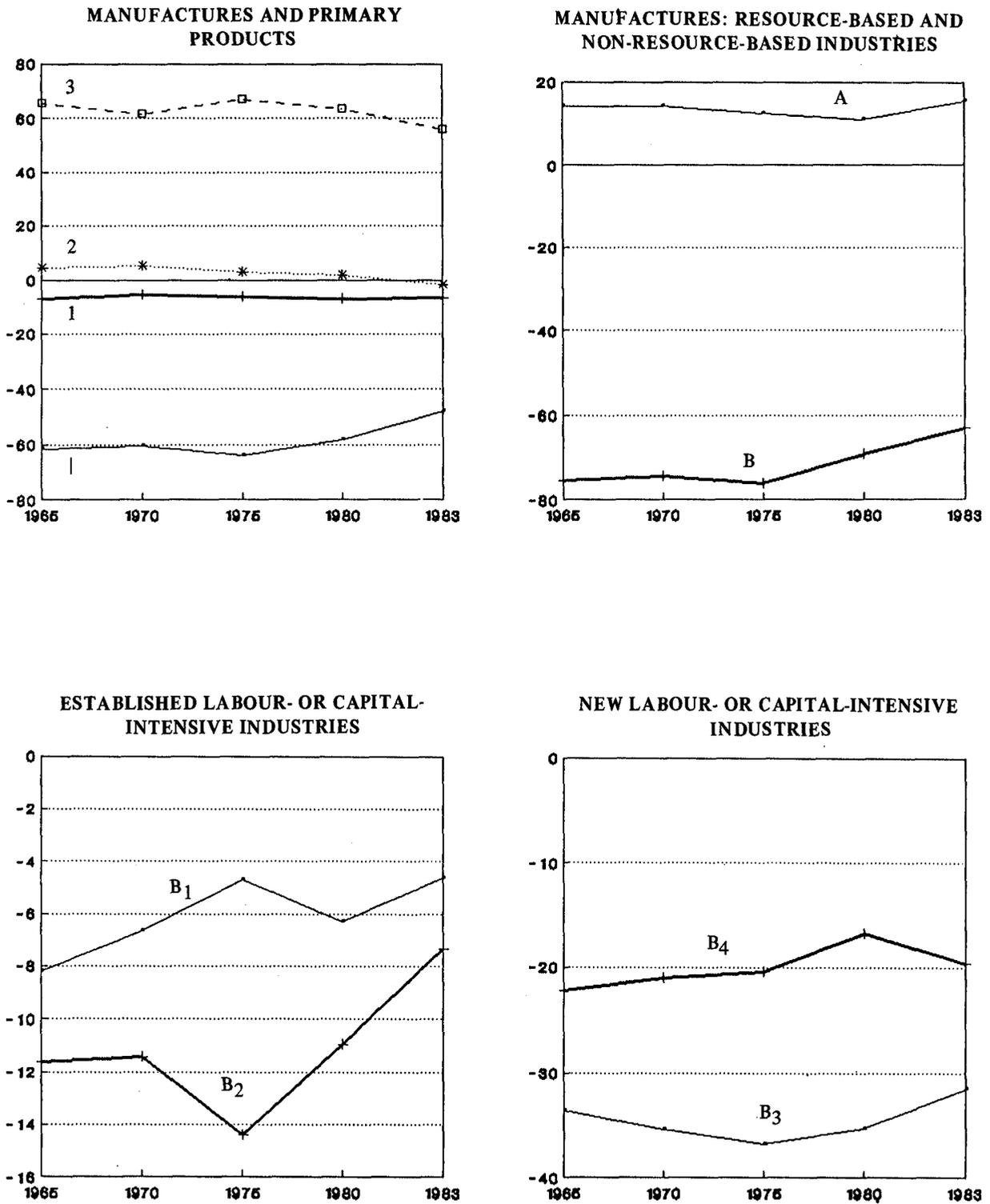
Source: Prepared by the author, on the basis of data provided by the United Nations Statistical Information System (UNSI).

Figure 14
URUGUAY: SPECIALIZATION AND EXTERNAL SECTOR, 1970-1987



Source: Prepared by the author, on the basis of data provided by the United Nations Statistical Information System (UNSI).

Figure 15
VENEZUELA: SPECIALIZATION AND EXTERNAL SECTOR, 1965-1983



Source: Prepared by the author, on the basis of data provided by the United Nations Statistical Information System (UNSI).

Components of an effective environmental policy

*María Inés Bustamante**
*Santiago Torres**

Governments now have very wide experience in promoting development and achieving better levels of income by means of macroeconomic and sectoral policies. Nevertheless, their experience is limited and they have not been very successful in guaranteeing the environmental sustainability of the projects they undertake and, thus helping to assure income sources.

In some countries of the region, explicitly environmental policies have been developed and even backed by specific laws. But these measures have not guaranteed the effectiveness of the proposals. In other countries, government proposals have so far been nothing more than purely symbolic rhetoric.

This weakness of the countries in treating the environmental problem is usually attributed to a lack of real political will on the government's part. While recognizing that this has been partly the cause of the problem, we believe it is necessary to look more deeply into other aspects which offer additional explanations and which may provide guidelines for action.

This article considers two questions which are fundamental to the issue, the legitimacy and the workability of environmental policy as keys to its effectiveness. It begins with an examination of the idea and of the very meaning of environmental policy from this point of view and goes on to analyse each one of these questions separately.

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Introduction

Since the 1960s, the deterioration in environmental quality has become one of the more important issues in present-day society. In fact, in recent years, sectors of the scientific community, non-governmental organizations and the mass communications media have been drawing public attention to countless threats to the ecosystems which sustain life and human activity on this planet.

Nevertheless, social reaction has varied widely among sectors. Reactions range from conservationist group activism to a rejection of the question's legitimacy by those who see it only as a ruse to deflect attention from the basic problems of poverty and inequality, both between nations and within societies.

It cannot be said that environmental degradation is a recent phenomenon. However, the unprecedented size of today's world population seeking space, food, raw materials and energy makes it urgently necessary to maximize the capacity of the environment to break down waste. At the same time, the scientific knowledge, technology, and material and financial resources available to mankind offer a tremendous capacity for making the environment artificial, for physically changing it, or even for intentionally destroying it.

Beyond the debate about the priority of the environmental question in the list of human problems, it must be recognized that the mobilization of public opinion on the subject results from important changes in the nature and size of the environmental problems which are degrading the present quality of life and seriously threatening that of future generations. If present tendencies associated with the expansion of human activity are not reversed, the alterations in ecological equilibrium which are already hampering the development process itself will reach dramatic levels. It is, therefore, essential to guarantee the environmental sustainability of all measures undertaken to improve living levels.

In spite of the broader existing awareness of the dangers resulting from environmental deterioration, it has not been easy to give legitimate and practical expression to this

concern to develop environmentally sustainable development formulas. Most countries encounter enormous difficulties in tackling these problems effectively and reversing present trends.

Economic theory itself, concerned with resource allocation, offers governments no patterns for analysing environmental advantages, especially public advantages, which, since they cannot be priced, do not enter into the market system or, where they can be valued, this value does not adequately reflect their importance to ecological equilibrium.

The disregard by economic theory and practice of the environmental sustainability of economic growth is reflected in the basic indicator of a country's performance, national income. Although environmental sustainability should be one of the main components in the definition of this indicator,¹ the methods used in its calculation allow no way of knowing how society is preserving or depleting its natural base. It cannot, therefore, serve as a guideline for making

rational decisions which minimize the costs of using this heritage.²

Until the question of environmental sustainability becomes a legitimate subject of political debate, it is unlikely that serious effort will be made to compile information and apply new accounting systems to the decision-making process. Until this happens and an environmental policy is neither developed nor put into effect, concern about the subject will remain in flux and environmental problems will continue unsolved.

Nevertheless, although efforts must be made to improve the information base for decision-making, it must not be forgotten that finding adequate indicators does not automatically solve the problems. This depends, rather, on the commitment of national governments to specific environmental goals. On the other hand, a large proportion of present environmental problems are so apparent that complex information is not necessary for recognizing them and delaying action until such information is compiled would result in unforfeitable delay.

I

Environmental policy

1. *The idea and extent of environmental policy*

In the broader sense, a national environmental policy is the set of norms adopted by the government which in some way delimit and direct the actions of persons, companies, and public bodies themselves with respect to the use, management and conservation of natural resources and the activities of existing environmental services.

However, this broad definition must be made more specific by the consideration, very important for the purposes of this paper, of the existence, in all the countries, of what could be defined as an implicit environmental policy.

¹Herman E. Daly (1989): "Toward a measure of sustainable social net national product", *Environmental Accounting for Sustainable Development*, Yusuf J. Ahmad, Salah El Serafy, Ernst Lutz (eds.), Washington, D.C., World Bank, June.

It is difficult to find components of economic policy which do not have significant environmental effects. This is particularly true of countries whose economies are based largely on the exploitation of natural resources, either renewable or non-renewable. In this sense, it can be stated in general terms that every economic policy implies an environmental policy.

The effectiveness of a "classical" environmental policy, regardless of the greater or lesser

²Some work has recently been done on the development of conceptual and methodological proposals for improving economic indicators. See, for example:

Roefie Hueting and Christian Leipert (1987): "Economic growth, national income and the blocked choices for the environment", Berlin, Internationales Institut für Umwelt und Gesellschaft, Wissenschaftszentrum Berlin (International Institute for the Environment and Society, Scientific Centre of Berlin), manuscript; and Jusuf J. Ahmad, Salah El Serafy and Ernst Lutz (eds.) (1989): "Environmental and resource accounting: an overview" *Environmental Accounting for Sustainable Development*, Washington, D.C., World Bank, June.

professionalism of its executing agents, can be considerably weakened if the existence of this implicit policy is not recognized and even further if, as usually happens, its content contradicts the other. It should be noted, in this context, that usually the implied policy has effects both on the intensity of resource use and on the way these are managed. Thus, the result of this policy in most cases has been over-use; undervaluing and under-use or, simply, bad use of natural resources.

There are many examples of this. The vigorous export policy pursued in Chile led the country to fourth place in world fisheries, to become the world's largest exporter of fish meal with 54% of the world's supply of dried seaweed. Between 1974 and 1989 the catch increased at an average annual rate of 12.2%. The implied policy for the management and conservation of hydro-biological resources was, in this case, to make no restrictions whatsoever except those respecting the marketing of the product. This has meant, according to some preliminary estimates, that the potential catch capacity of the open-sea fishery is presently seven times greater than the maximum sustainable catch as estimated by the industry itself.³ It must be pointed out here that there has been no explicit policy for the protection and conservation of the hydro-biological resource base.

This point will be dealt with further in the discussion of the workability of environmental policy.

2. *The goals of environmental policy*

Developing a realistic environmental policy requires, as does any other policy, the appropriate definition of objectives and priorities. This is more complicated than it appears at first. On the one hand, our knowledge of nature and the extent of the environmental problems is far from complete. Neither is there agreement on their diagnosis. On the other hand, the priorities among them and the priority given to their solution are not easily subjected to objective criteria and scientific bases.

³The figures used in this example are taken mainly from a report on fisheries prepared by the technical team which drew up the government programme for the recently elected President of Chile.

The main problems which all societies must sooner or later face with respect to environmental policy can be summed up in the following list.

Global problems:

- Deterioration of the ozone layer.
- Climatic change.
- Ocean contamination.

Problems affecting mainly rural areas:

- a) Soils.
 - Erosion.
 - Desertification.
 - Salinization.
- b) Water resources.
 - Pollution of continental surface waters.
 - Pollution of groundwater.
 - Pollution of coastal regions.
 - Sedimentation.
 - Exhaustion of water resources.
 - Alteration in the hydrologic cycle.
- c) Flora and fauna.
 - Deforestation.
 - Loss of genetic diversity.
 - Depletion of fauna resources.
 - Depletion of flora resources.
 - Pollution of different habitats.

Problems affecting mainly urban areas:

- Congestion.
- Atmospheric pollution.
- Visual pollution.
- Acoustic pollution.
- Deterioration in infrastructure.
- Appearance of biological vectors (rats, mosquitoes, etc. because of water pollution or poor solid waste disposal).

Problems resulting from natural disasters:

- Floods.
- Earthquakes and tidal waves.
- Volcanic eruptions.
- Hurricanes.
- Drought.

Although it is not exhaustive, the list gives a clear view of environmental concerns. The criterion by which these occurrences are classified as problems is that they have a negative effect on the quality of life for both present and future generations. This negative effect is not only direct, but can also be seen in the progressive lessening of the capacity of the resource base to

meet the growing demands for production and human consumption. This statement supposes an anthropocentric view of the relationship between man and the environment in which the environment is seen as a social heritage for the benefit of human welfare.

The functioning of land, water, atmospheric and biological ecosystems is systematic in character in the sense that it does not occur in separate compartments, but, on the contrary, all the ecosystems and their components are closely related to each other. Thus the list presented here allows for rapid identification of causal relationships or simultaneous appearance of many of the problems. For example, deforestation through the burning of forests results in a decrease in wildlife resources in the affected area, the exposure of river basins—which in turn results in sedimentation of dams and river beds—and, in addition, atmospheric pollution resulting from emissions of carbon dioxide and a reduction of photosynthesis and, its purification capacity. It is superfluous to say that, following this route, the terrestrial ecosystem itself will be affected over time by increased erosion and desertification.

The systematic nature of the environment significantly affects the application of environmental policy. Often, in order to solve a problem it will be necessary to first solve another which is the cause of the first. On the other hand, the solution of a specific problem could simultaneously produce other, undesirable effects. This happens, for example, in the case of measures to reduce water pollution by prohibiting the deposit of certain liquids and which only results in their conversion to the solid state, requiring equally unsuitable disposal or burning. This is called pollution migration. This fact was ignored in some of the early environmental legislation in the industrialized countries. This legislation was also mainly sectoral. In fact, it approached the problems of water, soil, and atmospheric pollution as separate and not interdependent problems. Now, several of these countries are adopting the systematic approach which, although more complicated, makes it possible to avoid many mistakes.

This systematic nature of the environment often makes it difficult to identify causal rela-

tionships since these appear in extremely complicated time and space patterns. An event can occur in a specific place and affect distant ecosystems. It is also possible for cause and effect to occur in the same place, but at different times. For this reason, the goal of environmental policy requires a large amount of specialized knowledge if it is to produce valid diagnoses and predictions. For example, some of the models drawn up in the developed countries for solving water pollution problems include climatic, topographical, and hydrological information and specialized dispersion models.⁴ Nevertheless, much remains to be done in this field and some of our environmental efforts should be directed to this task.

As well as the need for adequate diagnoses, the complexity of environmental problems makes it essential to set priorities in developing an environmental policy. In the first attempts at environmental management it is important to propose a number of clearly defined objectives. The practical experience acquired will permit a gradual strengthening in capacity for developing and carrying out programmes and projects. The attempt to accomplish an overall policy from the outset, i.e., to attack all fronts simultaneously, could generate expectations which cannot be met.

Because of the initial enthusiasm at the establishment of a number of ministerial agencies for dealing with the environment (departments, directorates, and environmental units in ministries of natural resources, energy and mines, industry, health, public works, agriculture, etc.), the Latin American countries forgot that complex policies must be applied gradually because of the lack of institutional experience and the many restrictions. In many cases, this hastiness led to a fragmentation of efforts and scarce resources among a multiplicity of work areas each with very different needs for planning, application, regulation, research, training, popularization, and community participation. Although the experience has been valuable, many of these initiatives have been frustrated by the dispersion of efforts.

⁴See, for example, Asit Biswas (ed.) (1981): *Models for Water Quality Management*, New York, McGraw Hill International Book Company.

Besides the important scientific studies for identifying environmental problems and evaluating their seriousness, the task of pinpointing the objectives of environmental policy, within a defined period of time, involves other considerations, equally complex but very different. Specifically, these are the social

interplay of the various interest groups, both environmental and non-environmental and the influence of this interplay on the choice of priorities and specific measures for environmental action. This brings up the question of the legitimacy of environmental policy.

II

The legitimacy of environmental policy

The social agents which have to be taken into account in environmental policy are as varied, if not more so, than in other areas of public activity. They are, among others, the public, industry, intermediate public organizations, the mass communications media, the non-environmental public administration, the judiciary, the financial authorities, the scientific community, environmental consulting firms and, of course, the agencies specifically in charge of environmental management.

In considering the legitimacy of environmental policy, we must consider mainly two basic questions. These are the perceptions of the different agents of the problems and their participation in the relevant decision-making process.

1. *Social perception and conflict of interest*

The various social agents live in different ecosystems and microsystems, belong to different socioeconomic levels, have different levels and qualities of education and training and, because of their specific economic activities, have correspondingly different interests. Therefore, the importance they allocate to environmental questions in the overall framework of their needs is considerably varied. In the same way, the relative importance to each group of a specific environmental problem and the urgency with which they demand its solution can also be very different. The value assigned by the different groups to a specific problem does not necessarily correspond to an objective, scientific measurement of the problem.

These differences in perception are also influenced both by the degree to which the various agents are exposed to the mass communications media—which today broadcast more information on environmental questions than ever before—and to the ability of each agent to understand and interpret this information.

However, not only are there differences in the manner in which the different social groups perceive the environmental problems which must be faced, but another source of conflict in the formulation of environmental policy is the fact that the desire to achieve specific objectives is not always combined with a willingness to assume the corresponding costs. This has generally made it very difficult to persuade the various groups to absorb external environmental diseconomies and to generate a genuine willingness to pay for a healthy environment.⁵

This difficulty results partly from the lack of a clear delimitation between those who cause and those who suffer from environmental degradation. Often, the generator of a specific problem is at the same time its victim. Car drivers are the best example. In other situations, the perpetrator of environmental damage may not be directly affected by his own detrimental actions, but by those of others. For example, when an industrial plant pollutes a river, damaging down-stream settlements, it may suffer in turn

⁵Richard C. Bishop, Thomas A. Heberlein, and Mary Jo Kealy (1983): "Contingent valuation of environmental assets: comparisons with a simulated market", *Natural Resources Journal*, vol. 23, No. 3, July.

the environmental impact of others. These may undermine its own installations as a result of periodic floods resulting from deforestation of the upper basin.

If environmental policy is to be legitimate, then the agencies in charge of its formulation and implementation must have a very clear idea of which groups are involved, the extent to which their perceptions are in agreement with the available scientific information, their specific way of thinking, and the way in which they interact and defend their interests. Only then can the government have a clear view of which activities and measures will be effective in the management process.

2. Public participation

The recognition and acceptance of the existence of different perceptions and of conflicts of interest is a very important step. The environmental authority must have a legitimate social basis, not only when it is elected or appointed, but throughout the entire design, application and regulation of the policy. Nevertheless, this recognition, however necessary, is not sufficient for an environmental policy to be legitimate. For this, it must, *inter alia*, be transparent from the beginning and participation, negotiation and arbitration norms must be incorporated in the various stages of the process.

The means of community participation must depend on the political and institutional traditions of the individual country.⁶ Participation at the national and, most likely, at the state or regional level, will have to operate indirectly through representatives elected by the various groups. Possibly at the local or community level public participation could be more direct at various stages of environmental management. In fact, in the experience of some Latin American countries, the municipalities are proving particularly suitable for participatory environmental management. The municipality is the direct

recipient of public demands for environmental quality and is also capable of planning, executing and regulating.

Obviously, each of these participation units will need to define specific procedures for public meetings, participation in the decision-making process, when participation is appropriate, information systems, etc. This is of basic importance if participation is to contribute to effective management rather than become an obstacle to it.

In some developed countries, such as the Federal Republic of Germany, experiments are being made with a specific technique of community participation, the so-called public hearings, which some Latin American environmentalists would like to apply in the region. The hearings have been convened especially in order to publicize environmental studies related to investment projects whose possible effects are of concern to a specific community and also in order to discuss alternative locations for activities or infrastructure. It is clearly a promising idea, but its procedures and areas of applicability must be clearly defined.

Although not so well defined as the public hearings, some Latin American experiences of participatory processes have achieved interesting results. For example, the pollution control programme carried out in the city of Cubatao, Brazil was successful.⁷ This was partly because the government and the representatives of various sectors of the community agreed on the regulation strategy to be used. The negotiated and participatory nature of the actual design of the programme led to a high degree of transparency at all stages of the programme and helped the various interest groups to achieve the common goal of transforming the city into a place where people could live and work.

This experience seems to suggest that, if environmental policy is to work, the task of protecting, conserving, and improving the environment has to be shared among all social groups. These include the authorities (executive, legislative, and judicial) which make up the state

⁶See Santiago Torres and Federico Arena (1985): "Medio ambiente y región: ámbitos claves para la gestión democrática de un desarrollo nacional sostenible", *Ambiente y desarrollo*, vol. 1, No. 3, Santiago, Chile, Centro de Investigación y Planificación del Medio Ambiente (CIPMA), October.

⁷See J.P. Galvao Filho (1987): "Controle da poluição, filosofia e conceito", *Ambiente. Revista CETESB de tecnologia*, vol. 1, No. 2.

apparatus and the individuals, companies, and the intermediate organizations which operate in the society.

Finally, the following points should also be taken into account in order to encourage participation in environmental management:

i) For participatory environmental management to be at all workable, not only the community itself but also and especially the technical and political staff responsible for such manage-

ment must have a certain degree of education and training.

ii) The achievement of effective participation requires an accessible information system so that all groups involved have an adequate knowledge of the matters on which they are expected to have an opinion or make a decision.

iii) In proposing the need to institutionalize participation, we assume it has been decided to decentralize State management to a large extent.

III

The workability of environmental policy

An obvious prerequisite of all policies is that they can be effectively translated into norms and activities for achieving the proposed goals. Nevertheless, as mentioned at the beginning, one of the possible explanations for the meagre success of environmental policies tried in the region is precisely their unworkability.

There are five relevant questions which should be analysed: the need for a multisectoral and spatial approach to environmental policy; the use of political economy tools in environmental management; the careful choice of specifically environmental tools for carrying out the policy; the special role of Environmental Impact Evaluations in its definition; and the need to establish clear means of financing to guarantee its execution.

1. *The multisectoral and spatial approach to environmental policy*

Given the systematic nature of the environment and the variety of social groups involved, we must adopt a multisectoral approach if the environmental policy is to be workable. This condition implies two specific questions. On the one hand, we must ensure the compatibility of sectoral policies within the overall environmental policy on the basis of the interrelationships and limitations of the relevant biogeophysical systems; we must also ensure the compatibility required by socioeconomic, productive and technological interdependence. At the same time, the search

for intersectoral compatibility must guarantee the uniformity of the basic criteria of environmental protection, conservation, and improvement; it must also delineate the joint responsibility of the various groups and institutions in the execution and regulation of environmental policy.

On the other hand, we must ensure that the goals, programmes and tools of the overall environmental policy are clearly and explicitly expressed in the development policies of each sector. In practice, there is no environmental problem or proposal which does not involve agents from various sectors of economic activity, either as manipulators of the environment, consumers of environmental services, or victims of specific problems. This need is seen in the case of a river which is used to irrigate agricultural land, supplies drinking water to neighbouring human settlements, receives domestic and industrial effluents from them, offers aesthetic and recreational services, provides the water input for specific industrial activities, allows the generation of hydroelectricity, sustains the hydro-biological species exploited by fishing, and is at the same time a transportation route.

An environmental policy really intended to protect the water resource effectively must, in this case, include clear directives for the agricultural users, the sanitation subsector, industries, tourism, energy suppliers, fisheries, and the transport industry. The responsibility for the specific design, execution and regulation of these specific expressions of overall

environmental policy should fall on the appropriate institution for each sector. The task of co-ordinating and integrating all these separate activities should be assumed by the agency in charge of overall environmental policy, with due regard for its transsectoral nature.

Another matter directly related to the practical effectiveness of environmental policy is the explicit definition of the spatial or territorial limitations. If a policy is proposed without reference to the spatial disposition of human settlements and of productive activity it cannot be effective. There are, therefore, two basic points which must be made. On the one hand, from the overall point of view, the guidelines for the use, management, and exploitation of natural resources and environmental services must be included in a national regional development policy. This means recognizing the tremendous differences between the various regions of a country in natural resource wealth and in environmental conditions. We must therefore recognize that our policies for resource management and utilization must take into account the idiosyncracies of each region.

On the other hand, intra-regionally and locally, environmental factors affecting development programmes and projects, which in this context constitute environmental policy, must be expressed in clearly spatial terms.

To return to the case of the river, an environmental policy which expresses only purely generic or non-spatial norms or guidelines for the use of the river (or, more specifically, of its capacity to break down organic waste) gives no real indication to industry so that it can conform to the policies or put it into practice. In fact, from the spatial angle, the same capacity of a river to break down waste is very different when viewed from immediately above an urban centre or area of special aesthetic or recreational interest than when it is viewed from below such a centre or area.

2. The use of political economy tools

The existence of an implicit environmental policy as part of the national economic policy imposes two basic requirements if it is to be effective.

First, the environmental policy should ensure that in designing the overall economic policies, particularly the sectoral policies, their medium-term and long-term effect on the environment is evaluated. In other words, the environmental implications of economic policies should be explicit, so that if their negative effects are sufficient to militate against their main goals, they can be changed. This explicitness will allow compensatory measures to be appropriately identified and applied and this will prevent or lessen unexpected and undesirable effects of the various productive activities.

In the second place, environmental policy should use economic policy tools much more frequently than previously and for multiple purposes. At the same time, the specifically environmental tools discussed below should be improved. Indirect incentives and disincentives should be used, especially fiscal measures. The incentives include subsidies or tax exemptions for encouraging specific processes, the adoption of technologies, the fixing of locations, the use of specific inputs, and other particularly beneficial measures or measures minimizing specific deleterious environmental effects, but which do not prohibit the activity to which they are applied. The disincentives include the charging of special taxes, of special land taxes, increased public service rates, etc. Although success is more difficult than with incentives, the purpose of disincentives is not to suppress activity, but, rather, to make some locations more attractive or to encourage technological or exploitation alternatives which are environmentally less unfavourable.

Another decisive role can be played by credit regulations, following the same criteria. In this event, encouragement or discouragement is reflected in interest rates, grace and payment periods, the demand for guarantees and co-signers, the provision of technical assistance, etc.

Economic policy tools are used because the reaction to them can be predicted. The purpose of these tools is to provoke a reaction which leads to an approximation of the desirable level of environmental quality. This is then expressed in standard terms of specific environmental quality indicators.

The example of fishery resources mentioned above can be used to illustrate the way proposed here for ensuring the practical application of environmental policy. Faced with this situation, it is inevitable that the application of any policy dealing with the exhaustion of a species through over-exploitation must also include measures to solve the problem of over-investment in the area. Otherwise, the policy will be virtually unworkable. One possibility is to create credit lines or fiscal incentives for the development of deep-sea fishing so as to facilitate the conversion of the superfluous part of the fishery fleet to this type of fishing.⁸ This would simultaneously meet the goal of maintaining or increasing sectoral exports.

3. *Specific tools of environmental policy*

As has been pointed out, the workability of environmental policy largely depends on the availability and use of a suitable set of tools. While recognizing the existence and importance of many educational and consciousness-raising tools, and also recognizing the role of fiscal expenditure as a direct action tool, we shall analyse here only those tools related to the directing and guiding of the behaviour of social and economic groups. We refer specifically to tools for prevention, encouragement, discouragement, and punishment.

The purpose of these tools is to direct behaviour, indicating explicitly what should or should not be done with respect to a resource or environmental situation. Failure to obey the rules would normally be penalized. The following are some, although not an exhaustive list, of the tools which in some form or another have been applied to some degree in the region.

i) The first group of tools is designed to prohibit or restrict the use of a specific resource or environmental system. In the latter case, the tools are seriously limited in that they do not imply the establishment of specific and adequate forms of using the resource or ecosystem within the limitations imposed.

⁸It must be added that the policy must simultaneously examine the need to improve basic knowledge of the state of available resources, so that in the very short term regulations ensuring sustainable exploitation are established, before the problem in these fisheries is repeated.

This group of tools includes quotas (for fishing, extraction, export, etc.), rights and concessions (by tender or free grant) over specific resources or ecosystems, seasonal restrictions on extraction or use (permanent or temporary prohibition affecting a specific resource or species), and exclusion from use or exploitation or limitations on it (usually associated with a specific ecosystem, such as, for example, the establishing of a natural park or forestry reserve).

ii) The second group of tools has a wider range of application than the first group. Their purpose is to exercise greater qualitative control over activities involving environmental change by imposing specific management techniques for the use or exploitation of specific resources or environmental systems which are directly or indirectly related to these activities. These tools include: zoning regulations which, although based on various criteria, clearly emphasize the protection or preservation of specific environmental conditions; installation and operation permits for specific activities, requiring the observance of a more or less broad set of environmental guidelines; and operating permits for specific resources or environmental systems, subject to previous approval of plans relating to their management.

The tools included in the two groups are not mutually exclusive. In fact, they can be combined. For example, the establishment of the regulating plans characteristic of urban areas, where zoning is associated with the granting of permits to start certain activities, lends itself to such a combination. Another example is the granting of permits to establish industries in a specific place. Industrialists must keep the volume of effluents or residual flows within specific maximum limits. These permits can be linked to existing zoning regulations or independent of them. Another example of the combined application of the two types of tools is fishing permits. They require the use of specified tools and limit the catch to specific groups defined by the age or size of the species. Also within this category are permits for exploiting the native forest which require a specific form of forest management.

As has been already pointed out, almost all these tools have been applied in the region. Nevertheless, in most cases their application has been for goals defined only sectorally. Their

appropriate integration or compatibility within an explicit environmental policy has been ignored.

Aside from encouraging behaviour which leads to contradictory results, minimizes or even defeats the intended aim, the lack of co-ordination among the environmental tools themselves, and between the environment and economic policy tools, has meant, in many instances, that the measures have turned out to be completely inoperable. What happened in the Fonseca Gulf, in the south of Honduras, is a typical example. There, the felling of mangrove trees was prohibited. But the authorities failed to adopt complementary measures offering viable alternatives to the local Hondurans who use these trees as domestic or industrial fuel and depend on them to a large extent for their work and sustenance. Clandestine exploitation of the resource continued after the prohibition.⁹

4. *Environmental Impact Statements as core policy components*

The Environmental Impact Statement procedure was developed in recent years to support environmental management. The idea and its content originated in the United States as part of the 1969 environmental policy law. The Environmental Impact Statement procedure is a means to predict the environmental consequences of a specific initiative, plan, programme, or project in order to improve the quality of debate on its acceptance.

Environmental Impact Statement procedures have been applied mainly to specific projects: the construction of big infrastructural works and large-scale industrial plants which involve the use of products, processes or inputs considered high environmental risks. Undoubtedly, however, the idea of the Environmental Impact Statement, its methods and procedures, offers a powerful tool for effectively carrying out environmental policy. The procedure can be used to evaluate a wide range of social initiatives with significant environmental repercussions.

⁹See ECLAC (1989): *Estrategia para el desarrollo sostenido de la región sur de Honduras* (I.C/R.742), Santiago, Chile, March.

They range from bills, macroeconomic policy measures, sectoral development plans, both regional and local, to the actual application of the specific measures proposed. The Environmental Impact Statement can also provide background information of basic significance in the design and specification of the environmental policy tools outlined above.

In this context, it is interesting to note that the United States legislation allows for a wide range of applicability of the Environmental Impact Statement which, although not always put into practice, covers individual projects and bills, plan and policy approval, and other strategic activities. The Latin American countries which have legislated in the area, however, have preferred to follow the European Community example, limiting the application of Environmental Impact Statements exclusively to specific projects.

The identification of the environmental effects of an initiative on the basis of information provided by an Environmental Impact Statement can lead to the proposing of protection and compensation measures, to the replacement of the original proposal by other alternatives, or even to its abandonment. It can lead to a reformulation of the process design for specific projects, a change in plant size, or the relocation of the project. Environmental Impact Statements are, therefore, essentially a preventive tool for environmental policy and at the same time a valuable tool for following up and regulating works undertaken.

However promising the idea, its effective application has met with innumerable difficulties. Few countries have used it as a regular tool for environmental management. Nevertheless, as already pointed out, it could become a basically significant component in the elaboration of environmental policy. In order to appreciate this potential, we will return briefly to the protagonists and the nature of their role in the implementation of an Environmental Impact Statement procedure.¹⁰

¹⁰Practical examples relating to this theme can be found in ECLAC (1989): *Informe del seminario sobre las evaluaciones del impacto ambiental como instrumento de gestión del medio ambiente. Situación y perspectivas en América Latina y el Caribe* (I.C/L.519), Santiago, Chile, October.

In the traditional procedure, the promoter or initiator of a project appears on one side seeking authorization to carry it out. This could be a private, native, foreign, or even government body. In most cases his main goal is to obtain the necessary permit. So he normally tries to emphasize the benefits and conceal the disadvantages of his project. Large companies operating in the heart of communities are relatively sensitive to the environmental question. They are anxious to prevent environmental deterioration to the extent that public opinion could blame it for the effect caused and start actions or bring political pressures which could harm its image.

On the other side is the environmental authority. Its job is to commission the Environmental Impact Statement, study its results, publish them and see that its recommendations are incorporated in the relevant decisions. The effectiveness of this authority throughout the entire Environmental Impact Statement procedure is strongly conditioned by the existence of an efficient institutional framework which allows him to do his job. It is also decisive that the requirement to carry out an Environmental Impact Statement procedure must be backed by law and its application governed by explicit regulations outlining the correct procedure.

In addition to these two agents, there is the body which makes the relevant studies. It usually consists of one or more specialized consulting companies. Its role in the procedure and in the results of an Environmental Impact Statement will vary according to circumstances and the status of the other two agents. The influence of a relatively incompetent environmental authority may not necessarily be beneficial in defining the study terms of reference. On the other hand, if the agent promoting the initiative is particularly powerful, the objectivity of the study may be affected by the desire of the consulting company to win new contracts.

Another important agent in the preparation of an Environmental Impact Statement is the community itself. Some of the more advanced Statements define precisely which community representatives should participate, when and on what subjects participation is required, as well as the relative weights to be given to opinions and recommendations. As has been pointed out,

effective community participation is, undoubtedly, one of the decisive factors not only for effectively putting environmental policy into practice, but also for assuring its legitimacy.

Lastly, in view of environmental developments in Latin America, the organizations which finance development projects cannot be ignored, since they exercise a decisive influence. Special mention must be made of the World Bank, the Inter-American Development Bank and the Central American Bank for Economic Integration. These institutions have a decisive influence in the preparation of an Environmental Impact Statement since, in analysing and later approving of projects presented to them, they require such a Statement.

Nevertheless, the fact that Environmental Impact Statements are made only for projects is a restraint on the freedom of environmental management. The building of large hydroelectric generating stations illustrates this statement. Very probably in this case, society undervalues a series of other sources (solar, wind, tidal energy). An evaluation of the environmental effect of energy policy as a whole, covering all these sources and not only hydroelectric ones, would have led to a recognition of the environmental advantages and disadvantages of each one of them, and would probably have shown the desirability of seeking energy development in other directions.

The above shows the need to prepare Environmental Impact Statements in series, from the level of overall and sectoral policy to the level of specific projects. This involves the gradual compilation of the relevant information, reducing the load on the final stages (at the project level) when there is less time to collect and analyse it. An Environmental Impact Statement cannot be justified in the case of very small individual projects. However, the application in series of Environmental Impact Statements at the programme level is clearly useful when these projects taken together make up a significant activity, for example, in housing or settlement programmes.¹¹

¹¹ Norman Lee (1982): "The future development of environmental impact assessment", *Journal of Environmental Management*, No. 14, London, Academic Press Inc.

