

# CEPAL

# REVIEW



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# CEPAL Review

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# 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.

References 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 may not necessarily add up to the corresponding totals, because of rounding.

# Elusive Development: The quest for a unified approach to development analysis and planning

*Marshall Wolfe\**

The efforts to incorporate the 'social dimension' into development policy or to formulate alternative styles of development are constrained not only by suppositions concerning the rationality and benevolence of governments and their accessibility to generalized advice but also by the feasibility of offering practical prescriptions for development without prior agreement on a theory of societal change.

On the basis of an analysis of the project on a unified approach carried out under the auspices of the United Nations Research Institute for Social Development and CEPAL, the author examines the different criteria used to approach these issues —technocratic or participationist, universalist or particularist, etc.— and after rejecting the idea of a universal action model for development, purporting to be suitable for all types of developing countries, he suggests that there is a need for a flexible attitude to development and the application of minimum criteria of acceptability and viability to the internal and external situations of the countries.

Finally, the author outlines a series of dilemmas and challenges for future policy-oriented research and notes that if this is to make a real contribution to human welfare it must maintain a critical attitude to its own terms of reference and the suppositions underlying them.

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## I

### The setting of the 'unified approach' project

In February 1971 a team organized jointly by the United Nations Research Institute for Social Development (UNRISD), the Economic Commission for Latin America (CEPAL), and the Social Development Division of the United Nations Headquarters Secretariat met in Geneva to plan a project in search of a "unified approach to development analysis and planning", with a scheduled duration of some eighteen months. Resolutions approved the previous year by the United Nations Economic and Social Council and General Assembly specified the kind of social-justice-oriented development to be sought.

It is hardly surprising that the team did not produce a 'unified approach' meeting the specifications of the resolutions during its life span or that subsequent efforts by UNRISD staff have not been able to synthesize such an approach from the materials it left behind. As the decade of the 1970s nears its end the shortcomings of current development processes and policies are even more conspicuous than at its beginning, and the range of contradictory attributes demanding 'unification' has widened: the reconciliation of technocratic rationality with popular participation, of continually expanding production with protection of the human environment and resource endowment, of continually diversifying human wants with priority to the satisfaction of basic human needs poses questions that may be somewhat clearer than before, but that are as far as ever from plausible answers. The unified approach project has been one among many attempts to grapple with this recalcitrant reality. In some respects, it has been left behind by other explorations commanding larger resources and starting from more radical challenges to the conventional wisdom of development.

Nevertheless, the unified approach project helped to incubate ideas and slogans that continue to evolve and ramify in sometimes unexpected ways in the international organizations and in different regional and national settings. It may be useful to take a critical look at

its history, not as a source of developmental prescriptions but as a source of insights into the ways in which the quest for such prescriptions has been and is being pursued in the international organizations; at the ideological preconceptions and bureaucratic rituals shaping this pursuit; at the disciplinary and theoretical positions that converge and seek compromises (or ignore each other) in a team such as that undertaking the project; and at the interactions, if any, between initiatives of this kind and the evolution of public policy and public opinion.

In the quest for means of bringing the human future into closer correspondence with professed values there has been a tendency to substitute terminological innovation for conceptual innovation, to reinvent 'practical' solutions that have long been current, and to evade definitions that would reveal lack of consensus on the present nature of human societies and on the nature of the Good Society that is sought. These traits derive from the constraints under which the quest is conducted, particularly within the international organizations, and from the role of development research as an employment-providing industry that encourages its practitioners to attempt a judicious mixture of innovativeness with conformity. The traits are too intimately related to the very processes of conflictive change and masked pursuit of perceived group interests that shape 'development' in the real world to be controlled simply through exposure; in any case, an underground literature of jokes and verses circulating among development practitioners continually does this. Nevertheless, a historical-critical survey of the quest for a unified approach may contribute some useful correctives, particularly because the team undertaking the project struggled against the different forms of evasion and explicitly recognized them.

The publication by the United Nations in 1952 of the *Preliminary Report on the World Social Situation* is a convenient starting point for a sketch of the pre-history of the unified approach. It goes without saying that such a sketch ignores many parallel or overlapping initiatives within and without the United Nations family of organizations. The United Nations resolutions calling for the preparation of

this report assumed that the "world social situation" was a definable reality that could be studied and reported on like the "world economic situation", already the subject of annual United Nations reports.<sup>1</sup> However, the resolutions left implicit the content and boundaries of the "social situation".

The small Secretariat teams charged with preparation of the report could not start from a unifying concept of its subject: it was confronted with scanty and unreliable information for most of the world relating to an unmanageably wide range of questions that might be considered 'social', political pitfalls deriving from the Cold War and the incipient processes of decolonization, and bureaucratic pitfalls deriving from the compartmentalization of 'social' activities between agencies and between units within agencies that was already a feature of the United Nations system. It therefore sought a manageably modest interpretation of its terms of reference: the report would focus on "existing social conditions", dealing only incidentally with "programmes to improve those conditions". The 'social conditions' with which it would deal were to be practically synonymous with 'standards of living'; it would assess these as far as practicable through quantitative indicators. The subject matter was to be broken down into 'social sectors', or 'components' of the standard of living, delimited in practice by the jurisdictional boundaries of the United Nations agencies dealing with these sectors and generally contributing chapters on them. In order to compensate to some extent for the resulting compartmentalization by sectors and worldwide generalizations by sectors, in which the 'social' unavoidably became divorced from reference to specific societies, the report contained chapters on three of the world regions then beginning to be labelled 'underdeveloped': Latin America, the Middle East, and South and Southeast Asia.

<sup>1</sup>Resolutions on social questions have usually originated in the Social Commission (later renamed Commission for Social Development), an advisory body to the Economic and Social Council, and have then been confirmed, with or without modifications, in resolutions of ECOSOC and finally of the United Nations General Assembly.

The United Nations organs that had requested the report received it quite favourably. It dispelled previous doubts whether such a task could be carried to a coherent conclusion, achieved an outside reception unusual among United Nations publications, and originated a series of studies in which successive attempts to go beyond the self-imposed limitations of the Preliminary Report can be traced. These efforts had a good deal to do with the way in which the 'unified approach' was eventually conceived and pursued. They were part of a conflictive evolution of ideas and organizational patterns in the United Nations Secretariat that reflected wider controversies under way in other international agencies, universities, research institutes, and national governments. Personalities, struggles for survival and growth among bureaucratic entities, and stereotypes harboured by each of the parties concerning the others, to be sure, blurred or distorted the reflection, but in very simplified terms, three main positions can be distinguished.

On the one side were the economists who dominated the authorized version of development thinking in the United Nations. They were econometrically trained and wedded to quantifiable laws and models, and some of them saw no reason to take the 'social' into account on any terms. Others saw allocations to consumption and to certain social services as important means of raising the productivity of the labour force. Still others were convinced that human welfare and equity, the values justifying the development effort, required some immediate attention to redistributive measures. However, they could come to terms with the social only through quantification of a kind compatible with their own techniques of drawing up national accounts, constructing models, analysing costs and benefits, calculating production functions, etc. If the proponents of social policies wanted a hearing they must learn the same techniques and provide usable data for them. Their view was that sound development policies, made possible by quantification of all the relevant factors, would eventually benefit everyone; enlightened self-interest would make governments and other societal actors adhere to them.

On the other side were proponents of sec-

toral social activities, dominated in the 1950s by the experience of the United States, then at the height of self-confidence as dispenser of advice and aid to poor or war-devastated countries. The activities in question were directed towards the relief of poverty, the universalization of the basic public social services found in the industrialized countries, the stimulation of community initiative, and the propagation of the norms and techniques of the 'helping professions', in particular social work. The proponents took the position that the forms of social action with which they identified were basic human rights and that the norms and techniques, with secondary adaptations, would be suitable to peoples everywhere. If local resources were insufficient, external aid and training could fill the gap. They were as insensitive as the economists to questions of social structural change and power relationships, but were particularly insensitive to one question central to the latter, that of criteria for the allocation of scarce resources.

The team responsible for the Reports on the World Social Situation found itself in the middle, seeking to understand the preoccupations of the economic quantifiers and the social service specialists and to build bridges between them: increasingly skeptical concerning the pretensions of both, but inhibited in criticism by lack of an alternative frame of reference and by the Secretariat's distaste for internal polemics and 'trouble'.

In their work, the term 'social development' gradually pushed aside 'social situation' with its static connotations, and although it did not receive a more precise definition, it became current as a counterpart to 'economic development'. Its users at this time identified it mainly with measurable improvement in standards or levels of living (the former term referring to norms, the latter to realities) and with government actions directed to this end. Two International Surveys of Programmes of Social Development concentrating on government plans and policies were issued, in 1955 and 1959. Afterwards, successive Reports on the World Social Situation were mandated to include "programmes to improve conditions".

From the beginning the reports encroached on topics to which the economists

could lay a claim, particularly in relation to criteria for the size of allocations to social programmes and the tension between capital accumulation and immediate raising of levels of living. Soon the reports began to discuss the social impact of economic phenomena and vice-versa and the social justifications of economic programmes and vice-versa.

The reports of the 1950s maintained a tone of qualified optimism. The 'social situation' was continually improving according to the statistical indicators, although the improvement was unevenly distributed and "much remains to be done". Governments were continually introducing new and improved social programmes. Practically all governments, by different paths, were advancing towards similar social goals, differentially hampered by misinformation, scanty resources, and the shortcomings of the human agents of their purposes. The interests of 'developed' and 'underdeveloped' countries in a world future of rising levels of living were basically harmonious; aid by the former to the latter was an important reality, however poorly planned and inadequate in extent. The social policies of all countries offered 'lessons' deserving study by their neighbours, although the flow of applicable lessons, and of experts to teach the lessons, might be mainly from the developed to the underdeveloped. The picture was of a predominantly rational and benevolent although highly imperfect world order.

By the early 1960s the reading of the statistical evidence and the evaluation of policies were changing significantly, although the conception of social development remained the same. The 1965 *Report on the World Social Situation* struck a note that was to be repeated with variations up to the present:

"A picture of painfully slow progress in the developing countries emerges at the mid-point of the Development Decade. While some sectors of development (especially education) have continued to fare better than others, and some countries (and parts of countries) have advanced faster than others, it seems clear that, for the most part, the recent effort at development has fallen far short of hopes and expectations. Possibly some of these expectations were unduly optimistic; a more pertinent question is

whether the development efforts, both national and international, have been sufficient - and in the right direction.

"Progress has been limited both by external constraints and by internal political and social realities. Unfavourable trends in trade and problems of external financing have sharply limited the material resources for development in many of the poorer countries, while the implementation of development goals has been hampered in a number of these countries by political instability and dissensions, with frequent overthrow of governments amid charges of corruption; sometimes also by lack of the necessary political will for development; and frequently by persistence of administrative and social structures that fail to provide an organizational basis for change and development or to enlist popular motivation and participation." (p. vii).

In fact, the proponents of social development had begun to envisage development as a complex process of societal change and modernization, in which the 'economic' and the 'social' were separable only artificially and for purposes of analysis. However, their distrust of global theories and models (or their institutional inhibition from choosing any one theory of societal change), together with the kinds of information available to them and the intellectual habits generated by the sectoral organization of the reports and the negotiation of their contents with the bureaucratic guardians of the sectors, continually crowded them back into a narrower vision of social development made up of progress in separate components of levels of living, measurable through inescapably heterogeneous statistical indicators and promotable through equally heterogeneous social and economic programmes. They became sufficiently sensitive to the shakiness of the data base of the elaborate statistical manipulations and models of the economists not to be tempted to follow suit with equally shaky social statistics. They considered but rejected as impracticable the objective of unifying the concept of level of living and measuring 'social development' through a composite statistical indicator comparable to the national income or gross national product. They made some use of the findings of sociological and anthropological field research,

but found in the theories then current in these disciplines no help towards an interpretation of social development matching the imposing structures built around economic development.

Meanwhile, the idea of objective guidelines for allocations of public resources and better mutual support between economic and social programmes attracted the attention of national representatives in the deliberative bodies of the United Nations. During the 1950s various United Nations resolutions called for "balanced economic and social development" and asked the Secretariat for reports pointing the way to such development. The current debate among economists over 'balanced' vs. 'unbalanced' growth strategies contributed to the popularity of the term, although the conceptions of what was to be 'balanced' had little in common. The resolutions conveyed a vision of social and economic 'fields' as distinct realities deserving equal shares of fertilizer.

The interest in 'balance' also had a more concrete motivation. The growth of international technical assistance to 'under-developed' countries was confronting the international agencies with competition for allocations to social and economic programmes comparable to that experienced by the national administrations, and the United Nations deliberative bodies had no generally accepted criteria for bringing order into the competition. International promoters separately urged on the national administrations a bewildering variety of projects and approaches and built up alliances with national sectoral interests. At the same time, many countries were setting up planning agencies, and some of these agencies were receiving formal responsibilities for centralizing technical assistance requests and arbitrating between the different sectoral claims for allocations. It was reasonable to suppose that while useful lessons must be emerging from these efforts, they would also require advances from *economic* development planning techniques to something more comprehensive. Thus, one of the resolutions called for "...studies of actual government experience in integrating social programmes with each other and with economic programmes and in deciding upon size and

priority of allocations in general development plans".<sup>2</sup>

The Secretariat team responsible for the Reports on the World Social Situation, after some years of speaking of 'balance' as a desideratum, finally began to tackle the question systematically around 1957 and presented its conclusions in the 1961 report, which began with the statement:

"From a governmental point of view, the question of balanced social and economic development is to an important extent a question of the pattern of public expenditure. There is no over-all conception or theory of balanced development applicable to the expenditure policy of the economically underdeveloped countries at the present time; there are only fragments of a theory and 'common sense'."

The treatment of the question in the 1961 report maintained the cautiously empirical tone of the above quotation, summarizing a wide range of possible interactions between the 'social' and the 'economic' and of theories concerning such interactions, concluding that "while it is theoretically not possible to state what levels of development in the various social components *should* go with given levels of economic development, it is quite possible to state what social levels *do* go with given economic levels", and that "studies of actual patterns of development can assist the practical process of decision-making... by providing evidence of social levels that can demonstrably be achieved at given levels of economic development [and] by providing evidence of imbalances". (p. 39).

Between 1957 and 1964, thirteen "country case studies" were completed and issued as background documents for the 'balanced development' project. Some of these studies were confident of the prospects for the national variant of planning; others exposed consistent failures on the part of political leaders and planners to foresee the resources that could be mobilized to achieve their purposes or the wider consequences of their efforts. The studies did not reveal any readily transferable techniques

<sup>2</sup>See Introduction to *Planning for Balanced Economic and Social Development: Six Country Case Studies* (United Nations, New York, 1964).

for balancing, and confirmed that juxtaposition of social and economic programmes in a development plan did not insure either their integration or their implementation. A good many of the studies confirmed implicitly that the size of allocations depended on some combination of bureaucratic inertia, the relative strength of organized pressures, the relative persuasiveness of advocates, or the hunches of political leaders, rather than on technical criteria. Moreover, in several of the countries political regimes and plans changed radically even before the Secretariat editors had time to issue the study.

Within the United Nations during the 1960s at least two distinct approaches proceeded, if not hand in hand, in juxtaposition with the attempts to bring the multifarious activities relating to human welfare under a roof of 'social development', measure their progress, and balance them with economic activities. The more influential of the approaches was the elaboration of norms for economic development of the Third World, shaped by the kind of economic thinking described above and symbolized by the first Development Decade. Interest centered on goals for investment, financial and technical flows from 'developed' to 'developing' countries, terms of trade, and, as the expected result, rates of increase in the gross national product. The second and more visionary approach was that of formulation of normative declarations on social and economic rights, and this, undeterred by the chasm between governmental votes for such rights and governmental capacity or will to honour them, reached its culmination in the Declaration on Social Progress and Development approved by the General Assembly in 1969 as resolution 2542 (XXIV).

The approaches of development economists and proponents of social sectoral action evolved during the 1960s, although it is doubtful whether they came to understand each other much better. The economists became more inclined to recognize 'social aspects' and 'social obstacles' to economic development, at least as excuses for frustrated plans and lagging dynamism, and to challenge sociologists for advice on how to insert missing ingredients

and remove obstacles.<sup>3</sup> They became more interested in the contributions of education and health services to the upgrading of 'human resources' and tried to devise methods of quantifying such contributions which, it was hoped, would permit their incorporation into models and plans. Moreover, the dominant econometricians had to take into account more fundamental criticisms of the conventional wisdom from within the economic camp, in particular from Gunnar Myrdal in *Asian Drama* (1968).

The social sectoral groups came to look on the economists as powerful but narrow-minded figures who could ensure adequate attention to social concerns by including them in development plans, once the right arguments were found to enlighten them on the importance of these concerns. Thus, somewhat grudgingly, some of them entered into the game of calculating the economic returns on social programmes and arguing their efficacy for removal of 'social obstacles'. They also began to include in their reports and resolutions demands that their specializations should be integrated into planning 'at the highest level'.

The first Development Decade drew to a close amid disillusionment of several kinds: over the tacit refusal of the 'developed' countries to act on its recommendations and over the consequences for human welfare of the kinds of economic growth and modernization that were taking place. Overall rates of economic growth were not too far from the proclaimed goals and neither were the gains in certain 'social' indicators but, as the 1965 Report on the World Social Situation had indicated, optimistic interpretations of the statistics were decreasingly plausi-

<sup>3</sup>The Economic Commission for Latin America was probably the first economically-oriented United Nations body to try to incorporate (from the early 1950s) a theoretical sociological approach into its thinking on economic development. This approach, under the intellectual leadership of José Medina Echavarría, gradually escaped from its ancillary role of diagnosing social aspects and obstacles and led to a quite different kind of development dialogue. See, in particular, José Medina Echavarría, *Consideraciones sociológicas sobre el desarrollo económico* (CEPAL, Santiago, Chile, 1963) and *Filosofía, educación y desarrollo* (Textos del ILPES, México City, Siglo XXI, 1967); and Adolfo Gurrieri, "José Medina Echavarría: An intellectual profile", *CEPAL Review*, No. 9, December 1979.

ble. The range of future disbenefits and dangers was only beginning to be visible. If what was happening was 'development' it was not an unmixed blessing, and suspicions that it might never become such a blessing were growing stronger, even among some development economists.

The disappointing results of the first Development Decade gave the proponents of the various social approaches and of radical changes in the economic approaches strong arguments for more adequate attention to their concerns in the Strategy to be prepared for a second Development Decade. Studies and meetings of various kinds began to revolve around this objective.

One manifestation, deriving from the pursuit of 'balanced development' and leading directly to the 'unified approach', was the convening of a Meeting of Experts on Social Policy and Planning in Stockholm in September 1969. This meeting was an attempt by the proponents of a broad but pragmatic conception of social development to strengthen their position by forming a common front with critical economists. More than half of the ten experts, selected by the usual criteria of geographical and political distribution, were economists who had already, in various ways, tried to incorporate non-economic factors into their thinking.

One finds in their report, as in all reports of meetings of this kind, echoes of voices with different preoccupations, theoretical backgrounds and terminologies.<sup>4</sup> The report pays its respects to the whole range of sectoral social questions by now traditional in the United Nations, in terms differing little from the Reports on the World Social Situation. Whether the experts had anything new to say or not, they could not leave themselves open to the accusation of neglecting the importance of education, health, etc. The more central propositions of the report, however, constitute an interesting demonstration of the ways in which the problem of rethinking development was generally con-

ceived at the time, and shaped the terms of reference of the unified approach project.

"The purpose of the meeting was to clarify further the role of social factors in development with a view to ensuring their adequate inclusion in development plans and programmes." This proposition and the proposition that "the economic approach to development analysis and planning had to be integrated with a social approach that was different in nature and would be more relevant to the problems of developing countries in the coming decade" were juxtaposed with less simple formulas: "it is most necessary to view the development process as a complex whole, comprising economic elements *sensu stricto*, but also other social, as well as political and administrative, elements. Any design for a development strategy, national or international, must cover all the above-mentioned fields if it is to be meaningful, internally consistent and capable of effective implementation." Governmental and United Nations compartmentalization should give way to a "more unified treatment", in which "the idea of a single social system in which development occurs" should be "taken seriously as its starting point".

Misleading dividing lines between economic and social phenomena, and between economic and social development, have been "due in part to the rather narrow approach to the development process characteristic of past thinking in economics, which relied heavily on simplistic econometric models with highly aggregated variables", and in part to governmental and United Nations bureaucratic compartmentalization. An "over-emphasis on economic growth rates of production has been based on the apparent ease of quantification in the concept of the national income or gross national product of developing countries". "The dominance of economists among the social scientists, and the earlier development and easier quantification of their concepts, has meant that certain non-market aspects—those inappropriately labelled 'social'—have been neglected in approaches to development." The experts recommended that those aspects should be dealt with as 'neglected areas' rather than as 'social factors', but did not follow this

<sup>4</sup>The Report of the Meeting of Experts on Social Policy and Planning was published in the *International Social Development Review*, No. 3, United Nations, New York, 1971, pp. 4-14.



recommendation in the remainder of their report.

The report endorsed one version of the 'dualist' label around which a great deal of ideological polemics and semantic confusion had focussed during the 1960s: "...a meaningful approach to development planning must take account of the dualist structure of many developing societies —dualist in terms of the difference between modern and traditional sectors, differences within those sectors and differences between those participating in development and those left behind or on the margin. ...The fact that development either leaves behind, or in some ways even creates, large areas of poverty, stagnation, marginality and actual exclusion from social and economic progress is too obvious and too urgent to be overlooked."

The report came down to earth by singling out one broad problem area as central to an acceptable development strategy: "The major problem for the Second Development Decade is likely to be unemployment and under-employment. ...In the absence of vigorously enforced employment policies, the grim prospect of the Second Development Decade is one of rising unemployment, accompanied by increasing concentration of the worst aspects of poverty in the cities, and growing gaps in the level of welfare among social groups and regions in individual countries, as well as growing gaps among countries. All this can take place with rates of increase in national income in most developing countries as high as or higher than the rates achieved by the technically advanced countries during their periods of industrialization."

The report juxtaposes the technocratic vision of development engineered from the top and the participationist vision of development emerging from popular initiative, but shows more affinity with the former: in the past, the analysis of social development processes and policies has focussed on "social development objectives" and on "social obstacles to development". The processes and policies should be viewed also "in terms of engineered social change... policies could and should be devised so as to activate wider social strata to increase their participation in the development pro-

cess". A major prerequisite for development is "peaceful radical social change, as rapidly as possible". "Peaceful domestic movements committed to rapid change should be permitted to flourish and, whenever possible, should be supported if they would help to promote a sense of participation and social engagement." However, for the social planner, it would be important "to obtain knowledge and guidance as to whether... radical changes [in attitudes] can be more easily made than a succession of small changes".

Finally, "to achieve effective development planning, all planners should think in terms of all goals".

The above quotations, together with other formulations in the report, suggest certain papered-over differences between 'experts' as to the nature of the 'social', but they also indicate a kind of compromise consensus on certain key suppositions that had already come under question during the 1960s. In miniature, they point to a number of conceptual problems that were to plague the later quest for a unified approach:

(i) The report assumes that a common process identifiable as 'development' is under way in the so-called 'developing' countries. This process is almost by definition, good and necessary, although its present shortcomings, from the standpoint of human welfare, may be more easily demonstrable than its goodness. These shortcomings can be attributed in large part to deficiencies in government policies and these in turn to the dominance of economic planners with over-narrow conceptions, using inappropriate tools. While the report voices many of the criticisms of current processes of economic growth and dependent modernization that were to become more insistent during the 1970s, it treats these as remediable defects. It does not entertain the possibility that the defects are inseparable from the functioning of the current international order, or that this order is basically incompatible with enhancement of human welfare over the long term. Still less does it entertain the possibility that 'development' is an inspirational myth, originally used to justify the attempted reproduction throughout the world of certain patterns for the organization of production characteristic of

the recent past of parts of Europe and North America, then overloaded with additional attributes to reinforce its supposed desirability and inevitability.

(ii) The report (probably in part because of the terms of reference of the meeting) places unlimited confidence in the potential capacity of planners to take everything into account in an integrated fashion and reveal to policy makers the one best way to do whatever they want to do. It assumes that development can be largely what planners and policy makers make of it, and that if sufficiently enlightened as to the importance of 'social' or neglected factors they can make of it something much better than heretofore. There is no trace of the various old and new disciplinary and theoretical positions that were questioning human capacity to plan comprehensively so as to reach predetermined ends and were (sometimes) finding reasons for moderate optimism in the market, in the 'hiding hand' stimulating would-be change agents by concealing difficulties from them, in the interplay of democratic political institutions, or in the acceptance and informed manipulation of 'limited rationality' in bureaucratic organizations.

(iii) The report does not entertain the possibility that the international organizations and governments to which it addresses itself, deriving from the power structures responsible for the iniquities to which it points, might be neither able nor willing to undertake radical changes, and that, indeed, they might look on their own requests for such reports as a harmless ritual testifying to their good intentions. The report refers to the inadequacies of governments only in terms of Gunnar Myrdal's concept of the 'soft State' with "insufficient power or will to carry out a number of desirable policies", and implicitly supposes that a 'hard State' could have such power and will. Governments advised by the right kind of planners are supposed to promote rapid and radical but peaceful social change and are entitled to *permit* or *support* social movements according to their informed judgement of the movement's peacefulness and its potential helpfulness in promoting "a sense of participation and wider social engagement". "Participation in the development process" of "wider social strata" is

to be achieved through policies of "engineered social change". From the vantage point of the end of the 1970s this faith in the rational benevolence of hard States engineering peaceful radical social change so as to enable the "wider strata" to participate in a development process, whose adaptability to meeting their needs instead of excluding or exploiting them is taken for granted, seems the most ingenuous aspect of the report. In the context of the end of the 1960s, however, it constituted a cautious recognition, tailored to the intended public of the report, of the revolutionary criticisms of existing social and political structures that were then arising on all sides.

The United Nations Economic and Social Council and General Assembly approved the report of the experts in 1970 and decanted it into resolutions giving instructions to the Secretariat for further work.<sup>5</sup> These resolutions affirmed "the need for a unified approach to development analysis and planning which would fully integrate the economic and social components in the formulation of policies and programmes at the national and international levels". They laid down specifications, deriving from the report of the experts, for the kind of 'unified approach' wanted, which, they said, must "include components" designed:

(a) To leave no section of the population outside the scope of change and development,

(b) To effect structural change which favours national development and to activate all sectors of the population to participate in the development process,

(c) To aim at social equity, including the achievement of an equitable distribution of income and wealth in the nation,

(d) To give high priority to the development of the human potentials, including vocational technical training and the provision of employment opportunities and meeting the needs of children."

The above components are to be "borne in mind in development analysis and planning processes, as well as in their implications, according to the particular developmental needs

<sup>5</sup>The *International Social Development Review*, No. 3, 1971, contains the text of these resolutions.

of each country". The Secretary-General is to submit a report on the unified approach at the "earliest possible date". The General Assembly resolution, more specifically, requests him to "evolve methods and techniques for the application of a unified approach to development, to be put at the disposal of Governments at their request".

During the same year, the General Assembly approved an "International Development Strategy" for the Second Development Decade (the 1970s). The Strategy was prepared mainly by the United Nations Committee for Development Planning, a permanent advisory body composed of eminent economists set up in 1966, whose preliminary work for the Strategy had been criticized in the report of the social policy experts as insufficiently human-welfare-oriented. The report of the experts was apparently not brought to the attention of the Committee for Development Planning, for whatever reason. Thus, the 'unified approach' resolution and the Strategy reached and passed through the General Assembly by separate channels. The Strategy, like its predecessor,

devoted most of its content to targets for economic growth, trade and financial transfers. However, the spirit of the times ensured that it would find room not only for a series of conventional and vague social sectoral recommendations ("developing countries will make vigorous efforts to improve..., will adopt suitable national policies..., will take steps to provide...", etc.) but also an affirmation of the need for a unified approach somewhat stronger than that of the resolutions deriving from the experts' report:

"...qualitative and structural changes in the society must go hand in hand with rapid economic growth, and existing disparities—regional, sectoral and social—should be substantially reduced. These objectives are both determining factors and end-results of development; they should therefore be viewed as integrated parts of the same dynamic process, and would require a unified approach."

The 'unified approach' had thus followed 'balanced development' into the international repertoire of aspirations that might mean many things to different men.

## II

### Methodological and institutional constraints

The preceding pages have suggested certain methodological and institutional constraints in efforts by United Nations bodies to deal with the 'social' or with 'development':

(i) The problem to be studied was normally defined through a resolution deriving partly from past reports presented by the Secretariat and partly from the interest and points of view of the representatives of governments in the policy-making bodies. In practice, governments rarely tried to impose a coherent ideological formulation through their representatives; they were generally content to seek recognition of their own achievements, refute criticisms, and occasionally score off adversaries. In the case of the 'social', which was more or less marginal to the central preoccupations of the governments, the formulation of problems

by the Secretariat, modified by personal interests and opinions of some representatives, usually prevailed, as long as it was clear that such formulations did not commit the governments or the United Nations to additional expenditures.

(ii) Definition of the problem normally preceded a request to the Secretary-General, as the person ultimately responsible for the work of the social units of the Secretariat, to produce a report containing 'practical' recommendations within a fixed period, determined by the calendar of future meetings of the policy-making bodies and by the need to allow ample time for prior translation and distribution of documents. During the 1970s timetables were also increasingly influenced by provisions for periodic review and appraisal of progress

within the Second Development Decade and by the international 'years' focussed on broad social problems. The practical recommendations were to be addressed to governments, on the supposition that they would be willing and able to act on prescriptions couched in very general terms. The conventions of the exercises permitted considerable latitude in criticism of 'some governments', 'many governments', etc. as inefficient, corrupt, short-sighted, or compartmentalized, as long as these traits were treated as shortcomings remediable through good advice and countries were not identified. Hypotheses that the problems addressed were not of a nature to be solved by the planning and actions of governments of whatever kind, or that typical existing governments would be unable to respond appropriately because of the character and the objectives of the forces dominating them were ruled out *a priori*.

(iii) Research techniques, beyond the compilation and synthesis of available published information, followed a limited range of paths, usually specified in the governing resolution:

(a) A questionnaire might be circulated to governments asking for their views on the problem and their methods of dealing with it. This technique has been used in earlier stages of social policy studies, and was resorted to again later in the quest for 'practical applications' of the unified approach, but did not enter into the work deriving immediately from the 1970 resolutions. The use of questionnaires had the advantage of freeing the Secretariat from responsibility for producing solutions to the more controversial questions, but had the disadvantage of eliciting incorrigibly heterogeneous materials, generally from a small minority of member governments, that had somehow to be 'taken into account' in reports.

(b) 'Country case studies' might be prepared through national institutions, individual consultants, or members of the Secretariat. This technique offered a greater likelihood of obtaining fresh information and ideas in a relatively coherent form. However, the conventions demanded that the countries to be studied be selected for a maximum of geographical and political diversity, and selection depended on too many extraneous factors to permit clear def-

inition of what the 'cases' were supposed to demonstrate. Budgetary limitations and short deadlines (since the case studies were generally supposed to contribute to reports due within less than two years) restricted the selection of those responsible for carrying them out and hampered the consultations and revisions needed for comparability and critical analysis. Typically, the reports made only slight use of the country case studies because they were completed after the deadline, because changes in the circumstances of the country left them quickly out of date, or because they presented an unassimilable mass of detail.

(c) The governing resolution usually envisaged consultations with and contributions from appropriate specialized agencies and other units of the United Nations family having social responsibilities (ILO, FAO, UNESCO, WHO, UNICEF, etc.). The consultations might or might not be perfunctory, but overlapping jurisdictions and sensitivity to criticism of certain dogmas and programmes introduced additional inhibitions into the preparation of broad, ideally 'unified' reports.

(d) At some stage in the response to requests for reports and recommendations, a 'meeting of experts' was practically obligatory. The conventions demanded that the Secretariat select the experts, like the countries for case studies, for maximum diversity, within limits imposed by the Secretariat's contacts and information concerning their qualifications and availability. In relation to broad topics such as social policy, balanced development, or the unified approach, the term 'expert' was stretched far beyond its usual sense. The participants in meetings might be 'experts' in many relevant specializations, but hardly in a field yet to be explored and mapped. As time went on and meetings multiplied, the repeated participation of planners and scholars undoubtedly contributed to a common understanding that has flowered in the formulations of 'another development' during the 1970s. The role of the 'experts' supposed to evaluate and improve ideas presented by the Secretariat, however, was ambiguous. If the experts exercised it vigorously they exposed their own differences of background and viewpoint and complicated the Secretariat's task of producing a coherent

'practical' report. The more deeply an expert was committed to a comprehensive theory or strategy of his own, the less fitted he would be to enter into an unavoidably eclectic exercise.

In combination, the instructions and techniques here outlined seemed to rule out the selection or construction of a single theory of social change on which to base an integrated strategy for social development. The instructions and techniques ensured that heterogeneous, incomplete, and erratically selected information would have to be taken into account; that representatives of different points of view and different terminologies would have to reach a least common denominator, or that their report would have to incorporate all proposals not definitely unacceptable to other participants nor self-evidently incompatible.

Once a grant from the Netherlands (later supplemented by grants from Canada and Sweden) made it possible to undertake such a study outside the routine of periodic world social reports, it was decided in New York to centre the study of a "unified approach to development analysis and planning" in the United Nations Research Institute for Social Development (UNRISD), an institution less bound by constraints and conventions than the Secretariat itself, but with a staff and work programme deriving historically from the concepts of level of living, social development and balanced development that had evolved in the Secretariat, and accustomed to similar research methods, in particular the pursuit of information on broad topics through country case studies.

The core of the research team that first met in February 1971 and engaged in discussions of preliminary drafts and conceptual papers during the greater part of that year was made up of the Director of UNRISD, who had taken a leading part in the evolution of United Nations thinking since the *Preliminary Report on the World Social Situation*; the Chief of the Social Development Division of the Economic Commission for Latin America, where more politically-oriented and conflict-oriented lines of thinking had been pursued for some time; an economist with experience in the plan organization of France and in the study of development indicators; a specialist in the study of

decision-making processes; and an economist who had written extensively on development and served as a policy and planning consultant in different parts of the world. Other persons joined the team during the course of the year, contributed conceptual papers, or entered into discussions with the team: directors of national planning agencies, consultants on development planning, members of the United Nations Committee for Development Planning, specialists in regional planning, in human geography, in econometric techniques, etc. Their function was to cover questions outside the competence of the core team but relevant to a 'unified approach'.

Even the core members of the team had other responsibilities in the Secretariat, in other UNRISD research projects, in academic institutions, and as national development planners and consultants. It was evident from the beginning that a team of this kind, with less than two years at its disposal, would not be able to reach a theoretical consensus nor produce a comprehensive set of prescriptions for unified development within that time. Instead, the team entertained the more modest hope of reaching agreement on certain central concepts, clarifying theoretical or disciplinary sources of divergence on others, stimulating new ways of thinking about development, and producing two kinds of report: first, a synthesis of central issues and unifying concepts, along with a few cautiously 'practical' guidelines, and second, a report covering in some detail all the aspects the team considered relevant and important, in chapters to be written by individual team members and consultants, reflecting their different points of view but given a reasonable coherence through discussions with the team as a whole.

The deadline for the first report was October 1972, this date being determined by the need to submit a report of the next session of the Commission for Social Development. The deadline for the second report was relatively elastic, but it was hoped that it would be completed by the end of 1973.

In practice, budgetary limitations and other commitments of the team members made it impossible to continue beyond 1971 the dialogue that had begun, and the texts that

emerged remained too diverse in their 'approaches' as well as their styles to add up to a publishable second consolidated report. In later stages, a series of individuals struggled to impose order on a mounting accumulation of disparate materials.

The team devoted a good deal of attention during 1971 to plans and negotiations for a series of studies of national experience, and eight such studies were eventually completed by national institutions or consultants, although only one of them was ready by the intended deadline of May 1972, so that they could be used only in a very limited way in preparation of the project's first or preliminary report. UNRISD eventually issued five of them in mimeographed texts. The specifications for the studies gave those carrying them out considerable latitude for pursuing aspects they considered nationally important, but sought a measure of uniformity by asking them to discuss the relevance to their national situations of certain preliminary hypotheses of the project, in particular, that of the emergence of a "triple crisis" in development planning: namely, in the basic philosophy or final goals of such planning, in its links with policy formation and decision-taking, and in the adequacy of its techniques, mostly of economic origin. Half the studies were carried out by economists, who were often the only candidates prepared to take a global view of what was happening in their countries in the name of development.

In spite of the small number of studies, the differences in their content and in the approaches of those carrying them out deserve some attention as indications of differences in the real world of national societies to which the quest for a unified approach addressed itself.

Two of the studies dealt with Asian countries (Philippines and Sri Lanka) which had extensive and bureaucratized social programmes, formal planning mechanisms and competitive party politics, with social service, consumption subsidy, job creation, and public works accomplishments and promises critical to party success in periodic elections. These studies were carried out collectively by institutions—a university school of public administration and a private socio-economic research institute staffed largely by persons having

previous experience in the national planning system. They documented in detail the functioning of programmes and the deficiencies of co-ordination and overall policy guidance. Under conditions of political competition for limited objectives, bureaucratic compartmentalization of social and economic activities, and diffuse dissatisfaction at the malfunctioning of the system, but with no immediate prospect of major changes in the distribution of power and the expectations of different interest-groups in the societies, these studies could make various practical suggestions for improvements in policy formation and execution, but offered no hope of a radically different 'unified approach'. Both texts indicated that the contradictions in the functioning of the societies were likely to become more pronounced in the future but that the deterioration probably would not overcome their basic stability for a long time. Meanwhile, planners had to try to understand political realities, adapt their proposals to such realities, and help to educate political leaders and public opinion.

One study dealt with another Asian country, Iran, that was undergoing rapid modernization under autocratic leadership, with resources at its command vastly larger than those of most 'developing' countries, with formal planning machinery, but without open channels for the competition of interest groups and political movements. This study was carried out by a political scientist in contact with the plan organization. Its dominant note was intense frustration of several kinds: first, at the high social costs and inequity of the modernization process; second, at the limited and erratic use made by the 'patrimonial ruler' of the advice of technocrats and planners; third, at the precariousness of societal stability resting on minorities only 'cynically committed' to the system, with the majority excluded and resentful. Here a certain unification of policy was present at the top and bureaucratic, political, and financial constraints were less formidable, but the human welfare objectives of the unified approach did not have first priority, socially-oriented planning could not depend on a hearing, and transmission channels between the leadership and the society functioned poorly.

Two studies were carried out by individual economists on newly independent African countries (Kenya and Togo) with formal planning machinery inherited in part from the colonial past and in process of adaptation to new policy objectives, with political competition open but not intense. Here the note is one of cautious down-to-earth optimism: while policy formation has been erratic and planning has not been very effective owing to poor information, faulty administrative machinery, and scanty resources, nevertheless gradual improvement in planning, adjusted to the capacities of the State offers a good deal of hope as a means of making policy more coherent and more equitable. A radically different and ambitious unified approach, however, is hardly advisable and probably impracticable because of its demands on information and scarce qualified human resources. A study, also carried out by an economist, of Trinidad and Tobago in the Caribbean sub-region likewise focussed on the modest potentialities of planning as a force for rationalization in a very small country emerging from colonialism with an excess of bureaucracy, intense factionalism, and no clear political vision of the national future.

Two studies, carried out by individual political scientists, dealt with Latin American countries (Chile and Peru) that were then experiencing semi-revolutionary changes (since frustrated) within settings of considerable uncertainty concerning the real distribution of power and the capacity of the political regimes to transform the system of production and the distribution of incomes, wealth and consumption while simultaneously presiding over the emergence of new forms of political participation of the 'marginalized' masses. These studies described the national planning mechanisms and the current social and economic programmes, but their attention lay elsewhere. Unlike the other studies mentioned above they could not treat the political and economic systems and the distribution of power as constant constraints on policy and planning, for better or worse. In Chile and Peru initiatives were under way (under the quite different auspices of a mainly Marxist-Socialist coalition of political parties and of a nationalist military govern-

ment) to transform the systems and structures, against the opposition of other combinations of forces. Under these conditions, the problems of planners seeking to improve their methodologies and exert more influence over political leaders and sectoral bureaucracies receded into the background, although both regimes were favourably disposed toward planning. The questions in the foreground were the character, degree of coherence and relative strength of the forces supporting and opposing structural changes in the control of land, industry and mineral resources; their tactics and ability to mobilize major sectors of the population for or against these changes; their ability to carry out the changes with a minimum of efficiency under unavoidably conflictive circumstances; the possibilities for compromises or shifts in political alliances; the compatibility of the changes with open political processes and the observance of laws generally weighted against them; the alternatives for future political regimes and forms of popular participation if the changes accomplished their immediate purpose; and the finding of ways to enlist international support and neutralize the opposition of certain governments and transnational enterprises.

In these studies the differing preoccupations of the executing institutions and individuals seem to have coincided with real differences in the national situations confronted. If the project team had not dispersed by the time they were completed, their comparative examination could have provided a valuable corrective to the normative, universalistic and technocratic bias given to the project by its terms of reference. They suggested that possibilities for human-welfare-oriented rationalization of policy were real but limited; for all their differences none of the studies could envisage short-term removal of the stumbling blocks to a unified approach: more likely, the problems would evolve through the interaction of political and economic factors into other problems, not necessarily less formidable. Would-be agents of human-welfare-oriented development had to seek opportunities within these processes, rather than devise ideal prescriptions.

### III

## Differing approaches to a unified approach

Two documents set forth the elements of consensus reached in the 'unified approach' project while it retained a measure of interdisciplinary teamwork: (i) *Report on a Unified Approach to Development Analysis and Planning: Preliminary Report of the Secretary-General (E/CN.5/447)*, 25 October 1972; this report was prepared by one member of the team and amplified and revised on the basis of comments from other team members, and (ii) *Report of the Secretary-General on the Expert Group Meeting on a Unified Approach to Development Analysis and Planning* held at Stockholm from 5 to 10 November 1972. The majority of the team members participated in this meeting, along with a small number of other economists, sociologists, planners and representatives of United Nations agencies. Both documents were presented to a session of the Commission for Social Development in February 1973. Because of the Commission's deadline the *Preliminary Report* could not be further revised to take into account the comments of the 1972 Expert Group.

A 'unified approach', according to the *Preliminary Report* "needs to make use of two complementary ways of looking at development: (i) development as a perceived advance toward specified ends based on societal values; (ii) development as the system of interrelated societal changes that underlies and conditions the feasibility of the advance".

"The first sense assumes human capability of shaping the future for human ends. It also implies that the existing society has the right and the ability through general consensus or through agents claiming to represent the best interest of the society, to make choices and enforce sacrifices in the name of development.

...The second sense assumes that development is an intelligible phenomenon susceptible to diagnosis and to objective propositions concerning the inter-relations of factors and the probable wider consequences of change in or action on key components of the 'system'."

"From the standpoint adopted here development is not a single uniform process or dimension of change and it cannot be assumed that 'development' means the transformation of the countries now labelled 'developing' into replicas of countries now labelled 'developed'. All national societies will be developing or trying to, during the foreseeable future, and at the same time will be trying to cope with the contradictions and disbenefits that arise from their development processes. There is no reason to expect their efforts to lead to uniform futures, or to final resolution of their struggles in a blessed state of 'being developed'."

The *Preliminary Report* went on to assert that "realistic discussion of the possibilities of more rational and effective action by human agents requires recognition of the existence and unavoidability of different *styles*, that is, different combinations of ends and means applied to different real patterns of growth and change. It also requires the taking into account of two different kinds of limitations on styles of development—limitations in terms of internal coherence and feasibility, and limitations in terms of compatibility with human welfare and equity values."

The *Preliminary Report* distinguished between the "real style of development" ("what is actually happening in a given national society") and the "preferred style of development" ("what the national political leadership, the planning agency, or some other significant political actor wants or expects to happen"). It rejected the possibility of a "detailed universal set of specifications for development or particularized 'definition'", but proposed a "minimum criterion" for assessment of styles of development: "the extent to which a style of development enables a society to function over the long term for the wellbeing of all its members". Assessed by this criterion, certain styles might be viable but not acceptable and others acceptable, but not viable.

The criterion implies choices, explicit or



implicit, with regard to: "(i) the extent and nature of national *autonomy*; (ii) the extent and nature of popular *participation*; (iii) the emphasis given to *production* in general, to specific lines and techniques of production, incentives, and forms of control over the means of production; (iv) the *distribution* of the fruits of development and mechanisms for redistribution; (v) the encouragement or discouragement of specific forms of individual or collective *consumption* of goods and services; (vi) the extent and nature of protection of the human environment, and (vii) the extent and nature of protection of human relationships contributing to solidarity, security, self-realization and freedom. These choices are complexly interdependent. If they are mutually contradictory beyond a certain point, the style will not be viable. If the choices are made in isolation from one another the probability is that they will be mutually contradictory to a dangerous degree."

After elaborating on the implications of these areas of choice, the *Preliminary Report* proceeded to sketch a typology of real national styles of development, then to propose certain strategic orientations for policy and certain approaches to developmental decision-making and diagnosis.

The differing approaches that we shall now discuss emerged not only during the period of team activity but also in subsequent attempts to synthesize the materials into a 'unified' final report and in debate outside the confines of the project. One might conclude that each member of the team began and ended with his own 'unified approach', more or less compatible with the positions summarized above and more or less modified by exposure to other positions, but retaining its premises deriving from the participant's ideology, discipline, and previous experience. Meanwhile, the international scene continually threw up additional major problems, approaches and slogans. The 1970s saw, instead of progress toward consensus on a 'unified approach', a continual diversification of interpretations of development, continually more ambitious international declarations aspiring to reconcile them, and also mounting criticism of 'development', from several quite different viewpoints, as an outworn and misleading myth.

The following pages do not try to reproduce the positions of participants in the unified approach project. Rather, the intention is to use these positions as a springboard towards a discussion of the different approaches that have continually confronted one another and entered into compromises in the international debate, whether as part of the project or not. Some of these positions were more strongly and typically represented in the project than others; a few of them were formulated more explicitly than before during the course of the project; some are more ambitious and exclusive in their explanatory and operational claims than others; some are simplified versions of positions that the same person might emphasize at different times without any necessary inconsistency. Some of the participants whose contributions were most important to the measure of consensus achieved in the *Preliminary Report* cannot be identified with any of the 'approaches'. All of them are, in one way or another, interventionist, the only influential approach to development not represented was *laissez-faire* or reliance on market forces.

### 1. *Development economics re-examined and broadened*

This approach assumed the centrality and at the same time the insufficiency of economic development theories and tools for diagnosis and planning applied to market or mixed economies. Economics offered the closest approximation to a coherent view of development, but it had not yet 'taken into account' all the relevant factors. The approach also assumed the centrality of economists as advisers to governments. The 'unified approach' must therefore be presented to economists in terms they could accept, incorporate into their methodologies, and communicate to political leaders having their own preoccupations and limitations of vision.

The approach had several main components:

(i) An interest in sociological and psychological diagnoses of 'social obstacles to development' or 'social preconditions for development'. The supposition was that 'traditional'

values, attitudes toward work and saving, class or caste barriers to mobility, child-rearing practices, extended family ties, etc. stood in the way of a development process requiring accelerated capital accumulation and investment, continual technological innovation, formation of a disciplined and qualified labour force, and predictable responsiveness of the population to market incentives. This development process could progress faster and more smoothly once the social experts diagnosed the obstacles and prescribed ways of removing them.

(ii) An interest in educational, health, social security and other social sectoral programmes, because of their claims on public resources and their contribution to economic development through the improvement of 'human resources'. Quantification of this impact and calculation of the ideal size of allocations to social programmes were considered key desiderata in a unified approach, although difficult and perhaps impossible to achieve.

(iii) A preoccupation with the measurable aspects of social justice and improved levels of living as the legitimate ends of development. The economists in question had already abandoned the expectation still current among many of their colleagues that these ends would eventually and more or less automatically derive from the maximization of investment and rates of increase in the national product. The most obvious disbenefits of economic growth in developing countries were increasing disparities in levels of income and consumption; new patterns of impoverishment and insecurity; and the incapacity of the economies to offer productive employment to a large part of the labour force. Therefore, the approach affirmed employment policies, income redistribution policies, and agrarian reform policies to be essential components of a unified approach.

(iv) A preoccupation with the improvement of quantitative methods for reconciling multiple objectives and guiding the selection of development projects. The proponents of the approach felt most at home with quantitative methods, and such methods responded to the political as well as planning demands made on them, but they could not help being aware of the fragile factual basis of their calculations. Thus they hesitated between the pursuit, on

the one hand, of continually more elaborate and data-demanding techniques for the construction of composite development indicators (preferably convertible into monetary terms) for complementing the gross national product; quantifying improvement in levels and distribution of welfare; calculating 'returns' on social investments, etc.; and, on the other hand, techniques, such as shadow-pricing, which permit an ordering and rational choice between alternative allocations with a minimum of data. In the last analysis, quantification might function, and be necessary, more as a heuristic device or a means of convincing the laity than as a reliable reflection of reality.

During the 1950s and 1960s variants on this approach had evolved from a more exclusively econometric position through continual discussions in the international agencies and elsewhere, as was pointed out above in relation to the prehistory of the unified approach. In particular, this trend had inspired a series of intergovernmental conferences on education and development, co-sponsored by UNESCO and the regional economic commissions, in which national educational authorities and authorities for economic planning and budget preparation were brought together with the aim of convincing them mutually that education should be planned so, as to qualify 'human resources' for economic development and that education should receive a larger share of public expenditures.

It was an approach that came naturally to economists deriving mixed sentiments of achievement and frustration from their experiences as development planners and consultants. It was also congenial to many social sectoral specialists, in spite of their uneasiness at submitting to the predominance of economic justifications for social programmes. It gave them a means that they lacked of ordering coherently what they were doing and also a more sympathetic hearing from circles believed to have a decisive influence over the allocation of resources.

## 2. *Development planning rehabilitated and perfected*

This approach derived from the preoccupa-

tions of planning practitioners in various 'developed' countries with market or mixed economies and in a much larger number of developing countries. During the 1950s and early 1960s the number of countries possessing planning agencies and preparing fixed-term plans has increased manifold. Even governments having no interest in such planning for themselves began to favour it for the 'developing' countries, if only as a means towards more effective use of their 'aid' to such countries: the support by the United States of ten-year economic and social development plans as a condition for aid under the Alliance for Progress is the most conspicuous example. The colonial powers had also left a heritage of 'development plans' and some rudimentary planning machinery in many of the newly independent countries. Courses training 'planners' to fill the posts opened in the new planning agencies proliferated, and a body of professional planners with a vested interest in the success of planning came into being. In the training of these planners economic theories and techniques predominated, but it also included other kinds of planning with their own history, in particular physical planning associated with the disciplines of architecture and engineering. Educational and health planning began to develop as distinct specializations, and in the other sectors of social action the acquisition of planning techniques and staff of their own began to figure at least as aspirations.

While the preoccupations of the planners coincided to a large extent with those of the development economists described above, they were more concerned with the legitimacy of their own function, their ties with politics, and the nature and effectiveness of the transmission between planning and application. By 1970, experience had caused a large measure of frustration and insecurity to mingle with the earlier claims for planning. The relevance of formal development plans was beginning to seem rather doubtful. The planners could not help seeing that their prescriptions were being followed only sporadically, and that the results of such partial planning deviated widely and unpredictably from their objectives and their projections. Planners and economic theorists had much less influence on the allocation of

public resources than did alliances of industrial and construction enterprises, engineers, and politicians, all of them (for differing reasons) wedded to large, capital-intensive highly visible, technologically advanced projects, however disruptive these might be to the environment and the livelihood of the people they were supposed to benefit. Moreover, in the context of radical challenges to power structures at the end of the 1960s, a good many planners could no longer accept the role of neutral technicians at the service of the State behind which they had sheltered themselves when planning first began to be institutionalized. Should they not serve the people rather than the State? But if so, how, since the State was their employer?

One reaction was to propose broader and more ambitious roles for planning. This approach dominated Part III of the *Preliminary Report*, which posed the following conditions for effective planning:

(i) "... planning should be a continuous activity, that is, an effort at rationality applied to various phases of the one process comprising the preparation of decision-making, its implementation, the control over action taken and the eventual revision of the orientations taken." Planning should not "be confused with the periodical elaboration of a document called the 'plan'".

(ii) "The second condition of effective planning is the diffusion of planning activities in the whole of society.

... First, planning activities should be extended to all central government departments instead of being confined to a 'Ministry of Planning' or 'Office of Planning'. ... Second, planning activities should be diffused to other administrative levels besides to central government." Third, the private sector should be drawn actively into planning, with "a reciprocal flow of techniques" between private enterprise and public sector planning.

(iii) Planning should be a "diversified but coherent activity" involving the co-ordinated utilization of financial planning, allocative planning, physical or spatial planning and institutional planning.

(iv) Planning should function as "part of the real decision-making process", and thus

should be recognized as a political activity. The idea that planning is a neutral technical exercise is a myth, although it may be a useful myth for planners under some conditions. "Plans always express choices, models make assumptions about what are to be accepted as constants (constraints) in the socio-political environment, values intrude into the choice of means as well as ends, techniques such as cost-benefit analysis rely on value judgements, and indicators, whether 'economic' or 'social', express ... some theory or interpretation of the functioning of a society." Ideally, there should be a "bringing-together or fusion of training and interests" of decision-maker, administrator and planner.

Effective planning supposes "the diffusion of an attitude or approach of rationality or efficiency at all levels of decision-making". It supposes a "strategic approach", in which key issues are selected for an "intensified planning effort", and an "innovative approach" "in the definition and organization of resources, the kinds of objectives and means chosen and their interrelations, in the manner of evaluation and execution of programmes and projects and in the general orientation of planning offices and administrators".

In fact, this approach seems to envisage a future social order in which planning becomes an activity and source of guidance as pervasive as religion in some other social orders, with professional planners functioning as teachers and prophets, but with the laity as well continually learning and applying more comprehensive planning techniques and resolving their unavoidable conflicts of interests and values by integrating their plans.

The next two approaches to be discussed implicitly negate this vision of planning societies, although the vision itself might incorporate them as legitimate facets of the all-encompassing activity of planning.

### 3. *Pragmatic social and economic ameliorism*

This approach gave priority to the identification of policies and measures that have worked (in the sense of demonstrably enhancing human welfare); to the consideration of how they might be made to work better; and to pragmatic

criteria for their combination into mutually supportive packages. It derived naturally from the 'programmes of social development' side of the *Reports on the World Social Situation*, which, in principle, identified programmes that were working in the expectation that they would provide 'lessons' for the governments of other countries confronting similar problems (in practice, the information available to the compilers of the Reports had been too scanty and the political constraints too confining for them to state with any confidence whether programmes they described, mainly summarizing official documents, really worked or not). The same approach dominated United Nations technical assistance in social questions, in which 'experts' set forth to apply methods learned in their home countries, on the supposition that they would be able to adapt such methods to the political and social setting of the country to be advised (in practice, as often as not, the experts really set forth to advocate methods that they had never been able to apply in their home countries).

The approach of pragmatic social and economic ameliorism had met with harsh and obvious criticisms over the years, but its proponents had plausible arguments on their side. After all, throughout the world human-welfare-oriented and human resource-oriented programmes of many kinds were continuing to appear and expand. By now they accounted for sizeable shares of public expenditures and of the national product in most countries, irrespective of their structure and level of production, their political system, or their distribution of power. Presumably some of them worked better than others, and comparative study could throw light on the reasons for this and on ways of raising the general level of effectiveness. Presumably some rough criteria could be established for the *kinds* as well as the *amounts* of social sector activities appropriate to countries at different levels or stages of development. Arguments to the effect that such improvements could be no more than palliatives in the absence of a unified theory of development, or profound structural changes, or a transformation of values, or truly comprehensive planning, or social revolution, might be excuses of intellectuals for not undertaking the

painstaking and unglamorous but necessary activities that were within their reach. Great care should be taken not to encourage the impermissible conclusion that "nothing can be done". Wide improvements in education, health and other services for the poor majority would not only respond to basic needs and rights but also make it more feasible for this majority to take part in structural or revolutionary change.

