



UNITED NATIONS

E C L A C

ECONOMIC COMMISSION
FOR LATIN AMERICA AND
THE CARIBBEAN

GERT ROSENTHAL
Executive Secretary

CARLOS MASSAD
Deputy
Executive Secretary

CEPAL

REVIEW

NUMBER 49
APRIL 1993
SANTIAGO, CHILE

ANIBAL PINTO
Director

EUGENIO LAHERA
Technical Secretary



UNITED NATIONS

CEPAL Review is prepared by the Secretariat of the Economic Commission for Latin America and the Caribbean. The views expressed in the signed articles, including the contributions of Secretariat staff members, however, represent the personal opinion of the authors and do not necessarily reflect the views of the Organization. The designations employed and the presentation of material in this publication do not imply the expression of any opinion whatsoever on the part of the Secretariat concerning the legal status of any country, territory, city or area or its authorities, or concerning the delimitation of its frontiers or boundaries.

Notes and explanation of symbols

The following symbols are used in tables in the Review:

-
- (...)
-
- (—)
-
- A blank space in a table means that the item in question is not applicable.
-
- (-)
-
- (.)
-
- (/)
-
- (-)
-

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

LC/G.1757-P

April 1993

UNITED NATIONS PUBLICATION

ISSN 0251-2920

ISBN 92-1-121187-6

Applications for the right to reproduce this work or parts thereof are welcomed and should be sent to the Secretary of the Publications Board, United Nations Headquarters, New York, N.Y. 10017, U.S.A. Member States and their governmental institutions may reproduce this work without application, but are requested to mention the source and inform the United Nations of such reproduction.

C O N T E N T S

Women in the region: major changes	7
<i>Miriam Krawczyk</i>	
The Pacific Basin and Latin America	21
<i>Dae Won Choi</i>	
Strategic management, planning and budgets	41
<i>Juan M. F. Martín P. and Arturo Núñez del Prado</i>	
The internationalization of Latin American industrial firms	55
<i>Wilson Peres Núñez</i>	
Water property rights and the State: The United States experience	75
<i>Carl J. Bauer</i>	
Poverty and adjustment: the case of Honduras	91
<i>Jorge Navarro</i>	
The trade union system: its background and future prospects	103
<i>Fernando Calderón G.</i>	
Shaping competitiveness in the Chilean wood-processing industry	117
<i>Dirk Messner</i>	
Improving urban transport for the poor	139
<i>Ian Thomson</i>	
Privatizations and social welfare	155
<i>Robert Devlin</i>	
Guidelines for contributors to CEPAL Review	181
Recent ECLAC publications	183

Women

in the region:

major changes

Miriam Krawczyk

*Chief of the
Women and Development
Unit of the ECLAC
Social Development
Division*

This article addresses concerns relating to the promotion of the advancement of women within the framework of ECLAC's proposal for changing production patterns with social equity. Virtually all the countries of the region have ratified the mechanisms set up by the United Nations to help attain truly equal treatment for women. Women have already been integrated into society, but their position in it needs to be improved, bearing in mind the social role which most cultures assign to them as women. As a means of illustrating some of the ways in which the status of women in the region has changed, the author analyses their participation in the spheres of employment, education and health. It is noted that women's growing participation in gainful employment is part of a structural trend that will continue to grow more marked in the future, despite the striking differences between the contexts in which women perform their productive and reproductive roles. In the field of education, enrolment continues to rise and male and female enrolment rates are starting to converge, but the distribution of women among the various fields of study has changed very little. Wage discrimination persists (women need to have had about four more years of formal education than men to earn as much) and most school textbooks continue to transmit images that militate against participation by men and women on a more equal footing. With regard to reproduction, the conscious separation of sexuality from reproduction, which until recently was not possible for women, is associated with free choice and the search for more effective birth control methods. Although most women in the region do not have access to contraceptives—due to lack of information and the cost involved—the average number of children per woman has dropped from 5.9 in 1950-1955 to 3.4 in 1985-1990. The modernization process inherent in today's new development styles has opened up new vistas for women through education, gainful employment, shared codes of communication and the spread of pro-choice models. The question which arises is whether all this will help to alter traditional power relationships, permit the formation of new types of links between the public and private spheres of activity, and promote more equitable interpersonal relationships, especially between men and women.

I

Women and changing production patterns with social equity

Strictly speaking, the status of women should no longer be studied as a separate topic within the broader subject of population, since all population variables affect women and vice versa: human reproduction, population shifts, economic and social development, and the cultural, ethnic and generational aspects of population. In practice, however, there are at least two reasons for doing so: to heighten concern for Latin American and Caribbean women in areas that are essential to the aim of greater social equity and in which women occupy a subordinate position despite their obviously central role; and to ensure that attitudes that take due account of gender begin to permeate all the various aspects of development, including population.

Today, in addition to sweeping technological change, we are witnessing thorough-going changes in the way our societies –including, of course, women and the roles they play– are being perceived. Our thinking and the way we look at things are apparently starting to change. The weakening of the major ideologies that had served up cosmo-visions of the world and the secularization accompanying modern-day life, at least in the Western model, are making room for new theories, cultural models and forms of interpersonal interaction, for a different kind of relationship between the public and private spheres and between economics and ethical considerations, and for a notion of democracy that involves a broader concept of citizenship. Within this new framework, it is essential that we redefine the relationship between gender, modernity and culture.

Any attempt to conduct research on the status of women runs up against well-known problems with regard to the availability of statistical information and the persistent gaps in that information. As long ago as 1979, C. Borsotti asserted that the pivotal questions involved in the formation of an appropriate conceptual framework for analysis and action relating to the status of women and their integration into development were: the exact definition of the type of social entity that women constitute; the links between

domestic units and the overall socioeconomic structure; sexual stereotypes, and cultural patterns (ECLAC, 1979). Although there has been a good deal of progress in each of these areas, much work remains to be done in order to link them up to one another and thereby get to the root of the problems associated with the positions that people –both men and women– occupy in society, including their empowerment or lack thereof within a context of changing production patterns with social equity.

There is a great difference between the *de jure* and *de facto* situations with regard to equality for women in the region, despite the fact that the instruments and mechanisms established by the United Nations for the advancement of women have been ratified by all the countries of the region except one.

By definition, ECLAC's proposal for changing production patterns with social equity, which advocates the concertation of strategies and consensus-building as an avenue to development within a democratic framework, incorporates the principle of respect for individuals' civil rights, including, of course, women's rights to participate in society and in the sharing of power on an equal footing and to have children or not, according to their own personal convictions. The effort to change production patterns with social equity, including cross-gender equity, takes the most innovative schools of current thought and incorporates into them ethical considerations which will contribute to the formation of the desired types of societies.

In this setting, population policies and gender-based considerations can play a new and different role in the region whereby they may help ensure that the long-standing tension –and even conflict– between State policy and the rights of the individual gives way to a form of complementarity. Progress in this regard has not come easily. Although it is generally agreed that rapid population growth hinders development, policies designed to regulate that growth –and especially those relating to fertility– have always involved certain political, ideological and religious values. In

fact, human reproduction is perhaps the subject in which we see the most complex entanglement of the most intimate and private affairs of the individual with the overall views of society.

The way in which women's issues have evolved has also entailed similar tensions at various points along the way; at present, a debate is in progress on the limitations of the concept of the "integration of women into development", which seemed a natural framework for consideration of these issues. Some contend that there has been no conceptual integration and that women's issues have, as a rule, been an "add-on" to the main development issues. It is also asserted that measures designed to "integrate" women have often only increased the marginalization both of the subject and of women themselves, and furthermore it is noted that, although the approach used thus far has indeed brought out many essential aspects of the situation, it suffers from major theoretical shortcomings: no matter how broadly the concept of development may be defined, the economic indicators used to measure it will invariably refer to the production of goods, and women's preponderant contribution to reproduction and to such other unpaid "services" as health care, food preparation and child-rearing will therefore remain invisible (Elson, 1991).

The predominant line of reasoning on this point today is that women are in fact an integral part of society, so that what must be done now is to improve their status in it, not only in terms of the position they occupy within society by virtue of the socioeconomic stratum to which they belong, but also as regards their culturally-assigned social role as women. It is now recognized that it will not be possible to achieve development, in the broad sense of the word (i.e., in ways that go beyond economic growth), unless an improvement is made in the social status of women (United Nations, 1992).

Although we cannot yet say that gender-based analysis now constitutes an adequately systematized body of theory, the large number and wide variety of studies conducted in recent years have generated new information about the status of women and their position within society. Studies specifically on women, as well as the attempts being made to formulate a theory of society capable of describing and explaining subordination as a cultural trait, have made significant contributions (although much remains to be done) to our pool of information on the status of women and our understanding of this subject. For example, gender

concepts and categories are sometimes used with reference to both men and women alike, while on other occasions they are used merely as synonyms for "sex" or "women" rather than to refer to a complex social construct. However, studies of social status from a gender perspective as well as analyses of social relations or the theory of power structures have helped not only to provide more information about women but also to identify more significant types of links between this subject and the more general aspects of society and to delineate those links more clearly. Today, the idea that development affects (either positively or negatively) men and women differently is much more widely accepted and easier to grasp (Portocarrero, 1990).

Organizations within the United Nations system, especially those with mandates that specifically concern women, have also been making major theoretical and practical efforts in recent years to incorporate the gender dimension into their activities.

Emphasis has been placed on the above aspects here because they have played such an important role in the conceptual maturation of the approach taken to women's issues and in the consensus that is being built in this regard. The variety and depth of the proposals put forward, the sum of the activities conducted, the strengths and weaknesses of the concept of women's integration into development, the incorporation of the dimension of gender, and the idea that women's issues should be included in more global processes provide a solid foundation for efforts to begin designing more fully integrated policies. This emphasis on the importance of examining the agreements reached in respect of women's issues and seeking to strengthen them still further should not, however, be construed as an attempt to play down the theoretical, political, value-based, religious, ethnic or other types of differences that undoubtedly exist and will inevitably continue to do so in the future.

Finally, the great majority of women who are in vulnerable positions within society should be accorded priority attention. Women heads of household, teenage mothers, refugee and displaced women, women migrants and older women are perhaps the most vulnerable of these groups, as they live under conditions of poverty, are open to all types of harassment and discrimination, and are unable—either in relative or absolute terms—to obtain proper education, suitable jobs or training or, in most cases, to exercise their reproductive rights.

II

The regional setting

The changes which have taken place in the region in the space of just a few decades have totally transformed Latin America's economic, sociopolitical and cultural profile as well as its patterns of personal and political relations. We might say that there has been a change not only in the objective situation but also in the way we look at it. The long, severe crisis of the 1980s made it necessary to "re-think" the future, which was seen to be fragile and uncertain, and to interpret reality on a new basis. Within this context, the ECLAC proposal for changing production patterns with social equity has provided a framework that is flexible enough to incorporate due consideration for matters of concern to women, including the issue of equity between the sexes and the need for more solidly-based measures, more fully integrated into general and sectoral public policy (ECLAC, 1990b).

These changes have significantly affected the status of women in Latin America and the Caribbean. Women's increasing presence in education and the labour force, the legal consolidation of their citizenship through women's suffrage, and the growing social acceptance of women in politics and public life are changes whose impact transcends economics and politics and is beginning to be reflected in new cultural patterns. The increase in life expectancy—which gives women what almost amounts to another whole "lifetime" after their child-bearing and child-rearing days are over—and the greater availability of birth control methods have given Latin American women new life choices and opportunities for exercising their rights more fully than in the past. Although the Latin American and Caribbean region is very heterogeneous and exhibits striking national differences that have a significant effect both on the status of women and on the pace of change, the direction of change appears irreversible (ECLAC, 1990a), and its impact on the women of the region goes far beyond what the figures have to tell us. The possibility of separating sexuality from reproduction and choosing, with some degree of certainty, whether or not to have children is still a very recent development on the Latin American scene. Although these changes are more apparent among educated, urban middle- and upper-income

groups, the pro-choice model has begun to make its influence felt in all sectors of society (CELADE, 1992).

The heterogeneity of the region and the implications this has for democracy pose one of the most formidable and urgent challenges that must be faced today. Although the countries have certain elements in common, each of them has gone through its own particular development process. The coexistence of different ethnic and cultural groups, the different types of policies applied and the varying degrees of modernization attained at more or less early stages of the process have served to form individual profiles and have created a wide range of situations in the region which will surely have to be resolved in different ways by each country.

This heterogeneity is also reflected in varying forms of participation by women. One aspect which should be studied in greater depth is the type of relationship that must exist between women and democracy in order to uphold the rights of the individual and, hence, social equity. Time and time again, the region has seen women band together in opposition to authoritarian governments through social movements and women's organizations which, however, then tend to become diluted in the course of the democratic process as it is channeled through political parties.

Given the region's structural heterogeneity, the wave of modernization that is increasingly permeating the regional model is not necessarily linked to democracy or economic growth. New options may lead to more freedom or less freedom; they may heighten economic problems and destabilize democratic processes. Nevertheless, the modernization implicit in those options has at the same time triggered the large-scale entry of women into education, gainful employment, shared codes of communication and the dissemination of pro-choice—or at least different—models. The question arises, however, as to whether modernity helps alter traditional power relationships, whether it makes possible new types of links between the public and private spheres, and whether it contributes to the emergence of more equitable interpersonal relationships, especially between men and women.

III

Women and employment

Employment, together with education and health, has been one of the highest-priority issues for women ever since the United Nations Decade for Women. In addition to placing women within a more global context, these issues influence women's behaviour, conditions and position within society and have a major impact on demographic variables, particularly fertility.

The analyses conducted in recent years show that women's increasing participation in gainful forms of employment has become a structural trend that will continue its upward path in the future. During the 1980s, women's participation in the labour market jumped from 18.83% to 22.03%, and they accounted for 37% of the growth in the economically active population during that decade (CELADE, 1992).

The increased economic activity of women has been a significant factor in the expansion of employment in lower-productivity activities, both in small businesses and in informal enterprises; this is largely a result of the big and mid-sized companies' tendency to subcontract work to small businesses, rather than hiring permanent or temporary staff, as a way of getting round labour laws.

In La Paz, for example, a growing number of women are engaging in own-account commercial microenterprises as part of their survival strategies; these businesses are often run out of their own homes or in open-air markets and city streets, and they mainly involve the sale of products (especially food) included in the basic shopping basket; the intense competition within this sector tends to hold down income levels, particularly in the case of most street vendors (Silva, 1988). In Jamaica, a very large percentage of own-account workers are women who work as vendors of farm produce, street vendors or illegal traders; the women of Jamaica's informal sector are generally middle-aged, of rural origin (although they are becoming increasingly urbanized), and work alone, with very little help from their families (Mesa-Lago, 1990).

It is often said that employment influences women's fertility rates, gives them greater autonomy, boosts their self-esteem, helps to make them

economically independent, gives them a sense of their worth as individuals and permits them to exert control over their own bodies. The foregoing is true in conceptual, theoretical terms, within the context of what Marshall Wolfe called "significant activities"; but in the case of Latin American and Caribbean women, the difficulties entailed in the types of employment to which they have access must not be underestimated.

Moreover, some authors contend that in the developing world there are enormous differences between the environments in which women perform their productive and reproductive roles, and this plays a part in determining how they will interact. A woman's educational level—especially if it is high—has a strong influence on the types of job opportunities open to her. In heavily biased societies, women mainly participate at the two extremes of the spectrum: in the modern sector, and in the most poorly paid segments of the domestic-service and informal sectors. Another highly influential factor in terms of the options open to women has been the fact that their work outside the home must be compatible with their child-rearing responsibilities, and this also continues to influence (although to a diminishing extent as time goes by) cultural attitudes to working women.

The work performed by women—whether paid or not—continues to be underestimated by official statistics because of the types of positions occupied by women in the labour force, the way in which economic activities are defined, and certain aspects of census-taking procedures, all of which are linked to cultural assumptions regarding the sexual division of labour. Although efforts have been made to rectify this state of affairs since the very outset of the United Nations Decade for Women, little has been achieved in this connection except a greater awareness of the problem. A recent study on the subject found that the types of censuses usually conducted in Latin America provide reliable data on the male labour force but that much of the information they supply regarding the female labour force is unreliable, especially in rural areas of the least developed countries. Using the same

definitions of economic activity as those used by the censuses, but with certain procedural modifications, this study was able to show that five-sixths of peasant women and one-half of urban women were under-represented, while only one-tenth of the men were affected by this statistical flaw. Other studies based on the number of hours worked have found that women in developing countries work between 12 and 13 hours more per week than men (Wainermann, 1992).

On the subject of wage discrimination, the most recent household surveys for six countries of the region indicate that during the second half of the 1980s the incomes of women with nine years of schooling

were lower than those of men who had attended school for only five years. Another study found that, although economically active women in Latin America and the Caribbean have had more schooling than their male counterparts, their rising levels of education and of employment in non-manual activities have not brought any improvement in their incomes (Sojo, 1992). The same author also asserts that women's higher employment rates should be considered in the light of striking differences in wages and discrimination, and that these factors are more marked among older women and, in every case studied, increase in severity as one moves up the educational scale.

IV

Women and education

The region's enrolment rates continue to rise, and the male and female rates are tending towards parity. At present, over half of the young women between 15 and 19 years of age have completed their elementary education. In 1985, women accounted for about 45% of enrolment in institutions of higher education, and they outnumbered men in this respect in 45% of the countries, but in contrast, illiteracy among the female population in rural areas continued to fluctuate between 19.2% and 48% in that same year. The distribution of women among the various fields of study has changed very little; although the percentage of women in engineering-related courses of study climbed to 8% in 1985, the figure for the social sciences and teaching fields still ranged from 60% to 70%. Women have less chance of attaining high academic positions, and they must have had more years of formal education than men in order to gain access to the same jobs. As mentioned earlier, wage discrimination is reflected in the fact that in order for a woman to earn as much as a man, she will need to have about four more years of formal education than her male counterpart; this wage gap narrows as one moves down the educational scale. Finally, despite the many changes that have occurred, school textbooks continue to transmit images that highlight women's role in the home, thereby working against the formation of a broader perception of women's roles and, hence,

discouraging women from attempting to participate on an equal footing with men.

The figures still show in no uncertain terms that education exerts a very strong influence upon demographic trends, since it affects the variables which produce demographic changes. The population's rising level of education and the improvement of its living conditions have played a pivotal role in bringing down the rate of infant mortality. Studies on the link between a mother's educational level and the variables of fertility and infant mortality have found an inverse relationship in every case. It is generally agreed that education affects reproductive behaviour by, in particular, influencing the formation and spread of attitudes, values and beliefs having to do with what is viewed as being a desirable family size. In the region it has been observed that more highly educated women tend to marry later and usually have fewer children. Education must not, however, be regarded as the only policy tool in this field, because its immediate effects are not known, depending as they do on the content of the instruction received and on interactions with the rest of the social system.

There are some indications that the influence of education may be declining, while at the same time the significance of education in itself and its efficacy as a factor of upward social mobility seem to be changing. As the educational system's coverage

expands, higher and higher levels of education are needed in order to open the door to a better job and standard of living. Education's influence on fertility may also have been weakened by such factors as increased knowledge of and access to contraceptives and the information provided by the social media. It must also be borne in mind that the region has already experienced a very substantial decrease in women's fertility rates, and that education has probably had a great deal to do with that drop. What is happening is that the fertility rates of less educated women are now falling as well, which makes the differences of magnitude seem less striking.

It should be remembered that, in the region, the large-scale entry of women into education took place between 1950 and 1980. During this period, there was a steady expansion of the formal educational system, scientific and technological research capabilities, and vocational training, side by side with rapid urbanization and a huge increase in women's participation in the labour market. Even though the expansion of the formal educational system was a regionwide phenomenon, it only heightened the existing heterogeneity and was not accompanied by any improvement in the quality of instruction; this was reflected in some of the highest repetition rates in the entire world (46% in first grade). The decline in the quality of education, which became even more marked in the 1980s, was due, *inter alia*, to poor living conditions, a deterioration in the supply of teaching services, cuts in government spending on education, and the use of outdated curricula.

All this indicates that a major effort should certainly be mounted to upgrade the quality of education in the region. This initiative should go beyond the mere question of coverage and seek to determine just how suitable the type of education being given today will be for the kind of society that will take shape in the near future. Changes in production paradigms and our increasingly globalized world view call for a very different type of education from that given today, which is mainly geared to the needs of the past rather than the needs that are likely to exist in the twenty-first century. Flexibility, know-how, mental breadth, continuing education, independence and creativity will be essential components of this new kind of education.

The new educational strategy proposed by ECLAC and UNESCO calls for educational reform, the building of a consensus among all the relevant actors in the public and private sectors, strategic coordination in combination with decentralization and, as regards content, a guarantee that future generations will enjoy universal access to the codes of the modern-day world, the formation of an open institutional structure and the promotion of creativity. In order to accomplish this, the whole of society will have to make a financial commitment and accord high priority to the promotion of regional cooperation in the field of education (Ottone, 1991).

Within this context, education is a key factor in helping women to gain a different kind of place for themselves in society, and it is essential that the substance of the educational process should be redesigned so as to promote more equitable interpersonal relations. The influence of women's educational level on their fertility rates, the quality of their children's lives and their job opportunities has been well documented. However, thus far little thought has been devoted to the type of education demanded by the models of the future –i.e., a participatory, flexible, non-hierarchical, non-authoritarian form of education capable of eliciting change and inspiring creativity, innovative thinking and initiative. Latin American and Caribbean women have had experiences of this type only in the context of women's movements, women's organizations or psychological counseling. An education of the sort proposed by ECLAC and UNESCO could prepare them much better not only to obtain new types of jobs but also to develop greater decision-making capabilities and attain greater autonomy and freedom in all areas of their civic and family lives.

In seeking to improve the status of women, two very important aspects must not be overlooked: although during its early stages the content of education as it now stands does encourage the participation of women by giving them access to shared, universal codes, later on it reinforces existing stereotypes regarding women's role in society and distorts their role within the labour market. Consequently, changing the educational process so that it will not perpetuate sexual discrimination is an essential step in improving women's place in society.

V

Health and women's right to control their own fertility

Women's health is influenced by their socioeconomic status, biological factors and elements relating to their position and role in society. Their rights should therefore include effective access to health services and to reproductive health aid –i.e., the right to avoid unwanted pregnancies and, on the other hand, to be pregnant and give birth under the safest possible conditions. These rights, which relate to the most intimate aspects of life, must be set forth in public policies and, as part of the democratic process, provision must be made for the people who will be affected by those policies to have a say in their formulation. Demographic changes and a recognition of women's right to control their own fertility therefore have important implications when health is defined as a harmonious balance of an individual's physical and psychological functions that is closely related to the basic conditions under which that individual lives.

1. Demographic change

Demographic statistics have perhaps been the clearest indicators of one of the major changes that occurred in women's lives during the 1980s: notwithstanding the existence of differences between and within countries, these figures show that, in general, during that period women were in the midst of a phase of demographic transition marked by declining fertility and mortality. The average annual population growth rate during the 1980s was 2.0%, and estimates show it falling to 1.7% during the 1990s; this means that the average number of children per woman dropped from 5.9 in 1950-1955 to 3.4 in 1985-1990, with the lowest fertility rates being those of the most highly educated urban women (CELADE, 1992).

Sharp differences have also been observed among subregions. The lowest fertility rates overall were found in the Caribbean, while the highest were registered in Central America, although Central America also experienced the steepest decrease in fertility rates between 1965-1970 and 1985-1990. The exceptions to the above were the rates for Costa Rica

and Panama in the Central American subregion, for Uruguay, Argentina and Chile in South America, and for Haiti in the Caribbean.

The incidence of pregnancy is becoming increasingly concentrated (70%) in the 20-35 year age group. The high-risk groups still form a significant proportion of the whole (25%-30%), with a particularly notable increase among adolescents but a reduction in fertility among older women. In the Caribbean, teenage pregnancies climbed from about 20% of the total at the start of the 1950s to 30% in the early 1980s, but then declined to between 15% and 20% by the end of that decade. It has not yet been determined whether these figures constitute a trend or not, however (Boland, 1992). Multiparity has decreased in the region as a whole, but 50% of all women still have more than four children. There is little reliable information on birth spacing, since figures on abortions are not available (PAHO/WHO, 1990).

It is impossible to determine the precise causes of these changes, since we do not have detailed information about the unwritten rules governing preceding models. The above figures are probably the outcome of a number of different factors, including: i) the birth control policies and programmes implemented in the region over the past few decades; ii) the different sort of cultural model that has been spreading throughout the region since the introduction of television, in whose programmes small families are portrayed as the norm; iii) urbanization and the increasing incompatibility between women's paid and unpaid work, due to the lack of preschool child-care assistance and infrastructure in almost all the countries; iv) new consumption models which place greater importance on the acquisition of material goods, and v) the needs and desires of women themselves, who did not participate, either as individuals or as members of organized groups or social movements, in the design or implementation of these programmes.

2. Contraception

The changes that have occurred in respect of human reproduction during the twentieth century have been

overwhelming. Although all cultures have used some form of birth control, it appears that efforts to address this issue have now assumed an entirely new dimension, involving free choice for individuals (particularly women), along with a conscious separation of sexuality from reproduction (that is to say, for women, since this separation already existed in the case of men) and a search for more effective birth control methods.

The possibility of engaging in sex with some degree of certainty that it will not lead to procreation has been an aspiration of people for a very long time. There are a number of mostly qualitative anthropological studies which illustrate these practices in the past. The rhythm method, early withdrawal, abortion, concealed infanticide, abstinence and some forms of condoms were apparently the most commonly used, or at least the best-documented, contraceptive methods in the past, but we cannot determine the scale or significance of their use with any degree of certainty. The large number of deaths (especially among women and young children) caused by plagues, other infectious diseases and childbirth-related complications was the most important, and most dramatic, regulator of population growth. It is interesting to note that, unlike modern methods of contraception, most of which are designed for use by women, some of the traditional systems placed the greatest share of responsibility on the man.

Current figures on contraceptive use in the region reflect striking differences from one country to the next (from 7% in Haiti to 70% in Costa Rica and Puerto Rico). The most recent statistics indicate that over 60% of married women use contraceptives in Brazil and Colombia but less than 30% do so in Guatemala. The main differences stem from such factors as economic stratum, educational level, age, the country's level of development, and the prevailing kind of health care policy, since contraceptive use is categorized as a health issue. According to some estimates, between the mid-1970s and the mid-1980s contraceptive use rose from 36% to 49% in Latin America.