Clearly, not every project or initiative needs an in-depth environmental study. Such studies are, generally, very expensive and it must not be forgotten that the ultimate justification of the procedure is the avoidance of environmental damage which results in a reduction in human welfare or growth capacity. It does not make sense if the cost of the Environmental Impact Statement is much higher than the benefits resulting from its application, or it delays decision-making. For this reason, Environmental Impact Statements are preceded by a preliminary survey of environmental impact which in turn determines the need for more in-depth study where environmental repercussions are anticipated.

In spite of its limitations, the Environmental Impact Statement is a particularly interesting way to tackle the job of co-ordinating and achieving the goals of environmental policy. Its strength lies basically in the prevention and control of potential environmental effects of human activity. To be effective, the procedure must meet certain requirements. It must be timely and involve high-quality information and methods of analysis. It must have legal and institutional backing, community participation and, finally, a good dose of realism in its application.

5. Means of financing environmental policy

The last important point for ensuring the workability and effectiveness of environmental policy is the need to provide it with suitable means of financing. In fact, in the experience of most Latin American countries the lack of these means has clearly threatened the possibility of carrying out environmental management to ensure sustainable development.

Although much could be said on this matter,¹² we will mention only a few general criteria

¹²For a proposal on means of financing, referring to Chile, but much more widely applicable, see Osvaldo Sunkel (1989): "El desarrollo sustentable: del marco conceptual a una propuesta operacional", *Chile piensa a Chile. Tercer Encuentro Científico sobre el Medio Ambiente. Ponencias centrales*, Centro de Investigación y Planificación del Medio Ambiente (CIPMA), vol. 1, Concepción, Chile.

which may provide guidelines for conceiving and implementing *ad hoc* means of financing.

If we accept that many environmental services which help to providing us with a certain quality of life are derived from a heritage or capital good which depreciates over time, then the possibility of maintaining these services depends on our ability to prevent this depreciation or to replace the damage.¹³ In either case, we must allocate resources. A society should perform in the same way as any productive concern, partly assuring its survival by almost automatically forming a depreciation reserve apart from its income.

On the other hand, the environment is, in most cases, part of the public heritage. This is true of genetic diversity, of most water ways and bodies of water, the shoreline, the atmosphere, and large tracks of national territory, as well as of innumerable ecosystems which man harnesses. With differences resulting from the particular legislation of each country, mineral deposits, water resources and natural forests are part of the national heritage. They are subject to the granting of concessions or use and exploitation rights, but they are not private property.

From the economic point of view, many of these assets have been considered traditionally as free. Their use, therefore, has not been limited in any way. Undoubtedly, modern society, because of its technological capacity and the size of the population, exerts pressures which will not allow these practices to continue. Society itself, through State action, should redress and compensate itself for the use and abuse of this heritage by establishing means to assure that part of the income generated is allocated to its care and maintenance.

Only to the extent to which —on the basis of these and other criteria— a guaranteed and adequate fund is created, will the environmental administration of a country find itself in a situation where it can undertake the job of putting an effective policy into practice for environmentally sustainable development.

¹³See Santiago Torres and David Pearce (1979): "Welfare economics and environmental problems", *International Journal of Environmental Studies*, vol. 13, London.

Natural heritage accounts and sustainable development

*Nicolo Gligo**

The economic growth of a country undoubtedly entails an environmental cost. This cost is much higher if development is based largely on the exploitation of natural resources. The existence of methods to detect and calculate this cost would afford parameters which would help us to determine the corrections to development strategies that we would have to introduce in order for development to be environmentally sustainable.

To a great extent, this is the main objective of natural heritage accounts, a subject much in vogue in recent years. Unfortunately it has not resulted in the undertaking of concrete studies, but rather has remained in the realm of theoretical discussion.

This article presents alternatives based on conclusions from a project prepared in ECLAC by the Joint ECLAC/UNEP Development and Environment Unit. The project is unique in terms of what has been done on the subject in the region.

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Introduction

The state of the physical environment in Latin America has progressively deteriorated. The manifold efforts of environmentalist sectors have been unsuccessful and today serious hazards exist because the development processes of countries are, to a greater or lesser extent, environmentally unsustainable.

The preparation of natural heritage accounts as an instrument for changing the state of the environment has generated the greatest interest. Some consider this subject to be important from a semantic point of view, as a way for economists and planners to communicate with ecologists and natural scientists. Others who are more realistic maintain that they are a very useful tool only insofar as countries adopt explicit, environmentally sustainable development strategies.

In 1986 an exploratory study was published in the *ECLAC Review* to provide background information on natural and cultural heritage accounts and to draw up recommendations for promoting them in Latin America (Gligo, 1986). The conclusion reached in this study was that the region was lacking in experience as well as in attempts to establish programmes for the preparation of heritage accounts, although it was shown that in many countries there were specific inventories of traditional natural resources. At the time, given the extraordinary interest generated by the subject, recommendations for promoting these programmes were quite optimistic. Concordant with this interest, the study did not look into the causes as to why these programmes had not been started and, the criterion used was simply to recommend the necessary steps to make them operable. Emphasis was placed, among other things, on the objectives of modifying or complementing national accounts and of placing them within information structure schemes. In addition, methodological tables were drawn up to carry out adjustment accounts with their classic debit and credit columns.

Despite reiterated concern for the subject, countries of the region have made no attempts to undertake heritage account programmes. Only two timid efforts began to be outlined in 1989.

At least light has been shed on many of the problems and options that arise in preparing these programmes. In this respect, it is clear that there has to be a physical valuation of changes in natural endowments over time, which would facilitate the compilation of a series of satellite accounts to national economic accounts.

Undoubtedly, we have the option of appraising these physical accounts economically, although already a series of problems are apparent which we shall analyse later. This valuation could give rise to the modification of national accounts, which, if this were to occur, would incorporate environmental development costs not usually included.

Between 1988 and 1990, through its Joint ECLAC/UNEP Development and Environment Unit and with funding from the Federal Republic of Germany, ECLAC undertook a

project of natural and cultural heritage inventories and accounts, for the purpose of making practical and realistic recommendations that would induce policy makers to develop heritage account programmes. Some conceptual problems were analysed in this project, particularly those pertaining to economic valuation, and three case studies were undertaken using various methodologies. One study was carried out in Mexico, in the State of Morelos, on the Chichinautzin biological corridor; the second was in Argentina, in the province of Río Negro, in a foothills area with a temperate-cold forest; and the third was in Chile in the entire region of Magallanes, focusing only on methodological aspects, due to the size of the area.

This article presents the main conclusions of the project.

I

Rapprochement between economics and ecology

It was generally thought that heritage accounting would quickly play a leading role among economic-environmental tools. However, the possibility of implementing them has gradually lessened both at the level of countries and international agencies, as a result of a number of factors to be analysed.

The idea of promoting heritage accounts, in particular those on natural endowment, arose when it was proved that there was no need for the gross domestic product growth rate to be related to the resource conservation rate. Moreover, in many instances, a greater GDP rate was obtained at the expense of natural heritage "consumption", a phenomenon which occurred above all in countries that based their development on the exploitation of natural resources. For this reason, the question began to be raised as to why national account systems did not detect this problem and what should be done to remedy the situation.

National account systems were set up at a time when the Keynesian macroeconomic model—basically concerned with employment—prevailed in economic thinking. In this context, the

importance of natural resources was discounted, although previously, classical thinking had considered them to be one of the three basic income-generating factors. Neoclassical thinkers, in turn, virtually excluded natural resources from their model (Repetto, *et. al.*, 1989).

Heritage accounts as a tool appeared, then, at a time when it became essential to bring economics closer to ecology, a matter which will be discussed in greater depth in order to understand the issues surrounding heritage accounts.

Recognition must be given to efforts made in this respect. Early in the century, and based on a rational critique of economic growth theories, Frederick Soddy tried to draw attention to the fact that wealth depended on physical laws and was part of solar radiation flows (Martínez Alier, 1987). Various authors followed in the wake of Soddy, all of them meeting with little success. Resource depletion has been a topic of discussion for over a century. If it only gathered momentum a few decades ago, this was due to the ever-growing awareness of the effects of depletion processes and to the increasingly frequent occurrence of disasters that graded the

physical environment. "Resource depletion, energy and material flows are historical phenomena: awareness of them is also historical" (Martínez Alier, 1987, p. 57).

We should also recall efforts by adherents of the school of "natural economics" at the time of Linnaeus and of the physiocrats who attempted to reconcile this kind of economics with that of chrematistics.

However, not much headway was made due primarily to the specialization of economic sciences, which often followed the path of economic reductionism.

José Manuel Naredo states that there are three routes along which economists have tried to extend the operating range of standard theoretical tools towards the subject of natural resources (Naredo, 1987). The first, put forward by Harold Hotelling attempts to price exhaustible resources on the basis of intergenerational preferences (Hotelling, 1931). The second, advanced by A.C. Pigou, corrects market imperfections by making private costs bear social costs through taxes or subsidies and by adjusting national accounts (Pigou, 1935). The third, established by R.H. Coase looks to the market to internalize negative externalities through modifications of the institutional framework (Coase, 1960).

The various streams refined their quantitative instruments and attempted to come up with some answers primarily at a micro level, but they were unable to respond to the major questions that arose out of the environmental crisis. Nevertheless, they are recognized for their well-known pioneering merit, in particular that of Hotelling, who rejected the possibility of an optimum allocation of resources over time unless total future demand was known (Georgescu-Roegen, 1975).

Despite the difficulties that arose from limitations inherent in the very laws of economic sciences, the greatest contributions were made in terms of concern for the economics of natural resources. The necessary framework was provided by Nicholas Georgescu-Roegen who related the laws of entropy and thermodynamics to economics. This author holds that thermodynamics is basically economic-value physics, as cannot unknowingly be established, and that the law of entropy is the most truly economic of all natural laws (Georgescu-Roegen, 1966).

There were contributions in the field made on the role and evaluation of natural resources in economic models (Smith and Krutilla, 1982). Also of note were contributions by authors such as Partha Dasgupta in the evaluation of the social costs of environmentally degraded resources, especially under conditions of uncertainty (Dasgupta, 1982), and those by a significant number of academic studies, such as those done by Harold Barnett or Anthony Fisher, who dealt with forms of measuring scarce natural resources (Barnett, 1979; Fisher, 1979).

The new conceptual thinking has tended to improve methods of evaluating natural resources and the physical environment. However, this does not bring economics any closer to ecology, but merely boils down to dealing with ecological problems through the use of new or rejuvenated methodologies conceived within the bounds of traditional economic laws.

This point is basic if we wish to analyse the role of heritage accounts beyond their use as an instrument for economic-environmental integration. Many of the arguments put forward to promote heritage accounts have been based on the need for a language—if possible an economic and one-dimensional language—that would permit planners or economic policy makers to "economically" understand what is happening to natural resources and other natural elements. Notwithstanding the importance of recognizing the need for a common language, what is even more crucial—in environmental science terms—is to understand what is happening to natural endowment, what changes have occurred in it over time, what changes are foreseeable. These questions must be answered in order to evaluate clearly whether development is environmentally sustainable. Obviously this evaluation should be comprehensive and, therefore, multidimensional and interdisciplinary.

In other words, as it has already been discussed in other papers, the basic objective of heritage accounts should be to provide those responsible for devising strategies and development policies, with a tool that would allow them to ascertain, among other things, what the cost of the various development strategies to natural heritage is and what the trends of this cost will be. The instruments and methodologies do not necessarily have to be standard, but rather could

be adapted to the ecosystemic determinants of the territory under study and to its social conditioning factors.

For this reason, heritage accounts should not be identified with a mere search for an economic language that would define changes in a one-dimensional way, setting a price on natural resources and on certain natural elements, which, in some cases, could be a complementary objective.

This does not imply that the subject of economic valuation should not be dealt with. On the contrary, it is seen as being necessary and extremely useful. However, it should not be the only tool sought, but rather should reinforce the use of methodologies and physical information. Nevertheless, we must bear in mind that valuation could pose serious limitations since there is no thesis within economic thinking in which the exchange value or its essence measures the use value of goods. As Pedro Tsakoumagkos states, the essence of value can be abstract work time, subjective pleasure or anything else, but never directly the very properties of the objects of use. The objective pursued by economic-environmental policy (and, consequently, by the preparation of environmental accounts of both inventories and

flows) is to design and implement strategies to counteract the deterioration of these very qualities. Economic calculation *per se* will never provide us with a measurement of what we are seeking, i.e., a *direct* measurement. This translates into the domain of "natural" processes—among these the natural social processes of deterioration of the physical environment—being different from other domains, regardless of how much they are juxtaposed. But it is precisely this juxtapositioning which makes it possible to design physical and economic measurements that correspond to each other unambiguously, and that will show us (and even measure) what we are seeking (Tsakoumagkos, 1990).

Heritage accounts should therefore be undertaken within an interdisciplinary framework of activities. The task is not easy since the various natural sciences are at a totally different level of abstraction from social sciences. Moreover, the historical nature of the latter contrasts with the non-historical nature of the former.

Nevertheless, the influence of the latter on the former would constitute an interdisciplinary exchange that would be the domain of the environmental dimension.

II

The workability of heritage accounts

Notwithstanding the proliferation of studies, meetings, recommendations, etc., on the usefulness of heritage accounts to establish new environmentally sustainable development strategies, there are very few countries that can show significant progress in this field. Moreover, in some relatively less developed countries there has been an obvious step backwards, because, despite having greater opportunities for resource evaluation through technological advances in remote sensing, their traditional systems for evaluating natural resources have deteriorated. A number of reasons are given for the scant progress made. Perhaps what is *essential* is that there are very few countries that have progressed in

establishing environmentally sustainable policies. It is a well known fact that the environmental problems faced worldwide are mounting.

The problem is even more complicated by the short-term development options that have been chosen, which obviously correlate with the generation and assimilation of all sorts of technologies that entail environmental risks. Immediate demands defer any concern for natural heritage until its deterioration or drawdown begins to threaten the possibilities of growth. Only then is there awareness of the problem, but usually by then it is too late.

In this context and, lacking any in-depth knowledge of changes over time in the natural

heritage inventory, wealth or stock, there are very few governments interested in showing how their development strategies and policies "consume" natural endowment or how a portion of the figures on their country's growth are not due to an improved combination of production factors, but rather to the deterioration and consumption of one of these.

The first point that needs to be made clear, then, is that heritage accounts are a useful instrument for new development strategies that *explicitly* propose substantial modifications to incorporate the environmental dimension. Efforts have been made at a global and regional level, but little can be said about national initiatives (World Commission on Environment and Development, 1987); (Sunkel and Gligo, 1981). Undoubtedly, in order to devise development strategies that are environmentally sustainable, it is essential to evaluate periodically what happens to both natural resources and to other natural elements.

Another factor that has had an influence on the inoperativeness of heritage accounts is the very definition of natural heritage. Each country, each local area, each academic group has a different definition of what it is. This leads to the proposing of similar methodologies for different purposes.

It is not a matter of specifically defining which are the natural endowment elements of a country or local area, but rather of surveying general concepts. Virtually all definitions of natural heritage start out with the concept of its *utilization*. And if there is utilization, there is a certain degree of transformation or making it artificial.

The problem does not lie in defining as natural all that is not man-made. The author, in a

previous publication, refuted this false dichotomy stating that anthropic actions actually tend to render the environment artificial in varying degrees. These different degrees of artificiality create a continuum that ranges from 0 to 100% (Gligo, 1986).

The need for a more precise definition is especially important for Latin American countries. In the United States natural heritage has been defined as anything that is related strictly to wildlife. For this reason no major conflict exists since natural heritage is easily definable in territorial terms. In other developed countries, primarily European natural heritage has been defined in terms of specific resources: water, fauna, soil, native forests (primary or secondary) (Gligo, 1986).

In Latin America not only is this definition of natural heritage of interest, but also, given the speed of change from pristine or semiwild ecosystems to agricultural systems, it is important to have a conceptual definition of ecosystem that denotes changes of the territory over time, since this process is closely linked to an ecological cost that varies depending on the transformation technologies applied.

Another common confusion is to identify heritage assets with goods that fall in the public domain. Although it is true that there is some overlap, many heritage assets have been privatized. This is the case with land that, despite being a natural heritage asset of primary importance, is privatized in the large majority of countries (CICPN, 1986). The legal issue in the future could contribute to the implementing of strategies to limit the abusive treatment of certain natural endowments which, due to their being privatized, conceal their status as social goods.

III

Description and classification of natural goods and resources

The debate over the description and classification of natural resource endowment has involved three essential biases for Latin America and the Caribbean. First, the almost exclusive

hierarchization of goods and resources that are of interest to developed countries in terms of their trade in the international market. Second, the importance given to certain goods and

resources that play an increasingly significant role in global environmental conditions. An example of this would be the endowments of biodiversity and humid tropical ecosystems. Third, the crossculturation and acculturation processes that alter lifestyles and tend to undervalue regional traditions and customs, thus altering natural heritage functions and, therefore, their valuation.

To decide in favour of the importance of resources based on traditional classifications, accepting the biases indicated, would mean introducing an instrument for environmentally sustainable development that, while not ignoring that it could have an alternative use for a given country, would prove extremely useful for a global strategy headed by developed countries.

Consequently, the descriptions and classifications that should have the greatest effect in the Latin American view are those based on a country's own approach, which should, if possible, be multivaluational.

The fact that the theory of value has developed as part of political economics could be indicative of the need to use economic categories to classify goods and resources according to their valuation. This position is clearly reductionist. A natural element can be valued in various ways, depending on the disciplinary or scientific approach. Thus, it can have a permanence value based on its ecosystemic contribution, an historic value depending on its contribution to the region's evolution, and an economic value when it is a market product.

A decade ago, the French proposed six options for setting up a classification. These nomenclature options were: i) institutional (by producers); ii) functional, from the standpoint of natural elements (reproductive condition, more or less renewable characteristics, cycles); iii) heritage functions and uses by man and his activities; iv) homogeneous geographic spaces (territories, ecosystems, spatial criteria); v) biospheric elements (environmental criterion) (lithosphere, hydrosphere, atmosphere, holobiomass); and vi) physical and chemical elements (the Mendeleevian arrangement, classification of energy forms).

The main streams followed the path of promoting classifications based essentially on

traditional natural elements (option ii) of the French).

In 1985 a regional proposal recommended using a combination of two options: the classical one based on the usually exploited natural resources (minerals, soil types, climate, etc.) and that of homogeneous geographic spaces (territories, ecosystems) (Gligo, 1986). This recommendation was made as a first attempt to promote heritage accounts at a national level.

However, the current situation has changed. The above-mentioned operational difficulties in undertaking accounts at this level make it necessary to pay more attention to subnational and local approaches, and consequently, the value of the resource gains in strength on the one hand, and on the other, so does valuation of what is understood by cultural heritage of a region.

In general, the bibliography on heritage accounts is not limited to the description and classification of goods and natural resources. It makes room for classical positions. This would seem logical since virtually the entire bibliography focuses on national issues. There are exceptions in which there is a perceived need to redefine the conceptual discussion on the subject (Naredo, 1987). In the few studies that exist on third-world countries no analysis has been done on biases either. Perhaps this is because those who carried out these studies were from developed countries.

The three experiences in the project Natural and Cultural Heritage Inventories and Accounts, mentioned in the introduction, provide suggestions and innovative conclusions.

The study on the Chichinautzin biological corridor in the Mexican State of Morelos, analyses changes brought about in the natural resources of the area. Already there appears a local resource, water, which gives the biological corridor distinctive characteristics, since the area constitutes a watershed ecosystem. To determine this condition and to evaluate it physically represents a significant contribution that defines the corridor.

The study of a temperate-cold forest in the foothills region of the Argentine province of Río Negro focuses on evaluating a series of ecosystem attributes that are usually not taken into account, such as biodiversity and tourist attrac-

tiveness. Here, as in the Mexican study, there is an effort to place a value on a local resource. In this regard we pause to make a point. The local importance of a given resource may determine the higher or lower valuation of other resources that systematically influence its functioning. Thus, if greater importance is placed locally on a scenic resource, it is logical to suppose that the value of timber in certain areas of the forest would be insignificant, since these areas are subordinate to changes in the scenery over time, although they can be physically and economically appraised.

The study of the Chilean region of Magallanes, due to its being strictly methodological, gives rise to an in-depth discussion of the description and classification of natural goods and resources. The specific and exclusive conditions of this region allow for a detailed examination of a methodological approach from a clearly local perspective. In this study preference is given to a local description and classification that establishes a global rather than a specific methodological guideline for the region, which subsequently makes it possible to locally define goods and resources.

The methodological option chosen in this case study selects biological or physical natural components that meet needs and therefore acquire value. They are grouped into three categories: man's needs, nature's requirements and, lastly, the economic interest stated in terms of

the economic value set for goods and resources. With regard to man's needs, based on studies by Manfred Max-Neef, four existential needs were determined that allow a good or resource to be described and classified from a local point of view (Max-Neef, *et. al.*, 1986). These are subsistence, identity, recreation and knowledge. Thus, a matrix is generated in which the four existential needs are placed in one ordinate and the main categories of natural components in the other.

What is interesting about the proposed method is that each good or resource can respond to one or more valuational dimensions.

Undoubtedly this classification must be viewed as an attempt to contribute to the debate, there being ample room for modification and improvement. It should be pointed out that it also represents an important contribution to the classification and, above all, the setting of priorities for the study of natural goods and resources of a region or local area.

A methodological proposal such as the aforementioned is notably useful, since it not only makes it possible to evaluate heritage from a local perspective but also, through an adequate methodology, it can contribute to the consolidation of subnational or national accounts. In the latter case, it is possible to predict that, notwithstanding consideration of an approach from below, aggregation will leave many local goods and resources out of the picture.

IV

The economic valuation of heritage accounts

The greatest conceptual efforts undertaken in the last two decades on the subject of heritage accounts have focused on the problem of economically valuating the various natural endowment components. These efforts have been made because many consider that the sole purpose of natural heritage accounts should be to modify national accounts.

Unfortunately, what has been lacking is a holistic concern, with interdisciplinary approaches that would allow the various values

inherent in a natural good or resource to be investigated. This has led to an insistence on the indiscriminate economic valuation of natural elements, regardless of whether these have exchange value or not. Obviously, in the face of this economic appraisal, use of economic tools in natural heritage accounts has many drawbacks. There are two serious limitations: on the one hand, the economic valuation of natural elements and goods that are not in the market; and on the other hand, for those resources that have

market prices, the restrictions that arise as a result of the very poor capacity of market prices to truly serve as environmental indicators and not merely be transmitters of value (determined by various conditions of appropriation, institutionalization, etc.), regardless of the qualities of use.

Notwithstanding these serious limitations, prior to analysing whether they can be overcome or not, we must emphasize the argument that there is a need to use economic valuation in natural heritage accounts as a useful instrument in implementing environmentally sustainable development. Its usefulness lies in the need for an instrument to allocate resources both at a sectoral and regional level. For this reason, maximum efforts must be made to clarify the possibilities of implementing these accounts.

The preparation of natural heritage accounts should, in addition, become a suitable indicator that would permit national income to be "corrected" (Leipert, 1989). This correction becomes very necessary due to the additional social costs of production that are generated by environmental deterioration.

1. *The economic valuation of inventories*

Various methodologies regarding heritage accounts have focused on the valuation of inventories or stock so that every so often, changes in them over time can be compared, based on constant prices. Herein lies the first problem: how do we determine these prices in order for them to be suitable indicators of the qualities of use? and how do we ascertain the multiple functions and benefits of a given ecosystem?

The following example sheds light on these questions: if a person owns a forest ecosystem, the producer only sees in it the timber from the trees, whose economic value does not depend on the time of formation nor on energy collection, but rather is shaped by multiple factors involving institutions, monopolies, wage policies, foreign trade, etc. The price of the forest does not necessarily indicate the quality of use. But —and this is crucial— the forest is not only timber: it is water-producing capacity, it is fauna, it is genetic diversity with potential resources, it is flora with pharmacological resources, it is tourism and recreation, etc.

In terms of the question of how to determine prices in order for them to be adequate indicators of quality of use, the replies have ranged from the extreme of working with net market prices to corrected market pricing, combined with the determination of values for natural elements that are not in the market.

Working with market prices does not prove to be advantageous. Undoubtedly, these prices express current generational preferences, but they do not take into account elements for future planning. On the other hand, the nature of a market good is afforded by the appropriation-appraisal process. For this reason, prices are not necessarily quantitative expressions of use values, but are rather tied to complex relations deriving from property rights, increased value and types of income. The other limitation that arises from the sole use of market prices is that it excludes a series of natural elements, goods and functions that are outside it.

It is obvious that methodologies for implementing the valuation of inventories should be based on a combination of *shadow pricing* of resources that are in the market and on the pricing of certain goods that are not in it. This is the method used in Argentina in the study carried out by the *Comisión Nacional de Política Ambiental* (the National Commission on Environmental Policy), supported by ECLAC, through the project referred to in the introduction (Suárez, 1990).

In this study, shadow prices were established that secure the necessary costs for the reproduction of a forest ecosystem in terms of the management and restrictions of the system. The procedure was based on given types of expenditures, namely, those involved in the productive function and those which are related to maintaining the ecosystemic function.

Included among the first expenditures were those of improvement of tree mass, fauna, genetic diversity and tourist potential. Among the second, those of maintaining the hydraulic and drinking water infrastructure, road infrastructure, the productive capacity of agricultural soils and other indirect benefits.

The basic idea was that these costs should generate a policy that would set prices to stimulate sustained management. However, there arises the question of how to determine these prices.

A detailed analysis of calculations of the various costs reveals significant conceptual efforts that, despite being ingenious and well thought out, are still questionable. The authors themselves, in referring to the maintenance of fauna, admit that these are undoubtedly contributions to the resolution of an important subject that still remains virtually unresolved (Suárez, 1990). However, despite this, expenditures in wildlife improvement were quite accurately calculated. Similar arguments were advanced with regard to the heritage value of genetic diversity and in terms of tourism and recreation.

The study then goes on to show the total heritage value based on calculations of the maintenance of the productive and ecosystemic functions.

The question that arises concerns the usefulness of this value. For the authors, this heritage value should generate price increases in marketable products, based on a modification of the relative price structure and, therefore, on income redistribution. But value transfers are either governed by the law of value itself or they answer to reasons that are unrelated to value (monopoly in a strict sense or action by the State) (Tsakoumagkos, 1990).

It should be mentioned that in this experience the heritage value of timber reaches 83% of the heritage value of the ecosystem under study. This figure makes for very low sensitivity of the remainder of the productive and ecosystemic maintenance functions.

Mention should be made of the fact that this exercise is called upon to have a primarily prospective benefit. The cybernetic model used is a significant effort; however, the linear nature of the cause and effect relationship—the sole possibility, considering the state of research on ecosystem attributes—limits its use.

The Argentine experience yields important insights, particularly on the difficulties in overcoming contradictions inherent in economic theories and in analysing the actual valuation possibilities of the heritage stock.

The Chilean case study in the Magallanes region involves another methodological approach as part of the project referred to. In this case, appraisal consists of comparing actual income obtained from the massive short-term exploitation of a resource versus the levels that would be achieved without the exploitation pro-

ject or with a rational exploitation project with appropriate management plans (University of Magallanes, 1989).

This methodology proposes working with two types of income, namely: actual income, calculated as gross income minus economic costs, and adjusted income, defined as actual income minus ecological and social costs. Both gross income and economic costs are determined on the basis of market prices.

The basic problem in this case lies in how to determine these ecological and social costs. The study defines them as the return and/or benefit from the resource exploitation that would be obtained with an appropriate rational exploitation (University of Magallanes, 1989). The definition is not very precise since "appropriate rational exploitation" can be interpreted in many ways. The treatment given to resources is differentiated: renewable resources have their economic and social costs determined, while the value of non-renewable resources is determined by the actual income obtained from exploitation.

The study concedes that there is a group of goods that lacks any possible economic value, but that could be valued through indirect benefit.

The Magallanes study does not place great emphasis on the economic accounting of natural resources. Rather, its emphasis on the classification, typology and multiple valuation criteria of resources clearly indicates a certain conceptual scepticism towards economic valuation.

The three studies make an effort to find answers for market distortions and deficiencies, as do other studies done in third-world areas and countries. In this sense it should be mentioned that the bottlenecks were similar to those encountered by Repetto, *et. al.* (1989) in the exercise done on heritage valuation in Indonesia, based on changes in oil and forest inventories and in erosion. In order to determine the value of petroleum and forests, net price or unit income was used, modifying values by using a correction factor to internalize price changes. In order to determine erosion, the cost per ha/year was estimated through loss of productivity of the agricultural sector. Upon capitalizing past costs it was concluded that, given the deteriorative techniques currently in use, 40% of future income is sacrificed in order to produce a present unit of income.

2. *The economic valuation of the fraction of growth attributed to environmental deterioration*

The theoretical and methodological difficulties in valuating inventories have gradually fostered an economic-environmental line of thinking in the sense of focusing efforts on the study of flow indicators. This does not run counter to proposals for the study of stock; in some cases it is complementary, but in others, the focus is solely on flows.

In Latin America, as part of the ECLAC project on natural and cultural heritage inventories and accounts, this option was chosen for the Mexican case study on the Chichinautzin biological corridor (Carabias, Montaña and Rodríguez, 1990).

Economic valuation puts forward as a theoretical reference the definition of income given by John Hicks, in which income represents the maximum consumption that can occur without modifying a society's or an individual's heritage. The work focused on the years 1970 and 1980, with simulations done for the years 1990 and 2000. By subtracting input costs from gross production value, economic income was obtained. Subsequently, environmental costs deriving from the various economic activities were estimated on the basis of calculating erosion, loss of forest cover, loss of water-retention capacity,

forest fires involving adult trees and saplings and loss of reproductive forest bank.

The study aimed at answering two questions of the greatest interest: the possibility of estimating what proportion of economic income environmental costs represent, and of determining what the impact of this reduction of natural endowment is on the availability of resources (water, forest, land) that constitute it.

To respond to the first question, an environmental cost coefficient was calculated for each unit of economic income. The answer to the second question was dealt with only in terms of physical balances. In this way the conceptual stumbling blocks discussed earlier were removed i.e., the difficulties in ascertaining qualities of use through economic valuation, and the existence of an historical nature which conditions use of economic parameters.

The option for this case has less contradictions and is also closely linked to the productive process, a fundamental issue for incorporating the environmental dimension into development strategies.

Nevertheless, the study poses a number of difficulties with regard to the determination of some prices. Particularly complex is how to assign value to loss by erosion. It is possible that other methods based on loss of productivity (which in fact corresponds to the decrease in stock due to loss of quality) would have been less disputable.

V

Improvement of conventional national accounts

It is generally agreed that conventional national accounts do not incorporate the depletion and deterioration of natural goods and resources.

The reformulation of development strategies with a view to making them environmentally sustainable will necessarily require accounting instruments to make up for this shortcoming (Lutz and El Serafy, 1988). Initiatives in this respect have been taken in various places, but, despite the interest shown by academic centres and international agencies, such as the United Nations Environment Programme

and the World Bank (Ahmad, El Serafy and Lutz, 1989), no significant modifications have occurred due to the conceptual problems already mentioned and to others discussed further on.

The method of greatest theoretical interest is the modification of the consolidation of gross domestic product accounts. In order for these to be consolidated, modifications must obviously occur at both the input and product levels. Two additions have been proposed for inputs: i) modification of the net national product to introduce "environmental plundering"; ii) deb-

iting the gross national product for "environmental services". Private consumption is modified in the product by adding the production value generated by use of environmental resources.

This method could provide the opportunity for managing the formula that states that the modified gross national product is equal to the conventional gross national product plus environmental services minus environmental damage (Peskin, 1989).

Analysis of this formula (mod. $GNP = GNP + ES - ED$) shows that modification is moving in the right direction: by increasing services and reducing damage, product grows as a result. In the absence of technological changes, by there being no "business transactions" for services and damage, the indicator would remain constant. Therefore, under these circumstances, it could well prove not to be a good indicator of human welfare. The other problem raised is that the maximum reduction of damage is not necessarily a social optimum, since it would involve an attendant lack of environmental services. This aspect is very controversial, especially when it is argued that, in order for product to grow and for the social optimum to be achieved, the damage could be greater.

Henry Peskin states that this method involves four basic problems:

i) Disagreement as to suitable units of measurement. The proposed system assumes that both damage and services should be evaluated in monetary terms, which, as has already been mentioned, leaves out a series of goods and functions that are outside the market.

ii) Disagreement as to the most appropriate discount rates. This point has been studied and the conclusion reached that, in fact, it is very difficult to assign discount rates in the light of the uncertainty surrounding the degree of substitution, the speed of obsolescence and technological changes (Smith and Krutilla, 1982; Smith, 1979; Markandya and Pearce, 1988).

iii) Dependence on the neoclassical economic model. The entire national accounting structure is based on neoclassical economic thinking and it is not clear that the latter is accepted by other societies with different cultural traditions where the environment could be a fundamental ethical conditioning factor.

iv) Demands that exceed the availability of information and abilities.

One of the objectives in introducing the subject of natural heritage accounts in Latin America and the Caribbean should be that national accounts be modified within a reasonable period of time. However, it should be pointed out that in France and other countries which have promoted such accounts, these modifications have still not been carried out.

Efforts in countries with less relative development have been few and far between: the Statistics Bureau of Tanzania, applying the methodology described in this chapter, undertook an interesting study on the modificatory introduction of firewood production from man-made plantations (Statistics Bureau of the United Republic of Tanzania, 1981).

Another important study is the above-mentioned one on Indonesia (Repetto, *et. al.*, 1989), where net domestic product is calculated by estimating depreciation in three natural resources: oil, forests and soils. Repetto, *et. al.*, exclude capital gains from the estimated depreciation. The reason given is that these are clearly influenced by short-term price fluctuations, which makes them extremely volatile.

The study on Indonesia also contributes background information on other significant macroeconomic estimates. It compares gross and net domestic investment estimates. The purpose of these parameters is to show that developing countries, such as Indonesia, which are very dependent on their depletable natural resources, should diversify their investments in order to preserve long-term sustainable development (Repetto, *et. al.*, 1989). This means that they should avoid financing consumption through the capital depreciation of natural resources. In the case referred to (recalculated) investment was negative in some years, which shows clearly the scant environmental sustainability of development strategies.

The experiences described leave us with various methodological lessons and still many unresolved questions. However, they have proved extremely useful in showing what the possibilities, limitations and problems are.

The sharing of these experiences, together with incipient regional efforts, allow us to infer that these problems will be present in Latin

American countries. But it is essential to make it clear that the prospects for Latin America are different. There are two factors responsible for this difference: on the one hand, the various

levels of industrialization and, on the other, the diversity in terms of dependence on renewable, conditionally renewable and non-renewable resources.