It followed that the 'unified approach' project, whatever else it might include, should aim at a set of practical down-to-earth recommendations that could be applied by the kinds of governments present in the real world. It should describe the more promising development activities and methods of integrating them that could be found. It should not formulate over-demanding preconditions and methodologies, and it should not pursue very far lines of thinking about human societies that might cast doubt on 'development' as an objective or on the practicability of a unified approach to it. As will be noted below, the approach of pragmatic ameliorism was one of the two that persisted in later demands made by United Nations policy-making bodies for pursuit of a unified approach.

#### 4. *Capacitation of national societies*

This approach emphasized social structural change: institutional build-up for diagnosis and problem-solving; participatory mechanisms; and educational programmes enabling societies to function better through the informed and co-operative action of their members. It did not figure in the initial research outline of the project. An UNRISD study of decision-making processes that entered into the scheme could have led to it,<sup>6</sup> but the methodology of this study had a self-contained logic that hindered assimilation. Capacitation emerged in the later stages as an alternative to comprehensive planning of a society's future and as a complement to pragmatic social ameliorism. It was first given a name in a 1974 report prepared by UNRISD.<sup>7</sup>

According to this report, "development planning first arose in connexion with material production ... In the last few decades, planning has spread to more and more fields of development activity, including social fields, but in this process, objectives have become less amenable to direct measurement, causal relations have become more complex and obscure, and control of the future has taken on a different complexion". Moreover, "conventional planning tends to lead to an over-emphasis on capital investment in physical structures and equipment, especially in social fields, since these objectives are easier to handle under the methodology of planning (and are likely to be more in demand politically) than are various other kinds of activity that may be equally or more desirable for development and possibly also much cheaper".

Another kind of rational approach to societal change and development is therefore needed. "The doctor or the teacher does not make plans or blueprints of the future like the architect but is equally rational. Similarly, at the societal level, it is desirable to think in terms of a 'capacitating' operation which does not try so much to define or control the future as to establish present conditions or capacities which will permit a given society to meet its problems in the future. The emphasis in such an approach is not on setting future output targets but on diagnosing current weaknesses and potentials, finding appropriate policies, and constantly monitoring the course of development." "An example of such a capacitation activity would be the undertaking of structural or institutional change, which conventional planning does not readily deal with through its technical methods."

The implications of a 'capacitation approach' were not further pursued within the project, and in its bare bones this approach suggests a faith in the existence of some rational and benevolent entity qualified or qualified to direct the capacitation. However, it also suggests a conception of development po-

<sup>6</sup>See J.M. Collette, *Etude sur les systèmes de décision* (UNRISD report No. 70.11/1, Geneva, 1970).

<sup>7</sup>*Report on a Unified Approach to Development Analysis and Planning: Note by the Secretary General* (E/CN.5/519, 5 December 1974). This report will be discussed later in this article.

policy-making as an educational experience, in which societal actors learn to cope by struggling with problems under conditions of limited rationality (an approach applicable to local groups and organizations as well as to national societies), and this relates it to the position of such economists as Albert O. Hirschman and such political scientists as Warren F. Ilchman, Norman Thomas Uphoff, Michel Crozier and Erhard Friedburg.<sup>8</sup> This could have been one of the most promising paths for exploration by the project, if the project had been able to count on a longer time span to take advantage of dialectical reactions to the approaches initially presenting themselves.

### 5. *Informational enlightenment*

Lines of thinking present in the *Reports on the World Social Situation* since the 1950s and in the UNRISD programme envisaged a transformation of the conditions for public action through improved methods of obtaining, disseminating, interpreting and integrating accurate and relevant information for diagnosis of social problems and evaluation of progress. The proponents of social development wanted to free their uses of data from domination by economic methodologies and construct methodologies better suited to their own purposes. They questioned the adequacy of income distribution studies to throw light on levels of living as well as the meaning of national aggregate indicators such as the GNP.

Several complementary suppositions backed up their emphasis on improvement of information: first, that one important reason why 'development' was so little oriented to human welfare was that policy-makers were poorly informed of needs; second, that informational exposure of shortcomings could generate pressures forcing governments to act - or make way for other regimes that would act. At a more

modest level of expectation, timely information would strengthen the hand of forces within national governments (as well as international organizations) disposed to tackle social problems. These suppositions were clearly legitimate, although they could be qualified by various observations: that governments often did nothing about problems that had become internationally notorious; that governments were often overwhelmed by informational exposure of problems demanding immediate solutions, rather than short of information; and that governments could use information as an aid to repression or a technique for evading action as easily as they could use it to promote the general welfare. In any case, informational enlightenment was the sphere of action most accessible to the international proponents of social development. It would become an 'approach' on the level of those discussed above only if it were considered a master key to development policy.

Part IV of the *Preliminary Report*, in dealing with diagnosis, information and indicators, for the most part takes too cautious a line to justify such a label. It subordinates information to the propositions advanced earlier in the Report: "Ideally there should be a continual interplay between diagnosis, redefinition of preferred styles, and strategic orientations. ...In practice, the mutually stimulating relationship is less often found than a kind of vicious circle; the types of information sought and their uses in diagnosis are governed by borrowed, inadequate conceptions of style and strategy, while conceptions of style and strategy are cramped by the types of information used for diagnosis....If development is to be understood as an interdependent system of changes rather than the expression of a single quantity, then methods of measurement and quantitative analysis appropriate to this conception need to be built up."

At the same time, the treatment of information retained certain propositions common to the *Reports on the World Social Situation* that made the possibility of unified policy depend on the correct manipulation of information and the rejection of certain informational fallacies:

(i) Development had to be measured in a disaggregative way before being 'unified' in

<sup>8</sup>Albert O. Hirschman, *Journeys toward Progress: Studies of Economic Policy-Making in Latin America* (1963), *Development Projects Observed* (1967) and *A Bias for Hope: Essays on Development and Latin America* (1971); Warren F. Ilchman and Norman Thomas Uphoff, *The Political Economy of Change* (1969); Michel Crozier and Erhard Friedburg, *L'acteur et le système* (1977).

policy. "Diagnosis for unified development involves first an attempt to see if the different factors of development are properly covered in proper proportions – that some are not neglected, causing a general drag on the system, while others are so advanced that their output cannot be absorbed." ('Factors' are stated to include the conventional components – education, health, nutrition, housing, industry, conditions of work and employment, etc. – and subcomponents – higher education, secondary education, etc. – around which the *Reports on the World Social Situation* had been ordered.). While it is impossible to specify simple quantitative requirements of one factor for growth in other factors, "through comparative international analysis, normal 'correspondences' among social and economic factors at a given level of development can be determined. ... Where a country shows marked abnormalities ... questions may be raised about its real style of development". Since "development is not a unidimensional phenomenon", what is needed is not a single indicator but a "pattern or profile of indicators for each country".

(ii) "Systems for collecting and analysing information should be designed as far as possible to facilitate understanding of relationships between different phenomena. This cannot be done through aggregates referring to the national population as a whole or to large groups. Interrelationships can be traced more readily at the local or operational level. ... one difficulty with most indicators is that they are used as national aggregates or averages and fail to reflect distribution. Another difficulty is that the indicators that seem to make sense at the national level may not make much sense when examined at the local level." "... to understand and diagnose the causal relationships between different developmental factors it is usually necessary to go to the level where the interactions actually take place rather than deal with abstractions at the national level."

Under informational analysis, development thus becomes a multidimensional jigsaw puzzle, its large pieces divisible into small pieces fitting into each other vertically as well as horizontally. A unified approach must aim at techniques expressing the full complexity of their relationships, but they remain pieces with

distinct contours susceptible to meaningful quantitative description, one sufficiently disaggregated, and combinable by the well-informed governmental player into a coherent whole at the 'national level'.

#### 6. *Institutionalized Marxist socialism and far-reaching structural change*

This is the first in the series of approaches under discussion that questioned the possibility of development responding to the minimum criterion of acceptability and viability within the framework of market or mixed economies. It did so, however, in a peculiarly ambiguous and stereotyped fashion that derived from the role of the socialist bloc in the United Nations and the ways in which policy-making bodies and the Secretariat simultaneously paid respect to and evaded its ideological position. The representatives of the national societies identifying themselves as socialist, in which the State controlled the means of production and the sources of investment and exercised power in the name of the working class, asserted that these societies could offer lessons in a functioning 'unified approach' to the rest of the world. The fruits of this unified approach were guaranteed full employment, relatively even income distribution, and universalization of social security and access to the major social services. The preconditions for these achievements could be labelled 'far-reaching structural changes', a formula covering many kinds of change, such as agrarian reform or popular participation in developmental decision-making, to which most governments had committed themselves through their votes in the United Nations. It had to be assumed that governments could carry out such structural changes if they wanted to, and that they had recognized the duty of doing so. The question whether abolition of private ownership of the means of production was not the key structural change could be left unanswered. The traditional Marxist-Leninist hypothesis on the necessity of destruction of the bourgeois State and seizure of power by the proletariat as a precondition for such structural change remained in the shade.

Its terms of reference and international setting inhibited the unified approach project

from trying to decide whether socialism (under whatever definition) or any other comprehensive system of political and economic organization was a necessary condition for a unified approach. In any case, most members of the team saw no need to do so: they considered their various approaches applicable to socialist as well as market or mixed systems. The affirmation of the legitimacy of different styles of development within a minimum criterion of acceptability and viability implicitly denied the necessity of socialist revolution without ruling it out as an option. In any case, the State remained in the centre of attention as executor of whatever structural changes were feasible within the style of development.

#### 7. *Neo-Marxist, participationist, self-reliant socialism*

This approach, for which it is particularly hard to find an adequate label, entered the unified approach debate at a late stage, introducing a combination of propositions deriving from dependency theory. Maoism and other recent currents in Marxism, 'conscientization' doctrines, etc., that had become current during the 1960s, mainly outside the inter-governmental framework of debate over development. The approach accepted the areas of choice deriving from the 'minimum criterion' set forth in the *Preliminary Report*, but it brushed aside the legitimacy of different styles of development. An attempt to reformulate the unified approach in these terms introduced a flavour of uncompromising and exclusive theoretical and valorative positions in place of the earnest endeavour to find something good in all positions which lingered even in the reception of the 'far-reaching structural change' approach discussed above. It also transformed the framework of internationally-aided *national* development more or less accepted by the other approaches.

According to a supporter of this approach, "Third World countries are faced with an alternative. Either they accept their dependence or they pursue the path of their own self-reliant autonomous development. In the first case, they are bound to increased polarization, inequality and mass poverty. They continue to

accept the mobilization of their resources primarily in function of foreign requirements. The mobilization of the immense reservoir of dormant productive and creative potentialities of the mass of their people will remain unutilized or underutilized. ... It is proposed that the countries of the Third World can only overcome their poverty and stagnation if and when they decide to pursue a new alternative and original road to development which qualitatively differs from that followed by the industrially advanced countries".<sup>9</sup>

Since the dominant forces of the 'industrially advanced' countries are responsible for the 'under-development' of the rest of the world and depend on its exploitation, the latter cannot look to them for 'aid' and still less take them as models for development. In fact, their style of development is morally indefensible and will become practically untenable once the Third World has taken another path; their real need for transformation is just as urgent and ineluctable as that of the Third World.

Market incentives cannot guide the transformation, nor can bureaucratic centrally-planned versions of socialism, in which objectives decided from above seek to speed up capital accumulation by depressing levels of popular consumption and wringing a surplus from the peasantry. The arousing of the creativity and active participation of the masses of the people is both a central end and a central means of a unified approach to development. The aim must be a "new man in a new society", with egalitarian values, frugal consumption aspirations and cooperative social relationships very different from the present. Policies and mechanisms for production, distribution, and the provision of social services, in particular education, must be shaped so as to contribute to this central aim.

<sup>9</sup>Joost B.W. Kuitenbrouwer, *Towards Self-reliant Integrated Urban-rural Development* (The I.C.S.W. Regional Conference for Asia and Western Pacific, Hong Kong, September 1975). This attitude to the unified approach is also presented in some detail in Kuitenbrouwer, *Premises and Implications of a Unified Approach to Development Analysis and Planning* (United Nations Economic and Social Commission for Asia and the Pacific, Bangkok, 1975), a text originally submitted to the project after dispersal of the initial team.



In the version that entered into the unified approach debates, this position—in spite of its radical challenge to more accommodating approaches—retained an ambiguity that was practically a condition for its entering at all. According to its premises, existing governments and the world system of States reflect relationships of domination and exploitation. For authentic development, the liberation of popular creativity must sweep away these relationships. Yet it suggests that ‘countries’ represented by their governments can ‘choose’ to do this and that the offering to them of detailed advice on how to do this is a legitimate activity. The nature of the catalytic force enabling the masses to change from objects of exploitation, cowed by repression and blinded by the lures of the consumer society, into creative participants in control of their own destiny remains obscure.

This ambiguity, however, which persists in later versions of ‘another development’, did not stem simply from the effort to adapt a revolutionary position to the international organizations’ inescapable task of “advice to governments”. It corresponded to an ambiguity in the self-perceived role of the State in Third World countries that was to become increasingly evident during the 1970s. Some national political leaderships and some groups within national public administrations and even planning agencies did identify themselves with a Neo-Marxist, participationist, self-reliant approach or parts of it. The countries in which such an approach exerted an appreciable influence within the State were generally outside the sphere of domination of any one central power; their domestic interest-groups identified with market-oriented economic growth were incipient or weak; and the political leadership and the bureaucracy thus had an apparently wide range of autonomy in choosing a style of development. Under such conditions, however, their capacity to inspire a predominantly rural population to become creative participants could be expected to be minimal and voluntaristic mobilization could easily slip into bureaucratic compulsion.

#### 8. *Ecodevelopment*

This approach centered attention on the objec-

tives of bringing production, consumption and human settlement patterns into harmony with the carrying capacity of the earth and of reconciling this with an equitable distribution of resources among the world’s peoples, implying a drastic lowering of the consumption levels of the richer countries. It had a relatively long history as an organized source of criticisms of policies oriented exclusively to economic growth, parallel to but interacting very little with the criticisms and prescriptions made in the name of social development.

The initiation of the unified approach project coincided with the posing by the Meadows Report to the Club of Rome of the problem of ‘limits to growth’ and with the rapid intensification of international concern over the environmental disbenefits of technological innovations in production and of artificially stimulated consumption. The project initially tried to pay its respects to these concerns without admitting them to a central position. Thus, the consensus set forth in the *Preliminary Report* included “protection of the human environment” among its areas of policy choice, but discussed it rather perfunctorily. The *Preliminary Report* included a qualified affirmation of the necessity and feasibility of production increases; such affirmations were becoming obligatory disclaimers, in texts that mentioned the disbenefits of economic growth, of any affinity with “zero growth” positions that would congeal the advantages of the rich countries and the poverty of the rest of the world:

“It is premature to go to the other extreme of advocacy of zero growth rates. Levels of production in most of the world are much too low to be reconcilable with any acceptable style of societal development, and production objectives will unavoidably preoccupy many national societies for the foreseeable future. Acceptable and viable styles of development demand of these societies that they should direct their production much more systematically to basic human needs, and that they should seek productive techniques that minimize environmental involvement of their human potential. ... In the longer term, the poorer national societies should raise their per capita production by several fold. ... However, raising them by the multiple required to ‘close the gap’ with the

present high-income societies is not necessarily relevant to the achievement of acceptable styles of development..."

In the later stages of the project, theories of 'ecodevelopment' were considered more positively for introduction as a 'missing ingredient'. Such theories, identified in particular with the work of Ignacy Sachs at the *Centre International de Recherche sur l'Environnement et le Développement* in Paris, emphasized planning for the management of the natural and social resources of specific 'eco-regions', seeking technologies, settlement patterns, systems of production and distribution adapted to each 'eco-region' and substituting as far as possible the use and husbanding of local renewable resources for non-renewable resources. Such a localized approach to development, implying the building up of self-contained systems capable of renewing themselves and gradually enhancing the welfare of the local population, presented interesting possibilities for cross-fertilization with several of the other approaches described above—capacitation, informational enlightenment, participationist development and self-reliant development—and also a challenge to the universalist bias of the project's terms of reference. Unfortunately, by the time ecodevelopment began to attract attention as a distinct alternative the opportunity for this kind of cross-fertilization had passed.<sup>10</sup>

#### 9. *Analysis of political choices and development styles*

The preceding pages have indicated implicitly the author's preference for an approach different from any of the above, although not radically incompatible with most of them. Such an approach tries to identify and explain political and other factors that condition the character and limits of public intervention in societal

change, the circumstances under which development policies approximating to the minimum criterion of acceptability and viability might emerge, and the identity of potential social agents for interventions furthering such 'unified approaches'. It rejects the eclectic supposition that national societies can pick and choose among 'lessons' from abroad and put the fragments together as they please, as well as the supposition that there is only One Right Way to develop which national societies must find and adopt under penalty of catastrophe. Each national society faces a certain limited range of choices, depending on its historically conditioned political, social and economic structures; its productive capacity; its natural and human resources; its dominant values; and its place in the international order. These factors imply differing advantages, degrees of equity or inequity, costs and dangers. Certain choices are either permanently outside the society's reach or feasible only through a revolutionary transformation that cannot be willed deliberately by a regime shaped by existing values and power relationships. In the terms adopted by the *Preliminary Report*, different real and preferred styles of development can be assessed against a double criterion of viability and acceptability. Such an approach cannot evade search for a theoretical framework or set of hypotheses to order its analyses of national societies, but does not expect this quest ever to be more than partially and provisionally successful. In the version here described, the approach recognizes a permanent danger of becoming ridden by theory, selecting or interpreting facts to fit the theory, and universalizing phenomena that may be conjunctural or local. It finds conspicuous examples of this danger in many attempts to use Marxism as a framework for analysis and action.

The organizers of the 'unified approach' project incorporated political and social structural analysis from the beginning as a corrective to the normative, technical and institutional approaches whose integration they envisaged. The proponents of the latter approaches could not help being aware of the political and social stumbling blocks, which most of them had encountered directly, as development planners and consultants. How-

<sup>10</sup>See Ignacy Sachs, "Population, Technology, Natural Resources and the Environment: Eco-development: a Contribution to the Definition of Development Styles for Latin America", CEPAL, *Economic Bulletin for Latin America*, Vol. XVIII, Nos. 1 and 2, 1973. This approach obviously links with the quest for 'appropriate technologies' and similar initiatives that have flourished during the 1970s.

ever, they naturally wanted not a panoramic view of all the stumbling blocks in the way of their vision of the Good Society but ideas on how to remove them so that their preferred strategies could advance.

The approach was open to the criticism that it led to the demoralizing conclusion that 'nothing could be done'. While the version that entered into the project affirmed that many things could and should be done by many kinds of social agents, it remained frankly skeptical about the unified approach conceived as a set of universally applicable prescriptions —whether prescriptions for the allocation of resources, for techniques of diagnosis and planning, or for transformation of societal structures and values. Human institutions, from the international order to the local group, were engaged in games so complex and for such varied prizes that attempts to make sense of them and influence them in the name of development called for an exceptional combination of audacity and humility. The unified approach project might contribute something along these lines if it remained iconoclastic, aware of the ritualistic side of the activity in which it was engaged and the ambivalences in all human endeavours. It could not take for granted either that national societies were potentially perfectable, once their shortcomings were diagnosed correctly, nor that their irrationalities and inequities called for root-and-branch destruction and transformation.

Several alternative criteria for classifying 'approaches' bring out other tensions and ambiguities in the quest for unified development prescriptions. In terms of polar positions one can distinguish:

*Technocratic vs. participationist* approaches. The former supposes that properly qualified specialists can find the one correct or optimal solution to each problem, adding up to the optimal style of development. Development policy can be unified to the extent to which such specialists can seek and apply the solutions without compromises to meet incompatible demands and resistances. Ideally, then, 'participation' should mean indoctrination in the nature of the optimal solution and corresponding behaviour. The latter approach supposes either that the optimal solution can

emerge only from the creativity of the people, in control of its own destiny, or that there is no one optimal solution but that various satisfactory solutions can emerge from democratic political competition. Technocratic imposition, or reliance on policies that do not require popular understanding, is inherently sterile.

*Centrality of economic or sociological laws vs. human-welfare-oriented voluntarism.* The laws looked to by the former approach might be those of the market, or of the psychological conditions for planned modification of human behaviour, or of the socio-economic conditions for transition to socialism. The supposition is that unified development depends on correct understanding of the laws and some combination of submission to and manipulation of the preconditions they impose. The latter position denies either the bindingness of the laws or the possibility of their infallible interpretation. Social agents should therefore guide their efforts primarily by their values. The extent to which these values can be realized and human welfare enhanced will be revealed only in the course of struggle and innovation. While the former of these positions seems to have more affinity with the technocratic approach and the latter with the participationist, either can co-exist with a predominantly technocratic or participationist outlook.

*Reliance on theoretical or methodological frames of reference vs. pragmatic acceptance of whatever works.* This contrast resembles the preceding, but with both polar positions more modest. The frame of reference does not pretend to explain the laws of development or societal change, but those of planning under specified conditions and with specified tools. The pragmatism applies itself to the amplification and adaptation of social and economic techniques that seem to have proved their usefulness, without aspiring to a voluntarist 'big push' towards the Good Society.

*Universalist vs. particularist* approaches. The former position supposes that development must mean approximately the same thing for all national societies, whatever that meaning may be: all societies must become predominantly industrialized, urban and market-oriented; or all societies must become democratically egalitarian; or all societies must become

collectivist and frugal in their life styles and use of resources. Universalism often combines with catastrophist all-or-nothing positions: unless mankind as a whole rapidly achieves certain objectives of productive capacity, technological restraint, social justice, disarmament, freedom, consumption austerity, or population limitation, mankind as a whole, or the 'world', or 'civilization' is doomed. The universalist approaches also sometimes carry the connotation that 'development' should mean a transition from a static 'bad' situation to a static 'good' situation: once mankind as a whole has overcome poverty, injustice, violence and waste it had better remain in harmony or balance with its environment.

The variants of the particularist position suppose that national societies, or whatever forms of social organization replace them, will continue to develop along many different lines, some more 'acceptable' for their values and some more 'viable' for their internal coherence

and efficiency than others. None of them is likely to reach a harmonious and static perfection, and some of them can be expected to degenerate or even perish, because of their mistakes or because of an insuperable combination of disadvantages. There may or may not be an objectively definable optimal style of development for each society but, except in terms too general to be useful, there can be no universally optimal style. This inevitable diversity has its dangers, particularly of conflicts between national societies and exploitation of the weak by the strong, but also its advantages: the homogenization of mankind is neither possible nor desirable; the wider the range of styles of development, the greater the likelihood that a positive cross-fertilization will take place in the future. The particularist as well as the universalist position can, of course, combine with a technocratic or a participationist bias, with a belief in iron laws of development or in voluntarism.

## IV

### The changing international market for propositions on development during and since the unified approach project

The unified approach project, as already noted, was one manifestation—and a relatively modest one—of the divergence in interpretations of development and the multiplication of attributes of development that had gained momentum during the 1960s and that was to become more pronounced and complex at the beginning of the 1970s. 'Development' must stand for something worth striving for, and the idea of increasing productive capacity—particularly industrial capacity—through capital accumulation, investment and technological innovation was still at the core of this something at the beginning of the 1970s. Experience was making it harder to believe, however, that growth in production by itself, whether guided by the market or by central planning, would bring about equitably distributed gains in human welfare, or that sufficient growth to permit ac-

complishment of this end was within the reach of the poorer countries without major changes in their internal policies and their place in the world system. Advocates of a very wide range of objectives and policies were arguing not only that their concerns constituted essential attributes of authentic development, but also that in order to achieve the other objectives of development, priority must be given to these concerns. The unified approach project was instructed in its terms of reference to find out how to unify what was unifiable in these different positions from the standpoint of one of them: the composite of human welfare objectives and social sectoral programmes that had come to be labelled 'social development'. Before it could accomplish this, however, the range of positions to be unified had widened considerably.

For the present, it will be enough to sum-

marize certain features of the changing international market for propositions on development inside and outside the intergovernmental organizations.

Within the latter the main framework for debate was the Second United Nations Development Decade, to be governed by an International Development Strategy approved by the United Nations General Assembly in October 1970. The Strategy provided for procedures of periodic 'review and appraisal' of progress by the various United Nations organs, and these generated a formidable volume of reports. As long as the Strategy seemed to have some potential relevance to government policies the proponents of different approaches and priorities presented their proposals as amplifications of points in the Strategy, or changes of emphasis, or means of implementing the Strategy. One justification for the initiation of the 'unified approach' project had indeed been the enrichment of the Strategy's social content.

The Strategy juxtaposed two main kinds of propositions, some clinging to the expectations of the first Development Decade, others responding to the criticisms of its excessive focus on economic growth. During the Decade new proposals superseded both kinds:

(i) *Propositions on international economic relations and on the duty of the richer countries to aid the development of the rest of the world through allocation of a minimum percentage of their national income and through fairer trade policies.* The Strategy presented propositions of this kind in considerable detail but in compromise formulations that emerged from bargaining between representatives of governments that wanted binding commitments and representatives of governments that wanted to ward off such commitments without a flat rejection. As the decade progressed the struggle for and against commitments was repeated in forum after forum. By 1974, the compromises reached in the Strategy were obviously inoperative and the Third World governments turned their attention to a Declaration and Programme of Action on the Establishment of a New International Economic Order (NIEO), for which most of the First World governments, now constituting a small minority in the United Nations, assumed no concrete re-

sponsibility. The debates over international economic relations fall outside the scope of the present chapter, but it is worth emphasizing that for the representatives of the majority of Third World governments the question of international economic relations remained central and the hope of obtaining firm commitments remained alive; many of these representatives looked on the questions to be discussed below either as harmless expressions of good intentions or as dangerous distractions from their central demands. They also continued to assume that development could mean for their countries what it had meant for the countries now industrialized, and that international interdependence through trade and financial flows could persist indefinitely, reformed but not transformed.

(ii) *Propositions on the content of development at the national level.* The Strategy's appeal for a unified approach has already been cited, along with its treatment of sectoral social objectives. During the 1970s the sessions of some regional United Nations organs approved more elaborate and somewhat bolder formulas on integrated development and the social meaning of development through their appraisals of progress under the strategy, but otherwise the social propositions attracted little attention. By the mid-1970s a series of detailed proposals for development approaches focussing on 'redistribution with growth', elimination of extreme poverty and priority to satisfaction of basic needs, emanating mainly from the World Bank and the International Labour Organisation were disputing the world stage with the New International Economic Order, replacing the innocuous juxtaposition of economic and social objectives by a new version of the old controversy over priorities. The 'basic needs' and related approaches treated policies for production, technological innovation, distribution and employment as central but subordinated their content to immediate human welfare ends. A good many proponents of the NIEO interpreted this as a tactic of the central capitalist countries, intended to justify failure to attend to trade and aid demands and restriction of the Third World to a form of second-rate semi-development through labour-intensive technologies. In fact, the new approaches had

several variants, some of them envisaging modest reallocations of resources to the poor and gains through aided self-help, others calling for the transformation of structures of production and distribution and an end to the affluence of minorities. Non-governmental institutions were able to carry these ideas farther toward the construction of coherent alternatives for the human future, the most ambitious of these attempts being the proposal of the Dag Hammarskjöld Foundation for 'another development', published in 1975.

An equally striking feature of the international treatment of development during the 1970s however, was the successive bringing into the foreground of a series of 'major problems' treated with what became a stereotyped ritual.

Population, the human environment, the status of women, habitat, employment and hunger were taken up in this way. In each case the problem was real enough and had long been the overriding concern of some institutions and sectors of opinion, mainly in the First World countries. The persistence of the concerned parties and usually some evident intensification of the problem brought it into the forefront of attention.

When this happened, the United Nations General Assembly might then proclaim an International Year to recognize the importance of the problem. A World Conference would be convened, preceded by regional conferences and meetings of 'experts' on the relation of the problem to other problems, the World Conference would approve a Plan of Action, and more regional conferences and specialized meetings would be convened to discuss application of this Plan. A temporary or permanent international secretariat would come into being and a fund to finance practical measures to deal with the problem would be set up.

Recognition of the problem would go through several phases. Simple cause-and-effect interpretations of the problem and direct remedies would be intensively publicized and then subjected to criticism from many directions. Representatives of the Third World would indicate their suspicions of the origins of initial interpretations of the problem and their disposition to recognize the need for action

only to the extent that this would not divert attention from economic development and from the duty of the rich countries to help such development. In any case, it could be demonstrated that the problem was complexly related to all other major problems; it could be solved only in the context of development. Thus, all roads led back to the unified approach.

But who was to do the unifying? Conceivably, any of the major problems might provide the starting point toward a comprehensive conception and strategy of development, around which the other problems and desiderata might be grouped, but they could not all occupy the centre at once. The gap between the capacity of governments and other human institutions in the real world to diagnose, choose and set priorities, and the demands that they advance toward multiple objectives in a unified way was wide enough already, and each 'major problem' threatened to widen it further. At the same time, it could be argued that, overwhelmed as they were, governments would not act on the major problems unless these were brought to their attention insistently, backed by organized popular pressures and warnings as to the indispensability of quick solutions to ward off catastrophe.

Meanwhile, outside the international bureaucratic and academic circles where it was more or less obligatory to profess faith in the benevolence and rationality of governments, several kinds of challenge to the whole structure of international development strategies, new international economic orders and plans of action became more insistent. Each of these challenges included variants ranging from wholesale negation to qualified criticisms of the conventional wisdom:

(i) 'Economic development' was reduced to the status of a mobilizing myth even by some economists prominent in development policy-making, most eloquently by Celso Furtado: "Myths function as lamps that illuminate the field of perception of the social scientist, allowing him to have a clear vision of certain problems and to see nothing of others at the same time as they give him spiritual tranquillity since the value judgements that he makes appear to his spirit as a reflection of objective reality.

"Today we know irrefutably that the economies of the periphery will never be developed in the sense of becoming similar to the economies that form the present centre of the capitalist system. But how can one deny that this idea has been very useful, to mobilize the peoples of the periphery and induce them to accept enormous sacrifices, to legitimate the destruction of archaic forms of culture, to explain and make them understand the necessity of destroying their physical environment, to justify forms of dependency that reinforce the predatory character of the productive system?"

"It can thus be affirmed that the idea of economic development is simply a myth. Thanks to this it has been possible to divert attention from the basic tasks of identifying the fundamental needs of the collectivity and the possibilities that the progress of science opens to humanity, so as to concentrate attention on abstract objectives such as investment, exports and growth".<sup>11</sup>

Such a challenge knocked one leg out from under the declarations of meeting after meeting that wedded the 'abstract objectives' of economic development to basic needs or 'major problems'.

(ii) Faith in the market as arbiter of developmental choices, in the inexhaustibility of natural resources, and in the ability of human ingenuity, spurred by market incentives, to solve problems as they arose, persisted and became more aggressive during the 1970s as the shortcomings of governmental and inter-governmental interventionism became more glaring. According to the proponents of variants of this position, from Daniel Moynihan to Herman Kahn and Milton Friedman, the main danger for the human future lay in the zeal to bind it by regulations, and the main stumbling block in the way of the development of poor countries lay in their hankering after welfare state policies and socialist planning. The dominant forces in a good many Third World countries had clung to such views even during the years of rising prestige for planning and 'social development' measures. During the 1970s the

influence of neo-liberalism on government policies became more open and even doctrinaire, particularly in certain 'semi-developed' countries of Latin America and Southeast Asia. While the governments of these countries participated in Third World solidarity as regards demands for changes in international economic relations, that is, for better access to markets and credits, they remained aloof from the accompanying formulas on socially-oriented or unified development, and actively opposed some of the more specific commitments for action on 'major problems'.

(iii) The penetration of transnational enterprises in the economies of the Third World, the emergence of 'transnational elites' identified with these enterprises, and the mutation of national cultures and consumption patterns brought about by transnationally-manipulated mass communication media and advertising made the vision of autonomous and self-sustaining national development seem obsolescent. The relevant development strategies for the future might be those of the transnationals rather than those of the governments.

(iv) Two kinds of challenges emerged from alarm over the prospects for resource exhaustion, environmental contamination, the potential destructiveness of new technologies, and over-population. The more direct challenge denied the possibility or desirability of anything identifiable with previous conceptions of development. Some variants of this position derived from it conclusions on the duty of the rich national societies to limit their consumption and assist the poorer countries in an equitable transition to 'zero population growth' and 'zero economic growth', thus approximating to one of the approaches to a unified approach described above. Other variants concluded that the rich societies should set their own houses in order and help other societies only if the latter showed promise of viability. Still others concluded that the momentum of current trends and the limited capacity for foresight and rational action made the avoidance of catastrophe unlikely either for humanity as a whole or for the better-off societies. Small groups and families might be able to shield themselves by preparing in advance for austere and self-reliant life styles and by

<sup>11</sup>Celso Furtado, *El desarrollo económico: Un mito* (Siglo XXI Editores, Mexico City, 1975).

withdrawing from the urban-industrial centres where catastrophe would be most sweeping. In the international discussions of development and of such 'major problems' as population, environment, and food supply the variants of this challenge figured prominently as heresies to be renounced.

Variants on the other challenge emerging from this diagnosis admitted the possibility of solutions to the resource, environmental and population problems, but insisted that these solutions would have to be comprehensive and 'counter-intuitive'. Piecemeal 'practical' responses to problems as they arose would only make matters worse through their impact on other systematically related areas. One variant then questioned the capacity of human institutions to devise and manage such comprehensive solutions: social and political limits would cripple development before the environmental and resource limits were reached. Another variant reasoned that solutions guaranteeing human survival would require a high degree of regimentation and suppression of dissent, and under these conditions the values of human welfare, equity and creativity, along with freedom, would go by the board.

(v) Diagnoses of the inherently exploitative character of the international capitalist order and of the structures of class and power in national States led to many variants of the conclusion that both must be destroyed as a precondition for the Good Society. These positions, through their links with the dominant forces in certain Third World countries, with organized terrorist movements and with international political struggles on the one hand, and with participationist and 'another development' visions on the other, had complex and

ambiguous relationships to the international discussions of prescriptions for development, but logically negated their relevance. The dominant forces in the central capitalist countries could not be committed to end their exploitation of the rest of the world, even if the governments they controlled entered into agreements to do so. The most that could be expected was an unacceptable 'renegotiation of the terms of dependence', benefitting only the exploiting minorities in the dependent countries.

The only solution for the latter, once their own people gained control of them, would be to cut all economic and political ties and accept the consequences in terms of austerity and of the liquidation of the minorities identified, through their economic roles and their consumption patterns, with the previous ties of dependency. Relations could then be reopened selectively, mainly with national societies having similar genuinely revolutionary regimes.

The same revolutionary positions denied that existing national governments, whatever the intentions of individuals within them, had any ability to achieve an acceptable social and economic order. Even those labelling themselves 'socialist' were really 'bureaucratic capitalist'. The weakness of their political leaders and bureaucracies in the face of the international order and the transnational enterprises, their inability to identify themselves with the people, and their consumerist aspirations ruled them out. A profound and creatively destructive uprising of the masses was called for, and the will of these masses rather than international prescriptions would govern the longer-term future.

## V

### The place of the unified approach project in the international rethinking of development

The term 'unified approach to development' has retained a certain currency in international circles during the 1970s, and a good many of the

ideas put forward under this label in meetings or by development advisers can be traced to the project here discussed. Variants of these ideas



would have circulated in any case, but the main feature that distinguished the partial consensus reached in the project has barely received a hearing.

The *Preliminary Report*, as already noted, did not pretend to offer either an original theory of development or a comprehensive set of practical prescriptions. Despite some internal inconsistencies, it tried to propose a flexible way of thinking about development and of confronting its minimum criterion of acceptability and viability with national situations and an international order in which nothing could be taken for granted, in which planning and formulation of norms tended to become ritual activities compensating for inability to influence real trends within the constraints under which social agents, inside and outside national governments, acted. A study under intergovernmental auspices could not honestly do much more than say: if your society has such-and-such characteristics and the institutions or groups you represent want to achieve such-and-such objectives, you should take into account certain factors, and you may find certain methods more helpful than others. These bare bones of a proposition, of course, might be given life through intensive studies of national experiences, but the limited material ability of the project to do this had been exhausted at an early stage.

The Commission for Social Development and the Economic and Social Council, to which the *Preliminary Report* was presented, naturally wanted more than this, and requested that a final report "be prepared in such a way as to be of the greatest possible practical use to planners, decision-makers, and administrators". Since the project team had already dispersed and its budget was exhausted, preparation of a final report on the scale originally envisaged was no longer practicable. UNRISD responded to the request with a brief "final report" submitted to the 1975 session of the Commission for Social Development. This report spelled out in more detail some of the proposals on development analysis and planning contained in the *Preliminary Report* and introduced the idea of 'capacitation', but also reiterated that: "It is a conclusion of the study that action for unified development should depend on diag-

nosis of particular circumstances. Practicality, therefore, must lie largely in general principles of approach and suggestions of ways of going about reaching concrete solutions, rather than in a universal action model of unified development presumed suitable for all types of developing countries. Even so, suggestions in a report of this kind on such a vast subject must be put forward with considerable modesty".<sup>12</sup>

The United Nations policy-making bodies did not allow this answer to be final. They next requested the Secretary-General to "prepare a report on the application by Governments of a unified approach to development analysis and planning", and also to prepare proposals for 'pilot projects' demonstrating the practical application of a unified approach.

These requests, in fact, juxtaposed two very different visions of the unified approach that were advanced by representatives of different governments. The first derived from the thesis that "far-reaching structural changes" within national societies were the essential precondition for a unified approach. Certain governments felt they possessed the correct specifications for such changes; while they could not expect to obtain inter-governmental consensus on them, they could use the unified approach to keep them in the forefront of attention and demonstrate their own achievements.

The second derived from the conception of the unified approach as mainly a question of integrating social and economic programmes, and also from a supposition going back to the beginning of United Nations social activities that the concentration of advanced methods and integrated services on a local population would provide lessons and achievements that could then be duplicated on a wider scale. Although this expectation had rarely if ever been fulfilled, the perpetuation of small-scale social technical assistance projects, the obvious virtues of integration of services, and the political, informational and bureaucratic difficulties in the way of such integration at the national level had continually revived it. The unified approach project had harboured hopes of this

<sup>12</sup>Report on a Unified Approach to Development Analysis and Planning (E/CN.5/519, 5 December 1974).

kind, particularly in relation to the importance of localized information, but its main emphasis had been on the national level. A unified approach focussing on pilot projects might be expected to appeal to governments that had no intention of sponsoring far-reaching structural changes and preferred to direct attention to the potential of modest but better-administered incremental changes.

By this time, while UNRISD continued to struggle to bring the research aspects of the unified approach to a coherent conclusion, the responsibility for acting on the new request had fallen mainly to the Secretariat Centre for Development Planning, Projections and Policies, an economically-oriented body that had in the past been decidedly cool towards the unified approach. Since the Secretariat was not in a position to decide which governments, if any, were applying a unified approach, however defined, or to evaluate their efforts, it fell back on its traditional method of dealing with controversial mandates. It circulated a request for information to governments, as it had also done recently in response to another resolution requesting information on the introduction of far-reaching social and economic changes. It sorted out the twenty countries that responded into "countries with centrally planned economies", "countries with developed market economies" and "countries with developing market economies" and summarized the information they provided (mainly on their planning systems), concluding that "while many countries have introduced an integrated or unified approach to development planning, clearly there is no unique approach that can be considered applicable to all countries".<sup>13</sup> Some members of the bodies to which the report was presented expressed disappointment at the inconclusiveness of this conclusion, but in view of the small number of governments that had troubled to reply to the request, it was evident that this method of pursuing the unified approach could not yield much more.

The Secretariat also prepared proposals for pilot projects, but in spite of their cautious for-

mulation these encountered resistance in the Economic and Social Council: "Several representatives expressed the view that the projects on the unified approach must take fully into consideration the imperatives of the sovereignty of Member States. They emphasized that full account must first be taken of the development goals set by each country for itself. Since each country had its own conception of the appropriate economic, social and political systems, development plans and policy measures adopted by Governments could be formulated and implemented only in the context of the actual conditions prevailing in individual countries. A project on integrated development planning should therefore neither seek a universal applicability of its findings nor be used to monitor and pass judgement, based on a single set of criteria, on the development objectives and performance of developing countries".<sup>14</sup>

The Economic and Social Council requested reformulation of the proposals, but by this time the unified approach as a distinct line of inquiry had reached an impasse. Moreover, its consideration in the United Nations policy-making bodies was being submerged in that of several other kinds of normative approach: first, the reformulations of international development policy, in particular the Programme of Action on the Establishment of a New International Economic Order, the Charter of Economic Rights and Duties of States, and General Assembly resolution 3362 (S-VII) of 16 September 1975 on "Development and International Economic Co-operation"; second, the various crusades for attention to 'major problems', and third, the proposals emanating from the International Labour Organisation and the World Bank for development policies focussed on satisfaction of basic needs or elimination of extreme poverty. These last approaches were sometimes identified with the unified approach, and had, in fact, inherited some of the project's central propositions on policy choices.

The reformulated pilot project proposals of

<sup>13</sup>*Application by Governments of a Unified Approach to Development Analysis and Planning, Report of the Secretary-General (E/CN.540, 22 September 1976).*

<sup>14</sup>*Projects on the Practical Application of a Unified Approach to Development Analysis and Planning, Report of the Secretary-General (E/5974, 4 May 1977).*

the Secretariat were limited to studies of changing priorities revealed by the national plans of developing countries, studies of national experiences in the implementation of plans, and training for officials of developing countries on the "main aspects of integrated development planning". The skeptical and radically revisionist attitude toward plans and planning that had been prominent in the unified approach project seemed to have faded away.<sup>15</sup>

The unified approach project exerted some influence in the regional commissions of the United Nations and was influenced by currents of thinking already present in them, but the elements interchanged differed, partly because of the nature of the contacts between the project and these bodies, and partly because of the differing national situations and policy preoccupations faced by the commissions. The project's studies of national experiences had already suggested the latter differences.

In Latin America, a region that was beginning to be labelled 'semi-developed', questions of viable choices between styles of development and the relation of such choices to ideologies and to the distribution of political power were in the forefront of attention. Did the capitalist 'development' or modernization of peripheral countries such as those of Latin America unavoidably generate increasing dependence on the world centres, increasing inequalities in the distribution of consumption and wealth, increasing insecurity and relative if not absolute poverty for large parts of the population, and increasing repression of protests? How could the evident gains in productive capacity, economic and social infrastructure, qualifications of the labour force and governmental administrative resources be converted into gains in human welfare, and who would be the societal agents of such a conversion? The experience of different countries of the region suggested that policies concentrat-

ing on rapid economic growth through governmental stimulation of market forces, or on structural transformation and social equality, could be successful on their own terms, at differing high costs, and if backed by sufficient power, but that the prospects for policies trying to reconcile multiple objectives of growth and welfare under conditions of open political competition were rather poor. Styles of development meeting the minimum criterion of the unified approach seemed to call for a transformation of values and expectations as well as power structures, but the circumstances of semi-development, in particular the penetration of transnational enterprises and the consumption aspirations of the 'modern' sectors of the population, made the way to such a transformation hard to envisage.

The Economic Commission for Latin America (CEPAL) had raised problems of this kind in several studies<sup>16</sup> and had contributed to the project the approach labelled above "analysis of political choices". The ideas generated in the project in turn influenced further studies and polemics in the CEPAL Secretariat on styles of development.<sup>17</sup>

Moreover, the ideas entered into a series of normative declarations approved by the CEPAL member governments at the Commission's 1973, 1975 and 1977 sessions, within the context of their periodic appraisals of progress under the Second Development Decade.<sup>18</sup> The propositions on 'integrated development' in these declarations, while actively supported by a minority of governments, show a surprising degree of acquiescence by the majority in what amounted to a condemnation of what was visibly happening in the name of development

<sup>16</sup> See, in particular, Raúl Prebisch, *Towards a Dynamic Development Policy for Latin America* (United Nations, New York, 1963); *Transformation and Development: The Great Task of Latin America* (report presented to the Inter-American Development Bank by Raúl Prebisch, 1970), and *Social Change and Social Development Policy in Latin America* (United Nations, New York, 1970).

<sup>17</sup> See, in particular, the papers by Raúl Prebisch, Aníbal Pinto, Jorge Graciarena and Marshall Wolfe in *CEPAL Review*, No. 1, first half of 1976.

<sup>18</sup> Regional Appraisals of the Internacional Development Strategy; Quito, 1973 and Chaguaramas, 1975 (in "Cuadernos de la CEPAL", No. 2), and Guatemala, 1977 (in "Cuadernos de la CEPAL", No. 17).

<sup>15</sup> The 5-page report cited in the preceding footnote seems to be the most recent manifestation of the unified approach as a separate topic in United Nations deliberations, other than a supplement to the document on "Application by Governments", containing summaries of five additional replies received up to 31 October 1978.

and an affirmation that "the objective of development in Latin America must be the creation of a new society and a new type of man". The 1975 appraisal placed this aspiration in a more sober perspective: "In spite of the professed aims and of the greater material capacity to eliminate poverty which ought to be implicit in the favourable economic growth rates of several countries, it is... not surprising that the rate of progress toward the attainment of social development goals is extremely slow. It is now more important than ever that the governments of Latin America should not—either through excessive optimism regarding the spontaneous results of accelerated economic growth or through pessimism regarding the possibility of looking into the future and influencing the processes of social change in such a complex and changing situation—lose sight of the fact that, in order to achieve equitable and integrated development, greater efforts are needed together with a thorough, realistic knowledge and appreciation of what is happening".

Finally, an exhaustive study of development theories and their application in Latin America carried out by the Latin American Institute for Economic and Social Planning (ILPES) associated with CEPAL dismissed the unified approach and the intergovernmental normative declarations associated with it in the following terms:

"The unified approach is not only the clear expression of a technocratic utopia but also, in spite of its name, it is a utopia made by aggregation of objectives, whose validity by themselves hardly anyone can deny, accompanied by continual reserves to the effect that the particular situation can legitimate their not being achieved and even their being set aside for an indeterminate and interminable future. A unified approach to development worthy of the name supposes a unified social science, which does not exist at present and which could only be constructed on certain philosophical postulates, derived from a general theory, which in turn could not count on general support for a long time to come. At the same time, an international declaration of objectives can be possible only through evading philosophical-political differences, so that the only possible base of a unified approach, a common

philosophy, is ruled out from the beginning. When such a declaration purports to be a unified approach, the only way to do it that is apparently legitimate is through the aggregation of objectives".<sup>19</sup>

In the Economic and Social Commission for Asia and the Pacific (ESCAP) the reception of the unified approach was at first conditioned by the relatively complex social services and planning-administrative machinery of the larger countries and by periodic meetings of an ESCAP committee on social development. The unified approach was seen mainly as a new attempt to tackle the previous concerns of the committee: better integration of government social and economic programmes, higher priority to the 'social', and more adequate statistical indicators for the social objectives of development. However, the increasingly ominous incapacity of urban-industrially biased economic growth and social programmes to cope with mass poverty in mainly rural populations, together with the presence of China as a demonstration of the possibility of a radically different style, brought about an openness, in ESCAP papers and in advisory missions, to the participationist self-reliant approach described above, in a variant deriving directly from the later stages of the unified approach project.<sup>20</sup>

In Africa, the unified approach entered into discussion mainly through a joint Economic Commission for Africa (ECA)/UNRISD study presented to the Sixth Session of the Conference of African Planners in October 1976,<sup>21</sup> and through visits of ECA/UNRISD teams to seven African countries. The study analysed all available African development plans currently in force in order to determine the degree to which the plan documents represent a systematic attempt to deal with the problem of uneven development, insofar as this

<sup>19</sup>Aldo E. Solari, Rolando Franco, Joel Jutkowitz, *Teoría, acción social y desarrollo en América Latina*, Textos del ILPES, Mexico City, Siglo XXI Editores S.A., 1976, p. 621.

<sup>20</sup>See Joost B.W. Kuitenbrouwer, *op. cit.*, and also reports of advisory missions to the Philippines, Pakistan and Papua-New Guinea.

<sup>21</sup>*Application of a Unified Approach to Development Analysis and Planning under African Conditions* (E/CN.14/CAP.6/4).

could be ascertained from the range and specification of plan objectives, from the type of planning information and procedures used, and from planned policies and projects relating to the provision of essential services, the composition of production, research and technology, institutional change, and external economic relations. The visits to countries similarly concentrated on planning objectives and techniques. The study and visits found, not unexpectedly, a certain correspondence between the objectives stated in the preambles to plans and the human-welfare-oriented terms of reference of the unified approach project, but also, very nebulous relationships between these objectives and the projects and techniques contained in the body of the plans. Several reasons were given to explain these divergences—lack of manpower and finance, inadequate political commitment, unavailability of relevant data, deliberate distortions by executing agencies. Another argument sometimes given was that projects on behalf of the 'little man' are extremely difficult to organize and manage, while big projects involving intensive capital investment can be set up and run much more effectively.

The African study thus started by accepting provisionally the plans as valid expressions of national policy and the planners—the main interlocutors of the study team—as key social agents. By pointing to gaps and shortcomings the study then tried to suggest modest and incremental improvements rather than radically different styles and strategies. How could planners make better diagnoses and influence policy more effectively towards human welfare objectives under conditions of rudimentary information, political instability, and very limited resources susceptible to allocation by the State? At the same time, the United Nations African Institute for Economic Development and Planning (IDEP) was diagnosing the existing styles of development of the African coun-

tries as neither acceptable nor viable and proposing variants of the self-reliant participationist approach; however, the contacts between this line of thinking within Africa and the unified approach project were slight.

The terms of reference of the unified approach project had focussed on the needs of the 'developing' or 'poor' countries. Its potential relevance to the countries that defined themselves as 'developed' was never clearly specified. According to some of the approaches that entered into the project, these countries figured mainly as sources of aid and of useful lessons for the 'developing' countries: since they were 'developed', it could be assumed that they already had a unified approach or did not need one. According to other approaches to a unified approach, the 'developed' countries were part of the problem, not part of the solution. Their people needed transformations in their style of development just as much as did the rest of the world, and might find such transformations even harder to achieve, in view of their material and psychological investments in existing patterns of production and consumption. The people of the rest of the world needed to free themselves from their economic, political, and cultural domination, and from the disastrous example of their patterns of artificially stimulated consumption, technological recklessness, and environmental devastation.

The contacts of the project with the Economic Commission for Europe, however, hardly touched on such questions. The facet of the unified approach of most interest here was that of informational enlightenment: the devising of development indicators and 'social accounting' to supplement the partially discredited GNP and national accounts, in national situations in which statistics were abundant, relatively reliable, and capable of providing answers to new questions which presumably included that of the relation between economic growth and human welfare.

## VI

## The dilemmas of international policy-oriented research and lessons for the future

The preceding pages have focussed on a few manifestations of the international aspiration to shape the future that, over the past three decades, has generated hundreds of meetings and hundreds of thousands of pages of documentation. On the margins of the ceaseless activity generated by the cycles of meetings of the international agencies one finds an even more diverse and complex ferment of theorizing, empirical research, polemics and ideological proselytizing whose practitioners interact with and contribute to the international normative-prescriptive efforts but scorn their ritualism, utopianism, evasiveness and lack of scientific rigour.

If the project did not manage to prescribe a “unified approach to development analysis and planning”, and in fact concluded that this, taken literally, was not a meaningful objective, it did make more explicit than heretofore certain dilemmas that any international policy-oriented research project would have to face. It also suggested that such dilemmas could not be avoided within the context of such a project. If policy-oriented research were to make any contribution to human welfare it would have to recognize a permanent tension and ambiguity in the demands made on it, and maintain a critical attitude towards its own terms of reference and the suppositions underlying them.

A mandate to reconcile the irreconcilable has at least the virtue of reproducing conditions somewhat similar to those of policy-making in real national societies. The most likely outcome may be evasion, but this is not the only possible result. Presumably such an outcome can be guarded against by bringing contradictions out into the open and incorporating them into the hypotheses of the research: a course that should present fewer drawbacks and dangers for a team pursuing policy questions at the international level than for advisers to national political regimes.

What are the dilemmas and tensions that international policy-oriented research must learn to live with?

First, there is the tension between the ideal of explicit definition of basic concepts, hypotheses and value premises and the pressures towards a combined eclecticism and consensualism that the heterogeneity of the situations confronted seems to legitimate. It cannot be accidental that the interminable discussions of development have left intact the confusion between development conceived as empirically observable processes of change and growth within social systems and development as progress toward the observer’s version of the Good Society. In the first sense development can be evaluated positively or negatively or judged inherently ambiguous in its implications for the human future. In the second sense development is by definition desirable. Nor have the discussions overcome the confusion between development conceived as a process subject to uniform laws and development conceived as a wide range of possible real patterns and possible aspirations. Can the term ‘development’ in the last analysis be anything more than a symbolic stamp of approval for changes that the user of the term considers unavoidable or desirable?

The unified approach project tried to delimit what was to be approached through the legitimation of different styles of development responding to a minimum criterion of acceptability and viability, but this left room for argument that practically any combination of policies that any regime cared to defend would eventually meet the criterion. It would be as easy to defend a strategy of immediate structural transformation, egalitarian distribution and self-reliance, at the short-term expense of levels of investment, production and consumption, as it would be to defend a strategy of maximization of investment and growth in pro-

duction, at the short-term expense of highly inequitable distribution, dependence on foreign capital, and repression of protests.

International policy-oriented research will have to continue to struggle to define development, along with other concepts, more clearly in terms of its own needs, but in full awareness that no definition will satisfy all users or prevent overloading of the term as a simultaneous expression of the real and of the desirable.

Second, there is the related tension between the ideal of arriving at a comprehensive and coherent theory explaining the phenomena the research confronts and aspires to change, and the pressures toward incongruous marriages of the pragmatic and the universal. Theories of development and social change have proliferated in recent years, but the explanatory power and prestige of all of them has waned. The unified approach project was able neither to make a reasoned choice among the theories already current nor to construct an original theory. It confronted—in addition to the obvious hindrances of inadequate time and disciplinary and other divergences in the team—an inhibiting prejudice against theorizing in the institutional sponsors of the project. Theoretical argument is divisive, and moreover, according to oft-repeated views in United Nations policy-making bodies, it is a luxury that cannot be afforded in view of the urgency of the problems demanding solution. Theoretical explanations are already available or can be dispensed with. The recurrent superficiality or evasiveness of the generalizations in United Nations documents, seeking to stay within the limits of the permissible, confirms this evaluation. The policy-making bodies thus call for the 'concrete' and the 'practical', but with the implicit or explicit proviso that the concrete and practical prescriptions must refrain from judging specific national situations and policies. Thus the compilers of reports must aim at prescriptions that appear concrete but are general enough to be applicable by any government that chooses to listen. The result has been a long series of Secretariat responses to demands for 'practical' solutions to urgent problems that were forgotten as soon as presented. This was true of the 'practical application' proposals deriving from the unified ap-

proach project. However, as was noted above, the project resisted advancing very far along this path.

The well-worn retort that nothing is more practical than a good theory comes to mind, but does not take one far towards resolution of the tension. Probably international policy-oriented research will continue to be more a consumer than a producer of theories, and will have to open itself to the possible validity, under defined conditions, of a wide range of theoretical challenges to the relevance of the 'practical'.

Third, there is the tension between the ideal of searching criticism of the conventional wisdom on development and the insertion of the research into a complicated array of institutions and expectations deriving from this wisdom, at a time when the wisdom itself has practically lost whatever coherence it once had. Policy-oriented research is expected to come up with something new and to criticize the old. There would be no occasion for it if its sponsors thought that existing diagnoses and policies were satisfactory. The very urgency with which 'practical' prescriptions are demanded indicates a pervasive sentiment of crisis.

Criticism must thus apply itself to a contradictory mixture of conventional suppositions (particularly on the role of the State), of sweeping, and apparently radical 'new' objectives—popular participation, elimination of poverty, satisfaction of basic needs, etc. and of terminological innovations giving an air of novelty to policies that have long been current. The 'unified approach' itself began mainly as a terminological innovation for a desideratum previously labelled 'balanced social and economic development'.

The most useful corrective will probably be the cultivation of historical awareness. The history of development as a mobilizing myth is short, but long enough for the observation that "those who forget history are condemned to repeat it" to have become very pertinent.