In the beginning, the issue was highly controversial. Some groups objected to the idea of the region borrowing models of reproductive behaviour from developed countries; others took exception to the implementation of family planning programmes that were contingent upon funding from the "beneficiary" countries themselves. In some circles, the debate revolved around the religious beliefs of the majority of

the population; in others, there was concern about the diversity of reproductive behaviour patterns in the region, the indiscriminate sterilization of certain groups of women, and many other questions. There is now an international legal instrument—the Convention on the Elimination of All Forms of Discrimination against Women (United Nations, 1979)—which voices a consensus on the need to ensure free choice for all individuals. In this context, free choice means socially and politically free choice based on a participatory approach and unconditional respect for plurality and differences on the part of all social actors; in other words, it is free choice based on a renewed appreciation for the value of democracy as a political model.

The World Health Organization (WHO) has said that the fact that a woman can now control her own fertility is probably one of the most important events in the history of women (WHO, 1980, p. 13), and the Nairobi Forward-looking Strategies state that a woman's ability to control her own fertility constitutes an important basis for the exercise of other rights. This is tantamount, at least in formal terms, to an acknowledgement of women's right to control their own fertility (United Nations, 1985).

Thus, we have moved from a situation in which women's fertility was controlled in the name of a "higher purpose", and they played little or no part in decision-making, to a situation where women are—at least formally—free to regulate their fertility. They are also given almost total responsibility for the reproduction of new generations, however. Granted, this is not stated explicitly, but if we take a look at how fertility is currently regulated in the region, we will find that in nearly 80% of all cases it is women who are responsible for contraception (PAHO/WHO, 1990). In fact, more recent data obtained from population and health surveys put the figure even higher (nearly 90%) in some countries.

It should be noted that although the literature on fertility-related behaviour usually talks about the "population", almost all the available information has actually been supplied by women, since all the health and fertility surveys are directed exclusively at women. It would be of interest at some future date to analyse the significance of a body of information that reflects solely the views of women on an issue which is at once so private a matter, yet at the same time such a subject of public concern as is the reproduction of human societies—a question which involves not individuals, but couples.

The contraceptive methods currently in use are sterilization, medication, intrauterine devices (IUDs), implants, condoms and vaginal methods. The traditional systems on which the most statistics have been compiled are the rhythm method and early withdrawal. Obviously, of all these methods, only early withdrawal and condoms place the main responsibility for avoiding pregnancy on men; all the others are the woman's responsibility. Another way of regulating fertility that is used in the region is abortion, which will be discussed later.

The most widely used of all of these systems in Latin America, as well as in the other developing countries, during the past decade has been the sterilization of women, which as of 1983 was applied to 36% of the women with active sex lives who were seeking to regulate their fertility (PAHO/WHO, 1990). In fact, more recent figures indicate that in some countries of the region the rates are now far higher than that 1983 regional average, with the Dominican Republic, El Salvador and Brazil registering sterilization rates of 65.8%, 63.8% and 40.4%, respectively, of the total number of female contraception users. Male sterilization has begun to have some impact, but in Latin America (with the exception of Puerto Rico, where the figure has reached 4%) the rates have remained below 1%, so that they do not even begin to measure up to female sterilization rates.

Given these figures, the question arises as to whether sterilization as a means of limiting the number of children is a contraceptive method comparable with those which only seek to space out births. It is true that, in terms of risk and under appropriate conditions, sterilization is a relatively more economical method, since it involves a single one-time cost; in addition, it affords complete security and probably has no physical side effects. However, in view of the fact that this method's use has become so widespread among fertile women with active sex lives, we might ask ourselves whether this irreversible decision—the facts show that it is indeed irreversible for the great majority of sterilized women—actually represents the result of true freedom of choice. It is one thing for a woman who is exhausted by the double workday with which she is saddled when she is raising her children—as is the case of the immense majority of women in the region—to express her conscious and definitive desire never to have any more children, and quite another for her to give that “never” a concrete

expression, especially within the cultural and social milieu of Latin America and the Caribbean, where these women will continue to live for many years to come. If it were an option chosen only by women whose age exposed them to possible high-risk pregnancies, it would be much more understandable, but most of these women are quite young, in an age group for which the future should hold many more “free choices”. It is important for this phenomenon to be analysed in greater depth; it is not simply a question of examining the programmes that are set up or the type of education and information given to women, but rather of determining to what extent they could perhaps envisage using other methods. The best known methods are the so-called “modern” ones, among them the “pill” and female sterilization.

The use of traditional methods has been declining considerably in comparison to modern methods. Although in Bolivia and Peru traditional methods are still the most widespread, in countries such as Colombia and Mexico they account for only a negligible percentage of total contraceptive use. The predominance of modern methods in such countries as Brazil, the Dominican Republic and even Guatemala, which has a low rate of contraceptive use, attests to the impact of the campaigns that have been launched to promote the use of particular methods.

According to recent figures, the demand for contraceptives on the part of women of childbearing age ranges from over 80% (Brazil and Colombia) to scarcely more than 50% (Guatemala). Although a substantial part of that demand is not being satisfied (in Bolivia, 35.2% of the women—mostly rural women and uneducated women—are not having their contraceptive needs met (Westoff and Ochoa, 1991)), the figures none the less indicate that the trend already is and will continue to be one of fewer births or perhaps, in some sectors, even no births at all.

There appears to be a need for a more in-depth study of the concept of demand so that we can determine how it is linked to class, ethnic group and culture and identify women's actual needs. People usually turn to what is most familiar to them, and in order to exercise their right to free choice, women should therefore have genuine access to all the information that has been compiled on the various methods, as well as to the methods themselves. If it is indeed true that a majority of the women in the region wish to limit the number of children they have rather

than simply spacing out those births, then the demand for contraceptives should be greater. This desire is also to be observed among young adult women, who, rather than simply spacing out their pregnancies, want to prevent any future births once they have had the number of children they wish (Westoff and Ochoa, 1991).

Although the subject of contraception has been addressed in many different ways, involving a variety of actors and numerous contradictions—which is why the available information on the topic is so fragmentary—there is clearly a very large and very explicit unsatisfied demand for contraceptives. Contraceptives are, in fact, inaccessible for a large majority of women due to lack of information and the cost of modern methods.

3. Abortion

Today it is generally agreed that abortion is not an acceptable means of contraception; nevertheless, the extent of this practice and its impact in terms of the physical and psychological injury done to many women who submit to this procedure under extremely substandard conditions merit our concern. The outcome of efforts to attain a suitable system of birth control will largely hinge upon a better appreciation of the complexities associated with decisions regarding birth control options, along with assured access to other possibilities. Sexual conduct and reproductive behaviour have sources and implications that go far beyond any single rationale, transcending ideological, geographic, linguistic and religious boundaries (David, 1974).

Induced abortion is one of the issues about which there is least information and most ambivalence. Some experts contend that abortion as a form of birth control is as old as the human race and has probably been practised in all cultures. Throughout history, women have chosen to abort undesired pregnancies, regardless of moral or legal sanctions and, frequently, at considerable physical and psychological risk (David, 1974).

At present, official statistics are available only on legal abortions in countries that have passed laws—starting, for the most part, in the 1930s—to lift restrictions on abortion. There are no reliable figures on illegal abortions, however, and this hinders the formation of informed opinions on the subject. The current laws concerning abortion range from total prohibition

to selective authorization at the request of the pregnant woman concerned. About 10% of the world's population live in countries where abortion is illegal; 18% live in countries where it is permitted only if the life of the pregnant woman is in danger; and 39% live in countries where abortion is permitted upon the woman's request.

Unconditional opposition to abortion is a position taken by conservative groups, primarily on religious and moral grounds. Although the Catholic Church has perhaps been the strongest opponent to abortion in the last few centuries, its position is shared by some Moslems, fundamentalist Protestants and orthodox Jews (David, 1974).

Cuba is the only country in the region where abortions are performed as part of government-provided health services. In 1974, Cuba recorded an overall rate of nearly 70 abortions per 1,000 women between the ages of 15 and 44; during the five-year period from 1974 to 1980, that rate dropped by 21% and the number of births fell by 33%, which would seem to indicate increased use of contraceptives. The abortion rate is believed to be higher in other countries and is thought to be on the rise, especially in urban areas (Tietze, 1987).

The circumstances under which abortion is permitted differ from country to country. In the Scandinavian countries, it is allowed primarily for medical, eugenic (including mental illness and hereditary diseases), legal and medico-social reasons. Abortion—during the first three months and under no circumstances after the eighteenth week—is also permitted on demand for women over 38 - 40 years of age and for women who have four or more children living. In the rest of Europe, abortion was restricted until the mid-1970s; thereafter it was permitted, and is now complemented by personal, psychological and family counseling. Interpretations in this regard tend to vary, and the methods employed differ as well. The most commonly used methods are instrumental extraction through the vaginal canal, uterine surgery and medication-induced uterine contractions. In Latin America, legal grounds for an abortion range from specific medical reasons only (for example, if the woman's life is in danger), to narrowly-defined medical reasons, broadly-defined medical reasons, eugenic considerations and, in some countries, legal, social and medico-social reasons (Tietze, 1987).

Interventions by persons with no medical training are particularly common in countries where abortion

is illegal; these include magic spells, traditional medicaments (some of them toxic) and traumatic procedures designed to destroy the embryo or fetus, after which its expulsion is left to nature. The most common method of all is the introduction of a foreign body into the uterus (Tietze, 1987). This type of abortion, usually performed with unsterilized instruments under unhygienic conditions, leads to such complications as hemorrhaging and sepsis which, unless the woman receives proper medical care, can result in her death. Indeed, this is the cause of 54% of all maternal mortality in Trinidad and Tobago, over 35% in

Argentina and Chile, and 25% in Uruguay and Venezuela (PAHO/WHO, 1990).

There is a clear lack of adequate legislation in this area to protect women's physical and mental health, and this is reflected in the statistics on maternal mortality, in the fact that the number of abortions exceeds the estimated figures (illegal abortions are concealed and induced abortions are recorded as miscarriages), and in a whole range of problems mostly associated with certain socioeconomic strata, since well-to-do women in the region are able to obtain abortions under satisfactory medical conditions.

VI

Conclusions

Women's issues and their relationship to development form part of a sweeping process of change involving modifications in the way the developed and developing worlds relate to one another, a process of economic internationalization of unprecedented proportions, the breakdown of ideological polarization, and a renewed appreciation of democracy as an almost inherent part of human development. All of this is taking place at a time marked by widening disparities between economic and social progress, the exclusion of large contingents of the population from the benefits of that progress, and the physical deterioration of our planet. For women, the basic issue is no longer their integration into development *per se*, but rather what form that integration should take. This calls for a thorough-going transformation of society, cultural changes, and shifts in the power structure (ECLAC, 1991).

It is inconceivable that a response to the needs of the women of the region today could be given by any one of the social actors on its own. The issues are complex ones, and there is no organization or group in the countries that has all the necessary human and financial resources to do the job. In order to incorporate these issues into global processes and design truly effective policies in support of women, government agencies (including national mechanisms targeting women and sectoral ministries, particularly in the areas of education, labour and health) must join

forces with non-governmental organizations, women's movements, research centres, universities and others.

In order to exercise their rights to the full, women need: i) genuine access to health services, information on reproduction and the means of planning their reproductive behaviour in accordance with their own beliefs; ii) consideration for the various stages of their life cycle; iii) a type of education that prepares them to participate in society on an equal footing as full citizens; iv) changes in the content of formal education and access to informal education, particularly with respect to training; and v) employment free of wage discrimination and of restrictions on access to certain areas of production.

Policies that have population-related impacts are more complex than other sorts of economic and social policies because they affect the private lives of individuals. They have more intimate emotional and affective components, and are heavily charged with cultural elements having historical, religious and ideological overtones. A process of change is therefore needed in order to ensure that reproduction – which has obviously always been a shared endeavour for men and women in biological terms – will also be a matter of shared concern to men and women in respect of the decision to have children and the care of, responsibility for and rearing of those children.

Bibliography

- Boland, Barbara (1992): Population dynamics and development in the Caribbean, Meeting of Government Experts on Population and Development in Latin America and the Caribbean, preparatory to the 1994 International Conference on Population and Development, St. Lucia, 6-9 October (mimeo).
- CELADE (Latin American Demographic Centre) (1992): Latin America: economically active population, period 1970-2000, *Demographic Bulletin*, vol. XXV, No. 49, Santiago, Chile, January.
- David, Henry (1974): Abortion research in transnational perspective: an overview, Henry David (ed.), *Abortion Research: International Experience*, Lexington, Lexington Books.
- ECLAC (Economic Commission for Latin America and the Caribbean) (1979): *Contributions to the diagnosis and promotion of the integration of women into the development of Latin America and the Caribbean (E/CEPAL/CRM.2/L.3)*, Santiago, Chile, October.
- (1990a): *Major changes and the crisis. The impact on women in Latin America and the Caribbean*, Santiago, Chile, September. United Nations publication, Sales No. E.90.II.G.13.
- (1990b): *Changing Production Patterns with Social Equity*, Santiago, Chile, March. United Nations publication, Sales No. E.90.II.G.6.
- (1991): *Women in Latin America and the Caribbean: the challenge of changing production patterns with social equity (LC/L.627(CRM.5/4))*, Santiago, Chile, July.
- Elson, Diane (1991): Gender issues in development strategies (SWID/1991/WP.1), Seminar on Integration of Women in Development, Vienna, 6 November.
- Mesa-Lago, Carmelo (1990): *La seguridad social y el sector informal*, Investigaciones sobre empleo, No. 32, Santiago, Chile, Regional Employment Programme for Latin America and the Caribbean (PREALC)/International Labour Organisation (ILO).
- Ottone, Ernesto (1991): *Modernidad y ciudadanía: el desafío educativo del siglo XXI*, Santiago, Chile (mimeo).
- PAHO (Pan-American Health Organization)/WHO (World Health Organization) (1990): *Las condiciones de salud en las Américas. Edición de 1990*, Publicación científica, vol. 1, No. 524, Washington, D.C.
- (1992): *Prevención de la mortalidad materna en las Américas: perspectivas para los años noventa*, Washington, D.C.
- Portocarrero, Patricia (ed.) (1990): *Mujer en el desarrollo: balance y propuestas*, Lima, Centro de la Mujer Peruana "Flora Tristán".
- Silva Escobar (1988): Comercio en pequeña escala en La Paz, Mayra and Marguerite Berger (eds.), *La mujer en el sector informal: trabajo femenino y microempresa en América Latina*, Caracas, Editorial Nueva Sociedad.
- Sojo, Ana (1992): La inserción laboral de la mujer latinoamericana: entre la crisis económica y los restos de la transformación productiva con equidad, Santiago, Chile (mimeo).
- Tietze, Christopher (1987): *Informe mundial sobre el aborto*, Madrid, Instituto de la Mujer.
- United Nations (1979): *Convention on the Elimination of All Forms of Discrimination Against Women*, New York, Department of Public Information.
- (1985): *The Nairobi Forward-Looking Strategies for the Advancement of Women*, New York, United Nations Department of Public Information, Division of Economic and Social Information, May.
- (1992): A gender perspective on population issues. Discussion note (ESD/P/ICPD.1994/EG.III/DN.2), paper presented at the Expert Group Meeting on Population and Women, Gaborone, 22-26 June, United Nations Office at Vienna (UNOV) (mimeo).
- Wainermann, Catalina (1992): *Improving the Accounting of Women Workers in Population Censuses: Lessons from Latin America*, World Employment Programme Research Working Papers, No. 178, Geneva, ILO.
- Westoff, Charles and Luis Hernando Ochoa (1991): *Unmet Need and the Demand for Family Planning*, Demographic and Health Surveys Comparative Studies, No. 5, Maryland, United States, Institute for Resource Development (IRD), July.
- WHO (World Health Organization) (1980): *La salud y la condición de la mujer*, document FHE/80.1, Geneva.

The Pacific *Basin and* Latin America

Dae Won Choi

*Expert with the
International Trade
and Transport
Division of ECLAC*

This article analyses three aspects of the economic relations between South-east Asia and Latin America: i) the true extent of the headway made by four newly industrializing Asian economies (NIEs) (the Republic of Korea, Hong Kong, Taiwan and Singapore) and four ASEAN countries (Indonesia, the Philippines, Malaysia and Thailand) in the new Asian economic order; ii) their economic relations –particularly those of the Republic of Korea and Taiwan– with Latin America; and iii) the implications of the Pacific Basin's new economic profile in terms of the effort to change production patterns with social equity in Latin America. The means by which the ASEAN countries and China have achieved their rapid pace of economic growth are also examined; to this end, the basic characteristics of the “catching-up” process, of the realignment of technological systems and of the globalization of the Asian-Pacific region are analysed. The argument is then put forward that in order for Latin America to change its production patterns, it will have to incorporate the new elements of technical/industrial realignment being used by the Japanese/NIE/ASEAN/Chinese economic centres; the author also contends that Latin America's dynamic re-incorporation into the new world economic order in the 1990s will increasingly come to depend on the degree of horizontal integration of production it achieves within the context of the “catching-up” process currently under way in Asia and the Pacific. The author concludes that regional and hemispheric integration within the framework of the Enterprise for the Americas will not conflict with Latin America's integration with the Asian-Pacific countries; on the contrary, it will contribute to a broader integration of the Pacific Basin, just as the open-ended regionalization of South-east Asia is not leading to the formation of an Asian economic bloc but instead represents a regional stage along the path to globalization.

I

Introduction

There are three ways of approaching the subject of the simultaneous globalization and regionalization processes now taking place in the world economy. The first is to study the dynamics of economic relations among all three of the traditional geographic economic centres –the United States, the European Economic Community (EEC) and Japan– in order to determine what the main trends and most significant variables are. The second is to examine each of these centres separately, analysing the underlying phenomena within each of these economies as a means of understanding their internal dynamics. And the third is to analyse how the current processes differ from the operational patterns of the preceding economic system by, for example, making a distinction (within the overall internationalization process of the postwar period) between the globalization process now under way, which gathered steam in the second half of the 1980s, and the transnationalization process that marked the three preceding decades.

None of these three approaches affords a true picture of world economic events, however, because in each case their tools of analysis take into consideration only the three main traditional actors in the sphere of international trade (United States, EEC, Japan), thus overlooking a fourth actor that has burst upon the scene. During the 1980s the world witnessed the emergence in Asia of a new wellspring of growth composed of the newly industrializing economies (NIES) of Asia and the Association of South-East Asian Nations (ASEAN). The former group includes Hong Kong, the Republic of Korea, Singapore and Taiwan, while the latter includes the Philippines, Indonesia, Malaysia and Thailand.¹

Thus, until the start of the 1980s the world's market economy system could accurately be described as a triad. Today, however, the two above-mentioned groups of Asian economies have begun to play such a crucial role in international economic relations that any thorough examination of

globalization and regionalization processes at the world level must incorporate them into the discussion.

The objectives of this article are to determine, first, how we should interpret the emergence of the Asian NIES and the ASEAN countries (the most recent NIES) within the context of the new world economic order; second, what factors have contributed to the economic vitality of these groups within the context of the new Asian economic order; third, what new economic patterns or matrices have taken shape in the relations between these groups and the Latin American countries in terms of foreign direct investment (FDI) and the promotion of foreign trade; and, finally, what conclusions can be drawn from these analyses as regards economic cooperation between the Asian-Pacific countries (especially the NIES) and Latin America within the new setting created by the globalization process in the Pacific Basin.²

¹ Singapore and Brunei are also permanent members of ASEAN. For the purposes of this study, however, Singapore is grouped with the Asian NIES and Brunei is not considered, since its economy is too small to have any major influence on the performance of ASEAN.

² For our purposes here, the Asian-Pacific region includes Japan, the NIES, the ASEAN countries, China, Australia and New Zealand, while the Pacific Basin includes the above plus the United States, Canada and Latin America.

II

The Pacific Basin in the new world economic order

1. Three international modalities for changing production patterns: the Asian-Pacific, European-Atlantic and Latin American models

Within the framework of the ongoing globalization process, a new kind of specialization began to take shape in the production sector at the world level starting in the second half of the 1980s. In order to gain a clearer picture of this new global division of labour and how it is influencing the different international patterns of technical/industrial development, it will be helpful to outline the above three modalities of changing production patterns on the basis of the changes seen in the corresponding industrial structures over the past two decades, with special emphasis on the period 1985-1992 and the approach taken by the 1991 UNIDO study.³

The Asian-Pacific modality, involving changes—due to an increase in value added—in production patterns at the three-digit level of the International Standard Industrial Classification (ISIC) in Japan, the Asian NIES and the ASEAN countries, is notable for the rapid growth of the electrical and non-electrical machinery, chemical and plastic products industries, and, in particular, the electronics industry, which is a key factor in the third industrial revolution. This pattern is evident in almost all the Asian-Pacific countries, from Japan to the NIES and from the ASEAN countries to China and India (UNIDO, 1992). If we plot this pattern on a graph, we end up with a shape that looks very much like a spaceship (see figure 1).

³In the UNIDO study, the value Θ for changing production patterns is defined as:

$$\cos \Theta = \frac{\sum_i (t) \cdot \sum_i (t-1)}{[\sum_i (t)^2] \cdot [\sum_i (t-1)^2]}$$

where $\sum_i (t)$ is the share of the total value of the manufacturing aggregate in year t that is accounted for by activity i . The value Θ is interpreted as the angle between two vectors $\sum_i (t-1)$ and $\sum_i (t)$, measured in degrees. Thus, the maximum theoretical value is 90 degrees (see UNIDO, 1991).

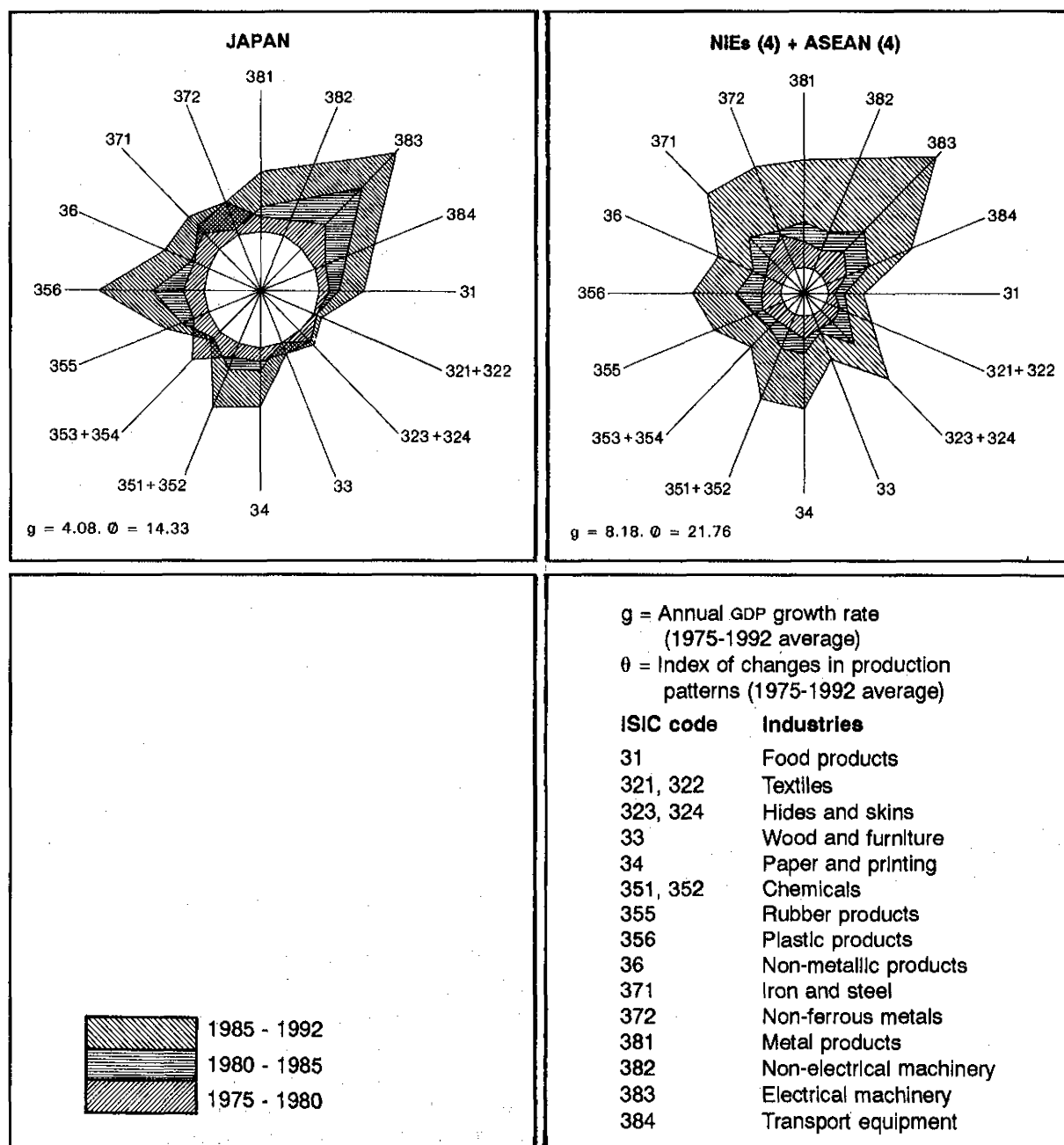
The second, or European-Atlantic, modality corresponds to the United States, Canada and Europe; the changes in these areas' production patterns are characterized by the rapid growth of the plastics industry, followed by chemicals, non-ferrous metals, and paper and printing. The less intensive development of the electronics industry distinguishes this modality from the Asian-Pacific model (see figure 2).

The third modality of changing production patterns, which corresponds to Latin America, involves a type of development based on non-ferrous metals and petroleum and petroleum products; in other words, it is still based on raw materials. Since the 1980s many countries in the region have been overhauling their industrial structures by means of privatizations and the liberalization of their trade and financial markets. Since this industrial restructuring is seen primarily in terms of an intensification of industrialization (of the type associated with the second industrial revolution), it would be more accurate to describe this process as a new modality for changing production patterns based on the progressive absorption of technological innovations (chiefly in the fields of micro-electronics, information sciences, biotechnology and new materials) corresponding to the third industrial revolution. The main difference between "industrial restructuring" and the "realignment of technical/industrial systems" is that whereas the former involves a change in the industrial structure based on the use of the internal combustion engine and heavy machinery, with petroleum products as the main energy source, the latter is based on intensive use of micro-electronics and takes advantage of computerized memory storage capabilities to incorporate knowledge as a basic input.

If the transformation of production patterns is seen as an industrialization process involving the ongoing replacement of technologies having constant returns to scale with technologies that generate increasing returns (Murphy, Schleifer and Vishny, 1989), then it follows that the realignment of technical/industrial systems is preferable to industrial restructuring.