VI

Regional guidelines

Based on efforts undertaken in other regions and the ECLAC project on natural and cultural heritage inventories and accounts, which highlights the large volume of background information available, the contribution of conceptual elements and conclusions drawn from the three local case studies chosen, the following guidelines are proposed:

a) Natural heritage accounts should be promoted in countries that substantially modify their development strategies to fully incorporate the environment as a basic dimension that conditions the obligations and rights of citizens, and determines ways and systems for a society to interrelate with its surroundings over the short, medium and long terms.

b) In this context the objective of heritage accounts should be to become a planning and management tool for ensuring environmentally sustainable development. For this reason, it is recommended that use of these accounts be imperatively fostered in countries that are seriously embarking on alternative strategies as an outcome of the deterioration of their environment.

c) When it comes to making recommendations on account methodologies it is impossible to treat countries of the region as a homogenous group. Each country, within the context previously described, should be able to develop its own method in accordance with its own heritage of natural goods and resources, its development approach and its cultural patterns.

d) It is important to make it perfectly clear that not only is there no conflict between physical accounts and economic accounts, but that these are absolutely complementary, since the latter depend on the former.

e) The assignment of greater importance to one or another kind of account will depend on its

usefulness as a strategic tool. Nothing is gained by accumulating a large volume of statistical data and physical and economic indicators if these are not incorporated into development plans and programmes.

f) It is recommendable that a system of physical accounts be promoted first. The proliferation of natural resource inventories could lead to the unwise duplication of work. A system of physical accounts is much more than the sum of partial inventories. It means generating information on the inventory or stock of natural goods and resources, the flows associated with the variations in inventory, ecosystemic interactions, disaggregate trends, in particular, levels of disturbance or deterioration, etc. Inventories are indispensable inputs for designing those systems.

In designing a physical account system it is advisable to avoid textual transcriptions of current classifications and, therefore, we must form a conceptual structure that would allow a classification in terms of geographic, economic, social and cultural specifics.

Specifics can occur in resource classification based on a study with the broadest scope possible, including natural goods and resources, independently of their appraisal as merchandize. Study priorities should be set according to the degrees of influence on the environmental sustainability of development.

g) It is foreseeable that no significant changes may occur in devising alternative development strategies in Latin American countries. Radical changes in environmental policies are only foreseen in the most extreme situations. Nevertheless, in many countries of the region alternative development strategies are being proposed for given areas that have reached very deteriorated states in their environment. For

these areas, which can even consist of states, provinces or departments, it is recommended that such accounts be promoted. In other words, in the current historical stage of Latin America, given the deteriorated and overexploited state of certain areas, drastic change is imperative. It is here that natural heritage accounts should become a useful tool.

h) To promote accounts based on given local areas or regions will mean proposing a methodology that will include their specifics. In so doing, it is convenient not to lose sight of the possibility that the methodology proposed could be linked to a national methodology.

i) This proposal does not at all exclude promoting modifications of national accounts and/or of establishing national heritage account programmes but, on the contrary, it is one of the avenues for fostering them. An important objective that should not be forgotten is the modification and improvement of national accounts.

j) To begin natural heritage accounts on the basis of certain deteriorated areas implies the problem of storing available information and of its reliability. Deteriorated areas are usually

located in harsh and vulnerable ecosystems that are almost always far removed from major urban areas. For this reason, a decision of this nature requires the design of an efficient natural resource research programme.

k) Once physical accounts are prepared, economic accounts of the natural heritage could be set up. A word of warning is in order as to the difficulty of reading physical accounts, due to their disaggregation into the various natural elements and resources.

l) In calculating an economic account, there is always the possibility that the region or local area under study might or might not have regional accounts. If it were to lack regional accounts, the environmental issues could prove to be a factor in promoting them, and if that were to occur, we would have to incorporate the environmental dimension into them as much as possible. If traditional regional accounting were to exist, two main options would arise, namely: i) to modify the regional account system and ii) not to innovate the traditional account, but to add a "corrected account" to it that would allow it to show the differences between both.

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The magnitude of poverty in Latin America

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In the last two decades, Latin America has gone through two opposite phases: the 1970s, which was a period of economic growth for most of the countries, and the 1980s, when the crisis seriously depressed the standard of living of broad sectors of the population. In order to appraise and interpret these changes properly, however, it is necessary to have at hand indicators which, individually or together, give an idea of the various dimensions of the social situation and the way they have evolved.

In order to help fill this need, the present article gives figures on the magnitude of poverty in Latin America in the years around 1980 and 1986, estimated according to the "poverty line" method. This study covers 10 countries representing approximately 85% of the population and 91% of the product of the region: Argentina, Brazil, Colombia, Costa Rica, Guatemala, Mexico, Panama, Peru, Uruguay and Venezuela. The poverty figures were then extrapolated to a group of 19 countries of the region and projected to the year 1989.

The overall results of the study show that at the end of the 1980s, 37% of the households of Latin America were in a situation of poverty and 17% of them were in a state of indigence. The latter figure means that—even if they spent their entire income on food—one household in six was unable to cover the nutritional needs of its members. The results also indicate that there were nearly 183 million poor persons (71 million more than in 1970), of whom some 88 million were indigent (an increase of nearly 28 million over the figure estimated by ECLAC for 1970). One of the most striking features of this comparison is that—in contrast with the situation at the beginning of the 1970s—poverty in Latin America is now mostly an urban phenomenon, both because of the big expansion of the main cities and the fact that the increase in poverty indexes has been concentrated in the urban areas, especially during the period of the crisis.

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Introduction

The economic crisis which affected the countries of Latin America in the 1980s not only highlighted the structural shortcomings which have characterized the region's development but also aggravated many of the existing social problems, giving rise to fresh obstacles to social mobility and cohesiveness. This has made it even more urgent to develop strategies which will make it possible to return to the path of sustained economic growth while at the same time orienting development towards the goal of social equity: tasks which, in turn, call for a fuller knowledge of the size and characteristics of that sector of the population which is living in conditions of marginality and critical deprivation.

To this end, the ECLAC Statistics and Projections Division carried out a study on the dimension of poverty in the Latin American countries, as part of the Regional Project for Overcoming Poverty (RLA/86/004) of the United Nations Development Programme (UNDP) and with financial assistance from the United Nations Population Fund (UNFPA). This study (ECLAC, 1990) is part of the line of research begun in the mid-1970s, aimed not only at determining the magnitude of the phenomenon but also at helping to develop methodologies to identify the households in a state of poverty and to describe their characteristics, thus providing useful information for the design of policies to overcome these problems.¹

This article aims to give some of the results of this study, especially regarding the magnitude of poverty in Latin America in the 1980s, and to provide a brief description of the methods used.² It should be borne in mind that the present article is a summary: that is to say, it is constantly referring—explicitly or not—to the original

¹In addition to the authors of this article, the main participants in the project were María de la Luz Avendaño, Mabel Bullemore and Carlos Daroch (all of the ECLAC Statistics and Projections Division) and the consultant Jorge Carvajal.

²Full details of the procedures adopted in each country and each phase of the research are given in a number of supporting studies carried out under the project. For a detailed list of these studies, see ECLAC, 1990.

study. Thus, many of the detailed descriptions in that study —especially those dealing with the methods used for the various estimates— are abridged or omitted.

The countries covered by the study are Argentina, Brazil, Colombia, Costa Rica, Guatemala, Mexico, Panama, Peru, Uruguay and Venezuela. In most cases, the poverty measurement refers to the years 1980 and 1986 and is effected basically in accordance with a procedure —already widely used in the region— involving the comparison of the income of households with the cost of satisfying their basic needs.³ This method consists of calculating the “poverty lines”, which represent the minimum income that would permit a household —at a given time and place— to satisfy the basic food and non-food requirements of its members.

The many theoretical aspects of a study of this type, depending on the conceptual framework of measurements of absolute poverty and also on the consequences of the methodology adopted in order to analyse the living conditions of households and define poverty situations, have already been dealt with at length in a number of studies, especially the ECLAC study (Altimir, 1979) dealing with the situation in 1970 (henceforth referred to as the “ECLAC-70” study).

For the proper interpretation of the results on the magnitude of poverty presented here, and especially in order to grasp the significance of their evolution between 1980 and 1986, it is necessary to bear in mind the criteria which guided the selection of the reference years.

Generally speaking, it was sought to make the most up-to-date measurements possible with the limited information available, and in most cases this permitted the preparation of estimates for 1986 or, in the case of two other countries, one year later. At the same time, a year around 1980 was selected in order to appreciate the effect of the crisis on poverty levels and also appraise the magnitude of the changes which had taken place in the 1970s: thus, the criterion was to select the year nearest to 1980 (before the crisis) in which the country in question showed the best results. Now, the fact that the last year for which information is available in the 1980s corresponded to different points of evolution of the various countries within their overall performance in the crisis period naturally affects the magnitude of poverty detected by our measurements, for the quantification method we used is based fundamentally on the current income of households, and this of course varied significantly during the 1980s.

Chapter I gives a brief description of the way in which the basic food shopping baskets were defined and the values of the poverty lines were determined. It also describes the criteria used to correct and adjust the household income data. Chapter II gives figures on the magnitude of poverty and indigence in 1980 and 1986 in the 10 countries studied, with some comments on their scope. This chapter also includes an extrapolation of these poverty figures to 19 countries of the region and their projection to 1989, and finally these results are compared with similar estimates made in ECLAC for 1970.

I

Poverty lines and household income

The determination of poverty lines for comparison with the current income of households in order to estimate the degree of poverty is based on the calculation of the cost of a

basic food basket whose composition is such as to cover the nutritional requirements of the population, bearing in mind the prevailing consumption patterns and the effective availability and relative prices of food in each country. The resulting cost is known as the “indigence line”. The poverty line, for its part, is determined by adding to that cost the amount required by households to satisfy their total non-

³ Although this aspect is not dealt with in the present article, the study made some advances in certain methodological respects which have made it possible to improve some of these poverty measurements and also give them a more periodic nature.

food needs. We will now briefly describe, in a general manner, the procedures used to define the basic food baskets, to determine the poverty lines, and to estimate income levels.

1. *Basic food baskets*

The starting point for the definition of the basic food baskets used in this study was the selection, for each country and geographical area, of a population stratum whose consumption pattern is to be taken as a point of reference. The corresponding information was obtained from household income and expenditure surveys carried out in the various countries in recent years.⁴ The procedure for selecting the reference group was broadly as follows: first of all, the total number of families surveyed were classified according to their per capita income, after which the location of the reference stratum in this income scale and the size of that stratum were determined in line with two general criteria: firstly, that the consumption habits of that group must not reflect decisions taken by those households in a context of extreme penury, and secondly, that the group must be big enough for its expenditure pattern to be considered representative. For this purpose, the effective calorie and protein intakes of different household strata were determined, and the reference group selected was that which was not only representative but also slightly exceeded, on average, the minimum recommended nutritional requirements. Thus, the lowest-income households were never selected as a reference stratum: instead, the strata selected were generally located between income distribution percentiles 20 and 50, except in the case of Argentina (Greater Buenos Aires) and Uruguay (Montevideo), where they were between percentiles 11 and 35, and the non-metropolitan urban areas of Guatemala (between percentiles 50 and 83).

⁴In the case of Brazil, the data from the 1987-1988 survey were not available, so the shopping baskets were determined on the basis of the 1974-1975 National Family Expenditure Study, while in Costa Rica the data from the 1988 survey were not available, so that the shopping basket was based on data from the ECLAC-70 study.

The foodstuffs selected were those that accounted for a significant proportion of spending on food or were consumed by a high proportion of households. This selection also included spending on food and drink outside the home.

The physical amounts of food corresponding to the expenditure declared by the households were estimated on the basis of the prices registered by the national statistical offices for the calculation of the respective consumer price indexes (CPI) and were expressed as grams/day per person. The amounts of calories and nutrients corresponding to these physical amounts were then determined from the coefficients of the nutritional content of the foodstuffs in question, using the tables best fitted to the variety of products consumed in each country.

Some articles were excluded from the consumption pattern of the reference stratum because of their high price per calorie, their low incidence in food spending, or the fact that they were not really essential from the strictly nutritional point of view or as culinary supplements. These exclusions were made mainly in order to define a basic shopping basket whose composition not only reflects the consumption habits of the population but also reduces to the minimum the excessive increase in the cost of the diet caused by the effort to arrive at an average of the many different consumption patterns of the various households making up a given reference group.

The structure and composition of the resulting basket were evaluated in the light of the global profile of the food supply and demand of the country in question, comparing them for this purpose not only with the average consumption pattern of the total number of households, as obtained from the family budget survey, but also with the information on the aggregate food supply taken from the food balance sheets for the three-year period 1981-1983 prepared by the United Nations Food and Agriculture Organization (FAO).

Finally, the physical amounts of all the articles in the shopping basket were proportionally adjusted to make their overall calorie content coincide exactly with the average energy needs of the population of the respective country and

geographical area. For this purpose, the nutritional requirements of the population of these countries were estimated on the basis of the international recommendations in force as from the 1981 FAO/WHO/UNU Joint Consultative Expert Meeting (FAO/WHO/UNU, 1985). In particular, account was taken in the calculation of the average energy and protein needs not only of the socio-demographic structure of the urban and rural areas of each country but also of the many different nutritional requirements deriving from the wide range of physical sizes and types of physical activity of the members of the population. In this respect, the present study modified the view of a single adult type usually taken in previous recommendations (FAO/WHO, 1973).⁵

Table 1 shows the basic shopping baskets, according to the groups of foodstuffs they contain, while table 2 gives some indicators of their nutritional quality. These latter indicators were calculated because the baskets must not only satisfy given total calorie and protein requirements but must also meet certain dietetic standards. Thus, in deciding on the contents of the baskets special attention was paid to considerations of the origin of the calories by type of nutrient and the quality of the proteins. Hence, an acceptable diet was considered to be one with an average of at least 10% of calories from proteins and between 15% and 25% from fats. It was also sought to ensure that cereals and pulses did not account for more than 60% of the total calories in the diet. With regard to protein quality, it was considered necessary that at least 35% of the proteins should be of animal origin. At the same time, while fully recognizing that the parameters of the energy/protein balance are the main indexes of diet quality, the priority given to these parameters obviously does not mean ignoring the value of all the other nutrients in a proper diet. Consequently, the basic baskets were also evaluated for their content of calcium, iron, vitamin A, thiamine, riboflavin, niacin and vitamin C, and it was found that in general they met the minimum levels established for each of these nutrients.

⁵With regard to energy needs, the estimates for the years around 1980 were between 5% and 7% lower than those used in the ECLAC-70 study. A detailed description of these calculations may be found in ECLAC, 1988.

Finally, in determining the monetary cost of the food baskets the consumer prices recorded for each article for the calculation of the CPI were used. Food consumption outside the home was excluded, or, rather, it was assimilated to the structure and prices per calorie observed for consumption within the home.⁶

In short, it may be considered that the proposed baskets, though based on observation of the effective food consumption of representative population strata of each country, are really of a normative nature, since they do not reproduce exactly the level and structure of the food consumption of those strata. As already noted, the diets in question were adjusted to certain minimum energy and protein requirements; they were adapted to the domestic availability of food, and they were also modified by replacing or eliminating some goods in view of their cost or their non-essential nature, although this does not mean that they were necessarily the baskets with the lowest possible cost.

2. Poverty lines

The procedure followed in determining the poverty lines consisted in establishing, on the basis of the basic food budgets (or indigence lines), normative relations between spending on food and other consumption expenditure.⁷ For this purpose, a detailed analysis was made of the level and structure of the monetary expenditure of households of different income groups, and especially of the distribution of expenditure between food and non-food goods, above all in the population stratum of interest to us.

On the basis of the values observed, it was considered appropriate, in the case of urban areas, to adopt a private consumption budget (poverty line) equal to twice the basic food

⁶The cost of the diet was also expressed in terms of the cost per 1 000 Kcal, this being an appropriate unit for determining the cost of food per person or per household, taking account in the latter case of the specific calorie needs of each of its members. This value, which represents a measurement of the cost of satisfying food needs in line with an adult-equivalent concept, made it possible to carry out other calculations of the magnitude of poverty on the basis of the calorie requirements of each household (ECLAC, 1990).

⁷For an analysis of the conceptual implications of this procedure, see ECLAC, 1990.

Table 1

LATIN AMERICA (TEN COUNTRIES): BASIC FOOD BASKETS

(Grammes per day per person)

Type of food	Argentina	Brazil ^a		Colombia		Costa Rica	Guatemala			Mexico		Panama	Peru	Uruguay	Venezuela
	Greater Buenos Aires	Rio de Janeiro M. A. ^b	São Paulo M.A. ^b	Bogotá D.E.	Other urban areas	San José	Central urban area	Other urban areas	Rural areas	Urban areas	Rural areas	Panama City	Metropolitan Lima	Montevideo	Caracas M.A. ^b
Cereals and products thereof	279.7	278.0	276.7	244.6	249.0	305.2	331.2	331.1	341.5	345.2	349.4	305.0	283.7	309.7	276.7
Roots and tubers	176.1	75.4	81.8	185.4	169.6	64.5	63.9	52.8	41.1	47.3	26.3	62.8	184.2	143.7	90.5
Sugar	44.2	82.4	106.1	76.4	80.5	59.7	72.5	66.3	68.4	55.5	68.7	43.0	70.4	50.7	46.1
Pulses	6.6	65.1	62.4	28.7	24.8	25.7	39.1	50.7	55.4	45.4	44.5	23.1	11.6	4.3	16.7
Vegetables	81.4	107.3	96.9	73.8	64.0	60.5	88.5	57.6	49.2	89.1	62.4	50.7	62.1	43.1	81.7
Fruit	107.1	92.4	68.0	165.8	165.6	113.8	139.3	93.9	72.6	109.7	91.3	98.5	116.6	95.1	159.9
Meat	181.6	100.7	76.4	112.7	113.9	110.5	107.6	88.2	79.2	116.7	99.8	121.4	107.9	143.4	135.5
Fish and shellfish	6.7	20.7	18.2	8.3	5.5	5.2	8.2	10.3	10.7	7.0	7.5	20.5	19.1	5.1	14.4
Milk and dairy products	226.5	140.7	106.0	185.3	178.5	142.8	144.0	123.7	105.9	185.6	133.3	151.2	137.8	294.9	193.1
Eggs	23.3	22.2	14.0	30.1	20.0	19.2	35.3	29.7	21.0	46.0	35.5	16.2	18.2	10.9	17.2
Beverages	113.3	34.8	25.1	113.6	77.9	86.3	78.2	62.9	54.7	95.2	74.3	104.1	77.0	89.0	116.7
Oils and fats	30.7	35.3	31.6	23.8	25.2	20.5	19.0	14.2	11.2	27.5	25.1	27.9	20.1	23.6	19.4
Total	1 277.3	1 055.1	963.0	1 248.4	1 174.6	1 014.1	1 126.6	981.5	910.8	1 170.3	1 018.2	1 024.5	1 108.8	1 213.5	1 168.1

Source: ECLAC estimates on the basis of special tabulations of household income and expenditure surveys.

^aThe basic food baskets for the various regions of Brazil are given in Annex B.1 of the ECLAC document "Magnitud de la pobreza en América Latina en los años ochenta", LC/L.533, Santiago, Chile, June 1990.

^bM.A. = Metropolitan Area.

Table 2
**LATIN AMERICA (TEN COUNTRIES): NUTRITIONAL BREAKDOWN
 OF BASIC FOOD BASKETS**

Country	Amount of:		Calories from:			Animal proteins
	Calories (kcal/day per person)	Proteins (grs/day per person)	Proteins	Fats (percentages)	Cereals and pulses (percentages)	
Argentina						
Greater Buenos Aires	2 211	79.0	14.3	-	42.2	55.5
Brazil ^a						
Rio de Janeiro M.A. ^b	2 214	71.0	12.8	23.6	49.8	43.9
São Paulo M.A. ^b	2 152	66.2	12.3	25.7	50.3	42.0
Colombia						
Bogotá D.E.	2 151	65.7	12.2	23.1	41.0	48.4
Other urban areas	2 151	63.2	11.7	22.5	42.6	49.9
Costa Rica						
San José	2 167	69.9	12.9	24.5	51.2	40.7
Guatemala						
Central urban area	2 135	64.4	12.1	24.6	53.8	45.3
Other urban areas	2 135	63.6	11.9	22.0	61.5	40.2
Rural areas	2 150	62.6	11.7	19.7	66.3	36.0
Mexico						
Urban areas	2 125	65.3	12.3	28.7	51.1	46.9
Rural areas	2 165	60.8	11.2	25.9	56.6	40.1
Panama						
Panama City	2 138	69.3	13.0	23.2	53.2	51.2
Peru						
Metropolitan Lima	2 154	70.1	13.0	19.8	47.2	50.0
Uruguay						
Montevideo	2 152	73.5	13.7	-	47.0	51.8
Venezuela						
Caracas M.A. ^b	2 140	70.2	13.1	19.2	48.0	54.2

Source: ECLAC estimates on the basis of special tabulations of household income and expenditure surveys.

^aA nutritional breakdown of the basic food baskets for the various regions of Brazil is given in Annex B.4 of the ECLAC document "Magnitud de la pobreza en América Latina en los años ochenta", LC/L.533, Santiago, Chile, June 1990.

^bM.A. = Metropolitan Area.

budget.⁸ In the case of rural areas, however, it was assumed that food expenditure was close to 57% of total expenditure, so that the rural poverty line was obtained by multiplying the basic food expenditure by a coefficient of 1.75. Both these criteria coincide with those used for the same purpose in the ECLAC-70 study.

These coefficients were applied uniformly to obtain the poverty lines for urban and rural

areas. Where information was not available on the structure of the food expenditure of households or the prices of foodstuffs in all areas of the country, however, it was necessary to make assumptions on the composition and cost of the food baskets. Briefly, it was assumed that food costs in non-metropolitan urban areas and in rural areas were equal to 95% and 75% respectively of the corresponding cost in metropolitan areas or in the capital. Table 3 gives the values of the poverty lines resulting from the application of these criteria, in national currency and U.S. dollars.

It should be noted that in this method of estimating poverty lines the determination of

⁸The uniform application of this rule may lead to some under-estimation (or over-estimation) of the magnitude of poverty in countries and areas of greater (or lesser) relative development, where the food expenditure coefficient for the income levels in question is less or greater than 50%.

Table 3

**LATIN AMERICA (TEN COUNTRIES): POVERTY AND INDIGENCE LINES, PER CAPITA
MONTHLY BUDGETS IN NATIONAL CURRENCY AND U.S. DOLLARS**

(At prices of the second half of 1988)

Country ^a	National currency		U.S. dollars ^b	
	Poverty line	Indigence line	Poverty line	Indigence line
Argentina				
Greater Buenos Aires	761.4	380.7	63.1	31.5
Other urban areas	723.3	361.7	59.9	30.0
Rural areas	499.7	285.5	41.4	23.6
Brazil				
Metropolitan Area ^c	22 958.2	11 479.1	57.0	28.5
Other urban areas	20 181.9	10 091.0	50.1	25.0
Rural areas				
Colombia				
Bogotá D.E.	18 464.0	9 232.0	58.1	29.0
Other urban areas	16 954.6	8 477.3	53.3	26.7
Rural areas	12 117.0	6 924.0	38.1	21.8
Costa Rica				
San José	4 098.0	2 049.0	52.7	26.3
Other urban areas	3 893.1	1 946.6	50.1	25.0
Rural areas	2 689.3	1 536.8	34.6	19.8
Guatemala				
Central urban area	140.3	70.2	51.9	26.0
Other urban areas	113.4	56.7	41.9	21.0
Rural areas	84.4	48.2	31.2	17.8
Mexico				
Urban areas	120 827.1	60 413.5	53.0	26.5
Rural areas	88 135.0	50 362.9	38.6	22.1
Panama				
Panama City	67.6	33.8	67.6	33.8
Other urban areas	64.2	32.1	64.2	32.1
Rural areas	44.4	25.4	44.4	25.4
Peru				
Metropolitan Lima	12 031.0	6 015.5	53.6	26.8
Other urban areas	11 429.4	5 714.7	50.9	25.4
Rural areas	7 895.3	4 511.6	35.1	20.1
Uruguay				
Montevideo	20 674.1	10 337.0	51.5	25.8
Other urban areas	19 640.4	9 820.2	49.0	24.5
Rural areas	13 567.4	7 752.8	33.8	19.3
Venezuela				
Caracas Metropolitan Area	1 906.4	953.2	70.6	35.3
Other urban areas	1 811.1	905.6	67.1	33.5
Rural areas	1 251.1	714.9	46.3	26.5

Source: ECLAC estimates.

^aFor each country, data are given only for those cities or geographical areas for which it was possible to make a detailed estimate of the basic food basket and its cost (the indigence line).

^bThe exchange rate used was the "rf" series (average for the second half of 1988) published in the International Monetary Fund's *International Financial Statistics*. In the case of Venezuela, the exchange rate prevailing in February 1989 was used.

^cWeighted average of the estimated budgets for São Paulo and Rio de Janeiro.

the cost of satisfying basic food requirements is more soundly based than when methods relying on the relative estimation of non-food needs are used, for the food requirements are calculated in accordance with generally accepted norms that specify certain minimum levels or degrees of adequacy of the diet, explicitly stating not only the cost of meeting those requirements but also the goods needed to satisfy them and the characteristics of those goods. In contrast, although the non-food requirements could also be made subject to given norms they are estimated indirectly, that is to say, on the basis of the proportion represented by spending on food in the total household expenditure. Thus, in addition to the fact that their cost is established indirectly, the goods needed to satisfy them are not specified. Since, moreover, the cost of satisfying them varies significantly over the different stages in the cycle of family life (depending on the size and composition of the household), as well as varying as a function of such factors as the accumulated wealth of the family and the degree of access to public services, it is very necessary to carry out a detailed analysis of these items of expenditure so as to be able to define specific coefficients for different types of households, just as in the case of food.⁹

3. Household income

After the basic food budgets and the corresponding poverty lines had been determined, the total disposable income of the households was then calculated so that it could be compared with the cost of satisfying the basic needs. The main source of information in this respect was the multi-purpose household surveys carried out regularly by the countries.

⁹ Analysis of the 1984-1985 income and expenditure survey for Colombia, for example, reveals that households of similar income levels but different compositions show significant differences as regards the main items in non-food expenditure. Thus, the group of households in Bogotá, Cali and Medellín, which made up the second quartile in per capita expenditure, displayed significant differences as regards the proportion of expenditure devoted to transport, education, health and housing. It may be noted, in this respect, that households consisting of young childless couples devoted an average of 20% of their expenditure to housing, whereas in the case of older couples with two children the corresponding proportion was 15%.

The income data provided by these surveys, however, tend to be affected by problems due to the partial nature of the concept of income investigated, the fact that people usually declare incomes lower than those they really receive, the restricted geographical coverage, and also factors and contingencies connected with theoretical and practical aspects of the sample design, all of which affects the quality and precision of the estimates. For these reasons, before making the poverty measurements we corrected and adjusted the amounts of income recorded by the surveys, using as a quantitative reference pattern the entries in the "household income and expenditure" account of the System of National Accounts.¹⁰

In general terms, the method used to adjust the incomes recorded by the household surveys consisted of imputing to each income type or flow investigated the discrepancies observed between the declared income and the corresponding concept registered in the national accounts. This imputation was effected on the basis of the following assumptions: that the under-declaration of income in the surveys is associated more with the type of income than its size; that the undeclared amount for each type of income is equal to the discrepancy between the income shown in the survey and the corresponding estimate in the national accounts; and that the under-declaration of each type of income generally follows a single elasticity pattern, except in the case of cash income from property, which is assumed to be concentrated in the highest quintile of the income distribution (Altimir, 1987).

The different types of income —both those recorded by the surveys and those taken from the national accounts— were expressed in per capita values, and the comparison of the two averages made it possible to define adjustment coefficients for each source of income. The amounts corresponding to income flows not covered by the surveys were also calculated.

In the few cases where the amount of some type of income estimated by the surveys was on average higher than the figures given by the

¹⁰ See in particular ECLAC, 1989.

national accounts, no adjustment was made for this concept. On the other hand, both wages and salaries and business profits, all broken down into agricultural and non-agricultural, were adjusted in proportion to the levels declared by their recipients. A similar criterion was applied to the under-estimation of transfers, with the exception that in cases where only primary income was received, the imputation was applied to non-economically-active persons belonging to the category of pensioners and

retirees. Likewise, the adjustment for under-estimation of cash income from property was assigned proportionately to all those in the highest-income 20% of households who declared that they received such income. Finally, the non-registration or under-estimation of imputed rent was distributed in proportion to the total income—already adjusted for all the other concepts—of those households which declared that they owned the dwellings they lived in.¹¹

II

The magnitude and evolution of poverty

The poverty lines, together with the suitably corrected estimates of per capita income of the households, made it possible to determine the magnitude of poverty and indigence in the years around 1980 and 1986.¹² Before presenting these results, however, it is necessary to make a few general observations on their significance and scope.

1. *Prior observations*

The first point to be made is that the quality of the information on which the poverty estimates presented below are based is not consistent: it varies from one country to another and, above all, from one geographical area of a country to another. In general, it may be said that the measurements for metropolitan areas are more precise than those for the other urban areas and rural areas, since they are derived from more

abundant and reliable data. Thus, for example, in preparing the food budgets we had more information on the main cities than on the other areas of the countries, both as regards household income and expenditure and as regards the prices of the articles included in the basic food baskets. Moreover, it is well known that household surveys more accurately reflect the situation of the urban population than that of rural dwellers, especially as regards the measurement of income. Consequently, the figures on rural poverty given in this article should be considered rather as indications of orders of magnitude. Indeed, both in the cases of the other urban areas and the rural areas of Argentina and the rural areas of Uruguay, the estimates are of a purely conjectural nature. The same is true of the rural areas of Colombia and the other urban areas and the rural areas of Peru in the years around 1980. These estimates are therefore presented merely in order to give a national-level view of the various countries for inclusion in the international comparisons.

Secondly, the fact that the calculation of the cost of satisfying food requirements relies more heavily on normative and empirical factors than in the case of the calculation of the cost of other basic needs means that estimates of poverty, as distinct from those of indigence, depend on the degree of appropriateness, in each particular case, of the coefficients used to set the poverty lines, that is to say, 2 for urban areas and 1.75 for rural zones.

¹¹ Annex E of ECLAC 1990 gives estimates of the income distribution by deciles of households, classified according to their total per capita income, in the various countries around 1986.

¹² In all cases, these measurements were carried out on the basis of the per capita income of the households, and not the expenditure. It was decided to use this procedure because in most of the countries of the region the data on expenditure were limited to the metropolitan areas or capital cities. Moreover, the fact that this information is normally collected only once every ten years prevents more frequent measurement of poverty on the basis of household expenditure, but it is possible to make these measurements on the basis of the data on income provided by the multi-purpose surveys which most countries carry out at regular intervals.

Thirdly, while it is true that the poverty phenomenon depends essentially on structural characteristics of the countries—which means that its magnitude changes relatively slowly with time—the method used to calculate that magnitude is by its very nature rather sensitive to conjunctural circumstances which involve significant changes in the income levels of households. Consequently, the results must be examined with due attention both to the years to which the figures refer in each country and, above all, to the particular phase that the countries were passing through within the recessionary cycle that affected Latin America from the early 1980s. Special care should therefore be exercised when drawing conclusions on the evolution of the magnitude of poverty and the relative performance of the countries in this respect.

Within the same order of ideas, it should be mentioned that the sensitivity of these poverty measurements to variations in the income level also depends on the income distribution profile and the distance of the indigence and poverty lines from the mean values of that distribution. Thus, a country where a high proportion of the households receive incomes close to the value of those lines will display substantial fluctuations in the magnitude of indigence and poverty as a result of even quite small changes in income.¹³

Finally, the existence of poverty and indigence lines makes it possible to break down the whole of the poor households into two sub-groups: indigent and non-indigent. With regard to the first-named, they may be described as households whose members very probably do not satisfy any of their basic needs in full. On the other hand, it is not necessarily true that all the households in the non-indigent sub-group satisfy their food requirements properly either, since although their income is higher than the basic food budget they must devote part of it to satisfying their other needs.

¹³This feature, which is typical of the method adopted here, means that it is also desirable to measure poverty at relatively frequent intervals (annually or six-monthly), since such measurements will make it possible to use this synthetic index for regular evaluation of changes in the living conditions of the population.

2. *The results for 1980 and 1986*

If we look at the percentage incidences of poverty and indigence shown in table 4 for the years around 1980 and 1986, we immediately note that there is a wide variety of situations. On the one hand, there are Argentina and Uruguay, which have the lowest percentages of poverty in the region: less than one in six households in these countries were poor at the times in question. At the other extreme are Guatemala and Peru: in the first-named of these countries nearly two-thirds of the households were poor, while in Peru nearly half the households were in this state. Between these two extremes there are two groups of countries where poverty affects between 20% and 40% of the households. The first group, where the incidence of poverty is nearer 20%, comprises Costa Rica, Venezuela and Mexico, while the second group, where the incidence is nearer 40%, comprises Panama, Colombia and Brazil.

Similarly, the proportion of indigent households varies substantially from one country to another, from around 5% in Argentina and Uruguay to levels of over 20% and even 30% in Peru and Guatemala, respectively. The remaining countries fall somewhere between these extreme values, as in the case of the poverty indexes. It should be noted that the changes which took place between 1980 and 1986 did not alter the positions initially occupied by the countries in the poverty scale.

Comparison of subnational geographical areas also brings out the pronounced disparities in the levels of well-being of the population within each country: the lowest percentages of poverty correspond to the urban areas and, within these, to the main cities or metropolitan areas, while the highest rates are observed in rural areas. These differences vary considerably from one country to another, however, reflecting the different degrees of internal heterogeneity in the levels of income of the population. Thus, for example, if we compare the situations of Brazil and Colombia in this respect, we see that although both these countries display similar levels of urban poverty, equal in each case to one-third of the households, rural poverty in Brazil is almost 30% higher than urban poverty, whereas in Colombia the difference is less than 10

Table 4

LATIN AMERICA (TEN COUNTRIES): HOUSEHOLDS IN A SITUATION OF POVERTY OR INDIGENCE

Country/year	Percentage of households below the poverty line					Percentage of households below the indigence line				
	Metro- politan Area	Other urban areas	Total urban areas	Rural areas	Whole country	Metro- politan Area	Other urban areas	Total urban areas	Rural areas	Whole country
Argentina										
1980	5	9	7	16	9	1	2	2	4	2
1986	9	15	12	17	13	3	4	3	6	4
Brazil										
1979	21 ^a	34	30	62	39	6 ^a	12	10	35	17
1987	24 ^a	37	34	60	40	8 ^a	16	13	34	18
Colombia										
1980	30	37	36	45	39	10	14	13	22	16
1986	31	37	36	42	38	11	16	15	22	17
Costa Rica										
1981	15	17	16	28	22	5	6	5	8	6
1988	19	22	21	28	25	5	6	6	10	8
Guatemala										
1980	26	52	41	79	65	5	19	13	44	33
1986	45	59	54	75	68	20	31	28	53	43
Mexico										
1977	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	32	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	10
1984	<i>c</i>	<i>c</i>	23	43	30	<i>c</i>	<i>c</i>	6	19	10
Panama										
1979	27	42	31	45	36	12	19	14	27	19
1986	27	41	30	43	34	11	19	13	22	16
Peru										
1980	29	41	35	65	46	9	15	12	37	21
1986	37	53	45	64	52	11	22	16	39	25
Uruguay										
1981	6	13	9	21	11	1	3	2	7	3
1986	9	19	14	23	15	2	4	3	8	3
Venezuela										
1981	12	20	18	35	22	3	6	5	15	7
1986	16	28	25	34	27	4	9	8	14	9

Source: ECLAC estimates on the basis of special tabulations from household surveys.

^aWeighted average of the estimates for the metropolitan areas of Rio de Janeiro and São Paulo.

^bOnly national-level data were available.

^cThe household survey used for the estimates is not representative for the Federal District.

percentage points. Guatemala and Peru stand in a similar relationship, although with higher levels of poverty. At the same time, it should be borne in mind that these two nations, together with Costa Rica, are the countries with the highest proportion of rural population.