The quest for a unified approach to development in terms of norms and prescriptions has been carried as far as it profitably can be, if not farther. The most hopeful direction for the next

stages of policy-oriented research lies at levels between the comprehensive theoretical or ideological explanations for societal change, and the local manifestations of change and policies designed to influence change. Comparative studies with a historical perspective focussed on the ways in which different social agents of change perceive their roles and act, and the confrontation between their perceptions and the specific settings on which they are trying to act, are still few. Presumably research in this direction will leave something intact in the aspiration for rationally planned

action to bring social change and economic growth into closer correspondence with certain generally accepted values of human welfare, equity, and freedom. In all probability, however, it will replace the image of the State as a rational, coherent, and benevolent entity—capable of choosing and entitled to choose a style of development; so powerful but so unimaginative that it seeks generalized advice and then acts on it—by a more realistic frame of reference for policy-oriented interpretation of what the State does or evades doing, why, and how.





# Exports of Latin American manufactures to the centres: their magnitude and significance

*Mario Movarec\**

The dynamism shown by Latin American exports as from 1975 led to the expectation that, if such a growth rate could be maintained, the region would eventually recover to some extent the share it had enjoyed in world trade during the 1950s. Since the decline in its share had occurred in respect of primary commodities and not manufactures, where Latin America's participation in world trade had increased, it is clearly of interest to look into the behaviour of Latin American exports of manufactured goods.

The author discusses in particular Latin America's exports of manufactures to the industrialized countries, since the latter, because of their high income and consumption levels, are the main purchasers of such goods.

After drawing attention to the significance of the trade in manufactured goods from the standpoint of the regional supply and the world demand for imports, he analyses the levels of concentration or diversification of exports shown by the Latin American countries, both with regard to primary commodities such as oil and to manufactures.

In the discussion of the central topic, several important aspects of the export of manufactures are examined, including the identification of manufactured and agroindustrial products exported; the degree of penetration of such products in the markets of the industrialized countries; the shares attained by the exporting Latin American countries, and the distribution of Latin American exports of manufactured goods among the industrialized countries. Finally, the author briefly describes some prospects for the growth of exports of manufactured and agroindustrial products and the possible effect of such growth on total exports from Latin America.

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## Introduction

This article was written in response to some questions raised by Raúl Prebisch, Director of *CEPAL Review*, in connexion with Latin American exports of manufactures, and particularly those going to the industrialized countries.

The issue has aroused interest for some time because of the need to know what types of manufactured goods are exported by the region to the centres in order to determine as precisely as possible the degree to which such manufactures are penetrating the markets of the importing countries.

When the study of this question was embarked upon, it became evident that it would have to be examined both from the standpoint of the Latin American supply and from that of the demand in the central countries, whose high levels of income and consumption are decisive factors in the level of exports from the periphery.

It is this relationship between the centre and the periphery which has mainly determined the nature of CEPAL's studies of the trends in Latin American external trade. Because of the economic importance of the sector, from the very beginning CEPAL has concerned itself with the formulation of proposals aimed at achieving regional action leading to the development of a trade structure and of trading relations with the rest of the world which would turn international trade into one of the dynamic factors facilitating growth. The dynamic effect generated will depend, on the one hand, on the creation of an increasing flow of exportable products and, on the other, on their having access to the international markets.

### 1. Regional supply

Some of the key points in the export strategy advocated by CEPAL have been:

(a) To promote the protection of basic commodities, seeking for this purpose to establish agreements aimed at stabilizing the prices of food and raw materials; and

(b) To promote the diversification of exports from the countries of the region, seeking gradually to sell manufactures whose production implies the incorporation of increasing value added.

With regard to the first point, in most countries of the region the yearly value of exports is accounted for by only a few commodities. Thus, when their prices on the international market fluctuate sharply, as is often the case, this affects the economies of those countries.

This dependence of economic activity on certain primary commodities goes beyond national boundaries and is equally significant at the regional level: in the late 1970s, primary commodities still represented over 75% of all exports from 23 Latin American countries.<sup>1</sup>

Consequently, this high correlation between the economies of the countries of the region and their basic export commodities gives rise to certain conditioning factors reflected especially in their vulnerability to the instability of demand, substantial price fluctuations on the international market and the unfavourable terms of trade with respect to imported manufactures.

If the prevailing situation —i.e., the high proportion of primary commodities in the total exports of the region— is projected over the short and medium terms, it is seen that the prospects are that this share will not change fundamentally.

The situation justifies the action already taken at the international level to rationalize the supply of such products and encourage understandings with importing countries with a view to establishing new international agreements on basic commodities.<sup>2</sup>

Nevertheless, past and possible future successes in reaching agreement between exporting developing countries and importing developed countries are not enough to eliminate or mitigate the problem of dependence on a limited range of exports. On the contrary, this dependence might even increase unless the achievement of stability in demand and hence in prices is accompanied by the development

of an export diversification policy. Thus, for example, if a country whose main export is coffee were to obtain greater income from its exports of this product as a result of higher demand and prices in consumer countries, the same circumstances would cause a rise in the share of coffee in total exports and hence also in the country's dependency on coffee: a situation which has characterized the development of exports in several of our countries in the past. Consequently, the solution of the problems created by sharp fluctuations in the value of exports when the latter are concentrated in one or a few products will depend more on how soon the high weighting of these few products can be reduced through export diversification than on any positive trends in demand in the industrialized countries.

In other words, the possibility of correcting the vulnerability of exports will depend more on the incorporation of new products as part of a diversification effort than on efforts to reach understandings with the importing countries aimed at protecting the level of incomes from traditional exports.

Thus, the export of non-traditional products helps reduce the detrimental effect of sharp variations in export income. The greater the number of products exported, the more varied their sectors of origin and the more balanced their proportions within total exports, the smaller will be the fluctuations caused by the price factor in the value of exports. This will be the case even when a country diversifies its exports solely on the basis of new primary commodities, whether agricultural or mineral, because cyclical variations in prices of basic commodities do not occur simultaneously and often occur in different directions.

While prices in some cases follow an upward trend, in others they move downward or remain stable. This behaviour of prices on the international market explains why the unit values of Latin American exports as a whole have not varied even more with the passage of time. Clearly, this has been due to the dissimilarity of variations in the prices of the export products of the region. Individual large fluctuations offset each other to a certain extent, and this causes the fluctuations in the unit value

<sup>1</sup>See CEPAL, *The external economic relations of Latin America in the 1980s*, E/CEPAL/G.1160, 1981, p. 62.

<sup>2</sup>In 1973, there were 21 associations of producer countries, with 70 member countries, whose objectives were both to protect primary commodities on the international market and to encourage co-operation between producer countries. See CEPAL, *The external economic relations of Latin America in the 1980s*, *op. cit.*, p. 54.

index for the region as whole to be less pronounced.

It should be noted that the options in this case, i.e., whether to export traditional or new (non-traditional) products, are different from the usual choice between primary and manufactured goods. Since different products are considered non-traditional in different countries and even in individual countries over time, it is difficult to adopt a statistical definition that is applicable throughout the region.

Obviously, as new products are incorporated, whether they be primary or manufactured, it is possible not only to reduce the sharp fluctuations in export income but also, and even more importantly, to avoid external strangulation to the extent that diversification increases the value of exports and generates surpluses on the trade balance and the balance-of-payments current account.

If our analysis were to be limited to external trade, it would appear to be just as suitable to diversify exports with primary commodities as with manufactures.

However, this is where we see the importance of the second point mentioned at the beginning of this article, regarding the advisability of constantly increasing the proportion of exports of industrial goods with a high value-added content because of the benefits this would bring to the national economies.

In the first place, it would ensure more dynamic growth exports because world demand for manufactures is growing at a relatively higher rate than the demand for basic commodities. It would thus make export earnings less prone to fluctuation than has previously been the case. The greater stability of trends in the variation of the unit values of manufactures with respect to basic commodities would also contribute to this.

To these benefits would be added the most important of all, namely, the positive effect within the countries themselves, since it is obvious that manufacturing contributes to the strengthening of the national economic structure, the strengthening and diversification of the industrialization process and, especially, to increasing employment and improving skills.

For all the above reasons, the Latin American and other developing countries have be-

come aware of the advantages of exporting manufactures and have been orienting their export promotion programmes in this direction.

In any event, it should be noted that from the standpoint of the regional supply of exportable goods, manufactures are only one target of the overall export diversification strategy, in the formulation of which they are viewed, however, as the most 'desirable' or 'advisable' exports.

## 2. *World demand and technology*

From the standpoint of the world demand for imports, on the other hand, trade in manufactured goods takes on greater significance. During the 30 years that have elapsed since CEPAL first put forth its ideas on the subject, important changes have taken place in regional and world trade. Some of these have affected our countries, the largest of which have made considerable progress in diversifying their exports—a subject we will discuss later on. The most revealing development, however, has been that which pertains to modifications in the structure of world trade.

In 1955, manufactures accounted for less than half the world trade in goods (45%). Since then, however, they have increased constantly, and by 1972 they accounted for 63% of world trade. In this latter year, before the oil crisis, fuels represented only 10% and the relative importance of other primary commodities had declined to such an extent that their share (27%) was less than half that of manufactures.

Although after 1974, because of the increase in oil prices, the share of fuels doubled (20%), manufactures retained their leading position in world trade: over the last five years, they accounted for 58%.

Figure 1 shows how manufactures increased at the expense of primary commodities, which decreased gradually and in 1979 amounted to less than half their previous level (22%).

Hence, over the last 25 years there has been a clear trend in world trade: manufactures are displacing primary commodities as far as current value is concerned. This trend is influenced by the following:

1. The relatively greater growth of world

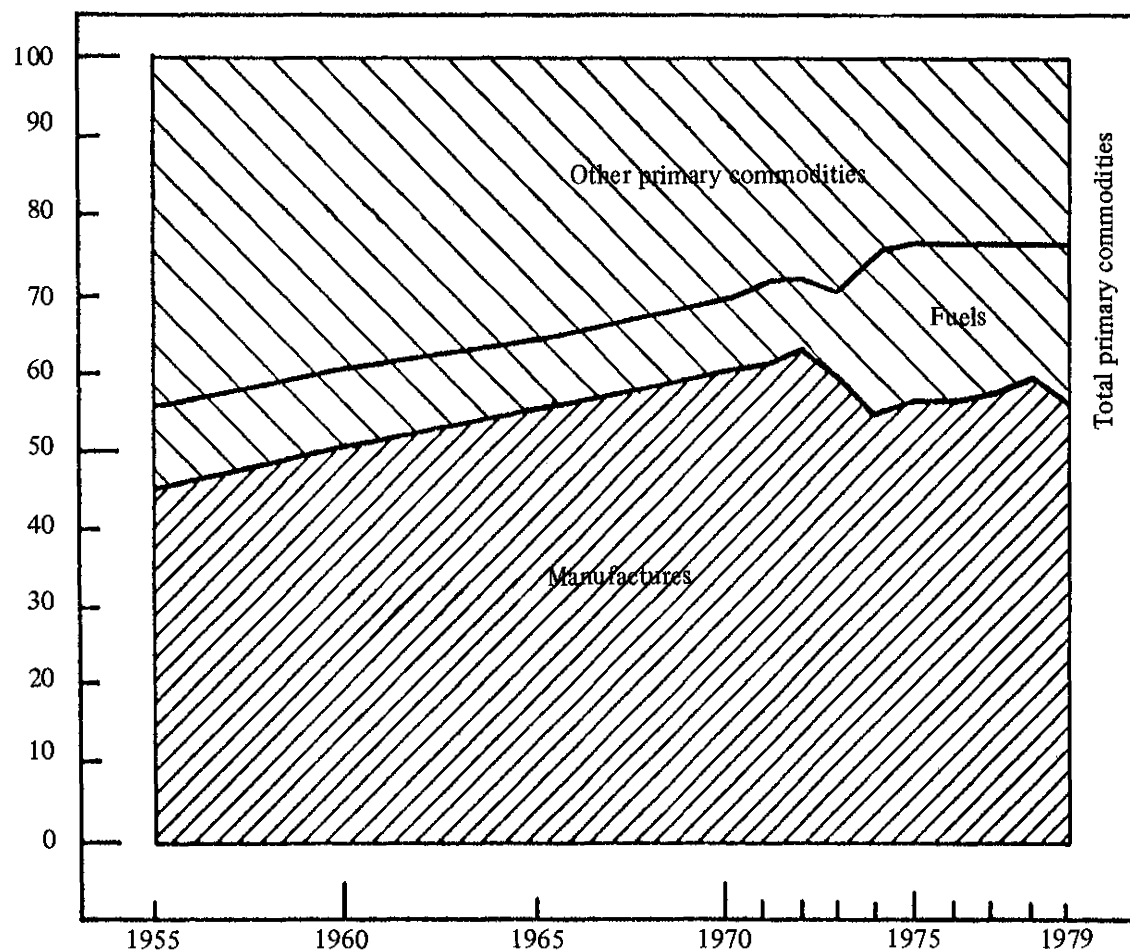
demand for manufactured goods because of the income elasticity of demand for such goods, which favours increased trade in manufactures.

2. Technological advances in the central countries which lead to a gradual reduction in the amount of raw materials and intermediate products used per unit of manufacturing production. Thus, 'production' technologies are increasingly associated with the development of 'substitution' technologies through which 'noble' raw materials (wood, rubber, natural textile fibres, wool, leather, all kinds of metals, non-metallic minerals, etc.) are replaced by synthetic and artificial products in the produc-

tion of goods in practically all branches of economic activity, such as construction materials, plastics and all kinds of plastic products, artificial and synthetic textile fibres, clothing, footwear, fertilizers and other inputs for agriculture, automobiles and transport vehicles, machinery and equipment in general and miscellaneous manufactures.

Consequently, as a result of the development and application of substitution technologies in the industrialized countries, fewer and fewer inputs of raw materials are required. This reduction takes two forms. On the one hand, world demand for raw materials is rela-

Figure 1  
**WORLD TRADE: SHARES OF PRIMARY COMMODITIES AND OF MANUFACTURES**  
*(Percentages)*



tively lower in terms of quantity (quantum), either because they have been replaced by other inputs or because new techniques allow for the production of industrial goods with less consumption of materials. On the other hand, the use of substitutes brings about substantial drops in the international prices of raw materials.

Substitution technologies would thus appear to have a negative effect on the two factors that affect the value of basic commodity sales: quantity and price. The combined negative effect of the two factors contributes, along with the problems mentioned in the first point, to a decline in the share of raw materials in the value of world trade.

Thus, the growing importance of manufactures in world trade is largely a consequence of the use of increasingly sophisticated production technologies.

This leads us to believe that this trend will continue for some time, since the technology gap between the developing and the industrialized countries is likely to continue growing, despite the efforts made to date, particularly by the United Nations (through UNCTAD), to reach agreements on the transfer of technology that would be favourable to the developing world.

Without going into detail as to what technologies the industrialized countries might transfer to developing countries, we should bear in mind that "technology is the fundamental link between natural and social systems".<sup>3</sup> Thus, the technological development achieved by the industrialized countries is a consequence of their economic and social development. All economic and social factors have contributed to this:<sup>4</sup> the primary productive

sectors, manufacturing industries and services (including education and technical, professional and scientific training) and even the behavioural patterns of national societies (punctuality, labour, discipline, sense of responsibility, etc.). Although the influence of such factors on the development of technology cannot be quantified, there is no question but that they continually give it both its orientation and its direction. This, then, is a gradual and continuing process which "increasingly sets the patterns for the definition of needs and the use of resources".<sup>5</sup>

The fact that this takes place gradually makes it possible to develop technology in successive steps whose order allows for progress to be made on the basis of previous achievements. Hence, the essential characteristics of this process is that it is constantly undergoing transformation. That is why today's technology is so different from yesterday's and will also be different from tomorrow's. And that is why we may say that technology "cannot be imported lock, stock and barrel".<sup>6</sup>

But there is always a first step, and this first step is taken with research designed to link the environment with society. Since such research usually begins in the central countries, the techniques developed there on the basis of this research envisage environmental realities and life systems that are different from those exist-

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for example, fuels, the by-products thereof, and energy appear in the classification, according to stage of transformation, in the following major groups and groups of the ISIC: 210 coal mining; 220 crude petroleum and natural gas production; 351 manufacture of industrial chemicals and of petroleum and coal products; 352 manufacture of other chemicals from petroleum and coal; 353 petroleum refineries; 354 manufacture of miscellaneous products of petroleum and coal; 610 petroleum bulk stations; 620 gasoline (petrol) filling stations (retail trade); 4101 the generation, transmission and distribution of electric energy for sale to household, industrial and commercial users; 4102 the manufacture of gas in gas works and the distribution of manufactured or natural gas through a system of mains to household, industrial and commercial users; 4103 establishments primarily engaged in the production and distribution of steam and hot water for heating, power and other purposes.

<sup>3</sup>See, "Present Development Styles and Environmental Problems", *op. cit.*, p. 13.

<sup>6</sup>See Miguel S. Wionczek, "The major unresolved issues in the negotiations on the UNCTAD code of conduct for the transfer of technology", in *CEPAL Review*, No. 10, April 1980, p. 96.

<sup>3</sup>See "Present Development Styles and Environmental Problems", Mostafá K. Tolba, *Cepal Review* No. 12, December 1980, p. 13.

<sup>4</sup>The expression "economic and social factors" is used here to refer to all categories of activity contained in the *International Standard Industrial Classification of all Economic Activities* (ISIC), United Nations, Statistical Papers, Series M, No. 4, Rev. 2, New York, 1969. Consequently, the three sectors to which reference is made, commonly known as the primary, secondary and tertiary sectors, include all the economic activities that take place in an economy, in the areas of population, production, employment, national income and other economic pursuits. Thus,

ing in the countries to which the findings are ultimately transferred. In addition, the transfer of technology involves not only 'desirable' but also 'undesirable' features. "What production technology has contributed to human welfare is incalculable. At the same time, however, the evils it brings with it are increasingly obvious and disquieting. I am referring not only to the anomalies of the consumer society but also to pollution, the deterioration of the environment and the irresponsible exploitation of non-renewable natural resources".<sup>7</sup>

At any given time, it is usually possible to transfer only partial aspects of a country's technological process that would make it possible, in industry for example, to improve in another country the methods or techniques for producing certain goods, by means of new and more productive equipment. It is not possible, however, to transfer the increasingly significant changes that take place, as a result of technological progress, in the real productivity of the factors of production and hence in the national economy as a whole.

In any event, the greater the changes that take place in the natural and social systems of the industrialized countries with respect to the developing countries, the greater will be both the technological progress of the former and the technological gap between the two types of countries. What is most likely, therefore, is that the 'technological components' in the production processes of the future will be proportionately greater and will play a stronger role in determining the growing share of manufactures in world trade.

Although this tends to confirm the trends in world trade over the last quarter of a century,

in the final analysis what it does is to show the loss of importance of the primary sectors with respect to the secondary and tertiary sectors: a process which goes hand in hand with development.

In a way, the above might lead us to a fatalistic conclusion about the future of the Third World. It should be borne in mind, however, that every trend has its limits. The extent to which the deterioration in the technological relation between the centres and the periphery can go will depend on that initial step mentioned above, i.e., research designed to promote the development of technology in the region. Research is necessary not only to avoid the evils that imported technology brings with it, but also to establish in our countries a link between nature and the living conditions of the inhabitants, which should be more in line with our reality.

Finally, there is a limit beyond which technology cannot go. Even though technology might modify the interrelationship between the centres and the periphery, either in favour of or against the periphery, technology simply cannot do away with matter. That is why technology will never be 'creation'. If technology were developed to the point of being able to create something out of nothing, it would achieve the supreme equality: placing Man on the same level as God. But Man can create nothing out of nothing; he can only transform matter. Herein lies the essential difference between spirit and matter. If we do away with matter, the only thing transferable to Man will be knowledge and knowledge through the Word. "In the beginning was the Word, and the Word was with God, and the Word was God. The same was in the beginning with God".<sup>8</sup>

<sup>7</sup>See Raúl Prebisch, "A critique of peripheral capitalism", in *CEPAL Review*, first half of 1976, p. 19.

<sup>8</sup>Gospel according to St. John, 1: 1-2 (authorized version).

## I

## Diversification or concentration of Latin American exports?

One development that is contrary to the interests of Latin America and which has been taking place for several years is the decline in its share of world exports. In 1950 this share was 11%, but 30 years later, in 1980, it had dropped to 5%, or less than half.

Twenty-two of the 24 countries of the region that were included in the comparison figured in this decline.<sup>9</sup>

Only Ecuador and Trinidad and Tobago slightly improved their share with respect to 1950, thanks to the contribution made by their oil exports. A high percentage of Trinidad and Tobago's oil exports consists of refined products processed in the country from imported crude oil inputs.

A comparison of each country's 1980 share with a more recent year, 1970, shows that only 4 countries had improved their relative position: Ecuador and Trinidad and Tobago, once again, plus Brazil and Mexico. Oil was also responsible for Mexico's increased share in world trade, which rose to a level similar to 1950 (actually a little lower).

The results of this comparison between 1970 and 1980 serve to show the seriousness of the decline in Latin America's relative position in world trade over the last 30 years, despite the dynamism evident since 1975 in exports from several Latin American countries. It was believed that if this recent dynamism could be maintained, the region would recover part of its past share.<sup>10</sup> However, in 1980, the region's share in world exports was lower not only with respect to 1950 and 1960, but also with respect to 1970 (see table 1).

<sup>9</sup>The following countries were considered: the 11 member countries of ALADI (formerly ALALC), the 5 member countries of the Central American Common Market, and Barbados, Cuba, Dominican Republic, Guyana, Haiti, Jamaica, Panama and Trinidad and Tobago.

<sup>10</sup>During the period 1975-1978, the quantum of exports from Latin America rose at an annual cumulative rate of 9.2%, higher than the 6.8% registered by world trade. Between 1970 and 1975, however, the growth rate of regional

Table 1

LATIN AMERICA: SHARE IN WORLD EXPORTS  
(Percentages)

	1950	1960	1970	1980
WORLD	100.00	100.00	100.00	100.00
Argentina	1.92	0.84	0.56	0.40
Brazil	2.22	0.99	0.87	1.01
Chile	0.47	0.38	0.39	0.24
Mexico	0.86	0.59	0.40	0.81
Paraguay	0.05	0.02	0.02	0.02
Uruguay	0.42	0.10	0.07	0.05
Bolivia	0.12	0.04	0.06	0.05
Colombia	0.65	0.36	0.23	0.21
Ecuador	0.12	0.11	0.06	0.13
Peru	0.31	0.34	0.33	0.19
Venezuela	1.91	1.90	1.00	0.96
Andean Group	3.13	2.74	1.70	1.54
ALADI	9.06	5.67	4.02	4.07
Costa Rica	0.09	0.07	0.07	0.05
El Salvador	0.11	0.09	0.07	0.05
Guatemala	0.13	0.09	0.09	0.08
Honduras	0.09	0.05	0.06	0.04
Nicaragua	0.04	0.04	0.06	0.03
CACM	0.48	0.34	0.36	0.24
Cuba	1.10	0.48	0.33	...
Haiti	0.06	0.02	0.01	0.01
Panama	0.03	0.02	0.03	0.02
Dominican Republic	0.14	0.14	0.07	0.05
Barbados	0.03	0.02	0.01	0.01
Guyana	0.05	0.06	0.04	0.02
Jamaica	0.07	0.13	0.11	0.05
Trinidad and Tobago	0.17	0.22	0.15	0.20
Total Latin America	11.23	7.13	5.16	4.68*

Source: United Nations Conference on Trade and Development, Supplement 1980, *Handbook of International Trade and Development Statistics*, and preliminary figures for 1980, based on official statistics.

\*Excluding Cuba.

exports was only 1.8%, much lower than the world rate of 5.2%. Therefore, during the 1970-1978 period, the physical volume of regional exports grew at an average annual rate of 4.5%, lower than the 6.1% growth rate of world trade.



This shows that the deterioration of Latin America's position in world trade has been very serious and that if this trend is to change, much greater efforts will have to be made than those carried out so far in individual countries.

If in addition to analysing the behaviour of exports by countries (the subjects of trade), we examine them according to major commodity groups (the objects of trade), we note that the decline is accounted for by primary commodities. Thus, these commodities, which in 1970 represented 13% of world exports of such goods, dropped to 11% in 1978. This drop occurred mainly with respect to fuels (from 13% to 9%) and minerals, including non-ferrous metals (from 14% to 11%). Only in 1978 did food and agricultural raw materials recover their 1970 share (see table 2).

In contrast, Latin American exports of manufactures, which in 1970 represented 1% of

world trade in such goods, rose in 1978 to 1.4%; this was the only group that increased its share in the value of world exports. Even though this percentage is still quite low, it should be borne in mind that in 1978 manufactures represented 60% of the total value of world trade; consequently, a small percentage increase in respect of this value comes to a significant amount.<sup>11</sup>

These figures highlight the fact that Latin American exports of primary commodities are proportionately more important in world trade than those of manufactures. This confirms the region's traditional position as an exporter of primary commodities.

The increase in the proportion of sales of manufactures, reflecting an increase in Latin America's share in the world trade in industrial goods, is a very positive development which has not only meant an improvement in the region's position on the international market, but

Table 2  
LATIN AMERICA: SHARE IN WORLD EXPORTS, BY COMMODITIES  
(Percentages)

	Total (SITC 0 to 9)	Food and agricultural raw materials (0+1+2-27-28+4)	Minerals (crude and metallic) and non-ferrous metals (27+28+68)	Fuels (3)	Primary commodities (0 to 4+68)	Manufactures (5 to 8-68)
1970	5.6	13.0	13.6	13.1	13.1	1.0
1971	5.2	12.0	13.0	12.7	12.3	0.9
1972	4.9	11.8	11.7	11.1	11.5	1.1
1973	5.2	11.1	11.2	12.2	11.5	1.3
1974	6.0	11.8	11.8	11.5	11.7	1.4
1975	5.6	12.2	12.5	10.8	11.6	1.2
1976	5.5	12.8	12.8	9.8	11.3	1.3
1977	5.5	13.9	11.5	9.1	11.3	1.4
1978	5.1	12.9	11.0	9.1	11.0	1.4

Source: CEPAL, on the basis of United Nations, *Monthly Bulletin of Statistics*, July 1975, May 1977 and July 1980.

Note: In addition to exports from the 24 countries covered in table 1, this table includes exports from Netherlands Antilles, Bahamas, Bermuda, French Guiana, Greenland, Guadeloupe, the Virgin Islands, Martinique and Suriname.

<sup>11</sup>Thus, for example, in 1978 a 1% increase in the share of the region in world exports of manufactures would have

meant an increase in total exports from the developing countries of America of 12%, equivalent to US\$ 7.8 billion.

has also promoted the development of the more dynamic sectors of the economies of some of our countries.

The changes that have taken place during the past decade with respect to Latin America's share by groups of goods—a decline in primary commodities and an increase in manufactures exported—mean in reality that there was a diversification of the region's exports. To this must be added the fact that some Latin American countries diversified their exports with non-traditional primary commodities or commodities which ceased to be exported for some time and then were again exported. It should be remembered, however, that this type of diversification cannot be determined at the Latin American level, since when a country exports a primary commodity for the first time, it will by definition be considered a 'non-traditional' commodity, although other Latin American countries will most likely already be exporting it as a traditional one. Thus, diversification at the national level cannot be distinguished regionally and instead actually tends to indicate greater concentration when figures are given for the Latin American countries as a whole.

The most recent case is that of the concentration of Latin American exports on oil during 1981. According to preliminary figures, because of the large increase in external sales of Mexican oil, the value of which rose to US\$ 15 billion,<sup>12</sup> this product is estimated to have represented 40% of the total value of the region's exports for that year. This represents the highest participation by a single product ever noted in Latin America.

While because of their magnitude Mexico's external sales of oil changed the percentage shares of the various exports for the region as a whole, the implications for that country's economy are also far-reaching and not free from internal controversy. Oil represented 64% of Mexico's total exports of goods in 1981 and this figure could rise during the next few years. Although it is lower than the figures for Vene-

zuela (91%) and Trinidad and Tobago (89%), there can be no question but that oil has brought about a high concentration of Mexican exports.

However, considering the structure and level of development achieved by Mexican industry and other sectors of the economy, as well as the development projects put underway thanks to the financial resources generated by oil, the significance and effects of this concentration are not comparable with those traditionally observed in other countries of the region. This is all the more evident when one takes into account the seriousness with which the Government of Mexico is carrying out the National Energy Plan and the role it assigns to oil in the economic and social development of the country.

"Today, reserves amount to 72 000 million barrels, while probable reserves are 58 650 million barrels, and the volume of potential reserves, comprising the previous amounts plus cumulative production to date, amounts to 250 000 million:

"A year ago, Mexico's petroleum reserves were sixth, by volume, in the world. Today they are in fourth place and are constantly rising.

"Since 1976, proven reserves of hydrocarbons have multiplied tenfold; production has trebled; exports of crude have grown at exponential rates; refinery capacity has increased 50% during these five years, and capacity for production of basic petrochemicals has practically doubled.

"But the objective of government policy on this matter is not to turn Mexico into a hydrocarbon-exporting country, into an 'oil' country supplying raw materials. This is why we are making such efforts not only to add value to our hydrocarbons, but also to increase the capability of our industry to supply the equipment required by the energy sector itself and by other basic branches of the economy. Thus, factories have been set up to produce valves, compressors, platforms, pipes and other equipment not previously produced in the country. Also, projects are underway for the construction of medium-sized ships, heavy casting and forging capacity, and several steel plants to supply us with the corresponding raw material.

"Increased production of hydrocarbons

<sup>12</sup>See Banco de México, *Comercio Exterior*, José López Portillo, "Quinto Informe Presidencial", 1 September 1981.

has created not only greater demand for capital goods, technical staff and workers, but also, through exports, it has generated resources to acquire from abroad the supplementary technology and equipment we need to achieve integral growth.

"Moreover, we realize that petroleum does not guarantee economic growth unless it is used in harmony and in step with the development of other sectors. Proof of this is the fact that some petroleum-exporting countries declined by 3% in 1980, whereas Mexico grew by over 8% during the same year.

"In Mexico we are 'sowing' petroleum in order to transform it from a non-renewable resource into a permanent source of income.

"In view of the urgent need to modernize the country while bringing together growth and justice, we have had to overcome the temptation to solve today's problems by making liberal use of the available resources without considering the consequences for tomorrow. This need is the essence of the plans and programmes that have been drawn up and is the basis of the policy we have established for the export of hydrocarbons, which takes us away from the concept of 'petrolization'. It involves the rational, planned use of a resource in order to facilitate and encourage the growth of others. Those who are frightened by the high share of exports accounted for by petroleum at a given time, without considering its relationship with the efforts being made in other sectors and forgetting about the limitations clearly set forth in the plans and programmes, are taking the same approach, are adopting the same mental attitude and, indeed, are being just as hasty as those who advocate exporting all the petroleum we can and blindly adjusting to the forces of the market.

"We repeat and confirm that Mexico is not a petrolized country, nor is it on the way to petrolization. Petroleum only accounts for 7% of the national product; in other words, for each peso produced in the country, only 7 centavos are accounted for by petroleum, whereas in the petrolized countries, for each peso of the product, 46 centavos come from petroleum.

"Of the total budgeted income of the Mexican public sector, 28% comes from petroleum,

whereas in the petroleum countries this figure ranges between 50 and 90%.

"In Mexico, investment by the entire petroleum sector is only 12% of the national total, whereas in the petrolized countries it is the main moving force of growth.

"Of the income received by Mexico from abroad (for goods and services), only 38% comes from petroleum, whereas many petroleum countries depend on oil for more than 90% of their foreign exchange.

"The expectations aroused by petroleum and our sudden presence on the oil scene, with all its conflicts, took us by surprise; we have still not been able calmly to comprehend the significance of this situation. We accept the rises in oil prices graciously and naturally, but the minute prices drop we become discouraged and feel sorry for ourselves. Those who thought we were going to rise from poverty, without any effort, to a near paradise, have had a rude awakening; those who thought petroleum was deeded to us by the devil so as to make us forget about tilling the soil have rejoiced morbidly, as have those who see their own success in the failure of the country: there are all kinds of people in our pluralistic and free society.

"I would like to recall that we never promised that oil would bring us a garden of roses. We did say, and it is proving to be true, that oil would give us financial self-determination, that it would be the fulcrum and detonator of economic development.

"We are not going to become great through speculation. Only work will give us that opportunity. Let us keep on working and leave aside all fairy tales, illusions, conceptual terrorism, slander and ill-will."<sup>13</sup>

This is an example of a concentration of exports that has had a 'dynamic' effect, since a new product has been added to exports which, although increasing concentration, also substantially increases foreign exchange income, thus obviating the traditional external strangulation of the country. The term might also be

<sup>13</sup>Excerpts from the Fifth Presidential Report submitted by the President of the Republic, José López Portillo, to the Congress of Mexico on 1 September 1981 (see footnote 12 above).

used to differentiate this type of concentration from the traditional or 'static' concentration of exports, whereby a few products account for a large share of total value and this situation is maintained over time; the effects of this have already been considered.

A suitable indicator for measuring the level of concentration of the external trade of a country is an index of product concentration. Estimates based on indexes calculated according to Hirschman's formula show that over a 17-year period the Latin American countries made significant progress in diversifying their exports. Thus, in 1977 the concentration indexes were lower than those for 1960 in all countries except Jamaica, where the index rose (see table 3).

Brazil was the country that achieved the greatest reduction in its export concentration index: i.e., it achieved the greatest diversification of exports, followed by Argentina and Barbados.

Venezuela, on the other hand, was the country in the region whose concentration index declined the least because petroleum continues to be its major export commodity.

The order in which the countries managed to reduce their concentration indexes was as follows:

Country	Reduction of concentration index between 1960 and 1977 (percentages)
— Brazil	63
— Argentina and Barbados	50 - 60
— Guatemala, Panama and Costa Rica	30 - 40
— Dominican Republic, Honduras, Mexico, Ecuador and Nicaragua	20 - 30
— Colombia, Trinidad and Tobago, Guyana and El Salvador	10 - 20
— Venezuela	8
— Jamaica was the only country whose concentration index rose (by 21%)	

Concentration indexes were not calculated for the remaining Latin American countries in 1960 and/or 1977.

In table 3, the countries are classified in decreasing order of the concentration index for 1977, so that the first countries on the list are those with the greatest concentration of exports and the last ones are the most diversified. It may be noted that Argentina, Mexico and Brazil are among the latter. Since 1977, Mexico's concentration index has probably changed significantly and Brazil's more moderately. In Mexico, the index should have risen appreciably because of the heavy participation of petroleum, while in Brazil, a country which has continued diversifying its exports at a constant rate, the concentration index should be lower. Thus, the index for Brazil would be closer to the value shown for Argentina and the Mexican index would be further away from those two countries.

As we have just seen, Brazil is the country that has achieved the greatest diversification of its exports. This process, which has brought about noteworthy results, has been characterized by:

(i) The high growth rate of exports, which has exceeded the rate for world trade;<sup>14</sup>

(ii) Highly diversified sales of both primary and industrial products in very significant amounts;

(iii) Diversification with respect to countries and zones of destination, leading to an increase in the number of co-participating countries, which now include buyer nations in Africa and the Middle East.

The high growth rate of Brazilian exports has been significantly stimulated by certain products which, since they do not correspond to any of the basic commodities previously occupying a major place in the region's exports, had probably not been considered or included in some of the national export promotion programmes.

However, with only three 'non-traditional' products, to which little or no importance had been attached until a few years ago (poultry

<sup>14</sup>The value of Brazil's exports increased between 1970 and 1980 at a cumulative annual rate of 22%, higher than the 20% registered by world trade. In 1981, Brazilian exports rose by 16% over the 1980 value, whereas the value of world trade for the first half of 1981 declined by 1% with respect to the same period in 1980.

Table 3

## LATIN AMERICA: CONCENTRATION INDEXES OF EXPORT COMMODITIES

Countries <sup>a</sup>	1960	1966	1968	1976	1977
Jamaica	0.560	0.536	0.553	0.509	0.679 <sup>b</sup>
Venezuela	0.725	0.702	0.692	0.688 <sup>c</sup>	0.668
Trinidad and Tabago	0.766	0.864	0.680	0.633	0.626
El Salvador	0.712	0.500	0.413	0.448	0.609
Colombia	0.743	0.664	0.609	0.530	0.600
Ecuador	0.644	0.650	0.515	0.564	0.507
Chile	...	...	0.747	0.547	0.471
Guyana	0.543	0.554	0.527	...	0.456
Guatemala	0.694	0.496	0.337	0.306 <sup>c</sup>	0.444
Haiti	...	...	0.406	0.280 <sup>c</sup>	0.438
Barbados	0.862	0.740	0.655	0.436	0.423
Costa Rica	0.609	0.462	0.379	0.337	0.409
Dominican Republic	0.541	0.598	0.553	0.563 <sup>c</sup>	0.407
Honduras	0.511	0.531	0.460	0.358	0.397
Panama	0.561	0.592	0.581	0.492 <sup>c</sup>	0.370
Nicaragua	0.460	0.517	0.391	0.313	0.364
Peru	...	...	0.335	0.287 <sup>c</sup>	0.266
Uruguay	...	...	0.458	0.271	0.257
Brazil	0.580	0.463	0.400	0.237	0.217
Mexico	0.272	0.243	0.147	0.174	0.212
Argentina	0.300	0.322	0.207	0.164	0.149
Cuba	...	...	0.754	0.871 <sup>c</sup>	...
Bolivia	...	...	0.492	0.444 <sup>c</sup>	...
Paraguay	...	...	0.301	0.272 <sup>c</sup>	...

Source: Calculated by the secretariat of UNCTAD on the basis of the Hirschman index. The index of concentration for each commodity is equal to 1.0 if only one commodity is exported (maximum concentration) and the value declines with rising degree of diversification of exports. The Hirschman indexes were calculated according to the following formula:

$$H_j = \frac{\sqrt{\sum_{i=1}^{182} \left( \frac{x_i}{X} \right)^2} - \sqrt{1/182}}{1 - \sqrt{1/182}}$$

where j = country index  
 $x_i$  = export value of product i  
 $X = \sum_{i=1}^{182} x_i$

and 182 = number of products at the three-digit level of the SITC.

See United Nations Conference on Trade and Development, Geneva, *Handbook of International Trade and Development Statistics*, 1969, 1979 and 1980.

<sup>a</sup>Decreasing order according to Hirschman concentration index for 1977.

<sup>b</sup>Index for 1976.

<sup>c</sup>Index for 1975.

meat, orange juice and footwear) Brazil is receiving foreign exchange amounting to at least twice that received by six countries of the region for their total exports and equivalent to that received by seven other countries (see table 4).

With regard to the destination of these products, it is worth pointing out that they are sold to countries with high per capita incomes

such as the Middle Eastern and the industrialized countries. The Middle Eastern countries import poultry meat, while the industrialized countries are the main purchasers of orange juice and footwear.

It is interesting to note, on the other hand, that less than 3% of the total amounts of these products are exported to Latin America (see table 5).

Table 4

BRAZIL: EXPORTS OF THREE NON-TRADITIONAL PRODUCTS TALLING AN AMOUNT EQUIVALENT TO THE EXPORTS OF 13 LATIN AMERICAN COUNTRIES, 1980

(Millions of dollars)

Exports from Brazil		Total exports of	
Poultry meat	207	Barbados	189
Orange juice	339	Guyana	389
Footwear	388	Haiti	211
Total for the 3 products	934	Nicaragua	532
		Panama	336
		Paraguay	400
		Bolivia	942
		Costa Rica	1 017
		El Salvador	963
		Honduras	835
		Jamaica	960
		Dominican Republic	962
		Uruguay	1 029

Source: International Monetary Fund, *International Financial Statistics*, Washington, December 1981; CEPAL, E/CEPAL/L. 260, "A Preliminary Balance-Sheet of the Latin American Economy during 1981"; Banco do Brasil, External Trade Department, *Weekly information bulletin* No. 736, March 1981.

Table 5

BRAZIL: DESTINATION OF EXPORTS OF THREE NON-TRADITIONAL PRODUCTS, 1978

(Percentages)

	Poultry meat (BTN 02.02)	Fruit juices (BTN 20.07)	Footwear (BTN 64.01 to 64.06)
Africa	3.3	-	-
Latin America	1.0	2.4	0.9
Middle East	94.9	-	-
Industrialized countries	0.8	97.1	98.3
USSR and Eastern Europe	-	0.5	0.6
Not specified	-	-	0.2

Source: Ministerio de Fazenda, Secretaria da Receita Federal, Coordenação do sistema de informações econômico-fiscais, *Comercio Exterior do Brasil, Exportação*, 1978.

Note: The main product under position 20.07 is orange juice.

The diversification achieved by Brazil, which may be measured by the reduction of the concentration index discussed above, becomes clearly evident when one notes how the relative importance of coffee has gradually declined (see table 6). Moreover, Brazilian exports from the automotive sector are estimated at nearly US\$ 2 billion for 1981: a value which is higher than that of coffee for the same year. According to estimates, these exports were distributed more or less equally between the industrialized and the developing countries, with sales to the region estimated at US\$ 250 million. These figures are very significant, since coffee accounted for 74% of exports in 1952, whereas in 1981 its estimated share was no more than 8%.

Table 6

SHARE OF COFFEE IN TOTAL EXPORTS  
OF BRAZIL AND COLOMBIA  
(Percentages)

Period	Brazil	Colombia
1950-1954	61	81
1955-1959	61	82
1960-1964	53	71
1965-1969	41	62
1970-1974	20	51
1975-1979	16	59
1980	12	61

Source: International Monetary Fund, *International Financial Statistics*, Washington, February 1960, Supplement 1978, July 1980 and December 1981.

No other country has diversified its exports as much as Brazil. Thus, for example, in Colombia the share of coffee also declined, to the point where in 1974 it represented 44% of total exports, but since then it has gained in importance again, rising to 61% in 1980. It should be noted that in 1977 coffee exports caused the concentration index to rise with respect to 1976 (see table 3).

In brief, there has been a diversification of exports in Latin America, and manufactures have contributed to this process in varying de-

grees, depending on the country concerned.

The case of Mexico, where petroleum caused a concentration of exports whose implications have already been discussed, allows us to draw some conclusions.

Although every export promotion strategy seeks to achieve a high degree of diversification by increasing the participation of manufactures, the real goal is to reverse the existing situation where primary commodities are preponderant, so that manufactures may take over this leading role and displace commodities from Latin American exports.

It should be borne in mind, however, that Latin America has a wealth of basic resources, which in the final analysis constitute one of its most important heritages. Other countries, such as those of the Old World and Japan, lack many of these resources. Thus, they will always need them and be concerned with obtaining them, not only by importing them but particularly by investing in their development in the countries which have them.

With respect to manufactures, on the other hand, the industrialized world has not shown comparable interest in promoting their production in Latin America, although there has been a large-scale industrial redeployment in the countries of South-East Asia aimed at taking advantage of the unique conditions and characteristics of that region.

Consequently, in our countries the development of export-oriented industry will have to depend to a large extent on domestic savings. Given the low coefficients of savings and domestic investment noted in Latin America, the proportion of these that can be used for the necessary industrial development may well be inadequate. This gives rise to serious questions about the region's prospects for improving its participation in world exports, since this will call for an increase in exports of manufactures of a magnitude that will probably be difficult to achieve. Consequently, it is also rather unlikely that primary commodities will in future play only a minor role in exports.

Moreover, what has happened in Brazil with respect to the diversification of exports, where certain non-traditional products based on primary commodities have become quite important, provides a valuable example for

other countries in the region of what can be achieved in this field. But the cases analysed might also lead to erroneous forecasts being made unless it is borne in mind that Brazil, because of its territorial extension, is endowed with enormous resources which allow it to compete on the international market with new products whose export can be increased at very high annual rates. This means that many of the successes achieved in Brazil might be difficult

to achieve in other countries of the region, particularly in those that are relatively less developed economically. Finally, this gives rise to the question of whether economic integration might not provide these countries with a timely alternative for trying to improve their position on the international scene. This is particularly relevant in the light of the protectionist measures increasingly being put into practice by the developed countries.

## II

### Exports of manufactures

Exports of Latin American manufactures went to the following destinations in 1978:<sup>15</sup>

	<i>Percentage</i>
<i>Developed countries</i>	54.0
— United States	30.9
— EEC	15.4
— Canada	1.4
— Japan	2.0
— Other developed countries	4.3
<i>Countries with centrally planned economies</i>	2.2
— Eastern Europe	1.1
— Soviet Union	0.7
— Asia	0.4
<i>Developing countries</i>	43.8
— Latin America	36.9
— Africa	3.8
— Asia (except the Middle East)	1.3
— Middle East	1.8

The dynamism shown by Latin American exports of manufactures, reflected in the increase in their share in world trade, represents an advance which not only means that sales on the international market are growing, but also shows that some countries have strengthened certain areas of their domestic industry, which have played their part in this improvement.

<sup>15</sup>See United Nations, *The external economic relations of Latin America in the 1980s*, *op. cit.*, table A.

Hence, what we are concerned with is determining, from the standpoint of Latin American supply, the countries, sectors and products which contributed to that growth, and likewise, from the standpoint of demand, the countries which imported those products.

Table 7, therefore, shows the structure of Latin American exports of manufactures to the industrialized countries and to the developing countries. Within the group of developing countries intra-regional trade and trade with other developing countries are shown separately.

It will be noted that Latin American exports of manufactures to the industrialized countries and to the developing countries differ significantly as regards their share in certain categories.

Exports to the developing countries contain a higher proportion of capital goods (machinery and transport equipment) and chemicals than those going to the industrialized countries. Whereas machinery and transport equipment sold within the region represent a slightly higher percentage (39%) than sales to the industrialized countries (36%), these capital goods account for more than half (55%) of Latin American manufactures exported to other developing countries. These sales were made by Brazil (94%) and, in equal percentages, by Argentina and Mexico (3%).

The industrialized countries, on the other hand, purchase a much higher percentage of



Table 7

LATIN AMERICA: STRUCTURE OF EXPORTS OF MANUFACTURES TO INDUSTRIALIZED COUNTRIES, DEVELOPING COUNTRIES AND LATIN AMERICA, 1978  
(Percentages)

SITC	Manufactures	Industri- alized countries	Developing countries		
			Total	Latin America	Others
	<i>Total manufactures</i>	100.0	100.0	100.0	100.0
5	Chemicals	10.9	15.8	17.5	5.6
6-68	Basic manufactured goods	30.9	31.7	31.0	36.3
65	Textile yarn and fabrics	8.2	7.3	6.7	11.1
67	Iron and steel	7.4	6.3	5.5	10.8
7	Machinery and transport equipment	35.7	41.3	38.9	55.3
73	Transport equipment	7.5	17.9	11.9	52.4
8	Miscellaneous manufactured articles	22.5	11.2	12.6	2.8
84	Clothing	9.6	3.5	3.9	1.2
85	Footwear	5.0	0.7	0.8	0.1

Source: Same as table 8, and CEPAL, on the basis of official statistics of the Latin American countries.

miscellaneous manufactured articles (23%), consisting mostly of non-durable consumer goods such as clothing and footwear, whereas the share of these manufactures in trade with developing countries and within the region is smaller.

Finally, the share of basic manufactured goods in the imports by the different regions is comparable, amounting to 31% in imports by the industrialized countries and 32% in those by the developing countries.

It will be noted from the above that the major share of Latin American manufactures are bought by the industrialized countries (54%). The main purpose of this article is to go more deeply into this fact. Certain basic definitions and concepts have been adopted to throw light on the subject.

### 1. Definitions of certain basic concepts

In dealing with this subject, it was found necessary to restrict certain basic concepts to definitions pertaining to the coverage of coparticipating countries, the concept of penetration into a market and the definition of manufactures. It was also necessary to investigate the distortion produced by statistics with regard to products subject to offshore assembly in the region.

### (a) Regions coparticipating in trade

Research was centered on a universe consisting, on the one hand, of 24 exporting countries of Latin America, and, on the other, the United States, the nine member countries of the European Economic Community (EEC), Canada and Japan.

In 1978, these countries together purchased 92% of Latin American exports of manufactures to the industrialized countries<sup>16</sup> and are, consequently, the main importers of processed products in the developed world.

### (b) The concept of penetration in a market

In order to determine the degree of penetration of Latin American manufactures in the industrialized countries, information is needed not only on what industrial goods those countries import but also on what they produce and export, in order to measure the degree or level of penetration of one or more products in terms of the apparent consumption thereof.

<sup>16</sup>Not including the following industrialized countries: members of EFTA, Spain, Gibraltar, Greece, Malta, Yugoslavia, Australia, New Zealand and South Africa.

Since this type of information is not available, however, the research will be limited to determining the share of Latin American manufactures within total imports of manufactured goods by the industrialized countries.

Therefore, we have chosen as our source of information the statistics compiled by the industrialized countries that are published by the United Nations Statistical Office.

(c) *Limitations inherent in statistical information*

The conclusions of an empirical study such as this depend to a large extent on the quality and reliability of the statistics used. The data compiled by the importing countries that had to be used for this study, give a distorted picture of the trade relations we are trying to identify.

Because of the subcontracting arrangements between United States firms and offshore assembly operations located in Mexico, near the border, there is a statistical discrepancy in the two countries' official statistics on trade between them.<sup>17</sup> These differences arise from the valuation given to the finished products upon their return to the United States, which includes the imputed value of parts previously produced in the United States and not in Mexico, inasmuch as they entered Mexico only temporarily for purposes of assembly and finishing.

Although, when they return to the United States for marketing, these products are subject to customs duty only on the portion of the value added corresponding to the work done in Mexico, the statistics record the total value of the finished product. The value added in Mexico, however, represents no more than 30% of the value of the finished product.<sup>18</sup>

<sup>17</sup>In 1978, United States and Mexican records on the flow of goods exported by Mexico to the United States show the following:

	<i>(Millions of dollars)</i>
Mexican exports to the United States	4 057
United States imports from Mexico	6 195
Statistical discrepancy	2 138
See: International Monetary Fund, <i>Direction of Trade Yearbook</i> , 1980.	

<sup>18</sup>See Héctor Soza, "The Industrialization Debate in Latin America", *CEPAL Review*, No. 13, April 1981, p. 54.

This is why there are such large differences between the records of the two countries in respect of several manufactured products classified in different chapters of the SITC.

In view of this situation, a detailed and exhaustive comparison of Mexican export statistics and United States import statistics was made in order to determine what products are involved and clean up the data so as to avoid mistaken conclusions. In addition, as will be seen in detail later on, after making several adjustments in the over-valued amounts shown in the import statistics, some modifications were made with regard to the share of manufactured products, the ranking of the Latin American exporting countries and the distribution by destination of the exports originally shown in these statistics.

Once the adjustments for offshore assembly are made, it becomes evident that trade between Mexico and the United States, because of its magnitude and particularly because of the methods used in compiling statistics, is substantial enough to alter the results for the region as a whole. If the current method of recording statistics persists, their impact could increase even more in view of the proposal for the creation of a free trade zone along the 3 218 kilometres of border between the United States and Mexico.<sup>19</sup>

<sup>19</sup>"... I have proposed that the United States and Mexico should support the creation of a free trade zone all along the border. My proposal, introduced recently at a hearing held by a United States trade advisory commission, is to establish such a zone along a 200-mile strip in the territory of each country, extending along the entire border from Brownsville, Texas, to San Diego, California. This would constitute a mini-Common Market. Any product grown, produced or manufactured within the zone, on either side of the border, could be traded free of duty within the zone.

"After a ten-year trial period, the zone could be extended to include more or all of the territory of both countries. If successful, the zone could be extended even more, to include not only the United States and Mexico but also Canada and the other nations of Latin America and the Caribbean."

Excerpt from the article "La frontera como centro de amistad", by Abelardo L. Valdez, in *Visión*, Vol. 57, No. 3, 10 August 1981.

Ambassador Abelardo L. Valdez was administrator for Latin America of the Agency for International Development (AID) between 1977 and 1979, and Chief of Protocol of the White House (1979-1981).

(d) *Definition of manufactures*

The concept of manufactures must be defined; any definition used will be a conventional one.

There are several international classifications which define manufactures, either directly or indirectly, according to basic criteria adopted for specific purposes; hence, they are all different from one another.<sup>20</sup>

In some cases, these classifications are not the most appropriate for use with regard to international trade, because of the purposes for which they were originally prepared.<sup>21</sup>

In other cases, the definition of manufactures is based on considerations of a practical nature, for purposes of obtaining external trade data at the world level.<sup>22</sup>

Finally, there are classifications such as those of GATT and UNCTAD,<sup>23</sup> which were created to facilitate negotiations, both bilateral and multilateral, within the framework of the activities of those agencies.

The United Nations statistics on the flows of world trade in manufactures, by regions and countries, use the definition based on sections 5 to 8 (except division 68, non-ferrous metals) of the SITC; consequently, we must use this as well when comparing data for the Latin American countries with data for world trade, since the latter do not use any other classification.

<sup>20</sup>See the following definitions of manufactures: (a) United Nations, various studies and publications: sections 5 to 8 except division 68 of the Standard International Trade Classification (SITC); (b) United Nations, United Nations Conference on Trade and Development (UNCTAD), Trade and Development Board, Committee on Manufactures, *The Definition of Primary Commodities, Semi-manufactures and Manufactures*, TD/B/C.2/3, July 1965; (c) GATT, chapters 25 to 99 of the Nomenclature of the Customs Co-operation Council; (d) United Nations, *Statistical Papers*, Series M, No. 4, Rev. 2, International Standard Industrial Classification of all economic activities (ISIC), major division 3, manufacturing.

<sup>21</sup>This is the case with regard to the ISIC, which is a classification of economic activities and not of products.

<sup>22</sup>Because of the structure of the SITC and the fact that it goes from minor (5-digit categories) to major (1-digit sections), the data organized according to this classification may be easily regrouped by sections in order to obtain values for the external trade of manufactures.

<sup>23</sup>Note that the classification established in 1965 by the UNCTAD Trade and Development Board met a strongly felt need in international economic relations. It was implicitly understood in the deliberations carried out from

Since the world trade data are based on the SITC, so is the classification of manufactures. Although we have, for this reason, used that definition of manufactures, our analysis also covers agroindustrial products from sections 0 and 1 of the SITC.

In any event, this definition is not entirely suitable for studying the trade relations of the Latin American countries, since it includes as manufactures certain traditional export products such as leather, included in section 6, and tanning extracts of vegetable origin, included in section 5. Likewise, it excludes from the category of manufactures such semi-manufactured products included in division 68, non-ferrous metals (copper, nickel, aluminium, lead, zinc and tin) as wire, tubes, pipes and fittings therefore, which are exported by many Latin American countries in relatively large amounts.

2. *Exports of manufactures to the centres*

Trade in manufactures and agroindustrial goods between Latin America and the industrialized countries is shown in tables 8, 9 and 10, which serve as a basis for the following analysis: table 8 shows the value of this trade according to the SITC structure, while tables 9 and 10 show the manufactured and agroindustrial goods traded, in descending order or percentage of total trade.

Latin American manufactures imported by the industrialized countries in 1978 represented 1.8% of all imports of processed goods. Mexico, Brazil and Argentina accounted for 77% of such sales from the region.

The imports of the industrialized countries are distributed as follows: United States, 68%; EEC, 25%; Japan, 4%; Canada, 2%.

The differences between the Mexican and United States records in respect of products finished in Mexico for re-entry to the United

the beginning in UNCTAD between the industrialized and the developing countries that the former were producers of industrial products whereas the Third World countries produced primary commodities. Up to then, however, there had been no internationally recognized classification to define products of one or the other category.

States caused an overvaluation in import statistics of US\$ 1 700 million. This value is much higher than that of actual exports of Mexican manufactures, which are estimated at US\$ 950

million. United States statistics, on the other hand, show imports of manufactures valued at US\$ 2 652 million.