FIGURE 1

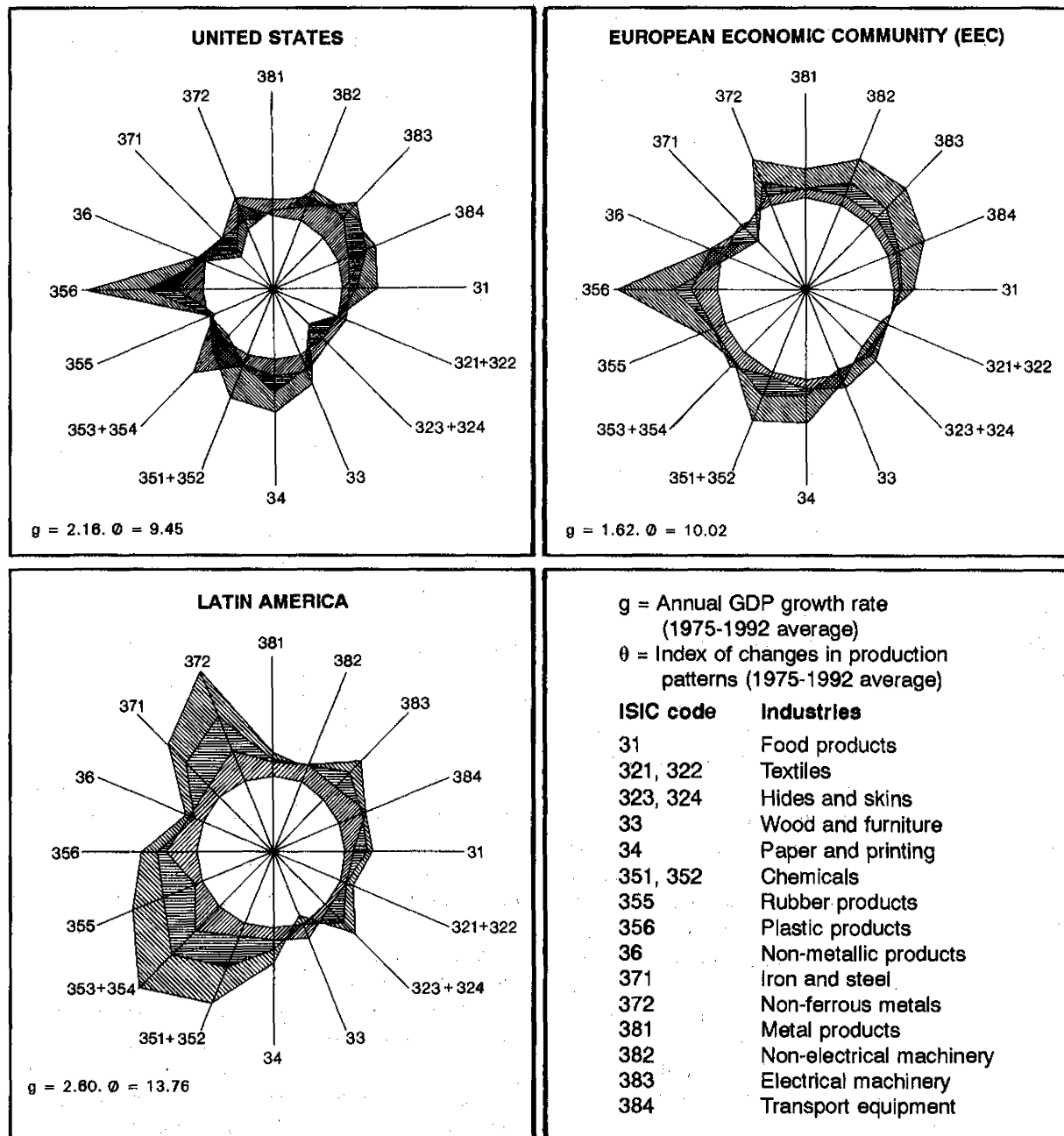
Japan, newly industrializing Asian economies (Asian NIEs) and members of the Association of South-east Asian Nations (ASEAN): changing production patterns, 1975-1992
(Index of value added (1975 = 100), at constant 1980 prices)



Source: Adapted from United Nations Industrial Development Organization (UNIDO), *Industry and Development: Global Report*, Vienna, 1991.

FIGURE 2

**United States, Europe and Latin America:
changing production patterns, 1975-1992**
(Index of value added (1975 = 100), at constant 1980 prices)



Source: Adapted from United Nations Industrial Development Organization (UNIDO), *Industry and Development: Global Report*, Vienna, 1991.

In view of the foregoing, efforts to change Latin America's production patterns in the 1990s will stand a greater chance of success if the changes are envisaged within the framework of an economic globalization process in which the third industrial revolution is playing a leading role. In addition to incorporating the above-mentioned elements, this "future-oriented" development strategy has a geo-economic connotation which suggests that the linchpin for this realignment of technical/industrial systems is to be found in the economic buoyancy of the Asian-Pacific region.

Since manufacturing has been assigned a central role in the effort to change production patterns, there should be a close correlation between GDP growth, the value added by manufacturing, and employment in the manufacturing sector. If we draw a comparison between Latin America, on the one hand, and the Asian NIES and ASEAN countries as a group, on the other, we find that in the 1980s GDP growth fluctuated around 7%-8% for the Asian group and between 2% and 4% for Latin America. During that same decade, the value added by the manufacturing sector increased by between 7% and 14% for the Asian group, while for Latin America the figures ranged from -1% to 4%. Meanwhile, the growth rate for employment in the manufacturing sector fell sharply in Latin America and ended up with an average of less than 2%, whereas the Asian countries' average for the period 1985-1992 was nearly 4%. These figures reflect sharp differences between the two groups' development patterns; the pattern of the South-east Asian countries is primarily based on the value added to manufactures, which is not the case in Latin America.

In short, these three modalities of changing production patterns did not lead to similar rates of economic growth in the 1980s. Although it is safe to assume that Latin America's performance was influenced by its financial crisis, the real problem was that the development of the production system stagnated during the 1980s; unless the 1990s bring a turnaround in this trend, both the region's economic development and its chances of establishing a new position for itself in the sphere of international trade may be at risk.

2. The growth of Intra-Pacific, Intra-Asian and Intra-industry trade

The end of the 1980s marked a profound change in the international economic order. In addition to the wave of political and economic reform that engulfed the former Soviet Union, Eastern Europe and

Germany, the economic bloc envisioned in Western Europe's plans to form a single market (Europe 92) began to take shape, steps were taken to create a North American free trade area, and the Enterprise for the Americas was unveiled. Another significant event was the emergence of South-east Asia as the new growth leader. The trend towards the consolidation of the Asian-Pacific region as a new hub of international trade on a par with that of the Atlantic heralds the birth of a new technical and economic centre of production in Asia. In fact, as the end of the twentieth century approaches, all indications are that, regardless of the form taken by the new international economic order, South-east Asia is likely to become one of its leading players.

The rapid growth of the Asian NIES' and ASEAN countries' trade has occurred thanks to the internal technical/industrial realignments carried out by each of these economies and to a development style based on increasing linkages between intra-industry trade and intraregional investment. In other words, the productive momentum generated by their internal industrialization drive has strengthened the economies of this region through multilateral trade in manufactures and investments in the realignment of their technical/industrial complexes, which have also been complemented by outward-looking initiatives.

On the new economic map of the Asian-Pacific region, there are three main focal points: Japan, the NIES and ASEAN. The economic growth of the ASEAN nations in recent years has outstripped that of the NIES, and its multiplier effect will be felt to an increasing extent in bordering countries such as Vietnam, Cambodia and Burma (Myanmar). Meanwhile, China is laying the groundwork for an effort to carry over the model it has set up along its coast into the inland areas of the country, which holds one-fifth of the world's population and has extraordinary economic potential. Along with China, India too is making an effort to join in the "flight of the wild geese", headed by Japan and followed by the Asian NIES and the ASEAN countries.

Thus, the industrialization process appears to follow a linear sequence of different yet mutually complementary stages of technological and industrial development, all of which seem to be leading in the same direction (Chen, 1989). For example, the "lead goose" is Japan, with its highly knowledge- and technology-intensive industries; it is followed by the NIES, whose industries are semi-intensive in knowledge and technology, and the ASEAN countries have also

joined the flock, with their labour-intensive and semi-technology-intensive industries.

In order to arrive at an understanding of the movements, correlations and linkages within and among these three centres, it is useful to bear in mind the following phenomena: i) the ascendancy of intra-Pacific trade over intra-Atlantic trade; ii) the expansion of intraregional trade in the Asian-Pacific region; and iii) the intensification of intra-industry trade.

The United States' trade links with the Asian-Pacific region are growing stronger while its ties with Europe are, in relative terms, growing weaker. In the 1970s and 1980s, total United States trade with Europe grew at an average rate of 12% per year, while its trade with the Asian-Pacific region expanded by 18% annually; as a result, total intra-Pacific trade amounted to over US\$300 billion per year, which was half as much again as the value of intra-Atlantic trade (US\$200 billion).

The increase in Asia's intraregional trade is evidenced by the growing share of total Asian-Pacific exports accounted for by intraregional trade, which rose from 34% in 1986 to 45% in 1990 (GATT, 1992). This marks a departure from the trend of the early 1980s, when North America was the largest market for Asian-Pacific exports.

The expanding role of intraregional trade in Asia's total trade is illustrated even more clearly by the figures on intraregional imports, which had come to represent 50% of the total by 1989. Moreover, during the second half of the 1980s NIE imports from the Asian-Pacific region climbed from 61% to 66%. Intra-NIE imports also rose, from 7% to 14%, while imports from China jumped from 5% to 11%. It is also noteworthy that exports of manufactures from the ASEAN countries to the Asian NIES increased by a factor of 70 between the early 1970s and the late 1980s, while their share of exports rose from 10% to 20%.

Horizontal intra-industry trade has been a significant component of intraregional trade. In terms of overall trends in exports of manufactures, Europe's and the United States' shares have shrunk while that of the Asian-Pacific region has burgeoned (Fukasaku, 1992). NIE exports of manufactures increased by a factor of 35 and those of ASEAN by a factor of 32 between the start of the 1970s and the end of the 1980s. The expansion of imports of manufactures was greater in the NIES, which registered a 21-fold increase during the period in question. For example, in 1987 the Asian NIES imported twice as much as Japan

did (6% versus 3% of world imports of manufactured products). At the same time, however, the NIES as a group were the second largest exporter of manufactures to ASEAN, with their 26% market share being surpassed only by Japan's 30%. China was also a net exporter of manufactures to the NIES (Nohara and Kagami, 1991).

Between 1980 and 1990, the percentage of manufactures in total NIE and ASEAN exports and imports expanded substantially, which underscores their tendency to move towards an intra-industry-based trade/production pattern. In the case of the NIES, for instance, manufactures made up over 90% of their total exports in 1990. The figure was much lower for the ASEAN member countries, but it still averaged around 50% for that year; in the space of a single decade, the Philippines, Malaysia and Thailand doubled the percentage of manufactures in their total exports, while Indonesia registered almost a tenfold increase.

The percentage of total imports accounted for by manufactures also expanded in both groups of countries, rising on average from about 55% to 70% in the NIES and from approximately 60% to around 70% of total imports in the ASEAN countries between 1980 and 1990.

An analysis of the composition of both groups' exports of manufactures during the 1980s brings to light various changes: i) human-capital- and technology-intensive industries increased their share of such exports; ii) industries making intensive use of unskilled labour and natural resources saw their share decline (in Thailand and Malaysia, in particular, the role of natural resources was significantly reduced); and iii) the share of manufactured exports accounted for by natural resource-based industries tended to shrink in the NIES, but these industries still play a major role in the ASEAN countries, even though their share also decreased during the period in question.

In terms of the Grubel-Lloyd intra-industry trade index⁴ for manufactures in the Asian-Pacific region,

⁴The Grubel-Lloyd index is expressed as follows:

$$I_{gl} = \frac{\sum_i \sum_j \sum_k [(X_{ijk} + M_{ijk}) - |X_{ijk} - M_{ijk}|]}{\sum_i \sum_j \sum_k [X_{ijk} + M_{ijk}]} \quad (100)$$

where X_{ijk} denotes exports of product i by country j to country k and M_{ijk} represents imports of product i by country j from country k . The greater the extent of intra-industry trade, the closer I_{gl} will be to 1 (Grubel and Lloyd, 1975).

all the countries exhibited sizeable increases during the 1980s. Among the NIES, Hong Kong and Singapore registered values of 75% and 72%, respectively, while the figures for the Republic of Korea and Taiwan were both slightly over 40% in 1989. The ASEAN countries saw their shares expand considerably, with the shares of the Philippines and Thailand nearly doubling. The largest increase was recorded by Malaysia, whose index jumped from slightly over 30% in 1979 to 55% in 1989, putting the country in third place among all the Asian-Pacific economies.

Table 1 provides an overview of trends in the Asian-Pacific countries' intra-industry trade with their main trading partners for manufactures. As may be seen from the table, particularly high indexes have been recorded for the intra-industry trade of the various individual NIES with the NIES as a group (around 30%-40%), of the Republic of Korea and Taiwan with Japan, and of the ASEAN countries (especially Malaysia, at over 50%) with the United States. The largest intra-industry traders in the Pacific Basin (including Japan, the United States and Canada) are the Asian NIES, with an (unweighted) average of almost 30%. They are followed by the United States and Canada. Europe and Japan are farther back in the ranking,

with shares of 22% and 17%, respectively. China, for its part, has already garnered a 14% share of the Asian-Pacific economies' intra-industry trade.

In summary, strong manufacturing trade links have been established not only between the Asian NIES and Japan, among the NIES themselves, between the NIES and ASEAN, and within ASEAN, but also between the NIES, ASEAN and the United States. This suggests that, along with the open-ended regionalization of the Asian-Pacific area, we may witness a stronger trend towards the globalization of trade in the Pacific Basin, in which the United States would play a pivotal role. Given the Latin American region's strong ties with the United States, this trend could have an increasing influence on Latin America's integration strategy as regards the Pacific Basin.

3. The new international economic order and the role of the new NIE/ASEAN hub: from a "triad" to a "quartet"

An examination of the present foreign trade structure, with its three traditional economic hubs (Japan, United States and Europe) and its new, fourth, centre (NIE/ASEAN), reveals that the NIES are becoming in-

TABLE 1

Asian-Pacific region: index of Intra-Industry trade in manufactures between Asian-Pacific economies and their main trading partners

Asian-Pacific economies	Japan	Australia and New Zealand	NIES ^a	ASEAN ^b	China	United States and Canada	OECD countries
Hong Kong	21.9	21.6	42.0	31.0	47.7	24.5	35.2
Singapore	21.3	31.2	43.2	57.2	19.2	43.8	37.8
Malaysia	22.2	19.3	46.0	43.5	11.2	53.3	27.9
Republic of Korea	36.0	9.0	32.9	19.8	-	24.7	20.2
Taiwan	31.8	9.7	29.0	16.3	-	19.6	25.7
New Zealand	4.8	57.3	10.4	13.5	1.7	22.2	13.9
Thailand	10.6	15.1	32.1	20.9	20.2	32.3	19.6
Japan	-	7.2	27.0	11.4	14.5	26.7	34.1
Australia	6.7	51.0	16.2	12.4	3.8	18.1	14.1
Philippines	10.6	14.2	15.5	23.2	9.1	28.7	13.4
Indonesia	5.8	7.5	12.9	21.2	1.9	4.1	4.8
Unweighted average	17.2	22.1	27.9	24.6	14.4	27.1	22.4

Source: K. Fukasaku, *Economic Regionalization and Intra-Industry Trade: Pacific-Asian Perspectives*, OECD Technical Papers, No. 53, Paris, Organization for Economic Cooperation and Development (OECD), 1992.

^a Newly industrializing Asian economies

^b Association of South-East Asian Nations.

creasingly influential with regard to the dynamism of the new international economic order.

This phenomenon is attested to in a study by the secretariat of the General Agreement on Tariffs and Trade (GATT, 1992) which found that a radical change had taken place in the ranking of the top merchandise exporters during the period 1980-1990. In 1979, Hong Kong was in 27th place, Taiwan was in 22nd place, the Republic of Korea in 29th, and Singapore was the 32nd largest exporter. One decade later, all of these economies were in the top 20 (Hong Kong was in 11th place, Taiwan in 12th, the Republic of Korea in 13th and Singapore in 18th place); the same trend was also observed among importers for that period.

Furthermore, the average growth rate recorded for NIE foreign trade in the period 1986-1989 was above the average for Asia as a whole (22%, not including Japan) as well as the world average (14%), since the NIE figures for that period were over 26% for imports and 23% for exports. In other words, the rate of increase in NIE foreign trade during that period was nearly twice as high as the growth rate of world trade.

These trends and changes entail a realignment of traditional trade links. Until recently, the United States was unquestionably the largest market for NIE exports. Now, however, the Asian-Pacific market (Japan, the NIEs, ASEAN and China) is becoming increasingly important, and intra-NIE trade has surpassed trade between the NIEs and Japan. In fact, with a growth rate of 36%, intra-NIE trade was the fastest-growing component of NIE exports between 1986 and 1989, since the rate of increase of NIE exports to Japan was 31%, exports to ASEAN countries rose by 30% and sales to the United States increased by 14%.

Trade relations between the NIEs and ASEAN have been remarkably buoyant compared with the relations between these groups and the three traditional centres of world trade, and this means that we need to make some changes in the way we have traditionally talked about the world trade structure, since the incorporation of another actor into the new international economic order may very well alter its future course of development.

As may be seen in table 2, in 1988 the total value of NIE and ASEAN exports to the United States (US\$83 billion) was nearly the same as the value of Europe's exports to that country (US\$84 billion) and quite close to that of Japan's exports to the United States (US\$90 billion) as well. It is also interesting to note that the value of United States exports to the Asian NIEs was quite similar to the value of its exports to Japan. In other words, the NIEs are as large a market for the United States as Japan is.

As regards the value of exports to Japan, NIE/ASEAN exports together exceeded those of the United States and were double the level of European exports. NIE exports to the Japanese market constitute an extraordinary case in that they exceeded the value of total European exports to Japan, while United States exports to that country were only 1.5 times as great as those of the NIEs. Meanwhile, Japan's exports to the NIEs were worth more than its exports to Europe, and the total value of Japanese exports to the NIEs and ASEAN was almost 1.5 times the value of its sales to Europe.

The economic vitality of the Asian countries as a group (the NIEs, the ASEAN countries and Japan) is also reflected in the figures for Asia's exports to the

TABLE 2

**The new "quartet" in international trade
(United States, Japan, Europe and NIEs + ASEAN):^a
merchandise trade, 1988
(Billions of dollars)**

Source/ destination	NIEs + ASEAN	United States	Europe	Japan	Total exports
NIEs + ASEAN	-	83	40	44	167
United States	42	-	70	38	150
Europe	30	84	-	20	134
Japan	63	90	45	-	198
Total imports	135	257	155	102	649

Source: Original calculations based on figures provided in the Japanese Foreign Trade Yearbook, 1990, in *Nikkei Economic Daily*, 1991.

^a Newly industrializing Asian economies (Asian NIEs) plus the member countries of the Association of South-East Asian Nations (ASEAN).

United States, since these amount to twice the value of Europe's exports to that market, which indicates that intra-Pacific trade is outperforming intra-Atlantic trade. Moreover, the combined value of NIE and ASEAN exports to the European market is almost on a par with Japanese exports to Europe. In fact, when all these Asian nations' exports are taken together, their total value surpasses that of United States exports to the European market.

As a corollary to the factors discussed above, it may be said that, in addition to constituting a model

of rapid economic growth, the NIES and ASEAN have also come to be a vigorous centre of economic growth in Asia. We therefore need to analyse the new global economic situation in terms of a quartet (United States, Europe, Japan and the NIES plus ASEAN) of leading actors rather than of the conventional triad (United States, Europe and Japan). South-east Asia must now be regarded as another player whose importance will increasingly depend on the NIES' participation in the technological and economic circuit that links Japan, the NIES, ASEAN and China.

III

The factors underlying the economic buoyancy of the Asian-Pacific region

1. Foreign direct investment (FDI) in the Asian-Pacific region: trends and prospects

An examination of the new Asian economic order is the best way to gain a clear picture of the globalization process taking place in the market-economy system, since its epicentre is located in the Asian-Pacific region. This analysis reveals that such constructs as R. Vernon's product cycle theory and the Heckscher-Ohlin theorem are no longer valid. Owing to the emergence of a new and more complex global division of labour based on increasing horizontal integration, FDI is not motivated only by comparative advantages, but also by new chains or circuits of value-adding activities in which global corporate strategies play a very important role.

In terms of the new Asian economic order, the year 1986 was a turning point in a variety of ways: i) in response to the 1985 Plaza Agreement, Japan took advantage of the edge it has over the United States and Europe in the high-technology micro-electronics sector (Makino, 1991), employing such mechanisms as the diversification of its production system, mergers and acquisitions, and other "new forms of FDI" (Oman, 1984) to intensify the globalization of its economy in an effort to become more competitive; ii) starting in that same year, the NIES managed to attain the largest trade surplus in the region, which enabled them to become a major foreign investor; and iii) the ASEAN countries achieved the undisputed status of "new NIES" by marking up

economic growth rates that have outpaced even those of the NIES themselves.

Behind this Asian economic buoyancy lies a new intraregional trend in FDI. It will be recalled that the first surge in FDI from the NIES coincided with the second boom in Japanese FDI. The chain of events underlying these developments was as follows: the Plaza Agreement of 1985 led to a revaluation of the Japanese yen which immediately gave the NIES a greater competitive edge in the world market, and the surplus achieved by these economies during the second half of the 1980s was transferred to the ASEAN countries in the form of FDI. It should be emphasized that, despite the correlation between the two above-mentioned upswings in FDI, Japan channeled its investments primarily to the tertiary sector, whereas the NIES directed their investments chiefly to the manufacturing sector (especially in the ASEAN countries and Latin America).⁵

⁵As is generally known, there have been two booms in Japanese FDI: one between 1969 and 1972, and the other between 1985 and 1989. The first upturn had three causes: i) the revaluation of the yen following the collapse of the Bretton Woods system in 1971; ii) the Japanese Government's deregulation of FDI; and iii) the 15% annual increase in Japanese wage levels during the early 1970s. These three factors explain why there was such a large outflow of Japanese investment during the 1969-1972 period. Most of this investment went to developing countries, since investors were seeking locations with low labour costs, and within such countries, the bulk of investment funds went to labour-intensive industries such as textiles and electrical machinery.

Contributory factors in the second Japanese FDI boom, which followed on the heels of the Plaza Agreement, included: i) exchange-rate adjustments, particularly the sharp rise in the yen against the United States dollar; ii) trade disputes between Japan, the United States and the European Economic Community (EEC); and iii) wage hikes, labour shortages and the series of financial deregulation measures associated with the internationalization of the banking system. As a result of all these changes, Japanese FDI grew at a record rate in 1986-1990: indeed, over 70% of the total stock (US\$227 billion) of Japanese FDI was built up during those five years. Even though the United States and Europe took in over two-thirds of the annual flows of such investment, during the period in question Japanese FDI accounted for 65% of total FDI in the NIES, 45% in the ASEAN countries and 90% in China.

One of the most notable events which occurred in respect of FDI during the 1980s was the NIES' emergence as one of the largest investors in the Asian-Pacific region and as a potentially major investor in other regions. During the 1980s, the stock of Taiwanese FDI in Malaysia skyrocketed by a factor of 250, to US\$2.3 billion. This sum is equivalent to 35% of the total FDI flow to Malaysia in 1990, and is far more than Japan's FDI in that country. Thailand, for its part, received approximately US\$500 million in FDI from the NIES in 1989, which was about 30% of its FDI total. In 1989, the largest investments in China came from Hong Kong and Macao, which together invested US\$2.3 billion. At the same time, the NIES are now taking those of their labour-intensive industries that generate less value added and relocating them in developing countries, while they are bringing over more science- and technology-intensive industries from the developed countries.

In analysing the linkages between FDI and foreign trade, it is important to note the influential role which the mounting inflow of such investment to the Asian-Pacific region has played in the expansion of that region's foreign trade. Initially, FDI generates a flow of capital goods from source countries to recipient countries. Parent companies provide their subsidiaries with parts and components for assembly, and the subsidiaries then send the semi-finished goods for final processing in a third country or for the last stages of their assembly in the source country. The spatial globalization of production entails a relocation of production activities via FDI such that national borders

cease to represent an obstacle and bilateral or trilateral trade flows are set in motion.

The Asian-Pacific region's relative importance as a new FDI source and destination has changed substantially. NIE transnationals have played an unprecedented role in bringing this change about by beginning to make foreign investments both in the Asian-Pacific region itself and in other developing and developed nations. The countries' efforts to set up a framework for investors were complemented by the creation of regional, bilateral and international instruments designed to provide guarantees for transnational investors in this region. In addition, in rapidly growing economies such as the NIES and the ASEAN countries, international agreements are being negotiated more swiftly in order to protect their investments in other countries of the region and in the rest of the world. At the regional level, ASEAN has emerged as an important vehicle for the coordination of investment policy and joint programmes aimed at boosting FDI flows. The ASEAN countries have also agreed to standardize their investment policies so as to reduce the competition among member countries through, *inter alia*, the liberalization of trade within ASEAN under the provisions of trade preference agreements; semi-public ASEAN manufacturing enterprises; the South-East Asian Association for Regional Cooperation; cooperation in the field of human resources development, and an industrial master plan.⁶

The recent increase in the volume of FDI in the Asian-Pacific region reflects not only local comparative advantages but also the global strategies of transnational corporations headquartered in developed countries (especially Japan) which call for the establishment of subsidiaries in the region to supply both local and foreign markets within the context of a process of progressive globalization. In order to gain a clearer notion of the relationship between FDI and trade in that context, an analysis of Japanese investments in the Asian Pacific will be helpful.

As regards local manufacturing supply, the subsidiaries of Japanese transnationals in the NIES and ASEAN countries make about 50% of their purchases on the local market. Local suppliers' market share in the ASEAN countries is growing remarkably fast; indeed, 90% of all precision instruments and 65% of all electrical machinery, iron and steel, and transport

⁶ On the subject of regional cooperation in the Asian-Pacific area, see ESCAP, 1991, chap. IX, pp. 331-369. See also CTC, 1991.

equipment are supplied by local producers. These figures attest to the growing "import-substituting endogenization"⁷ of the ASEAN nations, which is speeding up the Asian-Pacific region's progress towards self-sufficiency (Nohara and Kagami, 1991).