The foregoing considerations are important from a quantitative point of view, since the national poverty indexes are calculated as a weighted average of the indexes of the various geographical areas and are therefore influenced not only by the incidence of poverty in each of these but also by the relative importance of these areas in the total population of the country. Comparison of the figures for Costa Rica and Venezuela shows the effect of these urban-rural differences (table 4). In 1988, 21% of Costa Rica's urban households and 28% of its rural ones were under the poverty line, while the corresponding figures for Venezuela in 1986 were 25% and 34% respectively. This difference which apparently favours Costa Rica is minimized at the national level, however, with Costa Rica registering a global poverty rate of 25% and Venezuela one of 27%, because in the year in question the rural population constituted 54% of the total in the first-named country as against only 20% in the latter.

Although this article does not give a detailed description of the incidence of poverty in individual terms, the fact that poor households generally each have a larger number of members than households which are not poor means that—for a given number of households—the proportion of poor people is greater than that of people who are not in this situation. Thus, in the years around 1980 and 1986, in urban areas the poverty indexes in terms of numbers of persons were between 3% and 7% higher than the indexes in terms of households, while they were between 3% and 9% higher in rural areas.

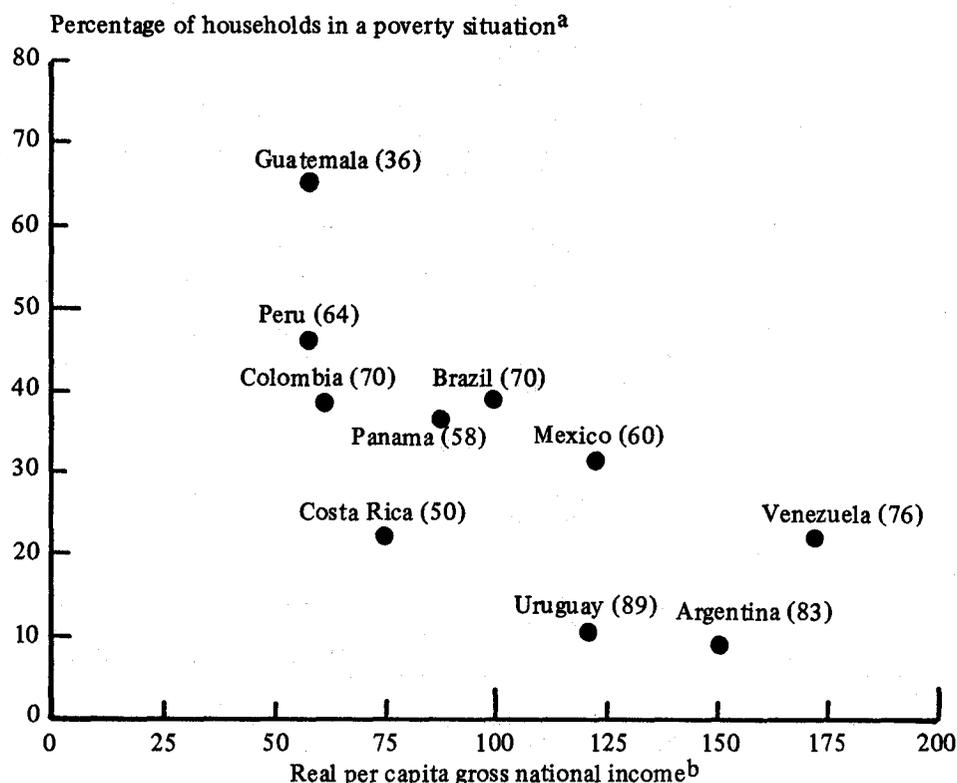
With regard to the evolution of poverty in the 1980s, it should be borne in mind that even though the period covered by this study includes several years when there were severe drops in income, it cannot be assumed that it always reflects the whole dimension of the crisis in all the countries. Thus, in only five of the 10 countries covered did the last year estimated coincide with the year in which the product reached its lowest point: this was so, for

example, in Venezuela and Guatemala in 1986 and, partially, in Argentina (1986), Peru (1985) and Uruguay (1986). It should come as no surprise, then, that it is precisely these countries which show the biggest increases in the incidence of poverty, both at the national level (between four and six percentage points) and, above all, in urban areas (between five and 13 points). These figures, together with the relatively slight increases of one to four points (and even some slight reductions) in rural poverty in this period, show that the crisis hit the urban areas hardest. The negative evolution of the main indicators of income levels and well-being of the population—especially the urban population—bear out this assertion. Thus, in 1986 the national per capita income in Argentina, Guatemala, Uruguay and Venezuela was approximately 20% lower than in 1980. In Peru, for its part, it was 13% lower in 1985, which was when that income reached its lowest level in the period. Likewise, the rates of open unemployment in urban areas in the first three of these countries increased steadily during this period, to the point that in 1986 they were almost double their 1980-1981 levels. In Peru, on the other hand, although there was no significant variation in unemployment between the beginning and end years, average wages fell by nearly 23% between 1980 and 1985.¹⁴

Costa Rica also registered an increase (of three percentage points) in the proportion of poor households, which were concentrated mainly in urban areas. It should be noted, however, that after the sharp drop suffered in 1982 as compared with 1981, income then tended to grow steadily up to about 1988 (although without regaining its levels of the late 1970s), so that the period over which poverty was measured (1981-1988) does not give a full idea of the impact of the crisis. The situation of Brazil is also similar in this respect: the drop in income took place between 1980 and 1983, subsequently recovering by 1987 to a level slightly higher than that of 1979. The increase of one percentage point (from 39% to 40%) in poverty at the national level was also concentrated in the urban and metropolitan

¹⁴See ECLAC, 1989.

Figure 1^a
**LATIN AMERICA (TEN COUNTRIES): RELATIONSHIP BETWEEN
 MAGNITUDE OF POVERTY AND LEVEL OF INCOME, 1980**



Source: ECLAC, Statistics and Projections Division.

^aPercentage of urban households shown in brackets.

^bAverage for 19 Latin American countries = 100.

areas and was accompanied by a slight decline in rural poverty (from 62% to 60%). In this case, despite the recovery that the level of employment appeared to imply, the real minimum wage towards 1987 was still nearly 25% lower than in the starting year, 1979.

In Colombia, Mexico and Panama there was a decline in the incidence of poverty which is explained, in the cases of Colombia and Panama, by the reductions of two and three percentage points, respectively, in rural poverty, since during the period under analysis there were practically no changes in urban poverty in either of these countries or any significant declines in the product or in national income. In Panama, the per capita income in 1986 was 20% higher than that of 1979, while in Colombia in the same year it was 5% higher than in 1980, although

urban unemployment continued to be relatively high in both countries, with levels averaging between 10% and 13%. Finally, in Mexico, where data are only available for the whole country, poverty went down between 1977 and 1984 by two percentage points.

A global appraisal of these estimates, leads to the conclusion that they give an adequate idea of the structural dimension of poverty. It may be noted in this respect, for example, that there is a close relation between the percentages of poverty and their most direct determinants, namely the per capita income, the level of concentration of income distribution, and the degree of urbanization (Ahluwalia, 1976). Figure 1 illustrates some of these relations. Thus, it shows the high inverse correlation between the level of per capita gross national

Table 5

**LATIN AMERICA AND THE CARIBBEAN: ESTIMATES OF POVERTY AND INDIGENCE,
1980 AND 1986**

	Poverty				Indigence			
	1980		1986		1980		1986	
	Thousands	Percent-ages	Thousands	Percent-ages	Thousands	Percent-ages	Thousands	Percent-ages
	(Households)							
Ten countries ^a								
National	19 700	33	26 500	35	8 000	13	11 700	15
Urban	10 000	24	16 200	29	3 200	8	6 000	11
Rural	9 700	52	10 300	51	4 800	26	5 700	28
Latin America ^b								
National	24 200	35	32 100	37	10 400	15	14 600	17
Urban	11 800	25	18 700	30	4 100	9	7 000	11
Rural	12 400	54	13 400	53	6 300	28	7 600	30
	(Population)							
Ten countries ^a								
National	109 200	38	137 500	41	47 400	17	62 700	19
Urban	52 800	28	80 300	34	17 300	9	29 700	13
Rural	56 400	58	57 200	57	30 100	31	33 000	33
Latin America ^b								
National	135 900	41	170 200	43	62 400	19	81 400	21
Urban	62 900	30	94 400	36	22 500	11	35 800	14
Rural	73 000	60	75 800	60	39 900	33	45 600	36

Source: ECLAC estimates.

^a Argentina, Brazil, Colombia, Costa Rica, Guatemala, Mexico, Panama, Peru, Uruguay and Venezuela.

^b In addition to the above 10 countries, includes Bolivia, Chile, the Dominican Republic, Ecuador, El Salvador, Haiti, Honduras, Nicaragua and Paraguay.

income —expressed as an index with regard to the average for Latin America— and the incidence of poverty in each of the countries around 1980. This figure also shows the percentages of the population living in urban areas in each country, which are in direct relation to the level of income and in inverse relation to the level of poverty.

In absolute terms, the number of poor people in the group of 10 countries studied, which amounted to 109 million in the years around 1980, rose to 137 million in the years around 1986: an increase of nearly 28 million.¹⁵ At the same time, the rather urban bias of the impact of the crisis, to which we have already referred, substantially altered the distribution of

the population living in a state of poverty in each country. Whereas in 1980 48% of the poor (53 million persons) lived in urban areas, in 1986 the proportion had risen to 58% (80 million people). Moreover, as was to be expected, in both the years in question almost half the poor were in Brazil, while between 85% and 90% of the poor were from four of the 10 countries studied (Brazil, Colombia, Mexico and Peru) (table 5). The number of indigent persons, for its part, increased from 47 million in 1980 to 63 million in 1986, accounting for more than half of the total increase in the number of poor. Although poverty grew more in urban areas, however, it continued to be more acute in rural areas, where 55% of all the poor were indigent, compared with around 35% in urban areas.

In view of the undoubted interest aroused by the possibility of obtaining an aggregate estimate of poverty for the whole of the region,

¹⁵In order to make the necessary comparisons, these calculations were based on the population figures for the years 1980 and 1986.

and bearing in mind that the 10 countries already mentioned represent a high proportion of the regional population and product (85% and 91%, respectively), we proceeded to extrapolate the poverty figures for the first-named 10 countries to cover the group of 19 countries of the region. In addition to the first 10 countries, the other countries incorporated into the estimate were Bolivia, Chile, the Dominican Republic, Ecuador, El Salvador, Haiti, Honduras, Nicaragua and Paraguay. In this extrapolation we used as a reference regression equations relating the per capita gross domestic product in 1980 and 1986 with the percentages of poor and indigent households at the national and urban levels in the same years.¹⁶ The rural poverty estimates were obtained residually on the basis of the population distribution by geographical areas. The results are also summarized in table 5.

If the levels of poverty obtained for the 19 countries (which come very close to representing the whole of the region) are compared with those for the first 10 countries, it will be observed that they are around two percentage points higher in both years: The reason for this increase, in spite of the modest weight of the population of the nine countries thus added in the regional total, is that their indexes of poverty were higher than the average for the first 10 countries. According to these extrapolations, in 1980 there were 135.9 million people (i.e., 41% of the regional total) living in a state of poverty in Latin America, and in 1986 the number had gone up to 170.2 million, or 43% of the total population. It may be noted that this increase of 34.3 million poor people was concentrated almost entirely in the urban areas, where the incidence of poverty rose from 30% to 36%. For their part, the changes in the number of people living in a state of indigence indirectly reveal the severity of the crisis in the first half of the 1980s, for of the above-mentioned total

increase of 34.3 million, 19 million (55%) correspond to the increase in the indigent population, both urban and rural.

3. The evolution of poverty in Latin America between 1970 and 1986 and its projection to the end of the 1980s

In spite of some methodological differences between the two studies, the results of this analysis of the magnitude of poverty in 1980 and 1986 can be compared with those of the ECLAC-70 study.¹⁷

The figures for the countries and geographical areas where such a comparison is possible show that between 1970 and 1980 urban poverty went down in Brazil, Colombia, Uruguay and Venezuela by between one and five percentage points, while in Argentina, Costa Rica and Peru it went up by between one and seven points (table 6). With regard to rural areas, poverty went down in all the countries by between one and 11 percentage points. These figures are naturally national averages, which are also affected by the differences in population distribution between the two types of areas, since in this decade the process of urbanization continued, although at different rates in each country.

What happened between 1970 and 1986 was also in line with the evolution of the countries' income in the two sub-periods already mentioned (1970-1980 and 1980-1986). Thus, the countries which had the highest sustained growth rates in those years (Brazil and Colombia) were precisely those that showed the biggest reductions in poverty. The data on income distribution show that these two countries continued to figure among those with the highest degree of concentration in the region, which gives grounds for conjecturing that the improvement in their poverty indexes was due much more to higher levels of income than to significant advances towards greater equity.¹⁸ It may also be recalled that in the 1980s Brazil and Colombia did not go through a period

¹⁶The equations were of the type: $H = a + b(\ln GDP_{pc})$ where H = percentage of poverty (or indigence) and $\ln GDP_{pc}$ = the natural logarithm of the per capita gross domestic product. The values of r^2 were between 0.6 and 0.7. The poor and indigent population of the nine countries not included in the present study was obtained by applying to the population of each country the rates of poverty and indigence estimated through these equations. In the case of households, the calculations were based on data from the latest population censuses and also on the average family size ratios by poverty strata observed in similar countries.

¹⁷These differences mainly concern the procedure used for determining the basic food baskets. For a summary of these differences, see ECLAC, 1990 (Appendix).

¹⁸See, for example, ECLAC, 1986 and ECLAC, 1986b.

of such deep depression as most of the other countries. Likewise, the somewhat smaller reduction in poverty in Mexico—which has an intermediate level of income concentration in the region—may be explained not only by the big increase in income during the period but also by increases in the participation of households from the lowest income distribution strata. Indeed, there are indications that while on the one hand there was indeed a reduction in the degree of income concentration in Mexico between the late 1960s and the late 1970s, on the other hand the degree of concentration remained relatively unchanged from then until 1984 (Altimir, 1982).

Table 6 also shows that poverty increased between 1970 and 1986 in the other five countries, this increase being related with the fact that income fell more sharply in these countries during the crisis years. Argentina is undoubtedly the most extreme case in this respect: in this country poverty rose at the national level by five percentage points because of the marked drop in per capita income (15% compared with 1970) and the deterioration in income distribution.¹⁹ In Costa Rica, Peru and Venezuela the increase in poverty was between one and two points, and the levels of per capita national income at the end of the survey period were practically the same as in 1970. Except in the case of Peru, these countries registered substantial rises in income in the 1970s, but they suffered equally sharp declines in the 1980s, presumably accompanied by an increase in income concentration. Much the same thing occurred in Uruguay with respect to urban poverty.

The figures for the 19 countries of the region clearly show the different ways in which poverty developed in the two decades under comparison. Thus, in the 1970s the percentage of poor households went down from 40% to 35%, while the proportion of indigent households fell from 19% to 15%. In the 1980s, however, this

tendency was reversed, with both poverty and indigence increasing by two percentage points. These values were likewise the result of the very different trends for urban and rural areas. Thus, the fact that the crisis had a relatively stronger effect on households in urban areas, together with the increase—in practically all the countries—in the weight of the urban population in the total, helps to explain why poverty went up in those areas by four percentage points (from 26% to 30%) between 1970 and the mid-1980s, even though it had actually gone down by one percentage point in the 1970s. In rural areas, in contrast (without of course overlooking the more conjectural nature of these estimates), there was a considerable drop in poverty in the 1970s (from 62% to 54%), followed by relative stability during the 1980s (table 6).

Furthermore, in order to obtain an estimate of what happened with regard to poverty in the 19 countries of the region in the whole of the 1970s and 1980s, a projection was made of the incidence of poverty in each country up to 1989. This was based both on the evolution of the per capita product and on other general indicators (open unemployment, average remuneration, minimum wages, percentage of the population living in rural areas, and product by sectors of economic activity) for the three-year period 1986-1989.

According to this projection, at the end of the 1980s 37% of the households in Latin America and the Caribbean were estimated to be living in conditions of poverty and 17% in a state of indigence (table 7). In urban areas, the respective figures were 31% and 12%, while in rural areas they were 54% and 31%. Compared with the values for 1970, these figures indicate a sharp rise in urban poverty (from 26% to 31%) and a likewise significant drop in rural poverty from 62% to 54%. Similar but smaller changes are estimated to have taken place with regard to indigence. As a result of the increase in both the population and the indexes of poverty, the projections indicate that at the end of the 1980s there would be nearly 183 million poor people in the region, i.e., 71 million more than in 1970. Of these, some 88 million were estimated to be indigent: an increase of nearly 28 million over the ECLAC estimate for the earlier year.

¹⁹Estimates of the distribution of the *total income* of households in Greater Buenos Aires indicate that the Gini concentration coefficient rose from 0.41 in 1970 to 0.44 in 1975 and 0.47 in 1980 (Altimir, 1986). In the present study, for its part, it is estimated that that coefficient—referring this time to the *per capita income* distribution of households—increased from 0.38 in 1980 to 0.41 in 1986.

Table 6

**LATIN AMERICA (SELECTED COUNTRIES): MAGNITUDE OF POVERTY AND INDIGENCE
AROUND 1970, 1980 AND 1986**

Country	Percentage of households below the poverty line									Percentage of households below the indigence line								
	Urban areas			Rural areas			Whole country			Urban areas			Rural areas			Whole country		
	1970	1980	1986	1970	1980	1986	1970	1980	1986	1970	1980	1986	1970	1980	1986	1970	1980	1986
Argentina	5	7	12	19	16	17	8	9	13	1	2	3	1	4	6	1	2	4
Brazil	35	30	34	73	62	60	49	39	40	15	10	13	42	35	34	25	17	18
Colombia	38	36	36	54	45	42	45	39	38	14	13	15	23	22	22	18	16	17
Costa Rica	15	16	21	30	28	28	24	22	25	5	5	6	7	8	10	6	6	8
Mexico	20	^a	23	49	^a	43	34	32	30	6	^a	6	18	^a	19	12	10	10
Peru	28	35	45	68	65	64	50	46	52	8	12	16	39	37	39	25	21	25
Uruguay	10	9	14	-	21	24	-	11	15	4	2	3	-	7	8	-	3	3
Venezuela	20	18	25	36	35	34	25	22	27	6	5	8	19	15	14	10	7	9
Latin America	26	25	30	62	54	53	40	35	37	10	9	11	34	28	30	19	15	17

Source: ECLAC estimates. The figures for 1970 correspond to the estimates published in *La dimensión de la pobreza en América Latina*, Cuadernos de la CEPAL series, No. 27, Santiago, Chile, 1979.

^aOnly data at the national level were available.

Table 7

LATIN AMERICA AND THE CARIBBEAN: MAGNITUDE OF POVERTY IN 1989

(Projections on the basis of figures for 1986)

	Households				Population			
	Poverty		Indigence		Poverty		Indigence	
	Thousands	Percent-ages	Thousands	Percent-ages	Thousands	Percent-ages	Thousands	Percent-ages
Total	34 600	37	15 800	17	183 200	44	87 700	21
Urban	20 300	31	7 600	12	103 700	36	39 400	14
Rural	14 300	54	8 200	31	79 500	61	48 300	37

Source: ECLAC estimates.

One of the most striking conclusions to be drawn from this comparison is that, unlike the situation in 1970, poverty in the region is now a mainly urban phenomenon, because of the big expansion in the main cities—over the last 20 years the urban population of the region has risen from 58% to 69% of the total population—and the fact that the increase in the indexes of poverty has been concentrated above all in those areas, especially in the crisis period. Thus, whereas in 1970 only 37% of the poor lived in urban areas, over half the population now does so. If we look at the extremely poor or indigent, on the other hand, it may be noted that today, just as in 1970, most of them continue to live in rural areas, despite the increase from 31% to 45% which has taken place in the proportion of urban indigents in the total number of such people.

These global figures are undoubtedly associated with the virtual stagnation of the per capita product in Latin America during the period 1970-1989. Thus, if we leave out Brazil, over this period the product grew by only 3.2% in real terms, so that the per capita product in 1989 was more than 12% lower than in 1980. In almost all the countries, most of this drop took place over a relatively short period of only two or three years and was accompanied by disproportionate reductions in the income of the poorest sectors. This fact, together with the nature of the crisis, explains the rise in the indexes of poverty at the national level and particularly in urban areas. On the other hand, the increase in the last two decades in the per

capita income in rural areas undoubtedly goes a long way towards explaining the decline in poverty in those areas. In the 1980s, the added value generated in agriculture—per rural inhabitant—grew by nearly 14%, while the product generated outside that sector went down by a similar amount (IDB, 1989). Even so, however, between 1970 and 1989 the number of rural poor in Latin America increased by some 9 million persons.

Finally, attention may also be drawn to the marked asymmetry between the evolution of urban poverty in Latin America and the changes which took place in income during the two sub-periods under consideration. In the 1970s, although per capita income in the region increased relatively rapidly (by an average of 3.6% per year), poverty went down by only one percentage point. In the first half of the 1980s, in contrast, the decline in per capita income (which averaged 2.3% per year) was accompanied by an increase of five percentage points in urban poverty.²⁰ These advances and setbacks are undoubtedly likewise associated with the trends

²⁰The trends observed in the eight countries confirm this statement. In the case of Brazil—the country with the greatest weight at the regional level in the aggregate figures—the drop of five percentage points in urban poverty between 1970 and 1979 (attributable mainly to the sharp rise in per capita income from US\$1 100 to US\$1 850 at 1980 prices over this period) was practically wiped out over the following eight years. Even though in 1987 per capita income had recovered its 1979 level after the sharp drop suffered between 1980 and 1983, average wages and the minimum urban wage still stood in that year at the lowest levels of the entire 1980s.

observed in income distribution. By way of hypothesis—for no information is available on the income distribution patterns around 1970 which is comparable with the estimates made for the mid-1980s—it may be asserted that the reduction in poverty registered in some countries in the 1970s took place without any major change in distribution patterns: that is to say, there was no change in the high levels of concentration typical of the region. Brazil and Colombia seem to be the most noteworthy cases in this respect, since the effects of the so-called trickledown were basically merely in line with the rate of growth of these economies. The well-known and extensively analysed effects of the crisis, especially on the lower strata of the urban population, explain the fact that in the 1980s the

drops in income and consumption were most marked in the lowest deciles of the income distribution scale, thus increasing the amount of poverty and the already high levels of inequality. Argentina and Uruguay, which had the relatively most equitable income distribution patterns of Latin America, suffered severe setbacks in this respect, sinking down closer to the level of countries with intermediate degrees of income concentration. Consequently, it is very likely that now, at the beginning of the 1990s, several countries of the region—specially those where their economic adjustments have meant pronounced drops in income—display greater inequity in distribution than around 1980 and similarly higher indexes of poverty, especially in urban areas.

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The complexity of evaluating social development

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The decade of the 1980s has been called the "lost decade", mainly in terms of the economic growth, investment and output of the countries of the region. However, the fragmentary evidence available makes such a summary description seem inappropriate for what happened in the social area. In view of the institutional inertia, the delayed effects of policies conceived and implemented under more favourable economic conditions than those of the 1980s, and particularly the will of governments to render some areas of welfare independent of economic fluctuations, a subtler evaluation of social development during the decade is called for.

This study seeks to contribute to a better understanding of the significance of the social trends during this period. It attempts to do so, first, on the basis of an analysis of the most reliable information available on the changes that took place in three important spheres of social welfare —employment, education and health— seeking thereby to pinpoint the direction which these changes took. Second, it presents an interpretative framework which, in the opinion of the authors, is an aid in tackling the complex task of weighing the advances and retreats of the various indicators of social development. The interpretation rests basically on the distinction between what we will call the soft and the hard goals of social policy and on the identification of some of the factors that probably determine the degree of hardness of such goals. The article ends by proposing a definition of social development that incorporates as central objectives welfare, equity, and democracy, together with some general guidelines for measuring progress towards those objectives.

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Introduction

During the 1980s, government officials, politicians, academics and professionals in the social field were increasingly concerned to establish the various effects of the economic crisis and the restructuring of production on the living conditions of the population and thus to obtain diagnoses that would provide proper guidance for action. However, given the scarcity and poor quality of the data available for the task, this concern was centred on an attempt to find more precise meaning in the changes in the move familiar social indicators, particularly those that did not react to the crisis as expected. Indeed, while some aspects of social welfare certainly deteriorated in a way consistent with the profound breakdown of the economy, others, including some considered decisive for improvement of living conditions, continued to show clear signs of progress. Thus, together with the long string of negative effects of the crisis (higher proportion of households below the poverty line; higher rates of open unemployment and various forms of underemployment; fewer resources allocated by governments to social areas; lower real wages and greater concentration of wealth), in some countries of the region, among other advances, infant mortality diminished significantly, housing infrastructure improved, and rates of enrollment at the secondary and higher education levels rose.

This apparent independence of social phenomena from each other and between some social phenomena and economic phenomena is not new. Indeed, the debate on Latin American development in recent decades was largely dominated by the issue of the unequal distribution of the fruits of economic growth. In the three decades following World War II such growth had exhibited rather high rates —at least in comparison with its poor performance now— which were not reflected in corresponding progress in the social area. In this context and by virtue of the lack of confidence in some sectors brought on by the overly optimistic picture produced by the evolution of the per capita product —for a long time considered the development indicator *par excellence*— it was

recommended that evaluations of development should be supplemented by detailed analyses of the behaviour of those indicators that seemed to better reflect the changes in the situation of the less privileged sectors of society, such as the rates of infant mortality, illiteracy or life expectancy. The elaboration of the so-called physical quality-of-life index (Overseas Development Council, 1978) resulted indeed from this kind of approach. What now causes a certain amount of perplexity is the manifestation of a phenomenon that could be interpreted as the

opposite of the one described above (Hirschman, 1987): negative product growth rates may be accompanied by positive changes in some important dimensions of welfare.

In order to better understand the nature of the relations between social and economic changes, we will analyse the changes in some of the more important indicators of conditions of employment, health and education in a number of Latin American countries, specifically those that offer reliable information on the period of five years or so that the crisis of the 1980s lasted.

I

Evolution of employment, health and education

A. Employment

1. *Initial considerations*

From the viewpoint of changes in the living conditions of the population, one of the more important consequences of the external debt crisis was without a doubt the sharp reduction of capacity to absorb labour in the production sectors providing jobs that were more stable, productive, better paid and better covered by social security schemes. The data in table 1 corroborate this statement: between 1980 and 1987, for example, Chile was the only one of the seven countries examined in which the number of people employed in large private companies increased. Such growth, slightly higher than that of the economically active population (EAP), probably stems from the vigorous privatization of State enterprises carried out recently in that country (Marcel, 1989). In the rest of the countries, in contrast, modern-sector employment grew much less than the labour supply.

This situation of stagnation and even decline in employment and the consequences that flow from it represent a clear reversal of the trends observed in previous decades. Between 1960 and 1970 the sustained economic growth of most of the countries of Latin America and the Caribbean produced modern sectors that

increasingly absorbed more skilled and productive human resources, while the part of EAP consisting of unskilled labour diminished rapidly. This structural occupational mobility, although insufficient to reduce the relative size of the urban informal sector and the absolute number of the poor, at least resulted in an increase in relatively well-paid jobs in the formal sector, especially in large and medium-sized private enterprises, and in jobs in the public sector (ECLAC, 1989, p. 6).

2. *Employment in some social categories*

Perhaps the most dramatic effect of the economic stagnation as it affected labour was the increase in unemployment. Between 1983 and 1985, at the epicentre of the crisis, unemployment rates in many countries reached the highest levels ever recorded. In 1987, of the 14 countries for which comparable information with total or partial coverage exists, 11 still had unemployment rates higher than those of 1980. Table 2 shows the evolution of employment according to various social categories in six metropolitan areas of the region which are sufficiently representative to give an approximate idea of the general behaviour of the respective countries. The more disaggregated

Table 1

**LATIN AMERICA: INDEX OF THE EVOLUTION OF SOME
EMPLOYMENT AND WAGE INDICATORS FOR 1987**

(1980 = 100)

Country	Index of the evolution of employed by sectors in relation to employed non-agricultural EAP				Open unemployment	Minimum wage
	Large private enterprises	Public sector	Self- employed ^a	Small private enterprises ^b		
Mexico	79	125	146	85	87	62
Brazil	79	108	131	167	59	71
Costa Rica	85	102	102	122	93	117
Colombia	85	90	120	120	121	113
Argentina	93	97	106	94	227	122
Venezuela	98	86	94	130	150	109
Chile	103	74	91	143	104	69

Source: ECLAC, provisional estimates on the basis of national data.

^aIncludes only non-professional self-employed and non-professional unpaid family workers.

^bIncludes enterprises with less than 10 employees, self-employed and professional unpaid family workers.

Table 2

**LATIN AMERICA: INDEXES OF THE EVOLUTION OF SOME INDICATORS OF
EMPLOYMENT AND UNEMPLOYMENT IN SOME METROPOLITAN
AREAS FOR THE YEARS SHOWN**

(First year shown = 100)

	Bototá Colombia 1979-1986	San José Costa Rica 1979-1988	São Paulo Brazil 1977-1987	Montevideo Uruguay 1981-1986	Caracas Venezuela 1978-1986	Buenos Aires Argentina 1980-1986
Rate of economic participation of 15-19 year-olds	98	93	103	85	73	90
Rate of economic participation of 20-24 year-olds	110	111	108	101	93	94
Unemployment rate for 15-19 year-olds	242	113	122	139	197	208
Unemployment rate for 20-24 year-olds	240	104	150	194	192	158
Unemployment rate for male heads of household aged 25-59	264	192	165	118	345	282
Unemployment rate for female heads of household aged 25-59	197	311	169	66	320	320
Rate of economic participation of women aged 25-39 in nuclear families with children under 5 years old	158	155	158	132	132	135
Percentage of accumulated variation of per capita GDP for 1981-1988 ^a	11.1	1.5	-8.7	-9.8	-14.6	-15.2

Source: ECLAC, estimates based on household surveys in the respective countries, and *Statistical Yearbook for Latin America and the Caribbean*, Santiago, Chile, recent years.

^aCalculated for the whole country.

data in this table show that in comparison with the employment situation in each social category around 1980 heads of household in at least five of the six cities had fewer work opportunities than young people, and that in some cases the unemployment rates of the beginning of the decade trebled.

As the crisis deepened, young people, especially those between 15 and 19 years of age, saw the job opportunities suited to their level of education increasingly blocked. The increase in unemployment prevented the members of this age group from at least partially compensating for the decline in family income by working. On the other hand, many young people left the labour market or did not even try to enter it, as they would have done under more favourable conditions. Perhaps these phenomena help explain why the participation rates of young people declined more in places where economic stagnation was worse. Such seems to be the case, for example, of Venezuela and Argentina: of the seven countries shown in table 2, they are precisely the ones whose economies suffered most damage in the period 1981-1988 and which also had the biggest decline in the youth employment rate. The highest youth rates, in contrast, are found in the metropolitan areas of Colombia and Costa Rica, countries with the best economic performances in the period studied (table 2). In these circumstances it would be no surprise if at least part of the increase in secondary education enrollment during this period was due to the fact that in a more favourable jobs market many young people would not have continued in the education system but did so now because of a lack of job opportunities. Likewise, those who had entered the jobs market were later removed from it by the crisis. Such young people, to the extent that they returned to the education system, judged it better to wait there for new signs of a recovery of demand, while gaining knowledge or educational credits that could eventually make them more competitive in the labour market.

Table 2 also shows that in all the cities studied there was an increase in the employment rates of mothers between 25 and 39 years of age with children under five in nuclear families. Even though these changes follow a long-term trend, their magnitude suggests that the trend

has grown stronger recently because of the need of many women to offset the actual drop in family income, i.e., to supplement the reduced income of the head of household by entering the labour market. This is a highly important phenomenon insofar as it has direct repercussions on the capacity of households to raise and protect the new generations, considering that the infrastructure of child-care services (kindergartens, pre-school centres) is particularly deficient precisely where it is most needed.

3. Employment by economic sectors

The changes in employment and wages brought about by the economic recession varied from country to country in step with the gravity of the crisis itself and also with the capacity of the social forces in each country to mobilize in defence of their positions, and with the responses of the governments to internal and external pressures seeking to influence economic and labour policies in one direction or another. It is particularly difficult to interpret properly the impact of the changes in employment on the living conditions of households and individuals. This difficulty stems from the fact that any interpretation has simultaneously to take into consideration changes in real wages, rates of open unemployment and the quality of the jobs obtained. From this angle table 1—which as we know contains data for the seven countries for which there was comparable information for the years 1980 and 1987—makes it possible to draw some conclusions. The table presents, first, the distribution by sector of the employed EAP, a datum which we take as an approximate indication of changes in the quality of jobs. Since the factors that determine job quality cannot be measured directly, we use a series of assumptions that allow us to evaluate, for example, the average productivity of one sector in relation to other sectors. We proceed in the same fashion with job stability, social security coverage and social benefits, i.e., we evaluate the services provided in one sector in comparison with the others. All this permits us finally to place the different sectors into three groups: large private enterprises, the public sector, and the non-

professional self-employed. Since small (less than 10 workers) private enterprises form a very heterogeneous conglomerate with large variations in job quality, we will consider them a residual category for the moment. Second, we examine the rates of open unemployment, which account for the relative changes both in the abundance or scarcity of job opportunities and the willingness of people to take jobs on the working and wage terms determined by the market at that time. Third, we consider the minimum levels of real wages, which once again offer an approximate indication, more or less accurate depending on the country, of the guidelines or reference points used by employers, sometimes to negotiate and sometimes to set the wages of their employees.

Brazil and Mexico were the countries in which the large private enterprises displayed less capacity during the period to absorb the growth of EAP. Despite that fact, rates of open unemployment declined in both countries, at the cost *inter alia* of a sharp drop in urban real minimum wages. As can be seen from the significant expansion of non-professional self-employment, job quality also declined in both countries. Unlike the other countries analysed, the recruitment of civil servants continued in both Brazil and Mexico, to the point where Mexico experienced a relatively large expansion of the sector, so that a source of jobs remained open during the crisis, mainly for educated middle-class young people (table 1).

For their part, Costa Rica, Colombia and Argentina, although less affected than Brazil and Mexico by stagnation in the capacity of their modern sectors to absorb labour, were less successful in controlling unemployment rates, probably owing to the combination of a series of factors, for example high urban real minimum wages than in 1980, or less expansion of non-professional self-employment than in the other countries, or the freezing of public-sector recruitment.

Finally, Chile and Venezuela maintained and even slightly improved their capacity to absorb labour in the more productive sectors. Nevertheless, open unemployment in Chile increased sharply, while Venezuela's apparent control of unemployment was probably due to a significant reduction of urban real minimum wages. But

what is important to point out here is that, on the one hand, both countries appear to have carried out policies to freeze public-sector recruitment—the relative growth of which was in fact clearly lower than the growth of the non-agricultural EAP—while, on the other hand, in neither of the two countries did non-professional workers move into self-employment (table 1).

When read together these data, although fragmentary and dispersed, allow us to venture some conjectures or hypotheses—which would certainly have to be proven by more complete data and analyses—concerning what generally happened during the period in those areas of the world of labour which most directly influence the living conditions of the population.