Table 8

INDUSTRIALIZED COUNTRIES: IMPORTS OF MANUFACTURES AND AGROINDUSTRIAL PRODUCTS FROM LATIN AMERICA, 1978  
(Millions of dollars)

SITC	Manufactures	Importers	Imports by industrialized countries from	
			Latin America	World
	AGROINDUSTRIAL PRODUCTS		1 504	20 160
	FOOD		1 389	13 663
013	Meat in airtight containers		334	1 710
032	Fish in airtight containers		46	1 284
053	Fruit, preserved and fruit preparations		373	2 394
(053.5)	Fruit juices		(340)	(925)
055	Vegetables, roots and tubers, preserved		42	1 864
071.3	Coffee extracts and essences		355	689
073	Chocolate and other food preparations containing cocoa		183	1 236
099	Food preparations n.e.s.		19	932
	BEVERAGES		87	5 596
112	Alcoholic beverages		86	5 380
122	TOBACCO MANUFACTURES		28	901
5	CHEMICALS		815	50 522
51	Organic and inorganic chemicals (oxides and salts)		538	16 681
6	BASIC MANUFACTURED GOODS		2 302	108 769
61	Leather, dressed furskins and leather manufactures		383	2 708
63	Wood manufactures		168	4 717
64	Paper, paperboard and manufactures thereof		82	12 775
65	Textile yarn, fabrics and made-up articles		611	22 150
66	Non-metallic mineral manufactures		320	21 034
67	Iron and steel		549	26 508
69	Manufactures of metal, n.e.s.		153	13 907
7	MACHINERY AND TRANSPORT EQUIPMENT		2 661	182 341
71	Machinery, other than electric		727	63 959
711	Power generating machinery		357	11 567
714	Office machines		185	11 135
719	Machinery and appliances (other than electrical) and machine parts, n.e.s.		125	23 108
72	Electrical machinery, apparatus and appliances		1 372	41 372
722	Electric power machinery and switchgear		261	7 093
723	Equipment for distributing electricity		74	1 266
724	Telecommunications apparatus		572	12 656
729	Other electrical machinery and apparatus		441	15 480
73	Transport equipment		556	77 010
732	Road motor vehicles		368	64 705
735	Ships and boats		103	3 630
8	MISCELLANEOUS MANUFACTURED ARTICLES		1 674	75 366
83	Travel goods, handbags		93	1 614
84	Clothing		717	21 426
85	Footwear		369	6 515
89	Miscellaneous manufactured articles		363	23 728

(Continuation table 8)

SITC	Manufactures	Importers	Imports by industrialized countries from	
			Latin America	World
891	Musical instruments, sound recorders and reproducers		77	4 989
894	Toys and sporting goods		109	4 196
	TOTAL AGROINDUSTRIAL PRODUCTS		1 504	20 160
	TOTAL MANUFACTURES		7 452 <sup>a</sup>	416 998
	TOTAL MANUFACTURES AND AGROINDUSTRIAL PRODUCTS		8 956	437 158

Source: Compiled by the author on the basis of United Nations Statistical Office, 1978 *World Trade Annual*, New York, Walker and Company, 1980.

<sup>a</sup>It is estimated that this figure includes US\$ 1 700 million of overvaluation in United States records of imports of manufactures from Mexico. This value would affect the following divisions:

	<i>Millions of dollars</i>
71. Machinery, other than electric	184
72. Electrical machinery, apparatus and appliances	972
73. Transport equipment	164
84. Clothing	186
89. Miscellaneous manufactured articles	195

Table 9  
INDUSTRIALIZED COUNTRIES: IMPORTS OF LATIN AMERICAN MANUFACTURES, 1978  
(Percentages)

SITC PRODUCT	Share of product as a percentage of all manufactures exported from Latin America	Market share of Latin American exporting countries (per cent)	Distribution among industrialized countries	Latin American share in imports of manufactures by the industrialized countries	Additional amount required to reach 1.4% (millions of dollars)
TOTAL MANUFACTURES	100.0	Mexico 39, Brazil 28, Argentina 10, Colombia and Uruguay and Jamaica 3, Dominican Republic, Haiti, El Salvador and Venezuela 2, Peru 1, Panama 0.8, Trinidad and Tobago and Chile 0.7, Costa Rica 0.6, Barbados 0.5, Nicaragua, Guyana and Paraguay 0.3, Bolivia, Cuba, Honduras and Guatemala 0.2, Ecuador 0.1.	United States 68.4, EEC 25.3, Japan 3.9 and Canada 2.4	1.8	a

(Continuation Table 9)

SITC PRODUCT	Share of product as percentage of all manufactures exported from Latin America	Market share of Latin American exporting countries (per cent)	Distribution among industrialized countries	Latin American share in imports of manufactures by the industrialized countries	Additional amount required to reach 1.4% (millions of dollars)
84 CLOTHING (outergarments, undergarments, clothing accessories, fur clothing and other articles of furskins)	9.6	Mexico 30, Uruguay 15, Brazil 10, Dominican Republic and Haiti 7, El Salvador and Colombia 5, Costa Rica 4	United States 83, EEC 15, Canada 1	3.3	-
65 TEXTILE YARNS, FABRICS AND MADE-UP ARTICLES (yarn and thread of silk, wool, cotton, flax, ramie and true hemp; of synthetic and artificial fibres. Includes fabrics made of these fibres and manufactures such as blankets and coverlets, bedlinen, carpets and mats and tapestries)	8.2	Brazil 44, Mexico 16, Argentina and Colombia 10, Peru 8, Uruguay 7	ECC 54, United States 38, Canada 5, Japan 3	2.8	-
724 TELECOMMUNICATIONS APPARATUS (television and radio broadcast receivers; electrical telephone and telegraph equipment, microphones, loudspeakers and amplifiers)	7.7	Mexico 81, Brazil 18	United States 92, EEC 4, Canada 3, Japan 1	4.5	-
67 IRON AND STEEL (pig iron, ferroalloys, ingots, bars, rods, angles shapes, sheets, hoops, wire, tubes and fittings of iron or steel)	7.4	Brazil 47, Argentina 23, Mexico 14, Dominican Republic 11, Venezuela 3, Chile 2	United States 61, EEC 27, Japan 10, Canada 2	2.1	-
51 CHEMICAL ELEMENTS AND COMPOUNDS (aluminium oxides and hydroxides, zinc oxides and peroxides, lead oxides, inorganic acids, liquid or dissolved ammonia, hydrocarbons, ethyl alcohol, etc.)	7.2	Jamaica 38, Mexico 25, Argentina 14, Brazil and Trinidad and Tobago 7	United States 59, EEC 34, Canada 1	3.2	-
729 ELECTRICAL MACHINERY AND APPARATUS (batteries and accumulators, thermionic valves and tubes, transistors, electrical lighting equipment for vehicles, electrical supply meters and electrical condensers)	5.9	Mexico 59, Brazil 20, El Salvador 13, Haiti 3	United States 91, ECC 8, Canada 1	2.8	-

(Continuation Table 9)

SITC PRODUCT	Share of product as a percentage of all manufactures exported from Latin America	Market share of Latin American exporting countries (per cent)	Distribution among industrialized countries	Latin American share in imports of manufactures by the industrialized countries	Additional amount required to reach 1.4% (millions of dollars)
61 LEATHER, LEATHER MANUFACTURES AND DRESSED FURSKINS (machine leather bands and belting, saddlery and other harnessmakers' goods; parts of footwear. The main category is tanned leather)	5.1	Argentina 51, Brazil 23, Uruguay 7, Mexico 6	EEC 55, United States 38, Canada 5, Japan 2	14.1	-
85 FOOTWEAR (footwear with soles of leather or with soles of other materials such as rubber, plastic material, wood or cork. Also includes boots, spats, leg-gins, etc.)	5.0	Brazil 72, Mexico 12, Uruguay 8, Argentina 6	United States 76, EEC 20, Canada 4	5.7	-
732 ROAD MOTOR VEHICLES (bodies, chassis, frames and other parts; chassis with engines mounted)	4.9	Mexico 67, Brazil 27, Argentina 4, Colombia 2	United States 65, EEC 32, Canada 2, Japan 1	0.6	538
711 POWER GENERATING MACHINERY, OTHER THAN ELECTRIC (internal combustion engines for automobiles and aircraft)	4.8	Brazil 67, Mexico 28, Argentina 4	United States 53, EEC 41, Japan 4, Canada 2	3.1	-
66 NON-METALLIC MINERAL MANUFACTURES (cement, glass and glass manufactures, non-refractory ceramic bricks, tiles and similar products, articles of asbestos and articles of minerals n.e.s)	4.3	Mexico 42, Colombia 20, Brazil 19, Venezuela 17	United States 67, EEC 18, Japan 14, Canada 1	1.5	-
722 ELECTRIC POWER MACHINERY AND SWITCHGEAR (electrical apparatus for making and breaking or for protecting electrical circuits, electric power machinery, motors and rotary and static convertors)	3.5	Mexico 82, Brazil 8, Haiti and Dominican Republic 3	United States 97, EEC 2, Canada 1	3.7	-
714 OFFICE MACHINES (electronic calculating machines, typewriters)	2.5	Brazil 41, Mexico 34, El Salvador 10, Argentina, Barbados and Haiti 4	United States 51, Japan 25, EEC 20, Canada 4	1.7	-

(Continuation Table 9)

SITC PRODUCT	Share of product as a percentage of all manufactures exported from Latin America	Market share of Latin American exporting countries (per cent)	Distribution among industrialized countries	Latin American share in imports of manufactures by the industrialized countries	Additional amount required to reach 1.4% (millions of dollars)
63 WOOD AND CORK MANUFACTURES (excluding furniture) (plywood boards, window and door frames, parquet flooring, tool handles, etc.)	2.3	Mexico 50, Brazil 38, Honduras and Bolivia 3	United States 70, EEC 26, Japan 3, Canada 1	3.6	—
69 MANUFACTURES OF METAL, N.E.S. (structures of iron and steel, containers, wire cables, wire mesh of iron or steel, of copper and aluminium, nails, screws and nuts, tools for use in the hand or in machines, cutlery, household equipment of base metals)	2.1	Mexico 65, Brazil 21, Chile 5, Argentina and Colombia 3	United States 93, EEC 5, Canada 2	1.1	42
719 MACHINERY AND APPLIANCES (other than electrical) and MACHINE PARTS (heating and cooling equipment, pumps and centrifuges, lifting and loading machinery, non-electrical domestic appliances, non-electrical motorized hand tools)	1.7	Mexico 65, Brazil 16, Argentina 8, Venezuela 6	United States 84, EEC 13, Canada 2, Japan 1	0.5	198
894 TOYS AND SPORTING GOODS (baseballs, fishing and hunting equipment, equipment for indoor games)	1.5	Mexico 47, Haiti 33, Brazil 12	United States 92, EEC 3, Canada 4, Japan 1	2.6	—
735 SHIPS AND BOATS (tugs, dredgers, floating structures)	1.4	Brazil 51, Panama 48, Argentina 1	United States 15, EEC 55, Japan 30	2.8	—
83 TRAVEL GOODS AND HANDBAGS	1.2	Mexico 30, Brazil 23, Uruguay 16, Colombia 12, Dominican Republic 10, Argentina 7	United States 81, EEC 15, Canada 4	5.8	—
64 PAPER, PAPERBOARD AND MANUFACTURES THEREOF, (newsprint paper, other printing and writing paper, paper bags, paperboard boxes and other containers)	1.1	Brazil 46, Mexico 44, Argentina 6	United States 82, EEC 17, Canada 1	0.6	97



(Continuation Table 9)

SITC PRODUCT	Share of product as a percentage of all manufactures exported from Latin America	Market share of Latin American exporting countries (per cent)	Distribution among industrialized countries	Latin American share in imports of manufactures by the industrialized countries	Additional amount required to reach 1.4% (millions of dollars)
891 MUSICAL INSTRUMENTS, SOUND RECORDERS AND REPRODUCERS (gramophones, tape recorders, phonograph records, recorded tapes, string musical instruments and n.e.s.)	1.0	Mexico 90, Brazil 9, Haiti 1	United States 92, EEC 8	1.5	—
723 EQUIPMENT FOR DISTRIBUTING ELECTRICITY (insulated wire and cable, electrical conduit tubing and joints therefore of base metal lined with insulating material)	1.0	Mexico 84, Dominican Republic 5, Chile 4, Brazil 3	United States 95, EEC 5	5.8	—

Source: Compiled and calculated by the author on the basis of United Nations Statistical Office, 1978 *World Trade Annual*, *op.cit.*

<sup>a</sup> After adjustment is made for offshore assembly, the 1.8% share in the previous column drops to 1.4%.

Table 10  
INDUSTRIALIZED COUNTRIES: IMPORTS OF LATIN AMERICAN  
AGROINDUSTRIAL PRODUCTS, 1978  
(Percentages)

SITC PRODUCT	Share of total agroindustrial exports from Latin America	Shares of exporting Latin American countries	Distribution among industrialized countries	Latin American share of total imports of agroindustrial products by the industrialized countries	Additional amount required to reach 7.5% (millions of dollars)
TOTAL AGROINDUSTRIAL PRODUCTS	100.0	Brazil 58, Argentina 19, Mexico 9, Ecuador 6, Colombia 1.8, Paraguay 1.7, Chile 1.2, Peru and Dominican Republic 0.8, El Salvador 0.5, Venezuela 0.4, Costa Rica and Uruguay 0.2, Haiti, Cuba, Honduras and Panama 0.1	United States 60, EEC 31, Canada 7, Japan 2	7.5	—

(Continuation Table 10)

SITC PRODUCT	Share of total agroindus- trial exports from Latin America	Shares of ex- porting Latin American countries	Distribution among indus- trialized countries	Latin Amer- ican share of total imports of agroindus- trial products by the indus- trialized countries	Additional amount re- quired to reach 7.5% (millions of dollars)
053 PRESERVED FRUITS AND FRUIT JUICES	24.8	Brazil 74, Mexi- co 14, Argenti- na 11	United States 53, EEC 32, Canada 14, Japan 1	15.6	-
071.3 COFFEE EXTRACTS AND ESSENCES	23.6	Brazil 91, Co- lombia 4, El Sal- vador and Mexi- co 2	United States 57, EEC 31	51.5	-
013 MEAT IN AIRTIGHT CON- TAINERS	22.2	Argentina 64, Brazil 28, Para- guay 7, Uru- guay 1	EEC 53, United States 43, Canada 3, Japan 1	19.5	--
073 CHOCOLATE AND OTHER FOOD PREPARATIONS CON- TAINING COCOA	12.2	Brazil 51, Ecua- dor 41, Colom- bia and Peru 2	United States 96, Japan 3	14.8	-
112 ALCOHOLIC BEVERAGES (wine, cider, fermented bever- ages, beer and distilled alcoholic beverages)	5.7	Mexico 50, Ja- maica 23, Trini- dad and To- bago 13, Argen- tina 6, Guyana 4, Chile 2	United States 61, EEC 20, Canada 13, Japan 6	1.6	318
032 FISH IN AIRTIGHT CON- TAINERS	3.1	Mexico 48, Chi- le 26, Peru 17, Venezuela 4	United States 68, EEC 30, Japan 2	3.6	50
055 VEGETABLES, ROOTS AND TUBERS PRESERVED	2.8	Mexico 67, Do- minican Repub- lic 10, Brazil and Chile 7	United States 76, EEC 17, Canada 7	2.3	98
122 TOBACCO MANUFACTURES (cigars, cigarettes, manufactured tobacco, including smoking and chewing tobacco and snuff)	1.8	Cuba 36, Jamai- ca 21, Honduras and Mexico 11	United States 57, EEC 43	3.1	40
099 FOOD PREPARATIONS N.E.S.	1.3	Mexico and Do- minican Repub- lic 26, Argenti- na, Brazil and Venezuela 11, Costa Rica, Chi- le and Panama 5	United States 95, Japan 5	2.0	51

Source: Compiled and calculated by the author on the basis of United Nations Statistical Office, 1978 *World Trade Annual*, *op. cit.*

If we deduct the US\$ 1 700 million of overvaluation from the total value of Latin American manufactures (i.e., US\$ 7 452 million), the amount will be reduced to US\$ 5 751 million.

Evidently, with this adjustment, the share of Latin American manufactures imported by the industrialized countries would also change, dropping from 1.8% to 1.4%.

In turn, this adjustment would change the shares of the exporting Latin American countries, as the order of importance of Mexico and Brazil would be reversed, with Brazil taking first place, with 36%, followed by Mexico, with 22%; Argentina, for its part, would continue in third place, but with a higher share: 13%.

The participation of the three countries together would drop to 71%, with the 6% difference being distributed proportionally among the remaining Latin American countries.

In any event, it should be noted that even when adjustments are made for offshore assembly, a very high proportion of this trade is concentrated in Argentina, Brazil and Mexico, as the remaining 29% is distributed among the 21 other Latin American countries.

The adjustment for offshore assembly also changes the percentage distribution by destination, even though the order of importance is not changed. Thus, the United States' share would decline from 68% to 59%, but the United States would continue to be the main purchaser of Latin American manufactures. The EEC share would rise from 25% to 33% and the minor roles of Japan and Canada would not change.

#### (a) Penetration of manufactures

As we have noted, after adjustment for offshore assembly, Latin American manufactures represent 1.4% of the imports of industrialized countries.

Above that average level of 1.4%, there are 21 items which have found a more favourable market in the industrialized countries.

The product that has penetrated the most, leather manufactures (including tanned leather), amounts to 14%. Nevertheless, this high participation is explained by the fact that this category consists mainly of tanned leather, a

semi-manufacture that has traditionally been exported by the region.

The level of penetration of the other products is as follows:

Product	Penetration ranking (%)
Railway vehicles	6 - 7
Equipment for distributing electricity; travel goods and handbags; footwear	5 - 6
Telecommunications apparatus	4 - 5
Electric power machinery and switchgear; wood manufactures; clothing; chemicals (aluminium oxides and hydroxides); motors; works of art n.e.s.	3 - 4
Yarns, fabrics and made-up articles, electrical machinery and apparatus; tugs, dredgers, floating structures; essential oils and perfume materials, iron and steel	2 - 3

These products were mainly exported by Mexico, Brazil and Argentina.

#### (b) What products are exported

The most important export item is clothing, which represents 9.6% of Latin American manufactures exported to the centres. Clothing and the 10 items following it in importance account for 70% of the region's exports of manufactures to the centres. Hence, a quick look of these items will make it easier to understand their significance and importance.

Two of the most important groups, i.e., chemical elements and compounds, and leather, dressed furskins and manufactures thereof, include products that are largely primary commodities or semi-manufactures. Thus, chemical elements include aluminium oxides and hydroxides (alumina), which are exported by Jamaica in the amount of US\$ 206 million, while the other item also contains a high proportion of goods that are actually traditional exports, such as leather and dressed furskins, mentioned above.

Of the 11 main categories, 5 are overvalued

as a result of offshore assembly: clothing; television and radio broadcast receivers and other telecommunications apparatus; batteries and electric accumulators and thermionic valves and tubes, transistors and other electrical equipment; road motor vehicles; internal combustion engines for automobiles and aircraft.

One symptomatic fact that shows the difference between industrial production proper and subcontracting and offshore assembly is that United States records show imports of electrical machinery and apparatus from Mexico as amounting to US\$ 257 million, whereas the EEC imports only US\$ 3 million worth of such items from the same country. Brazil, on the other hand, exports these products in the following proportions: to the United States, 26%; to the EEC, 65%; to Canada, 5%, and to Japan, 4%.

The fourth most important item is SITC division 67, which includes goods produced by the iron and steel industry. These products are considered semi-manufactures in the UNCTAD classification; however, in some UNCTAD documents, division 67 is excluded from manufactures and included under primary commodities.

The second most important item comprises yarns and fabrics. This is unquestionably the most 'traditional' category of manufactures exported from the region. Only 7 countries participate in this trade, with Brazil accounting for a very high percentage of it (44%).

The importance of footwear as a regional export product is also due to sales from Brazil, whose share is 72%.

In brief, there are two elements in Latin American exports of manufactures that make it difficult to understand clearly their true significance. In the first place, some export items include a high percentage of semi-manufactures obtained as by-products of primary commodities which are actually traditional export products.

In the second place, products finished in Mexico and re-exported to the United States are recorded at much higher values than the value added in Mexico, as a result of which the region appears with a higher share than it actually has.

What does seem very clear, in the export of

manufactures is that this trade is highly concentrated in the three biggest countries of the region.

If the manufactured products exported by Latin America were classified by use or economic purpose, the structure would appear as follows:

	%
Total manufactures	100.0
Consumer goods	29.2
Non-durables	17.9
Durables	11.3
Intermediate processed products and construction materials	42.2
Capital goods	28.6
For agriculture and industry	13.3
Transport equipment <sup>24</sup>	15.3

The share of intermediate processed goods and construction materials is particularly high, i.e., 42%, compared with the 29% each for consumer goods and capital goods.

The main items included under non-durable consumer goods are clothing (10%), footwear (5%), toys and sporting goods (1.5%), and travel goods and handbags (1.2%).

The main item under consumer durables is telecommunications equipment, which includes television and radio broadcast receivers (8%); these are followed in importance by tape recorders and other sound reproducers (1%) and works of art (paintings and drawings), 1%.

Intermediate processed products and construction materials include mainly textile yarns and fabrics (8%), iron and steel (7%) aluminium oxides and hydroxides (alumina) and other minerals (7%), leather and dressed furskins and manufactures thereof (5%), cement, glass and non-metallic mineral manufactures (4%), wood manufactures (2%), metal manufactures (2%) an paper, paperboard and manufactures thereof (1%).

Among capital goods, transport equipment accounts for 15% of all manufactures exported

<sup>24</sup>In addition to division 73 of the SITC, transport equipment includes group 711, automobile and aircraft engines, and part of group 729 (electrical lighting equipment for vehicles).

by Latin America; capital goods for agriculture and industry account for 13%.

The main exports of capital goods for agriculture and industry consist of electric power machinery and switchgear (4%), office machines (3%) and machinery and appliances other than electrical (2%).

(c) *Latin American exporting countries*

As we have seen, Brazil, Mexico and Argentina account for 71% of sales of manufactures. This high concentration may be noted in almost all cases; thus, Brazil is among the three major exporters of 34 of the 48 items making up the total for manufactures. Mexico, for its part, accounts for 43 items, while Argentina exports 17.

The relatively high shares of the Dominican Republic, Haiti and El Salvador should also be noted. In the case of Haiti and El Salvador, their importance stems from the fact that in recent years they have established free trade zones near their international airports, where enterprises engaged in offshore assembly assemble and mount parts sent by transnational corporations for re-export to the United States and Europe; the manufactures exported by the Dominican Republic are also produced and in same way, although the assembly operations are not located near the airport.

(d) *Countries of destination*

Among the industrialized countries, imports of Latin American manufactures are also highly concentrated, in this case in the United States and the EEC. Japan, on the other hand, imports only 4 items, totalling between 10% and 30% of the amount imported by those countries overall; these are iron and steel, non-metallic mineral manufactures, office machines, and tugs dredgers and floating structures. Canada imports the least, as it accounts for no more than 10% in any given category.

### 3. *Exports of agroindustrial products*

The region exports 14 categories of agroindustrial products to the centres. The four most important ones are: preserved fruit and fruit juices; coffee extracts and essences; meat in airtight containers; and chocolate and other food preparations containing cocoa. Altogether,

these items account for 83% of all the agroindustrial products sold.

They are followed in importance by alcoholic beverages and preserved fish and vegetables, which added to the above raise the share to 95%. None of the remaining products amount to 2%.

(a) *Penetration of agroindustrial products*

Imports from Latin America represent 7.5% of the agroindustrial products imported by the industrialized countries.

The products that have penetrated these markets to the largest extent are coffee extracts and essences, which amount to 52% of the total imports of such products. Brazil accounts for 91% of these sales.

These are followed by other goods that have been introduced in the markets of the central countries in proportion that, although not as high as the above, are at least double the average 7.5% penetration of the agroindustrial sector. Thus, Latin American penetration in respect of preserved meat is 20%, of fruit juices 16%, and of chocolate and other food preparations containing cocoa 15%. Brazil sells over 50% of the fruit juices and chocolate, while Argentina exports 64% of the preserved meat.

As regards the remaining agroindustrial goods, their penetration is very low, less than the 7.5% average. Curiously enough, Brazil is a relatively large exporter of only one of these, sugar confectionery (38%). Its share of all the rest is very low.

(b) *Exporting countries*

Of the agroindustrial goods purchased from Latin America by the industrialized countries, 86% come from Brazil, Argentina and Mexico. The concentration of sales from these three countries is higher than that of manufactures, where only Brazil and Argentina arrive at 77%.

They are followed in importance by Ecuador, which accounts for 6% because its exports of chocolate and other food preparations containing cocoa amount to 41% of the value of regional exports of these products.

Colombia, Paraguay and Chile account for less than 2% of exports and the 10 remaining countries have shares of less than 1%.

Argentina, Brazil and Mexico are fre-

quently among the three largest exporters of the various agroindustrial products. Mexico is first in respect of 8 products, Brazil in respect of 7 and Argentina in respect of 6 of the 14 on the list.

(c) *Countries of destination*

The main destination of agroindustrial products is the United States, which buys twice as much as the EEC countries. Canada and Japan buy less than 10% of all purchases of these goods by the developed countries.

The United States is the main importer of all agroindustrial goods, except preserved meat. In contrast, Japan purchases the least of each product.

4. *Growth prospects for exports of manufactures and agroindustrial goods*

As we have seen, Latin American penetration in the markets of the developed countries is greater with respect to agroindustrial goods than to manufactures.

The Latin American share of all agroindustrial goods imported by the industrialized countries is 7.5%; its share of manufactures is only 1.4%.

Among agroindustrial goods, coffee extracts and essences account for 52%; it is to be expected, however, that such a high percentage will eventually decline rather than increase, particularly as a single country, Brazil, accounts for 91% of these exports.

Because of the existing marketing systems and the import quotas established by the industrialized countries, as well as possible competition from new producers outside the region and preferences granted to producers from other regions linked with the EEC, the high proportion of sales by a single exporting country could well suffer a reduction.

On the other hand, there is a greater possibility that sales of goods now having a below-average share will increase, either because some of the arguments mentioned above might work in their favour or because established trading links for those products can be expected to permit an improvement in their currently low levels of penetration.

Considering the above, estimates have

been made of the dollar increases to be expected in respect of exports of manufactured goods now having a share below the average of 1.4% and of agroindustrial products having a share of less than 7.5%, should such exports reach the average figures mentioned.

In the case of manufactures, 27 items would increase in value and this would mean an increase of US\$ 1 746 million in total exports of manufactures to the industrialized countries. This increase would raise the value of exports of manufactures from the region to those countries by 30% and would raise the share of manufactures in the imports of industrialized countries from 1.4% to 1.8%.

In the case of agroindustrial goods, the improvement would be proportionally greater than in the case of manufactures. Thus, 11 items out of a total of 15 having a share of less than 7.5% would increase in value, by a total of US\$ 805 million. This means that exports of agroindustrial goods from the region to industrialized countries would increase by 54% and the share of agroindustrial goods in imports of the industrialized countries would go up from 7.5% to 11.5%.

Although these increases might be achieved through the conjecturally estimated improvement in the position of manufactured and agroindustrial goods showing low levels of penetration, their effect on the total value of exports from Latin America would not be very significant, as this value would only increase by 5%. Latin America's share in world exports would only increase by 0.2%; this same low percentage of increase (0.2%) would also be registered in its share of world exports of manufactures.

This latter fact leads to the conclusion that, as we stated in the previous chapter, Latin America's prospects for improving its share in world trade will depend on its exports of manufactures increasing substantially, since primary commodities have gradually lost their relative importance. For this to happen, both the agroindustrial and the manufactured goods mentioned in this article will have to enter the international markets to a much greater extent than is presently the case and, other goods that have not yet penetrated those markets will have to be added.

Assuming optimistically that this actually happens and that Latin America is thus able to recover its past importance, another question would arise which may be even more important: which countries of the region would benefit from these increases? Brazil, Mexico and Argentina currently account for three-fourths of Latin American exports of manufactures. What is most likely to happen, therefore, is that those same countries will increase or at least maintain their share, since the access of Latin American manufactures to the central countries is largely made possible by the penetration capacity of those three countries (installed industrial capacity, technology, entrepreneurial organization, marketing systems and export promotion, competitiveness on the international markets, export financing, etc.).

Finally, it has also been noted that when any of these three countries, particularly Brazil, shows low levels of penetration for its manufactures, these levels are also low for the region. In other words, if the three major countries do not penetrate, there is no penetration by Latin American manufactures on the international markets.

##### 5. Exports of manufactures and agroindustrial goods in 1980

After this article had been completed, the OECD published the 1980 external trade statistics for its member countries.<sup>25</sup> This publication enabled us to update the information contained in this study in order to find out what changes had taken place in 1980 with regard to Latin American exports of manufactures and agroindustrial goods to the centres.

The following is a summary of the main conclusions to be drawn from the figures for 1980:

Latin American manufactures imported by the industrialized countries in this year represented 1.8% of the latter's total imports of this type of goods. This same percentage had been reached in 1978; consequently, the low level of

penetration of Latin American manufactures in the centres has not changed.

Mexico, Brazil and Argentina account for 79% of such sales from the region. The concentration of exports of manufactures in these three countries is higher than that shown for 1978 (77%), because of the greater relative importance of Mexico (40%) and Brazil (31%). Argentina, on the other hand, registered a lower share (8%).

As we have already noted, the differences between the records compiled by the United States and by Mexico in respect of products finished in Mexico and subsequently re-exported to the United States cause an overvaluation in the latter's import statistics.<sup>26</sup> In 1980, this overvaluation amounted to US\$ 2 500 million. This is much higher than actual exports of Mexican manufactures during that year, which are estimated at US\$ 1 134 million. United States statistics, on the other hand, show imports of Mexican manufactures amounting to US\$ 3 634 million.

If we subtract the US\$ 2 500 million corresponding to the overvaluation in United States statistics for imports of manufactures from Mexico from the total value of US\$ 9 919 million of Latin American manufactures exported to the centres, the latter figure drops to US\$ 7 419 million, and this adjusted value changes the penetration percentage of Latin American manufactures in the industrialized countries, which then drops from 1.8% to 1.3%.

This adjustment would also change the participation of the three major Latin American exporters, as the rankings of Mexico and Brazil would be reversed, with Brazil moving to first place (42%), followed by Mexico (22%); Argentina's share would then be 10%.

<sup>26</sup>In 1980, United States and Mexican records on the flow of goods exported by Mexico to the United States showed the following:

<i>(Millions of dollars)</i>	
Mexican exports to the United States	9 688
United States imports from Mexico	12 774
Statistical discrepancy	3 086

<sup>25</sup>Organization for Economic Co-operation and Development (OECD), *Trade by Commodities*, 1980.

See: International Monetary Fund, *Direction of Trade Yearbook*, 1981.

As mentioned earlier, in 1978 El Salvador, Haiti and the Dominican Republic had a relatively important role in the region because of their exports of finished products through subcontracting or offshore assembly arrangements. In 1980, Haiti maintained its 2% participation because of its exports of sporting articles (mainly baseballs sent to the United States); the Dominican Republic increased its share from 2% to 3%, while El Salvador's share was reduced to half (1%) because of the aggravation during the second half of 1980 of internal conflicts that affected offshore operations to such an extent that they are probably paralysed by now. The transnational corporations that used to operate in El Salvador have probably moved to other countries of the area, given their practice of moving about in order to enter into offshore assembly arrangements in countries where unemployed labour can be hired at minimal wages.

With regard to the remaining Latin American countries, no significant changes are to be observed with respect to their 1978 share in exports of manufactures to the centres.

The percentage distribution by destination, after adjustment is made for offshore operations, is as follows: 54% to the United States, 35% to the EEC, 8% to Japan and 3% to Canada. A comparison of these figures with the 1978 figures shows that the United States continues to be the main buyer of Latin American manufactures, although its percentage is somewhat lower. The EEC and Japan increased their purchases, also slightly, while Canada remained the same.

The goods showing a significantly higher level of penetration are electrical machinery, apparatus and appliances, and television

broadcast receivers. Mexico's share is so high, however, that its exports to the United States alone amount to US\$ 1 562 million, or 80% of the value of the region's exports of such goods. As we have explained before, this figure includes a high proportion of overvaluation; hence, the penetration level for those products, nearly 4%, is not realistic.

With regard to the remaining manufactures exported by the region, there were no significant variations in 1980 with respect to the 1978 levels.

As regards exports of Latin American agro-industrial goods to the centres, in 1980 they amounted to US\$ 1 749 million, 16% higher than in 1978. The 1978 penetration level is comparable to the 1980 level (7.2%).

During the latter year, the Latin American supply of agroindustrial goods was more diversified, inasmuch as the participation of Argentina, Brazil and Mexico dropped to 80%. This was mainly due to the drop in prices for coffee extracts and essences which, since it brought about a drop in the value of coffee exports with respect to 1978, in turn brought down the share of Brazil, the main coffee exporter.

With respect to distribution according to the buyer countries, in 1980 the order was the same as in 1978, i.e., United States (54%), EEC (39%), Canada (5%) and Japan (2%).

The 1980 data show that no significant changes have occurred with respect to 1978 that would alter the analysis made in the preceding chapters. Indeed, they confirm the clear trend towards concentration in Brazil, Mexico and Argentina, of Latin American exports of manufactures to the centres.





## Urban transport in Latin America

### Some considerations on its equity and efficiency

*Ian Thomson\**

The travelling conditions of all the city-dwellers of Latin America are made more difficult by high levels of congestion, but the lower-income strata are in a particularly negative position, since they are usually limited to the use of buses and thus have to spend a larger proportion of their time and money on travelling than the better-off sectors of the population.

There are three main forms of public transport in the region: buses, suburban railways, and the metro or underground railway. Generally speaking, the first of these is the most frequently used form of transport, although it is usually also the least favoured by public policies, for whereas both suburban railways and the metro are normally subsidized by the State, buses receive subsidies only in exceptional cases, and sometimes these amount to less than bus operators pay out in taxes and other charges. Consequently, in order to improve the travelling conditions of the lower-income strata it would be necessary to give more favourable treatment to bus transport.

In this respect, the author suggests that one essential measure would be to reduce the congestion caused by private cars and taxis in order to expedite the passage of buses, which could be achieved through a system of tolls or extra charges. In this way, better use would be made of the existing infrastructure by transferring road space to those means of transport which use it most sparingly, thus reducing the pressure for expansion of the physical capacity of the urban transport system (either through the construction of metros or of new roads for surface transport), improving the level of service offered by buses, and perhaps also making it possible to reduce fares.

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## I

### The relation between family income and accessibility

#### 1. *The urban layout and income*

There can be no doubt that the problems associated with urbanization represent one of the biggest challenges faced at present by Latin America. It should be borne in mind that for the most part, urbanization is a relatively recent phenomenon in the region. Thus, in 1963 two United States researches wrote that the study of urbanization in Latin America was at that time a relatively new subject because the development of any really large centre of urban population was also quite recent.<sup>1</sup> Due largely to the fact that in this region the cities reached maturity at a different time from those of the industrialized countries, they display different characteristics whose consequences are not always properly appreciated.

For the present study, one of the most important differences between many cities of Latin America and others in the North is due to the spatial distribution of the social classes within them. It is a well-known fact that the inner areas of the cities of the North are frequently inhabited by members of the less privileged social classes, often immigrants who have just arrived and are living in seriously depressed environmental and economic conditions. Among the best-known examples of this are Harlem in New York and Brixton in London. It is also a fact that the higher-income families of the cities of the North often move to the outer suburbs, where the environmental conditions are more attractive to them.

These tendencies are not of course unknown in the cities of Latin America, but here they are much less marked than in the North. The situation varies from one city to another, but in some cases at least there does not appear to be any correlation in Latin America between the average family income in different areas of

<sup>1</sup>W. Stanley Rycroft and Myrtle M. Clemmer, *A Study of Urbanization in Latin America*, Commission on Ecumenical Mission and Relations, The United Presbyterian Church in the USA, 1963.

the city and the location of those areas within it, or any tendency for the higher-income areas to be nearer the centre of the city.<sup>2</sup> The reasons for this difference between the cities of Latin America and those of the North vary from one case to another: among them are such facts as the inadequate public transport systems of many Latin American cities, which make long daily journeys to and from work unattractive; the frequently adopted Latin American solution of transferring low-income city dwellers from relatively central shanty towns to houses and apartments which are more permanent but also further away from the centre of the cities; and the different cultural features of Latin Americans and dwellers in Northern countries as regards their requirements for recreational goods and services.

Figure 1 considers the case of the area studied in the analysis of the viability of the São Paulo metro. The data refer to a sample of 20%<sup>3</sup> of the approximately 190 traffic zones into which the region studied was divided, and they indicate that it is possible that there may be some tendency on the part of higher-income inhabitants to live closer to the city centre. The correlation analysis carried out for the whole 190 zones does not give any statistically conclusive result, but it was observed that the highest-income area was 4.3 kilometres from the centre, whereas the lowest-income area was 14.5 kilometres away. It can certainly be safely concluded that in São Paulo there is no perceptible tendency on the part of higher-income citizens to live further away from the centre.

Table 1 refers to the metropolitan region of Buenos Aires. The first column shows the average family income by which the traffic zones were classified, while the second column shows the average index of 'accessibility' of the respective groups or zones or, to be more exact, it gives a measurement of the facilities existing for travelling from home to the areas of the city

where there are more factors of attraction, such as those areas where jobs are concentrated. It is demonstrated that there is a tendency for the zones of lowest income to have the worst accessibility. This does not necessarily imply that the lower-income groups live further away from the centre of the city, although this is also probably true, but it does imply that the lower-income groups generally have to travel more in order to reach their destination, that is to say, their places of employment or recreation.

Obviously, the tasks of the urban transport system are influenced by the spatial distribution of the lower-income classes. The poor of the Latin American cities often have to travel long distances in order to reach the areas which offer the most attractive employment opportunities. Moreover, they frequently live in relatively isolated areas of low or medium population density which will probably be provided with few public transport services if this is left entirely to the market forces, and for which it may not be economically viable to provide mass transport systems.

Table 1

RELATIONSHIP BETWEEN FAMILY INCOME, ACCESSIBILITY AND JOURNEY GENERATION RATES FOR THE METROPOLITAN REGION OF BUENOS AIRES, 1970

Average family income of zone, in pesos per month	Index of accessibility	Number of journeys generated per family per day
Up to 600	4.44	4.45
600- 800	8.97	5.09
800-1 000	8.99	5.13
1 000-1 300	17.78	7.47
1 300 or more	21.80	9.21

Source: Prepared on the basis of *Estudio preliminar del transporte de la región metropolitana*, vol. I, Ministry of Public Works and Services, Buenos Aires, 1972.

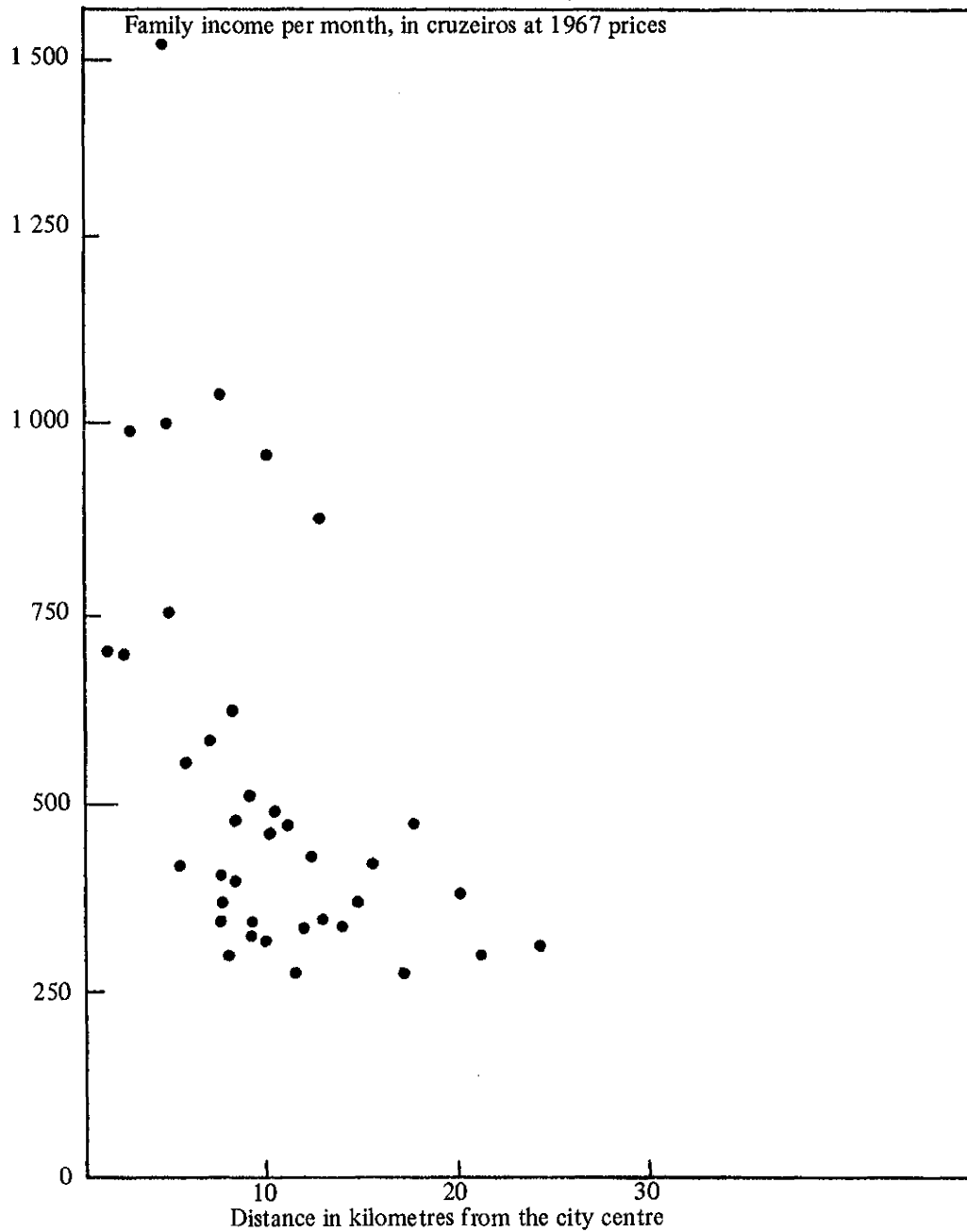
## 2. Journey generation and travel times, by income groups

Lower-income families generally make fewer journeys per day than higher-income families,

<sup>2</sup>An extreme example is that of Brasilia, where the richest persons live in the "Plano Piloto", while the poorest ones live in the satellite towns.

<sup>3</sup>The sample was made by selecting every fifth zone in a numerically ordered list.

Figure 1  
 RELATIONSHIP BETWEEN FAMILY INCOME AND DISTANCE FROM CITY  
 CENTRE: SÃO PAULO, 1966



Source: Metrô do São Paulo, Hochtief, Montreal, Deconsult, São Paulo, 1968.

both because of the importance of the travel cost itself for them and because of the expenditure they would make when they reach their destination. This tendency of lower-income families to make fewer journeys is aggravated when they live in the most inaccessible areas, where travel costs and times are relatively large. Moreover, there are very few lower-income families, of course, which own private cars, and this deprives them of another important stimulus for making journeys, which is the mere fact that a car is available.

Figure 2 shows the combined effects of these influences in the case of São Paulo. 'Essential' family travel (for work and education) increases in proportion to income up to the middle and upper-middle levels, but subsequently varies little with rising income, since

it is improbable that further increases in income would be accompanied by the employment of a larger number of family members or the attendance of more children at school. The total journey generation continues increasing with income at all the levels covered by the figure, however, since the better-off families make more journeys for recreational or social purposes or in order to attend to personal matters.

Table 2 concerns the case of Salvador (Bahía, Brazil). The number of journeys per family increases in a constant manner in line with income, and the same occurs with the number of members of the family travelling (together with the proportion of family members travelling) and the number of journeys per person.

Table 2

## BRAZIL: DAILY TRAVEL CHARACTERISTICS IN SALVADOR (BAHIA, BRAZIL)

*(Averages for all sizes of families)*

Family income per month, in cruzeiros at 1975 prices	Less than 417	417-834	835-1 251	1 252-2 085	2 086-3 336	3 337-4 587	4 588-5 838	5 839-8 340	8 341-12 510	Over 12 510
Travellers per household	1.4	1.8	2.2	2.7	2.9	3.1	3.2	3.2	3.5	3.8
Journeys per person	2.9	3.0	3.0	3.3	3.6	3.6	4.0	4.3	4.6	4.9
Journeys per household	4.1	5.4	6.6	8.9	10.4	11.2	12.8	13.8	16.1	18.6
Average speed of travel, door to door (km/h)	10.8	12.0	12.0	12.0	13.2	13.2	13.8	12.6	14.4	15.0
Travel time per traveller (minutes per day)	103.1	108.2	108.0	111.1	116.7	114.8	116.9	125.0	124.4	121.0
Travel distance per traveller (km/day)	18.2	21.9	21.8	22.6	25.1	25.4	27.2	26.0	30.0	30.1
Travel distance per household (km/day)	25.5	39.4	48.0	61.0	72.8	78.7	87.0	83.2	105.0	114.4
Number of persons in family	4.45	5.22	5.58	5.99	6.12	6.18	6.32	5.51	6.21	6.48

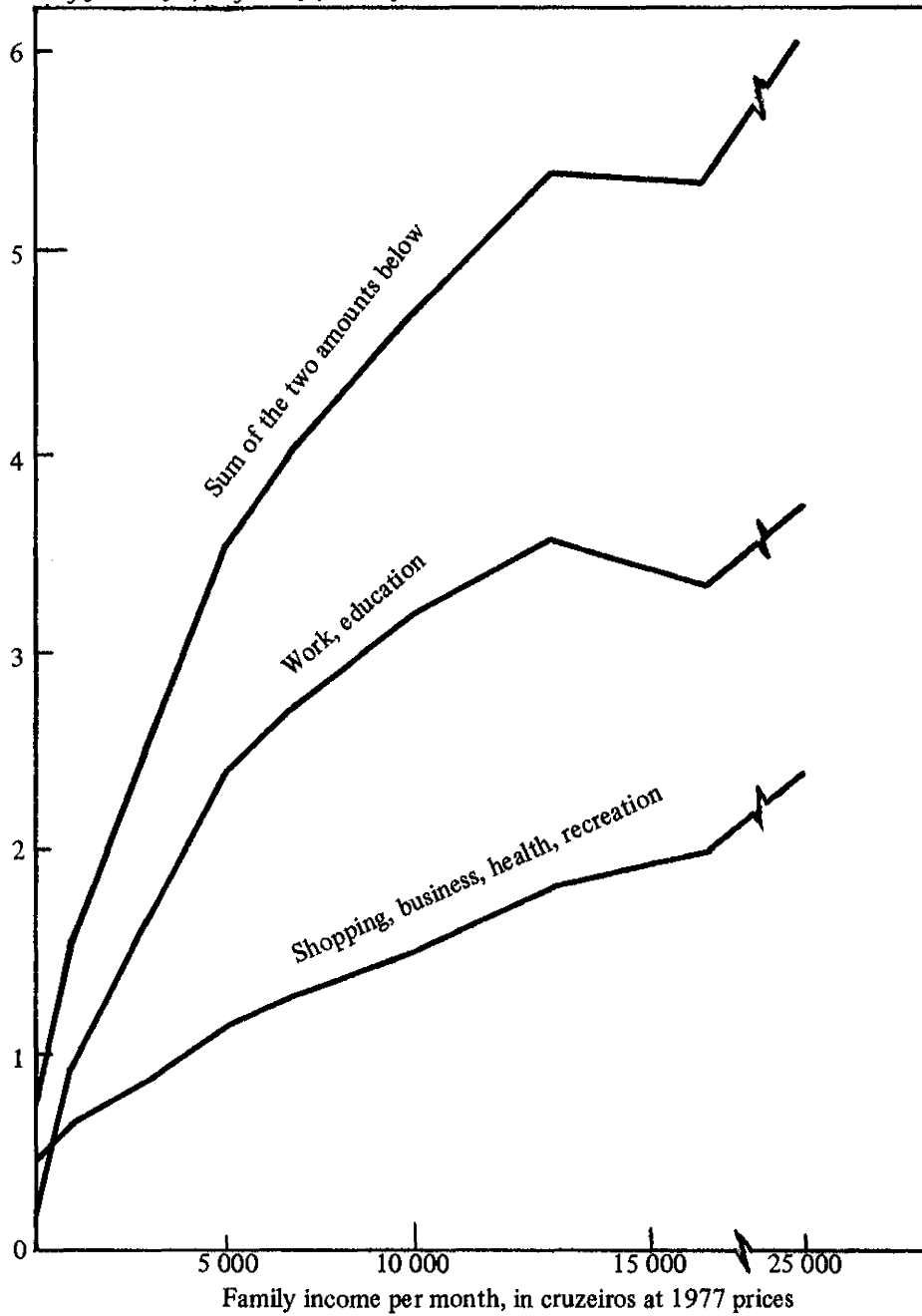
Source: World Bank, Economic Development Institute, Infrastructure Division.

These indicators show that poorer persons do not take advantage of the installations and services offered by the city to the same extent as better-off persons. Table 2 also shows that lower-income families cover a shorter distance than better-off families, although the distance covered per traveller continues to be relatively

constant.<sup>4</sup> On average, travellers of the bottom two income brackets cover 20 kilometres per day, whereas travellers in the top two income

<sup>4</sup>The fact that the distance covered per traveller remains constant despite changes in income may be due to the rather unusual layout of Salvador. Poorer persons tend

Figure 2  
**RELATIONSHIP BETWEEN NUMBER OF JOURNEYS AND FAMILY INCOME,**  
**BY REASONS FOR TRAVELLING, SÃO PAULO, 1977**  
*Number of journeys per family per day*



Source: Metropolitan Urban Transport Company of São Paulo.

to make do with travelling shorter distances, because although they would perhaps prefer to travel further in order to live in a more attractive area, this is out of the question for

them because of the extra cost and the longer travelling time involved.

brackets cover a distance which is 50% greater. The case of Salvador reveals that door-to-door travel speed rises from about 11 km per hour in the case of the bottom income groups to about 15 km per hour in the case of the richest groups of the 10 groups considered. This range of speed is not particularly great, and the result is that higher-income families spend a somewhat larger total daily travelling time per traveller than members of lower-income families. From what we have seen elsewhere, this feature of the situation in Salvador is not typical of other cities in Latin America, and it is considered to derive from the rather special layout of the city, since many higher-income families live in the hills surrounding the valley where the rest of the city is located. These hills are connected with the city centre by roads with a great many curves on which it is not possible to travel very fast.<sup>5</sup>

The information available for other cities clearly indicates that it is more normal for the total travel time per traveller to be inversely proportional to income. Table 3 shows the data for Bogotá, and table 4 those for Santiago, Chile. The same conclusion is compatible with the data in figure 3 on the case of São Paulo, where the higher-income families make a larger proportion of their journeys in relatively short travel times, compared with poorer families.

It seems reasonable to assert, in general terms, that lower-income families not only make fewer journeys than higher-income families, but also spend considerably more time on each journey. It would appear that each traveller in these families spends a higher proportion of his time travelling, even though he makes fewer journeys.

### 3. *Transport costs in relation to family income*

According to family expenditure surveys carried out in various Latin American countries during the last 15 years, the proportion of the

expenditure of lower-income families spent on urban public transport was not particularly great, and was generally less than 5% of total expenditure.

Table 5 shows some interesting conclusions of these studies. Today, however, the travel needs of a considerable proportion of low-income families mean that they must devote considerably greater percentages of their total expenditure to transport. Let us take,

Table 3

#### BOGOTÁ, COLOMBIA: RELATIONSHIP BETWEEN AVERAGE DAILY TRAVEL TIME PER TRAVELLER AND FAMILY INCOME

Monthly income, in pesos at 1972 prices	Daily travel time (minutes)
Up to 500	127
500- 1 000	117
1 000- 1 500	112
1 500- 2 000	113
2 000- 3 000	105
3 000- 5 000	107
5 000-15 000	102
15 000-30 000	98
30 000 or more	83

*Source:* A. Roth and Y. Zahavi, "Travel Time Budget in Developing Countries" (article to appear shortly in *Transportation Research*, *op. cit.*).

Table 4

#### SANTIAGO, CHILE: RELATIONSHIP BETWEEN TRAVEL TIME PER TRAVELLER AND FAMILY INCOME

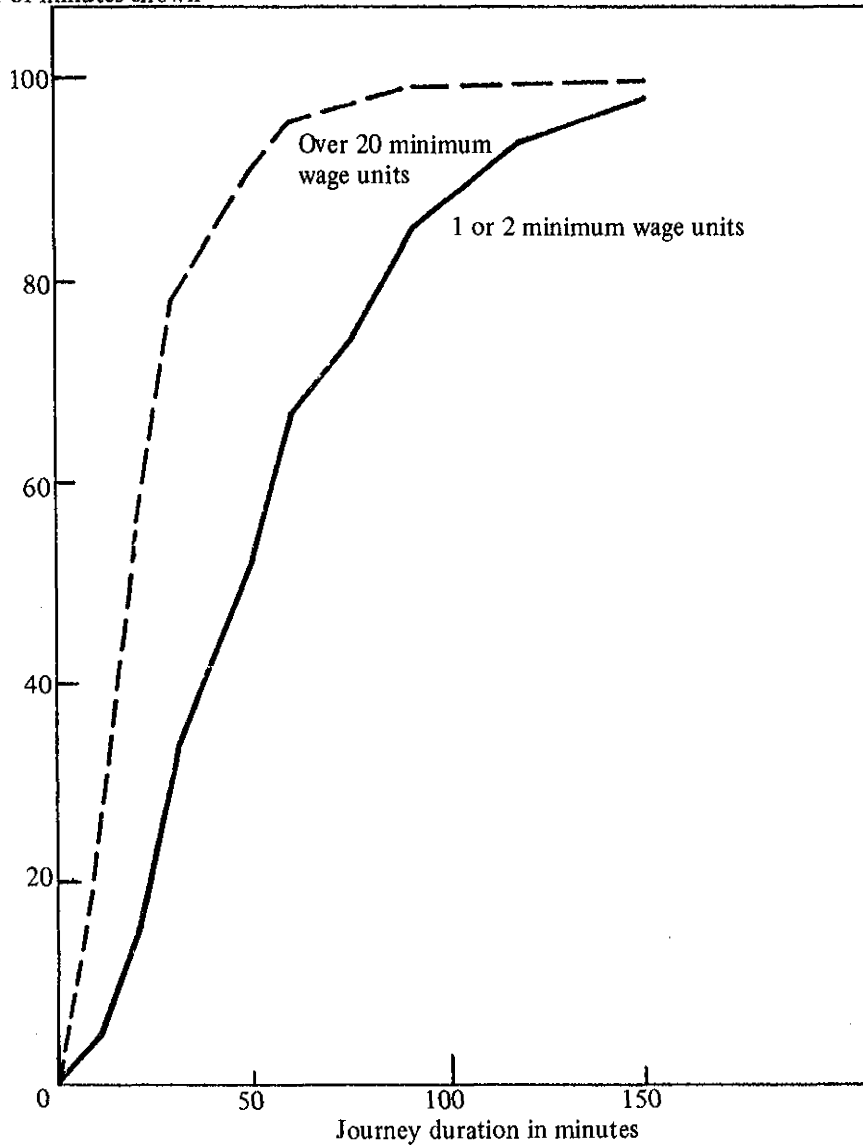
Monthly income, in pesos at 1977 prices	Daily travel time (minutes)
Up to 1 000	91
1 000- 2 500	88
2 500- 5 000	84
5 000-10 000	79
10 000-15 000	74
15 000-20 000	68
20 000 or more	67

*Source:* Catholic University, Chile, through World Bank (quoted in "Travel Time Budget in Developing Countries", *op. cit.*).

<sup>5</sup>See "Travel Time Budget in Developing Countries" by G. Roth and Y. Zahavi, shortly to appear in the magazine *Transportation Research*, Pergamon Press, Oxford, England.

Figure 3  
**TRAVEL WITHIN THE METROPOLITAN AREA OF SÃO PAULO, BY  
 DURATION OF JOURNEY, FOR FAMILIES WITH INCOMES OF  
 ONE OR TWO MINIMUM WAGE UNITS AND OVER  
 20 MINIMUM WAGE UNITS (1977)**

Percentage of journeys lasting at least  
 the number of minutes shown



Source: Data supplied by the Metropolitan Urban Transport Company of São Paulo.



for example, the hypothetical case of a low-income family of Santiago, Chile, earning approximately 7 000 pesos. If all the members of the family<sup>6</sup> make four journeys per day, then the total monthly expenditure on urban travel would be of the order of 13% of family income.