Although FDI flows amount to no more than 10% of gross domestic capital formation, in most of the countries the economic contribution made by transnational corporations, as measured by such indicators as stock ownership and sales, is the source of much of their industrial activity: in the late 1980s it accounted for over 50% of such activity in Hong Kong, Thailand and the Philippines, and for more than 40% of total Taiwanese exports of electronic equipment in 1986. Furthermore, especially in countries with generous endowments of natural resources, subsidiaries of transnational corporations are very large employers in the primary sector. In Fiji, for example, such subsidiaries provide three-quarters of all the jobs in the mining sector, and in Hong Kong they provide half of all the jobs in the electrical equipment industry, as well as half of the total value added by the manufacturing sector and exports. In Singapore, they account for 50% of all sales and a considerably larger percentage of exports, value added and employment; they are particularly active in the electrical equipment and petrochemicals industries. In fact, for these industries, transnationals account for over 45% of the total in all the indicators except export levels in the majority of Asian-Pacific countries (CTC, 1991).

The predominance of FDI in the electrical equipment industry⁸ is one of the basic characteristics of the realignment of technical/industrial systems in most of the Asian-Pacific countries. Within this sector, transnational corporations have invested in everything from component assembly to manufacturing activities having the greatest technological content. It appears that FDI in the NIES is increasingly moving towards more complex manufacturing activities, such as the production of motor vehicles (Republic of

Korea) and electrical equipment (Hong Kong, Taiwan and the Republic of Korea).

2. The realignment of technical/industrial systems in the Asian-Pacific region

The vigorous growth of trade and financial activity in the Asian-Pacific region has been achieved through the creation of new competitive advantages, which, in turn, have led to changes in production patterns and, consequently, in trade patterns. As the lead country moves on to new products containing more value added and more technological inputs, it makes up for its traditional products' loss of competitiveness by shifting their production base to countries where production costs are lower; these countries then substitute these products for their imports and later go on to become net exporters. The source country, for its part, becomes a net importer of these products again and moves on to create new products for export (Hugues, 1989; ESCAP, 1991).

Within about 10 years' time, this process will enable most of the Asian-Pacific nations, and particularly the ASEAN countries and China, either to compete with Japan on an equal footing or to gain a competitive edge over it in almost all the export product lines of importance today. Meanwhile, Japan will have moved on to the production of new items containing a still larger proportion of technological and human-capital inputs.

According to data compiled by UNIDO (1991), at existing price levels the NIES already manufacture articles that are more competitive than those produced by Japan in most of the electronics industry's product lines. Even China has an edge over Japan in the production of radio receivers, and the fans produced by Malaysia and Thailand out-compete those made in Japan. What is more, it is projected that within the next three years Malaysia will become more competitive than Japan in various lines of electronic products. The NIES (chiefly the Republic of Korea) will also gain an advantage over that country in various types of machinery and electronics, including individual semiconductors. In sum, the current trend towards "catching up" with more technically and industrially complex forms of production will probably enable most of the NIES to take Japan's place in various industries within the machinery and electronics sectors, while Malaysia, Thailand and China will move into the position left open by the NIES.

⁷ In using the term "import-substituting endogenization" we are seeking to emphasize the distinctive traits of the industrialization process now under way in the ASEAN countries. Their original model has been the experience of the NIES, which were able to generate an "endogenous core of technical progress" oriented towards exports of manufactures. Even though this concept does not depart from the fundamental concepts of import-substituting industrialization, the two modalities do differ in terms of the processes resulting from their actual implementation in, for example, South-east Asia and Latin America.

⁸ On the subject of FDI in the electronics sector in Malaysia and Thailand, see Lim and Fong, 1991.

In view of these phenomena, it is important that we re-interpret the dual role of the NIES in the Asian-Pacific region. As we said earlier, the NIES promote FDI from developed countries in high-technology sectors, while at the same time investing heavily in the ASEAN countries. Over the past 40 years the production of labour-intensive goods has shifted from Japan to the NIES, from the NIES to ASEAN, and from ASEAN to China, and in the near future these activities are likely to move on to Indochina (especially Vietnam) and southern Asia.

Because of this process, the countries' comparative advantages are constantly changing, thereby

rendering invalid approaches that define economic integration solely in terms of cross-sectoral complementarity. What is happening in South-east Asia demonstrates the increasing importance of intra-industry complementarity in economic integration processes.

Bearing these changes in mind, in the following chapter we will undertake an analysis of the economic relations between the Asian NIES and Latin America. In the course of this examination, we will seek to identify the complementary aspects of the relationship between integration into trade flows and the integration of production in the Pacific Basin.

IV

The new economic relations between the NIEs and Latin America

Latin America's economic relations with the NIES have an impact in three areas: the growth of trade, potential technological cooperation and new direct investments in production.

1. The expansion of trade between the NIES and Latin America in the 1980s

Trade relations between Latin America and the NIES changed significantly in the 1980s. Even during the economic crisis, trade between these two regions exhibited an unusual, and relatively unilateral, intensity (see table 3): while Latin America expanded its trade with these economies more than with any other world region, the NIES were increasing their trade with other markets (e.g., ASEAN). Total trade between Latin America and the NIES in 1990 was three times as great as it had been at the start of the 1980s in terms of value. The member countries of the Latin American Integration Association (ALADI) accounted for the bulk of total Latin American-NIE trade in terms of value, although total NIE trade with the Central American Common Market (CACM) also exhibited an upward trend.

The Republic of Korea has undoubtedly played the largest role in Latin American-NIE trade relations: in the 1980s total trade between the CACM and the Republic of Korea soared by over 500% and Republic of Korea-ALADI trade by 350%. This means that the

value of merchandise trade between Latin America and the Republic of Korea jumped from US\$600 million to US\$2.8 billion during the decade. Strong upturns were also seen in trade between Latin America and Taiwan (200%), Singapore (150%) and Hong Kong (130%).

Latin American imports from the Asian NIES doubled during the 1980s. The reasons for this increase included: i) the international competitiveness of NIE manufactures, which apparently motivated Latin America to turn away from its traditional sources of imports in favour of new industrial zones with more competitive prices, and ii) the NIES' drive to expand their share of world export markets during the 1980s by opening up new markets for their products, including that of Latin America.

Traditionally, Latin American imports from the NIES have been manufactures, whereas most of its exports to the NIES have been natural resource-based goods. Since the continuation of this situation perpetuates an existing form of cross-sectoral complementarity, it follows that this type of trade will tend to widen the technological gap that separates Latin America from the Asian NIES.

The value of total Latin American exports to the Asian NIES increased more than fivefold between 1980 and 1990, the largest buyers of Latin American exports during this period being the Republic of

TABLE 3

**Newly industrializing Asian economies (ASIAN NIES) and Latin America:^a
merchandise trade, 1980 and 1990**
(Percentage variation and millions of dollars)

		Exports to ALADI & CACM			Imports from ALADI & CACM			Total trade (exports + imports)		
		1980	1990	Variation (%)	1980	1990	Variation (%)	1980	1990	Variation (%)
Republic of Korea	ALADI	274.2	1 093.2	298.6	320.3	1 562.3	387.7	594.5	2 655.5	346.6
	CACM	21.2	126.4	496.2	2.9	25.8	789.6	24.1	152.2	531.5
	Total	295.4	1 219.4	312.8	323.2	1 588.1	391.3	618.6	2 807.7	353.8
Taiwan	ALADI	458.0	754.7	64.7	190.8	1 281.5	571.6	648.8	2 036.2	213.8
	CACM	30.1	98.0	25.5	19.5	8.1	-41.5	49.6	106.1	113.8
	Total	488.1	852.7	74.6	210.3	1 289.6	7513.2	698.4	2 142.3	206.7
Singapore	ALADI	237.3	273.0	-	118.8	605.8	409.9	356.1	878.8	146.7
	CACM	-	12.5	-	-	8.7	-	-	21.2	-
	Total	237.3	285.5	20.3	118.8	614.5	417.2	356.1	900.0	152.7
Hong Kong	ALADI	263.9	265.6	0.6	111.9	609.6	444.7	375.8	875.2	132.8
	CACM	8.8	30.7	248.8	3.2	2.7	-84.3	12.0	33.4	178.3
	Total	272.7	2 966.7	8.6	115.1	612.3	431.9	387.8	908.6	134.2
NIEs (total)	ALADI	1 233.4	2 386.5	93.4	741.8	4 059.2	447.2	1 975.2	6 445.7	226.3
	CACM	60.1	267.6	345.2	25.6	45.3	76.9	85.7	312.9	265.1
	Total	1 293.5	2 654.1	105.1	767.4	4 104.5	434.8	2 060.9	6 758.6	227.9

Source: International Commodity Trade Data Base (COMTRADE) and others.

^a Latin American Integration Association (ALADI) and Central American Common Market (CACM).

Korea (a fivefold increase in value) and Taiwan (with a sixfold increase).

Thanks to this trend, Latin America's 1980 trade deficits with all these economies had been transformed into large surpluses by 1990. A product-by-product analysis of NIE-Latin America trade flows for the period 1980-1990 brings to light several features. First, NIE exports to the Latin American region became considerably more diversified in most cases (the Republic of Korea was the exception, since its exports exhibited a marked degree of specialization), as did Latin American exports to the NIEs (except for those sold to the Taiwanese market). Second, the type of trade taking place between Latin America and the Asian NIEs changed during the decade from an intra-sectoral flow of commodity trade in combination with inter-sectoral trade⁹ to a type of trade marked by

greater inter-industry complementarity.¹⁰ The sizeable increase during the 1980s in inter-industry trade between Latin America and South-east Asia (including Japan, the NIEs and ASEAN) appears to herald the emergence of a new and different production/trade pattern whose potential should be explored.¹¹

It is of interest to note that (primarily vertical) intra-industry trade accounted for a larger share of total trade between the two regions than it did in the trade flows for the period 1986-1990 between Latin America and the United States, between Latin America and Europe and among the Latin American countries themselves.

⁹ Except in the case of Hong Kong, which at the start of the 1980s maintained a vertical intra-industry trade link with ALADI (ALADI exported ships and boats while Hong Kong exported watches and clocks).

¹⁰ The exception here was commerce between Singapore and ALADI, which as of 1990 involved three types of trade: intra-sectoral trade in primary products (mainly semi-finished goods), inter-sectoral trade, and vertical inter-industry trade (Singapore supplies colour television sets and ALADI provides photographic film, plates and paper).

¹¹ We do not feel that the results of this new pattern will affect our hypothesis regarding the relationship between Latin America and the NIEs.

The trend towards more intra-industry trade between Latin America and South-east Asia may be illustrated by comparing their manufacturing industries' shares of total exports. For example, if we use the Grubel-Lloyd index, we see that in the period 1980-1988, the manufacturing sectors of three Latin American countries considerably increased their shares of intra-industry trade with South-east Asian countries: Chile's index jumped from 0% to 21%; Mexico's rose from 1% to 16% and Colombia's from 4% to 24%. In these Latin American countries, the relative importance of South-east Asia in intra-industry trade within the manufacturing sector is between 15 and 20 times greater than that of Europe (ECLAC, 1991).

This would seem to point to a budding opportunity for increased economic cooperation between South-east Asia and Latin America, especially with regard to the establishment of intra-industry trade links and of new reciprocal ties between their economies. To make such cooperation a reality, however, Latin America will have to meet the challenge of actually changing its production patterns in order to increase its exports' value added through systematic efforts to promote the development of endogenous scientific and technological capabilities and cooperative links in this field while at the same time modifying its institutional structures to promote Asian investment in the manufacturing sector. The dynamism of trade between the NIES and Latin America provides us with a suitable environment for exploring these possibilities.

2. The potential for cooperation in the field of technology

Unlike the United States and post-1992 Europe, the Asian-Pacific region encompasses a broad spectrum of highly diverse countries, some of which are in situations similar to those of some Latin American countries. This raises the possibility of integrating some aspects of production through greater intra-industry trade between Latin America and Asian-Pacific countries or groups; for example, such trade could be increased with Japan, as the world's main source of technological innovations, particularly in high-technology products; with the NIES, which are increasingly concentrating on products requiring intensive use of high technology and of human and physical capital; with ASEAN, which is primarily an exporter of natural resource-based and labour-intensive goods;

and with China, which had one of the highest growth rates in the world during the 1980s and is an increasingly competitive exporter of manufactures involving abundant inputs of low-cost labour.

Latin America could attain greater integration of production, both vertical and horizontal, with any one of these countries or groups of countries.¹² Indeed, in terms of the new strategy for changing Latin America's production patterns, the Asian-Pacific region could be the area that offers the greatest potential for economic cooperation in the 1990s; in order to develop that potential, however, we will have to set aside our traditional view of Latin America's comparative advantages in favour of a new concept based on dynamic, competitive advantages.

In the present process of reorganization of the global economic order, such an increase in integration will be possible only if the countries move up to more advanced technical/industrial levels. Since the Asian-Pacific region is where this process is taking place most rapidly today, Latin America's integration with that region is essential, especially in view of the impact that the realignment of technological systems is likely to have on the world economy in the near future.

3. Trends in Asian NIE foreign direct investment in Latin America

During the second half of the 1980s, foreign direct investment by the Asian NIES (particularly the Republic of Korea and Taiwan) in Latin America was stimulated by: i) the NIES' incorporation into the Generalized System of Preferences (GSP) of the United States; ii) their labour force's rising wages; iii) the revaluation of their currencies; iv) their labour-intensive industries' declining ability to compete against ASEAN and China; v) the need to diversify their production base in line with the globalization process; vi) the growing protectionism of developed countries, which pressured Korean and

¹² This statement is based on the following line of reasoning: When intra-industry trade predominates, the reallocation of resources takes place chiefly among the companies in the same industry, rather than between different companies in different industries; it follows that, all other factors being equal, an intra-industry adjustment will therefore be less costly than an inter-industry adjustment. Moreover, the changes in income distribution brought about by the liberalization of trade will be less dramatic if the industrial adjustment is based primarily on intra-industrial, rather than inter-industrial, specialization (Fukasaku, 1992).

Taiwanese exporters to relocate their production bases so that they could re-export to the North American market; and vii) the need to adapt swiftly to technological change, which led to a rapid recycling of the types of technologies that require less capital.

Circumstances in Latin America that have helped to attract direct investment from the NIES include: i) the region's inexpensive labour; ii) its geographic proximity to the United States re-export market; iii) the hemispheric integration process called for by the Bush Administration's Enterprise for the Americas initiative, the incentives offered under the Caribbean Basin Initiative and the GSP; iv) the tax incentives available to enterprises in the region's export processing zones; v) the ready local supply of raw materials; vi) access to the region's internal market potential; vii) the growing stability of Latin American democracies; viii) a greater receptiveness to the technologies of the Asian NIES, whose direct investments are concentrated in the manufacturing sector; and ix) the growing openness of the capital market and the introduction of legal modifications that have made the regulations pertaining to FDI more flexible.

Let us now see what factors could draw a greater volume of FDI to Latin America in the next few years. The first wave of NIE investment in Central America—much of which came from the Republic of Korea and Taiwan—took place under the terms of the incentives provided by the Caribbean Basin Initiative (CBI); in fact, almost all the resulting production activities re-exported their goods to the United States market. There are two constraints, however, that will have an increasing effect on this first wave of investment: from an internal standpoint, NIE investment is over-concentrated in one industry (textiles and wearing apparel), while from an external angle, Central American exports are limited by United States quotas. This means that if greater concentration in the textiles and clothing industry does not lead to increased re-exports to the United States, then NIE investors will have only two options: to diversify their production base, relocating it in countries eligible for CBI incentives that are not subject to quotas; or to diversify their activities to include other product lines for which incentives are provided under the Generalized System of Preferences. The recent increase in Korean FDI in Honduras is a clear example of the first option; for examples of the second, we might look to the diversification of FDI into other manufacturing activities, such as the electrical equipment/electronics

industry. In this last regard, there is one variable—the Latin American countries' free trade agreements with the United States—that is having a greater impact than expected on the inflow of NIE investment to Latin America, as is illustrated by the massive flow of Korean investment recently received by Mexico.

If Latin America can manage to attract more NIE investment to its manufacturing sector—i.e., to attract a "second wave" of NIE investment and channel it into industries that are not only labour-intensive but also technology-intensive—this could lead to a realignment of the region's technological systems, given the greater technological content that products would then have and the speed with which technologies are recycled by the Asian NIES. This means that what Latin America needs to do is to see to it that this first wave of NIE investment in the textiles industry is followed by a second wave of FDI into other, more technology-intensive, manufacturing activities. It would seem that, in a sense, Latin America's chances of successfully changing its production patterns may increasingly depend on whether or not it joins in the process of economic renewal now taking place in the Asian Pacific. The grounds for such a statement include the fact that the NIES will be the world's most important new source of FDI during the 1990s (since their investments are concentrated in the manufacturing sector, are technology-intensive and are recycled rapidly) and the observation that, in order for Latin America to change its production patterns, it will need to undertake a more comprehensive realignment of its technological systems as it enters into the third industrial revolution.

It may therefore be assumed that during the 1990s the framework for the region's new form of integration into the world market will be shaped by the lead "quartet" (United States, the EEC, Japan and the NIES + ASEAN) and that the framework for the integration of its production activities will have to be based on the realignment of technological systems now under way in the NIES and the ASEAN countries—a realignment which is having a direct impact on the effort to change Latin America's production patterns.

If a general trend towards a reduction of trade barriers within the framework of GATT occurred, then an increase in trade would be possible, especially in view of the following factors: the NIES' recent move towards trade liberalization and the important potential of this market, which has not yet been fully

explored; the fact that the NIES have a higher import coefficient than such developed countries as the United States and Japan; and the increase in

complementarity to be expected as progress is made towards more complete vertical (inter-sectoral) and horizontal (intra-sectoral) integration of production.

V

From trade integration to a new type of integration of production in the Pacific Basin

Up to the early 1980s it was commonly believed, first, that Latin America's trade with South-east Asia would grow less rapidly than its trade with developed countries owing to competition from South-east Asian countries that are rich in natural resources (e.g., Thailand, Malaysia and Indonesia) and, second, that greater economic cooperation between these two regions was therefore not feasible.

Events in ASEAN during the final years of the 1980s proved, however, that the growth of commerce is increasingly determined by trends in intra-industry trade. Although it is true that until the early 1980s the inter-sectoral complementarity between Japan and the NIES, on one side, and ASEAN, on the other, was the linchpin of vertical integration in the Asian-Pacific region, from the mid-1980s onward intra-sectoral complementarity has come to play an increasingly important role in that region's horizontal integration. As was said earlier, the expansion seen during that period in intra-industry trade flows between the NIES and ASEAN was the result of the former's investments in the latter's manufacturing sector.

These events have direct implications for the effort to change Latin America's production patterns. After all, less than a decade ago, conditions in many countries of the Asian-Pacific region were less conducive to a transformation of production patterns than in many Latin American countries. Today, however, these Asian countries' economic development outlook is radically different: Malaysia is the world's largest producer of semiconductors; Thailand has become a paradigm of development by virtue of its ability to combine the growth of natural resource-based industries with the development of its electronics industry and has taken up the leadership position in ASEAN; Indonesia boosted the percentage of manufactures in

its total exports from under 5% in 1980 to nearly 40% in 1990; the Philippines is regaining its political stability and hopes to find its way on to the Asian economic growth path with the help of a mounting inflow of FDI; and China's "sleeping giant" economy is beginning to wake up. All these Asian countries except the Philippines grew at an average pace of between 7% and 10% per year in the 1980s. Furthermore, the fact that the Philippines was an exception to this rule suggests that geographic proximity is not always a decisive factor in gaining access to a process of rapid economic growth.

The common denominator for all these Asian economies that grew so rapidly between 1979 and 1989 is that they carved out a position for their economies in the world market by creating new competitive advantages rather than by relying on the traditional sort of comparative advantages. It may be supposed that the changes to be made in Latin America's production patterns should incorporate this same sort of "upward and onward" approach which is so characteristic of the technology of the third industrial revolution.

An analysis of the Asian experience suggests some guidelines for such an effort. First, the change in the ASEAN export mix brought about by its shift from the primary to the manufacturing sector was associated not only with FDI from Japan and the United States, but also with a greater flow of FDI from the NIES. There may thus be reason to believe that the increased flow of NIE investment into Latin America, which has been directed primarily to its manufacturing sector, may help to expand Latin America's intra-industry trade with South-east Asia. A considerable increase in such trade has already been seen in, for example, Mexico, Colombia and Chile.

In this era of economic globalization, an increase in investment prompts an increase in trade flows. In the case of the NIEs, because of their need to raise the technological content of their products in order to remain competitive, the recycling of technology is carried out in countries having lower production costs. Thanks to this relocation, the ASEAN countries were blessed with the lion's share of NIE-source FDI during the second half of the 1980s. The data for 1991, however, indicate that FDI in the ASEAN countries is now growing more slowly, which the experts attribute to shortcomings in their infrastructure, rising costs (chiefly wages) and over-investment, i.e., a level of investment that exceeds these countries' production capacity and is thus fueling inflation. This demonstrates that although geographic proximity, along with ethnic identity, is still important—as is commonly asserted in connection with the Chinese "diasporas" in Hong Kong, Singapore and Malaysia—it is not the only determinant. Today, NIE investment tends to flow to whatever country in the world offers the best competitive opportunities in production and trade. Latin America is no exception, as is demonstrated by the fact that the Republic of Korea's investments in the region more than doubled during the second half of the 1980s.

NIE-source FDI differs from other types of FDI in the following ways: first, the pace at which it recycles technology is among the fastest in the world—owing to the double "push" it gets from the NIEs' efforts to catch up with Japan while the ASEAN countries try to catch up with them—and encompasses everything from labour-intensive to technology- and human capital-intensive technologies; second, as a consequence of the above, this FDI is made on the "cutting edge" of competition between Japan's highest-technology activities and the ASEAN countries' greater capacity for technological endogenization (Ernst and O'Connor, 1992); and third, both the trajectory of strategic change in NIE technological and industrial development and the way in which it is being accomplished suggest what the future course of development of technology-intensive products is likely to be and serve as a frame of reference for developing countries such as those of ASEAN and Latin America as they take decisions regarding the positioning of their technical and industrial activities within the world economy. There is no question but that the ASEAN countries benefited from this strategic frame of reference during the 1980s, as may be inferred

from Malaysia's policy of "looking eastward" (Onn, 1989), which has sparked imitative measures in Indochina (especially Vietnam) and in the islands of the Pacific (Alagh, 1989; Choo and Ali, 1989, Schlosstein, 1991).

Moreover, as we have been saying throughout this article, the liberalization of Asian-Pacific trade is spreading from the export processing sector to other activities and is coupled with the deregulation of commodity prices, wages, interest rates and exchange rates. Consequently, production bases could expand, in a geographic sense, throughout the region. And this, with the support of increased investment in the Asian-Pacific region, has swelled intraregional (from Japan and the NIEs) and interregional (with the United States) trade flows based on competitive advantages. Thus, in considering the possibility of the linkage of the Latin American economies under the terms of the Enterprise for the Americas initiative (and the North American free trade area), we must also consider the possible linkages entailed by regional and hemispheric integration, *vis-à-vis* integration within the framework of the Pacific Basin.

For example, Japan/ASEAN and NIE/ASEAN, NIE/China and United States/ASEAN production linkages with the North American market hint at new types of production relations between, for instance, the NIEs and Latin America (at present such a relationship exists only with Central America) and ASEAN and Latin America. So long as Japan does not act as a substitutive recipient of the products generated by the above-mentioned production linkages, the North American market will continue to be of vital importance for exports of manufactures. Under these circumstances, the global extension of the production chain from South-east Asia to Latin America could be a feasible option in view of the Latin American region's proximity to the main market for such exports, the United States.

On the other hand, if an inward-looking regional Asian economic bloc were to be formed—such as the East Asian Economic Caucus (EAEC) proposed by Prime Minister Mahattir of Malaysia in 1990, which would include Japan, the NIEs, ASEAN, China, Myanmar and Vietnam but would exclude the United States, Canada, Australia and New Zealand—it could inhibit Latin America's participation in the integration of the Pacific Basin. Fortunately, in view of the characteristics of the Asian-Pacific production and trade structure within the context of the Pacific

Basin, many Asian countries are opposed to this introverted type of regionalization. In other words, since the United States is—at least for the time being—¹³ an irreplaceable economic linchpin for intra-Pacific integration, this means that if Asian regionalization is carried far enough, it will inevitably lead to fuller globalization of the Pacific Basin. This became evident at the Asia-Pacific Economic Cooperation Council meeting in Seoul in 1991, when China, Taiwan and Hong Kong joined this group, previously made up of the United States, Canada, Japan, the Republic of Korea, Singapore, the ASEAN countries, Brunei, New Zealand and Australia (making a total of 15 participants). Clearly, the possibility of Latin America's incorporation will be one of the tasks of the 1990s.

¹³ As noted in the introduction to this article, Japan is already one of Latin America's largest markets. What we are suggesting here, however, is that in the new global economic order that is taking shape as we approach the year 2000, the United States will continue to play a predominant role in the globalization of the Pacific Basin.

In summary, within the framework of intra-Pacific cooperation, Latin America has two options: it can join the group of Pacific Basin countries by means of inter-sectoral specialization, or it can achieve integration through the intensification of intra-industry trade with the Asian countries. All the indications are that it would be “easier” for Latin America to accomplish this through inter-sectoral economic cooperation. However, if broader variables are taken into consideration—such as the globalization process, the third industrial revolution, the realignment of technical/industrial systems, and the “catching up” path to integration, then intra-industry integration appears to be the best option. This task must be accomplished in order for the region to change its production patterns (ECLAC, 1992); in other words, the success of Latin America's economic development effort will increasingly depend upon the new economic configuration emerging in the Pacific Basin, which is the epicentre of the economic globalization process and of the realignment of technical/industrial systems at the world level.