The first thing that stands out is the relatively broad gamut of employment and wages policies that the governments had at hand and implemented in order to initiate or reinforce the transformation of production and to combat the overall deterioration of the economic situation and the decline in personal living conditions. For example, governments can decide whether to impose legal restrictions on various non-professional self-employment activities. If they do impose such restrictions, they can also apply them more or less rigorously. Similarly, they can freeze, increase or reduce recruitment in the public sector, and they can also try to determine, more or less effectively, guidelines for higher or lower real wages than those prevalent before the crisis. These and other interventions by the State in the field of employment stem from simultaneous consideration of a complex set of factors, which interact differently in each country: the available resources, the relative weight of various social and political pressures, institutional inertia, and the government's own programme. If this is the case, i.e., that governments do actually proceed in this way, it becomes clear that, both in the evaluation of the measures used to combat the crisis in the area of employment and in the measurement of their effect on personal living standards, it is totally insufficient to examine only real wages, or the rate of open unemployment, or the changes in the sectoral distribution of the employed EAP. An analysis that does not consider the combined effect of the various factors would not make it possible to

reconstruct the logic behind the measures adopted in each country or the logic of the measures most frequently used in the region.

Second, the public sector displays important differences in capacity to absorb labour. Of course, the extraordinarily vigorous growth of public-sector employment during the decades preceding the crisis derived fundamentally from two complex series of phenomena. One was the need to recruit more and more personnel to meet the growing demand for social services which accompanied the accelerated urbanization of those years. The other was related to the political pressures exerted by middle-class sectors on the State to hire the equally growing number of graduates from the education systems, which had in the meantime, owing partly to the urbanization itself, expanded very rapidly. The fiscal crisis that was beginning to be generated—or in some cases aggravated—at the beginning of the 1980s prevented many countries from continuing that policy. Thus, subjected to the fiscal-adjustment programmes agreed upon with the agencies acting as spokesmen for the lending bodies, many Latin American countries were forced to shut off access to the public sector and reduce the real wages of State employees, which fell almost as much as those of the non-professional self-employed (table 3). It is even possible that those changes had a more negative effect on the educated middle-class young than on other social categories.

Non-professional self-employment, in turn, increased in most of the countries, especially where the stagnation of the more productive sectors was worse. This kind of employment probably served as a refuge for the mass of unskilled workers who, with little capacity for collective pressure, had lost waged jobs or never had them. As mentioned above, the drop in income among the non-professional self-employed was greater than in any other category. A disproportionately high percentage of the so-called recent poor (Kaztman, 1989) is probably found in that category. The channeling of the labour supply towards self-employment was not however automatic. As we have seen, in several countries this sector grew less quickly during the crisis than the non-agricultural sector of EAP. Different government policies can facilitate or block access to these jobs. For example, the State can grant or deny licenses for certain services (taxi-meter permits, newspaper stands, stalls in open-air markets, street vendors, etc.) or can control or prosecute more or less vigorously those who carry on such activities without proper municipal authorization. Cultural patterns of consumption and stigmas associated with certain occupations can also play a similar role, i.e., they can block or facilitate the access to self-employment of some non-professional segments of the population.

But the most striking thing about the period under consideration is the noticeable growth in most of the countries of employment in small

Table 3

**LATIN AMERICA: INDEXES OF EARNINGS FROM EMPLOYMENT
BY YEAR AND BY ECONOMIC SECTOR^a**

(1980 = 100)

Economic sector	1981	1982	1983	1984	1985	1986	1987
Agriculture	100.5	93.6	88.8	87.1	78.5	93.8	77.2
Large private enterprises	98.4	99.8	90.4	90.1	93.4	95.5	85.1
Small private enterprises ^b	98.8	96.5	87.0	82.1	84.1	82.1	69.1
Public sector	92.7	90.2	80.7	76.4	79.3	76.0	68.0
Self-employed ^c	88.1	80.6	71.5	68.0	67.1	68.1	58.9
Total employment	94.8	91.6	81.8	79.2	79.9	82.6	72.1

Source: PREALC, estimates of the evolution of the labour market, 1980-1987.

^aIncludes Argentina, Brazil, Chile, Colombia, Costa Rica, Mexico and Venezuela.

^bIncludes enterprises with fewer than 10 employees, the professional self-employed and professional unpaid family workers.

^cIncludes only the non-professional self-employed and non-professional unpaid family workers.

enterprises (i.e., with fewer than 10 workers). There is insufficient information to break down into homogeneous categories the diversity of types of establishment involved. We can, however, venture some hypotheses about the growth of employment in the sector—hypotheses which, given the lack of data, are based more on personal observation than on the corresponding statistical information. We would say, first, that the deficiencies—mostly in quality—of State services due to the drastic cut-back in their resources created gaps in the supply of services which were probably filled by private companies. Education perhaps provides the clearest example: a multitude of schools sprang up specializing in rapid training in skills and jobs supposedly sought after by the modern sector of the economy. However, in response to the demand created by the increased number of mothers forced to enter the labour market in order to supplement insufficient family incomes and to the rapid growth in the importance attached to pre-school training with respect to a child's subsequent performance, a large number of pre-school establishments and kindergartens also sprang up. Second, because of the need to remain competitive during the crisis, large private enterprises sought to cut labour costs through *inter alia* the elimination of social-security costs by contracting small enterprises to

produce some of the goods and services which they previously produced or provided themselves. It is hardly surprising, then, that the capacity of small private enterprises to absorb labour developed in step with a drop in urban real minimum wages. It is interesting to note in this regard that, with the exception of Mexico which clearly deviates from this pattern, in all the countries the relative growth of employment in small enterprises corresponded exactly to the drop in urban real minimum wages (table 1).

To sum up, the stagnation of the modern sector considerably reduced the capacity of the economy as a whole to offer better jobs and shifted large segments of the population towards jobs which were less stable, worse paid, and practically unprotected by social-security services and social benefits. In previous decades the possibility of acquiring better jobs had kept alive the expectations of social mobility of the generations entering the labour market—expectations that moreover fulfilled an important function in investing the whole social order with legitimacy. One of the more worrying circumstances of the present state of the labour market is the loss of that hope on the part of young people, who find it very difficult now even to match the economic and social achievements of preceding generations, much less surpass them.

B. Health

The most striking thing about health in the first seven years of the 1980s is the fact that, despite the reduction of resources allocated by governments to the sector, the same positive trends of the pre-crisis period continued to manifest themselves.

1. *Public expenditures on health*

The percentage of public expenditure on health declined in most of the countries of Latin America and the Caribbean between 1980 and the last year for which we have information (about 1986), clearly demonstrating that the State was increasingly incapable of responding

to the needs and demands for health services. If we take as an approximate measure of the trends in the region's expenditure the unweighted average percentage of total public expenditure on health, it can be seen that this measurement, which in about 1980 was 7.7%, had fallen to 7.2% after mid-decade. However, since in about 1970 the unweighted measurement was 8.1%, it can be concluded that the downward trend is not attributable only to the debt crisis but is a continuation of a previous trend whose causes would have to be investigated. Nevertheless, the most probable explanation is that the crisis helped to speed up the rate of decline in health expenditures in relation to total government

spending, since during the 1970s the decline was 4.9%, according to the unweighted average, while in the seven years of the 1980s examined here it reached 6.5%. It should be remembered, moreover, that the period 1970-1980 was relatively expansionary (the per capita product increased in fact by around 39%), while the period 1980-1987 was one of stagnation (with a reduction of the per capita product of around 6%). Thus the decline in the relative expenditure on health in the first period may have been compatible with a higher or equal per capita expenditure.

If we examine the behaviour of each country separately, we will see that during the 1970s 15 countries reduced their relative health expenditure and 10 raised it, while during the first seven years of the 1980s 17 countries showed a decline in expenditure and only eight an increase. The fact that both real wages and total income of most households also declined (a fact which among other things was reflected by increased poverty) makes it highly probable that family spending on health care also declined significantly.

Philip Musgrove¹ has argued that since health care is a basic need, spending in the sector should be reduced less than proportionally when income falls, provided of course that the political will exists to make health care as independent as possible — particularly for sectors with less resources — of economic fluctuations. As the above figures show, this is not what happened in most of the countries of the region. Of the 17 countries with negative signs between 1980 and 1987 in the index of the cumulative variation of annual product growth rates, only four (Trinidad and Tobago, Panama, Paraguay and Honduras) significantly increased — by between 38% and 80% — the percentage of public expenditure on health in relation to total expenditure. Two other countries (Jamaica and Peru) showed small increases — between 2% and 4% — while the remaining 11 countries had drops ranging from 3% to 60% (the figures for Argentina and Costa Rica). As we see, the governments that

gave priority to health care during the crisis were in a minority in the region.

The proportion of total government health expenditure gives us a good indication of the importance that the society or the government in question assigns to health in relation to other sectors. But from the viewpoint of changes in the welfare of the population, the per capita expenditure on health is fundamental. As table 3 shows, of the nine countries for which we have reliable information for the period 1980-1986, only two (Brazil and Panama) increased their per capita expenditure on health. The rest of the countries reduced it more or less severely.

Nevertheless, it is not easy to determine with precision how this reduction affected the population's state of health. On the one hand, the decline in personal income and the consequent difficulties in making monthly payments probably prompted many people to drop out of a number of private health-care schemes (insurance, corporations, medical mutual associations or co-operatives). At least that is what happened in the only place for which information on the question was available: Montevideo. There the number enrolled in such schemes (71.4% of the total population in 1981) fell to 65.6% in 1986. The increase in unemployment may have had a similar effect, since the unemployed and in some cases, depending on the characteristics of national social-security systems, also their non-active family members, were probably left without the health care that workers and their families have a right to. Both trends indicate more demands on public health institutions, whose resources, as we have seen, were significantly reduced.

Even though this situation most probably affected the quantity and quality of the services provided, the crisis may also have acted as an incentive for raising the efficiency of the service or for making it more equitable by reserving the scarcer resources for the more needy population groups. The insufficiency of the available information rules out any judgements as to the overall net result of the alternatives mentioned, a circumstance which once again focuses the discussion on the serious problem of lack of statistical information to enable the inputs to be related to the results, both in the health field and in other social areas.

¹The text of Philip Musgrove, "Health care and economic hardship", *World Health*, World Health Organization (WHO), October 1984, is mentioned in Inter-American Development Bank (IDB), *Economic and Social Progress in Latin America, 1989 Report*, Washington, D.C., 1989.

Table 4

LATIN AMERICA AND THE CARIBBEAN: EVOLUTION OF SOME HEALTH INDICATORS IN RELATION TO 1980

(1980 = 100)

Country	Year(s)	Total consolidated government expenditure on health	Total per capita consolidated government expenditure on health	Number of doctors per inhabitant	Average annual rate of reduction of infant mortality in relation to 1980 (%)	Rate of global reduction of infant mortality in relation to 1980 (%)
Argentina	1986	-	-	-	4.0	7.2
Brazil	1986	156	128	-	-	-
Costa Rica	1984-1986	74	64	150	2.3	1.8
Chile	1986-1987	95	81	-	7.9	14.5
Cuba	1986-1987	-	-	174	5.9	6.0
Ecuador	1985-1987	83	96	151	5.2	16.9
El Salvador	1985-1987	57	50	99	-	-
Guatemala	1985	-	-	-	3.1	9.5
Mexico	1985-1986	92	83	101	-	-
Panama	1986	140	126	125	-	-
Paraguay	1986	84	62	-	-	-
Uruguay	1986	77	90	116	4.9	9.7
Venezuela	1986	-	-	-	5.3	9.6

Source: ECLAC, *Statistical Yearbook for Latin America and the Caribbean*, Santiago, Chile, recent years; Latin American Demographic Centre (CELADE), direct information; International Monetary Fund (IMF), *Government Financial Statistics Yearbook*, Washington, D.C., recent years; United Nations, Statistical Office, *Demographic Yearbook*, Washington, D.C., recent years.

Note: The consolidated expenditures of the central government at current prices were obtained from the International Monetary Fund (IMF), *Government Financial Statistics Yearbook*, Washington, D.C., vol. XII, 1988. The expenditures were adjusted to constant prices using the annual indexes of implicit prices in the global GDP at market prices (1980 base = 100) of ECLAC's Yearbook. The populations estimated year by year were obtained from interpolations using the Karup-King method based on five-year projections by CELADE.

2. The ratio of doctors to population

The reduction of public funds and family resources for health care did not lead, as we said above, to an overall deterioration in the respective indicators. Thus we find that some of the indicators commonly used to evaluate the performance of social policies in this area do not indicate the changes in welfare conditions that the crisis led us to expect.

Such is the case of the number of inhabitants per doctor (table 4). In fact, none of the seven countries for which we have comparable information in the period we are studying experienced a reduction in this number. On the contrary, most showed increases, varying between 16% and 74% between 1980 and the last year of the decade for which we have information. These data imply a higher average probability of every inhabitant receiving

attention from a medical professional, which means, at least potentially, progress in the health care of the population at large.

How is this information to be reconciled with the obviously gloomier picture painted by the economic data for the decade? First, the evolution of the ratio of doctors to population in a specific period depends to a large extent on previous structural conditions. If we assume that it takes an average of between eight and nine years to become a doctor, the increase in the number of doctors during the 1980s is determined more by personal decisions and the institutional incentives and facilities prevailing during the previous decade. As we know, in many countries of the region the 1970s were years of economic expansion which, on the one hand, allowed the State to increase its per capita expenditure on social services such as health and education and on the other, certainly raised the

people's expectations of improved welfare, prompting them to invest in the future with reasonable hopes, of higher returns.

Second, it is impossible to evaluate the effect of a larger number of doctors on welfare and equity without knowing the evolution of their spatial and social distribution. Even though we have no information on this point, we can venture some conjectures. With regard to spatial distribution, we know that during the 1980s the urbanization rate remained high in most of the countries of the region, although it was lower than in the previous decade. Thus we can assume that the problems caused by the scarcity of health-care centres in rural areas may be mitigated in some way, to the extent that the population moved to within the range of urban health-care institutions. As for social distribution, we know that the funds available for investment in health care diminished in most of the countries of the region and that the pay of public-sector health-care workers (including doctors) probably fell as much as the pay of public employees in general, i.e., more than in other sectors (table 3). Thus the deterioration in the health-services infrastructure, a growing relative lack of technical equipment, and the lower economic incentives probably led to negative selective recruitment in the public health sector, to resignations, to fewer hours worked, or to less dedication on the part of the more competent professionals. If all this actually happened, it may have led to a deterioration in health care, especially for the poorer population groups that depend precisely on the public sector for these services.

3. *The evolution of infant mortality*

The infant mortality rate is usually considered one of the more reliable indicators of the effectiveness of health-care systems, although its evolution in fact is determined by a wide and diverse range of factors. Despite the insufficiencies in this area, in all the countries of the region for which we have updated and reliable information the infant mortality rate registered a sustained downward trend from previous decades up to the end of the 1980s (table 4).

Some advances in health care certainly had an impact on the handling of the problem. This is true of a number of technological innovations widely established internationally, for example oral rehydration, which makes it possible to combat very effectively the effects of infant diarrhoea, one of the main causes of death during infancy and simultaneously to reduce the cost of the infrastructure needed to tackle the problem, thereby making very rapid progress possible in this field. To understand its importance, it is sufficient to point out that in 1980, when the World Health Organization (WHO) began its programme to control diarrhoeic diseases, less than 1% of the children of the world that suffered from these ailments were treated by oral rehydration therapy. By 1986, close to 36% of the cases of diarrhoea among children under five in Latin America and the Caribbean were treated with this therapy.² The campaigns to inform the population about the benefits for mother and child of spaced births had equally notable effects on the reduction of infant mortality. Existing public and private institutions in the countries concerned participated in the campaigns. These same institutions were also used to organize and carry out rapid campaigns of mass vaccination against high-risk early-childhood diseases.

Other indirect but no less important factors also contributed to the decline of infant mortality. Urbanization was one of them. Rapid urbanization gave many mothers the chance to visit health-care centres more often, gave them greater access to drinking water and sewage services (or at least the possibility of collectively expressing and tackling the need to have these services suitably provided), and also gave them more frequent exposure to a variety of messages about infant nutrition, hygiene, pre-natal care, etc. Receptivity to these messages and the adoption of the corresponding practices were also enhanced by the parallel rise of women's educational levels.

²See the report of the World Health Organization (WHO), *Programa para el control de las enfermedades diarreicas. Sexto informe 1986-1987*, February 1988, which is mentioned in the United Nations Children's Fund (UNICEF), *Estado mundial de la infancia 1989*, Barcelona, J & J Asociados, 1989.

An important characteristic of the factors just described is their relatively high degree of autonomy in relation to economic difficulties. In other words, as the recent history of the region shows, the downward trend of infant mortality may remain unchanged even if the economy in general declines or if the relative inequalities in the distribution of goods and services worsen, provided of course that such changes remain within certain limits.

The effort to save as many children as possible from death has not been, however, the exclusive work of governments. A very important role is also undoubtedly played by the concern and active promotion policies of some international organizations, including the

United Nations Children's Fund (UNICEF) and WHO, which successfully made the world aware of the problem and established the infant mortality rate as one of the key indicators for evaluating the performance of governments and societies in the social field: it is for this very reason that many countries have directed a good part of their efforts in the social field to combating the more immediate causes of infant mortality. This has been a fortunate development from the viewpoint of achieving more equitable welfare conditions, for infant mortality is concentrated among the lower-income groups, so that its reduction tends to improve mainly the life expectancy of the poor.

C. Education

1. *Resources and achievements*

In spite of the economic crisis that affected most Latin American countries and the resources allocated by governments to this area, education maintained and in most cases surpassed the quantitative achievements of the previous decades. Thus most of the countries maintained the target rate of nearly 100% primary-school attendance reached in the 1960s and 1970s. The rates of transfer from primary to secondary education rose, as did the proportion of enrollments in secondary and higher education.

Table 5 presents some indicators selected because they illustrate the commonest trends in the countries of the region in this field, or more specifically in the countries that have data for two different years of the decade of the 1980s. Thus, as can be seen from the table, in seven of the nine countries with data the consolidated government expenditure per inhabitant between 5 and 24 years of age fell in real values. In nine of the 11 countries, the ratio of teachers to the school-age population increased. In five (of seven) the rates of transfer from primary to secondary education increased. In 11 (of 13) secondary enrollment rose. And in eight (of nine), higher-education enrollment rose as well.

The data therefore justify the assertion that, despite the decline in public expenditure on education per potential student, considerable progress was made in achieving the universal goal of providing wider access to education and at the same time changes in the relative supply of human resources in primary education. Both achievements could be interpreted as improvements in the education system.

Other data from household surveys covering the main metropolitan areas of six countries of the region reinforce the theory that educational systems generally performed positively during the period under consideration. Indeed, as table 6 clearly shows, the number of young people between 15 and 24 years of age with only two years of primary education fell sharply during the period to a level of only 66% of the number in the same situation in previous years. Likewise, this age group's attendance rate at educational establishments rose by between 15% and 20% in relation to the previous situation, while the number of children repeating years was 75% of the corresponding figure for previous periods. The only result out of tune with these trends seems to be the increase in four countries in the rate of school drop-outs, which was around 70% higher than at the beginning of the 1980s. It

Table 5
**LATIN AMERICA AND THE CARIBBEAN: INDEXES OF THE EVOLUTION
 OF SOME EDUCATION INDICATORS**

(1980 = 100)

Country	Years	Consolidated government expenditure on education per inhabitant aged 5-24	Ratio of teachers to school-age population	Rate of transfer from primary to secondary education	Secondary-education enrollment per school-age population	Proportion of the population aged 20-24 enrolled in higher education
Argentina	1986	-	93	136	132	179
Brazil	1985-1986	143	109	-	107	84
Costa Rica	1985-1986	67	-	-	86	110
Chile	1986	94	-	-	122	122
Colombia	1986-1987	-	88	109	120	124
Cuba	1986-1988	-	132	-	109	117
Ecuador	1985-1986	73	110	-	109	-
El Salvador	1985-1986	54	109	-	112	-
Mexico	1985-1987	82	122	106	115	-
Panama	1985-1986	127	105	95	97	114
Paraguay	1985-1986	73	108	115	118	-
Uruguay	1986-1987	74	100	131	128	232
Venezuela	1986	-	106	98	112	120

Source: ECLAC, *Statistical Yearbook for Latin America and the Caribbean*, Santiago, Chile, recent years; Latin American Demographic Centre (CELADE), direct information; International Monetary Fund (IMF), *Government Financial Statistics Yearbook*, Washington, D.C., recent years; United Nations, Statistical Office, *Demographic Yearbook*, Washington, D.C., recent years.

Note: The consolidated expenditures of the central government at current prices were obtained from the International Monetary Fund (IMF), *Government Financial Statistics Yearbook*, Washington, D.C., vol. XII, 1988. The expenditures were adjusted to constant prices using the annual indexes of implicit prices in the global GDP at market prices (1980 base = 100) of ECLAC's Yearbook. The populations estimated year by year were obtained from interpolations using the Karup-King method based on five-year projections by CELADE.

should be kept in mind, however, that the drop-out rate varied between 1% and 5%.³

These results could be compatible with the theory of a growing social differentiation through education. On the one hand, aggregate indicators of transfers, enrollment and repeated years could be incorporating the better performances of students from population groups better endowed with human and material resources. Thus the possibly static or even declining situation of the less-favoured groups, as long as it remains within certain limits, would

not negatively affect the values of the aggregate indicators, thus concealing the heterogeneity of the educational performance of the various sectors. On the other hand, the quantitative advances may be accompanied by changes in the quality of education available to the various population groups. The need to explain the functions that education actually performed in the period under study leads us to a consideration of the question of the stratification of educational circuits.

2. The stratification of education channels

In contrast to the growing demands for education, the reduction of government funding and the strengthening of the principles of economic liberalism and its market solutions produced, and in some cases accelerated, a phenomenon known as stratification of the education channels defined as education's loss of

³To demonstrate that the increase in school drop-outs and the decline in rates of repeated years are compatible with the result of gross rates of school attendance at 100% and above we should specify, on the one hand, that such rates are obtained from the quotient of school enrollment and school-age population, which explains how these rates are often above 100%, and on the other hand, that while the rates of repeat range between 15% and 30%, drop-out rates vary from 1% to 5%, allowing the net result to be above 100%.

Table 6

**LATIN AMERICA: SOME EDUCATION AN EMPLOYMENT INDICATORS
IN CERTAIN METROPOLITAN AREAS**

Indicators (%)	Argentina Buenos Aires		Brazil São Paulo		Colombia Bogotá		Costa Rica San José		Uruguay Montevideo		Venezuela Caracas	
	1980	1986	1977	1987	1979	1986	1979	1988	1981	1986	1978	1986
<i>Education</i>												
Illiteracy in population between 15 and 24 years of age	...	...	12.7	6.7	3.7	2.5	3.0	3.0	0.9	0.9	3.3	2.4
Low educational level in population between 15 and 24 years of age	...	...	49.9	32.8	26.8	18.3	9.1	7.7	5.5	3.9	13.5	8.0
School drop-outs	3.0	1.9	2.0	3.4	5.2	3.2	3.1	5.3	0.7	1.5	2.9	3.9
Behind in education, population 7-15 ^a	10.6	...	41.1	30.6	27.4	16.3	17.3	18.8	17.0	14.6	27.0	23.7
Behind in education, population 7-15 ^b	3.7	...	21.7	14.0	12.2	6.4	5.8	6.8	6.3	5.3	5.0	3.3
Attendance rate, population 15-19	48.7	63.9	55.3	52.9	65.5	67.1	54.3	60.1	54.1	64.8	62.2	59.2
Attendance rate, population 20-24	22.7	25.9	26.4	19.0	32.4	32.9	25.1	28.9	24.9	35.6	30.3	31.2
Population between 6 and 11 years of age attending paid education									28.9	24.1		
Population between 12 and 17 years of age attending paid education									28.7	21.8		
<i>Employment</i>												
Economic participation of the population between 15 and 19 years of age	38.6	34.6	60.4	62.5	33.0	32.5	40.0	37.2	46.8	40.0	33.2	24.4
Economic participation of the population between 20 and 24 years of age	73.8	69.2	73.3	78.9	61.4	67.7	64.2	71.0	77.8	78.2	64.6	60.1
Population 15-19 working and studying	3.7	5.2	24.8	24.9	6.9	6.1	7.0	8.3	6.7	7.9	7.0	3.2
Population 20-24 working and studying	10.0	10.4	17.8	12.8	11.9	11.0	12.4	13.6	12.6	16.0	12.9	8.4
Unemployed population 15-19	6.6	13.7	7.9	9.6	11.8	28.6	15.1	17.0	22.2	30.9	7.1	14.0
Unemployed population 20-24	3.8	6.0	5.0	7.5	8.9	21.4	9.1	9.5	10.7	20.8	5.2	10.0
Economic participation of women in legal and common law marriages	33.5	39.1	29.3	...	32.3	51.7	...	40.7	52.7	67.5	52.2	57.9
Economic participation of women with children	25.1	34.0	25.5	40.2	30.8	48.8	26.3	40.8	48.2	63.7	33.1	43.6
Employment of women with children	23.9	32.6	25.0	38.8	29.6	40.0	25.4	36.8	42.4	56.7	32.7	40.6
Unemployment, male heads of household, 25-59 years old	1.1	3.1	1.7	2.8	1.4	3.7	1.2	2.3	2.7	3.2	1.1	3.8
Unemployment, female heads of household, 25-59 years old	1.5	4.8	1.6	2.7	3.2	6.3	0.9	2.8	10.0	6.6	1.5	4.8

Source: ECLAC, estimates based on processing of household surveys of the countries.

^aOne or more years behind.

^bTwo or more years behind.

homogeneity and of its status as an instrument of equity and social cohesion. The phenomenon is characterized by a higher proportion, at all educational levels, of private as opposed to public institutions. In contrast with a public education undermined by a lack of resources, private education is usually considerably better endowed with physical and technological infrastructure and offers better teaching conditions: since it has more resources, it can select teachers more rigorously and ensure a more extensive and intensive relationship between teachers and students.

The segmentation of the student population resulting from this division not only facilitates the operation of the mechanisms that reproduce social inequalities and undermine the possibilities of integration but also, in the case of Latin America with its rapid expansion of the educated young population in a context of insufficient job opportunities, helps to aggravate the consequences of what has been called the universal devaluation of education. In summary terms, the devaluation of education refers to the growing demands that employers make with respect to education, so that the jobs themselves require more skills as time goes by. Thus young people are faced with employers demanding labour who know and increasingly take into account educational differences; this has a discriminatory effect on job opportunities and wage levels. In other words, the importance which the market attaches to acquired knowledge allows only a decreasing proportion of the young population to keep alive their expectations of social mobility.

3. Some numerical evidence of the stratification of educational channels and its consequences

The privatization of primary and secondary education underwent considerable changes during the crisis. In some countries, especially Chile, it increased sharply; in others, including Uruguay, it declined just as sharply. However, a more complete analysis would be needed to determine if, as is likely, students in the private system performed significantly better than those in the public system; if there is such a difference it would represent an increased heterogeneity of

education as a whole and would thus accentuate the inequalities in cultural and job opportunities, depending on the different education which citizens receive.

Because of its objective, this analysis would have to focus on aspects of infrastructure, the extent of the relationship between teacher and student, and curriculum content. But it would also have to consider the performance of students, the extent of their passage through the system, and their achievements within and outside the system. Although we only have information for Chile in this area, and only for some of the aspects mentioned, supplied by the research of Cox and Jara (1989), we think that the results of the analysis should be considered as the expression of a process of increasing segmentation and heterogeneity in the educational system.

The data presented by Cox and Jara with respect to primary and secondary education in Chile in 1987 are as follows:

a) of those attending public schools, who make up 60% of the primary and secondary enrollment, 32% finish both cycles—which together theoretically last 12 years—in approximately 17.3 years, and only 9% finish in 12 years;

b) of those attending subsidized private schools, representing 33% of total enrollment, 44% finish both cycles in approximately 15.7 years and 18% do so in 12 years;

c) of those attending unsubsidized private schools, representing the remaining 7% of total enrollment, 67% finish both cycles in approximately 13.5 years, and 46% do so in 12 years.

In short, in this respect students in the private sector clearly perform better than those in the public sector, especially as only 9% of public-sector students complete both cycles in 12 years as opposed to 46% in unsubsidized private schools.

The performance of students educated in the two systems is also reflected in the results of the performance evaluation tests, which measure performance on a scale of 0 to 100. In the mathematics and Spanish tests, the fourth- and eighth-grade students of the schools which, according to the Cox and Jara classification, are

located at the highest socioeconomic level scored 22 and 26 points higher, respectively, than students from schools at lower socioeconomic levels.⁴

If we assume that on average there are no innate differences among the students attending these different kinds of school with respect to learning ability, we have to conclude that these results eloquently demonstrate the differences

between the different kinds of school with regard to the way in which knowledge is transmitted and its content. Returning to our previous argument, we can say that to the extent that enterprises are involved in the universal trend to demand increasingly higher quality in the human resources which they recruit, these educational differences will also result later in unequal job and wage opportunities.

II

Reflections on the meaning of social trends: hard and soft areas in social development

1. *The relationship between social changes and economic changes*

Our empirical analysis of the changes produced during the 1980s in some of the more important aspects of the quality of life demonstrates the existence of a considerable degree of independence between the fluctuations of the various indicators of social progress and between them and the indicators of economic development.

Some preliminary conclusions can be drawn from this independence. First, the evaluation of social development is a complex task, and its results can therefore vary significantly according to the indicators selected for the analysis. Even though this conclusion might seem obvious, it is not so obvious when set against the abundance of assertions about positive and negative changes in welfare conditions based on the uncritical use of a few indicators. Second, our theories about the factors that determine changes in some of the more important areas of social development clearly need to be reviewed and consolidated, but we can already discard all those that assert a close and direct correspondence between economic

changes and the general conditions of the quality of life. Third, the fact that there is a relative independence between economic and social changes indicates at the same time that there is a broad field within which governments can choose their policies.

As a working hypothesis, we will state here that the present situation has contributed to the situation in which government decisions on these various options are increasingly focussed more on what we will call the soft areas of social policy, i.e., those that offer less resistance to change. The present situation seems to be characterized by a sharp reduction of governments' room to manoeuvre which is determined by their need to tackle a multitude of tasks at the same time: meeting international obligations, operating with a much more limited budget than in normal conditions, preventing flight of capital, providing incentives for national and international investment in the country and, lastly, retaining the political support of the sectors that back them. However, all this has to be reconciled with the strong demands for improvements in welfare both from those broad sectors of society that suffer basic shortages and from the middle classes, whose standard of living, as we know, declined markedly during the crisis.

The complexity of evaluating social development makes it advisable to divide the problem into its component parts and deal one

⁴The highest category includes those private schools that cost the family an average annual expenditure of 70 000 1984 Chilean pesos, and the category just above the lowest one includes public, municipal or subsidized schools which require an average annual expenditure of 7 000 1984 Chilean pesos. The lowest category was not used because of the heterogeneity of the schools included in it.

by one with the specific difficulties posed by each of them. A first task would be to investigate the nature of the goals of social welfare, basically distinguishing between what we will call here the soft and the hard goals, according to their difficulty of attainment or, to put it another way, according to the amount of effort and investment which societies and governments have to make in order to attain them. A second task would be to elaborate a broad concept of social development which would provide an instrumental definition to guide the choice of indicators —a definition of social needs and of the elements that satisfy them which would necessarily be tentative because of its historical background and which would therefore change as society and culture change.

As we will see below, terming a goal hard or soft requires a revision of the theories about the necessary and sufficient conditions for progress in each aspect of welfare. But what we most need to remember at this point is that the complexity of evaluating social progress is closely related to the difficulty of reaching a minimum consensus about the degree of hardness of the goals, as well as about the way to assess actions designed to remove the obstacles to harder or softer goals.

2. Determinants of the hardness of social goals

Social areas can be distinguished in every society and at every moment of history, and within those areas there are dimensions in which it is easier or more difficult to attain certain goals. The degree of difficulty is determined basically by four closely interrelated factors: a) the amount of resources needed to reach the goals; b) the institutional conductivity; c) the political conductivity; and d) the cultural conductivity of the corresponding actions.

a) Resources

The design of a social policy, and more particularly its implementation, involves mobilizing material and human resources, knowledge and technologies to which governments have varying degrees of access. The costs of constructing the necessary

infrastructure for implanting or widening a service's sphere of action depend to a large extent on the development of technological innovations that lower such costs and thereby improve more or less rapidly the quality of life in the specific dimension covered by the service. In this regard perhaps the most influential technological innovation during the last decade has been oral rehydration therapy, discussed in the section on analysis of the evolution of infant mortality. The national and international agencies involved in that specific crusade have undoubtedly succeeded in calling the attention of governments to this problem, identifying it as a social defect repulsive to human sensitivity, whose rapid reduction has therefore become one of the top-priority goals of social policy. But by converting the reduction of infant mortality into an important social undertaking they also succeeded in channeling in that direction a larger volume of knowledge and human skills, and this was undoubtedly a significant factor in the production and introduction of those technological innovations —such as, for example, oral rehydration therapy— which made it possible to reduce significantly the costs of dealing with the problem. The moral of this story is that there is a complex causal relationship between the relative cost of the various goals of welfare and social equity and the priorities set by governments. Even though the availability of resources often determines priorities, the establishment of clear and compelling priorities also makes it possible to mobilize wills and reduce costs. In this respect, we should add that the capacity of a social goal to mobilize people depends not only on its content but also on the way it is presented. A presentation that makes the goal readily understandable facilitates communication and makes the concept more popular and its content more acceptable.

b) Institutional conductivity

Institutional conductivity relates to the degree of fluidity in the movement of ideas and to the degree of distortion they undergo in the bureaucracy before being put into practice. One of the main obstacles to the governance of some countries of the region lies precisely in the fact that the authorities are often incapable of

overcoming the resistance of vested interests in some of the State bureaucracies or of breaking down apathy and motivating government officials to perform their function as public servants. Strictly speaking, many of the results that are usually interpreted as consequences of a government's social policies are only the virtually immutable results of the inertia of rigid institutional patterns established earlier. These patterns not only set their own bureaucratic goals, which hardly respond to changes in society or the government's policies, but they also determine the criteria for judging their own institutional performance.

As we saw above, the crisis meant that in many countries public-sector recruitment was frozen and public-sector wages fell sharply. This probably led the more dynamic public officials to look elsewhere for work and weakened the motivation of the remaining officials for the enthusiastic design and implementation of innovative policies.

c) *Political conductivity*

Political conductivity relates to the resistance, in defence of the *status quo*, offered by interest groups to State interventions, especially when these imply direct or indirect changes in existing patterns of distribution or redistribution, or even when they merely threaten the monopoly of the more prominent marks of rank or social superiority, as in the case of policies designed to make certain services universally available. In times of crisis, when the struggle for increasingly scarce resources is fiercer, the opposition of interest groups can generate insuperable barriers to any government attempt to create more equitable social conditions. One of the consequences of the present crisis is indeed the relative weakness of the State in dealing with the more influential political and economic agents, a weakness that derives in part, as we mentioned above, from the need for governments to meet international obligations, prevent the flight of capital, provide incentives for national and international investment in the country, and at the same time retain the political support of the sectors that support it. In this context, the room for manoeuvre of social-equity policies is restricted to the softer options which are those that

provoke the least resistance from the main pressure groups, since they remain on the margins of the redistribution battle.

d) *Cultural conductivity*

Finally, the softness or hardness of a social goal is also determined by cultural resistance. Take the case, for example, of policies that seek to increase social equity by promoting homogeneous basic education conditions. We know that in most societies there are mechanisms, even in public and free schools, which concentrate the more experienced teachers, the more complete infrastructure, and the better teaching materials and equipment in the schools where the upper classes study; and vice versa, the less experienced staff, the poorer installations and the poorer teaching materials are found in rural areas or marginal urban neighbourhoods. A policy of making these conditions more equal would have to concentrate the better resources where they are needed in order to compensate for the absence of a cultural continuum between home and school, and where families are less able to provide an upbringing that meets the minimum demands of integration in a modern society. Some countries, notably the United States and Israel, tackled these problems with programmes which allowed for a kind of interchange between the living standards of the different neighbourhoods and the quality of the schools, so that, with the busing of children, for example, to an educational atmosphere superior to their living standards, the mechanisms for ever-increasing reproduction of social differentiation were broken down and homogeneous school environments were created in which children from different social and ethnic origins could get along with each other.