Table 6 shows that a Brazilian worker earning a minimum wage is obliged, depending on the city where he lives, to spend between 10% and 20% of his very modest income in order to make a minimal number of journeys on public transport (50 journeys per month), the great majority of them between the places where he lives and works. The table also seems to show that the fare he has to pay does not depend so much on the size of the city (and hence on the length of the journey) as on the attitude of the authorities to public transport. In Rio de Janeiro, where the municipally-owned buses do not form a substantial part of the fleet

and where (until very recently) a very fragmented form of entrepreneurial organization was tolerated, the fare is 60% higher than in São Paulo, where the opposite situation obtains and the Municipal Passenger Transport Company runs substantial deficits. The fare in São Paulo costs only a little more than in Boa Vista, the capital of the recently established State of Roraima, which has a population only 1% that of São Paulo. In Curitiba, which is perhaps the most progressive town in the whole of Latin America from the point of view of urban transport, the fare is relatively low in spite of the substantial size of the city and the high level of service offered by the bus system.

If the family expenditure surveys correctly reflect the travel costs of lower-income families in the biggest cities of Latin America under present conditions, then the members of these families must have to cover on foot distances which they would normally be expected to travel by using motor transport. It is indeed a fact that the members of low-income families cover long distances on foot in order to avoid

<sup>6</sup>It may be noted from table 2 that lower-income families in Salvador make 4.06 journeys per day.

Table 5

OFFICIAL ESTIMATES OF PROPORTION OF TOTAL SPENDING OF LOW- AND HIGH-INCOME HOUSEHOLDS DEVOTED TO URBAN PUBLIC TRANSPORT IN SELECTED CITIES OF LATIN AMERICA

City	Year	Type of transport	Percentage of total spending	
			Low-income households	High-income households
Buenos Aires	1969/70	Public transport	2.76	1.83
Rio de Janeiro	1961/62	Urban collective transport	4.7	3.7
São Paulo	1961/62	Urban collective transport	4.4	3.6
Rio de Janeiro	1967	Urban collective transport	3.98	1.14
Recife	1967	Urban collective transport	1.8	1.3
Porto Alegre	1967	Urban collective transport	3.2	1.0
Bogotá	1967	Public transport	2.75	1.60
Medellín	1967	Public transport	2.23	1.63
Cali	1967	Public transport	2.49	1.50
Quito	1967/68	Public transport	0.01	0.01
Guayaquil	1967/68	Public transport	0.00	0.01
Lima	1968	Public transport	2.64	1.87
Caracas	1966	Public transport	4.73	1.45
Maracaibo	1967	Public transport	4.70	1.00

Source: *Estadísticas sobre la estructura del gasto de consumo de los hogares según finalidad del gasto, por grupos de ingreso*, Cuadernos Estadísticos de la CEPAL, No. 4, CEPAL, 1978, on the basis of data provided by the countries.

paying bus fares, as became clear in interviews with these persons carried out by the press. The quantitative significance of these journeys on foot is perhaps not sufficiently taken into account in some surveys, because the latter concentrate on journeys by motor transport.

Table 6

COST OF URBAN BUS FARES IN THE STATE  
CAPITAL CITIES OF BRAZIL, AS A  
PERCENTAGE OF THE MINIMUM WAGE

City	Cost of fare in US\$ (equivalent) <sup>a</sup>	Percentage of minimum wage represented by 50 bus journeys per month
Aracajú	0.13	9.7
Belém	0.18	12.6
Belo Horizonte	0.24	14.2
Boa Vista	0.20	14.0
Brasília	0.34	20.1
Campo Grande	0.22	15.4
Cuiabá	0.23	16.1
Curitiba	0.175	10.3
Florianópolis	0.16	9.5
Fortaleza	0.17	12.7
Goiânia	0.15	10.5
João Pessoa	0.15	11.2
Macapá	0.20	14.0
Maceió	0.13	9.7
Manaus	0.16	11.2
Natal	0.18	13.4
Porto Alegre	0.22	13.0
Porto Velho	0.20	14.0
Recife	0.18	12.6
Rio Branco	0.15	10.5
Rio de Janeiro	0.35	20.7
Salvador	0.21	14.7
São Luis	0.17	12.7
São Paulo	0.22	13.0
Teresina	0.18	13.4
Vitória	0.22	13.0

Source: Statistical Report of the Inter-Syndical Department of Statistics and Socioeconomic Studies, São Paulo.

<sup>a</sup>The data correspond to September 1981 and an exchange rate of Cr\$ 100 per US dollar was used.

The incidents which take place when public transport fares are raised in the cities of Latin America provide significant proof of the incidence of fares in family expenditure. The

citizenry is frequently opposed to these rises, and its opposition often involves violence. An extreme example which speaks for itself is described in a news item in the *Jornal do Brasil* of 21 August 1981, the first paragraph of which reads: "Over 750 buses damaged (over 50% of the city fleet), according to the Bus Operators' Association; other buses burnt; electricity poles chopped down; shots fired by the military police; at least 31 people hurt, and total confusion in the centre of Salvador (Bahía, Brazil): such was the result of the demonstration provoked yesterday afternoon by the League Against Rising Prices in protest against the 61% increase in public transport fares". If the latter figure seems somewhat excessive, it should be compared with the prevailing rate of inflation, which was around 100% in Brazil in 1981, and it should also be borne in mind that this was the first fare increase for a number of months.<sup>7</sup>

#### 4. Conclusions on the relation between family income and accessibility<sup>8</sup> in Latin American cities

Travelling conditions are very disagreeable for all income groups in many Latin American cities. The proportion of families who own cars is much smaller in most Latin American cities than in the cities to the North, but the traffic congestion is probably worse. It is not so much the number of automobiles as the way they are used that determines the seriousness of congestion, and in Latin America the use of automobiles, particularly at peak traffic hours, is encouraged by the absence of restrictions which could be applied to govern this use. The congestion is made worse by the driving habits, as drivers are less responsible socially and have

<sup>7</sup>See "A insatisfação popular preocupa", in *Transporte Moderno*, September 1981, Editora TM Ltda., São Paulo. This article suggests that Brazilian urban bus companies may have placed less emphasis on the traditional fight for greater profitability in order to concentrate their efforts on preserving their bus fleets against the popular fury fomented by the substantial role played by bus fares in the family budget.

<sup>8</sup>Accessibility may be defined as "ease of reaching desirable attractions". In more technical terms, the accessibility of a zone  $i$  of a city may be defined as  $\sum_{j=i}^n A_j C_{ij}$ ,

a greater propensity to impede the flow of traffic by parking in the streets, which are in any case frequently relatively narrow. Although no results are given for Latin American cities, a soundly based study on urban travelling conditions concluded that the mean travelling speeds at peak hour in the city centres of Calcutta, Lagos and Manila were much lower than those in London, Paris and New York.<sup>9</sup> An example of the travelling conditions in Latin American cities is provided by the fact that at peak hour in the Avenida Presidente Vargas, the main artery of Rio de Janeiro, buses travel at only 3.5 km per hour.<sup>10</sup>

In comparison with higher-income families, there are fewer travellers in the lower-income families or urban areas of Latin America and they make fewer journeys, but each of these involves more time. In most cases, it is probable that the total daily travelling time per traveller goes down as income rises, even though the number of journeys made increases with income.

Lower-income families are frequently affected by unemployment, and include school-age children who do not regularly attend school. They may therefore have to make relatively fewer journeys to work and school. Above the income level at which it might be expected that the normal number of family members would be employed and receiving education, the number of journeys made per day for the 'essential' purposes of work and education does not vary perceptibly as a function of income. The rate of generation of journeys for other purposes, however, continues to increase slowly with income, which implies that the better-off the family, the more it tends to take advantage of the services offered by the city. While journeys to work do not increase significantly as income rises once a certain level has been reached, it may be assumed that the difficulties presented by travelling encourage workers to take jobs in the light of the transport conditions and not merely the attractions of the jobs themselves.<sup>11</sup>

## II

### Effects of urban transport policy in Latin America on different income groups

#### 1. *Those benefiting from urban transport subsidies*

The predominant means of urban transport in Latin America is the bus. In the great majority of cities it accounts for all movements of urban passengers who use public transport (not in-

cluding collective taxis, which are of importance in some cities). Even in cities with substantial rail systems, of which there are only four in South America (Buenos Aires, Rio de Janeiro, Santiago (Chile) and São Paulo), the bus predominates.<sup>12</sup> In Buenos Aires, for

where  $A_j$  is an index of the attraction of the zone  $j$ ;  $C_{ij}$  is a measure of the cost of transport between  $i$  and  $j$ , recognizing both the money component and other cost components (such as travel time); and there is a total of  $n$  zones, ordered  $i, \dots, j \dots n$ . There are also other formal definitions, but the above gives an idea of the concepts involved.

<sup>9</sup>J. Michael Tompson, "Great cities and their traffic", in *The Economist*, 11 August 1979.

<sup>10</sup>*O metrô do Rio de Janeiro e o futuro sistema integrado de transporte de massa*, Rio de Janeiro Metro Company, October 1976, p. 18.

<sup>11</sup>A newspaper item entitled "Worker wants nearby job" which appeared in the *Jornal do Brasil* of 28 June 1981 gives us details of a specific case: "Dona Escolástica dos Santos, a 60 year old nurse, went to an agency looking for a job as children's nurse, companion or something of the sort. She went to see about a job in the Barra de Tijuca sector of Rio de Janeiro but did not take it because although the wages of over 10 000 cruzeiros were good, the bus fares were very expensive. This is not a unique case. In employment agencies the supply of lower-paid labour has fallen off considerably for jobs in the centre and southern areas of the city".

<sup>12</sup>The Santiago subway system, or metro, is not strictly

example, in 1970 over half the journeys were made in buses, a little over 15% in automobiles and less than 15% in the metropolitan railway system, including the underground railways and the ordinary railways.<sup>13</sup> In Rio de Janeiro in 1970, the buses transported 1 427 million passengers, compared with 196 million passengers transported by the city railway and 425 million corresponding to taxis and private cars together.<sup>14</sup> In 1981 it is estimated that in Greater Rio de Janeiro the buses transported more than seven times as many passengers as the suburban trains, the ferryboats and the metro together.<sup>15</sup>

In some cities of Latin America there are bus services belonging to the public sector, but where these exist they generally complement those run by private entrepreneurs. In many cities, including such capitals as Brasilia, Buenos Aires, La Paz and Santiago, there are no publicly-owned bus services, and even in cities where they do exist they are frequently basically commercial lines which seek to cover their costs and, if possible, make a profit, although sometimes (but not always) they provide services which for various reasons are not attractive to private sector entrepreneurs.

It is not frequent for direct operating subsidies to be given to private bus owners, but indirect subsidies are common in the form of lower rates of taxation (on turnover, fuel and import duties), financial assistance for renewing the fleet faster than would be the case if purely commercial considerations were taken into account, etc. The relative importance of these indirect subsidies has not been analysed, but at all events bus operation can still produce a positive net yield for government bodies,

even when the assistance in the form of tax reductions is taken into account. In the case of Caracas, for example, it was calculated in 1970 that the taxes and other charges paid by bus owners (3.4 million bolívares or approximately US\$ 1.7 million at 1980 prices) exceeded the costs corresponding to buses in respect of the road services provided, which came to 2.9 million bolívares.<sup>16</sup> Furthermore, in Buenos Aires in 1970, the bus owners contributed 0.115 pesos per kilometre travelled in the form of taxes, whereas the estimated costs of the traffic police and the maintenance, amortization and interest costs of the infrastructure came to 0.031 pesos per kilometre.<sup>17</sup>

In some cases, as already stated, however, the bus transport system does receive subsidies. Even if it does receive them, however, there are sometimes interventions in the bus services on the part of the authorities (or permitted by them) which do not necessarily benefit users. In net terms, it is difficult to say whether users pay less, or whether they receive better services than if there were no subsidies or other forms of intervention. Thus, in São Paulo the Municipal Passenger Transport Company operates at a loss, which could be considered equivalent to a subsidy, but on the other hand the newspaper *Jornal do Brasil*, in its edition of 30 August 1981, reports that "taxes and social charges represent almost half the cost of fares (of urban buses in Brasil)". It is quite possible that users would prefer to have neither subsidies nor taxes. In Bogotá, subsidies are granted to buses that maintain regular services, but the institutional and entrepreneurial system for this form of transport in the city is so intricate that only a very thorough investigation could determine the net effects of all the forms of intervention, one of which is the granting of subsidies.<sup>18</sup>

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speaking a railway system, as it does not actually use rails for the running of the trains (except in the sidings and in case of emergency), since the carriages have rubber tires which run on a concrete track. For reasons of convenience, however, it will be considered in this article as a railway.

<sup>13</sup>*Estudio preliminar del transporte de la región metropolitana*, vol. 1, Ministry of Works and Public Services, Buenos Aires, 1972. Furthermore, in terms of passenger/kilometres, the buses achieved figures twice those of the railways of that city (see vol. 2 of the same study).

<sup>14</sup>*O metrô do Rio de Janeiro e o futuro sistema integrado de transporte de massa*, op. cit.

<sup>15</sup>*Jornal do Brasil*, 28 June 1981.

<sup>16</sup>*Cargas impositivas a los usuarios de la vialidad del área metropolitana de Caracas*, Venezuelan Government/World Bank/Alan M. Voorhees and Assocs. Inc., Caracas, 1973.

<sup>17</sup>*Estudio preliminar del transporte de la región metropolitana*, op. cit., volume 2.

<sup>18</sup>See Alcaldía Mayor de Bogotá, D.E., Depto. Administrativo de Tránsito y Transportes, *Racionalización del transporte público de pasajeros en Bogotá D.E.*, Plan Piloto 1.

In most Brazilian cities, no direct subsidies are given in respect of the operation of bus services, and this more or less reflects the policies applied in other parts of the region. The effects which this principle of not granting subsidies has on income distribution are aptly summed up in the following section of an article published in the *Jornal do Brasil* of 19 August 1979, reporting on an urban transport congress held in Porto Alegre:

"It was stated at the congress that the users of collective transport are concentrated in the income strata receiving between one and eight minimum wage units. These passengers provide 80% of the revenue received by the buses in the country and they are the persons most affected by the prevailing system, because their low income obliges them to live further away from their workplaces than those who earn more.<sup>19</sup> This means that the less the traveller earns, the more he has to spend on transport.<sup>20</sup> Correcting this situation would involve the establishment of a fare system which does not take into account the number of kilometres travelled so much as the income of the passenger".

The tone of the article from which this passage is taken indicates that although from the official point of view there does not appear to be any intention at all of seeking to change the predominantly private ownership of collective transport in the country, the semi-official discussions held at the congress reveal some degree of sympathy for public ownership and for the fixing of fares in line with social criteria. There was undoubtedly genuine interest behind this sympathy, but any change of policy should take into account the studies made on this matter recently in some countries of the North, which suggest that: (i) subsidies can bring with them a certain degree of inefficiency which prevents the whole benefit of the subsidy from reaching the users of the services pro-

vided; and (ii) private operation may be more efficient than public operation.<sup>21</sup>

It may be noted that in Brazil there is increasing support for the adoption of a single fare for the whole urban area, regardless of the distance travelled by the user.<sup>22</sup> This criterion has been applied for a long time in some cities, such as Curitiba and São Paulo, but it is now receiving more official support because of the concern with the high incidence of fares in the budgets of lower-income families, who frequently have to cover long distances using public transport. An additional incentive in favour of its adoption is the threat of social violence mentioned earlier, which actually broke out in Salvador in August 1981. Another very attractive idea which has been discussed but not yet put into practice is that of a "transport voucher", which would take the form of a ticket valid for a journey on public transport, issued by employers to their lower-paid staff. The issue of these vouchers by employers would be encouraged through fiscal incentives such as credits which would reduce the amount payable in income tax.<sup>23</sup> The generalized application of this criterion to cover also the unemployed and school children would provide very considerable advantages from the point of view of social justice in Latin American urban transport.

Although Latin American urban bus operation apparently does not usually receive substantial subsidies, urban rail transport does receive them in considerable amounts, as in other parts of the world. There are two types of urban rail transport in the region: the metros or underground railways, and the urban/subur-

<sup>21</sup>See reports LR 952, *The Economics of Stage Carriage Operation by Private Bus and Coach Companies*, and SR 541, *Subsidisation of Urban Public Transport*, published by the Transport and Road Research Laboratory of the United Kingdom, and Alan Walters and Charles Feibel, *Ownership and Efficiency in Urban Buses*, World Bank, Washington.

<sup>22</sup>See "Eliseu (Resende, the Minister of Transport) insists on the flat-rate fare" in *Jornal do Brasil*, 11 July 1981.

<sup>23</sup>See "This year the Government will bring in transport vouchers to compensate wages" in *Jornal do Brasil*, 31 May 1981. In actual fact, these vouchers were not introduced in 1981, possibly because of concern over reduction of revenue from income tax.

<sup>19</sup>Note that this coincides with a provisional conclusion reached in section 2 below.

<sup>20</sup>The article exaggerates somewhat on this point: those who earn more can travel more, and it is possible that they also pay more to do so, using private cars, taxis, collective taxis or luxury buses with air conditioning.

ban railways, which we shall call here suburban railways. The construction of the suburban railways which exist in the region came to an end in the 1930s (although there have lately been some signs of reactivation) while the construction of metros began in the 1960s, except in the case of Buenos Aires, where the first section was inaugurated in 1913 (in Buenos Aires this type of transport is called "subte"; the word "metro" is used in the other countries).

The suburban railways are of importance in only four cities: Buenos Aires, Rio de Janeiro, São Paulo and Mexico City. Suburban railway services also exist, although they are less important, in a few other cities which include Recife and Salvador in Brazil, Veracruz in Mexico and Valparaíso in Chile. With the financial participation of the World Bank, a new suburban electric railway is being built in Porto Alegre, indicating a renewal of interest in Brazil in this form of transport. Such railways are also being built in some other cities.

There can be no doubt whatever that the three main suburban railway systems in South America run at a big loss, although separate accounts are rarely published for such systems, which are considered essentially as social services by the national rail companies (although part of the suburban rail system in São Paulo is run by the railway enterprise of the State of São Paulo, FEPASA). It may be noted that action has been initiated to transfer these services to autonomous bodies which would only be responsible for metropolitan passenger transport. In one specific case, that of Rio de Janeiro, it has been demonstrated that users of the suburban trains pay less than half the operating costs of their journeys.<sup>24</sup>

The users of suburban railways in the region generally belong to the low and middle-income groups, so that the policy of subsidizing the operation of such rail services could have favourable consequences from the point of view of income distribution. In the case of Rio de Janeiro, the immediate beneficiaries of the subsidies are the lower-income groups living

in the northern part of the city, while in the case of Buenos Aires most of the beneficiaries are the middle-income inhabitants of Lomas de Zamora, Quilmes, Morón, 3 de Febrero, General Sarmiento, San Isidro and Vicente López. As for São Paulo, there are quantitative indicators which show that the users of the suburban rail services come from the lower-income groups, as is clear from table 7.

Table 7

FAMILY INCOME INDICATORS OF USERS  
OF VARIOUS FORMS OF TRANSPORT  
IN SAO PAULO, BRAZIL

Form of transport	Approximate monthly family income, in cruzeiros at 1977 prices <sup>a</sup>
Bus only	7 750
Private car only	14 000
Taxi only	12 750
Metro only	12 500
Other rail transport only	5 500
Bus/Bus <sup>b</sup>	7 000
Bus/metro <sup>b</sup>	8 750
Bus/other rail transport <sup>b</sup>	7 000

Source: Data provided by the Metropolitan Urban Transport Company of São Paulo.

<sup>a</sup>Round figures are given for income because the available sources of information did not permit more precise calculations to be made.

<sup>b</sup>Journeys involving the use of both the forms of transport referred to.

Probably because of the loss-making nature of the services offered and the considerable differences between the suburban rail services and the rest of the activities of national and State railway companies, it is evident that in South America such suburban systems have suffered from a lack of sufficient investment in the past. Thus, for example, only a relatively small part of the Buenos Aires system is electrified, while in Rio de Janeiro and São Paulo serious incidents have taken place in which the passengers have destroyed whole trains when the service has suffered longer than normal in-

<sup>24</sup>See the article "Train fares are going up" in *Jornal do Brasil*, 30 May 1981.

ruptions. There are some grounds for hoping, however, that the situation of the passengers of the suburban railways in the region may improve in the future. In Buenos Aires, for example, the heavily-used lines serving General Roca are being electrified, and in Rio de Janeiro 150 new trains have recently been acquired. Investments are also being made to improve the quality of suburban rail transport in Belo Horizonte, Porto Alegre, Recife, Salvador and other cities of Brazil.

As already noted, at present metros are operating in five Latin American cities, namely: Buenos Aires, Rio de Janeiro, Santiago (Chile), São Paulo and Mexico City, while the Caracas metro is to be opened in 1983. Except in the case of Buenos Aires, all these systems began to operate in the last 20 years. No metro system in Latin America covers its total expenditure entirely with its operational revenue, and indeed none of them even covers its operating costs, without including the civil engineering investment costs. In some cases, such as that of São Paulo, there is an operating deficit (it was sometimes anticipated, however, during the stage of evaluation of the projects, that the income would cover the social costs). The case of Santiago (Chile) may be used as an illustration. In 1979, when the metro fare in that city was 5 pesos, the operating costs, including the interest and depreciation on the rolling stock, were around 15 pesos, and the fare would have had to be raised to 30 pesos in order to cover also the capital costs of the construction. Generally speaking, these fares are fixed in the light of urban bus fares, the desirability of gaining a reasonable share of the urban travel market, and the objective of using the available capacity of the systems. The metros of Latin America must therefore be considered as a highly subsidized form of transport.<sup>25</sup>

It seems appropriate to ask who benefits from the subsidies given to the metros in the

region. The users frequently do not come from the lower-income families. Table 7 shows that in 1977 the average family income of persons using the São Paulo metro for the whole of their journey (who are probably the users gaining most from the system, since the metro serves them directly and they do not need to make transfers at either end of the journey) was equal to that of taxi users and only slightly below that of persons travelling by private car. In Rio de Janeiro, the first section of the metro line built with top priority provides transport between the districts of Flamengo and Botafogo in the southern area, inhabited by families in a good economic position, and the centre of the city, while the other part of the line provides transport between the district of Tijuca, also inhabited by middle-income families, and the centre, although it is true that other sections of the basic systems cover the needs of lower-income travellers.<sup>26</sup> The recent extension of the first metro line in Santiago (Chile) to the heart of the high-income section of the city benefits high-income passengers, although the western half of the same line and the second line of the metro provide services for other users with lower incomes. Generally speaking, the Buenos Aires metro serves the inner part of the city within the ring formed by the main stations of the interurban railway system, so that it probably benefits above all the middle and high-income families whose members work in the city centre.<sup>27</sup>

<sup>26</sup>Moreover, the projected extension of the priority line will take the Rio de Janeiro metro to areas inhabited by high-income families, such as Leblon and Copacabana.

<sup>27</sup>In the case of Buenos Aires, it is not easy to find data to prove this statement, although experience does seem to point to this: in this case, only very indirect estimates can be made. In the case of the São Paulo metro, the information contained in a study carried out in 1977 by the Metropolitan Urban Transport Company makes it possible to calculate approximately the average income in different types of occupations, and with other data from the same source it is possible to break down employment, by type of occupations, in different parts of the urban area. It is therefore possible in this case to calculate that workers in the traditional centre of the city earn an average of 4.15 minimum wage units, compared with the 4.02 minimum wage units corresponding to the urban area as a whole. In reality, however, the wage advantage of those working in the city centre is probably greater, since for a given occupation, those working in the centre earn more than those in any other part of the city.

<sup>25</sup>See *Algunos aspectos de la justificación socioeconómica de los ferrocarriles metropolitanos en América del Sur* (E/CEPAL/R.264), where a comparison is made of what the consultants expected from the metros of South America during the evaluation stage and the actual results recorded once they were being constructed or had already been built.

The lack of detailed statistical information for the cities in which there are metros means that it is impossible to form a precise idea of the income of those using the metro systems of the region, although for the most part they probably come from the upper and middle deciles of the income distribution scale. Metros are only viable in the case of extremely dense traffic flows concentrated in a narrow corridor, and it is therefore generally impossible to justify their construction when they only involve radial lines between densely populated non-peripheral districts and the city centre, in order thus to serve the needs of persons travelling every day between their homes and their workplaces.<sup>28</sup> Since those who work in city centres probably come from the middle and upper segments of the income scale, the predominance of such persons among users of the system may in practice be an inherent characteristic of metros.

Moreover, those who benefit most from metros may not be those who actually use them. Metros are only one of the various policy measures which can be put into practice in order to solve transport problems on the main radial roads of cities. The various options open include the following: reserving lanes for the exclusive use of buses; issuing supplementary licences for automobiles to be used in congested areas; and prohibiting automobiles from entering the main arteries and city centres when traffic density is at its highest. All these options call for much smaller capital investment than metros, but all of them in turn cause some kind of inconvenience to private car users, because they transfer road space from automobiles to buses and possibly other forms of public transport. If a metro is constructed instead of adopting one of the other much cheaper options, this implicitly means that private car users are being benefited, since they would be prejudiced if any other option were selected. Thus, by transferring part of the surface traffic demand from the roads running parallel to the metro, this solution tends directly to favour those who use private cars.<sup>29</sup>

<sup>28</sup>This is because of their high cost, which is between US\$ 30 and 100 million per kilometre.

<sup>29</sup>The road space freed during peak traffic periods by the diversion of demand to underground transport is gen-

In addition, from a logical point of view it could be argued that most of the benefits of metros are ultimately received by the owners of real estate near the metro, for these persons can raise rents in areas close to metro stations, on the grounds of smaller travelling time and costs, thus appropriating for themselves the benefit initially received by upper-income travellers. There have been some technical discussions in Latin America on the possibility of financing metro construction through differential property taxes on real estate close to metro stations, whose value obviously increases with the construction of this type of transport, but unfortunately these discussions have not had any practical effects.<sup>30</sup>

## 2. *The efficiency of conventional systems of running urban transport*

The irrational use of urban transport systems, which is frequent in Latin America (and in many other parts of the world), results in total transport costs which are higher than necessary, including avoidable costs for fuel and personal travelling time, and has unfavourable consequences on real income distribution, since those who use private vehicles impose extraordinary costs on those who use public transport. This irrational use is mainly the result of the unsuitable price fixing mechanisms applied to urban transport, which do not permit the optimum utilization which could be achieved if the road space were rationed by market mechanisms, modified in the light of social considerations.

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erally quickly used by surface traffic, which moves from other times and other routes in order to take advantage of it, thus practically cancelling out any potential benefit which could otherwise result. In other words, the corresponding demand is very elastic.

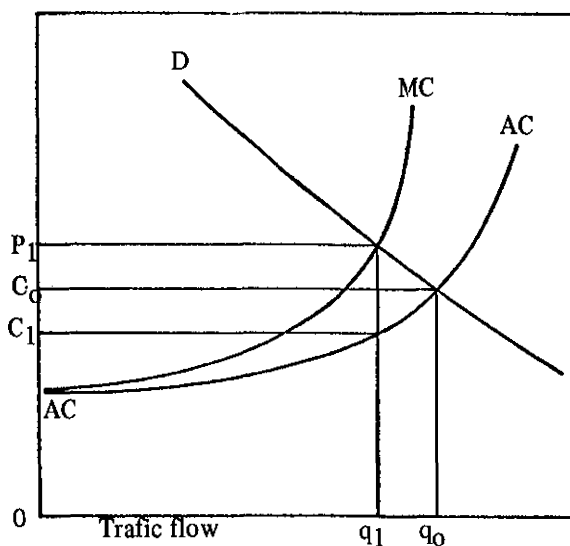
<sup>30</sup>The distributional effects of the subsidy financing have not been investigated in detail in the present study, but there are indications that in Canada transport users in general are in a better economic situation than those whose taxes finance the transport subsidies. See Mark Frankena, "Income distribution and transit subsidies", in *Journal of Transport Economics and Policy*, London School of Economics, September 1973. The tax systems of Latin America are generally relatively regressive, and it is probable that the conclusions reached regarding Canada are even more true of Latin America.



This situation is set forth in figure 4, which represents an urban road or set of roads. The curve AC shows the relation between the traffic volume (per period of time) and the cost per vehicle. This cost, which could be called the private cost, since it directly affects all automobiles,<sup>31</sup> increases slightly with traffic flow up to moderate levels of flow, above which it intensifies more sharply. The curve D shows the number of automobiles wishing to travel, as a function of the cost that each must pay. Equilibrium is reached with a flow of  $q_0$  when each automobile pays a cost of  $c_0$ .

Figure 4  
GENERALIZED RELATIONSHIP BETWEEN  
TRAFFIC FLOW, MEAN COST  
(PRIVATE) AND MARGINAL  
SOCIAL COSTS

Cost per flow unit



Source: Prepared by the author.

<sup>31</sup>Owners and drivers of automobiles must pay these costs by definition, although perhaps they do not fully appreciate their real magnitude because of their faulty perception of costs (since it is very difficult to find out the real fuel consumption per kilometre covered at different speeds and to determine the maintenance costs per kilometre). In addition, there are taxes and subsidies which mean that the market prices are different from the real economic costs.

It should be noted that the entry of a new automobile into the traffic flow causes an increase in the private costs of the other road users; only at very low traffic volumes is it possible to bring in an additional vehicle without appreciably reducing the speed of the rest of the traffic. It is possible to draw another curve, which we shall call MC, which indicates the change in the total cost caused by each addition to the traffic flow, as a function of that flow. This change comprises the private costs of the additional vehicle and the marginal social cost, that is to say, the extraordinary costs imposed on the automobiles already existing in the traffic flow as a result of the reduction of speed and other negative effects. The curve MC lies above the curve AC (or at the same level when the traffic flow is very low) and becomes much steeper at higher flow levels. If each road user were obliged to pay not only his private costs but also the marginal social costs caused by him, the equilibrium point would be at a flow of  $q_1$  when the cost of each unit in the flow would be  $c_1$ . Each of the units would have to pay a sum equivalent to  $(p_1 - c_1)$  in the form of a toll or special license in order to establish this optimum situation.<sup>32</sup>

Establishing a practical system for collecting such tolls is difficult from both the technical and social point of view, although probably not impossible. One version of a simplified option has been applied in Singapore and is analysed in chapter III of the present paper, and a similar system has been worked out but not put into practice in Caracas and London. The idea has been seriously considered in Brazil and is still under study in Chile. Much of the effort spent on traffic organization all over the world may be interpreted as an attempt to reduce traffic levels from a point characterized by  $q_0$  to levels characterized by  $q_1$ , by using parking regulations or physical restrictions of some other kind.

What is the magnitude of these marginal social costs? Figure 5 shows the relation between the private costs and marginal social

<sup>32</sup>It can be demonstrated that this movement towards the new and optimum equilibrium point generates benefits equal to  $q_1 (C_0 - C_1) - 1/2 (P_1 - C_0) (q_0 - q_1)$ .

costs and the traffic flow for some roads in Caracas, and demonstrates how the marginal social costs increase as the theoretical capacity of the road installations is approached. Table 8 shows the marginal social costs in Caracas by district and type of road for the morning peak hour.<sup>33</sup> In parts of the city centre, every kilometre covered by an automobile at the morning peak hour imposes a cost of over 50 US cents on the other road users. In the case of the little-used roads of the outer districts, however, the marginal social cost is practically nil.

So far, we have been talking about the cost per vehicle. It is common practice in traffic engineering circles to express other vehicles also in passenger car units (pcu), i.e., the number of automobiles which have the same effects on the traffic flow as the type of vehicle under consideration. The pcu equivalent of a bus varies depending on the particular case under consideration. Some authorities in Latin America use a pcu factor of 2 for a bus in general calculations, but using a factor of 3 would not represent any underestimation of their disturbing effect on the public transport traffic flow. Using this pessimistic factor for buses, however, and an occupation factor of 60, which is typical for maximum transport conditions in Latin America, then a marginal social cost of  $x$  cents per automobile-kilometre becomes a marginal social cost of  $0.05x$  cents per bus passenger. If the average automobile transports 1.5 persons, then the cost per occupant of the automobile would be  $0.60x$  cents i.e., 13 times the cost per bus user. Other collective transport media, such as collective taxis and minibuses, cost society more per passenger than an ordinary bus, but less than an automobile.

The difference between the private costs of urban travel by automobile in Latin America and the total costs, including those imposed on other members of society, is often heightened by the fact that automobile travellers use social-

<sup>33</sup>It should be understood that the figures given in this table show orders of magnitude. They depend to a very critical extent on the particular form of the equations for the traffic flow with respect to the traffic speed in each case. It should be borne in mind that the congestion in Caracas is of a special nature and is generally very serious even compared with other Latin American cities.

ly valuable parking space for which they pay little or nothing.<sup>34</sup> The following paragraph taken from the *Jornal do Brasil* of Rio de Janeiro of 15 October 1978 illustrates a general phenomenon through a particular case:

"These street parking spaces reserved for official use (in this case for the United States Consulate) are often used by adventurous car owners who risk going into the centre by automobile. The persons who help to park and look after automobiles (an occupation unknown in the cities of North America) encourage car drivers to continue doing this and always find some way of locating a space for them somewhere among the spaces which are not being used at that moment by official cars, charging between 5 and 10 cruzeiros for their services".

In Santiago and other cities it frequently happens that those engaged in the work of parking and looking after vehicles reserve kerbside spaces for their regular customers and receive monthly or weekly payment for this. The marginal social costs of parking vehicles in the street varies appreciably depending on the particular local circumstances, the cost per automobile being less, for example, when there is a continuous line of cars parked along the kerb and more when there is only one. In favourable circumstances,<sup>35</sup> the cost per working day could be 50 cents, while in unfavourable circumstances it could be much more.<sup>36</sup>

Some car drivers park their vehicles in private areas and pay market prices for doing

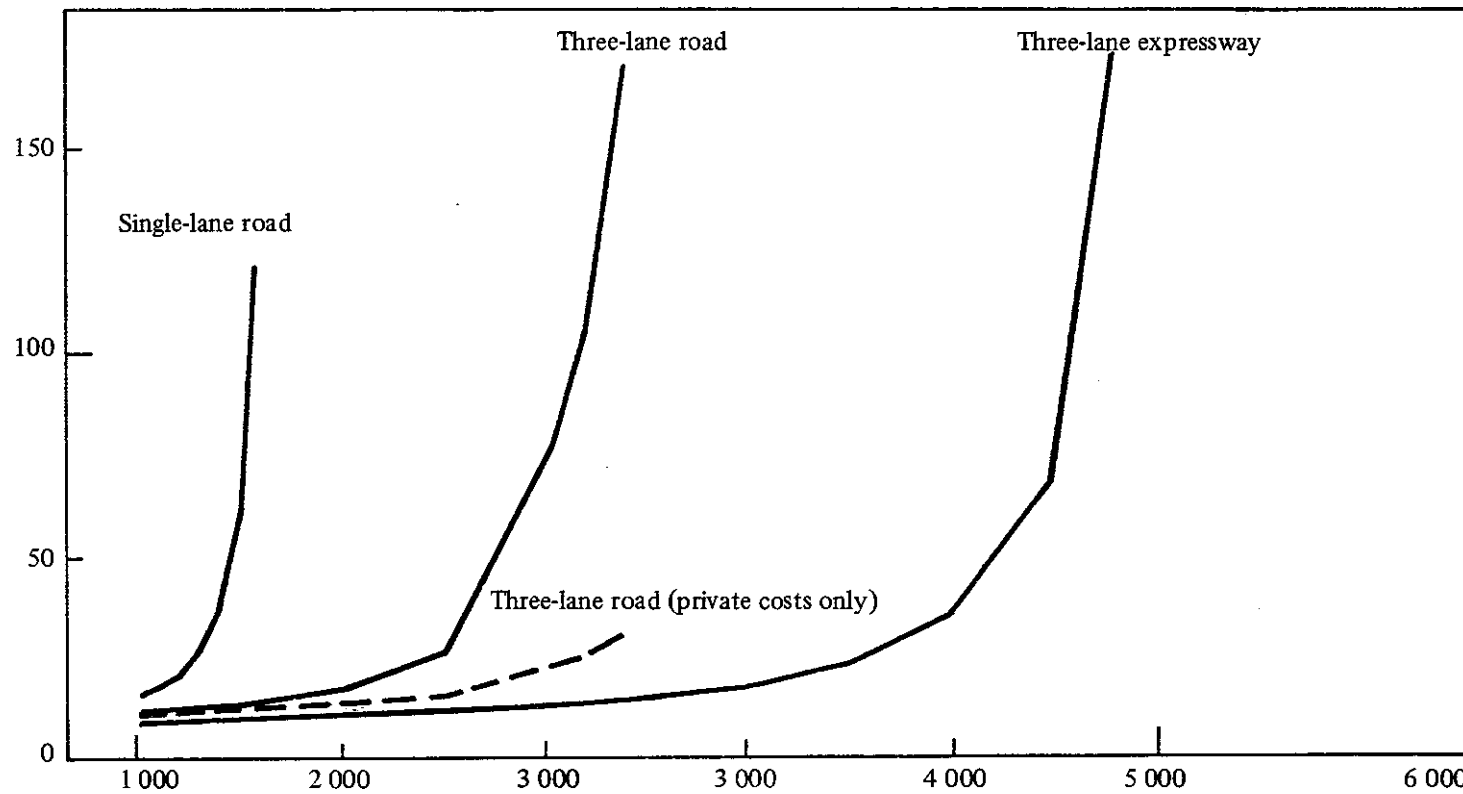
<sup>34</sup>It may be noted that figure 4 refers to a journey from a given place of residence to a parking place in the centre of the city, rather than to a specific street or set of streets. The curve AC would represent the private costs borne by the driver, including any payment made in connexion with parking. The curve MC would include the cost of the space occupied while parked: costs which are borne by society in general and not by the traveller in particular.

<sup>35</sup>That is to say, if the automobiles are parked at the rate of 180 per kilometre at the edge of a one-way two-lane road for 8 hours, when the traffic flow per hour is a constant 500 pcu (passenger car units).

<sup>36</sup>The situation is more acute when drivers queue up in the street while they are waiting for someone. Mothers of high-income families frequently wait en masse in their cars for their children to come out of school, giving rise to serious traffic problems. An article in the *Jornal do Brasil* of 15 March 1981 entitled "Double parking outside schools plays havoc with traffic" speaks for itself.

Figure 5

PRIVATE COSTS AND MARGINAL SOCIAL COSTS AS A FUNCTION OF TRAFFIC FLOW FOR  
DIFFERENT TYPES OF ROAD UNDER THE CONDITIONS PREVAILING IN CARACAS,  
IN U.S. CENTS AT 1980 PRICES



Source: Interpreted from *Cargas impositivas a los usuarios de la viabilidad del área metropolitana de Caracas*, Venezuelan Government/World Bank/Alan M. Voorhees and Associates, Caracas, 1973.

Table 8

MARGINAL SOCIAL COSTS PER KILOMETRE PER VEHICLE AT MORNING PEAK HOUR FOR VARIOUS DISTRICTS OF THE CARACAS METROPOLITAN AREA IN 1971, BY TYPE OF ROAD, IN U.S. CENTS AT OCTOBER 1980 PRICES

City district	Type of road							
	One lane	Two lanes	Three lanes	Expressway				Average for all types of road
				Two lanes	Two and a half lanes	Three lanes	Four lanes	
CBD	54.5	73.2	34.0	34.6	20.2	43.7	-	45.6
Manicomio/23 de enero	12.4	36.6	14.7	4.4	-	-	-	11.5
Vista Alegre/La Vega	0.0	6.6	12.5	7.5	4.4	4.4	-	5.5
Antimano	-	19.8	-	-	-	-	-	19.8
Las Acacias/Cementerio	3.8	11.3	16.0	7.7	-	10.0	25.5	16.0
El Valle and southward	-	0.0	13.3	4.4	-	4.4	-	8.4
Cotiza/El Bosque	8.5	6.5	12.6	6.3	-	12.0	-	9.1
Los Chorros/El Marqués	0.0	1.5	7.0	-	14.0	4.4	-	5.7
Baruta and environs	0.0	0.6	-	-	6.0	-	-	2.6
La California/El Hatillo	0.0	0.0	-	-	-	-	-	0.0
Petare and beyond	5.4	-	-	-	-	-	-	5.4
Country Club/ Los Palos Grandes	0.5	8.3	8.1	10.5	30.5	4.4	-	10.4
Las Mercedes/San Román	-	6.2	-	53.5	21.3	-	-	22.7
Chacaito/Santa Mónica	-	6.1	-	-	7.7	-	-	7.1
Pro Patria and beyond	4.3	-	-	6.6	-	-	-	5.3
Average for all types of road	7.4	14.1	16.3	12.9	13.6	8.3	25.5	12.7

Source: Table II.4 of *Cargas impositivas*, *op. cit.*, adjusted for the effects of inflation and converted into U.S. cents.

so; others part their cars at the roadside and do not pay anything or else only pay a small amount of money to someone who helps to park and look after the vehicles. It is not easy to estimate the social cost of the space occupied, and at all events this varies from one case to another. Assuming that the marginal value of land is the same for different uses, then each car parked in this way for 8 hours near, but not within, the city centre could cost approximately two dollars.

A person who works in the city centre and travels 15 kilometres by car between his home and his workplace at peak traffic times, morning and evening (and does not go home to lunch as many people do in Latin America) runs up a marginal social cost of US\$ 2.65 if we use the average cost per kilometre shown in table 7 and assume a social parking cost of 75

cents. This represents a cost of 18 cents per kilometre, although this estimate should be considered only as an illustration.

Owners and users of automobiles in Latin America often have to pay considerable amounts to government bodies in such forms as automobile purchase taxes, import duties and license charges. As these various kinds of taxes do not vary with the number of journeys made, they do not have a direct effect on congestion. The only tax which sometimes assumes significant proportions and which does vary according to the number of journeys made is the fuel tax.

In some countries (Bolivia, Ecuador and Venezuela) gasoline is effectively subsidized: that is to say, the implicit rate of taxation is negative. In other countries, however (Brazil, Paraguay and Uruguay), the taxes on gasoline

are relatively high. In Brazil, for example, the gasoline tax works out at about 5 US cents per kilometre for an automobile in urban traffic. If the total marginal social cost comes to 18 cents per kilometre, then these 5 cents could be considered to be a significant contribution to the total. There are some grounds for doubting, however, whether the retail price of gasoline in Brazil, including the tax factor, is much greater than the real economic cost of the product, in view of the fact that the shadow price of foreign exchange in the country is significantly higher than the prevailing official rate. It might be considered that the tax of 5 cents per kilometre matches reasonably well the difference between the real economic cost of gasoline, expressed in cruzeiros, and the retail price less tax. At all events, when considering systems to oblige travellers to pay the marginal social costs which correspond to them, the fixing of an appropriate level of gasoline taxes should be borne in mind.<sup>37</sup>

The argument that urban travelers should be made responsible for the marginal social costs they cause is based on the fact that if no such responsibility exists it cannot be expected that the transport system will function efficiently: in general there will be too many

journeys, and a percentage of those made will cost those making them less than their real total cost (for them and for the rest of society). If road users had to cover their marginal social costs, however, there would be significant advantages as regards distribution, including the following:

- the revenue in respect of tolls would be contributed above all by the relatively well-off persons who opted to continue travelling by private car even after the introduction of the road taxation system, and this revenue would be collected by the government to be used for the public good in the manner considered most suitable;

- the transfer of demand from automobiles to buses would increase the frequency and perhaps the density of the bus services, which would be advantageous for existing bus passengers;

- the reduction in automobile traffic would free road space and increase the speed of the buses and the reliability of the bus services;

- the bus fares should go down, since by increasing the utilization of each vehicle the depreciation and capital costs per passenger carried would be reduced.<sup>38</sup>

### III

## Policy options for increasing the efficiency and equity of urban transport systems

### 1. *Summary of some of the problems to be solved*

The foregoing sections of the present study set forth some of the problems which affect the efficiency and equity of urban transport systems

in Latin America. From the point of view of efficiency, it is necessary to reduce the total cost implied by a given volume of urban transport or else increase the volume of service

<sup>37</sup>It should be noted that if tolls are raised to reflect the marginal social costs, the traffic flows will generally go down to the pre-existing levels, thus lowering the marginal costs. The optimum toll, in equilibrium conditions, would be less than the marginal social costs before applying the tolls, that is to say, in figure 4, the vertical difference between the curve MC and the curve AC at a traffic level  $q_0$  is greater than in the case of a traffic level  $q_1$ .

<sup>38</sup>It is not *a priori* obvious that the bus fares would go down, since in spite of the higher speeds these vehicles might not be able to make more journeys during peak traffic times and the extra demand for bus transport caused by the transfers from private cars would increase the traffic concentration at those times. See the appendix to the present article, which describes a model developed in order to analyse this point. According to this, it would appear that the bus fares would indeed go down except in extreme cases.

provided for a given cost. From the point of view of equity and distribution, the main source of concern is that the degree of accessibility of the lower income groups is rather inferior. Going more deeply into this point, the following special objectives could be noted:

(i) Action should be taken to give present or potential travellers greater awareness of the total private and social cost of their travel, so that they only make those journeys whose benefit is greater than their cost, ensuring also that these journeys are made by the most efficient means and at the most suitable time of day.

(ii) The speed of the buses should be increased so as to reduce travelling time, which tends to discourage travel by lower-income families, thus at present reducing their accessibility.

(iii) The level of services provided by the bus system should be improved so as to make necessary fewer transfers in order to complete journeys.

(iv) The monetary cost of public transport should be reduced.

(v) The high capital investment represented by new urban roads and metro systems should be avoided, since these have to be financed with subsidies which frequently tend to benefit the less needy members of urban society.

A sixth objective could also be included, namely, that of avoiding direct subsidies to urban bus companies, since there are certain indications that such subsidies reduce efficiency. Instead, emphasis should be placed on the desirability of keeping bus operation in private hands, since it is probable that the transfer of such services to the public sector results in an increase in operating costs.<sup>39</sup>

## 2. An idealistic solution

If all road users were obliged to absorb the

marginal social cost of their journeys, this would represent an important step towards achieving all the objectives listed in the previous paragraph, the first of them being reached by definition.<sup>40</sup> The second objective would be achieved because the resultant reduction in the volume of private vehicle traffic would increase the speed of the buses (although not so much as that of private cars). The third aim would be favoured because the transfer of demand to the bus system would increase the service frequency and promote an increase in the coverage of bus services as well as stimulating greater route density. The fourth goal would be satisfied because the operating costs would be reduced in terms of time.<sup>41</sup> The fifth objective would be achieved because the greater efficiency obtained from the existing surface transport system would reduce the comparative advantages that metro systems might offer and make it less desirable to expand the road system (table 9, which is explained below, provides an example of this). The sixth aim would not be tackled directly, although the system of charging for road use ("road pricing") would stimulate the transfer of resources to private bus transport, thus increasing its profitability and hence reducing any need for subsidies.<sup>42</sup> It would improve the quality of services provided and reduce any pressure in favour of the transfer of such services to the public sector.

However, the practical difficulties standing in the way of the application of a system of charging for road use which would oblige users to absorb exactly their marginal social costs are such that this system probably cannot be introduced in the near future in spite of the considerable benefits it could bring. For the past ten years the necessary technology has existed for: (i) recording the passage of private cars through particular streets in the city road network; (ii)

<sup>39</sup>This possibility is shown in various studies, such as those of Alan Walters and Charles Feibel, *Ownership and Efficiency in Urban Bus Operation*, World Bank, Washington, D.C., and R. Tunbridge and R. Jackson, *The Economics of Stage Carriage Operation by Private Bus and Coach Companies*, Transport and Road Research Laboratory, England.

<sup>40</sup>Although differences might persist between what travelers are really paying and the extent to which they are aware of what they are paying.

<sup>41</sup>There would certainly be a rise in the ratio between the number of buses required and the number of passengers transported, although not sufficiently to offset the drop in operating costs, except in special cases (see annex 1).

<sup>42</sup>Except in extreme cases (see annex 1).

Table 9

COMPARISON BETWEEN THE JOURNEY TIME SAVINGS OBTAINED FOR A GIVEN VOLUME OF URBAN JOURNEYS AT PEAK TRAFFIC TIME BY THE APPLICATION OF A SYSTEM OF SUPPLEMENTARY LICENSES FOR ENTERING THE CITY CENTRE AND THE SAVINGS OBTAINED BY BUILDING A METROPOLITAN RAILWAY SYSTEM, USING AS AN EXAMPLE THE METROPOLITAN AREA OF CARACAS IN THE CONDITIONS PREVAILING IN 1971

(In United States dollars at October 1980 prices)

	Existing situation: no metro and no supplementary licenses	No metro, but with supplementary licenses at an optimum price of US\$ 1.25 per vehicle per hour	With metro between Petare and Pro Patria but no supplementary licenses
Number of hours of travelling time for private car users	31 920	27 015	30 005
Number of hours of travelling time for bus users	31 733	33 230	19 375
Number of hours of travelling time for collective taxi users	15 918	14 495	8 612
Number of hours of travelling time for metro users	-	-	10 007
<i>Total number of hours of travelling time</i>	79 571	74 740	67 999
Estimated cost of investment, in US dollars at 1980 prices	0	1 000 000	1 350 000 000
Amount of investment needed to save one hour of travelling time	-	207	116 661

Source: (1) *Cargas impositivas...*, *op. cit.*, especially tables X.1 (Vol. II), 4.12 (Vol. III) and A.1.5. and A.1.6 (annexes); (2) *Quarterly Economic Review: Venezuela*, The Economist Intelligence Unit, London, third quarter of 1980; (3) *Resumen general de costos: costo total del proyecto*, C.A. Metro de Caracas, October 1981; (4) Central Bank of Venezuela, *Boletín mensual*, various issues, for cost adjustment factors.

transmitting information on the time of passage, the prevailing traffic intensity and the identity of each vehicle so that a central computer can make the necessary calculations; and (iii) adding up the charges owed by each vehicle for subsequent collection. At present, however, it would appear that there are fewer probabilities than before of applying an exact automatic system of road use charges, mainly because of the combination of the high capital costs involved in the establishment of the system and the uncertainties of a political and social nature which could accompany the introduction of such a system.

At the beginning of the 1970s, a plan for the automatic collection of charges from road users in respect of the marginal social costs connected with their use of congested roads was prepared for the metropolitan area of Caracas, although its application in the short term was not recommended. Its capital cost was estimated at the by no means negligible sum of almost US\$ 50 million at present prices.<sup>43</sup> Perhaps it would not be very wise to enter into

<sup>43</sup>Government of Venezuela/World Bank/Alan M. Voorhees, and Associates, *op. cit.*.

a commitment to the investment of such a sum without first of all establishing the acceptability of the criteria used by examining the application of other alternatives calling for less capital expenditure. Doubts have usually been expressed about the political and social viability of this kind of road use charges. It has been suggested that charging for the marginal social costs involved in the use of urban roads would be inflationary but this would only be so if governments permitted it to be inflationary, since there is no reason why a change in economic administration which tends to reduce costs (in this case, those of urban transport) should have inflationary consequences.

The degree of political acceptability of the system of charges would be greater if it were introduced (with suitable modifications in line with the location) simultaneously in all urban areas of the country, in order to avoid protests from persons living in a particular urban area on account of having to pay for something (i.e., the congestion they cause) which persons living in other cities do not have to pay. If the net revenue generated in each city were invested for the benefit of residents, such objections could be refuted, although there would always be the danger that the system would be criticized by political interest groups seeking support from sectors of public opinion which are not perhaps properly informed.

### 3. *Practical alternatives*

More simple alternative ways of charging to cover the marginal social costs can also be conceived. Generally speaking, however, the simple alternatives are less precise and efficient, because they do not link the charge to the distance travelled along congested roads or the degree of congestion prevailing on a particular road when vehicles are using it. Instead, they involve the collection of a uniform amount depending on the class of vehicle entering a particular congested area (normally the city centre) on the basis of the use of congested road space (and hence of the marginal social costs generated) by an average vehicle of the same type entering the area subject to charges. In Caracas, plans and recommendations were made for the application of a programme of this

nature, and the basic features of these plans were actually applied in Singapore, with some variations such as those connected with the design of the collection system.<sup>44</sup>

The plan proposed for Caracas is known as "supplementary licensing", since it would call for the acquisition of an extra daily license for each vehicle included in the plan of entry to the city centre. Expressed in 1980 values, this daily license would have cost US\$ 3 per private car in 1971, US\$ 10 per collective taxi,<sup>45</sup> and US\$ 7.50 per truck, after adjusting the estimated license charges fixed for the beginning of the 1970s by the variation in the price index.<sup>46</sup> As it is very likely that the demand for road space per unit of available space has increased since the beginning of the 1970s, it may be assumed that the present optimum rate of charges would be somewhat higher than these values, so that it would be more reasonable to set it at US\$ 5 per private car. In the plan proposed for Caracas, buses were exempted from payment for social reasons and in order to simplify the system, but if they had been included the charge would have been approximately three times that estimated for collective taxis, since a bus uses approximately three times as much road space as a taxi.<sup>47</sup> The charge set for trucks in Caracas was discretionally reduced from the value that would have been fixed if only considerations of efficiency had been taken into account. It was considered that the elasticity of demand for urban road space by trucks would be low in relation to price and that the amounts charged

<sup>44</sup>Singapore has features which favour the introduction of a road taxation system: for example, there is only one city in the country and there is a sufficiently firm and disciplined democratic system capable of taking measures to contribute to long-term development and stability. See *Time* magazine, 25 January 1982.

<sup>45</sup>When this plan was worked out, the collective taxis were regular-sized American cars, but today they are small vans and mini-buses.

<sup>46</sup>The index used was that calculated by the Central Bank of Venezuela for the category "miscellaneous expenses", which includes transport. At the beginning of the 1970s, an individual component was not published for transport.

<sup>47</sup>If buses had been included in the system, this would have significantly increased the revenue, but not the economic benefits. The collective taxis, for their part, should now be paying more than if they were still the size of American cars.



to trucks would therefore simply be converted into greater costs for them (and possibly also give rise to difficulties of a political and social nature), without having any major incidence on congestion.

The special license would have to be displayed in the windshield of the vehicle and the supervision of the system would have been carried out mainly through the inspection of vehicles parked in the central area, but also of those being driven; 76 persons would have been needed for this work. It was estimated that the revenue from the plan would have been approximately 110 million bolívares per year at 1971 prices (nearly US\$ 56 million at 1980 prices), while the costs would have been slightly over 10 million bolívares per year. At present values, the expected annual revenue of nearly 100 million bolívares would be equivalent to about US\$ 50 million. In round figures, the annual economic and social benefits would have amounted to nearly 16 million bolívares (US\$ 8 million at present prices), from which it would be necessary to deduct the annual operating costs of the system, which are slightly over 10 million bolívares. The extraordinary initial cost of installing the system would have come to 2 million bolívares, so that the relation between the costs and benefits of the plan would have been favourable.<sup>48</sup> In reality, the long-term benefits might even have been greater. By making possible greater operating efficiency of the urban transport system it would have reduced the need to make big capital investments to improve its functioning. At present, a metropolitan railway system is being constructed in Caracas, and the cost of the first line in the system, from Propatria to Palo Verde, is estimated at some 7 billion bolívares at 1981 prices,<sup>49</sup> or US\$ 1 600 million. If Caracas

follows the trend of other Latin American cities which have decided to build metros, the final cost could even exceed this very high sum.<sup>50</sup>

Table 9 gives estimates of the total travelling time for the same number of journeys at peak morning traffic density time in Caracas for three different situations: (i) the present situation, without the metro and without additional licenses; (ii) introduction of the system of additional charges for entering the central area of the city, but without the metro; and (iii) with the metro operating between Propatria and Petare, but without additional licenses. It is estimated that the total number of hours travelled under the present system comes to 80 000 at peak traffic density time; with the system of additional licenses (without the metro), this time would be reduced to 75 000 hours, while with the metro but without the system of additional licenses the total travelling time would be 68 000 hours. The system of additional licenses would cost approximately US\$ 1 million, while the section of the metro in question, at 1980 prices, would cost US\$ 1 350 million, so that whereas each hour of travelling time saved through the application of the system of additional licenses would cost approximately US\$ 200, while each hour saved through construction of the metro would cost over US\$ 120 000.

The foregoing is not a strict and exhaustive comparison between the relative advantages of a system of additional licenses and those of another solution involving the building of a metro system. At all events, however, the figures are interesting. There can be no doubt that this comparison does not take into account certain negative and tax features of the metro solution: for example, with this system the number of persons travelling to work in their own cars (the preferred means) would be higher than if a system of additional licenses were applied; the metro would provide employment during its construction stage; it would require a large amount of foreign exchange; it would mean setting up a new and very large public

<sup>48</sup>It should be noted that although the license would only have been required for entering the city centre, the reduction in automobile traffic towards the centre would increase traffic speed in the entire urban area. In Caracas, the speed of automobiles in this area at times of peak traffic density would increase from 29 to 35 km per hour, with the cost of a license for entering the central area rising from 0 to 7.2 bolívares per hour at times of peak traffic density. See *Cargas impositivas, op. cit.*, table A. 1.5.