Bibliography

- Alagh, Yoginder K. (1989): The newly industrializing economies and the developing Asian and Pacific region: a view from South Asia, *Asian Development Review*, vol. 7, No. 2, Manila, Asian Development Bank (ADB).
- Chen, Edward K. Y. (1989): Trade policy in Asia, Seiji Naya (ed.), *Lessons in Development: a Comparative Study of Asia and Latin America*, Washington, D.C., International Center of Economic Growth (ICEG).
- Choo, Hakchung and Ifzal Ali (1989): The newly industrializing economies and Asian development: issues and options, *Asian Development Review*, vol. 7, No. 2, Manila, ADB.
- CTC (United Nations Centre on Transnational Corporations) (1991): *World Investment Directory*, vol. 1, New York.
- ECLAC (Economic Commission for Latin America and the Caribbean) (1991): *Latin American Trade and Growth: Some Unanswered Questions* (LC/R.1027), Santiago, Chile, Statistics and Projections Division.
- (1992): *Social Equity and Changing Production Patterns: an Integrated Approach* (LC/G.1701 (Ses.24/3)), Santiago, Chile.
- Ernst, Dieter and David O'Connor (1992): *Competing in Electronics Industry: the Experience of Newly Industrializing Economies*, Paris, Organization for Economic Co-operation and Development (OECD), Development Centre.
- ESCAP (Economic and Social Commission for Asia and the Pacific) (1991): *Industrial Restructuring in Asia and the Pacific. In Particular with a View to Strengthening Regional Co-operation*, Bangkok, United Nations, March.
- Fukasaku, Kiichiro (1992): *Economic Regionalization and Intra-Industry Trade: Pacific-Asian Perspectives, Technical papers, No. 53, Paris, OECD.*
- GATT (General Agreement on Tariffs and Trade) (1992), *International Trade 90-91*, vols. I and II, Geneva.
- Grubel, Herbert and P. J. Lloyd (1975): *Intraindustry Trade: The Theory and Measurement of International Trade in Differentiated Products*, London, Macmillan.
- Hugues, Helen (1989): Catching up: The Asian newly industrializing economies in the 1990s, *Asian Development Review*, vol. 7, No. 2, Manila, ADB.
- Lim, Linda Y.C. and Pang Eng Fong (1991): *Foreign Direct Investment and Industrialization in Malaysia, Singapore, Taiwan and Thailand*, Paris, OECD, Development Centre.

- Makino, Noboru (1991): Jejo unoen young won ha da (*The Eternity of the Manufacturing Sector: The New Industrial Society vs the Post-Industrial Society*), original Japanese text translated into Korean by Son Se Il, Ed. Chung Kye Institute.
- Murphy, Kevin M., André Schleifer and Robert Vishny (1989): Industrialization and the big push, *Journal of Political Economy*, vol. 97, No. 5, Chicago, IL, The University of Chicago.
- Nohara, Takashi and Mitsuhiro Kagami (1991): *Development of Asian-Pacific trade and its implications for NAFTA*, document presented at the Seminar on the Free Trade Agreement between Mexico, the United States and Canada and its Possible Effects on the Pacific Basin, 25-27 November, Mexico City, El Colegio de México.
- Oman, Charles (1984): *New Forms of International Investment in Developing Countries. The National Perspective*. Paris, OECD, Development Centre, October.
- Onn, Fong Chan (1989): Malaysia: in pursuit of newly industrializing economy status, *Asian Development Review*, vol. 7, No. 2, Manila, ADB.
- Schlossstein, Steven (1991): *Asia's New Little Dragons: the Dynamic Emergence of Indonesia, Thailand and Malaysia*, Chicago, IL, Contemporary Books.
- UNIDO (United Nations Industrial Development Organization) (1989): *Industry and Development: Global Report 1988/89*, Vienna.
- (1990): *Industry and Development: Global Report 1989/90*, Vienna.
- (1991): *Industry and Development: Global Report 1990/91*, Vienna.
- (1992): *Industry and Development: Global Report 1991/92*, Vienna.

Strategic *management,* planning *and budgets*

Juan M.F. Martín P. and Arturo Núñez del Prado

The authors are, respectively, the Director of the Public-Sector Programming Area of the Latin American and Caribbean Institute for Economic and Social Planning (ILPES) and the Director of ILPES

After having reached a turning point some time ago, the political, economic and social processes of the countries of the region are currently in the midst of a transition. Now that the wave of change which elevated the market and private enterprise to a position of unrivalled supremacy has passed, a more thoughtful evaluation needs to be made of the virtues and responsibilities, shortcomings and excesses of these factors. At the same time, a new assessment is also being made of the role of the State and of how it needs to change, as well as of possible forms of government intervention in social and economic processes. In short, the paradigm that will ultimately take hold in each country of the region has not yet become clearly defined. The changing nature of underdevelopment, its new dimensions and its most pressing manifestations make it necessary to rework existing interpretations and analyses and, on that basis, to put forward new political agendas and strategies for building more efficient economies and more equitable, unified societies. In recent years a considerable number of reforms have also been undertaken, with varying degrees of success, in an effort to improve the way market mechanisms function and to redefine the role of the State in various areas of the region's economic and social life. In the new division of responsibilities between the public and private sectors that is emerging out of these national experiences, modes of interaction associated with mixed economies are coming to the fore. In view of these developments, an ongoing analysis of the processes now under way is needed in order to organize and describe the different categories of newly emerging public-sector functions, ascertain the possibilities and limitations of the capacity for collective action embodied in planning as a technique of governance, and strengthen government approaches and procedures for marshalling and allocating resources.

I

Introduction

The planning and coordination of public policy are in the process of being reviewed and brought into line with the new sets of circumstances that have arisen in the region. Within the framework of the broader reforms being effected with regard to the State, the changes being made in the governmental administrative process are directed towards the establishment of new organizational and operational patterns.

This article comments upon these changes in the light of the actual processes currently taking place in the Latin American countries.¹ On the basis of considerations relating to existing forms of State action, the first four sections deal with fundamental aspects of strategic management. The discussion begins by focusing on the most pressing problems associated with underdevelopment and their very necessary prioritization, the conclusion being that we need to update our ideas about how these problems are created and perpetuated. Starting from a generic interpretation of the region's socioeconomic mode of operation, the ECLAC secretariat has drawn up a proposal for changing production patterns with social equity, and the *idées-forces* of that proposal are highlighted in this article.

It is also argued that an analysis of this subject as it relates to the actual economic and social realities of the region would be a very useful input for an examination of new forms of government intervention.

The last two sections are devoted to a discussion of the new functions of government which are beginning to emerge against this backdrop of societal change and reform of the State. One such group of functions has to do with the role of government as a catalyst in guiding and energizing national development processes; a second category is composed of the regulatory functions of government as an arbiter in cases where individual and collective interests may conflict, while the last group of functions concern the performance of those duties that are the exclusive prerogative of government. These categories of incipient governmental functions are used as a point of reference for a number of proposals for updating substantive and methodological aspects of planning as a technique of governance. The article closes with a few comments and suggestions for strengthening the governmental decision-making process as it relates to the allocation of public resources.

II

State action

Some dissatisfaction is to be noted among the region's political leadership as regards the operation of the existing socioeconomic system. The market and private enterprise are acknowledged to have certain features that should be utilized and promoted, but it is also recognized that they suffer from certain shortcomings which must be redressed and that they lead to certain excesses which need to be tempered. It is

appreciated that existing political agendas are firmly committed to building better societies. This calls for a skilful combination of market action and State intervention designed to ensure that the State's efforts to achieve this goal do not smother the potential of private enterprise. Clearly, this involves the delicate task of defining the proper sphere for State action, but it also creates a need to devise new forms and methods that will be in keeping with the changes taking place in our economies and societies (ILPES, 1992a).

The political processes which have taken place in the region over the past few years have had a very strong influence on State intervention and on the functions of planning as an instrument for guiding social and economic activity. Initially, these

¹ A preliminary version of this essay was presented in November 1992 at the fifteenth meeting of the Presiding Officers of the Regional Council for Planning (CRP), the intergovernmental body that oversees the work of ILPES. The authors wish to thank the directors of the Institute, as well as Jorge Israel and Ricardo Martner, for their valuable comments and suggestions.

mechanisms were clearly relegated to a position of secondary importance, while preference was given to the market and to deregulation. Planning ministries, departments and offices have, generally speaking, seen a decline both in their status and in their influence with decision-makers.

More recently, however, a more objective and realistic view has begun to be taken of new spheres and forms of State action, and this has led to the restoration of some of planning's classic functions as well as the identification of new tasks called for by emerging conditions. Today, the suppression of State intervention is no longer a leading issue; rather, the controversy—depending on the particular countries—concerns the extent, spheres and forms of regulatory action and of measures for guiding economic and social processes in desired directions.

III

The foundations of strategic management

A national agenda that embodies the goal of building a better society and explicitly states its main objectives is an essential frame of reference for the definition of a strategic form of management. This involves the identification and prioritization of the most serious problems of underdevelopment in each country, together with the formulation of an updated and more precise interpretation of their origins and of the chain of events and factors that have engendered them.

In the recent past, the region has witnessed significant deterioration in a range of economic and social variables which has led to a general decline in the quality of life of large segments of its population. This deterioration has, of course, been experienced in different ways in the different countries. The most disturbing problems must be weighted differently in each country; nevertheless, the problems discussed in the following pages, which mainly have to do with social inequity, are to be found in quite similar forms throughout much of the region.

1. The most critical problems

a) Poverty and social exclusion

It is generally agreed that the social inequity existing in most of the countries of the region has reached

It is not in mankind's nature to refrain from seeking to influence the future course of events, and this is also certainly true of society as a whole, which, if endowed with a democratic system of government, will choose the agenda that it finds most cogent. If we have a societal agenda to fulfil, then as soon as we lift our eyes to gaze into the future we are accepting the need for a strategic position and the desirability of being prepared beforehand, both for foreseeable external events and for the decisions that will have to be taken in order to put up a better defence against adverse events, take advantage of favourable ones, and ensure the fulfilment of the government's political agenda. Herein lies the essence of a renewed form of planning that abides by the restrictions imposed upon it by the modern world.

unbearable proportions. As someone once said, when a minority of the population has almost everything while the vast majority has almost nothing, this imbalance weakens democracy where it is most vulnerable. Indeed, this problem is so severe that its magnitude can be gauged quite well even without the help of statistics (ECLAC, 1990a). One has only to take a look at the region's cities and rural areas to realize that social exclusion and enormous territorial imbalances are among the chief manifestations of underdevelopment. The disturbing extent of poverty in the region is the result of its economies' inability to absorb the increase in the labour force in productive ways, and the emergence of the informal economy is compelling evidence of that inability. This obliges us to take a look at the way in which the social and economic system currently operates.

There are those who think that the stigma of exclusion is inherent in the prevailing development style. Others contend that it is a matter of time: they reason that if free enterprise and the market are allowed to function without being suffocated by State intervention, the level of investment will gradually rise so that available labour will be absorbed in an increasingly productive manner. In view of the imperative need to consolidate all the various facets of the

region's democracies, the span of time available for rectifying this problem is becoming a scarce resource, however. Hence the growing acceptance of the idea that the market and private enterprise, strategic management and State action are not mutually exclusive. The magnitude of the tasks to be accomplished leaves no choice but to concentrate on shared needs so that the operational demands of the market and private business and the government's responsibilities in respect of social needs and strategic leadership are all accorded due consideration.

b) Excessive consumption of non-essential goods and services

In contrast with efforts to address the above problem, there is an increasingly evident trend towards the unbridled acquisition of goods and services that are not strictly essential. Although such a propensity is not new, the current pace of consumption and, in particular, the means employed to satisfy this demand have become a cause of concern. Once again, we have no need of econometrics to realize that, if this trend persists, it could lead to even more disturbing distortions.

Although a large percentage of such consumption is accounted for by a relatively small segment of the population, it has an undeniable demonstration effect which, in conjunction with forms of advertising that go far beyond the bounds of mere persuasion, promotes consumption patterns that are at odds with the income levels of many sectors of society. This not only reduces the population's saving capacity, but leads to a great deal of frustration on the part of those who are urged to purchase more than they can afford.

Does it make sense for economic growth to be based largely on the growth of non-essential consumption? In view of this concern, it would not be reasonable to eschew State activity aimed at helping to moderate such excesses and to remedy shortfalls in regard to the consumption of essential goods and services. This is undoubtedly a complex matter: who is to decide what should be consumed? Be that as it may, however, the fact remains that today those who have something to sell use very aggressive ways of creating and fueling demand.

c) The insecurity of daily life

In many cities of the region, even in countries that are making substantial economic progress, criminal means of appropriating private and even public property are spreading at an alarming rate. Despite the punitive and preventive measures used by the

agencies responsible for the public's safety, the frequency of such crimes does not appear to have declined. In some cases the population comes to accept the situation and changes its behaviour patterns in ways designed to avoid what are considered to be inevitable hazards.

The prevalence of such acts may signal the presence of a phenomenon that runs deeper than mere antisocial behaviour. It might be a good thing to reflect on the contradiction that persists in today's societies: poverty is spreading, yet at the same time there is ongoing incitement to consume what are, for the most part, non-essential goods and services. The amount of advertising and the methods it employs seduce and enthrall the potential consumer, whose earning power and opportunities are, in many cases, quite limited. The gulf between what people want to buy and what they are really in a position to buy may serve as a breeding ground for forms of behaviour that are harmful to society. There can be no doubt about their proliferation in recent years, and all the projections—even the most conservative ones—classify this phenomenon among the societal disorders requiring priority attention.

d) The uncertain future of young people

There is little need for further evidence to prove that the fate of a significant number of young people in Latin America and the Caribbean remains uncertain. Some young people have had a patently insufficient education, while others have received a type of education that prepares them only for quite a limited place in today's societies. Some do manage to find a stable, productive role for themselves in economic and social life, but there are few opportunities for the rest, and their future employment status becomes all the more uncertain if they hope to work in the field for which they have tried to prepare themselves.

Education and access to knowledge are probably the subjects that will require the most thorough-going analysis from the standpoint of future development. If we care to look any further ahead than a year or so, there can be no doubt as to the importance of this issue.

e) The deteriorating quality of life for the middle class

The various sorts of corrective adjustments made in the economic and social processes in recent years have had both good and bad effects. On the negative side, we must include the impact on the so-called

middle class, which has had to forgo the consumption of a great many items, including even essential goods. The price of the shopping basket of goods and services for middle-income groups has risen much more sharply than their income levels, but the nature of their social role obliges them to maintain forms of behaviour that require substantial sacrifices. The mounting discontent among this sector of society is a source of social unrest that is menacing the political structures upon which democracy is founded. A society's vitality is closely related to the solidity and influence of this sector; if it is weakened, this may obstruct upward social mobility and cast a cloud over the political process itself. The adoption of an integrative view of the different social groups within the context of a strategic position aimed at advancing towards a better future is thus a prime responsibility of government.

f) The demand for transparency

In the 1990s we are witnessing a new wave of democracy on a universal scale which is probably the broadest, most thorough-going and intense process of this type to have occurred in the present century. Legitimate democracy is bringing about transformations in, *inter alia*, political regimes, forms of government and party systems. The wide-ranging democratization of Latin America is an outstanding example of this trend. There are other processes at work, however, which are less well known and insufficiently understood. One such process has to do with society's demands for transparency. The restoration of democracy entails the establishment of an open, transparent public forum in full view of the citizenry.

The very nature of some features of the development process heightens this demand for clarity. Indeed, the new mechanisms of economic deregulation require it in order to attain their legitimization, and it is a crucial requirement in the privatization of State-owned companies.

The demand for transparency can be equated with the demand for a genuine share in the design and implementation of public policy. Thus, all forms of confidentiality and any lack of transparency in decision-making processes are challenged. Obviously, the scope of this demand extends to social mechanisms and forms of behaviour such as bureaucracy, nepotism, clientage, influence-peddling, etc., and the current crisis in the political parties of some countries

certainly has to do with the disapproval aroused by such excesses. There is very little, if anything, that can do more to harm a government's ability to govern than the questioning of its legitimacy or of the legality of its acts.

g) Other aspects

There are, of course, other serious problems associated with underdevelopment, and environmental deterioration is one of them. Despite the tremendous importance of this issue, however, we will do no more than mention it in passing here. The wealth of information, analyses and projections concerning environmental factors are publicly available and are all the more accessible to the region's political leadership.

2. The need for updated interpretations

Although there are other disturbing manifestations of underdevelopment which could be mentioned, in this article we have referred only to those which are of high priority because of the seriousness of their implications and their widespread nature. As noted earlier, these problems are manifested differently in each national setting and, in some cases, may even be of secondary importance in comparison to other concerns specific to a given country. Be that as it may, a thorough analysis of this subject appears necessary.

This naturally creates a need for an updated explanation of how each of these problems arises and how it is perpetuated. The view persistently disseminated in the past that there is no point in further analysis no longer appears valid. The outside world and the economy and society of each country have changed considerably. Completely new problems have arisen, while chronic problems have changed considerably, even in their inherent nature. If baseline analyses are to serve as a foundation for the design of strategies for overcoming these problems, then they must not be limited to general considerations, but must instead refer to particular sets of circumstances. Exacting standards must be met in identifying variables, their sequencing and their direct and indirect linkages, as well as in estimating their magnitude and impacts. General analyses must be made more concrete and more specific and need to be developed on a more disaggregated level.

IV

The idées-forces of ECLAC

In response to the need for strategies to solve the range of problems faced by the region, the ECLAC secretariat has put forward a set of general concepts relating to the ideas of changing production patterns, social equity and sustainable development. These "idées-forces" are based on the observation of current phenomena and serve to promote a debate in which each country can address these issues in a way that relates to its particular circumstances. The ECLAC proposal's primary aim is to answer the following question: How can we achieve greater economic growth and gain a more solid footing in the external economy while also raising the living standards of the population and safeguarding the environment? (ECLAC, 1990b and 1992c).

The central ideas of this proposal concern the achievement of genuine competitiveness and the systemic nature of economic growth. In contrast to the type of competitiveness afforded by comparative advantages based on low wages and plundering of the environment, this new concept of competitiveness entails an ongoing absorption of technical progress and knowledge into the production and distribution processes.

The systemic character of this approach demands the formation of linkages in respect of economic growth generated by a more solid position in the external market and by the increased productivity of activities that produce goods and services for domestic consumption. This ensures the formation of greater social

linkages, thanks to the increased social equity that one finds in a more fully integrated economy. Clearly, then, the core element that sustains all these achievements—economic growth, a reduction in structural heterogeneity, a stronger position in the external market and greater social equity—is the absorption of technical progress and knowledge as a result of policies that bring needs and objectives into line with one another.

One of the basic assumptions underlying this proposal is that the development of open economies based on these elements can lead to the creation of far more jobs at a much higher level of productivity than could be created by intensifying the import-substitution process within protected economies. The systemic nature of the proposal stresses indirect job creation, as part of the overall competitive effort, in activities providing the relevant inputs and services.

The integrated approach devised by ECLAC points to an active role for the State in certain key areas, such as stricter public and private austerity with a view to the promotion of saving and investment; the preservation of natural capital and of a healthy biosphere; the promotion of transport, communications and other infrastructural projects needed to achieve systemic competitiveness; a policy for the absorption, adaptation and creation of technology; investment in human resources and vocational training; and the launching and financial backing of small and medium-scale businesses.

V

New forms of government action and a new kind of planning

Efforts to strengthen the governmental administrative process within the framework of a strategy for changing production patterns with social equity and environmental sustainability must take into consideration the societal phenomena that will influence that

process in coming years. These phenomena fall into four main categories of trends or shifts which are fairly widespread in the countries of the region: i) a transition from semi-closed to more open economies with a view to integration with the rest of the world and

participation in cooperation and free trade agreements with other nations; ii) a shift away from heavily regulated economies in which the State plays a large role (both directly and indirectly) in the production of goods and services and a move instead towards systems based on private enterprise and the operation of the market, with strategically aimed and more effective government regulations; iii) vertical dispersion of the central government apparatus as the central authorities give up powers and instruments –as a consequence of the economy's greater openness and integration– and delegate authority to lower levels as part of decentralization processes of varying scope at the regional, provincial and municipal levels; and iv) the increasing difficulty faced by governments, owing to financial, organizational and technological constraints, in coping with the range of demands being expressed, to varying degrees, at the political level.

Within this context, there are two closely related issues –reform of the State and emerging governmental functions– which, although their specific aspects and emphases may vary from country to country, are a prime focus of government concern and action. Increasing attention is also being given to a third issue: the renovation of planning.

1. Reform of the State

There is a prime fact that cannot be disregarded: against this backdrop, significant changes are already taking place in the economic functions of the State, and this process can be summed up in a single phrase: the State is reforming and is being reformed. It is, at one and the same time, both the agent and the object of this process.

This implies the simultaneous presence of two processes in governmental action today: administration and change. On the one hand, the government is defining and administering public policy within the context created by a given set of operational conditions; on the other, it is seeking to change those conditions in order to delimit the spheres of governmental action, redefine its functions and increase the viability of its policies. Thus, another important fact is that the current governmental process is marked by this interaction between the processes of administration (routine) and change (innovation).

A matter of some concern is that it is clearly simpler to reduce the State's role as a leading actor than to create the effective capacity needed to

establish a new profile, although these two processes do not necessarily conflict with one another. If we are to make headway in this direction we must focus the discussion on the quality of government involvement rather than merely its quantity. The question therefore is: What requirements need to be met as regards the quality of government intervention, in order to be in keeping with the changes mentioned above?

We will not attempt to provide an exhaustive analysis of this question here, but mention may be made of five such requirements that are of particular importance (ILPES, 1992b; Assael, 1992): i) a high degree of selectivity in defining critical areas; ii) efficiency and effectiveness of the action taken; iii) credibility and transparency; iv) explicitly-defined duration of the intervention; and v) advance knowledge of the cost.

Today, if governmental intervention is to be accorded legitimacy, society must be informed about the costs and benefits of government action, must have the right to evaluate them, and, above all, must know who is going to be receiving, who is going to be giving, why, how much, and for how long. All this must take place within a climate of unhindered expression of responsible public opinion.

The requirement of selectivity is an acknowledgement not only of the existence of spheres which properly fall within the purview of other economic and social actors, but also of the fact that the government has only a limited supply of managerial resources, funding and, ultimately, power. Quite apart from this fundamental circumstance, however, an explicit definition is needed of what the critical areas requiring government intervention are and what form that intervention should take. This means that we must shift the focus of the discussion away from the public-sector/private-sector balance and direct it instead towards these two sectors' emerging roles; in other words, we must shift our attention from the anatomy of the mixed economy to its physiology.

2. Emerging public functions

One difficulty that must be resolved in this connection is that, in various spheres, the State bears the ultimate responsibility because it alone among all the economic and social actors is supposed always to act for the general good. Its action in certain areas may be accorded top priority, which involves postponing the search for solutions to other problems. Postponing is not the same as ignoring, however, for to put it

simply, the government has the responsibility—a responsibility it cannot delegate to any other agent—to head up a collective effort to deal with all the various national problems.

Under a democratic system, a country is governed by a series of successive administrations, so that this responsibility to lead a collective effort therefore devolves upon a succession of different actors, and the commitments of a given administration are not necessarily binding upon the following one. An effective means of dealing with both of these difficulties is the conclusion of explicit or implicit agreements among all the major political forces regarding key aspects of the direction of development and the full operation of institutions.

In addition to such agreements concerning the direction and administration of public policy, the assets at the command of the government include the intertemporal framework in which it operates (since this gives it time to link up outputs and accommodate demands) and the different mixes of public/private interaction that can be used in taking action to promote the general welfare, which allows it to adjust the extent of its own participation in the design, execution, financing and administration of the relevant policies.

The government functions now emerging in the region can be grouped into three categories: functions relating to the catalytic role of the government in orienting and energizing the national development effort; functions relating to the government's arbitration, via government regulations, between individual and collective interests in areas where the two may come into conflict; and functions that are the exclusive prerogative of government. Of course, depending on the specific set of circumstances found in each country, the emergence of these types of functions will differ in intensity and in the degree of consensus surrounding it. Furthermore, their concrete expressions will necessarily reflect a given interpretation of development issues in the region. What substantive features should they have in order to build up a strategy for changing production patterns with social equity and environmental sustainability?

a) Building effective, modern mechanisms for guiding development

In order to meet the challenges arising out of today's development process, the strategy for bringing about change has four main pillars: investment, technology, markets and finance. The links among these elements do not form spontaneously, and it is the duty of the

government, in its role as a catalyst, to ensure that they develop in step with one another.

i) *Stimulating investment.* The maintenance of consistent ground rules, the credibility and sustainability of public policy, respect for property rights, and fair, prompt and swift settlement of contract disputes are some of the direct ways in which a government can help to encourage private investment; it can create these conditions either through its own acts or by promoting the necessary legal and administrative adjustments and the efficient operation of other State bodies. However, these conditions, although necessary, are not sufficient in and of themselves. An effort must therefore be made to promote an increase in public and private saving rates, the development and modernization of infrastructure, and the dissemination to the public of information on investment opportunities.

ii) *Scientific and technological development.* The purposeful absorption and dissemination of technical progress plays a pivotal role in changing production patterns and ensuring their compatibility with a democratic political system and an increasing level of social equity (ECLAC/UNESCO, 1992). The absorption and dissemination of technical progress involves a great many elements, including human resources development and a whole array of mechanisms and incentives for facilitating access to new information and the generation of knowledge. The region's shortcomings in respect of the education-knowledge continuum lessen its chances of making headway in other aspects of the absorption and dissemination of technical progress, however. Such headway can therefore be made only with the help of broad-ranging reforms in the educational and vocational training systems and through the development of endogenous capabilities for utilizing scientific and technological advances.

iii) *Markets and competitiveness.* In order to stimulate competitiveness and the advent of a new, more technologically-intensive phase of export activity, interaction between the public and private sectors will need to be intensified in at least two areas: the reinforcement of those bodies responsible for monitoring the relevant external markets and opening up new markets, and the conclusion of free trade agreements and regional, subregional and binational integration accords (ECLAC, 1990b, chap. V). Competition is not confined to external markets, however. In view of its effects on domestic markets, the trade liberalization process should be steady but gradual, or should be coupled with temporary protective

measures or direct subsidies in order to give national sectors exposed to outside competition a chance to adapt to these new conditions within a reasonable period of time.

iv) *Raising funds for long-term financing.* The fact that some private firms are beginning to return to the international financial market relieves some financial difficulties at the microeconomic level but, with few exceptions, the crux of the problem at the aggregate level continues to be external financial constraints and the size of the public-sector debt. The reduction and stabilization of external debt payments and efforts to put public finances on a sound footing are processes that continue to be very necessary, although notable progress has been made on both fronts by a number of the countries in the region. None the less, although temporary inflows of external resources may be secured through privatizations and portfolio investment, the resumption of financial flows for productive investment is closely linked to the chances of establishing new trade flows with countries outside the region and reducing both costs and country risk.

b) *Creating the necessary capabilities for regulating markets and economic activities that require supervision*

Opening up the economy and moving towards greater reliance on the market make it necessary for the government to set up regulatory and supervisory mechanisms in certain specific areas in order to reconcile private and collective interests, ensure the sustainability of the system, and establish suitable commitments among different sectors. Four areas in which such mechanisms appear to be needed in the majority of the countries in the region are: the production of goods and services under monopolistic conditions, the financial system and the capital market, social security administration, and the labour market and labour laws. In some cases, there is clearly some form of interaction between two or more of these areas.

i) *Production of goods and services under monopolistic conditions.* The privatization of State-owned firms is a prominent feature of the economic scene in the region today. The governments' privatization schemes are quite ambitious, and there is no sign that this trend is beginning to wane. If the privatization process includes—as it sometimes does—goods and services that are provided under monopolistic conditions or that involve significant externalities, then the quality and effectiveness of governmental regulation will become a central element in determining

both the future impact and the sustainability of the policies applied. Therefore, governments must find a way to establish appropriate regulatory frameworks to ensure efficient allocation, reconcile the various interests that are at stake, develop effective instruments for enforcing those regulations and settling disputes and, above all, for adjusting those frameworks to changing technological and operational conditions.

ii) *The financial system and the capital market.* Regulatory and supervisory systems in this area have shown themselves to be of decisive importance in determining the success of liberalization and financial reform policies. Countries that have deregulated their credit markets and interest rates without establishing suitable regulatory and supervisory mechanisms have tended to suffer from crises of insolvency and a loss of financial control. The available information (ECLAC, 1992a) indicates that a suitable system should include a prudent degree of regulation to help banking and financial institutions guard against insolvency and illiquidity; financial regulations designed to ensure that domestic instruments will continue to function smoothly and remain competitive with external placements (in terms of exchange rates, interest rates, lead time, etc.) and to promote the development of instruments that will broaden the institutionalized sector's coverage (such as, for example, credit guarantee funds, insurance, and venture capital loans); and organizational regulation to ensure the system's operational efficiency through the attainment of economies of scale, the integration of activities and the promotion of competitiveness.

iii) *Social security administration.* The crisis of traditional State-run social security systems is prompting a number of governments to undertake reforms in this area. Some of these reforms provide for adjustments in the traditional system, while others entail discarding it entirely and replacing it with a privately-run, individually capitalized system or a combination of these two systems (ECLAC, 1992b). The situation now taking shape appears to point to the possibility of a greater role for private organizations in the administration of large-scale funds in the future and to the concomitant need for governmental regulatory mechanisms which will not only open up investment opportunities for those funds, but will also ensure the administering bodies' continued solvency, financial stability and competitiveness.

iv) *The labour market and labour laws.* An important element in the development of competitiveness is the maintenance of a sufficient degree of

flexibility in the labour market. The modernization of production is not a smooth or integral process; it carries with it the risk of tensions and imbalances, and human resources may lag behind newly emerging demands both in terms of technical knowledge and their ability to adapt to a production environment subject to frequent major changes. If a national economy is to reduce this lag and retrofit its uncompetitive sectors, it will have to marshal its public and private resources in order to mitigate the social impacts of the process by creating mechanisms for the payment of unemployment benefits, providing vocational training geared to new markets, and ensuring an orderly transition through the preparation of sectoral baseline analyses and prospective studies, the adjustment of the legal and institutional structures and the establishment of efficient labour retraining mechanisms.

c) The performance of exclusively governmental duties

Despite the trends mentioned above, the State –by virtue of its economic importance, its ability to levy taxes and the power that it holds– remains the paramount organization in the countries of the region; moreover, there are many tasks for which it bears virtually sole responsibility. Therefore, the planning of its acts and the skill with which it manages its activities are matters of very high priority. Three topics should be considered in this connection: the management of global imbalances; the accumulation of social, physical and human capital; and the distribution of duties and powers within the State apparatus.

i) *Management of global imbalances.* The government must keep macroeconomic imbalances under control in order to permit growth within a context of stability, which, in its turn, is a necessary condition in order to meet the challenges involved in changing production patterns with environmental sustainability and social equity. Within this framework, fiscal management must be geared towards achieving structural stability of income together with budgetary flexibility so that the public sector's financing needs will be kept in line with the resources actually at its command.