The degree of hardness of this kind of policy would bear a more or less direct relationship to the population's receptivity to the message which this policy implies. There will be less cultural resistance when the message invokes elements which form part of a nation's values. In contrast, the more segmented a society, the higher the barriers of social and/or ethnic discrimination between the various social groups, and the greater will be the difficulties in implementing policies of this type.

3. Economic fluctuations and the achievement of hard social goals

Economic stagnation reduces not only the resources available to the State for its social policies but also its room for manoeuvre in setting the priorities that guide resource allocation. Indeed, the crisis deepens the struggle over the way in which the reduced resources of the State must be distributed between and within the different social areas, for certain influential groups enter the competition for State resources. In more prosperous times these groups would perhaps have tried to meet their social needs through the market (for example, education, health care or housing). Thus the crisis poses a paradoxical situation, for as the need to use collective funds to guarantee satisfaction of the basic necessities of an increasing number of households grows more imperative, the competition in society for scarce resources increases, as does the pressure on governments to allocate those resources to specific areas.

This explains two important features of soft policies: their attractiveness for governments and their relative independence of economic difficulties. By concentrating on them, governments can demonstrate the clear progress resulting from their social policies, whose importance for the improvement of welfare and equity is indisputable. But what is more, the low relative cost, the existence of technological innovations that make it possible to implement these initiatives, and the fact that they do not compete much for funds or threaten privileges, make this kind of measure politically viable as well.

4. Hardness, welfare and equity

The hardness of a social area is not ambiguous or necessarily associated with its contribution to welfare and equity. Relatively soft goals, such as reducing infant mortality or eliminating

illiteracy, are undoubtedly of enormous significance for the achievement of higher levels of welfare and equity, even when they do not directly threaten, in either the short or the medium term, the basis of current systems of stratification as hard goals are wont to do. This last characteristic helps to explain the relative facility with which soft goals can generate a favourable consensus among very diverse sectors and promote national and international mobilization. Such characteristics have made it possible to harness the energies and creativity of individuals and institutions to design, produce and implement technologies that lower costs and make the infrastructure needed to achieve the goals more accessible.

Even though soft social policies can contribute greatly to welfare and equity, we must be alert to the possibility that, while progress is being made in those areas, both the stratification of services and the mechanisms of exclusion and inequity that operate in the harder areas may be reinforced. Progress in the softer areas frees the social terrain from the more worrying inequalities—for example, those relating to life expectancy at birth (infant mortality) or minimum access to the world of information and knowledge (literacy)—and generally reveals the existence of a basic commitment on the part of society to control or eliminate the most severe manifestations of extreme poverty. But, as the social terrain is cleared of these extreme features of inequality, the profile of the central structure of social inequality begins to be more clearly perceptible. The basic mechanisms for reproducing inequality are installed there: for example, access according to social origin in the early stages of learning to educational services differentiated by the quality of education they provide. To seek to eliminate such mechanisms is indeed to set a hard goal, but one which is intrinsic to the achievement of equity, for equity implies, as we will see below, the gradual elimination of ascriptive criteria in the competition to secure social goods.

III

Towards a nominal and operative definition of social development based on equity

For the practical purposes of this study, we define social development as a process characterized by the achievement of interrelated advances in welfare, equity and democracy.

By greater welfare we mean an increase in the availability and accessibility of social and economic goods, as revealed by those average indicators that show increments in the average level of education of the population, life expectancy, health and social-security cover and services, improvements in housing, quality of jobs, and access to all those goods and services that determine the quality of life. In spite of the global nature of the indicators of welfare and the fact that they provide no information on how the goods involved are distributed, the meaning of differences between two or more values of these indicators is easily intelligible. Therefore, other factors remaining constant, the degree of social development of a country with an average of about 12 years of schooling, with paid vacations for 95% of its wage earners and with a life expectancy of 70 years is greater than that of another country with lower averages in each of these areas.

The attainment of certain minimum levels of welfare makes it possible to meet basic needs. As we will see below, this is one of the three criteria most frequently used in defining the concept of equity. Each society establishes its own minimum levels on the basis of the prevailing public view of what are considered decent living conditions, with the consequent judgement that people who do not attain these levels do not have the necessary means independently to ensure their own reproduction or that of the people who depend on them, and that they are in no position to compete for scarce goods. The reduction of these forms of exclusion, which are the most visible and ethically most worrying aspects of social inequality, is a necessary first step towards increased social integration. From the viewpoint of the construction and analysis of social indicators, the concern with these aspects of welfare which

attempt to create the minimum conditions for social integration of the excluded is concretely expressed in the desire to measure the changes in the percentage of households below the poverty and destitution lines and in the parallel desire to analyse the behaviour of the critical indicators (such as infant mortality, illiteracy and access to a minimum infrastructure of services) which affect such households most of all.

The notion of equity, as applied to social matters relates to the distribution of social goods (wealth, power and honours) from a normative viewpoint, and is applied to action policies or programmes (by evaluating their consequences), to ideologies (by evaluating the type of distribution of privileges implicit in their content), or to societies (by evaluating their structural characteristics).

There are three common criteria of progress in equity. The first relates to the gradual weakening of the association between the distribution of privileges and the ascriptive characteristics of people, i.e., those that do not depend on their skills or talents. The second criterion concerns the unequal distribution of privileges and the degree of this inequality: progress in equity in this regard means that the size of this difference is reduced. The third relates to the need to improve the situation of individuals or households which owing to their extreme living conditions do not satisfy the basic needs that allow them to reproduce themselves biologically and socially.

According to the first criterion, the level of equity or inequity is determined by the degree—implicit in a policy, or existing in a social structure, or legitimized by an ideology—of the association of the characteristics ascribed to individuals and the privileges that they possess. Ascribed characteristics are those that cannot be unchanged or changed only with difficulty, such as sex and skin colour—although age, for example, is also an ascribed characteristic, as can be seen in the case of children whose level of

welfare is imposed on them in a way by their household. From this perspective, progress in equity consists in the gradual weakening of the influence of ascribed characteristics on the acquisition of social privileges. According to this first meaning, therefore, an equitable society will be one in which both the dominant values and the concrete actions stemming from these values are in turn governed by a basic ethical imperative, namely that of equal access to social goods for all members of the society, regardless of their original or ascribed characteristics.

However, even in societies that can be considered equitable in the first sense, i.e., by weakening the link between ascribed features and achievements they ensure in some way equal opportunities for all their members, it can happen that the rewards and privileges accorded to achievements can be highly unequal. A society with such characteristics would not be equitable in the second sense, i.e., according to the criterion that defines equity or inequity in terms of the unequal distribution of privileges or, more exactly, in terms of the independence of the possible association of privileges with other characteristics of individuals or social categories. Therefore, even though it is accepted that a community can offer different rewards for talent, effort and responsibility, a society will be equitable in the second sense only if the inequalities do not exceed the limits which the dominant ethical standard deems tolerable.

In the third sense, the notion of equity reflects the moral rejection of the existence of households whose members cannot meet their basic needs, a situation which would suppose the presence of barriers to mobility and integration for specific social categories and/or the inability of the society's system of rewards to secure the performance of various social functions. From this perspective, the inequity of poverty will be commensurate with the wealth of the society in which it exists, i.e., with the unequal distribution of privileges.

The existence of these three different concepts of equity immediately poses a number of questions about, for example, the usefulness of the distinction, the relationship between the elements of each of the notions, and ways of measuring them better. The separation of the elements of the concepts is certainly useful for

comparative analysis, since societies can show more or less favourable results in each of them. In fact, the more equitable societies are those that present a particular combination of these factors so that, for example, ascribed criteria have little influence on the distribution of privileges, inequalities in the distribution of power, prestige and wealth are kept within the limits which prevent too wide a gap between the members of the various strata, and only relatively small groups of the population live in conditions of poverty. The opposite occurs of course in less equitable societies. But what is important to point out here is that, at least in theory, each of these factors can vary relatively independently of the other two, even when the more ascriptive societies tend in fact to have higher levels of inequality and more poverty, just as in fact the less ascriptive societies tend to manifest the opposite characteristics.

With respect to the relationship between the various factors, we have already mentioned that the inequity of poverty is accentuated when the wealth surrounding it is greater. The same argument can be made about inequalities, in the sense that their inequity increases with the ascriptive bias of each society. This prompts us to emphasize that, taken separately, none of the three factors (ascription, inequality and poverty) permits evaluation of the level of equity in a society, and that judgements in that regard have to be based on a simultaneous assessment of all three. This also means that every society which sets equitable development as an objective will have to formulate targets regarding the tolerable margins for the influence of ascribed characteristics on the distribution of privileges, for the size of those differences, and for the extent and severity of the poverty.

With respect to the problems posed by the measurement of these three dimensions of equity, the indicators of progress or regression in the ascribed component of equity are expressed in coefficients of association that permit evaluation of the degree of independence between the distribution of social goods and the ascribed attributes of individuals. Indicators based on coefficients of dispersion are used to investigate the magnitude of the inequalities. Lastly, the percentages of the total population consisting of individuals or households that do

not meet some of the needs that every society considers basic indicate the score achieved by that society in the third component of equity.

In conclusion, we will state that in this sense, social development implies that advances in the growth and equitable distribution of its fruits should be achieved within a context of democracy, which basically means increasing the participation of citizens in decisions on the content of national objectives, on the social definition of collective needs, on the role that education, health care, social security, etc., should play in conducting a society towards collectively defined objectives and, finally, on the

determination of criteria for the distribution of social goods. The more important global indicators describe the characteristics of political régimes that allow or bar, stimulate or inhibit people's participation in the various areas of social and political life. The existence of a democratic régime is, in this regard, a necessary although insufficient condition for participation. The measurement of this dimension involves many factors, including the intensity of participation, the variety of the areas in which it is found, and the differences between the various social groups with respect to opportunities to participate.

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Nature and selectiveness of social policy

Ana Sojo*

It was in the 1980s that proposals for the targeting or focusing of social expenditure on the poor gained ground. These proposals contrast universality and selectivity in terms of a dilemma in a disjunctive relationship: targeting or universal policies, or targeting versus universal policies.

In this article various economic and political arguments are advanced in defence of combining universality and antipoverty selectiveness in a strategy of mutual support in order to ensure that social investment in the welfare of the population can come to maturity.

Section I deals with the evolution of the concept of targeting and criticizes some current proposals, taking into account both the equity and the effectiveness of social expenditure; section II presents some general guidelines for social policy in the 1990s; and section III points out some characteristics of dynamic selectiveness.

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Marco Polo was describing a bridge, stone by stone. "But, which is the stone that supports the bridge?" asked Kublai Khan. "The bridge is not held up by one or another stone", replied Marco, "but rather by the arch line that they form". Kublai remained silent, thoughtful. Then he added "Why do you talk to me of the stones? It is only the arch that I'm interested in. "Polo answered, "Without the stones there is no arch".

Italo Calvino

I

Obvious and less obvious aspects of targeting

1. Evolution of the paradigm

"Targeting"¹ is the current proposal that has been most developed and has had most influence for modification of social expenditure. Although promoted by various agencies, the World Bank is the body that has worked it the most. In official documents and in proposals associated with the Bank, e.g., in unofficial studies disseminated or financed by the Bank, two stages can be seen, characterized by their significant shift of conceptual emphasis and by some important recent interpolations.

a) Targeting and redistribution with growth

In the 1970s the redistribution-with-growth debate impressed certain characteristics on the concept: it placed the crux of the analysis on the structural causes of poverty; it did not centre targeting on social policy; it did not propose a reductionism in social policy towards strictly selective programmes. Such intervention was only part of a spectrum of redistributive policies.

The poverty attendant on the concentration of income was related to the lack of skills, capital assets and complementary assets of a sector of the population. It was proposed that, in addition

¹The term targeting or target-oriented does not aptly express the idea of selectiveness and is even tautological, since all policy has a target population, defined as "focus" or "target", including universal social policies, from which targeting policies are held to be separate.

to acting upon employment and income distribution by type of activity, the State should reallocate public investment in such a way as to modify the underlying pattern of concentration of capital assets and human capital over time, in order thus to allow poor people access to such assets (Ahluwalia and Chenery, in Chenery *et. al.*, 1976). The success of the strategy, it was acknowledged, was limited by the resistance to asset-redistribution policies (*ibid.*).

Redistributive objectives, it was stated, should be pursued through a wide variety of areas of intervention: factor market ownership and control of assets, personal income tax and wealth tax, the provision of consumer goods, goods markets, and intervention in technological development. With regard to the latter it was stated: "It is unlikely that a single kind of economic policy intervention can succeed in achieving distributive objectives. Not only is each instrument limited, but also the objectives are typically multidimensional, and certain kinds of intervention would only have an impact on one part of the distribution problem" (Ahluwalia, in Chenery *et. al.*, p. 125) (unofficial translation).

Targeting also included assets as determinants of income. A target group was defined as "... a group of persons which, in addition to being poor, is relatively homogeneous in terms of the effect which a given set of policy instruments may have on it" (Dell and Duloy, in Chenery *et. al.*, 1976 p. 127) (unofficial translation). It was stressed that the concept —by focusing on the causes rather than the symptoms of poverty— facilitated the identification of *specific forms of assets* that could improve the living conditions of various groups of poor people (*ibid.*).

Targeting of social policy, with maternity-infant and nutrition services, was described as "... a necessary supplement of a strategy aimed at investment..." (Ahluwalia and Chenery, in Chenery *et. al.*, 1976, p. 77) (unofficial translation). In terms of public services, the criticism was made that the implicit subsidy would tend to benefit the upper and middle income sectors; it was proposed that the poor *should be afforded better participation and not be discriminated against in policy formulation* so that, by having access to such services, they too would raise their productivity (Rao, in Chenery *et. al.*, 1976); and

it was pointed out that it was necessary to eliminate any trickle-down of benefits to non-target groups in some programmes (Chenery and Duloy, in Chenery *et. al.*, 1976). However, fiscal difficulties were raised concerning the provision of more services to the poor without reducing them for other sectors and the resistance which these sectors would offer to the loss of their privileges (Rao, in Chenery *et. al.*, 1976).

b) *Targeting and structural adjustment*

Over time this position was modified, possibly by the impact of the political resistance already expected, by the debt crisis in the region and by the promotion of economic adjustment programmes to correct the external deficit. Interest then shifted to the symptoms of poverty.

In the 1980s the issue of targeting, as part of the controversy over how to promote social progress, underwent a conceptual change. The importance attached to physical and human assets in the 1970s in a broad series of policies shifted towards social policy proposals focused on programmes to combat extreme poverty. The concept of targeting became essentially synonymous with that of selectiveness in social expenditure; the earlier concept of selectiveness was limited with respect to assets; physical assets were considered only marginally, and in the case of human assets, on numerous occasions minimum thresholds were proposed for the meeting of needs.

On structural adjustment and poverty the World Bank stated: "Aside from ensuring that the adjustment programme is aimed at growth and elimination of the distortions that have an adverse effect on the poor, the other opportunities to modify adjustment programmes with a view to reducing losses in welfare of poor groups, without at the same time reducing general economic efficiency, are probably limited" (World Bank, 1987a, p. 25). And again: "The most important way in which financing by the Bank for adjustment purposes can benefit the poor is through scrutiny and review of public spending, in particular spending of a social nature. The rationalization of public expenditure and investment through an adjustment programme may help to eliminate uneconomic

projects, reduce the number of ineffective and costly programmes, and direct social expenditure to a greater extent towards the poor" (*ibid.*, p. 28) (unofficial translations).

Upon establishing that some social services are concentrated among high income sectors or that there is inefficiency in social expenditure, the World Bank generally proposes to focus on high-risk sectors: "...social programmes can be more cost effective and more equitable. If targeting is generally applied to public spending, it will be more effective, in which case there would be no trade-off between effectiveness and equity" (World Bank, 1988a, p. 13) (unofficial translation). Despite the differing characteristics of government social expenditure in each Latin American country and the specific nature of their problems, this position is common in World Bank proposals for Latin America,² and it can be summarized as follows:

- i) to help to resolve the fiscal crisis of the State through social policies;
- ii) to concentrate government social spending on the most vulnerable population through targeting policies;
- iii) to restrict State action in social policy matters;
- iv) negative evaluation of the concept of universality of services and criticism of universal policies because of the problems that they give rise to and because of their failures: it is proposed that the State should slowly drop universal policies through a relative and variable cutback in the instruments used for their implementation;
- v) a relative privatization of social policy is recommended, depending on whether

national or sectoral policy is involved. On occasion it is even proposed that private services should be used for targeting. In this connection, little attention is given to the problems caused by the private delivery of services;

- vi) confidence that the primary distribution of income and raising of the standard of living, as a result of "spillover" and an upswing in economic activity, will guarantee non-target groups the capacity to pay for using private services (ECLAC, 1988; Demery and Addison, 1987, p. 34; World Bank, 1987a).

Within this framework, the tension between universality and selectiveness in social policy becomes a dilemma: targeting versus universal policies.

c) *Some recent critical interpolations*

"...In effect, targeting has become a panacea for alleviating poverty, since it is suggested that policy-making authorities can jump on the bandwagon; in other words, that with improved targeting a greater alleviation of poverty could be achieved with less expenditure. Unfortunately, in the real world things are not so simple! There are good reasons why this paradisaical world is not the one in which policy-makers in developing countries live, and tough decisions will have to be made that weight up the costs and benefits of targeting" (Besley and Kanbur, 1990, p. 21) (unofficial translation).

In some recent studies financed or disseminated by the World Bank and by other agencies, certain difficulties are raised with regard to targeting, in two main aspects: its viability and technical suitability, and the political considerations. Both aspects have an impact on non-selective policies.

Increasing recognition has been given to the importance of political support in determining the effectiveness of structural changes. In the area we are interested in, this recognition has led to the distinction between tight targeting and broad targeting. Although it is argued that the first deals with considerations of effectiveness and social justice, the second is still desirable, for it brings in broader criteria of equity which enlist the political support of the influential middle groups in society and thus facilitate the implementation of sustained strategies of structural

²This does not mean a total absence of nuances in national and sectoral World Bank proposals. In an analysis of the nuances, even if they essentially relate to specific problems and contexts, it would be interesting to see to what extent they also reflect the impact of the ways in which each government negotiates with the Bank. There are, for example, certain claims made about Costa Rica, a country where universal social policies have prevailed and where such points proved controversial in adjustment negotiations. The Bank recognizes progress made in social matters and after analysing the problems of services and resources it proposes sectoral-targeting measures. But when it comes to education, where universal access to primary and secondary schooling and on-the-job manpower training is sought, it is striking that the comparative advantages of labour in Costa Rica are claimed to lie in the quality of human resources and not in low wages (World Bank, 1988b).

change (Nelson, 1989a and 1989b). The principle of broad targeting addresses those areas in which the interests of the poor sectors overlap with those of the middle groups and states: "If targeting is designed both to reduce political risks and to soften the impact on welfare of the subsidy reduction, the target group cannot consist *only* of the poor" (Nelson, 1989a, p. 107) (unofficial translation). Within this framework, when some programmes, such as food subsidies based on individual products or on place of residence cannot be targeted exclusively at the poor, this would prove to be more of an advantage than a drawback (*ibid.*, p. 111).

In addition, the little importance given to the package of antipoverty policies is considered to be a negative factor (*ibid.*, p. 103) and it is recommended that compensatory programmes be designed, as far as possible, in order to support or serve as models for more far-reaching endeavours in favour of the poor, rather than as substitutes or variations thereof (*ibid.*, p. 111). Such a proposal revives the emphasis of the 1970s.

Another recent study calls for the "economics of targeting". It states that, in contrast to the technocratic approach to poverty alleviation, which addresses primarily the information and administrative costs and undervalues there redistributive issues and the political conflict in play, it is important also to take into account the political support that various programmes can enjoy (Besley and Kanbur, 1990, p. 10). To this end, it is important to analyse the specific power structure of each country and its possible realignments: the balance of power determines programme continuity to a great extent; and the poor may be left out of political alliances when universal programmes are substituted for target-oriented ones. Adequate weighting of these factors could result in the exclusion of programmes that benefit only the population located below the poverty line, in order to draw closer to the more universally-oriented programmes that are the source of political cohesion (*ibid.*, pp. 11 and 12).

Both the instruments and the technical thinking on the issue have become increasingly sophisticated (Glewwe and van der Gaag, 1988; Glewwe and Kanaan, 1989). The benefit from targeting is defined as the additional amount

that would be required by a non-targeted budget to cater to the poverty level reached through targeting (Ravillion and Chao, cited in Besley and Kanbur, 1990, p. 14). It has been argued that policies which eliminate the causes of poverty, and not just their effects, can prove to be less costly over the long run, insofar as they allow the productivity of poor households to be raised (Glewwe and van der Gaag, 1988, p. 33).

Notable among the determinant technical factors for assessing the costs and benefits of targeting are the administrative and information costs, for it is difficult to estimate and verify low incomes that are often irregular, and also the marginal tax rates. Although they imply trickle-down effects, a positive evaluation is given to the use of indicators that are sufficiently correlated with income (e.g., regional indicators) in order to lower the administrative costs of other types of measurement (*ibid.*, pp. 12-17). In addition, it is proposed that the individual reactions to targeting should be taken into account: manipulation of information, demand reduced by the programme's content rejection of stigma, self-selectiveness (Besley and Kanbur, 1990).

In light of these technical considerations and of the economics of targeting —factors that act against "fine targeting" of the poor and suggest the advantages of universal schemes— the optimum strategy located between the two extremes is postulated, i.e., between perfect targeting and complete universality (*ibid.*, pp. 3 and 20).

2. Limitations of some targeting proposals

A criticism presented below does not refer to selectiveness as such, in the abstract, but to certain concrete proposals and certain assertions about the relationship of selective programmes to other social programmes.

a) *The fluidity of poverty line boundaries*

Owing to the impossibility of accurately determining the boundaries of poverty lines and to the vulnerability of groups close to the poverty threshold fixed in times of crisis, it is necessary to estimate the alterations produced in the standard of living by a change in the target population of social programmes when non-complementary targeting programmes are introduced. This must be done under very

diverse circumstances: both when the aim is to raise the redistributive effectiveness of social expenditure after it has been minimal, and when it is to eradicate poverty through a given transfer of total income, there having been a good redistributive effect of social expenditure treating the poor as a priority but homogeneous group.

When modifying the target population it is necessary to evaluate the redistributive capacity of existing programmes and to take the necessary steps not to leave the high-risk sectors unprotected or unwittingly create new areas of poverty. It is also important to consider the fate of the intermediate population, for its impoverishment is not desirable either.

b) *The potential ineffectiveness of social expenditure as a consequence of a static view of needs*

Some targeting schemes propose responding to the needs of age groups with a static approach, disregarding the future welfare of beneficiaries within the framework of social policy. Besides going against the goals of equity, this approach is a source of ineffectiveness, since it hampers the maturing of social investment. For example, if attention is focused on the various needs of high-risk persons only during the first years of life, it may happen that when they enter other stages of life—in the absence of suitable economic and social policies—these beneficiaries do not have their needs adequately met. This would be the case if their future depended on the income variable that is determined solely by market forces.

c) *One-sided arguments on social policy*

Targeting proposals tend to use the achievement of equity as an explicit benchmark for judging the effectiveness of government social spending. When equity is not achieved these schemes propose the privatization of services and the channelling of expenditure towards the poorest sectors of the population, and sometimes other social policy objectives are taken into account only marginally.

For example, some World Bank studies on education priorities propose strengthening government spending on primary schooling and drastically cutting back expenditure on univer-

sity education, and even discontinuing it.³ As part of the strategy to obtain the funds that would be required in Latin America to guarantee six years of education for the entire population, the following has been proposed by way of example: "The most obvious way to finance these measures is gradually to phase out higher education subsidies and transfer these funds to primary rural education. In the majority of countries government spending on higher education accounts for half of the expenditure on primary education. A substantial amount of public funds would, therefore, be freed up if higher education became self-financing" (Selowsky, 1979, p. 78) (unofficial translation).

With regard to equity, it is necessary to make some points about more equitable access to higher education if State support for it is maintained. The World Bank proposes promoting students loans and grants for those unable to pay. Redistributive assistance could also be facilitated by matching the cost of enrollment to the family income of the student.

However, in order to evaluate the efficiency of social expenditure it is necessary to consider its various objectives and not just its distributive effect. In the case of universities it is of utmost importance to weigh the consequences of their relative privatization for scientific and technological development (for example, whether weaknesses would arise which in turn would cause blockages in economic development).

d) *Reductionism in distinguishing between public and private goods*

The World Bank tends to differentiate between public and private goods, stressing that the latter should not be an object of government

³See Colclough, 1980, p. 19. A recent study on Brazil proposes, as a fundamental measure in education, to cutback State subsidies of higher education and to increase resources for secondary and university education (World Bank, 1988a, p. 64). In terms of rates of return it has been said ironically: "The reader who is unfamiliar with Bank statistics, particularly Economic Rates of Return as measures of project performance—is cautioned to take these numbers (as well as the somewhat strained distinction between poverty/non-poverty projects) with a grain of salt. Though they are cited as measurements by the Bank, they are indicators (sometimes convenient myths) that often serve to formalize what staff members subjectively know or believe in response to institutional requirements for "the numbers" (Annis, 1986, p. 109).

expenditure and basing target-oriented policies on high-risk groups to which some public goods and even some private goods—such as food—should be provided in the case of extreme poverty. It is recognized that "...while goods are public or private, that is a matter of degree and can vary over time and space. As a result, there are no simple rules for achieving an optimum level and allocation of public spending. It can nevertheless be said that government expenditure is more effective the greater its emphasis on public goods" (World Bank, 1988a, p. 4) (unofficial translation).

In social policy terms it is useful and necessary to distinguish between public and private goods. However, when making this distinction in recent studies the World Bank has shown two systematic biases stemming from a proposed means of privatizing health services and circumscribing access by poor sectors to certain services: i) a dubious correlation, unrelated to the criterion of considering who is the target: in general, the goods that imply higher per capita costs are identified as private goods; and ii) the use of limited yardsticks to measure enjoyment of benefits: limiting the social impact to the utmost excludes the positive externalities of goods and services simply classified as private.

These biases prevent enquiry into the positive externalities that are reciprocally created between social welfare and individual welfare. More than determining target groups, they lead to the exclusion of areas of social policy. In education, for instance, primary schooling is identified as a public good and university education as a private good (*ibid.*), establishing a kind of educational polarization that can be made more relative by taking into account for example, positive-sum elements of social welfare.

Moreover, the inadequate use of the concept leads to a limited definition of the so-called needs of the poor, e.g., the proposals on health when the treatment of high-cost diseases, such as heart or kidney disease is ranked as a private good, with the assertion that the cure would benefit only the patient.⁴ Or when it is simply

⁴An analysis of social expenditure in Brazil made by the World Bank shows that a large part of expenditure on health in Brazil is allotted to private goods, such as services relating to heart surgery and dialysis that benefit only individuals, it is claimed, and

asserted that the majority of curative services can be considered to be private goods (World Bank, 1987b, p. 700), and that the poor "tend to be more affected by health problems whose better solution lies in preventive programmes" (*ibid.*, p. 705) (unofficial translation).

To solve the problem of health-service financing in developing countries on the basis of these premises the World Bank proposes to reduce "...government responsibility for payment for health services that provide scant benefits to society as a whole (as opposed to the direct benefits to users of the service). In this way a greater pool of government (or public) resources would be available to fund services that provide substantial benefits to the whole of society. This proposal, by relieving government of the burden of spending public funds to defray health care costs for the rich, would free up resources, and thus more could be spent on the poor" (World Bank, 1987b, p. 696) (unofficial translation).

Thus, instead of defining health as a public good, this causes a kind of epidemiological polarization of society in which rich and poor are assigned a strict place and those diseases that are more typical of developed countries are identified as pertaining exclusively to the rich and their treatment as a private good. Nevertheless, it is important to point out that the poor, whether urban or rural, require more services (both simply preventive and complex treatment) owing to their precarious living conditions (Frenk, 1987, p. 720) and to bear in mind the social externalities of individual health.

e) *Regressive modification of charges*

Neoliberal criticism regards the universal provision of services as unfair because all persons benefit equally, irrespective of their very different needs and resources.⁵ The World Bank

curtail access to other public services (World Bank, 1988a, p. 4). See a similar distinction made in a World Bank proposal for all of Latin America in World Bank, 1987b, pp. 697 and 700.

⁵This expresses a very old perspective on social policy that, paradoxically, has as the consequence of a residual policy with meritocratic goals. Each individual will be able to satisfy his needs in the market-place according to his merit. Hence, the redistributive welfare objectives of the State are termed "egalitarianism" and analysed negatively. As Hayek states (1985, p. 158) (unofficial translation), "while equality before the law—the treatment of all

argues that universality creates inequalities and in some instances it proposes the privatization of services or else differentiation of the charges for public services in order to benefit those groups deemed to have priority. The proposal is generally associated with limitation of State action aimed at priority groups, with a preference for a private system that provides services to the sectors able to pay and even to high-risk groups. This fails to address certain issues, such as:

- i) cost increases within the framework of private provision of services, owing to their profit basis or inefficiency. As a negative example, it is worth bearing in mind the well-founded criticisms of the North American health system, whose private status is associated with high costs, problems of investment effectiveness and discriminatory access to services according to income;⁶
- ii) the probable regressive consequences of modification of service charges. This impact has been the object of concrete analyses, some of them financed by the World Bank. It was recently concluded on the situation in Peru: "It was observed that the introduction of user charges in Peru has the potential to raise cost-recovery income significantly, since the financial burden of the health system (and the associated loss of social welfare) is shifting from taxpayers to users. It was also found that the charges are regressive in terms both of access to the health system and of social welfare". (Gertler *et. al.*, 1987, p. 653).
- f) *Ownership of services and spurious correlations*

The assertion of spurious correlations between the optimum and the private provision of social services—the *ad hoc* rationale for an

by government according to the same laws— would seem to me to be an essential condition of individual liberty, any difference in treatment that is required to put people who are individually very different on the same level would seem to me not only incompatible with personal liberty but also highly immoral. But this is the sort of immorality towards which unlimited democracy is moving".

⁶See Navarro Vicente, 1989. This noted expert, professor of health policy at Johns Hopkins University and President of the International Association of Health Policy, clearly states these and other interesting issues in a comparison of the United States with Canada.

unlimited ideological choice for privatization— is also a serious matter. There is an example with regard to education:

"...there is no obvious indication that State-provided services are the best solution for poor families who cannot pay to educate their children. The needs of these families can be met through student grants or loans systems. As was indicated in chapter 1, public authorities can provide money for a service without providing the service itself. And there are strong arguments in favour of having private institutions serve these people: a private institution is more likely than a government to be more economical in the use of its teachers and other scarce resources and to have more incentives to avoid waste; and private schools are better equipped than State institutions to adapt their methods to new requirements" (Roth, 1987, p. 30) (unofficial translation; see also World Bank 1988a).

Such an option is liable to be broadly rejected in the real world.⁷

g) *Potential administrative red tape and ineffectiveness*

Targeting implies establishing mechanisms to identify persons entitled to services. Sometimes sizeable sums can be spent from the funds available simply to set up a mechanism to determine the target group (Cohen and Franco, 1988, p. 37). In this case the achievement of the objectives is hampered and the expenditure becomes ineffective.

Let us look, for example, at the demands that the following proposal would imply in this respect: "...plans for mandatory insurance in low-income countries should not cover small and foreseeable costs, such as low-cost treatment, and should only absorb costs that may be considered catastrophic for a person. (Where it is possible to do so, the definition of catastrophic cost should be related to the family income level)" (World Bank, 1987b, p. 702). In this case other difficulties would be added to those already

⁷See the negative views on the North American health system in *The Economist* No. 7630, 1989, pp. 21-24. Also, the problems of social works in Argentina described by the World Bank and by Katz and Muñoz, 1988.

outlined, with the proposal of a virtually *ad hoc* and individual determination of whether a situation is catastrophic or not. The timing of the decision as to whether a situation is catastrophic

is crucial in this case, and yet the situation must be evaluated. In the case of health, even life may be jeopardized while the decision is being made. . .

II

General social policy guidelines for the 1990s

1. *Equity: the non-exclusive goal of social policy*

Economic and social policy are dimensions of development whose use to promote investment, employment and redistribution constitute the basis of democracy. Equity cannot be achieved by social services alone: to reduce it to this level implies misunderstanding its true nature and hinders the solution of its problems. Primary income distribution and employment are typical dimensions of economic policy that have major social effects. These and other dimensions show how economic policy determines social policy (ECLAC, 1986, p. 6 and ECLAC, 1987, p. 7). The establishment of co-ordinated goals between the two types of policy can create a virtuous circle, while lack of co-ordination between them makes for inefficiency in both.

To have unrealistic expectations with respect to social policy objectives, whether these have to do with redistribution, equity or social cohesion, means to set impossible tasks (Cohen and Franco, 1988, pp. 25-29). For their part, specific social policy objectives may influence economic policy, and some dimensions of economic policy could well be regarded as part of social policy; this is the case with the extension of social benefits through tax exemptions and through certain kinds of loan. The structure of economic property is also a determinant; it marks out the boundaries of a social policy's rationale and its margins of influence.

For effectiveness and equity it is essential to create functional relationships between production, distribution and redistribution of income. In the case of the poor, this means taking them into account not only because they are high-risk or needy but also because they are economic agents.

2. *Social policy objectives: a normative proposal*

Equity and social security as guiding objectives of social policy imply integrated, active and preventive social policy that does not simply react to emergency or temporary situations or serve as a mere palliative for the inequalities deliberately caused by economic policy in its social coordinates.

Universal policies and selective policies aimed at high-risk sectors should promote equal opportunities for access to and enjoyment of social services by modifying the effects of the market on income distribution and use. The complexity of social policy means that its restructuring in the direction of equity and effectiveness must be comprehensive and cannot be reduced to an end objective of a fiscal nature.

Where the beneficiaries are concerned, the universal and selective approaches constitute the poles of social policy whose various specific combinations —depending on the circumstances— form the spectrum of social policy. Any restructuring of services must address both aspects through a suitable interaction of universal and selective policies.⁸

With regard to equity, the regressive or progressive sign of universal or selective programmes cannot be analysed by considering each measure or policy on its own. The sign depends on the overall set of policies and their combination. Selectiveness is regressive —regardless of the concrete performance of some

⁸The matching or interaction of universal and selective policies relates to the strategy, i.e., to the interrelationships of the two approaches within the broad spectrum of social policy. In concrete programmes, taken individually, either approach could obviously be complementary or exclusive.

programmes— when it is part of a strategy of dismantling policies which have had a significant progressive impact. It is problematical when it suffers from some of the problems indicated in the preceding section on targeting or when there is a trickle-down effect. Universal policies are regressive when they do not adequately take into account certain characteristics of the recipients, or as a result of the regressive nature of their funding or of other factors such as inefficiency, trickle-down, etc.