<sup>49</sup>*Resumen general de costos: costo total del proyecto, Metro de Caracas C.A.*, October 1981. It should be noted

that the extension from Petare to Palo Verde was not part of the original project.

<sup>50</sup>See *Algunos aspectos de la justificación socioeconómica de los ferrocarriles metropolitanos en América del Sur, op. cit.*

sector enterprise to operate the urban transport system, etc.

At all events, it may be asserted that generally speaking the adoption of a system of obliging urban road users to absorb the social costs they generate would tend to reduce the investment needs for the urban transport system. Table 10 gives another example, once more taken from the case of Caracas.<sup>51</sup> This table indicates that for every level of investment in the urban road system, the charging of an additional license of higher value leads to a reduction of the total costs of the transport sys-

tem (cost of road construction plus cost of road maintenance plus cost of vehicle operation). In addition, it indicates that the total costs arising as a result of the lower investment and the charging of higher sums for licenses are similar to those resulting from high investment and the charging of medium or small sums for licenses. The main reason why the same total costs (as defined) can be achieved for the urban transport system, regardless of whether investments are higher or lower, is that in the latter case fewer persons would go to work by car, so that the need for road space would diminish.<sup>52</sup>

Table 10

METROPOLITAN AREA OF CARACAS: CONSTRUCTION, MAINTENANCE AND OPERATING COSTS TO USERS ASSOCIATED WITH THREE LEVELS OF ROAD INVESTMENTS (WITHOUT METRO), WITH AND WITHOUT APPLICATION OF A SYSTEM OF SUPPLEMENTARY LICENSES TO ENTER THE CITY CENTRE, 1971-2001

(Millions of bolivares at net 1971 prices)

Level of road investments	Cost of licenses at time of maximum traffic density	Construction costs <sup>a</sup>	Maintenance costs	Operating costs to users <sup>b</sup>	Total costs
High	0.00	1 838	360	23 383	25 581
	1.25			23 213	25 411
	2.50			23 008	25 206
	5.00			23 041	25 239
	7.20			23 515	23 713
Medium	0.00	1 434	345	28 509	30 288
	1.25			24 482	26 261
	2.50			23 624	25 403
	5.00			23 245	25 024
	7.20			23 660	25 439
Low	0.00	1 114	332	32 506	33 952
	1.25			29 195	30 641
	2.50			28 456	29 902
	5.00			23 676	25 122
	7.20			23 833	25 279

Source: Table 6.3 of Technical Supplement to *Cargas impositivas...*, *op. cit.*

<sup>a</sup>Based on the assumption that no investments will be made after 1980.

<sup>b</sup>Including costs of travellers' time and operation of vehicles for all the hours spent on travelling during the period 1971-2001, assuming that the travel demand will not increase after 1980.

<sup>51</sup>Taken from the report by the Government of Venezuela/World Bank/Alan M. Voorhees and Associates. Chapter 6 of volume III of the report on this study contains a complete technical description of the way in which these figures were obtained.

<sup>52</sup>Note that the amounts referred to in table 10 were not adjusted in accordance with variation in the consumer surplus in the various cases.

#### 4. Other policy options

The achievement of the objectives set forth in chapter III.1 of the present paper can also be approached through policy options which do not involve obliging road users to absorb their marginal social costs. Generally speaking, these other options are less efficient, although they may be easier to impose and less conflictive from the social and political point of view. Most of them do not depend on price mechanisms so much as on physical limitations and therefore do not have the result of giving the authorities the benefit of payments made by users of the congested urban road space. When monetary factors are brought in, they generally involve subsidies rather than taxes.

The alternative most frequently used consists of controlling congestion by regulating city centre parking. This alternative may be fairly acceptable in some cases, but it has certain intrinsic drawbacks from the point of view of both efficiency and equity. Frequently its efficiency is reduced because this system is incapable of limiting journeys which go through the centre of the city rather than those which end there. Moreover, reducing the volume of traffic through the central area of the city frees road space in the streets in the centre, and this serves to encourage traffic through the centre.<sup>53</sup> Furthermore —although this is a practical rather than an intrinsic drawback— efforts to stop congestion by establishing a parking policy frequently run into the difficulty that a large proportion of the parking places in the centre of the city are not in the streets but in buildings operated by private or independent authorities, and in many cases these cannot be controlled directly. If the parking policy cannot take these parking places into account, it will probably only be able to solve a small part of the problem.

This impossibility of intervening appro-

priately in the case of parking places located in buildings (whether those specially constructed for parking or those which combine office and commercial premises with parking areas for employees and clients) also means that control through parking policy has drawbacks from the point of view of distribution, since it is frequently the richest persons who go to work in the city centre and have reserved parking places in such buildings. Through long-term directives on land use it will be possible to expand the control of over parking in buildings, but generally speaking the results of such action take years to show themselves.

In order to achieve significant effects, efforts to improve urban transport systems through direct aid to public transport instead of controls on private cars call for large subsidies. In North America it has been proved that in order to attract a significant number of car users the fares on public transport services would have to be negative,<sup>54</sup> and a similar conclusion will probably be reached in Latin America too. There are some examples of improvement of the quality of service instead of reducing the price of public transport, however, which have succeeded in inducing travellers to stop using their private cars. In 1974, for example, a system of luxury urban buses with air conditioning was introduced in Rio de Janeiro. These buses, known as "Cool Riders", charged higher fares, but nevertheless succeeded in attracting some car drivers, without however securing any change in the difficulties of driving to the city centre. Moreover, these buses do not receive direct subsidies.<sup>55</sup> There have not been many attempts to repeat the success of luxury air conditioned buses in other Latin American cities, although this solution undoubtedly deserves greater study with a view to its extension.<sup>56</sup>

<sup>53</sup>A comparison between the effectiveness of a road taxation system and a system of restricting traffic through control of parking is given in the article by J.M. Thomson, "An Evaluation of Two Proposals for Traffic Restraint in Central London", in *Journal of the Royal Statistical Society*, London, 1967, pp. 327-377.

<sup>54</sup>For example, P. Bly, F. Webster and S. Pounds, in their article "Effects of subsidies on urban public transport" in *Transportation*, 9 (1980) note that in most cases the combined cost in terms of time and money of travelling by car is so much less than that of travelling by bus that, even if fares were eliminated completely, it still probably would not be possible to attract most private car users to public transport.

<sup>55</sup>Moreover, when these buses were introduced they did not even have the advantage of reserved bus lanes.

<sup>56</sup>Sometimes this solution is ruled out in practice,

Indeed, recent reports indicate that the Rio de Janeiro "Cool Riders" may be on the point of bankruptcy, caught as they are between the rises in operating costs and the economic problems of the Brazilian middle class, who are their usual clients.<sup>57</sup>

Generally speaking, metros do not succeed either in inducing many of those who have to travel to work to give up using their private car unless at the same time the regulations on car parking are modified, in which case the change of means of transport is due to these modifications and not to the metro. In 1971 it was estimated that the Petare-Propatria metro line in Caracas would reduce the number of private car journeys at times of high traffic density from 129 412 to 124 629, that is to say, by a mere 4%.<sup>58</sup> Another example is that of Santiago, where it was estimated in 1982 that the extension of the metro system from a length of 24.4 km to 82.9 km (including sections of pre-metro) would reduce the number of private car journeys at times of maximum density from 211 682 to 210 849: i.e., a reduction of 0.39%.<sup>59</sup> The claimed improvement in public transport could be justified if additional restrictions were imposed on the use of private cars to go to work, either through making a charge for road use, controlling parking, or using other means so as to offer a satisfactory alternative to those who previously travelled by private car. It should also be borne in mind, however, that perhaps it is not necessary for the public authorities to take special measures in this field: instead, they could simply allow the natural market mechanisms to give rise to services which generate greater demand.

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although perhaps not deliberately, when the public authorities fix maximum fares for buses.

<sup>57</sup>See the news item "Cool Riders are causing problems and the operators want to get rid of them", *Jornal do Brasil*, 17 January 1982.

<sup>58</sup>Government of Venezuela/World Bank/Alan M. Vorhees and Associates, *op. cit.*

<sup>59</sup>*Evaluación de alternativas a la red de transporte colectivo independiente de Santiago*, Catholic University of Chile, for the Ministry of Transport and Communications of Chile, 1981.

Another policy option which might be considered excessively severe if the real seriousness of the situation were not fully appreciated has been suggested in a previous report of CEPAL<sup>60</sup> and also independently by the Ministry of Transport of Brazil;<sup>61</sup> under this option, private cars would be prohibited from using certain roads and the city centre during peak traffic hours. This alternative could be considered a procedure for reducing the cost of urban transport and improving the travelling conditions of lower-income groups by making those who wish to travel to work by car pay for the road space they use in terms of time and inconvenience rather than money. In economic terms, this alternative is inferior to those obliging road users to absorb their marginal social costs by paying a toll or other similar charge, since the payment would be made in the form of real economic resources rather than through a transfer. If no tolls were paid, the public sector would not obtain revenue. However, this might be better than regulating city centre parking and is worth considering as a viable policy option.

The complete list of options is very long, but few of them go to the real heart of the problem, which is that the relatively well-off drivers of private cars impose costs on the less wealthy who use public transport during times of congestion. It is not pretended that all the problems associated with urban transport in the Latin American region would be solved if a system connected with the concept of charging for the use of congested roads were introduced, or if physical restrictions on the use of private cars were adopted. Even if such measures were introduced, for example, it might continue to be necessary to consider the desirability of giving direct aid to facilitate the travel of the poorest families, but this would take us outside the specific area of urban transport towards the broader field of social policy in general.

<sup>60</sup>E/CEPAL/R.264, *op. cit.*, and E/CEPAL/PROY.2/R.9, *An Analysis of Some of the Social Consequences of the Automobile in Latin America*, September 1979.

<sup>61</sup>*Jornal do Brasil*, 3 July 1979.

## Appendix

### Effects of mechanisms for limiting urban congestion on bus fares

#### *Introduction*

It might be queried whether a system of additional urban licenses would really reduce bus fares.

The higher speed permitted by such a measure would tend to reduce the interest costs in respect of the bus fleet and would also help to reduce those operating costs which vary as a function of operating time. Furthermore, the system of licenses would tend to increase the demand for bus services, especially at peak traffic hours, and could encourage the acquisition of more buses, which would only be used during those hours. In addition, systems of additional licenses would only have a favourable effect on the interest costs of the fleet if the higher speed thus made possible enabled the vehicles to complete a larger number of journeys during peak traffic hours, which might not be possible if the bus routes are too long. These repercussions of a system of additional licenses on bus transport are generally not sufficiently recognized. If the negative repercussions outweigh the favourable effects, bus fares might tend to go up rather than down.

In order to study the quantitative importance of the various factors in question, a simple operating model for a bus route was developed. This appendix contains a summary description of this model and of the conclusions derived from it.

#### *Brief summary of the model*

The model analyses a bus route for given conditions regarding: (i) the number of passengers to be transported, with the peak traffic hours being distinguished from others; (ii) the speed of the buses at peak traffic hours and outside them; (iii) the characteristics of the bus route and the operating conditions; and (iv) the number of hours of operation, both in total and during peak traffic hours. The supplement to

this appendix gives a complete technical description.

The first stage consists of determining the required frequencies, which are calculated separately for periods of peak traffic density and other periods, taking into account the relation between the number of persons needing transport and the capacity of each bus, as well as the minimum frequency which each bus line wishes or is obliged to offer.

Once these frequencies have been established, the number of buses needed is calculated. In order to carry out this calculation for the peak traffic period, the variables used were the service frequency (in the form determined above), the duration of the peak traffic period, and the time taken to cover the whole route. For the period outside peak traffic hours, the frequency and the time needed to complete the route were taken into account.

Estimates were then made of the global operating variables on which costs depend: the total number of kilometres per day covered by the buses on the route; the total operating time; and the total time, including rest periods.

The total costs were calculated by adding together four separate components. The first was the crew costs, which are related to the total time including rest periods. The second was the other time-dependent operating costs (including part of the costs of fuel, depreciation and maintenance) which are based on the total operating time. The third was the interest component, which is a function of the total number of buses needed. Finally the fourth component was the distance-related costs, which depend on the number of kilometres travelled by the buses.

The final result of the calculations is the total cost per passenger transported.

#### *Application of the model*

The model took a basic case which was as-

sumed to represent the existing situation and in which the only limitation on private car traffic in the urban area was the parking policy. The test case which was compared with this basic case assumed a situation in which a system of road use charges was applied (or other means of limiting journeys, especially those by private car) at times of traffic congestion.<sup>1</sup> Several variations were made both for the basic case and the test case, in order to see how the result changed according to different circumstances. Table A-2 shows the set of data used in each application of the model, while table A-1, which contains a list of the results of the different applications of the model, presents the corresponding results. The terms used in the model are defined in table A-3.

#### *Summary of conclusions*

In most cases it is concluded that the system of charging for additional licenses would reduce the bus costs per passenger, and hence the bus fares. There would only be an increase in fares in cases where (i) the bus routes are relatively short or (ii) the license charge leads to a very appreciable increase in demand for bus ser-

vices at peak traffic time, with little or no variation in such demand outside those times (especially when the peak traffic period is relatively short).

The longer the peak traffic density period (including the morning and evening peaks) the greater the reduction in fares would be. If this peak period were short, however, the reduction in the round trip time permitted by the charging of additional licenses would not allow the vehicles to return to their terminals with sufficient time to make an extra journey during the peak traffic period.

The changes in fares vary slightly according to the length of the route. If the morning peak traffic period lasts for two hours (and the evening one is of similar duration) and permits a speed of 15 kilometres per hour (without the application of additional licenses) then the application of such licenses would enable fares to be reduced more and more in proportion as the length of route rises from 5 to 15 kilometres (see comparison between application 1 and application 1A). Within this range of distances, the buses can usually carry out more than one journey during the peak traffic time, and the increase in speed made possible by the use of licenses improves the results in this sense. In proportion as the length of the route increases, the application of licenses gradually gives rise to greater effects, as it reduces the relative importance of rest periods at the end of the run.

<sup>1</sup>It should be noted that here it is assumed that buses are exempt from any kind of payment.

Table 1

#### ESTIMATED VARIATIONS IN BUS COSTS PER PASSENGER TRANSPORTED AS A RESULT OF THE ADOPTION OF A SYSTEM OF CHARGES FOR ROAD USE OR SOME OTHER SYSTEM TO TRANSFER PRIVATE CAR USERS TO COLLECTIVE TRANSPORT, FOR DIFFERENT TYPES OF CONDITIONS

Comparisons between applications shown	Percentage variation in cost when KR is:				
	5	10	15	20	25
1A/1	-5.85	-5.94	-5.97	-5.17	-5.38
2A/2	-1.10	-0.40	-0.88	-1.15	-1.01
3A/3	-4.54	-4.56	-4.57	-4.58	-4.03
4A/4	-0.31	-0.37	-0.07	-0.38	-0.53
2B/2	+0.00	+0.47	-0.39	-0.85	-1.14
2D/2C	+0.04	-0.21	-0.53	-0.70	-0.80

Source: Prepared by the author.

Table 2  
ENTRY DATA USED IN THE VARIOUS RUNS OF THE MODEL

Variable	Value assumed for the run indicated										
	1 <sup>a</sup>	1A <sup>b</sup>	2 <sup>a</sup>	2A <sup>b</sup>	2B <sup>b</sup>	2C <sup>a</sup>	2D <sup>b</sup>	3 <sup>a</sup>	3A <sup>b</sup>	4 <sup>a</sup>	4A <sup>b</sup>
PPMP	1 000	1 250	1 000	1 250	1 500	1 000	1 250	1 000	1 250	1 000	1 250
PPMFP	150	160	150	150	150	150	150	150	160	150	150
FM					0.1667 <sup>c</sup>						
VP	15	17.5	15	17.5	17.5	15	17.5	22.5	25	22.5	25
VFP	19	19.25	19	19	19	19	19	27.5	27.75	27.5	27.5
KR					5 <sup>c</sup> , 10 <sup>c</sup> , 15 <sup>c</sup> , 20 <sup>c</sup> y 25 <sup>c</sup>						
LBP					0.0833 <sup>c</sup>						
LBFP					0.2000 <sup>c</sup>						
LCP					0.0333 <sup>c</sup>						
LCFP					0.0333 <sup>c</sup>						
CB					60 <sup>c</sup>						
t <sub>0</sub>	7.5	7.5	8	8	8	8.0	8.0	7.5	7.5	8	8
t <sub>1</sub>	9.5	9.5	9	9	9	8.5	8.5	9.5	9.5	9	9
CIBA					4 000 <sup>c</sup>						
CCH					3.50 <sup>c</sup>						
OCOH					2.88 <sup>c</sup>						
COK					0.33 <sup>c</sup>						
HO					18.50 <sup>c</sup>						

Source: Prepared by the author. The source of the monetary values was the report *Cargas impositivas...*, *op. cit.* These values are expressed in dollars at 1980 prices. They were later revised, however, to make them more representative of Latin American conditions. (It should be noted that since the objective of the model is to estimate the relationship between the cost in a given situation and the cost in another situation, the absolute costs are not very important, although the values must of course be approximately realistic).

<sup>a</sup>Without charges.

<sup>b</sup>With charges.

<sup>c</sup>In all cases.

Table 3  
DEFINITION OF TERMS USED IN THE MATHEMATICAL MODEL

Number of persons wishing to enter city centre per hour during period of peak traffic density	PPMP	Ditto, outside period of peak traffic density	LBFP
Rest time at inner-city terminal during hours of peak traffic density			LCP
Number of persons wishing to enter city per hour outside period of peak traffic density	PPMFP	Ditto, outside period of peak traffic density	LCFP
Minimum frequency of service	FM	Load capacity per bus (number of passengers)	CB
Speed of service, in km/h, during period of peak traffic density	VP	Time at which morning peak traffic begins	t <sub>0</sub>
Speed of service, in km/h, outside period of peak traffic density	VFP	Time at which morning peak traffic ends	t <sub>1</sub>
Length of route, km (one way)	KR	Interest costs per bus per year	CIBA
Rest time at terminal in outer part of city during hours of peak traffic density	LBP	Cost of crew, per hour	CCH
		Other operating costs, per hour	OCOH
		Operating costs per kilometre	COK
		Number of hours of operation per day	HO

When the distances are over 16 or 17 kilometres, however, there is no way that the buses could make more than one complete journey during the peak traffic period, even if the system of additional licenses were introduced, and hence this source of cost reduction ceases to have any effect, although the reduction in fares when the route is 25 kilometres long is nevertheless greater than when it is 20 kilometres, since the effect of the rest periods continues to decline consistently. (It should be borne in mind that generally speaking the licenses would tend to increase the concentration of demand during the peak period and reduce the mean utilization of the buses because of this).

*Supplement to appendix: technical description of the model*

1.1 The first stage consists of estimating the service frequency. The frequency needed to take care of the traffic flow is calculated separately for the peak traffic period and for the off-peak period, and this frequency is then compared with the specified minimum desired frequency. The frequency selected will be that which offers the best interval service. Taking as an example the case of the off-peak frequency, we calculate:

$$\frac{CB}{PPMFP} \tag{1}$$

and use either this value or that of FM, depending on which of them is smaller. The result is denominated FMFP.<sup>2</sup>

1.2 The number of buses needed can be estimated in more than one way. The model uses different methods for the peak traffic period and the off-peak period. In the first case, we begin by estimating the number of bus journeys (of vehicles, not of passengers) during the peak traffic period through:

$$\frac{t_1 - t_0}{FMP} \tag{2}$$

<sup>2</sup>The equivalent for the peak traffic period is denominated FMP.

This will give the number of buses needed if no bus is capable of completing more than one round trip during the peak traffic period. The round trip time during this period equals:

$$\frac{KR}{VP} + \frac{2KR}{(VP + VFP)} + LBP + LCP \tag{3}$$

From this we see that at least one bus can make more than one round trip if:

$$(t_1 - t_0) - \left( \frac{KR}{VP} + \frac{2KR}{(VP + VFP)} + LBP + LCP \right) > 0 \tag{4}$$

If this condition is maintained, then the number of buses needed is:

$$\frac{\left( \frac{KR}{VP} + \frac{2KR}{VP + VFP} + LBP + LCP \right)}{FMP} \tag{5}$$

The number of buses needed outside the peak traffic period was estimated in the following manner: first, we estimated the round trip time and then divided this by the off-peak service frequency. Formally, the calculation is made as follows:

$$\frac{\left( \frac{2KR}{VFP} + LBFP + LCFP \right)}{FMFP} \tag{6}$$

1.3 In addition to the number of buses needed, the total costs will depend on the total number of kilometres travelled, the total operating time of the buses, and the total time including both running time and rest periods. The time taken for a round trip at peak traffic time is given by:

$$\frac{KR}{VP} + \frac{2KR}{(VP + VFP)} \tag{7}$$

to which we must add LBP + LCP to obtain the total round trip time including rest periods.



The total operating time and the total time including rest periods outside times of peak traffic density are calculated in accordance with the same principles.

The number of kilometres travelled by the buses is estimated by multiplying the total number of bus journeys by the distance travelled on each journey. The number of bus journeys to the centre outside the time of peak traffic density is obtained from:

$$\frac{HO - 2(t_1 - t_0)}{FMFP} \quad (8)$$

The number of journeys made by the buses to the centre during the peak traffic periods is obtained from:

$$\frac{2(t_1 - t_0)}{FMP} \quad (9)$$

The number of kilometres travelled by the buses is found by adding the results of formulas 8 and 9 and multiplying this by the round trip distance in kilometres.

1.4 It is considered that the total cost comprises: (i) the crew costs, which vary according to the number of hours of use of the buses, including rest periods; (ii) the time-dependent operating costs (which are different from the crew costs), estimated on the basis of the number of hours of use of the buses, excluding rest periods; (iii) the interest costs, which depend on the total number of buses in the fleet; and (iv) the operating costs which vary according to the number of kilometres travelled by the fleet. All these costs are calculated by simple arithmetical operations. Finally, the four cost components are added together to obtain the total daily cost.

1.5 The final product of the programme represent the total cost per passenger, which will indicate the fare to be charged. In calculating the number of passengers transported per day, we start from the basis that there are  $(t_1 - t_0)$  hours of peak traffic density towards the centre in the morning and the same number in the evening. The maximum demand occurs in a single direction, for example when PPMP passengers per hour travel from the centre at the evening peak period, while only PPMFP passengers travel in the opposite direction.

1.6 The programme was conceived for calculating the cost per passenger. At all events, it stores the most important intermediate data for calculating this desired output.

## Capital goods

### Size of markets, sectoral structure and demand prospects in Latin America

*Jorge Beckel\* and  
Salvador Lluch\*\**

During the past thirty years, the manufacture of capital goods has undergone considerable quantitative and qualitative development in Latin America. This progress, which is especially notable in the larger countries of the region, has largely been the result of an import-substitution effort made through various government stimuli which have raised the technological level of the industry and given the economies greater independence with respect to the fluctuations in the world export commodities market.

Despite the overall progress achieved, the regional trade in capital goods is fairly limited, since half of the total purchases come from outside. This fact is worth pointing out at times such as the present when, except in Mexico, the machinery and equipment plants, boiler shops and related industries have been showing a drastic drop in their levels of activity and amount of orders.

Moreover, there are many cases of displacement of national production by imports, along with clear indications of serious setbacks and losses in the industrial and technological fields which may be difficult to make good. CEPAL, which from its inception has devoted much attention to the Latin American industrialization process, has been observing with concern this difficult state of affairs, which contrasts with the enormous regional needs for capital goods.

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## I

### Capital goods and the advance of industry

During the 1970s, industry in Latin America experienced fairly vigorous growth: manufacturing activity generally grew at higher rates than the economy as a whole, and the rate of increase was also relatively high in comparison with that of the industrialized countries.<sup>1</sup> These tendencies, and the equally positive results in the field of manufactured exports, show that industrial activity is making strides in the region.

This picture, however, is somewhat darkened by the disturbing world economic situation, since there are some phenomena which could have very negative repercussions on the economic and social development of the countries of the region,<sup>2</sup> especially the energy crisis and the acceleration of world inflation.

The energy crisis obviously affects countries differently according to whether or not they produce oil. Since most of the region belongs to the second group, it is affected by this problem in overall terms; moreover, many countries must make efforts to readjust, which may mean a deceleration of economic growth, an increase in external debt or, most probably, a combination of both effects.

World inflation, of which the increase in oil prices is only one cause, also affects Latin America, not only stimulating its domestic inflation but also making it more difficult to acquire supplies of imported goods: a situation aggravated by the world recession which has an impact on the level and price of the region's exports. Despite the unfavourable world economic situation, the regional economy as a whole has behaved better than might have been expected, largely due to the strong growth of reciprocal trade. But although in this reciprocal trade there is a greater share of manufac-

<sup>1</sup>CEPAL, *Análisis y perspectivas del desarrollo industrial latinoamericano* (ST/CEPAL/CONF.69/62).

<sup>2</sup>CEPAL, *The economic and social development and external economic relations of Latin America* (E/CEPAL/1061).

tures, this is still low in quantitative terms, and its significance decreases if it is analysed in qualitative terms. Moreover, as indicated above and as shown by various CEPAL studies, and even though there are definite differences among the various countries, the industrial structure of the region is clearly asymmetrical because of the insufficient development of the more complex manufactures, such as most capital goods. The development of basic engineering also appears insufficient as regards the production of the more complex metal manufactures and machinery or electrical products, or products of substantive importance in large-scale projects.<sup>3</sup>

As already noted, this situation varies considerably in the different countries, since the larger ones have managed to establish a substantial capacity for the manufacture of equipment, but at all events the regional deficiency in basic engineering affects all the countries of the region to a significant extent.

These observations, and others not expressly considered here, reveal the need to make a detailed study on the origin and establishment of capital goods production in Latin America. It is necessary to know the capacities and deficiencies of this sector and to assess how far it has been adapted to the needs of the region: this is, of course, the purpose of CEPAL's activities in this field. It is a complex task which, beginning with exploratory studies several years ago, is now reaching a stage of materialization and concerting of efforts which will help to attack and eliminate the obstacles to the development of a productive sector of singular importance for the progress of the region.<sup>4</sup>

It should be noted that even though the production of equipment is concentrated in the

three largest countries, the subject is also of interest for those which have a smaller market. The latter can act in two main ways: arranging for domestic industry to participate in the construction of large projects located in their territory, or encouraging it to produce specialized equipment required by the primary sectors of the country. Regarding the first of these courses of action, the preliminary studies already done by the project show, for example, that the majority of the member countries of the Central American Common Market already have sufficient productive capacity to carry out the implementation of certain parts of projects which are of technical interest, such as feeder pipelines for hydroelectric plants, floodgates for these plants, pressure vessels for other installations and, of course, simple structures and support and inspection systems.

It is interesting to note that the execution of these activities not only involves an increase in the technological resources of the country and the level of training of its labour force, but also, in the majority of cases, offers clear economic advantages principally due to considerable savings in transport. Moreover, many parts of certain large projects not only involve high transport costs but also intensive use of labour, which contributes to the attractiveness of domestic production.

Naturally, the execution of such activities requires a very serious analysis of the project and of the requirements which its various components involve, and this analysis calls for an engineering capacity which obviously is acquired over time. This would appear to be a very interesting field for co-operation among those Latin American firms which have reached different levels of progress.

<sup>3</sup>This subject, which cannot be omitted here, deserves a specific and in-depth analysis for two main reasons: firstly, the inadequacy of basic engineering creates a dependency which inhibits real trade competition; secondly, it is a very difficult situation to correct, and concerted, long-range efforts would be required in various fields in order to do so.

<sup>4</sup>It should be noted that in the accomplishment of this

work the support of UNDP and UNIDO within the United Nations System were of major importance, as were the collaboration of other regional bodies, such as CIER and OLADE, the help of enterprises of the region such as PETROBRAS and ELETROBRAS, and the very generous help given by the Government of Spain through the Ibero-American Institute of Co-operation.

## II

## Evolution of demand during the past decade and size markets in the Latin American countries

During the 1970s the demand for capital goods evolved differently in the various Latin American countries. For the purposes of this study the situation was initially examined in eight countries: Argentina, Bolivia, Brazil, Colombia, Ecuador, Mexico, Peru and Venezuela. The group thus includes the three countries with the relatively largest markets and the

countries of the Andean subregion; as can be seen, it also includes both exporters and importers of oil, and even one country (Colombia) which changed from an exporter to an importer of crude oil during the period in question.

Table 1 shows the evolution in these countries of two indicators of the demand for capital goods from 1971 to 1978; also shown are invest-

Table 1

### EVOLUTION OF TWO INDICATORS OF DEMAND FOR CAPITAL GOODS IN 8 LATIN AMERICAN COUNTRIES IN THE PERIOD 1970-1978

(1970=100)

	1971	1972	1973	1974	1975	1976	1977	1978
<i>A. Investment in machinery and equipment<sup>a</sup></i>								
Argentina	111	113	152	181	102	121	153	116
Bolivia	104	124	145	182	234	258	268	247
Brazil	120	143	191	235	242	238	235	253
Colombia	109	99	94	121	126	156	193	213
Ecuador	147	158	180	250	388	322	482	446
Mexico	95	107	131	152	171	161	128	162
Peru	108	108	161	217	235	178	135	96
Venezuela	116	136	156	158	210	274	382	368
<i>Total</i>	<i>111</i>	<i>125</i>	<i>161</i>	<i>193</i>	<i>193</i>	<i>197</i>	<i>204</i>	<i>211</i>
<i>B. Imports of capital goods<sup>b</sup></i>								
Argentina	112	117	102	104	103	92	170	160
Bolivia	93	114	147	191	239	237	252	302
Brazil	133	179	232	267	303	253	197	209
Colombia	88	86	82	93	94	108	105	182
Ecuador	119	124	139	218	330	311	484	510
Mexico	89	110	138	158	199	192	157	203
Peru	95	97	154	242	271	226	166	155
Venezuela	115	144	150	178	267	315	394	424
<i>Total</i>	<i>109</i>	<i>132</i>	<i>155</i>	<i>182</i>	<i>222</i>	<i>213</i>	<i>215</i>	<i>242</i>

*Source:* Prepared by the CEPAL/UNIDO/UNDP Capital Goods Project (RLA/77/015) on the basis of information from the Statistics and Quantitative Analysis Division.

<sup>a</sup>Based on constant 1970 prices. An estimate of the value of investments at 1980 prices is given in annex I.

<sup>b</sup>On the basis of the CIF value and in current dollars for each year. For the conversion to constant prices the wholesale price index of capital goods in the United States market was used. The value of imports at current prices for each year is given in annex II.

ment in machinery and equipment and the value of capital goods imports.<sup>5</sup> As may be seen, there are two fairly clear-cut categories. One is made up of countries where the indicators of demand show an upward trend over the entire period; Bolivia, Ecuador, Colombia and Venezuela belong to this group. The other is characterized by a growth in demand during the first five years of the period but by stagnation in the second; the three large countries and Peru belong to this second category. The table shows that the fact that a country is or is not an oil exporter, or is self-sufficient, does not explain in itself the different behaviour of demand for equipment. Moreover, the demand in Latin America as a whole reflects the evolution characteristic of this second group, due to its importance in the region.<sup>6</sup>

The amount of demand for capital goods in the various countries is related in the first place with the size of their national economies, although, as well as size, the differences in the proportion of the gross domestic product which each country devotes to capital formation, as well as its structure, are also determining factors in these differences.

The importance of each country as an import market is largely determined by the development of the supply of capital goods produced domestically. Table 2, which shows the geographical structure of investment in machinery and equipment as well as capital goods imports in Latin America in recent years, illustrates this.

It may also be seen that the investment in machinery and equipment by the small and medium-sized countries, taken as a whole, represents 27% of the total for all 19 countries considered: i.e., it is comparable in relative terms to that of each of the three largest countries in the region. Moreover, the small and medium-sized countries together absorb approximately half of Latin American imports of

capital goods. This represents, for example, a figure almost three times Brazil's imports under this heading. In brief, the capital goods market in the small and medium-sized countries is substantial and represents an interesting basis for possible productive activities in these countries or for regional co-operation efforts which go beyond what the largest countries can do among themselves.

Table 2

LATIN AMERICA: GEOGRAPHIC STRUCTURE OF INVESTMENT IN MACHINERY AND EQUIPMENT AND OF IMPORTS OF CAPITAL GOODS (19 COUNTRIES)<sup>a</sup>

(Percentages)

Country	Investment in machinery and equipment, 1976 <sup>b</sup>	Imports of capital goods, 1979 <sup>c</sup>
Argentina	10.8	10.2
Bolivia	0.6 <sup>d</sup>	1.5
Brazil	46.3 <sup>d</sup>	16.2
Colombia	4.1	5.5
Costa Rica	0.8 <sup>d</sup>	1.3
Chile	1.8	5.1
Ecuador	0.8	4.2
El Salvador	0.6 <sup>d</sup>	0.9
Guatemala	1.1	1.8
Haiti	0.1 <sup>d</sup>	0.1
Honduras	0.4 <sup>d</sup>	0.9
Mexico	16.0	25.3
Nicaragua	0.3	0.2
Panama	0.6	1.0
Paraguay	0.6	0.8
Peru	3.1	3.5
Dominican Republic	0.9	1.0
Uruguay	0.6	1.2
Venezuela	10.5 <sup>d</sup>	19.3
<i>Total</i>	<i>100.0</i>	<i>100.0</i>

Source: Prepared by the CEPAL/UNIDO/UNDP Capital Goods Project on the basis of information from the CEPAL Statistics and Quantitative Analysis Division (see annexes III and IV).

<sup>a</sup>Based on the "Clasificación por Uso y Destino Económico" (CUODE).

<sup>b</sup>Based on user prices in 1970 dollars; amounts in national currency were converted to dollars at the countries' import exchange rate.

<sup>c</sup>Based on CIF prices in 1979 dollars.

<sup>d</sup>Estimate based on average of investment in machinery and equipment in total gross fixed investment, 1970-1975 (see document E/CEPAL/1021).

<sup>5</sup>These goods are defined in keeping with the "Clasificación Uniforme por Origen y Destino Económico" (CUODE).

<sup>6</sup>After 1978, there was a sharp change in the trend in Mexico. This was so significant that it must be pointed out even though it obviously does not affect the situation of the period in question.

The above, however, should be analysed with some caution, since preliminary estimates indicate that the three biggest countries account for 90% of the current production of capital goods, and four medium-sized countries

produce most of the remaining 10%. It is apparent that the domestic market has thus far been a determining factor in the development of capital goods production in Latin America.<sup>7</sup>

### III

## The sectoral structure of investment in machinery and equipment in Latin America

Only partial data are available on the annual investment by the various sectors of activity in the region. Because this is an important aspect of the capital goods market, an attempt has been made to estimate the investment in machinery and equipment in some economic sectors, and for this purpose an analysis was made of the available information on imports and production of specific types of goods between 1970 and 1978. In the case of the manufacturing industries and the electricity sector, the estimates of investment refer to the increase in installed capacity and, in some cases, the figures were adjusted to take into account the renewal of obsolete installations, while in the case of the transport sectors, only transport equipment was considered (i.e., the infrastructure was not included). The results of the estimates are given in table 3.

As may be seen, the sectors identified represent approximately 70% of the investment in machinery and equipment during the past decade; the remainder corresponds to activities not separately identified: mainly forestry and fishing, part of manufacturing activity, telecommunications, transport infrastructure, services and government. If we examine the table by major activity sectors, we can see that the agricultural sector represents approximately 8% of the demand for capital goods; mining, extraction of oil, electricity and civil construction 16%; manufacturing as a whole 25%, and the transport sector 22%.

A look at the investment in machinery and equipment by activity sectors shows that the automotive transport sector, with 16%, represents the greatest segment of demand for capi-

Table 3  
LATIN AMERICA:<sup>a</sup> SECTORAL STRUCTURE  
ON INVESTMENT IN MACHINERY  
AND EQUIPMENT IN THE 1970s

Activity sectors	Average annual investment (Millions of U.S. dollars at 1980 prices)	Percentage share
Agriculture	3 200	8
Mining and civil construction	1 500	4
Extraction of oil and natural gas	1 300	3
Electricity	3 500	9
Manufacturing:		
Paper and pulp	400	1
Basic chemicals	2 200	5.5
Refineries	1 000	2.5
Iron and steel	2 200	5.5
Metal manufactures and machinery	3 400	8.5
Transport:		
Rail	300 <sup>b</sup>	1
Automotive	6 300	16
Maritime	1 200	3
Air	900	2
Other activities	12 600	31
<i>Total</i>	<i>40 000</i>	<i>100.0</i>

Source: CEPAL/UNIDO/UNDP Capital Goods Project.

<sup>a</sup>Based on information from Argentina, Bolivia, Brazil, Colombia, Ecuador, Mexico, Peru and Venezuela.

<sup>b</sup>INTAL, *La industria ferroviaria latinoamericana: Análisis de integración sectorial*, April 1980.

<sup>7</sup>This situation was analysed in detail by J. Ayza, G. Fichet and N. González in *América Latina: Integración económica y sustitución de importaciones*, Mexico City, Fondo de Cultura Económica, 1975.

tal goods; this sector basically consists of buses, trucks and utility vehicles incorporated into the countries' fleet of commercial vehicles during the period in question. Thus, this figure represents not only the demand of the automotive transport sector in the strict sense, but also that of the other economic sectors. At another level of demand, we find agriculture; the generation, transmission and distribution of electricity; iron and steel; and the metal manufactures and machinery industry, with a 7% to 9% share each. According to estimates, these sectors, combined with automotive transport, account for about half the total investment in machinery and equipment during the decade. In third place are basic chemicals and mining and construction, with a share of between 4% and 6%. The other activities have a lower level of demand.

It would of course have been desirable to make a sector-by-sector analysis of the development of investment in machinery and equipment during the decade, but this was only possible in exceptional cases, and even then with certain reservations. In the oil sector an acceleration in investments in machinery and equipment could be expected, due to the intensification of activity in the exploration and development of new deposits. If it is assumed that the total gross investment (capital outlay) of the sector is an approximate indicator of the evolution of the demand for oil-related equipment, then between 1970 and 1978 this demand appears to have trebled or quadrupled in real terms, whereas total investment in machinery and equipment of the eight countries merely doubled.

The picture gained of the sectoral structure

of demand makes it possible to analyse another aspect of the capital goods market which is significant when we contemplate possible joint actions to strengthen ties among Latin American enterprises and boost the regional bargaining capacity *vis-à-vis* the traditional suppliers. Thus, it is observed that approximately half of the demand analysed originates in sectors where the number of potential users or buyers is small. This is particularly so in the case of mining, oil extraction, electrical energy, petrochemicals, refineries, iron and steel, paper and pulp, railroads and the sea and air transport industries. In addition to the concentration of demand in a few enterprises, projects in these sectors also usually involve very large amounts of money, and moreover they include a very wide range of equipment of various levels of complexity, size and weight. If certain additional conditions were created, then the participation of the domestic industry would be possible, even in the case of the small and medium-sized countries of the region. The other sectors within the range of activities analysed, such as agriculture, civil construction, metal manufactures and machinery and automotive transport, represent approximately the other half of the requirements for capital goods. The demand of these sectors is distributed over a larger number of users and, unlike the previous case, mass-produced equipment predominates. These structural differences in the capital goods market undoubtedly have a significant impact on the forms of technological development, marketing and financing of the equipment. This would require a specific, in-depth analysis which is outside the objectives proposed by the studies in progress.

## IV

## Prospects for the growth of demand

The Latin American countries are seeking to maintain rapid economic growth and substantial levels of investment. To that end, they now have a significantly more diversified productive base than in the past, with broader systems of education and significantly greater management, entrepreneurial and technical capacity. Faced with the slow growth of the world economy the region is thus favoured with a certain degree of autonomy or defence capacity.<sup>8</sup> The continued expansion of the volume of Latin American exports in recent years and the achievement of rates of economic growth, investment and gross savings which are frequently higher than those of the industrialized countries are some eloquent indicators of this new situation. However, there are some items of uncertainty which, although they largely originate outside the region, are of such a nature that they have serious and almost unforeseeable repercussions on investment and thus on demand for capital goods. Some of the most notable of these factors are the trends in world oil prices and the availability of medium-and long-term external financing. Until now it has been possible to channel resources to the Latin American countries which show a deficit primarily through the commercial banks, but the indebtedness of some of these nations has shown very disturbing levels and trends. Faced with an unfavourable balance of payments, the majority of these countries, including some of the larger ones, have redoubled their efforts to increase exports, especially of manufactures. The success of these measures will also largely depend on the ability of the industrialized countries, as the principal buyers of Latin American goods, to neutralize the pressures in favour of protectionism exerted by the sectors affected by increasing imports under the present unfavourable conditions of recession or

slow economic growth. One alternative could be to increase trade among the Latin American countries themselves, as well as between them and developing countries in other regions.

These circumstances and factors could obviously be interpreted in different ways in terms of their effects on investment in machinery and equipment as an indicator of the demand for capital goods.

In order to provide a tentative frame of reference, a statistical correlation exercise was carried out on the basis of the available data from 20 Latin American countries and 11 industrialized countries for the period 1950-1976.<sup>9</sup> Economic growth and per capita income were thereby identified as significant independent variables; an average of the data for the 17-year period was used in order to eliminate from the projections annual variations in investment due to short-term cyclical phenomena.

In the past thirty years, the gross domestic product of Latin America has grown at an average annual rate of nearly 6%.<sup>10</sup> A reasonable hypothesis with regard to the 1980s would be to assume that this rate will not change. This would reflect the assumption, on the one hand, that the majority of Latin American countries are currently in a favourable domestic position to accelerate their economic growth, while taking into account, on the other hand, the inhibiting effects of the present world economic instability and its probable persistence for several years, in addition to the extent of the adjustments required in the Latin American economies. The estimated regional growth trend would not imply that this rate would be the same for all countries, but rather that it would represent an average situation. Given the differences in resource availability in the energy sector, it would be reasonable to expect an acceleration in economic growth in some coun-

<sup>8</sup>"The Latin American economy in 1980. CEPAL's preliminary balance", in *Notas sobre la economía y el desarrollo de América Latina*, No. 333, January 1981, prepared by the Information Services of CEPAL.

<sup>9</sup>Larry Wilmore, "Proyecciones de la demanda de bienes de capital", preliminary draft, CEPAL/UNIDO Joint Industrial Development Division, October 1979.

<sup>10</sup>CEPAL Economic Projections Centre.



tries and, on the other hand, a decrease in others, at least during an adjustment period.

If the economic activity of Latin America were to expand uniformly throughout the decade at a 6% annual rate, the above correlation would mean that investment in machinery and equipment would grow at a rate of 7%. Taking into account the 19 Latin American countries which represent approximately 90% of the gross domestic product of Latin America and the Caribbean, investment in machinery and equipment—including transport equipment—would amount to US\$ 120 000 million in 1990.<sup>11</sup> Finally, if economic growth were slower at the beginning of the 1980s, but later became faster than the assumed annual 6% rate, investment in machinery and equipment by the end of the decade would even be somewhat higher than the above-mentioned figure.

At all events, these figures show that the Latin American capacity for purchasing machinery and equipment, even in worldwide terms, is definitely significant. The maintenance and possible expansion of this capacity could help compensate to some extent for the recessionary trends in international trade and the economy. This relative importance is especially notable in some sectors, an important example of which is that of equipment for the generation of hydroelectricity. The regional reserves of hydropower resources, the number and production capacity of the projects already studied, and the insufficient level of overall electricity supply suggest that this will be a broader and more promising field of co-operation.

An analysis of the projects for hydroelectric plants planned up to the year 2000 in the member countries of the Latin American Integration Association (ALADI) and the countries of the Central American Isthmus shows a demand for more than 700 hydraulic turbines over a period of 20 years, or 35 units on average per year.

This figure mainly includes demand for equipment by plants with a generation capacity higher than 100 MW; there is also a high proportion of units of more than 50 MW.

Although a strict comparison cannot be made because of the different plant capacities, it is illustrative to mention that in Itaipú, one of the largest hydroelectric projects in the world, 18 turbines are being installed.

Hydraulic turbines are complex pieces of machinery. Even so, a number of industrial enterprises in the region have the capacity to construct them nearly entirely. The considerable Latin American demand for hydroelectric plant, however, is directed only to a small extent towards the region itself. If this situation were to change, not only could the industrial installed capacity be more fully used, but also the financial arrangements necessary to establish laboratories where small-scale models are tested could be made, thus completing the support basis needed to achieve eventual full basic engineering capacity.

Another interesting specific case would be that of the demand for equipment for cement plants. In a recently completed study it was estimated that Latin America, excluding the Caribbean region, needs in the course of the next ten years to buy approximately 140 rotary kilns, in addition to mills, crushers and other special cement plant equipment. It has been estimated that these equipment requirements are equivalent to an ex-works value of US\$ 7 000 million.

Moreover, due to the slow growth of cement consumption in the United States and Western Europe, Latin America accounts for approximately one-third of the world demand for new cement plants, excluding the industrialized countries of the socialist bloc. The concentration of such a high proportion of world demand under a specific equipment heading, which also occurs in the above-mentioned case of hydraulic turbines, could represent substantial international bargaining potential if handled jointly.

Finally, it is worth pointing out that the effort to acquire the capacity to design and construct production equipment, i.e., to create the region's actual working tools, also implies reaching a higher level of autonomous decision-making, for making the right choice of what and how much to produce is only possible for those who have the knowledge of how to do so.

<sup>11</sup>Calculated in 1980 dollars.

## Annex I

INVESTMENT IN MACHINERY AND EQUIPMENT BY 8 LATIN AMERICAN COUNTRIES,  
1970-1978(In millions of 1980 dollars at user prices)<sup>a</sup>

	1970	1971	1972	1973	1974	1975	1976	1977	1978	Total 1970-78
Argentina	4 336	4 831	4 904	6 581	7 844	4 402	5 265	6 626	5 045	49 834
Brazil	9 798	11 789	14 004	18 723	22 990	23 719	23 296	23 017	24 762	172 098
Mexico	5 730	5 434	6 123	7 496	8 721	9 815	9 207	7 347	9 270	69 143
Colombia	1 132	1 236	1 118	1 060	1 375	1 424	1 762	2 187	2 414	13 708
Peru	942	1 017	1 017	1 515	2 044	2 216	1 673	1 276	902	12 602
Venezuela	2 114	2 453	2 875	3 290	3 341	4 432	5 795	8 075	7 783	40 158
Bolivia	148	154	184	214	270	346	382	396	366	2 460
Ecuador	190	280	301	342	475	738	612	916	847	4 701
<i>Total</i>	<i>24 390</i>	<i>27 194</i>	<i>30 526</i>	<i>39 221</i>	<i>47 060</i>	<i>47 092</i>	<i>47 992</i>	<i>49 840</i>	<i>51 389</i>	<i>364 704</i>

Source: National Accounts of the countries and International Monetary Fund, *International Financial Statistics*.<sup>a</sup>It is estimated that, at producer prices, the investment figures would be 25% lower. The amounts in national currency of the countries were converted at the import exchange rate.

## Annex II

## IMPORTS OF CAPITAL GOODS BY 8 LATIN AMERICAN COUNTRIES, 1970-1978

(In millions of dollars CIF at current prices)<sup>a</sup>

	1970	1971	1972	1973	1974	1975	1976	1977	1978
Argentina	484.3	565.8	604.4	547.0	634.6	726.7	686.1	1 359.0	1 384.4
Brazil	956.9	1 331.9	1 827.6	2 449.7	3 214.8	4 205.0	3 750.6	3 099.2	3 569.3
Mexico	980.1	913.4	1 156.6	1 498.2	1 957.2	2 827.4	2 909.4	2 536.6	3 543.0
Colombia	370.1	340.4	341.4	335.5	432.5	503.9	617.9	638.1	1 203.2
Peru	211.2	208.6	217.9	359.6	646.4	831.0	737.8	577.3	582.6
Venezuela	671.1	806.4	1 033.0	1 109.0	1 504.7	2 602.7	3 276.6	4 358.6	5 070.1
Bolivia	57.4	55.7	70.1	93.4	138.5	199.1	210.2	238.5	309.0
Ecuador	90.9	112.7	120.7	139.4	250.3	435.4	438.3	724.5	826.9
<i>Total</i>	<i>3 822.0</i>	<i>4 335.9</i>	<i>5 371.7</i>	<i>6 531.8</i>	<i>8 779.0</i>	<i>12 331.2</i>	<i>12 626.9</i>	<i>13 531.8</i>	<i>16 488.5</i>

Source: CEPAL, Statistics and Quantitative Analysis Division.

<sup>a</sup>Current prices in each year.

## Annex III

LATIN AMERICA: INVESTMENT IN  
MACHINERY AND EQUIPMENT BY  
COUNTRIES, 1976<sup>a</sup>*(In millions of dollars at 1970 prices)*

Argentina	2 614.5
Bolivia	144.1 <sup>b</sup>
Brazil	11 238.7 <sup>b</sup>
Colombia	1 003.7
Costa Rica	183.7 <sup>b</sup>
Chile	427.2
Ecuador	206.0
El Salvador	142.6 <sup>b</sup>
Guatemala	271.9
Haiti	30.6 <sup>b</sup>
Honduras	87.7 <sup>b</sup>
Mexico	3 881.0
Nicaragua	84.6
Panama	151.5
Paraguay	136.0
Peru	765.0
Dominican Republic	216.4
Uruguay	150.8
Venezuela	2 547.4 <sup>b</sup>
<b>Total</b>	<b>24 283.4</b>

Source: CEPAL, Statistics and Quantitative Analysis Division, based on the National Accounts of the countries.

<sup>a</sup>At 1970 user prices. The amounts in national currency of the countries were converted at the import exchange rate.

<sup>b</sup>Estimated on the basis of the average share of 1970-1975, total gross fixed investment represented by investment in machinery and equipment. (See document E/CEPAL/1021.)

## Annex IV

LATIN AMERICA: IMPORTS OF CAPITAL  
GOODS BY COUNTRIES, 1979<sup>a</sup>*(In millions of dollars CIF)*

Argentina	2 405.5
Bolivia	341.4
Brazil	3 802.5
Colombia	1 286.2
Costa Rica	305.0
Chile	1 197.9
Ecuador	982.2
El Salvador	215.0
Guatemala	414.2
Haiti	33.1
Honduras	223.0
Mexico	5 925.2
Nicaragua	53.6
Panama	240.6
Paraguay	178.7
Peru	824.0
Dominican Republic	227.4
Uruguay	273.6
Venezuela	4 531.2
<b>Total</b>	<b>23 460.3</b>

Source: CEPAL, Statistics and Quantitative Analysis Division.

<sup>a</sup>Based on the "Clasificación por Uso o Destino Económico" (CUODE).

# Unequal development and the absorption of labour

Latin America  
1950-1980

*Victor E. Tokman\**

Various studies carried out at CEPAL between 1950 and 1980, especially by Raúl Prebisch, have attempted to probe into the principal factors influencing the absorption of labour in Latin America, with special emphasis on the rate of capital accumulation and economic growth, the type of technology used, the proportion of the labour force employed at low levels of productivity and, more recently, the consequences of the mechanisms of appropriation and utilization of the surplus which are an integral part of peripheral capitalism.

In this article, the author calls into question some of the hypotheses presented in these studies, comparing Latin America with the developed countries, especially the United States. This analysis shows that one of the special features of Latin America is the persistence of the employment of a considerable proportion of the labour force at low levels of productivity—a feature which had been pointed out by CEPAL studies from the beginning.

The productive absorption of this labour is made more difficult by the dynamic insufficiency of the economy, which is incapable of reducing this proportion despite the high rates of accumulation and growth of the modern sectors, this being explained, in turn, by the nature of technological change and the distribution and appropriation of wealth. For this reason, the author concludes that policies oriented towards the productive absorption of labour should place more stress on the selection of technology and on the raising of the productivity levels of the most backward sectors: solutions which in most cases require the modification of the predominant patterns of access to reproductive capital.

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## I

### Current interpretations

The purpose of this study is to offer some conceptual elements for interpreting the process of absorption of labour in Latin America during the past 30 years, in the light of the available information provided by PREALC (1981).

The current regional interpretations may be associated in one way or another with the work of Raúl Prebisch and other authors connected with CEPAL, who draw attention to the low level of absorption of labour and associate it with various factors inherent in Latin American development. These interpretations have been changing over time, and those which we will call here the ideas of the 1960s are clearly distinguishable from those of the 1970s.

The former arose as an implicit reaction—since they were not made explicit in any of the studies published—to certain distortions which were appearing in the behaviour of the labour absorption process. These distortions were defined in relation to what should have occurred according to a supposed normal model of growth. The implicitly accepted normal model postulates three basic trends associated with growth. The first is the transfer of population from rural to urban areas; the second is that the secondary sectors (particularly manufacturing) become the most dynamic ones as regards absorption of labour; and the third refers to the growing degree of homogenization resulting from the reduction in the intersectorial differences in productivity (between agricultural and non-agricultural and between tertiary and secondary).

In order to analyse the historical validity of the normal model in other countries of the world, one may refer to two pioneer works by Clark (1951) and Kuznets (1957). Both studies, but especially the second, analyse the changes in the sectoral distribution of the product and of employment, and the differences in productivity. For this purpose, they review the available information for many countries and make comparisons of the position in a number of countries in a given year (around 1947) or of the changes which have occurred in a single country through time (from the middle of the nineteenth century until around 1950).

This analysis makes it possible to test empirically the validity of two of the expected trends, but not the third. There appears to be a clear association between the transfer of labour to the non-agricultural sectors and growth, and differences in productivity tend to decrease as countries develop. This behaviour is observed both in comparisons between countries and over time. However, it is not so clear what role the secondary sectors have played historically in the absorption of labour. The country analysis reaffirms the normal model by indicating a growing absorption of employment in non-agricultural activities and, within these, mainly in the secondary sector. The analysis over time, however, shows that the tertiary sectors are the ones which absorb the greatest proportion of the labour displaced from agricultural activities, while the secondary sectors show asystematic behaviour, with expansion in some countries and contraction in others, albeit in general a lower growth rate than in the tertiary sector.

Studies by Prebisch (1970) and CEPAL (1965) analysing the evolution of the structure of employment in the region until the end of the 1960s show two anomalous trends.<sup>1</sup> In the first place, there is a premature urbanization resulting from the high rates of rural-urban migration, and in the second place, there is a structural deformation in the direction of a premature tertiarization of the non-agricultural labour force, given the inability of the secondary sectors, particularly manufacturing, to absorb it. In turn, this behaviour results from three main factors: firstly, the dynamic insufficiency which leads to a slow expansion of the Latin American economy; secondly, the effect

of technological change, which has meant the use of increasingly capital-intensive techniques, and finally, the need to absorb a high proportion of the labour now employed at low levels of productivity in the artisanal sector of manufacturing.

The most recent works by Prebisch (1976, 1978 and 1981, *inter alia*) probe more deeply into dynamic insufficiency, examining the process of appropriation and use of the surplus and maintaining that the use of inadequate technology resulting from delayed industrialization is another basic explanatory factor. Finally, these studies identify structural heterogeneity (analysed by various authors, but particularly Pinto, 1970) as another important variable in explaining the behaviour of employment in the region. This concept, as opposed to previous ones, brings out not only the intersectoral differences but also the intra-sectoral ones.<sup>2</sup> It should be noted that the emphasis previously placed on the two basic distortions—premature urbanization and structural deformation—are abandoned in this approach.

The present study explores the relevance of the above-mentioned explanatory factors for the period 1950-1980. For this purpose, comparisons are made with developed countries—particularly with the United States during the significant periods—in order to determine what factors are specific to the Latin American situation. The methodology used in the analysis does not, or course, imply accepting that there is a single process of development at the world level, but on the contrary makes it possible to paint a more precise picture of the characteristics of what Prebisch has called 'peripheral capitalism'.

<sup>1</sup>Although not mentioned explicitly, these are understood to refer to the normal model described above.

<sup>2</sup>The usual dichotomy between artisans and factory workers in the manufacturing sector is only an extreme case of the contrasts which may be observed between different technological strata.