In order to meet the other challenges it faces, however, a government must also maintain a progressive fiscal policy (ECLAC, 1992c, chap. IV). This progressivity needs to be measured in terms of the net impact on the various social groups of all the government's acts taken together: taxation and public-sector

rates and prices, on the one hand, and the various types of expenditures, on the other. Thus, the management of economic, social and environmental imbalances could be based on the proper articulation over time of measures affecting the amount and stability of public resources, the possibility of reallocating funds from one budget item to another and, in particular, more efficient expenditure patterns.

ii) *Formation of social, physical and human capital.* Given the systemic nature of the concept, in order for significant progress to be made in promoting genuine competitiveness, physical infrastructure must be developed and must run efficiently at international prices. The region's physical infrastructure was allowed to deteriorate so much during the fiscal crisis of the 1980s that its rehabilitation is now a high-priority task. The fact that the public sector does not have sufficient resources to cover the necessary levels of investment and current expenditure has led governments to undertake deregulation programmes, privatizations, decentralization schemes, and subsidized or toll-based leasing arrangements with the private sector in order to pay for the restoration work, the necessary expansion, and the maintenance and operation of major components of the system. Apart from the above-mentioned regulatory function of government-controlled monopolies, mention should also be made of the complementarity that must exist between public expenditure and private investment within the framework of effective government policies to ensure the harmonious development of a country's infrastructure and to guard against negative impacts in relation to social equity, territorial equity and the environment.

In the area of social benefits, the region is also witnessing a mounting expansion of quasi-markets for social security, health and education oriented towards the upper- and middle-income sectors. The sharp decline in the quality of public services in recent years has hastened the transition to these new systems, even in cases where families must make sacrifices in other areas of their household budget. The great majority of the population, however, has no choice but to rely on public services. In addition to increasing the resources made available for such services, a determined public-sector effort is required to establish realistic policies, design effective programmes, target expenditure, coordinate the actions of the institutions involved and, above all, establish efficient systems for providing the highest-quality services possible.

iii) *Distribution of duties and powers at the various levels of government.* The deconcentration and decentralization of many of the central government's duties have been prompted by two mutually-reinforcing factors: the demand for greater autonomy, and the shrinking supply of resources and capacities available to the central government. This shift has three dimensions: corporate management, which is the typical case of State-run companies; the provision of social services; and territorial divisions at the levels of national regions, provinces and municipalities. The process is not a linear one in any of these dimensions, nor is it free of conflicts between the opposing forces of centralization and autonomy, between subsidization and obligatory autarky, and between standards imposed by the central government and private or local resistance thereto. Two facts should be borne in mind in this regard. First, the necessary degree of financial autonomy should be strictly commensurate with the duties and responsibilities assumed while seeing to it that the central government's leeway for dealing with macroeconomic imbalances is reduced as little as possible. Second, deconcentration and decentralization bring about a re-organization of the functions of the entire State apparatus, so that it is not merely a question of strengthening the technical and institutional capabilities of the bodies to which duties and powers are being delegated; this shift also involves redefining and organizing the functions of central or sectoral bodies in order to formulate national policies, define and enforce standards and regulations, speedily detect any major variations in the quality of deconcentrated or decentralized management as measured by national standards, and take corrective action to support their fulfilment.

The profile of the type of State capable of performing these functions differs from the traditional State structure. While the State may have to be smaller, it will also need to be sturdier and stronger; it will have to specialize its various functions while at the same time achieving greater unity between its leadership and implementational roles; it will need to interact more closely with political and operational organizations and with those of civil society, but it must also retain a sufficient degree of autonomy in respect of its decision-making functions. This transformation, whose specific aspects will differ in each country, is perhaps one of the greatest challenges to be faced by the countries of the region in the coming years.

3. A new kind of planning

The incipient functions of government which we have been discussing in this article serve as a necessary point of reference for efforts to update the content and methodologies of planning as a technique of governance. What form will this new type of planning assume, and, in terms of the government's performance of its three types of functions (i.e., its role as a catalyst, arbitration between individual and collective interests, and the exclusive duties of government), what contributions can it make?

In considering the catalytic role of government, one important factor is the need to produce information about the future, i.e., to provide some idea, however minimal it may be, of the scenarios towards which each national society could be evolving. There are at least three reasons for this: it fosters greater unity and inter-temporal consistency in governmental decision-making; it provides a marker for private economic calculations by permitting more accurate estimates of the risk involved in long-term investments; and it offers a picture of the possibilities open to all the members of the social structure. This is perhaps planning's chief contribution to a government's ability to govern, since in order to put together any agenda whatsoever, we must travel a two-way road between the present and the future; without this movement back and forth between present reality, a vision of what is possible and a vision of what is desirable, there can be no leadership or strategic consensus-building.

In times of rapid change such as the present, this task involves much more than simply extrapolating existing trends, but on the other hand it should not be confused with the now disavowed type of planning praxis which sought to dictate the future. Planning's job is to serve as a catalyst for an interconnection of different perspectives that goes beyond what any market or any social actor or group could do on its own and to anticipate what consequences, over different periods of time, the government's decisions will have. Although some countries' governments do take these types of factors into consideration, their efforts in this respect are usually unsystematic and lack a solid basis. A suitable technical foundation for such an effort can be provided by a prospective, scenario-based methodology in combination with a system of leading current indicators. The task cannot be accomplished in isolation from the decision-making process at its highest level, however, although the preparatory work

may, of course, be the responsibility of a specific agency (usually the national planning body). There are two reasons for this: first, it involves managing information and articulating rationales that find expression only at that level, and second, it serves as a tool for strategic decision-making within the government and as the technical basis for consensus-building outside the government.

The role of a new form of planning in the second category of emerging governmental functions –i.e., arbitration between individual and collective interests in spheres of activity in which the presence of private agents is significant– can also be a pivotal one. First, it can help pinpoint critical areas requiring government regulation and supervision; second, it can contribute to the early detection and monitoring of any problems or undesirable effects caused by policy changes; third, it can be of assistance in the development of the necessary technical and negotiating capabilities within the government apparatus; and finally, it can contribute to the expression and reconciliation of different interests, to the public transparency of the process and to the establishment of automatic, institutionalized mechanisms for the settlement of disputes. As in the case of the preceding category, this last task entails negotiation and consensus-building; however, in this case the relevant spheres are more limited in terms of the actors involved and more specific as regards the nature of possible disputes.

The third and final category –functions that are the special prerogative of government– also calls for

a considerable planning effort, particularly in relation to the programming, assessment and follow-up of government action. In these activities, economic logic and substantive knowledge of the relevant sector must be systematically applied in the government's detailed decisions at the respective sectoral or global levels, based on the corresponding data systems and operational criteria.

It is important to be aware of the fact that, as part of the State reforms currently under way in the countries of the region, the content and procedures of a number of these fairly routine planning tasks need to be modified or reoriented. Examples of processes which are going to require strategic intervention at some point include the restructuring of the budgetary process; the reorganization of the system of investment planning and the evaluation of investment programmes and projects dealing with social, physical and human capital; the redefinition of the relationship between public-sector enterprises and the central government; and the redistribution of areas of competence and resources among the various levels of government. The common denominator of such intervention will be the promotion of organizational, methodological and procedural adjustments on a concentrated, selective basis over a limited period of time; in other words, planning is, in these cases, associated with the idea of establishing a new system of government management in specific areas, in accordance with the current profile of governmental functions.

VI

The relationship between planning and the budget

The relationship between planning and the budget has always been regarded as a crucial nexus in terms of a government's ability to take action, since, in effect, it sums up the reciprocal links between decision-making and resource allocation.

The usual difficulties involved in arriving at institutional and methodological arrangements that will serve as effective links between these two processes have recently been compounded by the interruption –to a greater or lesser extent depending on the country– of one or the other of these tasks.

At the same time, however, some lessons have been learned that now make it more urgent, but also more feasible, to find suitable solutions for this recurring problem in respect of government action. These lessons concern the following: i) the prime importance to be assigned to fiscal matters in the management of macroeconomic disequilibria; ii) the need to consolidate and integrate policies on public revenues, decisions regarding spending, and the methods to be used to finance any deficits that arise; iii) the importance assumed, in a situation marked by

resource constraints, by the concepts of priority, productivity and substitution in comprehensive expenditure programmes; iv) the need for the explicit definition of a certain time span in which to seek ways of satisfying latent or deferred demands; and v) the need for better understanding of the interaction between capital and current expenditure, as well as of some of the shortcomings in this way of classifying certain items of expenditure.

From a technical point of view, it is not too difficult to visualize the array of instrumental and informational capabilities needed to configure an integrated public expenditure programming and management system. Such a system would include: i) a macroeconomic framework, means for interaction with fiscal programming, and a set of leading indicators for short-term analysis; ii) a fiscal plan with income and expenditure projections for a number of different assumptions with respect to continuity and innovation; iii) a multi-year, renewable physical and social investment programme, with expenditures spread out over the programming period and updated yearly; and iv) a physical/economic and financial budget performance and expenditure control system.

These components entail tasks requiring different amounts of time to complete: a sliding, medium-term programming period (from three to five years, with biannual or annual updates) is therefore called for in order to provide the time horizon needed to gain a full picture of the process. It is worth stressing that it is perfectly possible to put together an analytical frame of reference such as the above, although, of course, the process will not be problem-free (there may be theoretical or methodological controversies, difficulties involved in linking up its various components, and questions as to the relevance, up-to-dateness and reliability of the databases, to name only a few of the main pitfalls).

The fact that these governmental activities are performed by the civil service raises some major problems. The institutional dimension is crucial, however, for converting mere technical possibilities into routine administrative procedures that can promote the necessary organization and stability of the government decision-making process. The problems involved in the institutionalization of this process are by no means negligible: strong inertial forces have to be overcome, coordination mechanisms need to be designed and set up and, most importantly, a way must be found to ensure that the relevant information

—which is by no means a free good— flows properly throughout the system.

Two vital institutional needs in this regard deserve special mention: the need to have technocratic and administrative machinery capable of interacting efficiently with government leaders, and the need for a sustained and cumulative process of innovation in respect of public-sector programming and administrative procedures.

With respect to the first of these needs, many would agree that the civil service often suffers from an oversupply of staff and an undersupply of operational capabilities at one and the same time. There is also probably a consensus, however, that most of the countries in the region do have a critical mass of qualified human resources. Wherein, then, lies the problem? Public-sector wage levels are surely a major factor, but not the only one. What inducements to become and remain a career civil servant can be offered by a government service that is the target of the types of charges that have been levelled so persistently in the region? It is imperative that the image of government service should be transformed into that of a socially-esteemed endeavour characterized by transparency and effective action. This renovation should be headed by the political leadership, but all the various segments of society, especially the business sector, must take part in it. The reason for this is simple but compelling: the successful development of the private sector of an economy cannot take place in the absence of a modern public sector capable of performing its key tasks efficiently, particularly with regard to the allocation of the resources entrusted to it by society.

This political decision should also, however, be reflected in a corresponding restructuring of legal provisions, new administrative regulations and the adoption of procedures that will reinforce the reform process and sustain it over time so that its results will be cumulative. Under normal circumstances, this will also require that political agreements be reached to maintain the direction of change beyond the term of any given administration. Perhaps, paradoxically, State reform must be a State policy. The institutionalization of a solid technical foundation to support the process of public resource allocation does not appear to be so controversial an issue as to prevent the conclusion of agreements allowing for substantial progress in this area, and it therefore seems to be a good starting point.

It is not, of course, simply a question of building up a techno-bureaucracy within the civil service, since the process of allocating public resources also has an important political dimension. The true basis for this process is a certain balance between the technical and political criteria applied at nodes of the public-sector apparatus at different decision-making levels. The widespread, aggregative nature of the process has three main consequences: there are many different decision-making centres which advocate different types of expenditures; these units' behaviour is largely determined by their own interests and their own particular rationales, and the extent of the power they bring to bear in pushing for their own initiatives varies widely for technical and political reasons.

Hence, rather than being a purely technical matter, the process of allocating public resources entails a considerable amount of institutional negotiation. To put it more precisely, the complex process by which political decisions are taken can be made more efficient and more rational in an overall sense with the help of better analyses, but it cannot be replaced by mere technical calculations. What is truly essential is

that this process should, through a positive form of interaction, serve as an explicit means of setting forth options and that the corresponding decisions on expenditure should be such as to further the true objectives of the government and of the political forces represented in the country's parliament.

The governments of the region are trying to respond to some of these demands in the wake of an extremely severe crisis. Because of the diversity of national situations, the countries are likely to go through several different stages in developing their operational capabilities: i) putting their houses in order (coping with urgent imbalances); ii) arriving at a better understanding of where they stand and where they are going (logging of data and follow-up); and iii) plotting out a desired course (*ex ante* appraisal) and determining why the goal was or was not reached (*ex post* evaluation). The establishment of a suitable time horizon is crucial for the organization of the relevant tasks and their priorities and, above all, for the development of the technical and institutional capabilities needed to provide a sound basis for politically significant decisions regarding public resource allocation.

Bibliography

- Assael, Héctor (1992): *Estado y mercado* (mimeo).
- ECLAC (Economic Commission for Latin America and the Caribbean) (1990a): *Magnitud de la pobreza en América Latina en los años ochenta* (LC/L.533), Santiago, Chile, 31 May.
- (1990b): *Changing Production Patterns with Social Equity*, Santiago, Chile, March. United Nations publication, Sales No. E.90.II.G.6.
- (1992a): *Regulation and Supervision of Banks and Financial Institutions. Case Studies in Latin America and the Caribbean*, "Financiamiento del Desarrollo" series, No. 8 (LC/L.655), Santiago, Chile, September.
- (1992b): *Pension Systems in Latin America: Diagnosis and Reform Alternatives. Case Studies in Latin America and the Caribbean. Conclusions and Recommendations*, "Financiamiento del Desarrollo" series, No. 9 (LC/L.656), Santiago, Chile, September.
- (1992c): *Social Equity and Changing Production Patterns: An Integrated Approach* (LC/G.1701 (SES.24/3)), Santiago, Chile, February.
- ECLAC/UNESCO (United Nations Educational, Scientific and Cultural Organization) (1992): *Education and Knowledge: Basic Pillars of Changing Production Patterns with Social Equity* (LC/G.1702 (SES.24/4)), Santiago, Chile, 18 March.
- ILPES (Latin American and Caribbean Institute for Economic and Social Planning) (1992a): *Funciones de la planificación en los años 90* (LC/IP/R.107-Rev.1), Madrid, 24 March.
- (1992b): *Adecuación y cambios en el funcionamiento del sector público*, paper presented at the Second Seminar on Public Budgets and Strategic Management, Buenos Aires, 23-26 June (mimeo).

The internationalization *of Latin American* industrial firms

Wilson Peres Núñez

*Principal Technical Adviser
to ECLAC/UNDP Regional
Project RLA/88/039.*

*The author gratefully
acknowledges the
comments and suggestions
made by Juan Alberto Fuentes,
Michael Mortimore and
Joseph Ramos and notes that,
as in many other cases,
Fernando Fajnzylber was
the driving force behind
this project and, in
particular, this study.*

The Latin American countries' position within the international economy finds concrete expression in the international operations of their business enterprises. Some of these operations, such as international trade and finance in major world markets, are already traditional activities of leading Latin American firms, and at least since the mid-1970s, these firms have been part of a rapid internationalization process which gave rise both to the export boom of the 1980s and also to the heavy private external borrowing seen in the 1970s. The leading Latin American firms still have a great deal of room in which to expand, and opportunities for them to increase their international trade and re-enter international capital markets have become evident during the incipient recovery being made by most of the Latin American countries in the early 1990s. By their very nature, however, these traditional components have certain limitations and will therefore need to be supplemented by new forms of international economic activity that can support and strengthen them over the long term. One of these modalities, foreign direct investment by Latin American enterprises, will play a role of major importance. It is therefore necessary to analyse the effects of foreign investment by Latin American firms on those firms' international competitiveness, on the development of competitive advantages in the source country, and on the well-being of the population in both the source and destination countries.

I

The components of internationalization

The traditional components of leading Latin American firms'¹ involvement in the international economy, i.e., international trade and the international capital market, are subject to certain limits that mainly have to do with what is happening in the world economy in the 1990s; this is particularly the case owing to the following limiting factors:

i) Trade negotiations such as those undertaken within the framework of the General Agreement on Tariffs and Trade (GATT) are subject to an inherent limitation that will persist regardless of the outcome of the present round. This limitation lies in the fact that although such negotiations concentrate on areas of conflict, they do not cover the structures that gave rise to those conflicts. Moreover, much more ground will have to be covered before negotiations of the type being held between Japan and the United States under the terms of the Structural Impediments Initiative are included on the agendas of the governments of the region. Under these circumstances, and given the intermittent appearance of protectionism in major world markets, trade constraints due to conflicts may hinder the internationalization of Latin American firms.

ii) The existing regionalization processes have an as yet undetermined potential for trade creation and diversion. Although it is still too early to predict what the main effects of the three main regionalization processes now under way will be (the formation of a single European market, the North American Free Trade Agreement and the East Asian common economic space), the clash between strategies aimed at creating "closed" zones (strongholds) and those designed to set up "open" zones may cast some doubt upon the potential of trade as a tool for the internationalization of firms based in countries that are not part of these major agreements.²

iii) The other main traditional component of international economic activity – international finance – also has certain limitations which, in this case, stem from expectations of a real capital shortage in the 1990s. These expectations became still stronger once the costs of Germany's reunification and of the economic changes in Eastern Europe became apparent, and they have had a strong influence on government decision-making in some of the larger countries of the region since 1989. The recent acceleration of the movement towards trade integration in the region has undoubtedly been one of their effects.³

These three limitations are not immutable, and their severity may indeed undergo unexpected changes during the 1990s. The fact remains, however, that they introduce an element of uncertainty into business decisions. Various firms, both in the newly industrializing economies (NIEs) of East Asia and in Latin America, have sought to reduce that uncertainty through heavy foreign direct investment, particularly in developed countries. Foreign investment not only allows them to use intra-industry and intra-firm trade as tools of market penetration, but also opens up attractive opportunities for other investments and for the acquisition of technologies unavailable on the international market.

In addition to the opportunities for the quantitative and qualitative expansion of trade and financing, foreign direct investment permits the addition of entrepreneurial inputs to regionalization and even globalization processes.⁴ At the international level, there appear to be two major ways in which regional economic zones are established: i) the European strategy of pursuing political negotiations aimed at the configuration of a formally-constituted common market; and ii) the prevailing strategy of the swiftly growing

¹ Latin American firms are defined here as business enterprises in which a majority of the assets are either owned or controlled by natural or juridical persons from the region. The features that qualify a firm as a leader vary from country to country, but have to do with the size of the company and its market share (generally speaking, their share would need to be among the four or five largest in the market in question).

² For an in-depth analysis of the subject, see Lawrence, 1991.

³ From a short-term perspective, the expectations to this effect in respect of the early years of the decade appear to have fallen wide of the mark. In fact, a relative oversupply of short-term capital seems to be flowing into the larger economies of the region.

⁴ As used in this article, the term "foreign direct investment" refers, unless otherwise indicated, to investments made by Latin American countries.

countries of East Asia.⁵ In the first case, the integration process is carried forward by policy measures, while in the second, the decisive element is direct investment. Although strategies based on bilateral or multilateral negotiations have a great deal of potential, the factors driving forward the economic integration of regions in South-East Asia appear to be much more powerful.⁶

These two approaches (overcoming the limitations of the traditional components of international economic activity and the materialization of the process at the corporate level) have important policy implications. The efficient involvement of such companies in traditional and new forms of international activity will have a direct impact on the levels of competitiveness and well-being attained by the societies of their home countries. For Latin American firms, an understanding of the importance of foreign direct investment and of how it works is essential in order to move towards more efficient policies.

It has always been somewhat difficult to explain why enterprises based in developing countries engage in foreign direct investment, since they usually lack the advantages associated with transnational corporations based in developed countries (economies of scale, multi-plant economies, proprietary technologies). The theoretical analysis of direct investment by developing countries has been based on two clearly complementary approaches (UNCTC, 1991): one focuses on the investment cycle, while the other concentrates on the advantages available to firms based in developing countries.

The first approach emphasizes the fact that the ratio between a country's outward and inward investment flows will go through a number of different stages as part of an evolutionary process whose nature is primarily determined by the country's per capita

GDP, level of industrialization and volume of trade (Dunning, 1986). The corporate competitive advantages associated with the possession, location and possibility of internalizing those advantages are considered to generate a five-stage cycle: i) minimal inward and outward investment flows; ii) a considerable inward flow of investment and an extremely small outward flow; iii) significant flows in both directions, but with the inbound flow still exceeding the outbound flow; iv) an outward flow that exceeds the inward flow; and v) a new mix of outward and inward foreign investment. As their enterprises develop competitive advantages, countries will pass through these different stages of the cycle.⁷ Thus, foreign direct investment may well be a natural stage in the economic development process.

The second approach involves an analysis, from two different standpoints, of the advantages possessed by firms based in developing countries. One type of analysis is based on the product cycle theory and focuses on three possible sources of competitive advantages for such firms: i) the ownership of technologies which are mature enough to have been "forgotten" by companies in developed countries but which have not yet been mastered by more backward countries; ii) the lower production costs deriving from the adaptation of technologies to smaller-scale markets, local raw materials or a more abundant supply of labour; and iii) lower wage costs and lower overheads (Vernon, 1966). The second type of analysis, which is compatible with the first, focuses on the importance of the entrepreneurial capacity for performing tasks of varying complexity through the accumulation of management skills, marketing techniques and essentially idiosyncratic technologies that do not lend themselves to formal structures.⁸

The analytical aspects of the above approaches are not entirely satisfactory. For example, many countries do not have investment flows that are commensurate with their level of development as defined by the investment-cycle approach; the product cycle

⁵ This strategy involves the movement of industries from Japan, the leader of Asian technical and industrial progress, to the four "tigers" which follow it, and from them to a second-tier periphery (Thailand, Malaysia, Indonesia and the Philippines), followed now by a real or potential third-tier periphery (Sri Lanka, China and even Vietnam) which is beginning to be added to this chain. This strategy has been likened to the formation typical of the flight of the wild geese, which line up and follow a leader who points the way.

⁶ The rapid growth of the *maquiladoras* (export-oriented inbond assembly industries) of northern Mexico provides an illustration of the proportions that can be reached by a drive to establish a position in the international market for "economic" reasons, once an explicit policy decision has been taken to employ such a strategy.

⁷ Thus, for example, a number of countries in sub-Saharan Africa are in the first stage; most of the Latin American countries are in the second; Argentina, Brazil and Mexico, together with some East Asian economies (the Republic of Korea and Taiwan), are entering the third stage; Japan, Germany and Sweden, along with Hong Kong, are in the fourth; and the United States and the United Kingdom are in the fifth stage.