These programmes are no less important for social integration and cohesion. By increasing the capacity to forecast results in the situations in which they operate they help to stabilize the rules of the game among the various players. There are different kinds of solidarity that contribute to cohesion —national, professional, family, religious, associational, etc.— which can be expressed in social policy; for this reason a relative balance should also be sought between the various types of logic and instrument of protection, which are even at times necessarily contradictory.

It is desirable to achieve positive-sum games through social policy, linking the needs of the various social sectors in the programmes. This is possible owing to what Jrgen Habermas calls "generalizable interests"; and in addition to achieving concrete objectives and increasing social cohesion it permits the social support base to be broadened to include the function of equity of social expenditure.

The ravages of the crisis in Latin America and the Caribbean and its serious social consequences make it necessary to set minimum national goals for meeting needs as one of the guiding criteria for the reform of social services; these goals should relate both to programme objectives and to the volume of investment. The constraints due to the crisis should not prevent the setting of such goals: we would point out that many social programmes in the region and throughout the world were developed even prior to the consolidation of post-World War II economic growth cycles.

3. *The dynamic effects of investment in social policy*

The effectiveness of the State is related not only to the immediate effects of its action but also to the long-term dynamic effects that its action produces. Expenditure having long-term effects therefore warrants special treatment. Such expenditure includes —in addition to spending to increase capital assets— investments in human capital in such areas as education, nutrition and health. Both are differentiated from expenditure whose main effect is to increase current consumption by programme beneficiaries (Foxley *et. al.*, 1980, pp. 28 and 29). The effectiveness of investments by the State in human capital should also be evaluated in the light of their long-term effects.

It is not advisable for State programmes to count only on increased current consumption in fighting extreme poverty. It is very important that the long-term dimension of nutrition, health, education and housing services, in conjunction with adequate pay and employment policies, should contribute to meeting the basic needs of the beneficiaries and act against the transfer of poverty from one generation to another.

On the other hand, State social policy should not be limited only to the fight against the manifestations of extreme poverty. This would restrict at several levels the dynamism produced by State investments in human capital. For example, preventive actions could be neglected in such areas as health and nutrition; there is also the risk of eliminating the externalities of State social policy represented by investments in human capital which go beyond equity, understood as guaranteed satisfaction of minimum needs, and can contribute to systemic cohesion, social mobility and technological development.

4. *Forward and reverse linkages in social policy*

The effects of forward and reverse linkages in social policy *vis-a-vis* the economy are usually recognized. It is then stated that some programmes, by affecting demand and broadening

the market, can create strong reverse linkages with production and income (World Bank, 1988, p. 67). Reverse linkage would result from the impact of demand growth on supply sectors or of the decline of other sectors; and forward linkage would result from the supply of social services insofar as they serve as an input in some activity.

These considerations can make a twofold contribution: on the one hand, to identify the major beneficiaries of social projects, who do not always coincide with the target population; and on the other hand, to evaluate the attainment of project objectives and determine their coincidence with national priorities (Cohen and Franco, 1988, pp. 222 and 223).

At the risk of speculating, we want to use the metaphor of linkages in order, giving it another connotation, to identify the interrelationships of social policies and the relationships of social policy with the economy.⁹ We thus wish to highlight the importance of promoting the ripening of investment in social policy through effective relationships between the various programmes that help to increase welfare. The relations are termed necessary owing to the complementary nature of the various aspects of welfare which implies the simultaneous consumption of the relevant goods and products. Maturity is expressed in the joint effect of the programmes which enhances the impact of what the individual and isolated effects of each programme would have been. This produces an accumulated effect in social policy quite apart from the progress attained in a limited area over a limited period of time.

We define reverse linkages in social policy in its own field as the negative or positive effects

that a measure or programme produces on demand in comparison with other social policies or programmes. Forward linkages —positive or negative— are the effects on other social programmes —either promotion or hindrance— of the supply of services deriving from a measure or programme. These linkages are internal.

For their part, reverse linkages of social policy with economic policy describe the positive or negative demand effects that social policy requires from economic policy. Forward linkages describe the positive or negative conditions that the supply of social services creates for the adoption of economic policy measures. These linkages are external.

The linkages are inherently determined by the characteristics of the goods produced and by the way in which they are produced. But here they are not understood strictly as productive inputs for a good. In this area, an attempt could be made to use terms such as fiscal links (as in Hirschman, 1984) or income links.

Some linkages are determined by the various needs of individuals which viewed dynamically, give rise to social policies with permanent effects, e.g., health and education programmes suited to the various life stages. Others are conditioned by the simultaneous care afforded various sectors of the population. An example of a reverse linkage of education is that a good educational yield requires a healthy and well-fed population; an example of a forward linkage of education is that, with the achievement of certain habits and knowledge, it helps to improve nutrition and health; this implies intersectoral linkages of social policy (repercussions of decent housing on health and education) and intrasectoral ones.

Social policy has a reverse linkage with economic policy, via the funding required, and a forward one because it creates a better base on which to increase income by raising labour productivity. Potential or effective (active) linkages may be the subject of social and economic policies or not. A conscious attempt must be made to reduce the negative ones and promote the positive. In our opinion, disregard of them could lead to failures and to greater outlays due to possible unforeseen negative effects caused by the reciprocal blocking of different measures. But, if positive linkages are reinforced, suitable

⁹Our aspiration, perhaps unrealized, is to engage in a directed speculation. When using the concept of the effects of reverse and forward linkages in another field, we borrow only its higher-order predicates, i.e., those that "predicate something of properties or relationships. Examples of these higher-order predicates could be "symmetrical relation" and "biological property" (Bunge, 1986, p. 268). Looking into homologies of relationships we "export" these predicates of order and relationship to another field (*ibid.*, p. 226). In this way the concept, assigned a new meaning in another field, serves to create a new concept. We select the original concept because its connotations provide an adequate background for what we wish to express; thus, the new concept evokes relationship aspects of the original one which can promote dialogue on social policy. Of course, some formulations of the new concept paraphrase formulations pertaining to the original one made by Hirschman (1973 and 1984).

interrelationships between social policies will be consciously promoted. In the relationship between economic policy and social policy this is equivalent to creating a virtuous circle.

Within the domain of social policy itself, it is fundamental consciously to reinforce potential positive forward and reverse linkages to promote different programmes on a reciprocal basis. Such reinforcement can help to ensure: a) the efficient and effective use of social expenditure; b) social policy continuity which allows for sustained maturing of expenditure over time; and c) fuller achievement of equity goals. This means determining the amount and kinds of linkages within social policy, i.e., their interdependence, and their linkages with economic policy. The characteristics of the problems to be solved and the classification of needs or shortfalls can be the focus for analysis of the importance and viability of linkages. The direct and indirect impacts of social policy can then be ascertained, as can the relationships to be promoted in the light of their potential importance and viability. This will help to establish priorities in programmes with strong linkage effects and reject those with undefinable or unlikely linkages or those that are unsuitable in terms of the established objectives.

What is involved is a dynamic perspective, for the promotion of suitable linkages requires a period of development and is subject to change owing to cumulative effects.

5. The volume and rationalization of social expenditure

Social services can be defined as the institutionalization over time of a given resource distribution pattern (Mishra, 1984, p. 33).

Selectiveness relates strictly to the identification of specific target groups; it is not synonymous with the limitation of social expenditure. So much so that in critical situations attending to the high-risk population can imply increased social spending. Given the political will, the increase in social expenditure would be unavoidable in those countries that have allocated a minimal budget for this purpose. When cuts in public social spending have been associated with a deterioration of the living conditions of the population, it is imperative to make

an effort to restore adequate levels of spending. Also, in some cases resources could be reoriented towards social policy, e.g., in countries where military spending is very high. This obviously implies complex political processes relating to peace-keeping and the establishment of democratic and stable rules for coexistence.

In all cases unmet national demands that cannot be covered by setting up mechanisms for rationalization of expenditure force an extension of public social spending. To do this it may possibly be necessary to enlarge the State's resources, and this brings us —among other things— to debt relief, to fiscal reforms to increase the progressivity of taxation, and the redistributive assistance in the funding of social services.

When resources earmarked for selective purposes are not new but reallocated from other programmes, it is necessary to safeguard against detriment to other useful social policy objectives, for example when preventive action in health and nutrition is transformed into curative action.

Better co-ordination with private social policy initiatives (of non-governmental organizations and others) is also required. These initiatives should not be confused with the private delivery of services through the market, since they are non-profit. To improve the effectiveness of programme coverage it is necessary to introduce reforms at various levels. The possibilities of broadening the spectrum of target groups through resource reallocation and organizational changes should be explored. The more efficient use of resources through the introduction of expenditure rationalization mechanisms offers various means of broadening social services or improving their quality.

If it is a matter of dismantling public services (e.g., self-financing of higher education) and not of reforming them, it is important to consider whether tax avoidance by high-income sectors would increase in response to a goal of channelling social spending very strictly towards target-oriented policies. This is crucial when the tax rate is low and social expenditure scant.

Within the framework of the universal provision of services or services directed to broader sectors, selectiveness criteria could be applied to alleviate poverty when payment for services is not uniform: the redistributive aspect

can consist precisely of combining the same kind and quality of services with payment differentiated according to income. From the point of view of redistributive assistance, unequal contributions based on income levels should ensure basic services for all (ECLAC, 1988).

6. *Social policy, technological innovation and productivity*

In periods of transition towards a new phase of economic development geared to technological innovation and increased productivity, the role of social policy is vital with respect to employment. In the face of changes in technology, resource allocation, industrial retooling and restructuring of the State, all promoted in order to raise productivity, the vulnerability of labour can be affected by economic and political constraints that lower job mobility. And this for obvious reasons: in the absence of other measures, overcoming the constraints simply causes unemployment.

It is possible to increase labour mobility and to pursue equity if the State promotes manpower-training policies and subsidizes unemployment, within the framework of industrial refitting, the promotion of new exports and reform of the State. In countries with an extensive informal or underground economy these policies are essential means of raising industrial productivity.

In the area of education and human resources it is possible to combine innovations which work against technological development in relatively less developed countries, help to develop the productive sector, and promote democratization by putting technologies within the reach of low-income children.¹⁰

Improvements in productivity should contribute, for their part, to a lowering of service delivery costs, which would have a positive impact on social spending.

7. *On public and private goods*

According to the classical definition of a pure public good formulated by Samuelson, individual consumption of this type of good does not reduce

or impede another individual's consumption—in contrast to what occurs with private goods that are divided and distributed to different individuals. The debate on the virtual inexistence of any public goods thus defined led to the assertion that public goods are an extreme and that goods possess various degrees of publicness and various levels of non-exclusiveness in price and non-competition in consumption.

It is useful to distinguish between public and private goods in order to identify suitable areas for public expenditure: the greater the actual publicness of the goods, the greater the effectiveness of public spending. Since there is no objective distinction between the two, to establish a distinction inevitably involves ethical and value judgements. It is essential to consider the interrelation of individual welfare and social welfare, i.e., to examine the reciprocally positive externalities that generate social and individual welfare. Otherwise, a criterion for public action becomes a source of exclusion of areas of social policy.

It is also useful to remember a characteristic of public goods highlighted by Hirschman: "it is not only that all can consume them, but that *one cannot avoid using them* unless one exits the community that provides them. Consequently, whoever says public goods says public ills" (Hirschman, 1977, p. 100). For this reason, and because of the public dimensions of private goods, "it is impossible to avoid them completely. Despite one's exit, one continues to be a product user or at least of its external effects from which we cannot escape" (*ibid.*, p. 103).

These ideas constitute a good argument against zero-sum views in social policy. It is unrealistic to think that poor conditions of health, education and employment *exclusively* affect those who suffer them in the flesh. As Hirschman points out, "Obviously, a private citizen can "exit" public education by sending his children to a private school, but at the same time *he cannot* exit it, in the sense that his life and that of his children will be affected by the quality of public education. There are many goods of this nature that are ostensibly private that we can purchase or not purchase; but they entail a public good dimension (what economists often refer to as 'external economies'), such that *their mere production and use by others, affects, dignifies or*

¹⁰ See Fonseca, 1989, on the computer education programme in Costa Rica.

degrades the life of all community members" (*ibid.*, p. 101) (author's emphasis) (unofficial translation).

Over and above the unmet needs of a broad sector of the population, the increase in crime, political polarization, civil war, and social disintegration in which some countries virtually find themselves, or the impossibility of recovery of output owing to the lack of skilled labour, are

irrefutable proof of the national repercussions of restricted use or denial of goods with public dimensions on large sectors of the community. On the other hand, enjoyment of public goods, such as social integration in democracy, good health and education indicators, and high capital and labour productivity in a society, among other elements, represent forms of synthesis of proper community enjoyment of various kinds of goods.

III

Some guidelines for dynamic selectiveness

Selective programmes will be more effective and avoid dependence on the State by the needy to the extent that they are co-ordinated with measures to combat the structural causes of poverty. The design of such programmes implies: a) evaluating the redistributive characteristics of public social spending; b) identifying areas of selective spending; c) using suitable instruments; d) taking account of their interrelation with universal programmes or those intended for other sectors of the population.

1. *On the quality of selective services*

By definition, selectiveness in social policy presupposes the exclusion of certain income groups from certain programmes. It is essential to safeguard against the exclusion leading to poor quality of services owing to the weak political clout of poor sectors. In Hirschman's words (1977), we can postulate that "a proper exit" or an exclusion of non-incorporated social sectors is essential: the "absentees" should continue to ensure the quality of the selective public good; when ceasing to consume a public good directly, people should not behave as if it were a private good, for in that case an "exit" or ending of consumption, in turn, ends the relation between the client or member and the product or agency that is being dropped.

In social policy the direct users determine only partially the quality of the service. The social sectors with greater political and economic power are the ones which can have a greater influence on the quality of public services. If

selectiveness is not to be synonymous with low-quality stratified services for the poor, the excluded sectors should continue to care about the quality of services, even if they are not direct users. The rationale for such conduct can be based on what Hirschman says: "total exit is impossible" since, in a sense, the excluded continue to use the product (*ibid.*, p. 99).

2. *The importance of identifying poverty*

Perfect selectiveness requires total transparency of expenditure levels by individuals. In the real world selectiveness is imperfect: it is carried out on the basis of faulty information on eligible beneficiaries.¹¹ Depending on the identification of poverty, two basic kinds of selectiveness can be distinguished.¹²

Selectiveness is direct when the choice of beneficiaries is made individually, on a case-by-case basis, determining whether the persons or family groups meet the requirements of the programme objectives. This means obtaining specific and detailed information on groups or households that is generally obtained from the households themselves. A very detailed profile of poor households is required in order to deter-

¹¹We have taken the distinction originally proposed for targeting from Glewwe and Kanaan, 1989, p. 22, an unofficial study financed by the World Bank.

¹²With very slight changes, for the purposes of this distinction we again use the one originally proposed for a targeting strategy in Glewwe and van der Gaag, 1988, pp. 28 and 29.

mine their eligibility; owing to the imperfections of the information, the greater the degree of selectiveness intended, the more difficult selectiveness becomes. This mechanism also demands that information be updated every so often; moreover, the evaluation of programme results should essentially be done on an individual basis. It may be inappropriate to make the selection only on the basis of data obtained directly from the potential beneficiaries because of the possible biases, especially if these biases can influence the potential use of data (*ibid.*, Glewwe and van der Gaag, 1989, pp. 31-33).

Selectiveness can also be based on general information on possible beneficiary groups or households (e.g., through a household survey), from which one identifies the beneficiary group, region or community and their needs. In this case the ways in which the programme operates are also changed. Selection criteria can include variables of territory or region or mode of occupation (informal or precarious jobs in workshops, co-operatives, etc.); different combinations of criteria could also be made.¹³

Clearly, to opt for direct selectiveness or selectiveness according to certain general criteria, we must have various kinds of information available. When choosing a type of selectiveness, it is wise to ascertain what kind of information is available whether it is possible to obtain additional information, and what the costs are. It is advisable to draw on the store of information on coverage and quality of services and their effects which has traditionally been handled by public agencies responsible for sectoral social policies (Vergara, 1990), and to organize a comprehensive social information system.

In terms of the effectiveness of social spending determined by cost-benefit analysis, it is imperative to ascertain what information is worth gathering. This decision is affected by the poverty line selected, the definition of poverty used, the amount allocated to poverty alleviation, and the initial information available. If poverty can be reduced to a great extent with a fixed amount of resources by using additional information, and if the savings due to selectiveness exceed the cost of obtaining the additional

information, then it should be corrected (Glewwe and van der Gaag, 1989, p. 22).

The identification of the key characteristics of the poor and of feasible policies for fighting poverty requires competent and timely research; in some cases this can constitute a constraint (Glewwe and van der Gaag, 1989, p. 34). If, paradoxically, there is a correlation between the greater extent and intensity of poverty and the various constraints on such research on selectiveness (infrastructure, skilled personnel, adequate budget), it is better to opt for indirect selective mechanisms.

The poverty indexes used should be suited to the kind of vulnerability or basic needs that are to be addressed. It is not advisable to develop a global poverty index to serve as a basis for granting very diverse subsidies: its use prevents specific solutions and excludes persons who display acute needs in some respects owing to the overestimate of values in other variables.¹⁴

The kind of need detected will have to be expressed in the programme profile. The way in which the poverty is to be alleviated will then determine the use of the appropriate mechanisms, the introduction of measures that are outside the field of social policy, the relationship between individual transfers to beneficiaries or the promotion of regional and community programmes, etc.¹⁵

3. On sectors excluded from selectiveness

To draw a poverty line presupposes a value judgement, as does the setting of goals. In this case it must be determined whether, with the policies adopted, the aim is to eradicate poverty or whether a level of poverty shall exist and only poverty in excess of that level shall be fought.

When non-selective programmes are eliminated or cut back, it will have to be decided whether they have benefitted those sectors adjacent to the poverty line which are to be the focus of the whole effort. In order to prevent new areas of poverty it is necessary to consider changes that may occur in the standard of living as a result of changes in the target populations.

¹³Criteria offered by Vergara, 1990, as alternative approaches to targeting in Chile which we believe to be of general interest.

¹⁴See footnote 13.

¹⁵See footnote 13.

There are several reasons for this: a) the fluidity of poverty-line boundaries; b) the relative inability of these lines to indicate the depth of poverty; c) the vulnerability in crises of groups located slightly above the cut-off poverty lines.

It is also imperative to evaluate the repercussions that all this has on the intermediate population (e.g., for the third income quintile). If one of the social policy objectives is to promote social mobility and equity, it is not advisable to cause—through selectiveness combined with the abandonment of these sectors—their impoverishment by the cost of paying for access to private services. The deterioration of their living conditions through lack of access to services such as health and education, among others, would stem from the income elasticity of private spending in such areas.

In order to exclude sectors is not enough to prove that sectors with relatively good incomes have benefitted; it is also necessary to consider the tax contribution made by the different sectors. It is advisable to exclude those which while able to do so, do not make any contributions, or else to raise their contributions. Exclusion is not right when the tax contribution of those that are eventually excluded is essential. In Chile, for example, middle-income groups

paid substantial contributions at the end of the 1960s and obtained State benefits in almost equal proportion to their contribution to revenue; i.e., they self-financed such benefits through taxes (Foxley *et. al.*, 1980, pp. 183-188).

4. Changes in the sectors chosen and in the population in general: challenges for selectiveness

Various reasons compel us to consider the dynamism of the population at the time the target groups are established:

- i) the effects on the population of the social policies themselves, or of economic policy on employment and wages;
- ii) the simultaneous care of needs relating to the various areas and stages of the life of the population, in order to reinforce welfare and ensure that investment in social policy comes to fruition;
- iii) the goal of helping to create positive reverse and forward linkages of selective policies; and
- iv) the objective of making the reciprocal promotion of the various social policy programmes feasible by acting on the interrelated manifestations of poverty.

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Eduardo García D'Acuña

At a time when the region was witnessing a period of democratization and renewed search for equitable development strategies, ECLAC lost one of its most unique figures and one most closely identified with this intellectual approach. Eduardo García D'Acuña departed from us early in the year, a dearly loved friend and talented associate in the construction of a structuralist body of thought on Latin American development.

Eduardo García obtained a degree in economics at the University of Chile in 1956 and, the following year, a diploma in economic development in the ECLAC course. He then continued his studies at the Massachusetts Institute of Technology, obtaining his doctorate in 1964 with a thesis that presented a quantitative model for Chilean inflation.

From that time his work held two constants: his concern for reconciling efficiency and equity and his zeal for rigour in his proposals, seeking to quantify and, when necessary, to model them.

Over a thousand students who had the privilege of attending his lectures can bear witness to this analytical and expository rigour. Eduardo García was undoubtedly a teacher above all else, in the full sense of the word; devoted to his students, he meticulously prepared his lectures, his exercises and his laboratory research and then delivered the solutions. I was fortunate to collaborate with him for a couple of years as assistant professor in the main course at ILPES, and I can attest to his dedication as a teacher and to the warm bond he always established with his students.

He was a professor at the University of Chile (1962-1980), at the Catholic University (1970-1973) and later in the PREALC and ILPES courses where he served as director of the special subject of Global Planning and Programming in the Public Sector.

In his professional career he was the first general director (1964-1966) and later technical director (1967-1970) of ODEPLAN, the National Planning Office, which today enjoys ministerial rank. He played a leading role there in collaborating in a cost inflation model for the Chilean economy, which was used to chart the course of stabilization policy at the time.

Early in the 1970s he served as director of the Institute of Economics of the Catholic University and as adviser to the Central Bank until 1973. From 1974 onward his academic activities were focused on the United Nations system. First in PREALC (1974-1979) as a researcher and later with management duties; subsequently he worked in ILPES (1980-1989) as research director, as professor and, once again, as director of the special subject of Comprehensive Planning and Programming in the Public Sector.

The subject of planning was at the core of his concerns; he conducted many research projects —continuously updated— on macroeconomic models. His last years were devoted to determining macroeconomic programming models, taking a direct part by supervising work on the economy in Argentina, Brazil, Chile, Nicaragua, Paraguay and Venezuela.

He also had the knack of anticipating major debates. In the late 1960s he was already talking about market socialism and the mixed economy where the market and planning are co-ordinated, anticipating the great change at the end of the 1980s in Eastern Europe.

In all his endeavours he showed talent and dedication, establishing life-long friendships and binding his life to the study and teaching of economics. He leaves behind a legacy of academic rigour, human warmth and deep personal commitment to democratic change in our societies and to the lot of the disinherited majorities of Latin America.

These few lines are an insufficient offering of thanks on behalf of all of us who shared a vision of Latin American development with him and who were able to benefit from his knowledge and friendship.

Oswaldo Rosales

* * *

As a posthumous tribute, the CEPAL Review reprints below two of the many valuable contributions by Eduardo García D'Acuña to the dissemination of the ideas of ECLAC and in particular of ILPES, where he held the post of director up to his death.

Econometric models for planning

Eduardo García D'Acuña

The use of models in planning is almost as old as formalized planning itself, initiated in Latin America in the 1960s. Planning models were developed and used at both government and international agency levels, generally as simple analytical structures derived from the Harrod-Domar growth equation. In some cases a degree of complexity was produced by the inclusion of input-output tables or two-gap models whose main purpose was to estimate the volume of domestic efforts and external savings necessary to guarantee a given product growth rate and to ensure some coherence in the intersectoral growth pattern, in order to avoid the formation of bottlenecks and the subsequent inflationary pressures. Until the 1970s the majority of the plans formulated used an array of macroeconomic projections as a technical support to guarantee their internal coherence.¹

In the 1980s we are faced with a different situation. This is a more complex decade in terms of the problems that must be solved (external debt, massive unemployment, extreme poverty, hyperinflation) and, at the same time, a richer one in terms of analytical methods, work tools and sources of information (advances in applied macroeconomics, in computer processing and in the supply of information), despite lags in some areas.

In these circumstances, to what beneficial use can econometric models be put, given the valuable human resources and scarce material means available? What methodological precautions should be taken to avoid misusing them? What technical problems do their estimations pose?

I

Use of models

In a brilliant paper Paul Dubois² outlines two main uses of models: a) short-term economic forecasting and b) the study of variables and the adoption of a strategy; to which we would add c) *ex-post* evaluation. Let us examine each of these uses.

1. Short-term economic forecasting

This is perhaps the field which has developed most in recent years, at both national and international levels.

At the national level, it seems essential, before formulating macroeconomic policies and plans for the following year, to have reasonable forecasts of the trends of the main variables in the international framework and of how they can affect domestic macroeconomic performance. Likewise, it is the very essence of planning to forecast the emergence of imbalances in the economy or the worsening of existing ones. In this function, the look-out role of a short-term forecasting model is fundamental.

This function has been gradually established among planning and economic management bodies, both in the more developed countries and in the less developed ones and in international agencies. In the former, there is the well-known pioneering work undertaken in France by the National Institute of Statistics and Economic Studies (INSEE), the Forecasting Department of the Ministry of Finance, and the French Moni-

¹ One of the intellectual authors of this approach was Dr. Raúl Prebisch, who outlined it clearly in his famous programming technique published in 1953 in ECLAC, *Preliminary study of the technique of programming economic development* (E/CN.12/0292), Santiago, Chile, 1953.

² Paul Dubois, "Macroeconomic models and planning in the context of an uncertain future: the French experience", *CEPAL Review*, No. 31 (LC/G.1452), Santiago, Chile, April, 1987.

toring Office on the Current Economic Situation. In the United States and in other countries members of the OECD, as well as in some less developed countries, the practice of short-term forecasting has also become gradually institutionalized, in either public or private bodies.³ At the international level, mention should be made of the periodic studies done by OECD, UNCTAD, IMF and the World Bank. At the subregional level, the work begun by the Board of the Cartagena Agreement (JUNAC), using the MEGA model, constitutes a noteworthy effort.

2. Study of variables and adoption of the plan

Mere forecasting of the short-term future, although important, does not exhaust the scope of planning, particularly over the medium term where the aim is to establish specific development strategies.

The exploration of variables is probably the most useful—and at the same time the most difficult—technical application of planning models. And we say this because what is involved is an attempt to simulate the effects that specific economic and social policy options would have on a set of endogenous variables resulting from economic activity, given certain assumptions about international economic performance, and then, to compare these results with the objectives or goals regarded as desirable by the planning authority. Therefore, this means designing a recursive scheme in which—on the basis of preliminary definitions of policy options—the effects of these options on the resulting variables are studied and then compared with the desired plan profiles; the policy definitions are then repeatedly revised until policy options consistent with plan objectives are found. All of this, of course, within a given external framework of uncontrollable variables. The following figure illustrates this procedure.

Clearly, this procedure will depend decisively on two elements: a) the assumptions

regarding external framework trends and b) the estimation of model performance functions and parameters *that will be in effect during the plan period*.

With regard to the first point, we can only stress the importance of having reliable studies on and medium-term forecasts of international economic performance, in particular in the country's main trade and financial partners. Given that it is often impossible to define a single profile of the international framework, we can choose to work with alternative scenarios that are contingent upon the occurrence of given economic and political phenomena, with a specific probability.

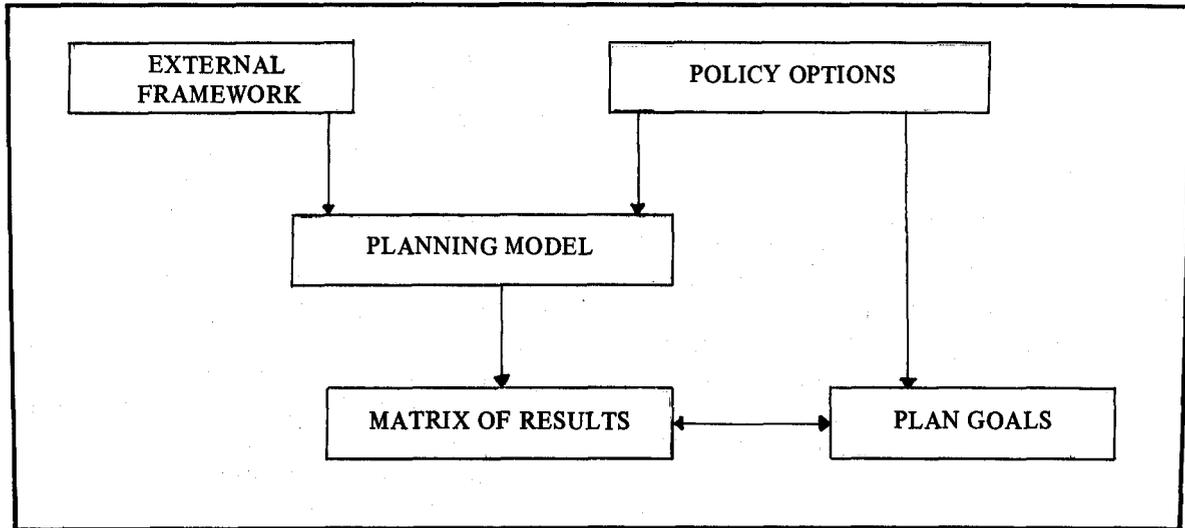
In section two we shall offer some methodological considerations about the estimation of the relevant functions and parameters.

3. Ex-post evaluation

Perhaps the field that has received the least attention in planning has been the retrospective evaluation of the recent past in order to determine objectively in what way the plan has or has not been implemented. Mere comparison of past records with plan goals is not enough. It is necessary to delve deeper and investigate the causes of the divergences between plan and reality. These may in principle be due to four factors: i) errors in forecasting the external framework; ii) errors in forecasting the performance of external private agents; iii) errors or defects in the application of policy instruments; and iv) unforeseen random factors, such as droughts, earthquakes, etc.

The identification of these causes can be greatly facilitated if a quantitative model is available. For this it would be necessary, first of all, to produce retrospective simulations, using alternately the forecast external framework and the real one; this will make it possible to evaluate the discrepancies due to the first cause indicated. Second, it would be necessary to identify estimation errors in the parameters that would have been recorded in the performance functions of the model, comparing the deviations in performance variables—in the absence of errors in the forecast of the external framework—in the application of the economic policy and of ran-

³See *International Journal of Forecasting*, published by ELSEVIER Science Publishers, Netherlands, which gives a quarterly account of macroeconomic forecasts for a broad sample of countries.



dom factors. This would make it necessary to re-estimate the parameters in order to incorporate changes in performance into the model. Third, deviations caused by errors or defects in applying the agreed policies would likewise

require simulations, maintaining the other factors constant. A comparison of the total deviations with those attributable to the three factors indicated would produce a balance imputable to unforeseen random factors.

II

Methodological questions

We shall deal with three important methodological questions: the relationship between the reality and the model, estimation problems and the data base.

1. *Appropriate representation of the reality*

The need is obvious for a model to reflect faithfully the economic structure of a country. However, when constructing models there is a risk of implicitly or explicitly adopting the prevailing view of the economic structure in the more developed countries. This may be due not to the deliberate intention of the researcher but to the form in which information is available.

In this respect we wish to point out four aspects that should be closely analysed.

a) *Heterogeneity of the economy*

It is a fact that the economies with an intermediate degree of development do not have the production and technological homogeneity of the industrialized countries. Production units coexist in such countries in each branch of activity (agriculture, industry, services, etc.), with very diverse technological levels and forms of organization; this has a significant impact on productivity, employment and income distribution, on the one hand, and on the structure of goods and factor markets, on the other. To put it more simply, there is a traditional or primitive stratum, an intermediate stratum and a modern or advanced stratum in each economic activity.

We believe that it is essential for the model to incorporate these structural differences in its

equations in order to permit policy-making differentiated by strata, if employment and income-distribution goals are part of the plan.⁴

b) *Demand structure*

The structural heterogeneity of Latin American economies necessarily has an effect on the social structure and on the kinds of economic performance of the various strata. This fact has great influence on the structure of demand by type and quality of goods. Notable qualitative differences are often added to the difference in the composition of consumption, as a result of Engel's law, in particular between urban and rural strata.

The model should incorporate these structural differences into its performance equations, for they are often closely interrelated with the functioning of the production apparatus. Such a design of model would permit a quantitative evaluation of the effects of a strategy intended substantially to increase productive employment levels, reduce underemployment and improve income distribution to the most deprived sectors.

c) *External sector*

The strong link between Latin American economies and industrialized centres is well known, particularly in terms of the inputs dependence caused by the trickle-down effects of exports variations on the domestic economy and by debt servicing. This interdependence can be adequately incorporated in a planning model by the technological matrices of imported inputs and capital goods and by certain institutional equations that deal with the income and service flows involved. Besides these effects, we would like to point out three points that are becoming increasingly important. First, the models should capture the domestic effects of variations in the terms of trade in all their magnitude, in particular in those countries that are highly dependent on imported energy inputs. The recent deterioration of the terms of trade is not only an impor-

tant determinant of domestic inflation but also affects, because of its negative effect on real domestic income, the various performance functions, such as the domestic savings rate, and by these and other means the process of capital formation.

Second, the actual presence in the economy of a sector made up of transnational corporations or of their subsidiaries warrants explicit treatment in equations dealing with production structure, income generation and distribution, and saving and investment processes.

Lastly, the high speed at which some countries have acquired external debt in recent years certainly justifies the inclusion in the model of equations that explain the dynamics of this debt and its effects on the capacity for future growth.

d) *Public sector*

The public sector, has been considered in various planning models, in particular through income and expenditure variables. But one increasingly important function of the State has rarely been made explicit: the production of goods and services that are sold through the market.

The sector of State production and services enterprises must be clearly distinguished in the model for several reasons. First, it is the only sector in a mixed economy in which the State can operate mandatory planning. Second, it seems imperative to bring out the links between the State enterprise sector and the rest of the economy, both domestic and external. The relationship with the domestic private sector seems essential as a means of identifying the interrelationship between the production activities of the two sectors, for this would make it possible to evaluate the effects of expansions or contradictions of the first on the second. Identification of the relationship with the external sector would facilitate evaluation of the net impact of the State sector on the balance of payments and the financial system, with obvious benefits for economic policy-making.

Lastly, the identification in the model of gross investment by State enterprises would make it possible to quantify their impact on the creation of capacity. Since this sector normally develops projects which necessarily take a longer time to mature in terms of capacity than the

⁴The research undertaken by the World Employment Programme and the Regional Employment Programme for Latin America and the Caribbean (PREALC), both subsidiary bodies of the International Labour Organization (ILO), points in this same direction.

average for private projects, although their impact on effective demand is similar to that of private projects, the proposed sectoral separation would indicate the proportions in which State investment should be linked with private investment in order to prevent inflationary or recessionary pressures.

In summary, in this section we have argued for the construction of a model that faithfully reflects the structural characteristics of the country of the region where it is applied. Indeed, this is no easy task and not lacking in serious difficulties of implementation, owing in particular to the absence of some of the data.

Nevertheless, we believe that this is the direction in which we should move in order to design an instrument that is not only technically efficient but also politically and socially relevant.

2. Problems of econometric estimation

The advent of microcomputers and statistical estimation "packages" has greatly simplified the task of estimating parameters and calculating statistical significance and self-correlation tests. Despite these instrumental advances, at least three caveats must be made with respect to the estimation of parameters.

The first relates to the necessary and warranted inclusion of dummy variables in equations, in order to reflect the effects of special exogenous events that are common in Latin America, such as drastic changes in government or in economic policy, or natural disasters such as droughts, floods or earthquakes, all of which imply a one-time change in the main economic series.

Second is the well known question of the estimation of simultaneous equations, very per-

tinuous in the case of macroeconomic models with a large number of endogenous variables. Here it is very appropriate to use methods such as squared minimums in two stages on the basis of instrumental variables.