## II

## Basic structural anomalies

## 1. Migrations and premature urbanization

One of the most outstanding characteristics of the development of the employment situation in Latin America during the past 30 years has been the rapid rate of migration from rural areas to the cities. Thus, in 1950, 55% of the labour force was engaged in agricultural activities, while in 1980 it is estimated that only 35% worked in this field. Although the transfer of population from rural to urban areas is to be expected as normal behaviour when countries are growing, it is noteworthy that there was a premature manifestation of this phenomenon during the 1960s.

In order to assess whether the transfer of population from the country to the city was extremely rapid or occurred during a very brief period, we may examine the experience of some developed countries which showed similar demographic behaviour, such as the United

States, the Scandinavian countries and Japan (the countries of Western Europe displayed types of demographic growth and thus labour growth which are not comparable with those of the Latin American countries).<sup>3</sup>

Table 1 shows clearly that the experience of the region does not display very different characteristics from those of the United States, Sweden or Japan in respect of its population, labour, and spatial mobility dynamics. The 30 years that it took Latin America for the percentage of agricultural labour to drop from 55% to 35% is a similar period to that required for similar evolution to occur in the United States (between 1870 and 1903), and Sweden (between 1891 and 1920). Similarly, the three de-

<sup>3</sup>Thus, for example, the increase in the labour force in France since the beginning of the nineteenth century has been 0.3% annually, and even in Italy it grew by only 0.5% annually between 1871 and 1936 (Clark, 1951).

Table 1

## POPULATION DYNAMICS AND MIGRATIONS

	Latin America	United States	Sweden	Japan
Percentage of labour force working in agriculture				
(i) 55%	1950	1870	1891	1920
(ii) 42%	1970	1890	1912	1940
(iii) 35%	1980	1903	1920	n.d.
Number of years between (i) and (ii)	30	33	29	n.d.
Number of years between (i) and (iii)	20	20	21	20
Annual population growth <sup>a</sup>	2.8	2.0	0.7	1.2 <sup>b</sup>
Annual growth in labour force <sup>a</sup>	2.4	2.7	1.5 <sup>c</sup>	1.6 <sup>b</sup>
Annual growth in urban labour force <sup>a</sup>	3.7	3.7	3.1 <sup>c</sup>	2.9 <sup>b</sup>

Source: Latin America: information provided by PREALC.  
United States: Lebergott (1964).  
Sweden and Japan: Colin Clark (1951).

<sup>a</sup>Between (i) and (iii).

<sup>b</sup>Between (i) and (ii).

<sup>c</sup>Between (ii) and (iii).

veloped countries included in the table took 20 years, —as did Latin America— to increase the proportion of non-agricultural labour from 45% to 58%.

An analysis of the table also makes it possible to examine the relative validity of the argument which explains Latin America's limited labour absorption capacity by the rapid growth of its population. Although it has been confirmed that the region's population growth rate is the highest of all the countries considered, the differences diminish when referring to the labour force, which is the relevant concept in an analysis of the employment situation. Indeed, during the comparison period the United States showed higher labour force growth rates than those recorded in the Latin American countries.

## 2. Structural deformation and premature tertiarization

According to the current theories, premature urbanization was partly the cause of a deformation in the sectoral distribution of labour among non-agricultural activities. Thus, both CEPAL (1965) and Prebisch (1970) draw attention to the insufficient labour absorption of the secondary sectors (industry, mining and construction), and particularly of manufacturing. According to various studies, among them the above-mentioned ones by Kuznets and Clark, in proportion as the average income of a country increases, there is likely to be a reduction in the share of agricultural labour and an increase in the importance of employment in the secondary and tertiary sectors, and the increase in the secondary sectors is likely to be more rapid during the first stages of development.

Contrary to expectations, the information analysed by CEPAL going up to 1965 showed a reduction in the share of manufacturing employment in non-agricultural employment. Thus, the 1965 CEPAL report indicates a reduction in the share of manufacturing employment from 35.4% in 1925 to 27.1% in 1960, while Prebisch (1970), dealing with the participation of the secondary sector, shows a drop from 35% to 31.8% and estimates a level of 30% for about 1970.

Table 2, made up from the most recent

Table 2  
ABSORPTION OF LABOUR IN THE  
SECONDARY SECTOR<sup>a</sup>

(As a percentage of non-agricultural labour)

	1950 <sup>b</sup>	1970 <sup>b</sup>	1980 <sup>b</sup>
Latin America	42.0	39.7	40.3
United States	50.0	47.4	41.5
Sweden <sup>c</sup>			
(i)	36.4	50.0	53.8
(ii)	62.2	63.2	57.8
Japan	49.0	36.9	

Source: Latin America: information provided by PREALC. United States, Sweden and Japan: Kuznets (1957).

<sup>a</sup>Including manufacturing, mining and construction.

<sup>b</sup>Time periods are similar to those defined in table 1. Latin America 1950 corresponds to United States 1890, to Sweden (i) 1891 and (ii) 1900, and to Japan 1920. Latin America 1970 corresponds to United States 1890, to Sweden 1912 and 1924, and to Japan 1940. Latin America 1980 corresponds to United States 1903 and to Sweden (i) 1920 and (ii) 1938.

<sup>c</sup>The estimate for (i) corresponds to data from Colin Clark (1951); the estimate for (ii) corresponds to data from J. Svernilson, cited by Kuznets (1957).

PREALC figures, confirms that the secondary sector is not increasing its share in non-agricultural labour, since it decreased from 42% to 40% between 1950 and 1970 and then apparently stabilized at that level. This behaviour too, however, is similar to that shown by the United States, Japan and Sweden (in one of the available estimates) in the relevant comparison period: indeed, these countries showed greater reductions than in Latin America during periods of equal duration. It should be noted that the highest level reached by the countries compared exceeds the Latin American level, which can partly be attributed to the differences in technologies between the periods considered. We will return to this point later.

In addition to looking at the results of the above comparison, it is worth reviewing the conclusions of the studies which suggested that a given behaviour for the structure of employment could be predicted. Thus, as pointed out earlier, Kuznets reaches different conclusions when he analyses the information over time (30-40 years) for 28 countries; although it is true

that there is a reduction in the share accounted for by agricultural employment in the total as income grows, the secondary sector does not show such consistent behaviour as in the international comparisons. In five countries, the share of the secondary sector in the total decreases, and in another five the increases are very small. Finally, the proportion of the labour force in tertiary activities grew in all the countries, and in most of them it did so more rapidly than employment in the secondary sectors.<sup>4</sup>

The behaviour of manufacturing is the main factor determining the evolution observed in the secondary sector, and this gave rise to a series of interpretations which high-

light the insufficiency of the manufacturing sector in the creation of employment. The international comparison shows, however, that, like the entire secondary sector, the share of industrial employment went down slightly from 1950 to 1970 and stabilized around 28% of the non-agricultural labour force as from the latter year. This drop is lower than that recorded in the United States between 1870 and 1903, and the level of the coefficient is on average similar to that of the developed countries after the 1920s, which again suggests the influence of delayed industrialization on the absorption of labour.<sup>5</sup>

### III

## Explanatory factors

### 1. *Dynamic insufficiency and accumulation capacity*

The deformation of the structure of employment generated by the low relative capacity of manufacturing to absorb labour would appear in turn to be partly the result of insufficient accumulation capacity. The imitation of the consumption patterns of the central economies leads, according to Prebisch, to the consumption of that part of the surplus which should be used for expanding productive capacity, thus reducing the possibilities for increasing production and employment; this process is known as dynamic insufficiency.

In order to examine to what extent dynamic insufficiency has been a determining factor in the evolution of the employment situation in Latin America in the past 30 years, we should take another look at the international comparisons, particularly with the United States in the relevant period.

<sup>4</sup>Almost all the developed countries cited as evidence of the 'atypical' behaviour of Latin America are also in this position. Among them are England from 1841 to 1951; France from 1866 to 1950; Germany from 1882 to 1933 and Italy from 1871 to 1954 (Kuznets, 1957).

In the first place, the growth of the product of Latin America on average exceeded that of the United States in the period when the latter country was experiencing internal migrations of the same magnitude as those which occurred between 1950 and 1980 in Latin America. In the second place, the investment coefficient in the two cases is practically equal. The selected period in United States economic history shows the highest rates of the past century and a half, since after 1920 the investment coefficient did not rise above 15% there. In addition, it should be remembered that the United States is the country which had the highest investment rates in the world, both during the period between the middle of the nineteenth century and the First World War and from the end of the nineteenth century until around 1960, which were the years analysed by Kuznets (1961).<sup>6</sup> Thus, if this compar-

<sup>5</sup>The share of manufacturing employment in non-agricultural employment in Latin America in 1970 (28.4%), which was maintained in the following ten years, was similar to that of the United States in the 1920s and of France in the late 1930s, and slightly lower than that of England in this century.

<sup>6</sup>Interestingly enough, the only country which surpassed the United States in the second sub-period was



Table 3

## CAPACITY FOR ACCUMULATION AND GROWTH OF THE PRODUCT: LATIN AMERICA AND THE UNITED STATES

Years	Latin America		Years <sup>c</sup>	United States	
	Growth of the product <sup>a</sup>	Investment coefficient <sup>b</sup>		Growth of the product <sup>a</sup>	Investment coefficient <sup>b</sup>
1950-1960	5.1	20.5	1869-73/1877-81	6.5	18.9
1960-1970	5.7	20.0	1882-86/1892-96	3.3	22.3
1970-1980	5.7	24.0	1891-1901/1902-06	4.5	23.0
1950-1980	5.5	21.5	1869-73/1902-06	4.8	21.4

Source: Latin America: CEPAL.

United States: product: Kuznets (1956); investment: U.S. Department of Commerce, Bureau of the Census (1960).

<sup>a</sup>Annual growth rate of the gross domestic product at constant prices.

<sup>b</sup>Ratio between gross fixed investment and the gross domestic product, both at constant prices.

<sup>c</sup>The periods corresponding to the growth rates of the product do not correspond exactly to those of the investment coefficient, due to problems in the original presentation of the data. The first subperiod of the product corresponds to 1869-78/1879-88; the second to 1879-88/1889-98 and the third to 1889-98/1899-1908. The total corresponds to 1869-78/1899-1908.

ison suggests anything it is that Latin America seems to be showing a similar dynamism to that displayed by the United States in the past, so that it is necessary to decide what meaning is to be assigned to dynamic insufficiency.

The evidence of the past three decades indicates that there are limitations to the interpretation of the problem in terms of dynamic insufficiency, at least as regards absolute dynamism, so that it is necessary to look more closely at the absorption of labour by occupational category and the differences in productivity, both between sectors and within some sectors. The first is necessary because it can more precisely reflect the particular situation of employment in Latin America, and the second because it enables us to analyse the cost involved in the creation of production jobs.

## 2. Structural heterogeneity

### (a) The informal sector

Perhaps the most significant phenomenon

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Argentina, which is also the only Latin American country included in the comparison. While the United States registered a coefficient of gross fixed investment, not counting variation in stocks, of 18.8% in the 50 years between the period 1894-1913 and 1946-1955, Argentina showed an investment coefficient of 25.7% during the first 54 years of this century.

in the employment situation in Latin America is the presence of an informal urban sector which not only absorbs a considerable share of the urban labour force but also does not seem to show any signs of decreasing. Many studies deal with this subject from very different angles (see for example, PREALC, 1978), but it is not appropriate to analyse them here. It is enough to point out that this sector is made up of activities which are quite easy to enter, require little capital and organization, and are associated generally with small units of production. These characteristics result on average in low levels of productivity per person and a low capacity for accumulation.

Table 4 shows the size and evolution of employment in the Latin American informal sector and compares it with the behaviour shown in the United States in the relevant period.<sup>7</sup> It can be seen, first, that the informal sector accounts for about 30% of the urban labour force in the region and that this level has remained practically the same during the past three decades. It should be noted that in about 1900 the United States registered a similar share for this sector, but unlike the situation in Latin America there was a clear tendency to

<sup>7</sup>Strictly speaking, due to the availability of information, the period under consideration in the United States begins 30 years after that used so far.

Table 4

URBAN INFORMAL SECTOR: LATIN AMERICA AND THE UNITED STATES<sup>a</sup>

Latin America				United States			
Years	Non-household informal sector <sup>b</sup>	Household services	Total	Years	Non-household informal sector <sup>c</sup>	Household services	Total
1950	20.0	10.5	30.5	1900	23.2	10.4	33.6
1970	19.8	9.6	29.4	1910	18.9	8.2	27.1
1980	20.8	9.0	29.8	1920	14.8	5.4	20.2

Source: Latin America: PREALC (1981).

United States: Lebergott (1964).

<sup>a</sup>Percentages of the non-agricultural labour force.

<sup>b</sup>Including own-account workers, except professionals and technicians, plus unpaid family members.

<sup>c</sup>Including own-account workers plus unpaid family members.

decline in the 20 years under consideration.<sup>8</sup> This situation occurs both in the informal non-household sector and in the household services sector.

Moreover, as shown in table 5, there are appreciable differences in the sectoral distribution of informal employment. If we observe the sectoral importance of own-account workers (considered as a suitable proxy), we note that the levels are almost similar for the urban total, but in Latin America they are distributed equally between the industrial and services sectors, whereas in the United States these workers are concentrated mainly outside industrial activities. It also confirms that there is a clear asymmetry in the trend, which in the case of the United States appears in all the sectors.

The above comparative analysis suggests at least three conclusions which are useful in interpreting the evolution of the employment situation in Latin America. The first is that the size of the urban informal sector seems to be associated with the beginnings of intense migratory processes, and is not a feature peculiar to the region. The second highlights

the difference in evolution, since in Latin America the sector persists almost without decreasing while in the United States it is gradually absorbed by the urban modern sectors. Finally, the sectoral distribution brings out an additional difference, since Latin America shows a relatively high level of informality in its industrial sector, similar to the average, while this level is low in the United States. These two latter characteristics are among the peculiarities of the employment situation in the region which show that, while the United States has been resolving the problem of its informal sector, the region has been incapable of doing so in the past 30 years, and that the Latin American industrial sector must deal with an additional task compared with the situation faced at the corresponding time by American industry.

It is clear that the size and distribution of the informal sector is only one indicator of the differentiated effort which the Latin American economy must make in order to solve its employment problem. The other indicator concerns the differences in productivity existing both between sectors and within them, since these differences, along with the above-mentioned factors, bring out the magnitude of the adjustment required.

#### (b) *Intersectoral differences in productivity*

Following the methodology used up to

<sup>8</sup>The estimate for the United States includes professionals and technicians, in the category of own-account workers, thus enlarging the sector. In addition, given the increase shown in this occupational category during the period, the decline in the informal sector proper must have been even greater.

Table 5  
OWN-ACCOUNT WORKERS BY SECTORS: LATIN AMERICA AND THE UNITED STATES

Latin America				United States			
Years	Total <sup>a</sup>	Urban <sup>b</sup>	Manufacturing <sup>c</sup>	Years	Total <sup>a</sup>	Urban <sup>b</sup>	Manufacturing <sup>c</sup>
1950	26.4	19.2	22.1	1900	34.0	22.2	7.2
1960	29.9	20.9	23.1	1910	29.4	18.1	6.0
1970	28.1	19.0	20.7	1920	26.2	14.1	4.4
1980	n.d.	19.9	n.d.	1930	23.1	13.4	3.3.

Source: Latin America: information provided by PREALC.

United States: Lebergott (1964).

<sup>a</sup>Own-account workers as a percentage of the total labour force.

<sup>b</sup>Urban own-account workers as a percentage of the urban labour force.

<sup>c</sup>Own-account workers in manufacturing, as a percentage of the labour force of that sector.

now, we can determine the similarities and differences in the productivity differentials among the productive sectors. Table 6 presents the information for Latin America in the past 30 years and that corresponding to the United States, Sweden and Japan during comparable historical periods; its analysis allows us to draw certain conclusions.

Firstly, it seems clear that Latin American agricultural productivity is relatively low, considered both in relation to the other productive sectors and to the other countries included. In addition, even though a tendency is noted for the levels of productivity of agricultural and non-agricultural activities to become more similar, this is occurring at a much slower rate than in the United States and Sweden.<sup>9</sup>

Secondly, low productivity per person in the non-agricultural sectors, particularly in services, may even hide the real differences that exist. It is therefore important to analyse the differentials between the agricultural sector and the secondary sector, and between the latter and services. Comparing agricultural productivity with that of the secondary sector, the above becomes even more clear. Agricultural productivity is extremely low, and its dif-

ference from that of the secondary sector is not diminishing, as occurs in the other countries. In contrast, the differences in productivity among the non-agricultural sectors are small and tend to disappear. All this contrasts with what has happened in the United States, where there is also a decrease in the differentials, but where the productivity of services appears to be relatively higher.

It could be argued that the level and evolution of the productivity differentials suggest, contrary to the previous interpretation, that the productivity of Latin American manufacturing is relatively higher than that registered in the other countries. The higher productivity in Latin American industry could partly be due to the fact that it began its industrialization later, benefiting from the technological progress already made in other parts of the world.<sup>10</sup> However, the comparison with Sweden and Japan, which also began their industrialization late, suggests that although the productivity of the industrial sector is probably greater because of this fact, the magnitude of the differentials in Latin America means that there are very low levels of productivity in the other sectors.

<sup>9</sup>Japan appears to be an exception to this trend, which is also a general trend in most of the countries of the world according to studies by Kuznets (1957). This, however, could be due to the year used in the comparison—1940—since after that the differences between these levels of productivity continued to decrease.

<sup>10</sup>Part of the apparently greater relative productivity in the secondary sector could also be due to distortions in the relative prices in favour of this sector, which was subject to preferential treatment in the period analysed in most of the countries of the region.

Table 6  
INTERSECTORAL PRODUCTIVITY DIFFERENCES

	1950 <sup>a</sup>			1970 <sup>a</sup>			1980 <sup>a</sup>		
	A/NA <sup>b</sup>	A/M <sup>c</sup>	M/S <sup>d</sup>	A/NA <sup>b</sup>	A/M <sup>c</sup>	M/S <sup>d</sup>	A/NA <sup>b</sup>	A/M <sup>c</sup>	M/S <sup>d</sup>
Latin America	0.20	0.24	0.75	0.22	0.23	0.97	0.24	0.24	0.96
United States	0.26	0.48	0.37	0.27	0.44	0.45	0.46	0.65	0.56
Sweden <sup>e</sup>	0.43	0.46	0.90	0.45	0.46	0.93	0.59	0.64	0.84
Japan	0.44	0.51	0.77	0.29	0.26	1.23			

Source: Latin America: *employment*, PREALC; *product*, CEPAL.  
United States, Sweden and Japan: Kuznets (1957).

<sup>a</sup>The equivalent years used for the comparison are defined in note<sup>b</sup> of table 2.

<sup>b</sup>Ratio of product per person in the agricultural sector to that of the non-agricultural sector.

<sup>c</sup>Ratio of product per person in the agricultural sector to that of the secondary sector (industry, construction and mining).

<sup>d</sup>Ratio between product per person in the secondary sector to that of the remaining urban sectors.

<sup>e</sup>Refers to employment estimate according to Colin Clark (see table 2, note<sup>c</sup>).

The comparison with the United States indicates that Latin America has greater productivity differentials and that these tend either to lessen at a lower rate (agricultural-non-agricultural) or even not to decrease at all (agricultural-secondary). In contrast with the United States experience, however, there appears to be greater homogeneity among the urban sectors. This apparently contradicts what would be expected from the analysis of the sectoral distribution of the informal sector, since while in Latin America this sector was distributed equally between industry and services, in the United States it was concentrated in the latter. If the informal sector is associated with lower productivity, this should imply a lower intersectoral productivity differential in the United States than that which actually exists, since the productivity of services would tend to fall more than that of industry (whereas in fact the former is usually higher than the latter). To analyse this type of problem it is necessary to examine intra-sectoral differences in productivity).

(c) *Intra-sectoral differences in productivity*

Information on intra-sectoral differences in productivity is difficult to come by; in this section we will therefore have to resort to some partial comparisons which we feel are useful.

The informal sector (or own-account workers, or the technically backward strata) tends to be associated, within the services sector, with activities generally classified as 'other services', even though commerce—especially in Latin America—also includes a large proportion of informal services, generally in the form of small establishments and street vendors. In manufacturing, the informal sector is concentrated in small businesses, including individual, craft-type activities.

If we observe, first, the differences in productivity between 'other services' and the rest of the services sector (commerce, transport, finance, government and basic services), we see that the United States began in 1870 with differentials lower than 30%, which by 1920 had disappeared. In Latin America, however, the average differential in the 10 countries for which information was available around 1950 was higher than 45%.<sup>11</sup>

Secondly, the differences in productivity per person in the industrial sector are also significantly lower in the United States and tend to decrease. Thus, if we compare the

<sup>11</sup>Both estimates are from Kuznets, 1957. Note that these probably underestimate the differential for Latin America because of the greater importance of importance of informal commerce, which is not included in 'other services'.

productivity of establishments with fewer than 20 employees with that of establishments employing more than 500, we observe differentials of around 27% in 1954, but by 1972 these had been reduced to less than 5%. If we look at the situation in Mexico and Brazil, however, we may observe that this differential in both countries exceeds 60%; and in the former, for which information is available for 1970 and 1975, the differences in productivity are on the increase, amounting to over 70% in the latter year.<sup>12</sup>

This partial information suggests that the differences in productivity between informal activities and other activities are not only greater in Latin America but also, contrary to what occurs in the United States, they do not tend to decrease. This means that even if similar figures are registered with regard to absorption of labour in the informal sector (in the early years), the effort in terms of resources needed to transfer the workers from one sector to another must be much greater.

## IV

### Access to capital and employment at low levels of productivity

In the previous sections, a series of similarities and peculiarities have been noted in the evolution of the employment situation in Latin America as compared with that experienced by some developed countries in corresponding past periods, particularly the United States at the end of the last century and in the first decades of this century.

By way of summing up, we might briefly recall what these characteristics are. Firstly, the fast growth of the labour force, the rapid rate of migration from rural to urban areas, and the sectoral distribution of employment in urban activities do not seem to have been specific to the region. This calls into question the capacity of these variables for explaining the employment situation, although they were undoubtedly assigned an important role in many of such interpretation efforts particularly those made by CEPAL in the 1960s.

Secondly, we have found confirmation of what various diagnostic studies have pointed out as the truly special feature of the employment situation in the region: the existence and permanence of a significant contingent of the

labour force in activities which in PREALC studies are called 'informal' and in the most recent studies by Prebisch are described as activities of the 'lower-productivity technical levels' and 'lower strata'. The analysis also makes it possible to add new factors to this diagnosis, as it is not the relative size of the informal sector at the beginning of the comparison period which is a distinguishing feature of urban employment, but rather the differences in productivity per person which exist between informal activities and the remaining urban activities, and their asymmetrical sectoral distribution. There are also major differences in intersectoral productivity, a particularly striking case being the extremely low agricultural productivity. This picture of sharp inter and intra-sectoral differences makes up what Aníbal Pinto rightly calls 'structural heterogeneity', which is ultimately the main differentiating element in the prevailing situation.

The existence of major differences in productivity at different levels has a clear implication for the dynamics of job creation. It is harder, in terms of resources, to absorb migrants and reconvert urban informal employment into modern employment than it was for the developed countries to do so in the past. The result is that the absorption of employment in the modern urban sectors, despite its intensity by the standards of past international ex-

<sup>12</sup>The information for the United States comes from the United States Department of Commerce, Bureau of the Census, 1979. That for Brazil is from the Industrial Census of 1970, and for Mexico from García (1981).

perience,<sup>13</sup> is relatively insufficient for the purposes of decreasing the population employed in the informal sector and reducing the degree of heterogeneity.

The reasons why the differences in productivity in Latin America are greater than those in the United States are to be sought in two areas: first, in the nature of technological change, and second, in the structure of the ownership of capital and the unequal access to this capital.

The first aspect is connected with the fact that Latin America entered the process of industrialization quite late. This implies the advantage of having access, without incurring the costs of research and development and technological obsolescence, to technologies which yield greater productivity, but in turn it has the disadvantage that the creation of jobs becomes more costly. The technological change originating in the central countries tends to increase the productivity of resources, but by making more intensive use of capital than of labour. The result is that, generally speaking, the possibilities for growth are greater for a given amount of resources, but on the other hand there is a lower degree of labour absorption.

In addition, the differences in productivity are related to the distribution of wealth and access to this wealth. Thus, the lower relative productivity of the agricultural sector is largely explained by the greater concentration of land ownership, while the differences in the distribution of urban wealth are perpetuated by the existence of mechanisms which restrict access to capital for those who do not already possess some wealth.

Some partial data help to illustrate the differences in the concentration of wealth. The Gini coefficient for land distribution in Latin America was 0.843 around 1950 and remained almost unchanged between that year and 1970.<sup>14</sup> The same indicator of land concentration shows that in the United States in 1900 the

figure was 0.572; around 1910 it dropped to 0.529, and in 1920 it rose to 0.588.<sup>15</sup> The situation in manufacturing is apparently similar. Comparing the value of the entropy index for ten Latin American countries with five Western European countries around 1960, Meller (1978) concludes that the concentration in the Latin American countries as a whole, and individually, is systematically greater than in the European countries as a whole and individually.<sup>16</sup> Pryor (1972), for his part, using a different index of concentration, finds that the United States shows levels of concentration similar to those of Europe.<sup>17</sup> In addition, evidence presented by Lagos (1966) for Chile shows that the 50 largest manufacturing firms generated 38% of the value added in 1957; in comparison, the same number of firms generated between 17% and 25% of the industrial value added in the United States between 1947 and 1970.

The mechanisms which restrict the access to capital are related, *inter alia*, with the segmentation of the international capital market, the absence or segmentation of the domestic capital market, the preference for investment in enterprises connected with the owners of the capital, and biases in public investment.<sup>18</sup> The existence of such restrictions, as well as the initial concentration, generates and tends to perpetuate a differentiation in the productive structure as regards capital intensity, which is true both between sectors (agricultural versus industrial) and within the same sector (formal versus informal enterprises).

<sup>15</sup>These coefficients were prepared from information provided by the United States Department of Commerce, Bureau of the Census (1975). In 1974 the Gini index for the total of land, including forests, was 0.726, and if limited to cultivated land, 0.605.

<sup>16</sup>The countries included were Argentina, Chile, Colombia, Costa Rica, Ecuador, Mexico, Paraguay, Peru, Uruguay, Venezuela, Germany, Belgium, France, Holland and Italy.

<sup>17</sup>Using as a measure of concentration the percentage of sales or production originating in the four largest firms around 1965, Pryor concludes that the industrial concentration in the United States is similar to that of France, Germany, Italy, Holland, the United Kingdom and Japan and is lower than that of Belgium, Canada, Sweden, Switzerland and Yugoslavia.

<sup>18</sup>Ramos (1980) identifies these as determining factors and develops an interesting theoretical model which shows how, in conditions of segmentation of the capital market, a

<sup>13</sup>See, for example, Tokman (1981).

<sup>14</sup>The information for 1950 and 1960 corresponds to the simple mean of the Gini coefficients of 18 countries of the region; for 1970, information is available for only four countries. Source: Organization of American States, IASI (1975).

## V

## Insufficient absorption and strategic options

The higher cost associated with the creation of employment in the sectors with the highest productivity theoretically implies the need to increase investment and consequently also the saving necessary to finance it. Given the limits observed in the utilization of the surplus, which are in keeping with the prevailing distribution of income and the consumption habits derived from imitative capitalism, the result is what Prebisch calls 'dynamic insufficiency'. This interpretation, which is correct in its theoretical supposition, points up, however, only one aspect of the solution to the problem, i.e., the expansion of the capacity to accumulate.

An increase in investment would make it possible to accelerate the transfer of persons from low-productivity activities to those of higher productivity. Besides being costly economically, however, this solution inevitably implies prolonged adjustment periods. In addition, its feasibility does not seem clear when we take into account that the empirical evidence of the past 30 years suggests that the investment made by the region is among the highest in the world, and is in fact similar to that made by the United States in comparable historical periods. Nevertheless, it would be worth exploring the possibility of changing the composition of investment with a view to creating reproductive capital rather than consumptive capital (to use Prebisch's terminology).

It is thus necessary to emphasize the reasons for this greater need for accumulation which according to the analysis are basically the characteristics associated with modern technology and the existing differences in productivity. This would imply a need for some complementary action to deal with the factors

determining the greater cost of creating jobs. On the one hand, the pursuit of a more suitable selection of technology would make it possible to absorb more labour without affecting efficiency, either through changes in the composition of production, promotion of plants of a certain size, or changes in the relative prices of the factors of production.

On the other hand, productivity gaps could be narrowed by raising the prevailing levels in the most backward sectors, especially agriculture and the informal urban sector. This would make it necessary to deconcentrate capital (land, in the case of agriculture) and to act upon the determining factors of the segmentation of the capital market which help to perpetuate the original situation.

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# Monetarism, open-economy policies and the ideological crisis

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In his recent articles, and especially in his latest book (*Capitalismo periférico. Crisis y transformación*, Fondo de Cultura Económica, Mexico City, 1981), the author pays special attention to the role played by monetary mechanisms in peripheral capitalism and to the meaning and limits of their use by the monetary authority. The ideas he expressed generated various critical comments which have led him to present, in the first part of this article, a new version of his views which, while respecting the original structure, incorporates some additional reflections. Thus, after reaffirming the essence of his thesis on the role of monetary mechanisms in the appropriation of the surplus, he examines how these instruments also play a decisive role in the defence of this surplus. On the basis of this theoretical clarification, he criticizes the way in which monetary mechanisms have been applied in recent 'monetarist' experiments in Latin America, and sounds a warning about their effectiveness and consequences.

In the second part he deals especially with trade and financial 'openness' policies and the form and effects they have had in Latin America, in the light of the centre periphery relationship and the interests dominating this. Both monetarism and economic openness are theoretical manifestations which originated in the centres and have shown that they do not serve the fundamental interests of peripheral development, which can only be satisfied by a tenacious effort towards intellectual emancipation.

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## Introduction

Attempts to interpret peripheral development within the framework of neoclassical theories are pointless if they do not take into account the structure of society and the phenomena which occur as technology from the centres penetrates into it.

These are extremely important phenomena which, impelled by the internal logic of peripheral capitalism, tend in time to lead the system into an inflation-fuelled crisis of a social nature which is impossible to explain by using such theories. Monetary measures can neither explain nor effectively attack such a problem.

From the ranks of the neoclassicists —not all of them, of course— have arisen the monetarists, who try to apply these measures while ignoring the true nature of the phenomena responsible for social inflation.

The inflationary crisis of the system is, in the last analysis, the outcome of a distributive struggle characterized by the interplay of power relations in the course of the structural changes which accompany the progressive penetration of technology from the centres; and this distributive struggle has its origin in the great social inequality of peripheral capitalism. Few will dispute the persistence of this phenomenon. Efforts have been made to correct it through various redistributive measures, which have undoubtedly had some positive effects. But in the long run they themselves have helped to provoke the serious upheavals of social inflation.

One may seek all kinds of explanations for this. In my opinion, however, there is one basic explanation: *the dynamic of the system is based on social inequality* whose origin lies in the structural phenomenon of the economic surplus which is appropriated by the upper strata of society, where most of the means of production are concentrated. As explained in previous studies, the existence of a large mass of people with lower productivity and lower income prevents that part of the labour force which is employed at growing levels of productivity thanks to the accumulation of capital from raising its wages in a corresponding fashion. There is a regressive competition within the labour force when the market forces are fully in play, and the portion of the increase in produc-

tivity which is not transferred to the labour force is the economic surplus.

The *growth of the economic surplus is a dynamic necessity of the system*, since it is the source of most of the reproductive capital whose accumulation multiplies productivity and employment. But at the same time a considerable part of this surplus is used for the privileged consumption of the upper strata, and this consumption expands as the surplus grows, to the detriment of accumulation.

In the course of development, the middle and eventually the lower social strata naturally try to raise their own private and social consumption by placing pressure on the distribution scheme, either directly, through their trade union power, or through the government, while the latter also increases its civil and military consumption.

What happens, however, is that *this expansion of consumption in the distributive struggle does not occur at the expense of privileged consumption, but rather is superimposed on it*. And this is the origin of the social inflation upheavals, for if the rate of all these forms of consumption exceeds the rate of productivity, slowing down the growth of the surplus, the system reacts with an inflationary rise in prices: it cannot continue regularly to fulfil this dynamic requirement.

As already noted, the surplus is explained by the heterogeneity of the social structure, where there is a great variety of levels of technology and productivity. It is thus a structural phenomenon, but monetary mechanisms play a prime role in its appropriation.

Monetary mechanisms are far from neutral. They not only allow the upper strata to appropriate the surplus, but are also a factor in its defence. It is a serious theoretical as well as practical error to consider money independently of the productive process, to which monetary mechanisms are closely linked.

I mentioned above the relations of power. The development of the redistributive power of the labour force and the State accompanies the process of democratization as the latter progresses and begins to overcome the obstacles in its path. This is one of the important consequences of the changes in the societal structure

which occur as technology penetrates the society.

The distributive struggle attempts to correct social inequality, and manages to do so up to a certain limit without entering into conflict with the growth of the surplus, thanks to successive increases in productivity. Beyond this critical limit, however, the dynamic of the surplus becomes involved.

When this limit has been reached, monetary mechanisms play their defensive role. The incompatibility between the different forms of consumption referred to above and accumulation shows up in the rise in prices. By using monetary mechanisms, it is possible to counteract this rise through credit restrictions, which lead to a recession or contraction of economic activity and resulting unemployment. This unemployment then causes a decline in wages *if the redistributive power of the labour force and its ability to pass on the burden of taxes which falls on its shoulders are weak or non-existent*.

The labour force thus has to give way in its redistributive effort, if government expenditures are not reduced and the upper strata, by using their political power, evade the tax burden.

There is thus an indispensable condition if the monetary mechanisms are to be able to effectively defend the surplus and hence accumulation and the privileged consumption of the upper strata: the non-existence or weakness of the trade union and political power of labour. But when this power becomes stronger in the course of structural changes, the labour force, and especially its middle strata, resists the drop in wages. When this happens, the tightening of credit brings with it recession or contraction in the economy, with consequent unemployment, while the companies transfer to prices the higher wages of the labour still employed. *Thus, the inflationary spiral and unemployment coexist*. Sooner or later, however, the intensity of these phenomena and their adverse effects on the companies themselves and on the government force the monetary authorities to relax credit in order to stimulate the economy. There is thus a new impulse which tends to accelerate inflation. *The monetary mechanisms are left powerless; they have become*

obsolete in the later stages of structural changes and the progress of the democratization process.

The Latin American periphery is not characterized by the solidity of its democratic institutions. When the redistributive power has gained strength and unemployment cannot bring it back in line, an attempt is made to do so by means of the military power of the State, thus restoring the dynamic of the surplus and privileged consumption. It would also be possible to raise the rate of accumulation at the expense of such consumption, but there is no spontaneous way of doing so. It would be necessary to take deliberate measures to reduce privileged consumption, and this is hard to reconcile with the euphoria which usually prevails in the dominant groups when resort is had to the use of military force.

There is a huge social and political cost in restoring the surplus, and if, in the course of time, the process of democratization is renewed, there is a risk of a new inflationary cycle if the system of appropriation and distribution of the fruits of technical progress is not tackled at its roots. *It would be a tremendous error to try to go back in time without effecting such a transformation.*

This is what I now propose to demonstrate. It is not a question of going back to the situation of a decade or two ago, nor to some remote past. Anyone who believes that neoclassicism is a great theoretical innovation seems not to have noticed that this theory prevailed in the periods of the outward-oriented growth of the periphery, before the Great Depression of the 1930s.

This study is based on ideas set forth in other previous studies published in *CEPAL Review* and in *Capitalismo Periférico*,<sup>1</sup> a book which systematizes and condenses them. In writing this article the criticisms and suggestions received and my own clarification of previous ideas have been very useful. I should also cite two works published after this book, namely, "La crisis inflacionaria del capitalismo", published in *El Trimestre Económico*, Mexico City, Vol. XLIX, No. 193, January-March 1982, and a recent monograph, *Teoría y práctica de la ortodoxia*, presented at the international seminar on economic policies and the prospects for democracy in Latin America of the 1980s, organized by the Latin American Institute for Social Research (ILDIS) and held in Quito, Ecuador, in April 1982.

## I

### Monetary mechanisms in the appropriation and defence of the surplus

#### 1. *The role of monetary mechanisms in social inequality*

Monetary mechanisms play a dual role which is closely linked to the societal structure and its changes. Above all, they must create enough money for total demand to coincide with the total supply of final goods, which has grown bigger because of the increases in both employment and productivity. Thanks to such mechanisms, this productivity can be exploited by the companies in the form of a surplus for the owners of the means of production, without

lowering prices. Monetary mechanisms *thus fulfil their role of sustaining social inequality.*

Monetary mechanisms also have to defend the surplus from the distributive struggle, in such a way that its growth allows more capital to be accumulated while at the same time permitting the privileged consumption of the upper strata to rise. These mechanisms thus place a limit on the redistribution of the fruits of

<sup>1</sup>*Capitalismo periférico. Crisis y transformación*, Mexico City, Fondo de Cultura Económica, 1981.

technical progress, or on the progressive correction of structural inequalities. Let us first examine the role of monetary mechanisms in the appropriation of these fruits.

## 2. *The appropriation of the surplus*

To understand this, we must answer the following simple question. If in the course of the production process the wages of the labour force only rise in accordance with *part* of the increase in productivity, since much of this is appropriated in the form of a surplus by the owners of the means of production, then how do we explain the fact that the total demand originating in this labour income can absorb the *entire increase in productivity* which augments the total supply of final goods?

The answer is also very simple. If the demand came from the wages paid to obtain the corresponding supply, it would be insufficient to absorb the latter and the prices would fall as productivity rose. This would occur *if production were stationary*; but this is not the case in the dynamics of development, because *the income from which this demand arises does not come from present supply but from a greater supply in course of production*, from which the corresponding final goods will come after a certain time. *The growth in demand thus anticipates the future supply by directing itself towards the present supply* and thus absorbing in the form of a surplus the increase in productivity.

To understand this phenomenon we must take into account *the time that the production process takes*. A certain time passes between the primary stages of production and the output of the final goods. In all the stages of this process the companies pay income to the labour force, from which total demand arises. But this income does not wait to be spent until the corresponding final goods are produced at the end of a certain time; instead, it becomes a demand for goods which already exist in the market and whose production process began some time back.<sup>2</sup>

If we look at a given period over the growing course of production, the demand for final goods comes from the income which, during the same period, is paid to the labour force in the different stages of the productive processes in progress during this period. Now, this income being paid by the companies is greater than the income which was paid before in order to obtain the supply entering the market in the period under consideration. Present demand thus exceeds the demand which would have been recorded if present demand had come from the income paid previously to obtain the present supply. This is indispensable in order that the increase in productivity reflected in this final supply, plus the growth in production resulting from higher employment, may be absorbed without prices falling.

If the demand is sufficient to absorb all the supply without a drop in prices, this is the market's signal for production to continue to increase. This signal is transmitted back to all the stages of the process in progress. Thus, the companies which have sold more final goods than before increase the demand for goods in process produced by the companies of the preceding stage; and the latter in turn augment the demand for goods from the previous stage, all the way back to the primary goods stage.

This demand between companies, which has thus been moving backward, causes partial surpluses to arise in the course of the production process. It cannot therefore be expected that the total surplus will appear when the final goods enter the market, as if a single company were handling all the production processes: on the contrary, the surplus also appears *in advance* in the different stages.

In order to pay the growing wages corresponding to the greater employment of labour and the increase in partial surpluses, the companies have to increase their availability of money correspondingly by resorting to the banking system. The money which they pay out in this way comes back to them when they sell the goods at the various stages up until the

<sup>2</sup>The famous Say's law said that supply creates its own demand. Expressing ourselves in the same language, we

would say that *today's supply does not create its own demand, but this demand is created by the supply which is in process* and from which final goods will later emerge.

final goods stage. In this way the companies obtain from each stage the corresponding surplus and recover the money they have already paid to labour. And these funds thus recovered, plus and additional creation of money, allow them to continue to increase the production in progress.

Let us follow this same reasoning by successive approximations. Not all the money used by the companies is immediately transformed into demand for final goods; part is directed towards demand for services, which absorb quite a large portion of the money created in order to increase the production in progress, and *this money gradually returns to the companies in the form of demand for final goods.*

Let us consider the nature of this demand which is diverted to services. It means that a part of the money corresponding to the wages paid by the companies, and the partial surpluses they obtain, temporarily stops being spent on goods and takes the form of demand for services. Any formation of capital requires corresponding saving; thus, the production in progress which has to increase in order for the supply of final goods to grow in its turn *represents the circulating capital or working capital of the companies and is thus covered by the temporary saving in question, which should not be confused with the saving required for the accumulation of fixed capital.*

Before finishing this section we should briefly recall the mechanism which allows the monetary authority to fulfil its regulatory function as a stabilizer of prices. It is guided by symptoms. If the creation of money is excessive in relation to the growth of supply, due to the increase in employment and productivity, prices will tend to rise, with the resulting external imbalance, and this will slow down the expansion of money until a new equilibrium is reached, provided the monetary authority does nothing to counteract the initial expansion. One of the most important factors in the rise in prices is the increase in labour wages, whose significance we will now consider.

In order to simplify our explanation, we had not yet introduced this factor. We do so now so that we can examine the other important role of the monetary mechanisms, for, as we have said, besides being an instrument of ap-

propriation they are also an instrument for the defence of the surplus against the attacks it suffers in the distributive struggle.

### 3. *The defence of the surplus*

Let us now introduce the *notion of rates* in order to clarify our reasoning.

For the system to function normally, the rate of growth of labour pay must maintain a close relationship with the rate of increase in productivity.

The rate of pay rises either when the labour force attempts to augment its share in the increase in productivity at the expense of the growth of the surplus, or when compensation is given, through an increase in wages, for a rise in prices resulting from higher government taxes which affect it in one way or another. It also tries to secure compensation for other price increases such as those resulting from imports or from inelasticity of the domestic supply of certain goods, that is to say, from factors which do not originate in the distributive struggle.

At all events, we must make a clear distinction between the pressure of distribution and that of compensation in order to understand *the bias of the system in favour of the upper strata through the monetary defence mechanism.*

When the wage rate rises above the rate of productivity, no matter how this occurs, the companies will demand a rise in the rate of money creation in order to pay the higher wages.

If they manage to obtain this greater quantity of money, the wage increases will inevitably be transferred to prices to the extent that the rate of increase in productivity has been exceeded.

There is thus an inflationary increase in prices which the monetary authority will try to correct if it fulfils its stabilizing function. This is the role of monetary mechanisms. Their corrective effectiveness depends on the flexibility of wages. *In view of the nature of the system, wages must fall; whether they do this or not depends on the strength of the trade unions and the political power of the labour force.*

In both cases this phenomenon could be schematically explained as follows. Once the

rise in prices has occurred, if the monetary authority refuses to continue to provide additional money to keep paying the higher wages the companies are obliged (insofar as they cannot directly force a reduction in wages) to use part of the flow of money available to them before the increase in wages to pay for this increase. As a result, they will not have enough money to keep on increasing the level of employment and of the production in progress.

The extent to which the rate of growth of employment begins to slow down in this way will depend on the intensity of the restrictive monetary policy. Such is the direct effect on employment and future supply. But there is also an immediate impact on total demand for finished goods. As the money flow destined for production in progress diminishes, the rate of total demand is insufficient to match the rate at which the supply of final goods had been growing, and this insufficiency in demand is transferred back to the different stages of the production process. The initial restriction on the creation of money thus causes a recession in productive activity, with resulting unemployment, and this unemployment allows the companies to cut back wages if the trade union and political power of labour is weak or non-existent.

This is the social cost of restoring the dynamic of the surplus through monetary mechanisms.

It is true that the total surplus also shrinks insofar as the reduced demand among the companies at the different stages of the process brings along with it a decrease in the partial surpluses. This is only a temporary phenomenon, however, since when the economy later recovers, these partial surpluses begin to rise once more, inasmuch as labour does not have the power to win an increase in wages again, or the companies refuse to grant such an increase in the face of the threat of a firm, stabilizing attitude on the part of the monetary authority.

For the neoclassical economists, this readjustment in wages is one of the great virtues of the system, since to them the trade union and political pressure of labour represents an arbitrary interference in the laws of the market. This would be a reasonable criticism if under these laws the fruits of technological progress

were passed on to all levels of society through decreases in prices, as they assume. We know, however, that the system does not work like this, since only a part of these fruits is transferred to the labour force; another more or less large part is retained in the form of the surplus by the owners of the means of production.

This is what leads to the social inequity of the so-called 'virtues' of the system. Consumption on the part of the labour force must be reduced in order to re-establish the surplus and permit not only accumulation but also privileged consumption by the favoured social strata.

It is true that the growth of accumulation is an inevitable requirement—in whatever system—for increasing employment with growing productivity. However, peripheral capitalism suffers from severe asymmetry in this respect. *If the limiting of consumption on the part of the labour force is imposed in order to fulfil this dynamic requirement, the fact remains that there is no provision in the system for limiting the privileged consumption of the favoured strata.* On the contrary, increasing imitation of the forms of consumption of the centres is occurring, to the clear detriment of vigorous development. And there is nothing in the system which imposes a reduction of this privileged consumption in order to favour accumulation. But consumption on the part of the labour force does have to be reduced, by monetary mechanisms, when it threatens privileged consumption.

This is not the only way the *regressive bias of the system* manifests itself, however. We already explained that wage increases, as well as reflecting the efforts on the part of labour to share in the fruits of technological progress, are also explainable by the desire to compensate for the unfavourable effects of price increases resulting from government taxes or external or domestic factors outside the distributive struggle. This action to seek compensation through wage increases is also subject, as in the previous case, to the restrictive policy of the monetary authority, and when the instrument at the latter's disposal is used in this way and causes unemployment, wages have to go down, not only by the amount they had genuinely risen, but by the amount they had managed to gain as

compensation for the effect of these other price increases. Thus, in the last analysis, these increases do not hurt privileged consumption but the consumption on the part of the labour force. Such is the virtue of the readjustment brought about by the monetary mechanisms: *a virtue for some, but downright social inequality for others.*

We have spoken of the effectiveness of monetary mechanisms when the redistributive power of the labour force is non-existent or very weak. This is so in those phases of structural change when the process of democratization is incipient or is manipulated in one way or another by the dominant groups. But when this process advances and the labour force acquires trade union and political strength, the monetary mechanisms again become incapable of slowing down the redistributive power.

How does the system react, then, to an increase in the wage rate beyond the productivity rate? The initial reaction is the same as that of the previous case: the restrictive policy of the monetary authority forces the companies to divert a part of the monetary flow for the payment of higher wages, with a consequent decrease in the rate of the production in progress. The result is unemployment. But unlike what happens in the other case, here the labour force does not accept a cut in its wages, and the companies therefore transfer to prices the increased costs caused by the diversion of the monetary flow, to the detriment of the production in progress. Since the redistributive power is strong, however, the rise in prices is followed by a new compensatory rise in wages, although of only temporary effect, giving rise to the familiar spiral.

Now if the monetary authority continues with its restrictive policy, *the companies will have to further increase the diversion of money to finance the inflationary growth of wages*, and in this way they will deprive the production in progress of the money needed to keep it growing at the previous rate. If the pressure of the employed labour force continues, without the monetary authority attenuating or changing its restrictive policy, the recession will then turn into active contraction. It is at this point that the *dual phenomenon of inflation and unemployment which did not occur in the pre-*

*vious phases of the structural evolution appears. The monetary mechanisms have not only become impotent, but actually counter productive*, for in addition to the fairly large loss it suffers due to unemployment, the surplus fluctuates continually: it grows when prices rise and shrinks when wages rise in a new turn of the spiral.

Is there any way out of this inflationary crisis, for which the *intrinsic logic of the system* is itself responsible? Neoclassical economists who hold monetaristic beliefs advocate persisting with the restrictive policy until labour resigns itself to accepting a reduction in its real wages and does not insist on being compensated, wholly or partially, for the rise in prices. It is possible that the risk of unemployment spreading to those who are still employed may become a flexibility factor in wage negotiations.

Indeed, when inflation grows serious and unemployment becomes high, labour is usually more disposed to consider social pacts. But this willingness, besides having certain drawbacks, is only temporary, since when the economy recovers and employment increases, the redistributive pressure arises again, and the system is exposed to a new cycle of inflationary spiral and unemployment. I do not believe there is any way to avoid this, except through a new system of appropriation and redistribution of the fruits of technological progress, obviously not along neoclassical principles.

It is not surprising, then, that some proponents of this school of thought are now talking about the advisability of constantly maintaining a minimum unemployment level, like the sword of Damocles, in order to contain the rise in wages during the reactivation of the economy. Does it follow, then, that this waste of factors of production signifies their optimal allocation according to those principles? Far from it, since the potential for accumulation is diminishing, to the clear detriment of the absorption of labour from the lower strata and the general improvement of the productivity of the entire economy.

Before going on to the next point, let us look for a moment at one very important aspect. We have already explained that the upheavals of the system occur when the wage rate rises



above the productivity rate. The latter depends, on the one hand, on the accumulation of reproductive capital and, on the other, on the growing skills which the penetration of technology requires the labour force to possess. Thus, in capitalistic development, there is a clear tendency towards a rise in productivity through a rise in the level of labour skills, even if there has not been a rise in the rate of accumulation of reproductive capital. To the extent that this occurs and the wage rate is not out of line with that of productivity, the system functions normally and wages, as well as the surplus, evolve without any upheavals of a redistributive nature.

This observation is important, since without this increase in the productivity rate (and in that arising from a higher rate of reproductive accumulation) we cannot explain the effective and persistent improvement in labour's standard of living over the course of development.

Another significant observation is the following: we have referred to the social expenditures of the State (social consumption). Undoubtedly this has contributed to the rise in the efficiency of labour. In addition, State investments in infrastructure have formed part of the reproductive capital and thus have effectively participated, along with accumulation by companies, in the rise of employment and productivity.

There is another aspect we should also mention. Remember that the surplus is a phenomenon which results from structural heterogeneity. When the accumulation of capital is very active, so too is the transfer of workers from relatively low technical levels of production to others with growing productivity. The phenomenon of regressive competition is thus weakened, as is the capacity to appropriate the surplus. Wages thus tend to rise more than productivity, independently of the exercise of redistributive power. And no matter how hard the monetary authority tries to contain this rise in wages through the well-known mechanisms at its disposal, the readjustment of the system will not be able to force wages down, since the improvement is a structural one. The economic recovery policy will have to recognize this fact and the resulting rise in prices. However, in view of its nature, this phenomenon occurs

rather slowly and the system gradually adapts itself to it. At all events, this has an adverse effect on the rate of the surplus, the capacity for accumulation and the rate of growth of employment. In this way the system spontaneously slows down the correction of regressive competition. This is one more proof that the dynamics of the system are ultimately based on social inequality.

#### 4. *The use of military power*

I shall not be so foolish as to maintain that the employment of the military power of the State to contain the inflationary increase in wages is a result of neoclassical thinking. It is a complex political phenomenon which, although it may be explained by the increasingly serious upheavals accompanying the inflationary crisis in the system, is also the result of other factors which have occurred in the historical development of the periphery in the past, before the redistributive power of labour and the State became prominent.

There can be no doubt, however, that some neoclassical economists approve of the intervention of military power in order to subdue the trade union and political power of labour and correct its violation of the laws of the market.

How can the continuation of the spiral, which the monetary mechanisms have not been able to contain, be averted? Simply by subjugating the power of labour, in order to apply the formula mentioned earlier in regard to wages: preventing their increase in the spiral while leaving prices free to 'seek their own level'.

The surplus, free from interference, recovers its growth. I have said more than once that the restoration of the surplus provides the opportunity to raise the rate of reproductive accumulation above its previous level. But to do this it would be necessary to contain the evolution of the privileged consumption of the favoured strata. There is no spontaneous mechanism in the system for achieving this positive effect; on the contrary, we have frequently witnessed a veritable orgy of consumption which tends to contaminate part of the middle strata, the usual supporters of military power.

Another very significant fact is the continuation of inflation despite the fact that the wages of most of the labour force have been frozen. This is due to the persistence or recrudescence of traditional forms of inflation, especially of fiscal origin.

Another of the vehement aspirations of the neoclassicists is the dismantling of the State in order to make it subsidiary or dispensable. These efforts, however, are not usually as successful as expected. While some spending, especially of a social nature, is reduced, other spending—generally related to the new political régime—is increased. The State thus fails to observe one of the primary recommendations of fiscal orthodoxy, as well as that of increasing taxes in order to pay the deficit. This latter measure may be effective if the power of labour to seek compensatory wage rises is eliminated. In this case, the tax would no longer be inflationary, even if it fell on the labour force; as for possible burdens on the upper strata, the strengthening of their political power places them out of danger in this respect.

Thus, it is not surprising that fiscal-generated inflation springs up. The truth is that it is a tolerable form of inflation for the dominant groups as long as it does not hurt the dynamic of the surplus. On the contrary, it inflates the surplus and thus offers more scope for the readjustment of wages, as long as the real surplus can continue to grow. In any case, these readjustments represent a certain psychological relief for labour, which has already suffered from shrinking wages.

The consequences of fiscal inflation are thus ultimately felt by labour, since it acts to the detriment of their consumption rather than that of the favoured strata. It is thus compatible with the dynamics of the system.

The same is true of inflation of external origin, as well as that resulting from domestic factors other than the distributive struggle, as mentioned elsewhere in this article. The effects are likewise felt by labour and not by the surplus, insofar as a compensatory increase in wages is not allowed.

At this point in our argument we might ask if there is not some way within the system other than fiscal orthodoxy for eliminating the inflation originating in the State deficit. This way is

certainly not that of monetary orthodoxy, which cannot be a valid substitute for the former, since it is not possible to neutralize the creation of money from fiscal sources by restricting the money available to private activity. Such an opinion would make sense to those who consider that inflation can be corrected simply by controlling the quantity of money. However, paradoxical though it may seem, fiscal inflation, far from requiring a smaller quantity of money for private activity, actually requires greater creation of money than before.

The explanation for this is very simple. Thus, fiscal inflation first causes prices to rise and inflates the surplus at the final goods stage. And this phenomenon moves backwards through all the stages of the production process, inflating the partial surpluses, so that the companies need more money than before for their circulating capital. If the monetary authority refuses to grant it, there will inevitably be a recession or a contraction, depending on the degree of credit restriction, as we explained before when discussing redistributive pressure. Of course these adverse effects tend to expand the fiscal deficit.

There are usually other reasons, however, for resorting to the restriction of credit. To contain the inflationary effect of the deficit, it is also recommended that the savings of the public should be used, and this additional demand for savings causes interest rates to rise in the financial market. Why is it then necessary to raise the interest on bank money? For a very simple reason: without this increase, there would be a risk that part of the money created in response to the growth of production in progress might be diverted to the public sector (or abroad), so that a part of the fiscal deficit would be covered by bank money rather than savings. This is why it is necessary to raise the bank interest rates, confusing them with those of genuine savings. To achieve this purpose the banks are forced to restrict credit to private sector companies, to the detriment of the growth of production in progress, i.e., at the cost of recession or contraction of the economy with the corresponding unemployment and decrease in savings, depending on the intensity of the restrictive policy.

There is no doubt that inflation could be

contained, under this policy, but only by incurring in an economic and social cost at this time which could be very considerable.

A clear distinction would be drawn between this case and the other in which unemployment is unable to contain the inflationary spiral and the trade union and political power of labour prevents wages from being reduced.

Recent examples of fiscal inflation have displayed certain notable consequences. Since domestic saving is not enough to compensate for the fiscal deficit, governments resort to external financing, and in order to make this procedure attractive, the bank interest rates are raised to the maximum through credit restriction.

Around this singular procedure, a new constellation of financial groups springs up which enthusiastically supports the restrictive policy, inasmuch as this extreme raising of rates leads to huge profit margins for the fortunate operators.

But this is not the only result. When genuine domestic saving is used, it is possible to contain fiscal inflation through the displacement of consumption: the demand and consumption of those who are saving is reduced in favour of the demand and consumption of the State (or of those who work in connexion with its investments). In contrast, when foreign funds are used there is no such compensation of demand and consumption. These funds have an inflationary effect similar to that which occurs when domestic expansion of money is used to cover the deficit. There is, in effect, an

*inflationary increase in demand.* But in this case the external imbalance caused by this increase is covered by the foreign funds which have flowed into the country.