⁸ For an example of this type of analysis, see Lall, 1983.

cannot account for the capital- and technology-intensive investments that some developing countries have made in developed countries; and adaptation as a source of advantages does not necessarily work to the benefit of firms based in developing countries, since the established transnational corporations have more experience in adapting to developing countries exhibiting a wide range of very different conditions, as well as being able to benefit from the internal transfer of that experience and of technology.

II

The scale of foreign direct investment

1. The international experience

Foreign investment by companies based in developing countries is not a recent phenomenon, since South-South investment has been going on since the early 1930s. By the early 1980s, this type of investment had become quite significant, although estimates of the accumulated stock of such investment were extremely imprecise. For example, Louis T. Wells has estimated that as of 1980 it amounted to between US\$5 billion and US\$10 billion, whereas the former United Nations Centre for Transnational Corporations (UNCTC) (now the Transnational Corporations and Management Division of the United Nations) has given a figure of US\$15.3 billion for that same year (Wells, 1983; UNCTC, 1988).

The phenomenon of interest to us here is somewhat different. The stock of foreign direct investment from developing countries, which totalled around US\$50 billion in 1985, has tended to be concentrated in developed countries (see table 1).⁹ The available

In short, these approaches are useful in explaining what motivates developing countries to make foreign direct investments in other developing countries (i.e., South-South investment), but direct investment by developing countries in developed countries (i.e., South-North investment) is a subject that requires further study. This article attempts to contribute to such an analysis by taking a look at major Latin American manufacturing firms' recent experiences with international expansion.

data on investment during the period 1986-1989 indicate that by the end of the 1980s the accumulated stock totalled at least some US\$80 billion.¹⁰ With the exclusion of investment from Asia (not including the Middle East), which has followed the strategy that has become known as the "flight of the wild geese", over 70% of the investment flows from underdeveloped regions have been channeled to the developed world.

In the early 1980s, of the 18 developing economies for which information on foreign direct investment is available, five (Argentina, Bangladesh, Brazil, Mexico and Taiwan) were investing more in developed than in developing countries. By the close of the 1980s, they had been joined by China, Indonesia, the Republic of Korea and Venezuela, whereas most of the foreign direct investment from Colombia, Hong Kong, India, Pakistan, Peru, the Philippines, Singapore and Thailand was concentrated in developing countries. Most of the developing economies that were engaging in foreign direct investment

⁹ As shown in table 1, this figure includes nearly US\$18 billion of investment located in tax havens. More than one-third of developing countries' foreign direct investment in 1985 and more than 20% of it in 1975 came from such countries as the Netherlands Antilles, Bermuda, Liberia, Panama and the Cayman Islands, where the major investors are transnational corporations based in developed countries (UNCTC, 1991).

¹⁰ The UNCTC estimated the average annual flow of direct investment from one group of developing countries for the period 1986-1989 at US\$4 747 million (UNCTC, 1991). Since this figure does not include such economies as those of Hong Kong, India, Indonesia, Malaysia, Mexico or Peru, we can safely assume that it seriously underestimates total foreign direct investment from developing countries. Other data compiled by the UNCTC suggest a figure of about US\$85 billion for 1988.

TABLE 1

Developing countries: foreign direct investment stocks
(Millions of dollars)

Investment sources	Investment destinations					
	1975			1985		
	Developed economies	Developing economies	Total	Developed economies	Developing economies	Total
Latin America and the Caribbean (excluding tax havens)	3 151	102	3 254	4 664	388	5 051
Tax havens ^a	1 157	838	1 994	15 402	2 507	17 910
Latin America (including tax havens)	4 308	940	5 248	20 066	2 895	22 961
Africa	255	44	299	690	522	1 212
Asia (excluding Middle East)	535	2 217	2 752	4 629	8 337	12 966
Middle East	394	21	415	5 480	519	6 000
Total ^b	5 653	3 591	9 244	36 240	13 323	49 563
Foreign direct investment by developing countries as a percentage of investment by all countries	4.4	15.0	6.1	8.1	15.9	9.3

Source: United Nations Commission on Transnational Corporations, *Non-Conventional Transnational Corporations* (E/C.10/1990/18), 5 May 1990, table 2.

^a Netherlands Antilles, Bahamas, Cayman Islands and Panama.

^b Includes the former Yugoslavia and Turkey as well as figures on direct investment from unspecified developing countries. Consequently, the sum of the individual entries does not match the totals shown.

directed it towards just a few recipient countries; for example, in the late 1980s, over three-quarters of the investment coming from China, Colombia, Hong Kong, Peru, Singapore and Thailand was concentrated in the three destinations of greatest importance for each of those countries. Brazil and the Republic of Korea, on the other hand, were more diversified: in 1988 there were 13 countries in each of which Brazil had over US\$10 million of direct investment, while in the case of Korea there were 21 such countries.

In that same year there were 17 destinations (ten developed countries and seven developing nations) in which direct investment by developing countries totalled more than US\$1 billion. During the 1980s the United States was the chief recipient of this type of investment (with nearly one-third of the total), but a substantial portion of its share came from tax havens (73% in 1980 and 46% in 1988). Leading developing-economy recipients of direct investment from other developing countries included China,

Indonesia, Malaysia, Mexico, Singapore and Taiwan, each with over US\$1 billion in direct investment from developing countries not classified as tax havens (UNCTC, 1991).

Although investment from developing countries is still only a small fraction of foreign direct investment worldwide (less than 10%), it grew very rapidly in 1975-1985, even if investment from tax havens is excluded from the calculations.

Two elements merit particular attention in this respect (see table 1). One is the fact that in the 1980s the Latin American and Caribbean region (excluding tax havens) slipped downward in the rankings as a source of foreign direct investment: whereas prior to that time it had accounted for slightly over one-third of the total stock of foreign direct investment from underdeveloped countries, its share shrank to only about 10% in that decade. Since foreign direct investment patterns are related to competitiveness, economic maturity and the type of position held within the

international economy, this trend is quite disturbing. In contrast, there was a huge increase, in absolute terms, in investment from East Asia. This development will be discussed in the following section.

2. Direct investment from East Asia

An examination of investment flows in Asia in the 1980s (see table 2) demonstrates the importance of foreign investment for countries whose economies are smaller than the largest in Latin America.¹¹ A significant feature, however, is that China is playing an increasing role in Asian investment and, in fact, has become the fastest-growing foreign investor among the developing countries. For its part, the United States is a very important destination for investment from the Republic of Korea and Taiwan (see table 3), both of which have set up very strong support systems for their foreign investment activities.

In Taiwan, incentives for foreign direct investment began to be offered in 1979, when the Investment Promotion Act introduced exemption from profits tax on foreign investments. This exemption benefited firms investing in the exploitation, development or processing of natural resources and their exportation back to Taiwan. In 1984, this incentive was extended to include companies which: i) produce or process specific government-designated agricultural or industrial raw materials and sell those products on the domestic market or export them to other countries; ii) are engaged in the transfer of government-specified technologies; or iii) invest in government-designated companies and sell their output on the domestic market or to other countries. Also in 1984, investors were given the right to defer the starting date for the application of this exemption by one to four years. Companies meeting the requirements to qualify for this tax exemption were also given access to the foreign exchange market under the provisions of the Exchange Controls Act. Thus, in practice, obtaining authorization for a foreign investment qualified that investment for a number of incentives. This

gave rise to an extensive system of support for foreign direct investment, made possible by the combined effect of Taiwanese industry's competitiveness and its resulting trade surpluses (Chen, 1986).

The Republic of Korea's system of incentives for foreign direct investment has been equally ambitious. During the 1980s, in particular, four types of stimuli were offered:

i) Credit assistance from the Korean Export-Import Bank, which financed as much as 80% of the total investment (90% in the case of medium-sized and small firms) at a rate slightly above LIBOR over a 10-year repayment period. The Korean corporations for the development of petroleum and mining also provided start-up and working capital for overseas prospecting and development of natural resources.

ii) Tax incentives which take the form of authorization for investors to establish a tax reserve to cover possible losses on their foreign investment. This reserve is equivalent to 15% of the investment (20% in the case of natural resources) and, if no losses are sustained, the reserve must be included in the profits statement over a four-year period, following a three-year grace period. Other tax incentives include deductions for taxes paid to foreign governments and an income tax exemption on dividends earned abroad from natural resource projects, provided that the dividends are tax exempt in countries that have signed agreements with Korea to avoid double taxation.

iii) Foreign investment insurance covering up to 90% of capital losses or losses of dividends or interest due to political factors such as war, expropriation or the imposition of restrictions on remittances.

iv) The provision of information through the foreign investment advisory centre set up by the Korean Small Business Federation and the Korean Export-Import Bank (Bank of Korea, 1989; Kuang, 1989).

The experience of Korea and Taiwan illustrates a dual dimension of foreign direct investment by developing economies. On the one hand, a rapid increase in such investment has been feasible thanks to favourable balance-of-payments conditions and, most importantly, a strong competitive position in manufacturing. On the other hand, government policy has been designed to help ensure that the growth of such investment will serve national interests, the policy aim being first to secure a supply of natural resources and then to gain access to markets, management methods and technology, as well as to transfer out of the country industries that are on the decline in the domestic market owing to changes in competitive

¹¹ It is important to note the huge gap between the figures on Taiwanese foreign direct investment reported by recipient countries (see table 2) and by Taiwan itself (see table 3). This discrepancy would appear to be due to the fact that the amount of such foreign investment has been deliberately undervalued in order to avoid compromising the recipient countries, given Taiwan's difficult position in terms of its international relations (see World Bank, Department of Industry and Energy, 1989, box 2, p. 10).

TABLE 2

Asia: investment flows in the 1980s
(Millions of dollars)

Host economies	Source economies							Total
	Hong Kong	Singapore	Taiwan	Korea	Total NIEs	Japan	Other	
Developing Asian countries	11 120	1 588	2 484	412	15 604	11 565	15 159	42 328
Four newly industrializing economies (NIES)	1 063	171	43	n.d.	1 277	8 022	17 440	26 739
Total	12 182	1 760	2 527	412	16 881	19 587	32 599	69 067

Source: World Bank, Department of Industry and Energy, *Foreign Direct Investment from the Newly Industrialized Economies*, Industry Series, paper No. 22, Washington, D.C., December 1989, table 3. The data refer to investments made between 1979 and 1988; the period varies depending on the country.

TABLE 3

Taiwan and Republic of Korea: cumulative foreign direct investment flows, 1986-1990
(Millions of dollars)

Destination	Taiwan	Korea
South-East Asia	990.6 ^a	601.8
North America	1 176.8	1 045.1
European Economic Community (EEC)	41.0	141.3
Other	653.2	360.4
Total	2 861.6	2 148.6

Source: Organization for Economic Cooperation and Development (OECD), *The Dynamic Asian Economies and International Direct Investment*, OECD SG/IV/CIME (92)4, Paris, 1992; and World Bank, *Foreign Direct Investment from the Newly Industrialized Economies*, Industry Series, paper No. 22, December 1989, tables 5 and 6.

^a Authorized investments according to recipient countries: US\$2 527 million.

factors (a rise in real wages, for example).¹² Given the investment dynamics of these two economies and their geographic orientation, in this case, too, we are witnessing a combination of investments in developed countries and investment linked to industrial deployment, as an efficient mechanism for improving the position of these economies in the world market.

3. The scale of direct investment by Latin America

Although there is information at the company level which shows that investment by Latin American countries has grown rapidly since the mid-1980s,

aggregated information on investment flows and stocks is available for only seven countries in the region: Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela. The data for 1988-1990 indicate that these countries had foreign investments totalling US\$7 461 million,¹³ which was more than double the estimated total for the entire region in 1975 (see table 1). Argentine, Brazilian, Mexican and Venezuelan investment was concentrated in developed countries and tax havens; the other countries' investments tended to be located in Latin American countries and tax havens.

¹² The expansion of Korean and Taiwanese investment once their industries had matured is in keeping with the notion of an investment development cycle described earlier. The use of investment as a means of facilitating industrial retrofitting through the transfer abroad of industries as they become obsolete (without, however, relinquishing control over them) is in line with the ideas on Japanese investment set forth by Terutomo Ozawa (Ozawa, 1991). This article by Ozawa shows how Japanese foreign direct investment has been an essential catalyst for the country's shift towards a more sophisticated domestic industrial structure by allowing the transfer to other countries of industrial activities in which Japan has been losing its competitive edge and by serving as a support mechanism for the economy's shift towards sectors that provide more value added. For an early exposition of these ideas, see Ozawa, 1975.

¹³ The breakdown for this total is as follows: Argentina: US\$2 730 million; Brazil: US\$2 397 million; Mexico: US\$903 million; Venezuela: US\$765 million; Colombia: US\$402 million; Chile: US\$201 million; and Peru: US\$63 million. The data were obtained from ECLAC, 1992a, for Brazil, Chile, Colombia and Peru in 1990, and from UNCTC, 1991, for Argentina, Mexico and Venezuela in 1988.

TABLE 4

United States: net inward foreign direct investment position
(Year-end stocks, in millions of dollars)

	1991	1990	1989	1988	1987
Brazil	488	378	428	286	293
Mexico	608	550	1 251	218	180
Panama	4 367	4 099	3 039	2 878	2 627
Venezuela	544	489	1 431	540	411
Other	458	503	474	409	425
Latin American total	6 466	6 020	6 624	4 331	3 935
World total	407 577	396 702	373 763	314 754	263 394

Source: United States Department of Commerce, "The international investment position of the United States in 1990", *Survey of Current Business*, vol. 71, No. 6, Washington, D.C., June 1991; and "The international investment position of the United States in 1991", *Survey of Current Business*, vol. 72, No. 6, Washington, D.C., June 1992.

More recent data (June 1992) put Brazil's total foreign investments at US\$4 139 million, of which 53% was in tax havens, 39% in developed countries (mainly the United States and United Kingdom) and 8% in developing countries (Peres Núñez, 1993). Indeed, Brazilian investment in developed countries has grown extremely rapidly, soaring from US\$707 million in 1983 to US\$1 601 million in 1992, with nearly two-thirds of that sum going to the United States (US\$1 064 million). Data on the main destination for Latin American investment (the United States) indicate that the Latin American countries' net position¹⁴ increased by almost 65% between 1987 and 1991, jumping from US\$3 935 million to US\$6 466 million, with Venezuelan,

Mexican and Brazilian investments (if Panama is excluded on the grounds that it is a tax haven) accounting for the bulk of that amount (see table 4).

A detailed analysis of the major economic variables for non-bank affiliates in the United States (see table 5)¹⁵ points up the considerable sales volumes achieved by companies in which Latin American investors have an interest: in 1990, their sales amounted to US\$19 341 million, which is in line with other statistics that put the number of jobs created by these affiliates at over 34 000. Although these amounts still represent only a small fraction of total foreign investment in the United States (slightly over 1% in 1990), they are on the rise, and their size in absolute terms is quite significant for the source countries in question.

¹⁴ "Net position" is the sum of foreign direct investors' capital plus the net balance of their accounts with their affiliates located in the United States. It will therefore be determined by the financial policy of the parent company and its affiliates, which in turn will be heavily influenced by real interest rates in the source and destination countries. The ratio between these rates changed radically, for example, between Mexico and the United States in 1989-1990.

¹⁵ The *Survey of Current Business* defines an affiliate as any company in which 10% or more of the voting stock is owned by a foreign investor.

TABLE 5

**United States: sales and jobs provided by non-bank
U.S. affiliates of foreign firms**

Source country	Sales (millions of dollars)		Jobs (thousands)	
	1990	1989	1988	1990
Brazil	1 600	1 035	993	2.3
Mexico	2 851	2 543	1 398	12.0
Venezuela	13 196	7 862	6 604	16.2
Other	1 694	2 256	1 935	4.1
Latin American subtotal (excluding Panama)	19 341	13 695	10 931	34.6
Panama	4 008	7 113	3 709	29.5
Latin American total	23 349	20 808	14 640	64.1
World total	1 168 490	1 040 887	886 407	4 705.3

Source: United States Department of Commerce, "U.S. affiliates of foreign companies: operations in 1990", *Survey of Current Business*, vol. 72, No. 5, Washington, D.C., May 1992; and "U.S. affiliates of foreign companies: operations in 1989", *Survey of Current Business*, vol. 71, No. 7, Washington, D.C., July 1991.

III

Main features of Latin America's direct investment

Based on an analysis of six case studies –on Argentina, Brazil, Chile, Colombia, Mexico and Venezuela–¹⁶ an idea can be gained of the principal features of the foreign direct investments made by these countries' major industrial enterprises. Some of the main such features are the following:

First of all, these investments are heavily concentrated in certain destinations. For Brazil, Mexico and Venezuela, the main recipient country is the United States. Although the levels of Mexican investment in Central America and Europe and of Brazilian and Venezuelan investment in Europe are significant, they do not invalidate the above statement. The investments of Colombian,¹⁷ Chilean and Argentine manu-

¹⁶These studies were conducted as part of ECLAC/UNDP Regional Project RLA/88/039, "Design of policies to strengthen the capacity for technological innovation and enhance international competitiveness in the Latin American entrepreneurial environment". The appendix contains a list of the main Argentine, Brazilian, Mexican and Chilean manufacturing firms which have made foreign direct investments. Because the identities of the firms included in the survey samples in Colombia and Venezuela were confidential, no tables are given for companies in these two countries.

¹⁷The largest foreign direct investments made by Colombian firms are those of Carvajal S.A. (printing and publishing in Brazil, Ecuador, Guatemala, Chile, Mexico, Panama and Venezuela, and distribution in the United States and Spain); Distral S.A., which has invested in the production of capital goods in Venezuela and the United States (Florida); and Levapan S.A. (production of yeast in Ecuador and Venezuela). The scope of Carvajal S.A.'s internationalization is illustrated by the fact that nearly 25% of its sales are made by its foreign affiliates. (Data obtained from interviews with executives in the above-named firms.)

facturing firms are relatively more diversified and tend to be directed primarily towards other Latin American countries.¹⁸

Second, the concentration of investment in certain countries is also related to a heavy concentration of investment in certain sectors. If we look at the total sum of investment rather than the number of investment projects, the following sectoral specializations (excluding the financial sector) become apparent:

i) Over 95% of Venezuela's investment in the United States is in petroleum refining and related industries, principally through *Petróleos de Venezuela S. A.*¹⁹

ii) Mexican corporate investment is heavily concentrated in non-metallic minerals industries, chiefly because of the large investments made by *Vitro, S.A.* (glass containers and related industries) and by *Cementos Mexicanos S. A.*²⁰

iii) Investment by Brazilian firms is heavily concentrated in the production of motor vehicle parts (United States and Portugal), wearing apparel (Spain and Portugal) and marketing.

iv) Argentine firms exhibit a greater degree of sectoral diversification; this is primarily because the bulk of Argentina's foreign investments were initiated during earlier stages of development, as will be discussed later.

Third, the time frame for Latin American firms' foreign investments differs significantly from one country to another:

i) The first Argentine-based firms to diversify their investments by moving some of them out of the country started to do so in the early decades of the twentieth century (e.g., *Bunge & Born* in the food industry and *Alpargatas* in textiles and footwear). These investments were channelled to other South American countries, especially Brazil. Then, starting

in the 1940s, a number of firms that had met with success in import-substitution activities, particularly in the metal products and machinery industries, also began to invest in other countries of the region (Katz and Kosacoff, 1983). Finally, in the 1980s—largely because of the effort to restructure Argentine industry that had begun in the mid-1970s—new business groups started to invest in other countries in such activities as pharmaceuticals, iron and steel, paper, aluminium, special-order capital goods (short production runs) and the food industry (see Bisang, Fuchs and Kosacoff, 1992).

ii) Brazilian, Mexican and Venezuelan firms began to make real progress in terms of international expansion immediately following the recession of the 1980s, although some foreign investments had been made in preceding decades. While those pre-recession investments tended to be concentrated in protected markets in other countries of the region, post-recession investments have been directed primarily towards the United States. Colombian firms' investments have followed a similar, although less marked, trend.

iii) For Chile, internationalization is a very recent phenomenon which only really took hold following the relaxation of foreign investment regulations in April 1991.

Fourth, each country's development model and policies have had a decisive influence on how aggressively they have sought to move into the international market. This is shown in the following examples:

i) In the cases of Mexico and Brazil, there has been a close correlation between the development model and the amount of investment. Mexico's development model is relatively more open to foreign markets, and its main economic groups' levels of investment have been higher as well, whereas Brazilian groups—which operate on roughly the same scale as their Mexican counterparts—exhibit less of a propensity for foreign investment. Of course, the difference in the location and size of the two countries' domestic markets plays an important role in the persistence of different development styles. Another compelling demonstration of the development model's importance as a determinant of the intensity and scope of international expansion by Latin American firms is provided by an analysis of the behaviour of the region's main television networks (Arruda, 1991; Robina, 1991).

¹⁸ The largest Argentine investments in developed countries are in the banking sector and are concentrated in the Netherlands (UNCTC, 1991).

¹⁹ State-owned aluminium producers are in second place, with investments in Belgium, the United States and Costa Rica. Major investments in other sectors include *Corimón's* involvement in the chemical industry in the United States and *Venezolana de Pulpa's* investments in the United Kingdom (Ross, 1991; ECLAC, 1992b; *América Economía*, 1992).

²⁰ For an analysis of how *Vitro S.A.* came to be the second-largest producer of glass containers in the United States and how *Cementos Mexicanos S.A. (CEMEX)* ended up controlling 29% of Spain's cement market, see Peres Núñez, 1990, and *The New York Times*, 1992.

ii) The reorganization of Argentine industry in the 1970s and 1980s is reflected in the profile of the Argentine firms that have internationalized their operations since that time. Argentine companies' long history of international expansion provides a clear illustration of the close correlation that may exist between a country's development style and the growth of its foreign investment activity (Bisang, Fuchs and Kosacoff, 1992). The different development models used by this country have gone hand in hand with different investment strategies and motivations. The incipient trend towards foreign investment by Chilean firms reflects an equally significant restructuring process.

iii) The structural "petrolization" of the Venezuelan economy has had a decisive effect on the level and structure of its foreign investments (ECLAC, 1992a, box V-6).

In short, there is a clear-cut relationship between the concentration of investment flows in certain recipient sectors and countries and the time frame and development model in which such flows originated. The investments made by Argentina and other countries prior to the 1980s were a "natural" expansion of efficient import-substituting processes and business enterprises. In some cases, this expansion was coupled with the transfer of appropriate technologies that had been developed or adapted by those same sectors or firms. The protection of destination countries' markets was an incentive for that expansion, and indeed it "forced" its occurrence, since it was the only way to maintain market shares that had been won with exports. The rationale for many of the more recent investments, especially by Mexico and Brazil, is based on a more complex set of factors, which will be analysed in the following section.

IV

Determinants of foreign investment

The current vigour of foreign investment by some leading Latin American firms is the net result of the interaction between factors that encourage investment and factors that deter it. Some of these factors are taken into consideration by analytical approaches for explaining the growth of foreign direct investment by developing countries; in the aggregate, however, this set of factors seems to go beyond the reasons suggested by analyses of the product cycle, of the investment development cycle and of the skills development process that were outlined earlier.

1. Factors that stimulate internationalization

The business enterprises that were studied have internationalized their operations in response both to factors at work within the companies themselves and to factors forming part of their external environment.

The internal factors—which are the most similar to those dealt with in traditional analyses of foreign investment by developed countries—include the following:

i) An effort to increase the firm's efficiency and profitability, which entails the use of mechanisms for utilizing comparative advantages in a number of countries, fully exploiting any possible economies of

scale and of scope, and paving the way for the in-house development of technology;

ii) A desire to initiate or speed up the firm's learning process regarding markets, operations, management techniques, products, etc.; and

iii) The need to reduce the risk inherent in running a business in a highly unstable economy.

External factors relating to the business environment have also played an influential role in the international expansion of companies based in the countries of the region. They include:

i) Factors that motivate companies to reduce their sensitivity to the vagaries of their home country's economic policy and economic situation. In particular, companies in this position wish to increase the percentage of foreign-currency revenues in their total earnings in order to shield themselves from the instability of their home country's exchange policies. Obviously, for the firms of some countries, foreign investment is also a way of reducing their dependence on domestic markets whose growth is expected to remain slow.

ii) Factors related to the dynamics of market competition. Foreign investment has given companies a way to stop firms with which they compete at the international level from making further inroads into

their domestic market, take advantage of opportunities for forming strategic alliances, and develop new, higher value-added markets and market niches (as has been done, for example, by Brazilian firms in the garment industry). It should also be noted that the presence of affiliates in developed countries has made it possible or has helped make it possible for firms from the region to gain access to new technologies and financing.

iii) Changes in the organizational and technical structure of industries that use Latin American exports. These changes have prompted firms to set up plants in the markets where such user industries are located. For example, Brazilian automobile part makers, such as Metal Leve and COFAB, have made investments in Europe or the United States so that they can use the just-in-time inventory management system demanded by their clients, develop designs in close contact with them, and place more emphasis on offering "technological solutions" rather than merely supplying parts or components (see the case of Metal Leve in ECLAC, 1992a, box V-4).

iv) It is possible that, within the context of the international economy, current regionalization processes may divert trade rather than increasing it. This generates uncertainty, but that uncertainty can at least be reduced to some extent by establishing plants, storage facilities or marketing centres in countries which are firmly-committed parties to existing agreements. The intermittent appearance of protectionism underscores the importance of diminishing that uncertainty.

V

The main trends in Latin America in the early 1990s

The existing trends are not of a regional character, but instead are essentially a result of the specific economic situation in each country and the strengths and weaknesses of its firms. Generally speaking, however, businesses are increasingly coming around to the view that foreign investment is necessary in order to hold on to markets they have already penetrated or to carve out a position in markets where the level of value added is higher; it is also felt that in global industries, companies in countries which are in the process of opening up their economies to trade and which suffer from systemic shortcomings run the risk

2. Factors that deter internationalization

Among the various factors that have discouraged leading firms in a number of countries from trying to internationalize their operations, two main categories can be identified:

i) Macroeconomic policies, particularly those having to do with regulations that obstruct the free flow of funds reflected in the capital account (such regulations were in effect in most of the countries of the region up to the mid-1980s, and even more recently in the case of Chile) and with the absence of international treaties to eliminate double taxation.

ii) Factors at work within the firm. Shortages of some factors of production (e.g., financial resources and management teams) have blocked or delayed foreign investments. In addition, the fact that many firms do not know a great deal about international investment has acted as a significant constraint by raising the level of uncertainty regarding the results of possible investments.

The available information on the cases studied indicates that the factors which encourage internationalization outweigh the factors hindering it at the present time and are likely to continue to do so in the future. Although the elements at hand do not provide sufficient grounds for describing the investments now under way as an authentic process in the strict sense of the word, they do seem to constitute a sufficient basis for the identification of certain trends.

of losing their own domestic market unless they, too, operate on the basis of a global strategy.