Lastly, there is the incorporation of partial adjustment mechanisms according to the Koyck format, to adequately reflect the distributed lags that tend to occur in dynamic models.

3. Data base

It is a commonplace that statistical information in Latin America suffers from serious deficiencies. However, when we embark on the task of estimating a macroeconomic model, we generally note that it is not so deficient. There is, of course, great dispersal and, at times, contradictory figures on the same variable.

In any case, the compilation of a coherent data base is an important first step. To ensure this coherence it is advisable to use national accounts systems as a baseline for the construction of complementary subsystems of balance of payments and the external sector, employment and income, the public sector, prices and wages, and the monetary and financial sector. It is important, before beginning the estimation work, to undertake a macroeconomic coherence analysis for a selected number of years among these various subsystems.

A data base constructed in this way and organized in a computer file constitutes an important byproduct for the routine information and analysis tasks of a planning agency. In addition, when it is duly updated, it becomes a systematic and permanent source of information for the public information functions that such agencies usually carry out.

III

Conclusion

Despite the existing methodological difficulties, the construction of macroeconomic models is a great help to planners and economic policy-makers in analysing the current economic situation.

However, there are some caveats that users should bear in mind.

First, a model is not a "black box" capable of providing magical answers to all questions asked of it. A good model should be a transparent box

that clearly shows its structure and its operating mechanisms. It can then be a powerful aid in the logical analysis of economic processes and not a substitute for such analysis. In actual fact, the results delivered by a model should always be questioned, especially if they contradict common sense. Sometimes, it is common sense that is mistaken, when it takes into account only the direct effects of a policy and not the side or cumulative effects. This interaction between analyst and model generates a valuable learning and model-improvement process.

Second, models represent economic theories and hypotheses that do not always interpret reality in an exclusive way. That is to say, it is perfectly possible to validate two contradictory theories with the same data base. Thus, econometric methods do not always yield conclusive results in terms of proving the scientific validity of a theory. Strictly speaking, they only show that reality does not contradict a hypothesis. This indeterminate situation demands more thorough theoretical work that would lead to more accurate and precise theories and models.

Third, there is a clear conservative bias in a model, since it is a representation of the past. This obviously does not bother conservatives, but it is an obstacle for proponents of social

change. For them the difficulty could be partly overcome through sensitivity analysis that examines the effects of variations of the main parameters and exogenous variables. Tax reform may demand a hike in taxation rates. However, drastic changes in economic structure, such as those resulting from agrarian reform or nationalization of a major portion of industry, can hardly be accommodated in a conventional econometric model.

Finally, it is useful to remember that models only express an economic rationality, which, although important, does not exhaust the theoretical field of decisions and planning. As Linstone³ has indicated, there are multiple perspectives in planning, one of which is based on technical and economic rationality. Others are based on political, institutional, organizational and psychological factors. The economic planner must be aware that his rationality is only one part of the final decision. For this reason, a good dose of modesty should accompany the use of this tool, if it is to be set up as an infallible instrument.

³Harold A. Linstone, "The need for multiple perspectives in planning", *CEPAL Review*, No. 31 (LC/G.1452), Santiago, Chile, April 1987.

Selection of dynamic comparative advantages

Eduardo García D'Acuña

The future development of Latin America and the Caribbean will feature the progressive and more effective insertion of its products in the international economy. This process appears to be determined by two important factors.

First is the need to generate a large export surplus that will allow for real payment of the external debt, even in the most favourable case of a definitive agreement being reached between debtor countries, the banking system and central countries which would change current liabilities into longer-term commitments at lower interest rates than those currently in effect.

Second is the need for more rational use of resources, in particular through the promotion and diversification of exports and greater efficiency and effectiveness in imports substitution.

This requires a marked change in the macro-economic and sectoral policy framework of each country. It also requires decisive action by the region in international forums in order to reduce the protectionist measures of industrialized countries that hinder full access to their domestic markets. In the first case, it is necessary to have various resource-allocation criteria that provide a basis for adoption of sound macroeconomic and sectoral policies. Let us first examine these criteria.

The first criterion in the economic literature relates to the principle of comparative or market advantages, according to which domestic production of any item that is relatively cheaper domestically *vis-à-vis* its counterpart in the international market should be promoted, whereas production of any goods that are *relatively* more expensive should be discouraged. If the current exchange rate has a value that balances the balance of payments, cost and price comparisons can be made in the same currency and in absolute terms, and obtain the same results. From this criterion there stems a whole series of economic policy prescriptions that can be summarized as follows: a) setting a low and standard tariff that does not distort costs or market prices; b) applying a low and standard export subsidy rate, equivalent to the tariff;

c) uniform tax treatment for production sectors that supply the domestic or external market; d) setting an effective exchange rate whose level will ensure adequate profitability of the export sector and of the sector competing with imports; e) rejection in general, of any sectoral policies that generate specific advantages for any sector or activity; and f) stability in these rules of the game in order to stimulate new investments that will guarantee the effective reallocation of resources over time.

This set of economic policies is commonly associated with market-economy practice when there are many private agents who are very sensitive to market signals and who would respond positively to the indicated policy framework. However, it may also be associated with a socialist market economy, in which independent and co-operative State enterprises, operating on a decentralized basis, adapt their protectionist and trade actions to a similar policy framework set up by the central planning agency. In this connection we can cite the experience of socialist countries such as Hungary and Yugoslavia.

The criterion of comparative advantages—and the attendant policies—is correct, given a set of assumptions that endorse its social desirability, but it has undergone a series of qualifications and corrections in order to take into account: a) distributive, social and employment factors; b) dynamic elements linked to the incorporation of technological advances; c) elements associated with the environment and natural-resource depletion; and d) some considerations regarding the structure of world trade and the role in it of transnational corporations and the trade and financial policies of central countries.

We shall examine each of these factors in order to see how to modify the simple principle of market and static comparative advantages.

Distributive, social and employment factors can seriously alter the pattern of comparative market advantages. We shall examine the case of country *A* which, faced with the need to pay its external debt, needs to generate an export sur-

plus, and therefore resorts to devaluing its currency, while keeping nominal wages constant. The inflationary pressures associated with the devaluation produce a drop in real wages that allows the exports and imports-substitution sectors to raise their profitability sharply by improving the competitiveness of their enterprises. Has a real comparative advantage been generated? Indeed not, because a simple reversal of the wages policy would eliminate the competitive edge gained. The situation of country *B* is different, for its enterprises introduce and apply more efficient production techniques that increase output per worker. In this case, if real wages are maintained, the enterprises will enjoy greater profitability which will enable them to compete successfully in international markets. And to do so on a permanent basis, without detriment to the standard of living of any member of society. The factors associated with expenditure and social welfare have similar implications. The same country could make its enterprises more competitive by reducing taxes on company profits, resulting in a cutback in government social spending on health, education, housing, etc. Such a cutback, once again, will give a competitive edge to exporters and to imports-substitution companies, but at a social cost that is disregarded in private cost-benefit analysis.

It is evident from the foregoing that a very clear distinction must be made between real comparative advantages based on increased resource productivity and simple competitive advantages based on the deterioration in the living standards of some domestic sectors.

Lastly, a process of external economic openness based on comparative market advantages could cause a drop in overall employment, if the creation of new jobs in the exports sector does not compensate for job losses in the imports-substitution sectors which will have declined. In this case, openness would lead to a situation of structural unemployment and would necessarily involve expansion of imports substitution or domestic market activities until full employment of resources was achieved. In terms of the criterion of comparative advantages, an attempt will be made to evaluate the profitability of each activity, assigning labour its real opportunity cost which, if there is unemployment, will be lower than the market wage.

The incorporation or non-incorporation of dynamic elements associated with technological factors that would act over a given span of time provides another evaluation criterion. These technological factors relate to issues such as learning by doing or the argument of infant industry, the existence of potential economies of scale of which good use could be made in the future through the spread effect, and the creation and development of new technologies. None of these elements are usually taken into account in the statistical analysis of comparative advantages, as the market reveals them today. Given that each of these factors is found in a different form in the various agricultural, mining, industrial and service activities, their careful evaluation would make it possible to consider their benefits over their entire economic life, as well as their interactions within and between sectors. Evaluation methodologies should therefore consider applying traditional cost-benefit analysis not only to the individual project but also to a series of activities over the time span involved.

It is likewise possible to adduce arguments based on the effect on the environment of certain activities involving internationally traded goods, or on the use in such activities of renewable or non-renewable natural resources, in order to qualify the simple principle of static and market comparative advantages. The most obvious case is the export of an ore whose processing requires enormous quantities of groundwater and whose waste materials inflict considerable damage on fishing activities or on the well-being of neighbouring towns. Clearly, if the water has an alternative use in agricultural activities and in the support of associated ecosystems, a social cost should be assigned to its use. The waste materials also have a production and welfare cost that has to be evaluated. Therefore, these costs should be assigned to the export activity prior to any decision on its suitability from the international standpoint.

The use of renewable or non-renewable natural resources raises another problem of the correction of static market advantages. In recent years various countries have successfully developed exports based on natural gas by-products by imputing a very low cost to this non-renewable input, thus gaining a market advantage. If the product obtained is ultimately

destined for consumption and not for the creation of an alternative productive capacity, it would clearly involve the waste of a natural resource to the detriment of the welfare of future generations. This could be corrected by assigning a suitable discount rate to the future benefits of the project. In the case of renewable resources, for this same reason, rates allowing for the restoration of the resource to its original level should be incorporated as a cost factor.

Another consideration affecting comparative advantages is the gradual shift of polluting industrial activities or processes from industrialized countries to less developed ones as a result of restrictions and pollution-control charges imposed by the Governments of the industrialized countries. Thus, willingness to accept air, water and soil pollution from such processes appears as a "comparative advantage" of the less developed countries. Once again, it would be a false advantage unless the social costs and external diseconomies associated with these processes are taken into account.

Lastly, the evaluation criteria of comparative advantages should carefully study *the factors associated with the structure and dynamics of the world economy and with the performance of*

transnational corporations in their investment and technological development decisions. The current and future production pattern of the first world —the United States— as well as that of Japan, Western Europe and the newly industrialized countries of Southeast Asia is too important a factor to be ignored in an international insertion strategy for Latin America. The comparative advantage pattern of the United States, *vis-à-vis* these countries has ostensibly changed over the last 15 years. The United States has gained a competitive edge in goods with both a high natural-resource content, and a high technological content, and it has been the front runner in standardized industrial products. In turn, Western Europe, Japan and the other countries have undergone significant changes. Moreover, the major changes that are approaching with the advent of the European Common Market in 1992, the macroeconomic adjustment that the United States will undergo sooner or later, and the ever-increasing importance of Japan's role and that of the economies of South-East Asia will produce a change in the international framework which it will be imperative to take into account in any successful plan for the region's international insertion.

Guidelines for contributors to *CEPAL Review*

The editorial board of the Review are always interested in encouraging the publication of articles which analyse the economic and social development of Latin America and the Caribbean. With this in mind, and in order to facilitate the presentation, consideration and publication of papers, they have prepared the following information and suggestions to serve as a guide to future contributors.

— The submission of an article assumes an undertaking by the author not to submit it simultaneously to other periodical publications.

— Papers should be submitted in Spanish, Portuguese or English. They will be translated into the appropriate language by ECLAC.

— Papers should not be longer than 33 double-spaced letter-size pages (U.S. quarto), but shorter articles will also be considered. The original and one copy should be submitted, as should the diskettes, if any (in IBM or compatible WordPerfect format).

— All contributions should be accompanied by a note clearly indicating the title of the paper, the name of the author, the institution he belongs to, and his address. Authors are also requested to send in a short summary of the article (no more than 250 words) giving a brief description of its subject matter and main conclusions.

— Footnotes should be kept to the minimum, while bibliographical references and direct quotations should be carefully checked, since they are the responsibility of the author. It is also recommended that the number of tables and figures should be reduced to the minimum and that they should not duplicate information given in the text.

— Special attention should be paid to the bibliography. All the necessary information must be correctly stated in each case (name of the author or authors, complete title (including any subtitle), publisher, city, month and year of publication and, in the case of a series, the title and corresponding volume number or part, etc.).

— The editorial board of the Review reserve the right to make any necessary revision or editorial changes required by the articles.

— Authors will receive a courtesy copy of the Review in which their article appears, plus 30 offprints of the article, both in Spanish and in English, at the time of publication in each language.

Recent ECLAC publications

The Latin American co-operative movement: past history and future prospects (LC/G.1458-P), "Libros de la CEPAL" series, No. 14. Santiago, Chile, December 1989 (371 pages).

The approach taken to the co-operative movement in this book is based on a more systematic search for information on the current theory, practice and situation of the co-operative sector in the region, in an effort to link the special problems of this sector with the broader concerns of ECLAC on Latin American development. In this respect, the book raises some questions about the role which this form of organization could really play on the complex Latin American economic scene of the 1980s.

The main criteria adopted in the light of the wide variety of situations existing both at the national level and within the countries analysed consist of going as deeply as possible into the details of this topic, establishing more solid bases for dialogue, and outlining some of the main trends which could serve in policy formulation.

As well as reviewing the situation of the co-operative movement in the various countries of the region as regards the sectors covered by it, the magnitude of its activities and the social groups involved, the book examines some issues which would appear to be of prime importance to the whole of society at the present time. In this respect, mention may be made of participation, the relationship between the State and society, the options for the return of democracy, the danger of increased corporatism of this sector, and the need to establish new and different outlooks, since it is expected that the crisis will have lasting effects.

There would appear to be general agreement that although the co-operative movement alone cannot become an agent of change, it nevertheless has an important role to play in social and economic democracy. Despite the heterogeneity of the co-operative models in Latin America, there are some main trends which seem to indicate that in the future co-operativism will take at least three probable forms. The first of these is made up of large-scale co-operatives—whether State-owned, State-aided or private—which, like the European co-operatives and those of other developed countries in general, will increase their links with conventional capitalist enterprises. A second area could be set up if medium-sized co-operatives could be linked with State social policies, which could be oriented to favour the interests of particular social groups as regards options for housing, work, agricultural production, fisheries, etc. A third form could take shape around the possibility of generating new forms of organization which are perhaps more unorthodox and flexible than conventional co-operatives and could offer new opportunities for traditionally margined sectors.

The solutions proposed in the book are not of an exclusive nature, and all credit is given to the value of the wide range of experience and the plurality of ideas behind the Latin American co-operative movement. The interrelation between the different elements is brought out, and it is shown how more detailed research into historical and cultural aspects could provide promising new possibilities for debate and future action.

In spite of the heterogeneity of the origin, development, current situation and specific fields of action of Latin American co-operativism, there are some broad common lines within which the sector's activities tend to fit. Thus, its origins are generally to be traced back to immigrant groups—that is to say, groups that tend to organize themselves to protect their rights, with particular emphasis on their share of consumption, employment, etc.—or to ethnically or culturally different communities whose organization is related to the form of economic management of a previously existing group.

As well as these forms, which are managed by the members themselves, there are also the co-operatives set up on the initiative of religious institutions (especially the Catholic Church) or private enterprises, as well as those set up through State action, supported by external projects in some periods.

The co-operative movement has considerable historical background in the region and has covered practically all the sectors of the economy: consumption, savings and loans, housing, public services, schools, the agricultural sector, fisheries, exports, electricity, pharmacies, telephones, etc. In most cases its performance has been precarious because of the lack of continuity of State policies, problems of resources, and obstacles due to the shortage of capital, training and education. This has clearly brought out the close relation between the situation of co-operatives and the society in which they operate, their dependence on the particular socio-political models in force, and their reflection of the stratification of the societies of which they form part.

With regard to the future, it would seem that there are a number of possible lines of evolution rather than one single path. According to the views expressed by the representatives of important currents of co-operative thinking, it would appear that co-operatives are increasingly becoming the leaders in sectoral matters and are acting as a factor of mobilization towards a form of action more in line with co-operative ideas and more closely linked with society as a whole. With regard to the role of the co-operative movement, the probable trends are as follows:

- An increase in big co-operative organizations with high capital investments, located in the most important sectors of the economy and probably increasingly similar to those of the developed countries, with a tendency towards concentration.
- The emergence of new forms of co-operatives in middle-level professional sectors.
- The establishment of possibly unorthodox forms of association which generate alternative employment opportunities in the middle and lower middle sectors, and probably the promotion of this type of co-operative (doubtless in different forms depending on

the social context) as part of the more assistance-oriented social policies that will be formulated by some countries of the region in order to relieve (even if only partially) the effects of the crisis on the popular sectors. These forms of co-operativism will naturally represent different interests; they will assuredly display different degrees and types of participation, and it is difficult to predict how much strength the co-operative movement will have for taking joint collaboration decisions. Probably, if emphasis is placed on the need for development in a context of equity, autonomy and growth, and if the original ideas of solidarity, mutual aid and democracy are retained and furthered, it will be possible to create a suitable basis for consensus if the co-operative movement really wants to become a stronger actor on the social scene and a valid interlocutor in the debate on the future of Latin America.

Changes in employment and the social crisis in Latin America (LC/G.1558-P), "Libros de la CEPAL" series, No. 22. Santiago, Chile, December 1989 (243 pages).

This study makes use of the census samples of the OMUECE programme of the Latin American Demographic Centre (CELADE), centering attention on the computerized analysis of the magnetic tapes containing data from the 1960, 1970 and 1980 population censuses.

In the two decades preceding the present crisis, the employment structures of the countries of the region underwent changes of great social significance. Almost all the countries —some earlier, some later, and with varying degrees of speed and success— undertook the transition from agricultural societies to more urban and industrialized economies with modern services sectors and higher levels of education and productivity: a process which has been termed "social modernization".

When the crisis of the 1980s began, some countries had still not completed the first phase of this great transition, while in others which had begun to modernize at an earlier date the cycle was already beginning to show signs of exhaustion. For the Latin American societies which were at an intermediate stage between these two extremes, the 1960-1980 period was one of rapid but unbalanced changes in their socio-occupational structures: growth of the product, expansion in the State apparatus, the growing capitalization of economic relations and the spread of education among the younger generations were associated with growth, in both absolute and relative terms, of the occupational strata of highest productivity and income in the secondary and tertiary sectors.

In different phases and different countries, this general change in the employment structure had two great social impacts germane to the analysis of the present social problems: it gave rise to structural mobility which ensured the political viability (albeit often precarious and transitory) of the style of development based on social modernization, and it brought about a metamorphosis in the social identities of the main collective actors, be they peasants, the proletariat, the urban informal sector or the middle class.

Chapter I of this book analyses these two phenomena in global and comparative terms. The thesis is put forward that the upward social mobility enjoyed for decades by a substantial part of the population, together with the hopes of such mobility for their children that were kindled among the sectors that were still excluded, made extreme demands on the economic and employment structures and that, for this and other reasons, the social logic of this upward mobility began to enter into crisis even before the financial crisis of the 1980s.

The changes which took place in the profiles of the major socio-occupational groups (up to the period just before the crisis) have various implications for the potential of these groups as collective leaders in the creation of new styles of development for getting out of the crisis.

The peasants, who were in the majority until a few years ago, have lost their relative weight in the economically active population (EAP), and the gap separating them from their urban brothers in terms of formal education has grown wider. Even so, in many countries the rural population has also undergone a qualitative change by crossing the threshold of literacy and minimum education and acquiring a knowledge of national realities and a capacity to arrive at their own well-founded conclusions, thanks to the expansion of the communications media and of basic education in rural areas and their own personal experience of direct contact with the urban world.

The relative weight of the urban working class has remained unchanged or even gone down in the sector of the formal industrial proletariat, which has been "modernized" in terms of qualifications and productivity. The urban informal sector has shown that it is not necessarily nor universally a synonym for underemployment, but also includes sectors which have higher levels of productivity than the formal manual labour sector and even sometimes offers possibilities for social mobility, since a skilled own-account worker with a family labour force has a chance to build up a little capital and is not subject to the limitations on wage income involved in the combination of dominant entrepreneurial power, over-supply of wage labour, inflation, and the restrictions suffered by the trade union movement in many countries.

In particular, the urban working class has been tertiarized, with a big increase in employment in modern manual services (such as repair work) and especially in relatively skilled non-manual activities involving a growing (but poorly paid) number of female workers in such occupations as semi-professionals, schoolteachers, lower-level office workers and, in particular, wage-earning sales personnel.

Consequently, the non-manual sector has undergone sharp differentiation in that the tertiarization of the urban popular sector has been added to the growth in upper middle class occupations (professionals, managers, employers, etc.), thus giving the non-manual occupations as a whole the highest growth rate in the EAP. As well as growing, the middle class has also undergone a change in its own social identity. Social status now depends more on consumption capacity than on the traditional criteria of prestige, and this has stimulated the tendency for both men

and women from a given household to engage in non-manual employment in order to maintain this capacity, thus overthrowing the previous concept and customs of what was felt to constitute a middle-class family.

Chapter II analyses the major socio-occupational changes affecting women between 1960 and 1980, using a prepared typology of Latin American countries for this purpose. The analysis centres on two main aspects. One of these concerns the profile of working women and shows the relation between activity in the labour market and individual variables such as age, civil status and education. The other concerns the participation of women in production, showing how the Latin American societies have incorporated women in the various branches of activity, economic sectors and occupational groups during the period under analysis, and hence in the various socio-occupational groups.

The second part of this book contains national studies on the changes in employment which have taken place in five countries of the region, covering a wide range of national situations and illustrating various moments in the dual demographic and occupational transition up to 1980. The first country analysed —Panama— has quite a high level of modernization, with average indices of social welfare that are among the highest in the region. Brazil and Ecuador, for their part, display rapid but unbalanced change, while Honduras and Bolivia are in a process of demographic, social and economic change which is at an incipient level but has very marked individual features in each case.

The urban crisis in Latin America and the Caribbean: reflections on some possible solutions (LC/G.1571-P), "Libros de la CEPAL" series, No. 23. Santiago, Chile, December 1989 (197 pages).

This publication is a collection of texts prepared in recent years by ECLAC experts and outside consultants for the Joint ECLAC/UNCHS Human Settlements Unit.

The processes of population distribution and settlement are closely linked with the broader processes of social change and development, with which they interact and are mutually decisive. This means that the forms of spatial occupation, organization, development and use are historically conditioned by the features of production and their implications for the social structures, so that the settlement pattern typical of a given society is a result of the style of development prevailing in it.

Just as the economic and social behaviour of the population depends on the "cultural pattern" of the society to which that population belongs, so human settlements are a cultural product too. In the past, however, this idea has not generally been given due consideration in studies on human settlements, which has led, especially in the developing countries, to the formulation of socioeconomic and urban development models based on paradigms frequently far removed from the real conditions in the majority of those countries.

This is particularly true of the developing countries because in them the formulation of express policies on

human settlement (whether they concern territorial development or improvement of the habitat) has to be carried out in a context of extreme poverty, under the pressure of extraordinarily rapid rates of population growth and urbanization, and in a situation of generalized crisis in which there is a conflict between financial and production constraints on the one hand, and the growing demand for greater equity, participation and democracy on the other.

Consequently, it is urgently necessary to rethink the problems of the habitat, reorient national human settlement policies, and reorganize the administrative and local government systems. These tasks presuppose a new capacity both for bringing general concepts within the national dimension in order to formulate and apply new policies on human settlements and the improvement of the quality of the constructed environment, and for reorganizing the management institutions, mechanisms and procedures as well as preparing and putting into effect innovatory programmes and projects which provide alternatives to the traditional ones.

They also presuppose the establishment of properly-linked forms of action in the field of human settlements designed, within the framework of the special features of each political system, to harmonize the objectives, policies and projects of the central government with local interests in order to improve the environment and living conditions of the local communities and promote community participation.

These reflections are based on the assumption that the present crisis is not only of an economic nature but is largely the result of long-standing problems of a structural nature which have characterized the economic, social and political development of the region in the past and many of whose effects are irreversible, at least in the short and medium term.

The texts have been grouped together according to their main subjects, thus forming the three chapters of the book:

Chapter I, "Critical areas for the formulation of human settlements policies in Latin America and the Caribbean", summarizes previous ECLAC documents.

Chapter II, "Metropolitanization and the crisis", comprises two studies by the consultants Francisco Sabatini and Ricardo Jordán Fuchs: "Metropolitanization and the crisis in Latin America: problems and prospects" and "The urban crisis: conceptual elements for an environmental approach", and a study entitled "The crisis of the Latin American urban paradigm" which was prepared by Alfredo Gastal, an expert of the Joint ECLAC/UNCHS Human Settlements Unit.

Chapter III, "National development planning and management: the role of local government", contains a study entitled "Local government and national development planning" by Osvaldo Dávila, former Secretary-General for Planning of the Government of Ecuador, together with a study by Mario Rosales, of the Latin American Centre for Local Government Training and Development, who is also a researcher for the Latin American Chapter of the International Union of Local Authorities.

The final part of this chapter consists of a summary of two studies by the Joint ECLAC/UNCHS Human Settlements Unit.

Changing production patterns with social equity (LC/G.1601), "Libros de la CEPAL" series, No. 25. Santiago, Chile, March 1990 (177 pages).

In this document, the ECLAC Secretariat has sought to present a synthesized study of the main lessons left by the economic crisis of the 1980s. On this basis, it presents a proposal, for consideration of member States' governments, for the development of the Latin American and Caribbean countries for the 1990s and beyond. This proposal revolves around what is considered to be the primary and common task of all the countries: *the transformation of the productive structures of the region in a context of progressively greater social equity*. Such a process is intended to create new sources of dynamism which will, in turn, make it possible to achieve some of the objectives inherent in a contemporary conception of development: growth, improvement of income distribution, consolidation of the democratization process, greater autonomy, establishment of conditions which will halt the deterioration of the environment, and improvement of the quality of life of the entire population.

It should be noted, however, that the proposal does not pretend to offer a single, universally applicable recipe: rather, it consists of a set of guidelines which must, of course, be adapted to the particular situations of the individual countries.

The study is set out in six chapters. The first chapter presents an introduction and summary of the main ideas contained in the document. The second analyses the initial setting, noting that there has been a slowing down of growth, macroeconomic disequilibria, a regressive adjustment process, weakening of the public sector, and a decline in investment. The third chapter then analyses some of the factors conditioning the transformation of the productive structure: the international environment, macroeconomic equilibria, the availability of development financing, and the support of diverse actors of societies. The fourth chapter goes on to set forth the main features of changing production patterns with social equity, together with some of the dilemmas that the process will be faced with.

On the basis of what has been covered in the preceding chapters, chapter five outlines some basic policies which would facilitate the desired changes in production patterns. After analysing the subject of specific national features, it deals with policies designed to support true competitiveness, to strengthen production linkages, and to improve interaction between public and private agents. Finally, chapter six deals with the contribution that economic integration could make to the process of change in production patterns and proposes some policies in the areas interacting with the international economy, promoting production linkages, and strengthening the institutional foundation of integration.

This study is based on the rich and varied lessons learnt during the 1980s, both within and outside the region,

and on the analysis of concrete experiences, some of which are briefly described in boxes in order to illustrate the proposed policy outlines. Like every undertaking of this scale, the document forms part of a broader and deeper process. Thus, it not only contains the general thrust of a proposal, but also sketches the broad priorities of the future work programme of the Secretariat. Ultimately, this study and future activities which will stem from it seek to contribute to the present and future debate in the region, as it approaches the twenty-first century, on how to achieve sustained development.

Latin America and the Caribbean: options to reduce the debt burden (LC/G.1605-P), "Libros de la CEPAL" series, No. 26. Santiago, Chile, March 1990 (110 pages).

Just as debt fatigue set in some time ago due to the protracted nature of the negotiations to deal with what often appears to be an intractable problem, the great amount of written material that has been produced on the matter—including the Secretariat's own frequent contributions—has also led to a different type of fatigue. It often appears, in effect, that all that could be said on the topic has already been said. It might therefore be asked why the Secretariat has prepared yet another statement.

The answer is simple enough. The problem is still very much with us, and unless some major changes occur, it is likely to remain so during a protracted period of time. It was therefore felt that as the United Nations turns its attention to the most pressing matters on the global development agenda for the 1990s, and the Economic Commission for Latin America and the Caribbean in particular does so regarding the region, it would be timely to once more address the issue, taking into account recent developments in the matter.

For many Latin American and Caribbean countries, the debt problem, brewed in the seventies, became a permanent obstacle to development in the eighties. It now threatens to remain an important development issue as well as a contentious topic in the arena of international economic co-operation in the nineties. As stated in previous Secretariat documents, the debt overhang certainly is not the only major obstacle that the countries of the region face. Clearly, however, any discussion of development prospects for the 1990s—a topic explored in a separate document—would be incomplete without taking a new look at this secular problem and proposing ways of overcoming it.

With the passage of time, the premise that the debt problem is systemic in nature has proven correct. Hence, the first and best option for resolving it is a comprehensive concerted or collective solution which distributes costs in a way that is functional to a rapid restoration of confidence in the system *as a whole*: only that way can losses in global output and employment be minimized.

Indeed, a relatively untold story in the development crisis of the region is the reluctance of the creditor governments to accept the systemic character of the crisis and to assume their subsequent responsibilities in an interdependent world. To highlight the importance of

more ambitious public participation in any lasting solution to the debt problem, after presenting the summary and conclusions (chapter I) the study examines in chapter II the debt problem in its proper context as a systemic financial problem, and the type of role that the public sector is traditionally expected to play in resolving it. The general analysis is given more concrete form by examining public sector activism in the resolution of domestic financial crises in the industrialized countries, and by contrasting that with the relatively passive public management of the Latin American and Caribbean crises.

Chapter III analyses the option of a concerted solution to the region's debt problem. The analytical focus is on the Brady Plan. In this chapter the Plan's achievements are elaborated on, as well as its apparent shortcomings. The shortcomings are serious enough to have already raised doubts in many circles about the Plan's likely effectiveness. Nevertheless, it has many of the necessary ingredients of a solution and therefore the Secretariat considers that it would be premature to write it off as another failed concerted strategy.

It is the potential value of the Brady Plan, coupled with its shortcomings, that inspires chapter IV. In this section of the document a series of constructive proposals are presented which are meant to fortify the Brady Plan and ensure its success in ending the severe and protracted debt problem in developing countries.

The final chapter of the document explores the experiences that have accumulated over the years regarding unilateral reduction of the transfer of resources. This option must be seriously contemplated by debtors as long as an effective comprehensive public solution to reduce the transfer of resources fails to emerge from the creditor countries. Indeed, under the heavy weight of the outward transfer of resources, most countries in the region have in fact been pushed into deploying this option.

Elements for the design of policies on industry and technology in Latin America (LC/G.1565-P), "Cuadernos de la CEPAL" series, No. 63. Santiago, Chile, March 1990 (172 pages).

The global context of profound technological change, increased competition on international markets and the need for the countries of the region to generate foreign exchange because of the external constraints on economic growth means that a coherent policy for the acquisition of technological capacity and comparative advantages must necessarily be a vital element in the recovery of economic growth and the achievement of equitable and self-sustaining development.

This book, which consists of three essays on the topics in question, seeks to make some progress in the design of policies on industry and technology for Latin America in the present circumstances. The first two studies provide a conceptual framework, while in the third study the concepts put forward are given in the context of a specific case: that of Mexico.

In part I of the book, Ricardo Ffrench-Davis contrasts the Heckscher-Ohlin model and its neoclassical adaptations with the actual conditions of Latin America. The author

concludes that, because of the way the region has to fit into the international markets and the unbalanced structure of the economies of the region, the Heckscher-Ohlin model cannot be used to explain the actual features of Latin America's international trade, so that there are no sound reasons for recommending a system of free trade. As an alternative to this model, he outlines the elements of a neostructuralist theory of international trade, finally recommending a deliberate policy of public intervention which will permit the countries of the region to acquire comparative advantages. In the author's view, this type of sectoral policy, accompanied by systems of export promotion and the use of public purchasing power, should form part of a macroeconomic policy favouring industrial and technological development. In this connection, he makes an analysis of exchange, monetary and tariff policies as macroeconomic instruments.

Ffrench-Davis's essay is complemented by a study by Morris Teubal on the same subject, which forms part II of this book. Teubal justifies an interventionist policy on the basis of the concept of distortions of the market. Since he considers that this approach does not fully explain the industrial and technological lag of the region, however, the author also includes structuralist elements in his analysis. After this theoretical summary from the neoclassical and structuralist viewpoints, Teubal's final conclusions on policies to promote industry and technology are very similar to those of Ffrench-Davis.

In general terms, he concludes that it is urgently necessary that the governments of the region should make an effort to increase their countries' capacity to adopt, adapt and generate new technologies for the restructuring of industry, in a context of tariff rationalization and reduction and judicious levelling of export incentives, thus favouring import substitution. This will complement the economic adjustment processes so as to achieve what has been called a positive adjustment process.

The foregoing leads up to a discussion on the need for proper criteria concerning the selection of policy instruments and promising areas of production and the design of an appropriate infrastructure of institutions and mechanisms for promoting industry and technology.

This brings us to an issue which is dealt with in some depth in this book: the problem of the selectivity or neutrality of public action as regards the economic actors, sectors, products or markets. According to Ffrench-Davis, the selectivity of the policies is the most outstanding feature of neostructuralism. Teubal, in contrast, takes as his starting point the theoretically neutral policies of neoliberalism. For the first-named author, the rate of increase in the amount and quality of productive resources depends on the effectiveness of public action to bring out hitherto overlooked comparative advantages. He maintains that policies should give priority to those lines of activity which offer a chance to take advantage of dynamic externalities, economies of scale and specialization and which give rise to linkages and multiplier effects that can increase the level of domestic economic and social articulation of the countries. Teubal, for his part, attaches importance to selective policies only in specific cases, such as very large indivisible investments, infant industries, and externalities in the construction of a system of enterprises

and institutions. His argument against selective policies is that such policies require a great deal of information and analytical capacity, which would be too costly for the developing countries. At the same time, the author suggests that there are systems of auto-selection among the projects and sectors worthy of government support.

Without wishing to give the impression of seeking to close this debate, it may be pointed out that the studies of Ffrench-Davis and Teubal coincide in proposing industrial and technological promotion strategies for the region which combine aspects of selectivity and neutrality in policy application. Such strategies must be selective in the sense of concentrating efforts and scarce resources on the development of functionally linked "critical masses" of capacity and specialization. The essential elements in this policy would be long-term orientation, strategic co-ordination and internal consistency, and the result of this could be described as a selective policy. At the same time, the application of the instruments calls for neutrality, in the sense of objectivity, controllability and transparency.

In part III of this book, Jaime Ros analyses the debate on the industrialization process and the role of the State in Mexico. While there is consensus about a number of problems facing Mexican industrial policy (heterogeneity of production, poor sectoral linkages, technological lags,

weakness of the capital goods sector, poor export performance, unequal income distribution), the causes of these problems are open to discussion, and this has given rise to radically different strategy proposals.

On the one hand, this study lays emphasis on the need to correct the distortions in the markets (liberalization), while on the other hand it highlights the need to relieve external constraints through the generation and acquisition of comparative advantages, the ultimate aim of this proposal being the promotion of technological development and the capital goods sector. The author then goes on to make a detailed analysis of the possible industrial policy instruments, their form of application, and their effects. In his analysis of the Mexican case, the author of this study strengthens the arguments in favour of a policy on industry and technology for Latin America, in general consonance with the conceptual framework outlined in the studies by Ffrench-Davis and Teubal. This document, then, contains the Secretariat's considered point of view, as perceived from a Latin American and Caribbean vantage point, on how the debt overhang could be dealt with constructively and consensually. In the absence of better and more equitable management of the problem, it is difficult to see how development can be put back on track in the present decade.

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