Furthermore, yet another inflationary effect is added. The companies try to transfer the extreme interest rates to prices, thus tending to aggravate the effect of this inflationary demand. And if labour cannot exercise its power to seek compensation because of the military power, the high interest rates will eventually affect its reduced consumption.

It is true that, strictly speaking, it would not be correct to blame this manipulation of the system on neoclassical theories: it is really a manipulation of these theories. But these are still not the only consequences. There is yet another: that of tempering the inflationary demand caused by the inflow of external resources (or other factors) by lowering tariffs so as to slow down the rise in prices in the name of neoclassical theories. And since this is not enough, overvaluation of the currency is resorted to, preventing the exchange rate from adjusting to the domestic price rises.

The consequences of this manipulation are much too well known for us to examine them here. Overvaluation stimulates imports (already stimulated by the drop in tariffs) and discourages exports. But the favoured groups do not worry about this, since the resulting deficit in the balance of payments is covered by new external credit, providing a new stimulus for the financial boom.

## II

### Theories, self-interest and breaking of the rules

#### 1. *Neoclassical theories and the periphery*

Why have neoclassical theories and their monetarist derivations proved unable to explain the reality of the development of the periphery? Why are their recommendations counter-productive when compared with the facts?

The reason is that these theories ignore the

structure of society. They thus ignore the persistence of the surplus, a structural phenomenon of appropriation of the fruits of technological progress, which lies at the very root of social inequality.

These theories also ignore the primordial role of monetary mechanisms which allow the owners of the means of production to appropri-

ate this surplus. It may thus be useful to summarize what was explained above.

*The appropriation of the surplus completely invalidates the neoclassical reasoning about the social diffusion of the fruits of the growing productivity of the system.*

This reasoning leads neoclassical economists to abominate the trade union power of labour, since this power interferes with the laws of the marketplace and is alleged to counteract the spontaneous tendency of the system towards distributive equilibrium (an integral part of general equilibrium).

It is the logical conclusion of this reasoning that forms the basis for monetarism. Its virtue is precisely that it causes the contraction of the economy until unemployment allows the trade union's power to be overcome and forces them to accept a lowering of wages. This is not the way to reach distributive equilibrium, however, since the decline in wages makes it possible to fully restore both the surplus and its dynamic, and this is the basic inequality of the system.

When labour has acquired a great deal of trade union and political power, however, the monetary mechanism for defending the surplus becomes obsolete and loses its effectiveness. Even in cases where labour finally has to give in, this is a temporary fact rather than a definitive correction.

Furthermore, according to this thesis, wages have to fall not only because they have progressed beyond the point required by the presumed equilibrium, but also so that the surplus can recover what it had lost owing to the exaggerated growth of the State. This is why it is necessary to dismantle the latter, beginning with the social services.

How could anyone imagine that labour, when it has acquired consciousness and power, will meekly accept the imposition of monetary mechanisms?

The problem thus becomes insoluble, and the system ends in social inflation which tends to become an inherent feature of it.

It is insoluble because of the system of appropriation of the fruits of technological progress and the dynamics of accumulation. This is the great problem which will have to be re-

solved sooner or later by the periphery —and also by the centres...

Whatever the degree of purity of the original theories may have been —and I believe it was very high— the later function of these theories has been to sustain peripheral capitalism, with its exclusive and conflictive tendencies, and for this purpose it has used, among other methods, monetary mechanisms. These mechanisms are first useful for obtaining the surplus and later for defending it from labour and the State: they enshrine the bias of the system in favour of the upper strata, until the mechanisms become obsolete.

*These theories thus respond to the dominant interests in the system. This is true not only in domestic development but also in relations between the centres and the periphery.* I am referring in this case to the dominant interests which characterize the hegemony of the centres over the periphery. In the period before the world depression of the 1930s, the influence of the previous system of the international division of labour was very great; under its sway, the periphery remained excluded from the industrialization process and was merely an appendix to the centres.

When we thought that this system had been superseded once and for all, it unexpectedly resurfaced in the form of the so-called 'open economy' policies.

These policies are not usually rejected frankly and openly with regard to the industrialization of the periphery, but it is usually held that they must be spontaneous, without protection or subsidies. The supporters of this reappearance of neoclassicism recognize, however, that the costs of peripheral industrialization are high compared with the technological and economic superiority of the centres. In any case, one must not interfere with the laws of the marketplace by using arbitrary expedients. If the costs are higher, they must be reduced. And the most expeditious means, according to them, is to reduce wages as much as is necessary for the industry to become competitive.

There can be no doubt that the past system of the international division of labour fitted in very well with the interests of the centres. The industrialization of the periphery did not really interest them. In this sense it was usually as-

serted that the solution to development did not lie there, but rather in the technification of primary production in order to lower costs and compete better in the international market.

When the countries of the periphery, after the great world depression, began to think about these phenomena with independent judgement, they soon reacted against this thesis held by the centres. They did not deny the need to introduce technological progress in primary activities, but they maintained that this could not be done outside the context of development without leading to serious consequences, for if the productivity of these activities were to increase and the labour thus made redundant were not absorbed, the benefits of technological progress would be transferred to the centres, through the deterioration of the terms of trade.

This was one of the theoretical justifications of industrialization: to contribute to the employment of the redundant labour force in activities of higher productivity. Industrialization and technological progress in primary activities were thus integral and complementary parts of a single development policy. Imagine anything more opposed to the theory of lowering wages in order to industrialize!

Once peripheral industrialization was underway, the centres resolved to take advantage of it. It was claimed that transnational corporations would bring with them a vigorous modernization of industry: the doors should thus be thrown open to them. It was no longer a question of denying industrialization but rather of giving it an international perspective. There was now a new thesis to talk about: the internationalization of production.

In reality, however, it was not the internationalization of production in the periphery which interested the transnationals so much as its internationalization in the centres themselves, under the powerful thrust of technological innovations leading to the ceaseless diversification of goods and services. And the periphery was once again left on the sidelines of this type of industrialization, except in relation to those goods which were no longer new.

There was, moreover, an intense liberalization of trade in which the periphery scarcely participated, for this liberalization did not ap-

ply to a comparable extent to those industrial goods in which the periphery had obtained or might obtain comparative advantages.

As a result, the transnational corporations contributed much more to the internationalization of consumption in the periphery than to the internationalization of production there. Thus, we again see the importance of the self-interest of the centres.

I have been referring to the industrial transnationals which have acquired so much influence in the international field. They now share their enormous power with the financial transnationals, i.e., with a few private banking institutions which have rapidly evolved due to the Eurodollar market, which we will discuss later. These transnationals played a very useful role when the rise in oil prices led to a large deficit in the importing countries. But they later offered credit for the payment of these growing imports, which often included consumer goods. The results are well known: growing indebtedness in order to make payments of capital and interest. The position of some developing countries is a matter of serious concern, not only because of the magnitude of the debt, but also because the recession in the centres makes it impossible to pay it back through corresponding exports.

This is a case of significant lack of foresight, both on the part of the private international banks and of the debtors, which was fostered in the case of the banks by the enormous gains involved.

As for the debtor countries of the periphery, they have often allowed themselves to be seduced by this type of operation because it enabled them to avoid taking indispensable readjustment measures. Moreover, they have more than once been persuaded that they should open their economies on a massive scale to external finance closely linked to trade openness.

Those in favour of 'open economy' policies strongly oppose selective measures in regard to imports such as were adopted in previous periods when there was a trade imbalance: such artificial interference in the laws of the marketplace must be avoided, they say, and the trade balance must be corrected in some other way, either by using credit facilities or by restricting

credit in order to cause contraction and thus reduce imports at the expense of economic activity.

Here too there has been a lamentable theoretical regression, since the public international financial bodies themselves had finally recognized—very late in the game, it is true—that structural imbalances were occurring in the relations with the centres which also required structural readjustments. I very much fear that we are returning to the seriously mistaken theoretical concepts of previous eras. This is a new manifestation of the return to orthodoxy!

However, it would be a grave error always to see behind the theories elaborated in the centres themselves the predominant influence of the interests which weigh so heavily on the periphery. What is occurring now in the central countries is a clear demonstration that some of the theories prevailing there do not fit in either with the profound structural changes which have occurred in the centre.

I am afraid that in making this assertion I may be accused of having the arbitrary attitude of looking at certain phenomena in the centres from the viewpoint of the periphery. I nevertheless maintain that a structural imbalance is occurring there between consumption and accumulation similar to that in the periphery, and it is in fact a structural crisis.

## 2. *The crisis in the centres*

Advanced capitalism is in the midst of a crisis. It is not surprising that the situation is frequently compared to the Great Depression of the 1930s. However, they are two different phenomena. The crisis of the 1930s was conjunctural, albeit of extraordinary severity. In contrast, the present crisis basically represents *a structural imbalance between consumption and accumulation*, as in the Latin American periphery, which does not appear to have occurred previously, since this imbalance is the result of the evolution of the structure of society and of the power relations arising within it.

This crisis was incubating right through the long years of the boom period in the centres which ended in the first half of the 1970s. It is not the result of the decadence of capitalism,

but rather of its over-vigorous development, which has caused it to overflow its banks without finding a new course. And the result of all this has been social inflation which, as in the periphery, cannot be attacked effectively by using monetary mechanisms.

In order to understand the nature of the structural imbalance between consumption and accumulation, it is worth recalling what was said about the dynamic sequence which characterizes a growing economy, whatever the economic and social system. *The accumulation of reproductive capital is an essential condition for an increase in employment and productivity, which, in turn, is an essential condition for the growth of accumulation; and so on. Thus, if the rate of accumulation drops, productivity will also drop.*

In my opinion, this is what has occurred in the centres, beginning with the United States. Despite the very high level of productivity, this has proved insufficient to meet the growth of various forms of consumption. On top of the growing and increasingly diversified consumption of the upper strata of society, there has been added that of the middle and, finally, the lower strata, while the trade union and political power of labour has been getting stronger as the structural changes in the society occur. Yet this is not happening at the expense of the consumption of the upper strata but is rather being imposed on it, in regard to both the private consumption and the social consumption of labour, especially through the intermediary of the State. The same occurs with the growth of the civil and military consumption of the latter.

It should not surprise us, then, that over time the growth rate of consumption has tended to exceed that of accumulation. Moreover, only a part of the latter corresponds to reproductive capital which augments productivity as well as employment, another part which tends to show relative growth corresponds to forms of accumulation which do not have this virtue, as in the obvious case of capital which is accumulated to respond to the needs of military consumption. In addition, there tends to be an increase in the proportion of capital used for the constant diversification of goods and services rather than for productivity.

All this negatively influences the rate of productivity, although other factors are involved as well.

It should be taken into account, on the other hand, that in the past higher productivity has been due not only to technological innovations but also to the irresponsible use of a non-renewable natural resource —oil. To correct this phenomenon, there would have to be a greater investment of capital per unit of energy, and thus per product unit, unless greater energy efficiency is achieved.

The same is true of measures designed to defend the environment from all the forms of pollution which have been destroying it.

Consequently, serious measures for the readjustment of consumption are called for in order to raise the rate of accumulation of reproductive capital, employment and productivity, and to respond to the various requirements for ecological defence measures in regard to energy and the environment.

How is this to be done? This is the fundamental problem which is still far from being resolved, since there is no mechanism in the system, for regulating consumption and accumulation, nor has any theoretical explanation been offered for these phenomena which might serve as a guide for practical action.

In order to correct the inflationary consequences of the fiscal deficit, recourse is being had, just as in some countries in the periphery, to the procurement of public savings in order to support government consumption, by means of compressing the consumption of those who are saving. Because of the magnitude of the deficit, extremely high interest rates are being used to obtain the necessary saving. Moreover, in order to ensure that these rates do not result in any transfer of bank money to the financial market, the interest rates on money from the latter are also raised by virtue of credit restrictions. These restrictions in turn lead to recession—at the very least—and unemployment, and the latter, besides shrinking savings, expands the fiscal deficit.

I admit that it is possible to sharply reduce or even eliminate inflation in this way, but at great economic and social cost, not only for the United States but also for the rest of the world and most especially the periphery. *It is a policy*

*which, in addition to being counterproductive, falls far short of offering a fundamental solution, since sooner or later credit will have to be expanded and interest rates lowered, with the resulting inflationary effects as explained above.*

Of course this brief and superficial overview of the situation of the centres was not undertaken out of mere intellectual curiosity, but in order to explain the structural nature of this crisis. It is no longer possible to counteract the crisis, as in the 1930s, with a Keynesian expansive policy, unless this is combined with other fundamental measures which are slow in coming. My conclusion is that there are no grounds for expecting a lasting improvement in the economies of the centres. The periphery should therefore prepare itself for a serious prolongation of this crisis and seek basically to make use of its own potential for development, although this should be done in such a way that if this hypothesis does not come true, the periphery can take advantage of the additional stimulus which the hoped-for economic recovery of the centres would bring with it.

### 3. *World inflation and peripheral open-economy policies*

There is one very important comment that remains to be made: inflation in the United States has expanded beyond its national borders. This has had the advantage of alleviating the domestic pressure of consumption on accumulation, since the economy has been able to take advantage of part of the product of the rest of the world, paying for this contribution with dollars which ended up being non-convertible.

This was a new blow —added to that suffered during the Great Depression— to what was left of the gold standard, which has now been destroyed without trace.

In reality, the Bretton Woods agreements already marked the demise of the gold standard, whose role was henceforth to be played by the dollar, thus giving the United States an enormous responsibility that it has proved incapable of carrying out.

Together with this responsibility it received a right of seigneurage by which it was able to create for its own advantage the money

required for the expansion of world trade. This arrangement freed the world currency from the shortage of the precious metal, but instead of dollars being created in response to these trade requirements, they were created mainly in response to the redistributive struggle and the fiscal deficit.

Be that as it may, the fact is that inflationary dollars flooded the world. The dollar assumed the role of international as well as national currency, although it was not subject to the strict laws of the gold standard. Quite on the contrary, it was not subject to any monetary discipline whatever.

The inflationary abundance of this currency generated the Eurodollar market. Since the countries receiving them were worried lest they should give rise to an exaggerated domestic expansion of money, they returned part of their holdings to this market, generally in the form of short-term loans. These operations, of course, further accentuated the inflationary pressure: for each unit of money, two or three more have been created, in the same way that the money from bank reserves multiplies domestically. But contrary to what occurs domestically in each country, these Eurodollar operations are not subject to any control.

What happens is that when money is loaned in the Eurodollar market, it does not necessarily represent saving on the part of those who have received dollars for their external transactions—that is, genuine saving—as has always occurred in the case of international long-term loans. Instead, it mainly represents dollars which multiply in an inflationary manner as indicated.

This is another of the paradigms on which monetarist open economy policies are built: the idea that countries should resolutely enter the international market, as if it corresponded to the past image of the gold standard.

In line with this concept of open economy policies, a monetarist theory of the balance of payments has arisen, which rejects any reason for intervention by the monetary authority in regard to fluctuations which originate outside the country. If these cause a surplus, they claim, then the domestic interest rates will drop and the money which is not needed in the country will flow out of it; the opposite will

occur when there is a deficit. This is a very unrealistic picture of what actually happens in the cyclical reality of our countries. When the domestic interest rates drop due to the inflow of external funds, this heightens the tendency to misuse credit, and this makes it more difficult for the cyclical decline to occur. The monetary authority then has to act in various ways, and I believe that I have gained some positive experience in this respect when I had some responsibility for the monetary policy of my country.

It is clear that when there is an abundance of dollars which the big international private banks want to loan, the open economy policy is very attractive. But how long will it continue to be so? The gold standard did not work this way. The interplay of interest rates occurred primarily among the big countries.

Neither does trade openness attract me. It is a well-known fact that the centres either do not follow the rules of the game of the international division of labour, or else the rules they do follow are incompatible with the development of our countries. I will not deal with this subject now. I only want to refer to the serious impact that this second great crisis of capitalism is having. Can we talk about unconditional open economy policies when faced with the decline in the growth rates of the centres and the reappearance of protectionism? It is paradoxical that the return to orthodoxy coincides with this phenomenon which is so contrary to the comparative advantages of the periphery.

We must not confuse trade openness with the rational linking-up of the periphery with the centres. The great error of the open economy policy is not that it proclaims comparative advantages—to deny them would be absurd—but that it assumes that the dismantling of protections and subsidies would allow us to profit from these advantages fully.

I hope that the foregoing reflections will serve to temper the enthusiasm of those who, in their desire to imitate, let themselves be seduced not only by the theories of the centres but also by the manner in which the latter attack their own problems. This observation not only corresponds to the present crisis of capitalism but also to the previous one: the Great Depression of the 1930s.



Let me say a few words about the latter. What appeared in the beginning to be a simple cyclical decline turned into an intense economic contraction; the immediate origin of this phenomenon was, in my opinion, the brutal restriction of credit to which the stock market crash led in the United States. Instead of this policy, it would have been advisable to use a policy of government expansion to deal with it. But the new Keynesian ideas, which were just beginning, took a long time to penetrate, being considered heresies although they were later incorporated into orthodox thinking.

On all this were superimposed the tragic consequences of the sharp increase in import duties. The world contraction, the drop in prices and protectionism all led to a great external imbalance in the rest of the world, in contrast with the impressive accumulation of gold by the United States. The rest of the world had to defend itself through bilateralism, which restricted imports from the United States while trying to maintain imports from countries which could be paid with exports.

The multilateral trade and payments system which appeared to have been built on solid foundations, with a longstanding history interrupted only by the First World War, was thus destroyed, and the gold standard system suffered a hard blow from which it never recovered.

As is well known, the consequences of these crises have lasted a long time; indeed, they have dominated the greater part of the half century which has passed since the Great Depression. But scarcely had the world recovered from the consequences of the latter when the Second World War occurred, followed by the serious difficulties of the post-war era. There then occurred the extraordinary boom which lasted until the first half of the 1970s, only to be followed by the present crisis, which seems to me to be more profound, complex and difficult than the Great Depression.

I have had the rare privilege—in academic terms, of course—of having worked as a young economist during the first great crisis and the Second World War, and of now witnessing the present crisis. In those days we had to improvise defence measures which were the beginning of an autonomous development effort.

And today we are also being forced to defend ourselves from the vicissitudes of the centres and seek new development paths. There is much to be discussed before selecting our course of action.

In my long lifetime, between these two extremes of the great world crises, I have had the opportunity to participate in the initial struggles of UNCTAD to obtain from the centres a more enlightened policy of co-operation with the periphery.

Nothing important was achieved then or later. However, it must be acknowledged that in the long years of prosperity which came to an end in the first half of the 1970s the concern of the Latin American periphery about the negative attitude of the centres began to weaken in view of the positive consequences of the extraordinary rates of development achieved, which had never occurred before so persistently. Thanks to this prosperity, the most industrialized developing countries embarked upon the export of industrial goods. They strove to persuade the centres to liberalize the importation of goods in which they had comparative advantages. But they did not succeed.

Despite this fact, these exports were successful, since the high growth rates of the centres made it possible in many cases to overcome the obstacles in their path.

It is perfectly understandable that this boom should have appeared to be the beginning of a new and very promising era. The periphery allowed itself to be dazzled, and in view of the success of its exports it did not rationally pursue the import substitution required by the symmetry of the process of industrialization. This error was analogous to that which had been committed earlier in the opposite sense, when development was held to be more important than the process of substitution.

These observations are not intended to put on paper what is still fresh in the memory of one who had to act in those tempestuous times, nor merely to explain my serious concerns today. I am writing for another reason, since those of us who were neoclassicists had to deal with phenomena which were outside the field of theory. During the Great Depression, the centres had stopped being an exemplary model of opera-

tion, a paradigm for our countries to identify with. What is equally important, we stopped accepting with reverence the theories developed there, and as a result of passing through so many vicissitudes we began to seek our own developmental path.

Thirty years ago, the periphery had begun a tenacious and difficult attempt to emancipate itself intellectually. It was learning to question those theories developed in the centres which did not fit in with the basic interests of peripheral development. The return to conventional theories in recent years has represented an attempt to counteract this effort aimed at inde-

pendent thinking about development. The seductiveness of these theories is very powerful, and it clouds their new proponents' view of reality so that they are unable to perceive clearly the interplay of internal and external interests behind these new manifestations of conventional thinking.

Now is the time to pursue this effort at intellectual emancipation. We must now advance in broader fields and include in our thinking an examination of the structure of the society, without which both the theory and the practice of development will continue to drift from their proper paths.



# The international recession and Latin America

*Enrique V. Iglesias\**

The international economic and financial crisis is one of the main sources of present concern, particularly as there are no generally accepted solutions for dealing with it. This article is therefore of special interest in that it seeks not only to describe the main features of the crisis but also to suggest some ways of tackling it.

The first part of the article describes the present international economic situation and its effects on the periphery in general and Latin America in particular, with special reference in the latter case to the reduction in the growth rate, the fall in the terms of trade, the increase in external indebtedness, the deterioration in the fiscal situation and the worsening of social conditions. In these circumstances, the author anticipates a further period of difficulties in view of which it would be advisable to apply a policy aimed at limiting the adverse effects of the crisis.

In view of the range of different national situations, no attempt is made to present a set of specific policy recommendations: instead, some general ideas are suggested which may be useful for guiding concrete actions. These ideas or policy options are divided into three levels: world, regional and national, with emphasis being placed among the national-level ideas on external indebtedness and tariff, exchange rate and public expenditure policies.

By way of conclusion, the author stresses that the internal adjustment cannot be left to the automatic impulses of the international market, that the fight against inflation cannot form the exclusive objective of economic policy, and that such policy must not be restricted to the use of monetary mechanisms.

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## I

### The current international economic situation: crisis, insecurity and confusion

The general characteristics of the current international economic situation are all too well known. This is a serious and profound crisis which simply cannot be dismissed as a mere downturn of a conjunctural nature.

The stagnation of economic activity has continued for a much longer period than was the case during previous recessions in almost all the industrial countries. Unemployment is the highest it has been since the Great Depression, with estimates showing around 30 million unemployed in the OECD countries.

Recently, certain favourable indicators have shown that inflation has gone down in the United States, and during the last quarter there have been signs of a slight but encouraging recovery in that country's gross product. These indicators, however, are not duplicated in other industrial centres. Thus, the May communiqué of the OECD Ministers states that while we may expect soon to see a moderate expansion of economic activity in the OECD area, possibly including an improvement in the employment situation during the coming year, this expansion will not be sufficient to bring about a rapid drop in the present high level of unemployment.

The great industrial centres have agreed to concentrate on combating inflation as their first goal and have chosen to try to achieve this goal primarily by using monetary tools. Because of this, when no significant progress was made in reducing fiscal deficits, there has been strong upward pressure on interest rates. Indeed, real interest rates have reached levels without precedent in the post-war period which are only comparable with those prevailing during the Great Depression. Thus, we are faced with a truly exceptional situation. During 1982, interest rates on the free market have remained around 16.5%. Since inflation rates have dropped at the same time, however, real interest rates, traditionally averaging about 2%, have abruptly risen to averages of 6 and 7%. This

phenomenon has brought about a drop in investment levels and heavy flows of capital between the industrial countries. These flows in turn have led to a drastic revaluation of the United States dollar *vis-à-vis* the other currencies.

The abrupt and unexpected currency fluctuations in the central countries have become a possibly inevitable but nonetheless destabilizing element in the international economy. This problem was given special attention by the Chiefs of State meeting recently at Versailles, who stressed the importance of achieving more harmonious functioning of the machinery for adjusting exchange rates.

Moreover, the increasing balance-of-payments problems of some industrialized countries, the persistence of unemployment in most of them and the stubborn unresponsiveness of the productive system have led to serious confrontations in the trade policies of the central countries that seem to be leading them into

dangerous protectionist practices. This of course would represent a serious backward step from the sustained and beneficial trend towards free trade began after World War II.

No less serious is the fact that, faced with this difficult and complicated panorama, the prevailing theoretical concepts have not been able to suggest a clear and viable course of action to those responsible for economic policy. The continuing debates between proponents of the monetarist and Keynesian approaches have not succeeded in throwing enough light on the causes of stagflation and they have been even less successful in suggesting what measures should be taken to overcome it. To this confusion at the theoretical level, with its inevitable implications at the level of action, has been added a failure to coordinate the economic policies of the industrial countries in a manner commensurate with the seriousness of the problems currently facing the international community.

## II

### The effects of the international cycle on the periphery

Obviously, this confusing situation has created difficulties for the countries of the periphery, for which the present behaviour and future evolution of the central economies are of fundamental importance. This is particularly true in the case of those Latin American countries which have in recent years, each in its own way, been pursuing policies of commercial and financial openness.

The effect which the unsatisfactory international situation has on our countries may be easily seen in certain very significant areas:

(a) The slackness of domestic demand in the industrial countries and particularly the decline of investments and the reduction of stocks due fundamentally to the high interest rates have substantially weakened basic commodity prices, which have dropped consistently over the past twelve months and still show no signs of firm recovery. In the case of the non-oil-exporting countries of Latin America, the

terms of trade—which had already deteriorated by nearly 30% during the three-year period 1978-1980—dropped by a further 11% in 1981, and the situation does not seem to have improved during the first half of 1982.

(b) The rise in interest rates has greatly increased the cost of servicing the external debt of the developing countries. To appreciate the effect this process has had on the Latin American economies, we should note that, given the current level of external indebtedness of the region, every time the interest rate goes up one point, the cost of servicing the debt increases by approximately one billion dollars.

(c) Restrictive fiscal policies have led to reductions in financial assistance for development, particularly as regards contributions to multilateral banking institutions and national assistance programmes. Although the percentage which such loans represent in the total external indebtedness of the region has decreased

during the last decade, they are still essential to the development of Latin America and particularly to the progress of the medium-sized and small countries that still depend heavily on public financial flows.

(d) The protectionist trends that have in various forms become stronger in certain industrialized economies threaten to create problems for Latin American trade, particularly in the case of the new exports of manufactured

goods, which have been gaining ground in recent years and, which constitute an important factor in promoting the overall economic growth of semi-industrialized countries such as many of the Latin American ones. In this regard, it is worth recalling that certain recent events, such as the multi-fibres agreement, have caused serious concern about what might happen in the future should protectionism increase in the world.

### III

## The international recession and the recent evolution of Latin America

It would be risky to blame all the problems of the Latin American economy in recent times on the behaviour of the international economy. It is well known that situations differ in the various countries of the region and that, along with the problems deriving from the external situation, there have in certain cases been problems arising from the application of unsuitable economic policies or the lack of appropriate policies.

All in all, however, we cannot ignore the fact that the external cycle plays a fundamental role in the recent behaviour of the Latin American economy. This is shown by certain basic indicators of the evolution of the region's economy in 1981:

(a) The growth rate for 1981 —barely 1.7%— was the lowest for the entire post-war period and contrasts sharply with the growth rate for the previous year, i.e., 5.9%. This meant that the per capita product dropped for the first time in the last thirty years.

(b) Because of the decline in the terms of trade and the high interest rates, the deficit on the balance-of-payments current account has remained at exceptionally high levels, with the total deficit for the region amounting to 38 billion dollars in 1981 as compared with 28 billion in 1980.

(c) As a result of the foregoing, the gross disbursed external debt is estimated to have

amounted to close on 240 billion dollars in 1981, which means that it has doubled over the last three and a half years.

(d) The fiscal situation deteriorated substantially in many countries of the region and the budget deficit grew, forcing the countries to reduce public expenditure and particularly investment.

(e) As a consequence of the above changes, there has been a clear deterioration of the social situation, with real wages going down in the great majority of the countries and a substantial rise in unemployment in many of them.

(f) Another, and no less disquieting, consequence is the critical situation faced by businesses in many countries of the region. This has been particularly influenced by the reduction in the level of domestic activity, the drop in international prices of goods and, most of all, the new phenomenon of extremely high real interest rates. The high international interest rates have been projected on to the domestic economies and the effect of this external factor has been increased by certain internal phenomena, so that the interest rates in many countries of the region have reached levels so high that they cannot be sustained beyond a limited period. Not only has this seriously hampered investment, it has also brought about serious disequilibria in the business economy, where enterprises have had to resort to increasing indebtedness at very high rates which have in

turn eroded their profitability and in some cases brought about their downfall. Naturally, these negative phenomena have affected the

profitability and even the viability of various financial entities in some countries of the region.

## IV

### The prospects for the immediate future

In these circumstances, it is rather difficult to project possible scenarios for the regional economy, inasmuch as there are no clear indicators of the probable behaviour of the world economy. It is worthwhile recalling in this connexion that in recent years the forecasts made at the international level have been more or less systematically belied by reality. We must therefore be cautious.

Some optimistic forecasts based on recent United States economic indicators anticipate a recovery of that economy for the last quarter of this year. Even according to the best estimates, however, this recovery will be modest and will not be accompanied by a similar phenomenon in the European countries.

Other less optimistic forecasts envisage a continuation of the current recessive conditions well into 1983; this would thus postpone any marked recovery of the industrialized economies until the second half of next year.

At all events, no one anticipates a vigorous growth cycle during 1983, and it is quite likely that, in the best of cases, recovery will be slow and uneven in the main industrial centres.

Moreover, misgivings have also been expressed with regard to the very nature of the recovery, and in particular, with regard to the ability of the system to avoid the dangers of a resurgence of inflation. Nor can we be sure of how fast and how strongly the recovery will be transmitted to the countries of the periphery.

Faced with these possibilities, what course should the countries of the region follow? I believe that, taking a conservative view, it would be wise to anticipate a further period of difficulties, which will mean that the region must make full use of the capacity for defending itself that it has shown in recent years and, in particular, that it must carry out a set of pol-

icies that will enable it, if not to avoid at least to mitigate the impact of a particular acute depressive cycle in the international economy.

I have no doubt that this is possible, although it should be stressed that when the region showed its extraordinary self-defence capacity during the energy crisis of the mid-1970s, the circumstances of its countries were very different from the present ones.

In the first place, at that time the increases in the prices of fuels were accompanied by sharp rises in basic commodities, which are vital to the external economy of the region. This greatly helped to neutralize the impact of the higher oil prices and to maintain domestic activity.

In addition, Latin America's indebtedness at the beginning of the crisis of the mid-1970s was very low. Thus, in 1973 the gross disbursed external debt was approximately 40 billion dollars, which was only 30% more than the total value of exports for that year. In such circumstances, many countries of the region were able to resort to external financing, which was moreover quite abundant because of the considerable international liquidity created by the oil surpluses and the financial permissiveness of the private international banks which were anxious to lend their surpluses profitably.

This situation has changed drastically during the 1980s. In the first place, the prices of the main export products remain at dramatically low levels. Secondly, in 1981 the external debt was estimated to total nearly 240 billion dollars, almost double the value of total exports during the same year. Thirdly, the international financial agencies themselves are not showing the same capacity for meeting the growing international financing needs of the developing countries or, at any rate, of a large number of

them. Finally, the level of domestic inflation faced by many countries of the region is substantially greater than it was before the first energy crisis.

This means that today it is much more urgent to apply more complex and integral adjustment policies: a question on which I would now like to make the following comments.

## V

### The policy options to the countries of the region

Let us begin by stressing once again that it is difficult to make generalizations about the economic policies of the countries of the region. Although there are recurring common denominators, the individual situations may be quite different. There are differences in the size of the economies, the degrees of openness to the exterior, the level of indebtedness, the trade structures and the endowment of natural resources, all of which means that we are dealing with very different situations when analysing the economic policy options open to each country.

Moreover, in view of the growing internationalization of the Latin American economy, these options will depend to a very large extent on how the large centres respond, through their adjustment policies, to the following questions:

— When and how will there be a recovery in the dynamism of domestic demand, levels of investment and stocks of raw materials?

— Also linked with the above, although with specific determining factors: when will the existing high interest rates begin to go down?

— Will it be possible to check the growing protectionist trends in the industrial countries or will they, on the contrary, become even stronger, particularly in sectors that are crucial to our exports?

— Will private and public financial flows continue to reach the region in adequate amounts and on suitable terms?

— What levels will be reached by the price of fuels on the world market?

The answers to these questions will of course determine what the policy options will be. That is why, rather than pointing to a con-

crete set of recommendations that could be carried out in each and every one of the countries of the region, our remarks are meant merely to serve as a guide for discussion of the topic, which can be dealt with in specific terms only at the national level.

Three levels of action —world-wide, regional and national— are open to the countries of the region.

#### 1. *Policy options at the world level*

It is all too well known that the economies of the periphery have very little influence on the course of the international economic situation, except in a few exceptional instances such as that of the oil-exporting countries.

It has nevertheless become obvious in recent years that the industrializing countries, by substantially increasing their foreign trade, have not only expanded their domestic production capacity but have also opened wide possibilities for imports of products from the industrialized countries. Thus, in today's world, the trading capacity of the countries of the periphery is already a significant factor for some export sectors of the industrialized countries and is thereby a dynamic factor in the international cycle.

The maintenance and especially the expansion of this import capacity of the periphery are therefore factors which have a positive influence on the policy of international refutation and cannot be ignored by the large centres.

Thus, along with considerations of international equity, which encourage and justify global negotiations aimed at achieving a new world economic order, the external dynamism of the peripheral countries is an additional element in the mutuality of interests which



should foster and inspire these negotiations. It is for these reasons that it is very much in Latin America's interest to join with the Third World countries, as indeed it is already doing, to promote a promising and constructive international dialogue.

It would thus appear to be to no one's advantage to postpone the negotiating efforts until the central economies have recovered. On the contrary, it would be beneficial for all to incorporate the growth potential of the peripheral countries into the recovery policies, especially those of Latin America.

In this context, and within the overall framework in which these negotiations will take place, two aspects will be vitally important for the region in the next few years, in view of the influence of the international economy on that of Latin America:

(a) The maintenance of smooth financial flows to support the period of transition towards a more dynamic stage within the cycle of the international economy. This is valid not only for private credit but also for that originating in public entities, since our countries' growing need for long-term investments, added to the deterioration of the external debt profile, make it necessary to resort to public capital which, even though it may not be predominant, will serve as a catalyst for the private financial sector itself and will make it possible to improve the maturity structure of the external debt. In other words, we feel that a time is coming in which the financial flows from public and private bodies must reinforce each other, and that there is room for imaginative forms of association between them which the region could use intelligently and appropriately in the present circumstances. It is for this reason that it seems important to us to include among the objectives of the programme of negotiations the strengthening of world financial institutions such as the International Bank for Reconstruction and Development and the International Monetary Fund, or regional institutions such as the Inter-American Development Bank.

(b) The opening-up of external markets to the exports of the region, particularly those of manufactures. It will not be possible to sustain the growth rate of our imports or maintain a

healthy capacity for making external payments without a concomitant step forward in our exports. In this regard, we should remember that despite the difficulties facing the expansion of world trade in 1981, the volume of exports from the region nevertheless grew by 7% that year, highlighting the fact that there is a new and more diversified productive capacity in Latin America, and that if this capacity is not used, for reasons due to external factors, both the trade and the financial capacity of the region cannot help but be affected. It is therefore important to support moves aimed at maintaining open trade policies in the industrial countries which will facilitate the efforts being made in recent years by many countries of the region to counterbalance the openness policies followed by the latter in recent years, in many cases not without high domestic cost.

Support for the global negotiations and the strengthening of the present negotiating machinery in forums such as UNCTAD, GATT, IMF and the World Bank should thus be fundamental priorities in the international action of the region. Only in this way can global interdependence be used as a clear element of support for the recovery of the world economy.

These actions will have to be complemented by determined and imaginative efforts to increase the commercial, financial and technical co-operation ties with the other regions of the Third World. This area of action, which was neglected until a few years ago, but to which the Latin American countries are now paying increasing attention, presents significant possibilities for development and diversification, especially for the more advanced economies of the region.

## *2. Policy options at the regional level*

In the present circumstances a new field is opening up for Latin American co-operation. As in earlier periods when there were difficulties in the external markets, the opportunities provided by the regional market must be vigorously developed and utilized. This market could thus become a compensating factor in the international cycle and open new and vigorous channels for regional co-operation.

The total market of Latin America is now

reaching one thousand billion dollars, while our foreign trade in goods is nearing 100 billion dollars, taking account of both exports and imports.

Perhaps the example of some specific sectors can highlight the magnitude of the opportunities for the expansion of regional trade.

The hydroelectric sector, which has high priority within regional energy policy, will require in the next 10 years about 50 turbogenerator units per year for installations of more than 100 megawatts, involving an average annual investment for this sector of nearly 9 billion dollars.

The iron and steel production capacity of the region as a whole will expand to around 55 million tons by the end of the decade. To achieve this expansion, investments of nearly 4 billion dollars per year will be required.

The expansion in cement plants already planned for the region will involve total annual investments over the decade of nearly 1 billion dollars.

Thus, in these three sectors alone, the region will have to invest nearly 14 billion dollars per year in areas of direct interest to the Latin American metal manufactures and machinery industry. There is enough industrial experience, installed capacity and experienced management in the region to deal efficiently with a significant part of this demand for products of the metal manufactures and machinery industry, and this is only one example of the sectors open to regional co-operation.

Of course, for the efficient use of the regional market clear commitments will be required on the part of governments, as well as adequate export promotion policies and dynamic initiatives on the part of the public and private entrepreneurial sectors.

It is certainly not a question of returning to outworn policies of autarky, but rather of utilizing and improving the existing regional markets in order to achieve increasing participation in them—when necessary, in association with foreign enterprises—so as to take advantage of the opportunities offered by their expansion.

In this regard, it is worth noting that some interesting initiatives for collaboration among private Latin American entrepreneurs are now

in progress. Promotion efforts underway at CEPAL have convinced us that there is a promising field for the development and consolidation of both national and regional co-operation policies. And we should certainly not overlook the efforts to stimulate the present regional integration schemes and the flexible work that can be done through the SELA machinery.

### 3. *Options at the national level*

As already noted, it is impossible to specify a single ideal combination of economic policies at the national level. Most of the countries of the region, however, are taking decisions on four priority fronts, in regard to which we would like to make some comments.

#### (a) *External indebtedness*

The countries of the region have been turning to external indebtedness for various reasons. In many cases they have done this in order to cover the deficit in their external accounts, which are under pressure from imported inflation, the increase in the cost of energy or the process of external openness itself. In other cases, external indebtedness has been used to shore up domestic credit markets and finance the expansion of consumption and investment. In others, finally, external indebtedness has actually facilitated the flight of capital generated by the instability of domestic policies. Thus, the assessment of indebtedness policies in each country is obviously connected with the ultimate purpose of the external debt.

The lessons of the immediate past suggest that the current levels of this debt will oblige countries to be naturally selective in the area of external indebtedness. External credit, like the reduction of reserves, is a legitimate instrument to which countries may resort at critical points in the external cycle, such as the present time. Under the present circumstances, however, both the levels to which external indebtedness has risen and its very high cost point to the need for caution in its use.

The countries of the region have realized this, and hence, through various domestic policy approaches, they have managed to reduce

their trade deficit in recent years, even at the cost of sacrificing their level of domestic activity. However, it is obvious that the seriousness and duration of the international recession will make it necessary to resort to external debt in the years to come, with the above-mentioned reservations. On the other hand, this policy option should not be a cause for excessive concern, in view of the growth potential of the region and the vigorous export capacity shown in the past ten years.

Within this context, we believe that recourse to external financing should continue to be had, with—as mentioned before—greater participation by public credit. This is especially necessary in the current situation, since it would not only improve the debt profile but also be an additional incentive for the flow of private capital into the region.

#### (b) *Tariff policies*

In general terms, many countries of the region have applied policies in recent years aimed at increasing industrial efficiency through the restructuring and gradual reduction of their external tariffs. In essence this has involved the recognition, on the one hand, of the need for the developing countries to resort to tariff policies to support their newly created industries, at the same time as an admission, on the other hand, that this protection should have limits in time, whose specific dimensions must be defined in the economic policies by laying down the rate at which the tariff adjustments will take place.

In this area, the experiences of the region have been varied and show very different degrees of intensity.

In the present circumstances, however, these policies must be reconciled on the one hand with the international economic situation and the economic policies of the centres, and on the other, with other domestic economic policies. The international economic situation has created new factors conditioning the trade reform programmes on which some of the countries of the region have embarked. The advance of protectionist trends, the extent and intensity of the industrial centres' export promotion and subsidy policies, and even the exchange rate

fluctuations themselves make it imperative to revise the policies for restructuring and reducing tariffs being applied in our countries. In other words, the pace of this reform must be realistically reviewed in the light of the trends in international trade, so as to avoid unnecessary and intolerable costs for the domestic production apparatus.

#### (c) *Exchange policy*

Tariff reform policies should be accompanied by export promotion policies which legitimately defend the new and greater competitiveness of our countries and make it possible to consolidate the gains made in this area in international markets in recent years.

The management of exchange policies and the maintenance of realistic exchange rates are of special significance in this connexion. Naturally, these are particularly necessary in countries which have made significant reductions in their external tariffs. They are all the more indispensable in the current international economic situation, in order to maintain the competitiveness of both export industries and efficient import-substitution industries. Calling for realistic exchange rates, of course, does not mean denying that the mechanisms and forms of exchange policies are highly specific and depend on the overall economic policies and other determining factors particular to each country. However, as past experience clearly shows, the decisive role of exchange policies in export promotion and diversification must not be sacrificed by using exchange parity mainly as a policy instrument for short-term stabilization.

#### (d) *Public expenditure policies*

The inflationary pressures arising from the fiscal deficit have led many countries of the region to pursue rigorous objectives of fiscal austerity, which have meant significant cuts in public expenditures, particularly in investment.

Without disregarding the fundamental role played by fiscal austerity in any anti-inflation policy, we cannot help but point out the need to

reconcile this goal with other no less important social objectives.

The use of public expenditure for social purposes, particularly the defence of investments with a high employment content or with a heavy impact on the mobilization of idle resources, cannot be set aside in these times.

It is enough to recall on this occasion, the

policies applied in many Latin American countries during the 1930s, which —without of course overlooking the differences in time and in the nature of the economic problems— left a positive aftermath of social effects and above all helped to give vigorous support to the economic and industrial infrastructure of the region in that critical period.

## Conclusions

The greater external openness pursued in recent years has opened up new possibilities to the region in respect of its economic development policy, but it has also implied new and growing forms of vulnerability.

The recent changes in the international economic situation and the prevailing uncertainty and confusion make it difficult to forecast the future course of events. It is clear, however, that no country can avoid the cost of the adjustments being imposed by the international cycle. What must be done is to mobilize domestic resources to the maximum through appropriate policies in order to moderate or spread out over time the cost of the adjustments required.

In these circumstances, the adoption of flexible and pragmatic policies seems to be the only reasonable course of action. Only in this way will we be able to use the extraordinary defence potential available to the region and surmount the difficult current situation.

In this regard, it is worth recalling some lessons we have received as a legacy from the past.

Firstly, just as in the 1930s, it is not possible to leave domestic adjustment to the automatic forces of the international market. Although the importance of this market cannot be ignored, active economic policies are required on all fronts. Leaving adjustments to the influence of the unstable and sluggish international markets would involve extraordinarily high costs, both social and economic. It should be recalled that our economies are still weak entities whose capacity for social or economic endurance are limited. In the social area, de-

fending the levels of employment or applying policies aimed at satisfying the basic needs of the population are objectives of especially high priority in the present circumstances. In the economic field, the often inevitable impact of the international cycle on the economies of business enterprises is causing serious problems for the survival of the business sectors, which must be given the opportunity to make gradual adjustments over time in their search for economic and financial equilibrium.

Secondly, and as a corollary to the above, it is legitimate and necessary to highlight the objective of combating inflation, since the profound economic and social traumas which this phenomenon has caused and is still causing in the region are well known. But this objective cannot be totally exclusive. It must fit in with other equally important aims, such as the ability to compete internationally to defend our incipient industrial exporting sector, or the need to make sufficient social expenditure to achieve basic minimum employment and consumption objectives.

Thirdly, and while fully recognizing the importance of monetary policies, the complexity of the present times and the variety of objectives that must be pursued by economic policy indicate that such policy cannot be reduced to the use of purely monetary mechanisms. What is needed is to activate all the fronts and instruments of economic policy, particularly in the fiscal area, and make sure that income policies, which are so directly linked with the principles of fairness and justice, are not sacrificed *a priori* to the urgent demands of the current situation.

In conclusion, I should like to repeat that,

although we cannot disregard the severe difficulties of the present economic situation, we in CEPAL feel cautious optimism with regard to the near future.

We have dealt on other occasions with the more general problems of the region's economic development strategy in the medium and long term: a topic which was given particular emphasis at the CEPAL session in Montevideo in May 1981 and which was crystallized in the Development Strategy for the present decade.

The fact that we have limited ourselves on this occasion to more immediate problems does not mean, of course, that we could possibly forget the objectives whose fulfilment will provide the region with a future of vigorous growth and social progress, provided that international co-operation policies are duly mobilized, that the region recognizes the enormous development potential existing in regional co-operation, and that the domestic policies adopted succeed in overcoming the obstacles of the present in a pragmatic and flexible manner.

# Some CEPAL Publications

**Economic Survey of Latin America, 1980**, CEPAL, Santiago, Chile, 1981, 629 pages (United Nations Publication, Sales No. E.82.II.C.1).

The *Economic Survey of Latin America* is an annual publication whose main object is to describe the principal trends and the economic evolution of Latin America during the corresponding year. In Part One of the 1980 *Survey*, the general aspects of this evolution are presented with special attention to the international context, economic growth, the external sector and inflation, while in Part Two separate consideration is given to the events in 25 countries of the region. The third and final part of the *Survey* contains a special study of the economic development of Jamaica and Trinidad and Tobago in the 1970s.

In general terms, the *Survey* notes that owing to the effects of the adverse international situation the Latin American economy evolved less favourably in 1980 than during the preceding year, since the economic growth rate fell in the majority of the countries of the region while the situation with regard to the balance-of-payments disequilibria became more severe and external indebtedness rose sharply. At the same time, inflationary pressures persisted, so that continual and significant price rises (which had previously been a feature of only a small number of Latin American economies) became generalized throughout the region.

Some of these factors look different, however, if they are considered from a broader time perspective and, above all, if they are viewed in the light of the prevailing trends in the world economy during 1980.

Thus, although Latin America's economic growth rate of 6% in 1980 was somewhat lower than the 6.4% achieved in 1979, it was not only the highest growth rate recorded in 1980 in any major region of the Third World but also greatly exceeded the growth rates of the product achieved in that year both in the centrally planned economies (3.1%) and in the industrialized countries as a whole (1.5%). The annual increase in the product of slightly over 6% achieved by Latin America in the past two years, during which recessive tendencies again predominated in the world economy and international petroleum prices experienced a second substantial series of increases, was much greater than the growth rate of less than 4% recorded in 1975 when the previous recession in the world economy ended.

Naturally, the maintenance of this relatively high economic growth rate was partly responsible for the fact that the region's imports continued to expand very rapidly, and this in turn was a factor in the disequilibrium in the balance-of-payments current account. This deficit was also swollen by the tremendous rise in interest payments caused by the substantial increase in interest rates on the international financial markets in 1980 and by the rapid and

steady rise in the external debt of Latin America in the second half of the last decade. Finally, in the case of the petroleum-importing countries, the equilibrium of their external accounts was also affected by the increase in the international prices of hydrocarbons. Thus, the current account deficit of this group of countries rose in 1980 to the unprecedented amount of US\$ 23.4 billion, a figure 62% higher than that for the preceding year and almost three times the amount of the deficit recorded in 1978. Although this extraordinary expansion in the disequilibrium on current account was mitigated at the regional level by the reduction in the deficit of the Latin American petroleum-exporting countries, the current account deficit of the Latin American countries as a whole also rose in 1980, reaching the record level of over US\$ 27.7 billion.

Moreover, and in contrast to the performance in past years, the growth in the current transactions deficit of the balance of payments was not accompanied in 1980 by a bigger net flow of capital. In fact, the net inflow of financial resources into the region (US\$ 26 billion) was slightly lower than in 1979, thus interrupting the marked and virtually continuous upward trend established during the previous decade. Also in contrast with what had happened up to 1979, the net capital receipts of Latin America in 1980 were not enough to cover the deficit on current account, and consequently the region's balance of payments closed with a negative balance for the first time since 1962.

Furthermore, external indebtedness continued to grow rapidly in 1980, and it is estimated that at the end of the year Latin America's public and State-guaranteed external debt amounted to US\$ 130 billion, while the total gross debt (which also includes the non-guaranteed bank debt) amounted to US\$ 212 billion—nearly double what it had been only three years before.

**Regional programme of action for Latin America in the 1980s**, Cuadernos de la CEPAL series, No. 40, Santiago, Chile, 1981, 66 pages.

In accordance with the United Nations General Assembly resolution 35/36, in which the Third Development Decade was proclaimed, and with resolutions which have emerged from its own forums, CEPAL has contributed to the formulation of the new International Development Strategy for the 1980s. In line with this, during the nineteenth session of the Commission, held at Montevideo in 1981, consideration was given to the report of the fifth session of High-Level Government Experts and new material was incorporated into it; it was on this basis that the Regional Programme of Action for the implementation of the International Development Strategy for the Third United Nations Development Decade, contained in this *Cuaderno*, was formulated and adopted.

**Integración y cooperación regionales en los años ochenta**, (Regional integration and co-operation in the 1980s), *Estudios e Informes de la CEPAL series*, No. 8, Santiago, Chile, 1982, 174 pages (Spanish only).

This publication was prepared in order to provide a detailed picture of the present situation and future prospects of the integration schemes and co-operation activities in the region. It also served as background material for the

comprehensive document entitled *Latin American development in the 1980s* (E/CEPAL/G.1150) which was submitted to governments for their consideration at the nineteenth session of the Economic Commission for Latin America held at Montevideo, Uruguay, in May 1981. The study under review therefore supplements and enlarges upon the latter document.

In recent years there has been an extensive debate on the foundations and results of regional integration; this study therefore begins by presenting some facts concerning this topic in the light of the ideas linking integration with the form of insertion in the world economy and with the industrialization process.

It goes on to deal in general terms with the progress of integration in the region and then analyses the past development and future prospects of each of the integration schemes. It includes sections on the Latin American Economic System (SELA), the treaties on the River Plate and Amazon Basins, and the instruments of financial and monetary co-operation in effect in Latin America and the Caribbean.

The other forms of regional co-operation, which cover a wide variety of fields and approaches, are presented in chapter III, which is subdivided into sections on governmental co-operation and co-operation at the business level. This chapter seeks to show the considerable wealth of forms and mechanisms through which binational or multinational co-operation is expressed, and it thus represents an attempt to identify systematically the important links being formed among the countries of the region through the various co-operation agreements and activities.

Finally, suggestions are made concerning priority activities and areas for regional integration and co-operation. The action recommended and the fields selected may provide useful sign posts in the formulation of concerted programmes in these fields to help the institutions which administer the processes and the bodies working with them to focus their effects on the fields and instruments which the governments consider most appropriate for furthering the search for increased and more fruitful relations among the countries of the region.

**Estrategias de desarrollo sectorial para los años ochenta: Industria y Agricultura** (Sectoral development strategies for the 1980s: Industry and agriculture), **Estudios e Informes de la CEPAL** series, No. 9, 1981, 100 pages (Spanish only).

The two documents contained in this publication were prepared with the aim of supplementing and enlarging upon some of the topics dealt with in *Latin American development in the 1980s* (E/CEPAL/G.1150).

The first document, on industrial policy within the framework of the new International Development Strategy, refers in its various chapters to industrial development, the objectives, policies and goals of industrialization, and the instrumentation of the industrial policy, and analyses the main factors which will determine the industrial future of the countries of the region: external relations in all their aspects, including the forms (selective or otherwise) of assimilation and the patterns established by the advanced

countries; general economic and socio-political determinants; and the spheres of action of specific industrial policies.

The second document presents both a diagnostic study and an agricultural development strategy for the 1980s. It notes that Latin American agriculture offers a combination of possibilities which are gradually being exploited and as yet unresolved problems which may be getting worse. Clear and definite economic progress and a marked advance at the technological level are to be observed, both of them fostered by economic policy incentives, by the attractive, although selective, terms offered by expanding markets, and by the increasingly large investments financed with resources from a variety of origins. This material progress exists against a background of rural poverty, which is still the main negative feature of Latin American agriculture.

The study also describes the basic and supplementary objectives of agricultural development and the production growth targets set for Latin American agriculture in the 1980s, refers to the instrumentation of the programme of action, and presents some specific policy measures at the national and regional levels. In view of the variety of national situations, it is not possible to present an exhaustive analysis of policies, and for this reason the study refers only to a few areas where policies are required to tackle basic common problems.

**Experiencias de planificación regional en América Latina: Una teoría en busca de una práctica** (Experience in regional planning in Latin America). Published jointly by the Economic Commission for Latin America, the Latin American Institute for Economic and Social Planning and the Inter-American Planning Association, Santiago, Chile, 1981, 390 pages (Spanish only).

This book is a collection of some of the documents presented at the Seminar on National Regional Development Strategies held at Bogotá from 17 to 21 September 1979, which was organized by the Latin American Institute for Economic and Social Planning (ILPES) in conjunction with the Institute of Social Studies of The Hague (ISS), the Latin American Social Research Institute (ILDIS, Quito) and the University of the Andes at Bogotá (UNIANDES).

This seminar provided an excellent opportunity to assess the state of the theory and practice of regional planning, with emphasis on the forms they take in Latin America. Many of the documents presented at the meeting and the discussions which took place there were directed at the very foundations of regional development planning rather than specific aspects of this discipline. Thus, the tendency was to analyse the ideological and political parameters which define the possibility of making significant changes in the spatial operation of the Latin American economies rather than to consider specific procedures and techniques.

Consequently, the analysis focused on the way in which national regional development problems have been tackled in terms of government action. These experiences, and in particular the strategies which have emerged from them, were reviewed and discussed in order to try to identify the theories behind the strategy statements; the ele-

ments they share and those where they differ; the difficulties involved in their implementation; the explicit policies which have shaped the strategies, with analysis of the effectiveness of each of them; population, poverty and environmental problems which have been affected by the implementation of regional development strategies; and recommendations for improving the capacity of governments to design viable regional policies so as to tackle the problems of regional development in Latin America.

**PLANINDEX** (summaries of documents on planning), Vol. 2, No. 1, CLADES, July 1981.

This issue of PLANINDEX is one of the products of the "Information System for Planning in Latin America and the Caribbean" and is intended to keep its subscribers up to date on the studies, plans and research generated on the topic of development planning in the region. It is hoped that this publication will help to increase the knowledge of existing experience so as to avoid the duplication of effort in the planning field. The purpose of summarizing these studies and plans is precisely to promote the exchange of experience among countries as an effective aid to development.

With this publications and those which will follow it, it is sought to collect all the documentation produced in the region on this subject.

**CEPALINDEX** (summaries of CEPAL/ILPES documents, 2037-2372), Vol. 4, No. 1, CLADES, June 1981.

In this publication the Latin American Centre for Economic and Social Documentation (CLADES) continues its analysis and processing of the documentation prepared by CEPAL and ILPES, using the ISIS (Integrated Set of Information Systems) system. Its objective is to contribute to the transfer and exchange of socio-economic information by forming a data base of easy access.

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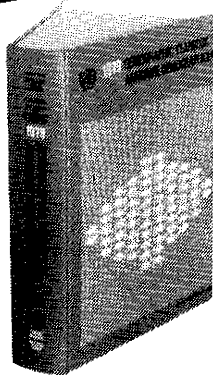
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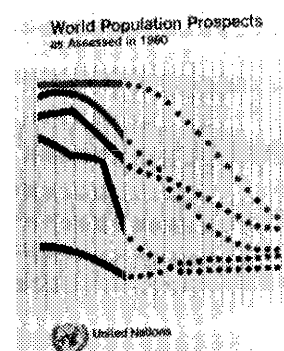
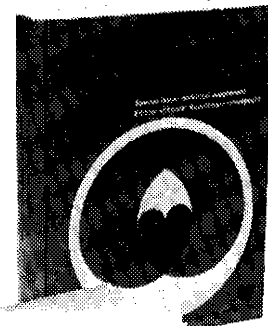
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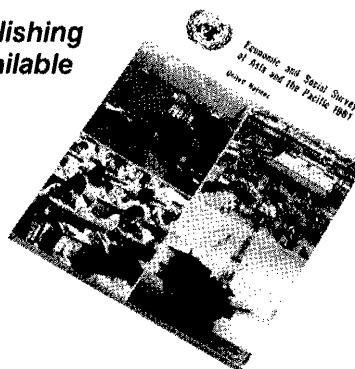


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