The basic trends observed in the individual countries are as follows:

i) Mexico's large privately-owned groups are increasing their investments in the United States; this trend is associated with the creation of the North American Free Trade Area.

ii) For Argentine firms, the establishment of MERCOSUR strengthens the foundations of their strategy of investing in southern Brazil, especially in activities linked to agro-industry.

iii) Some Chilean companies have made relatively large foreign investments, especially since the relaxation of regulations governing access to the informal exchange market for operations involving direct investments outside the country. This liberalization has been coupled with greater maturity on the part of those Chilean firms capable of engaging in foreign investment, as has been clearly reflected in

their participation in the privatization of major companies in Argentina since 1991.²¹

Although the foregoing indicates that the level of foreign direct investment by Latin American enterprises is already rising, a fuller understanding of the phenomenon and its effects by the countries' governments and societies will surely cause this trend to grow stronger and the process will become even more dynamic.

VI

The Impact of Latin American foreign investments

In actual fact, no assessments are currently available of the impact of Latin American firms' foreign investment activity. More specifically, it is not known how it affects the international competitiveness of the firms' home countries, much less the well-being of their inhabitants. Social and political acceptance of these investments has been hindered by the lack of such evaluations. In some countries, it is difficult even to gain access to information about these business activities because foreign direct investment is confused with capital flight, the depletion of domestic savings, and even a lack of patriotism. Complete, accurate information and a suitable evaluation would surely help to dispel preconceived ideas that constitute a very real obstacle to foreign investment.

Despite the absence of such an assessment, sufficient information can be compiled to attempt at least a rough evaluation of the impact of foreign direct investment in terms of winning or maintaining markets and gaining access to financial resources.

As regards the impact of foreign affiliates on the external trade of their host countries, the available information on foreign affiliates established in the United States (see table 6) indicates that, on balance, their net effect on the host country is negative.

Although the table does not mean that the source country is the sole beneficiary of this situation, the information to be gleaned from country studies and from an analysis of the nature of the large-scale investments made by Mexican firms in glass and cement, by Brazilian firms in automobile parts and by Venezuelan companies in the oil industry all indicate that foreign investment has indeed improved these countries' trade balances.

In the area of finance, the deterioration of Mexico's net foreign investment position in the United States between 1989 and 1990 (see table 4) appears to suggest that affiliates in that country are being used as a source of finance. The available information indicates that direct investment by Mexico has actually increased; therefore, the reason for the deterioration in the net position must lie in the parent companies' accounts, which should have shown a reduction in the affiliates' debit balance or an increase in their credit balance. Either of these two movements would be in keeping with the spread between the two economies' real interest rates during those years.

The exact way in which government policy influences the internationalization of companies in the region is still far from being fully understood. However, even before precise evaluations become available, it is safe to say that the negotiation of agreements to prevent double taxation and eliminate unnecessary obstacles to the flow of capital for direct investment would be appropriate steps to take in order to boost competitiveness and strengthen Latin America's entrepreneurial base. Before recommending any further measures, much more precise information would be needed on the consequences of internationalization.

²¹According to information supplied by the Ministry of Economic Affairs of Argentina, Chile's direct investment in that country during 1992 amounted to US\$700 million, which is considerably more than the US\$200 million in foreign direct investment registered with the Central Bank of Chile between 1971 and 1991 (*Estrategia*, 1992, p. 39). For a list of the main direct investments in Argentina made by Chilean firms, see section D of the appendix.

TABLE 6

**United States: external trade of non-bank
U.S. affiliates of foreign firms**
(Millions of dollars)

Source country:	1990		1989		1988	
	Exports from United States	Imports to United States	Exports from United States	Imports to United States	Exports from United States	Imports to United States
Brazil	196	211	134	186	148	186
Mexico	157	811	131	821	84	803
Venezuela	257	4 637	141	2 886	74	... ^a
Other	1 027	603	1 274	609	1 217	... ^a
Latin American subtotal (excluding Panama)	1 637	6 262	1 681	4 501	1 542	3 806
Panama	247	547	331	544	266	523
Latin American total	1 883	6 809	2 012	5 045	1 808	4 329
World total	91 137	180 674	84 263	169 745	69 541	155 533

Source: United States Department of Commerce, "U.S. affiliates of foreign companies: operations in 1990", *Survey of Current Business*, vol. 72, No. 5, Washington, D.C., May 1992; "U.S. affiliates of foreign companies: operations in 1989", *Survey of Current Business*, vol. 71, No. 7, Washington, D.C., July 1991; and "U.S. affiliates of foreign companies: operations in 1988", *Survey of Current Business*, vol. 70, No. 7, Washington, D.C., July 1990. The sums of the source figures will not always match the totals and subtotals shown.

^a These figures were suppressed by the source for reasons of confidentiality.

A detailed study would also help to do away with obstacles to foreign investment created by the perhaps mistaken idea that such investments constitute an inefficient use of chronically scarce domestic savings which are needed to fund national development. The restrictions which the Government of Venezuela placed on foreign investment by *Petróleos de Venezuela S.A.* in mid-1992 appear to be the result of just such a misconception (*Latin American Weekly Report*, 1992). These types of image problems are also found in the recipient countries, as is shown by the resistance of congressmen in the United States to the purchase of PPI Del Monte Fresh Produce by a Mexican group.²²

It may therefore be concluded that an in-depth analysis is needed of the ways in which foreign investment by Latin American firms affects those firms' international competitiveness, the creation of competitive advantages in the source country and the well-being of the population in both the source and destination countries.

²² Opposition to this purchase was sparked by the fact that the State-owned industrial development bank (*Nacional Financiera*) has a minority interest in the Mexican group in question (*La Jornada*, 1992; *The Wall Street Journal*, 1992).

Bibliography

- América Economía* (1992): Santiago, Chile, special issue, December.
- Arruda, Mauro (1991): *A internacionalização da TV Globo*, ECLAC/UNDP Regional Project RLA/88/039, Santiago, Chile, ECLAC.
- Bank of Korea (1989): *Overseas Investment of Korea*, Seoul, December.
- Bisang, Roberto, Mariana Fuchs and Bernardo Kosacoff (1992): *Internacionalización y desarrollo industrial: inversiones externas directas de empresas industriales argentinas*, Working Paper No. 43 (LC/BUE/L.125), Buenos Aires, ECLAC Office in Buenos Aires, February.
- Chen, Che-Hung (1986): Taiwan's foreign direct investment, *Journal of World Trade Law*, vol. 20, No. 6, Geneva, November-December.
- Dunning, John (1986): The investment development cycle and Third World multinationals, K. M. Kahn (ed.),

- Multinationals of the South: New Actors in the International Economy*, New York, St Martin's Press/German Overseas Institute.
- ECLAC (Economic Commission for Latin America and the Caribbean) (1992a): *Social Equity and Changing Production Patterns: An Integrated Approach* (LC/G.1701(SES.24/3)), Santiago, Chile.
- (1992b): *Inversión extranjera directa en América Latina y el Caribe 1970-1990*, DSC/1/Add.1 and DSC/1/Add.2, Santiago, Chile, September.
- El Mercurio* (1992): Santiago, Chile, 18 April.
- Estrategia* (1990): Santiago, Chile, 19 November.
- (1992): Santiago, Chile, 28 September.
- Expansión* (1992): No. 589, Mexico City, Expansión S.A., 29 April.
- Katz, Jorge and Bernardo Kosacoff (1983): *Multinationals from Argentina*, Sanjaya Lall (ed.), *The New Multinationals: the Spread of Third World Enterprises*, New York, John Wiley & Sons.
- Kuang, Dae-Hwan (1989): *Korea's Overseas Investment in Rapid Rise*, Seoul, Korea Exchange Bank.
- La Jornada* (1992): Mexico City, 2 November.
- Lall, Sanjaya (1983): *The New Multinationals: The Spread of Third World Enterprises*, New York, John Wiley & Sons.
- Latin American Weekly Report* (1992): Pérez orders state oil company to halt and reverse 'internationalisation' drive, London, Latin American Newsletters, 10 September.
- Lawrence, Robert (1991): *Scenarios of the World Trading System and their Implications for Developing Countries*, Technical papers, No. 47, Paris, Organization for Economic Co-operation and Development (OECD).
- OECD (1992): *The Dynamic Asian Economies and International Direct Investment*, Paris.
- Ozawa, Terutomo (1975): Peculiarities of Japan's multinationalism: facts and theories, *Banca Nazionale del Lavoro Quarterly Review*, vol. XXVIII, No. 115, Rome, Banca Nazionale del Lavoro, December.
- (1991): Japan in a new phase of multinationalism and industrial upgrading: functional integration of trade, growth and FDI, *Journal of World Trade*, vol. 25, No. 1, Geneva, Werner Publishing Company Ltd., February.
- Paúl Fresno, Luis Hernán (1991): *Segunda etapa en el proceso de integración a los mercados globales: inversión directa de empresas chilenas en el exterior*, ECLAC/UNDP Regional Project RLA/88/039, Santiago, Chile, ECLAC.
- Peres Núñez, Wilson (1990): *From Globalization to Regionalization: the Mexican Case*, Technical papers, No. 24, Paris, OECD Development Centre, August.
- (1993): *La inversión directa intrarregional en América Latina*, ECLAC, Division of Production, Productivity and Management (mimeo).
- Robina, Soledad (1991): *La internacionalización de una empresa mexicana: el caso de Televisa*, ECLAC/UNDP Regional Project RLA/88/039, Santiago, Chile, ECLAC.
- Ross, Maxim (1991): *La inversión directa en actividades productivas en el exterior: el caso de Venezuela*, ECLAC/UNDP Regional Project RLA/88/039, Santiago, Chile, ECLAC.
- The New York Times* (1992): Mexico cement maker strikes again in Spain, New York, 21 July.
- The Wall Street Journal* (1992): Mexican group plans to buy a fruit firm from Polly Peck for about \$500 million, 12 August.
- UNCTC (United Nations Centre on Transnational Corporations) (1988): *Transnational Corporations in World Development: Trends and Prospects*, New York, United Nations publication, Sales No. E.88.II.A.7.
- (1991): *Transnational corporations from developing countries. Impact on home countries*, New York, (mimeo).
- United Nations Commission on Transnational Corporations (1990): *Non-Conventional Transnational Corporations* (E/C.10/1990/18), Washington, D.C., 5 May.
- United States Department of Commerce (1990): U.S. affiliates of foreign companies: operations in 1988, *Survey of Current Business*, vol. 70, No. 7, Washington, D.C., July.
- (1991a): The international investment position of the United States in 1990, *Survey of Current Business*, vol. 71, No. 6, Washington, D.C., June.
- (1991b): U.S. affiliates of foreign companies: operations in 1989, *Survey of Current Business*, vol. 71, No. 7, Washington, D.C., July.
- (1992a): The international investment position in The United States in 1991, *Survey of Current Business*, vol. 72, No. 6, Washington, D.C., June.
- (1992b): U.S. affiliates of foreign companies: operations in 1990, *Survey of Current Business*, vol. 72, No. 5, Washington, D.C., May.
- Ventura, Vivianne (1991): *A internacionalização das empresas brasileiras*, ECLAC/UNDP Regional Project RLA/88/039, Santiago, Chile, ECLAC.
- Vernon, Raymond (1966): International investment and international trade in the product cycle, *The Quarterly Journal of Economics*, vol. 80, No. 2, Cambridge, MA, Harvard University, May.
- Wells, Jr., L. T. (1983): *Third World Multinationals. The Rise of Foreign Investment from Developing Countries*, Cambridge, MA, The Massachusetts Institute of Technology, MIT Press.
- World Bank, Industry and Energy Department (1989): *Foreign Direct Investment from the Newly Industrialized Economies*, Industry Series paper No. 22, Washington, D.C., December.

APPENDIX

A. Main Argentine firms with direct investments abroad

Company	Foreign affiliates	Country	Year	Activity	Observations
Bunge & Born	Molinos	Paraguay	1943	Agroindustry	
	Harineros	Brazil	1905	Agroindustry	Controls 11 firms
	Sanbra	Brazil	1928	Chemicals, textiles	Controls 9 firms
	La Fabril	Peru	1943	Agroindustry	Controls 9 firms
Alpargatas	Fabrica Uruguaya de Alpargatas	Uruguay	1890	Yarns, footwear	
	São Paulo Alpargatas	Brazil	1907	Yarns	Brazilian-owned since 1982
	Comercial Textil Ltda.	Chile	1982	Marketing	
	Anstalt Balzer Exportex Anstalt	Switzerland Switzerland	1983 1985	Holding company Marketing	Has 5 branches
Arcor	Arcopar	Paraguay	1978	Candies	Joint investment with local capital
	Nechar SA	Brazil	1980	Candies	
	Van Dam SA	Uruguay	1980	Candies	Joint investment with local capital
	Alimentos Indal	Chile	1981	Jam	Joint investment with local capital
Techint	TPT Houston	USA	1990	Pipe finishing	
	CEI	Italy	1922	Electro-mechanical engineering	
	Techint SA Mexico	Mexico	1954	Industrial engineering	
	COMEI	Mexico	n/s	Industrial engineering	Controlled by Techint Mexico
Techint	TAMSA	Mexico	1952	Steelmaking	Minority share
	Pomini Farrel	Italy	1988	Industrial equipment	
	Giustina International	Italy	n/s	Industrial equipment	Controlled by Pomini Farrel
	Breda-Techint Machine	Italy	n/s	Industrial equipment	Joint investment by Alumix-Breda and Techint
	Casagrande Techint	Italy	1990	Industrial equipment	Joint investment by Casagrande and Techint
F.V.	Ecuacobre	Ecuador	1978	Sanitary fittings	
	DOCOL	Brazil	1984	Sanitary fittings	
	Fravi SA	Brazil	1977	Marketing	
	F.V. of America	USA	1988	Marketing	
Celulosa	Fabipar	Paraguay	1982	Paper manufacture	
SINTYAL	Lab. Krinos	Venezuela	1982	Pharmaceuticals	
	Sintyal Peru	Peru	1985-1989	Pharmaceuticals	
	Sintyal Chile	Chile	1985-1989	Pharmaceuticals	
	Sintyal Uruguay	Uruguay	1985-1989	Pharmaceuticals	
	Chepar	Paraguay	1985-1989	Pharmaceuticals	
	Chemobras	Brazil	1985-1989	Pharmaceuticals	
	Difucap	Brazil	1985-1989	Pharmaceuticals	In association with Sanofi
	Chemo-Ibérica	Spain	1974	Marketing	
	Parke-Davis España	Spain	1985	Pharmaceuticals	
n/s	Italy	n/s	Pharmaceuticals		

Company	Foreign affiliates	Country	Year	Activity	Observations
Bagó	Hondulab	Honduras	n/s	Pharmaceuticals	Contract with Keun Wah Pharmaceutical Co. of Korea
	Laboratorios Armstrong (49%)	Mexico	n/s	Pharmaceuticals	
	Ethipharma	Bolivia	n/s	Pharmaceuticals	
	Profarma	Chile	n/s	Pharmaceuticals	
	Betal	Uruguay	n/s	Pharmaceuticals	
Gramón	G. Ramón	Paraguay	n/s	Pharmaceuticals	Minority share
Roemmers	Roemmers Uruguay	Uruguay	n/s	Pharmaceuticals	
	Roemmers Paraguay	Paraguay	n/s	Pharmaceuticals	
Manuel Sanmartín	Máquinas Sanmartín Ltda.	Brazil	1975	Machinery for the beverages industry	
	Máquinas Austral SA	Mexico	1978	Bottle-washing machines	
Carballo y Cía	Equis SRL	Paraguay	1975	Machinery for the beverages industry	
	n/s	Brazil	n/s	Machinery for the beverages industry	
Peñaflor	Bearco	Puerto Rico	1979	Wines	
	Andean Vineyard Co. Inc.	USA	1975	Wine marketing	
	Vinos Argentinos Imports USA	USA	1978	Wine marketing	
	Trapiche UK	United Kingdom	1990	Wine marketing	
Promecor	Promecor Brasil	Brazil	1980	Machine tools Special machinery	
Zanella Hnos.	Agromecánica Paraguaya	Paraguay	1965	Motorecycle parts and metal products	Sold in 1973
	Branco Motores	Brazil	1991	Engines with automatic gearboxes for mopeds	
	n/s	Brazil	1992	Moped factory	In course of execution
Sandor	n/s	Brazil		Dairy products	In course of execution
	n/s	Mexico		Dairy products	In course of execution
Carrocerías El Detalle	n/s	Brazil		Chassis manufacture	In course of execution

Source: Adapted from Roberto Bisang, Mariana Fuchs and Bernardo Kosacoff, *Internacionalización y desarrollo industrial: inversiones externas directas de empresas industriales argentinas*, ECLAC/UNDP Regional Project RLA/88/039, ECLAC, Santiago, Chile, 1991.

B. Main Brazilian firms with direct investments abroad

Companies (by sectors)	Sales (millions of dollars)	Activity	Country	Year	Observations
Foodstuffs					
Copersucar	2 043	Soluble coffee	USA	1976	Fourth largest coffee processor plant in the USA. Sold to Nestlé in 1986.
Cerval Alimentos (Hering)	1 135	Soya oil and meal plant	Portugal	To begin in 1993	Joint investment with other Brazilian groups. Investment: US\$40 million.
Textiles and clothing					
SP Alpargatas	693	Jeans factory	Spain	1989	Investment less than US\$14 million. Flexibility in meeting clients' needs. Penetration of segments with bigger margins.
Hering	214	Shirt factory (Euro-Disney)	Spain	1988	780 workers in 1991. To serve a market segment demanding quick deliveries. Other projects in Germany and USA.
Staroup	72	Jeans factory	Portugal	1989	Add value to product. Portuguese partner.
Packaging					
Toga	141	Paper and cardboard packaging factory	USA	1988	Bryce Corporation provided 40% of capital.
ITAP	138	Food packaging factory	USA (Buffalo, New York)	1983	150 workers. Production, and finishing of products exported from Brazil. Project for a plant in Portugal.
Electric and electronic goods					
Brastemp	763	40% of former Philips affiliate; refrigerator production	Argentina	1990	Investment: US\$10 million. Joint investment with Whirlpool.
Gradiente	272	Assembly of audio equipment	Mexico	1973	Closed down in 1986.
		Laboratory and trade-mark	United Kingdom	1979	"Garrard" brand; plant closed down in 1982.
Wood and furniture					
Duralex (Itau Group)	254	Factory	Germany (Hanover)	1990	Joint investment. 1990 sales: US\$14 million. Increase value added.
Steelmaking and capital goods					
Gerdau	1097	Steelworks	Canada (Ontario) Uruguay	1989 1981	Ontario plant: 250 000 tons per year. Uruguayan plant: 39 000 tons per year. Sales on protected markets; USA.
Motor vehicle parts					
COFAP	616	Engine part factory	Portugal	1991	Investment: US\$150 million. EEC Fund (Europe '92).
		50% of INDUFREN	Argentina	1991	Eliminate potential competition in MERCOSUR.
Metal Leve	366	Piston factory	USA (South Carolina)	1989	Investment: US\$10 million. Sales: US\$15 million. Clients demand technological solutions and "just in time" operation. Projects: piston factory (BEC) and gasket factory (USA).
SIFCO	142	Shaft machining plant	USA	1989	"Just in time" operation Project: second machining plant for 1991.

Source: Vivianne Ventura, *A internacionalização das empresas brasileiras*, ECLAC/UNDP Regional Project RLA/88/039, ECLAC, Santiago, Chile, 1991.

C. Main Mexican firms with direct investments abroad

Company	Activity	Country	Observations
Bimbo	Foodstuffs (bread)	Guatemala Chile	Projects in Colombia and El Salvador
Camesa	Metal products	USA	
CEMEX	Cement	USA Spain	Controls 29% of the Spanish market Produces cement and cement mixers in the USA.
Cydsa	Chemicals	USA	
Empresas Lanzagorta	Oil industry equipment	USA	
EPN	Oil industry equipment	USA	
GEAM	Agricultural products	USA	Controls PPI Del Monte Fresh Produce. Investment: US\$500 million.
Grupo Chihuahua	n/s	USA	
Industrias Monterrey	Foam panels	USA	Joint investment.
Herdez	Foodstuffs	USA	
Grupo ICA	Construction	USA Central America	
Maseca	Corn meal	Costa Rica	
Peñoles	Mining	USA	
Petróleos Mexicanos	Oil refining	Spain	Investment: US\$170 million in 5% of REPSOL (I.N.H.).
Peñoles	Mining	USA	
Pulsar	Carpets	USA	
Quadrum	Manufacture of public telephones	USA	
TAMSA	Steel pipes	USA	
Vitro SA	Glass, glass products and domestic appliances	USA	Controls Anchor Glass Corp. (second largest producer of glass containers in USA). Joint investments with Corning Inc.

Source: *Expansión*, No. 589, Mexico City, Expansión SA, 29 April 1992; *América Economía*, special issue, December 1992; *The New York Times*, 21 July 1992.

D. Main Chilean firms with direct investments abroad

Company	Activity	Country	Observations
Chilectra, Enersis and Endesa	Electricity	Argentina	Owens 25.2% of EDESUR. Investment: US\$275 million.
Endesa, Enersis and Chilectra	Electricity	Argentina	Owens 42% of Central Costanera. Investment US\$23 million.
Chilgener and Chilquinta	Electricity	Argentina	Owens 60% of Central Puerto. Investment: US\$92 million.
Masisa	Construction of a particle board plant	Argentina	Investment: US\$35 million.
Compañía Manufacturera de Papeles y Cartones	Purchase of a diaper factory	Argentina	Química Estrella San Luis SA. Investment: US\$11.5 million.
Dos en Uno	Candy factory	Argentina	Investment: US\$10 million.
Cemento Polpaico	Cement	Colombia	Minority share. Investment: US\$10 million.
Cerámicas Cordillera	Purchase of a ceramics plant	Argentina	Investment: US\$8.5 million.
Indura	Purchase of an industrial gases plant	Argentina	
Grupo Luksic	Brewery, electricity	Argentina	Investments in the province of Salta
Cochrane SA	Printing and publishing	Argentina	Joint investments with Editorial Atlántida (Argentina) and Editorial O Globo (Brazil).
SOQUIMICH	Nitrates and iodine	Argentina and other countries	Affiliates in six countries with investments of US\$7 million.
Madeco	Electrical industry	Argentina	Purchase of Industrias Eléctricas Quilmes. Investment: US\$5.5 million.
Madeco	Copper pipes	China	Joint investments with Codelco (Chile) and Beijing Non Ferrous Metal to set up Beijing Santiago Copper Corporation. Capital: US\$4.8 million.

Source: Luis Hernán Paúl Fresno, *Segunda etapa en el proceso de integración a los mercados globales: inversión directa de empresas chilenas en el exterior*, ECLAC/UNDP Regional Project RLA/88/039, ECLAC, Santiago, Chile, 1991; *Estrategia*, Santiago, Chile, 28 September 1992 and 19 November 1990; *El Mercurio*, Santiago, Chile, 18 April 1992.

Water property rights *and the State:* The United States *experience*

Carl J. Bauer

*Visiting doctoral candidate,
Department of Jurisprudence
and Social Policy,
Boalt Hall School of Law,
University of California
(Berkeley)*

The nature of property rights regimes has great influence on patterns of water and other natural resource development, and hence on economic development in general. Although in capitalist societies property rights are predominantly "private," their actual form and content are shaped by a wide range of political, economic, legal, and social institutions, so that the boundary between "public" and "private" is often very hard to define. The case of water is especially problematic: its peculiar physical characteristics mean that private rights are typically rights to *use* rather than ownership, and the need for public regulation to coordinate users is inescapable. In addition it is commonly believed that water rights regimes are much affected by geographic conditions: primarily whether the climate is wet or dry. This paper presents a North American case study of property rights and State involvement in water development that has several features similar to contemporary Latin America: geographic contrasts, economic transformation from agricultural to urban/industrial development, and political conflict over the role of the State and the limits of private property. The case is that of the State of Washington from the late 19th century to the Second World War, characterized by two contradictory water rights doctrines and a dramatically changing balance between irrigation and hydroelectricity. Several general lessons for the Latin American region can be drawn from this case: i) geographic conditions are much less important to legal doctrine and institutions than the redefinition and security of private rights needed to stimulate capital investment; ii) the importance of water development for regional economic growth depends on State involvement to overcome the limitations of the private sector; iii) private property can take several different and incompatible forms: a point which both its proponents and critics often ignore; iv) a private property regime geared to dynamic economic development can only be established and maintained with the active support of State intervention and administration, and v) such a regime can so effectively overcome the geographic and social obstacles presented by Nature to private property that the legal and institutional reforms needed to ensure "environmentally sustainable development" will probably have to be more fundamental than is often supposed.

I

Introduction

In Latin America and elsewhere, the nature of property rights regimes has great influence on patterns of water and other natural resource development, and hence on regional economic development in general.¹ In capitalist societies, of course, property rights are predominantly "private," but their actual form and content are shaped by a wide range of political, economic, legal and social institutions. How to define the boundary and relations between "public" and "private" thus becomes a crucial and contested question.

In the case of water the question is particularly complicated. In part this reflects water's physical nature—its mobility, fluidity, versatility and vital importance give it an inherently public character. Property rights regarding water are also affected by different geographic conditions. The question of whether the climate is arid or humid is widely believed to exert a strong influence on water rights regimes: the scarcity or abundance of water influences which land uses or other economic activities are most feasible, and this in turn influences legal rules on water use and control. This belief may become a sort of "environmental

determinism", according to which societies in arid climates the world over tend to develop similar systems of water law which differ markedly from those developed by societies in humid climates.

The premise of this paper is that Latin American policy-makers can draw some important conclusions about property rights and the role of the State in water resource development from a case study of what happened in the State of Washington from the late 19th century to the Second World War. Despite the evident differences, this case presents several features that are sufficiently similar to contemporary Latin American conditions to be useful: geographic variability and contrasts; economic transformation from primarily agricultural and resource-extractive activities to more urban and industrial development; and political conflict over the proper role for the State in this process and over the nature and limits of private property rights. While the study is limited to water resources, it is suggested that it offers more general lessons about the relation between private property and the State, and about the prospects for environmental sustainability under conditions of capitalist development.

II

Water resource development and policy issues in Latin America

Latin America is characterized by wide variations of environmental and climatic conditions. This is so not only between different nations—e.g., Mexico is generally more arid than Brazil—but also within nations, as nearly all of them have both arid and humid regions—e.g., northern vs. southern Mexico, western vs. eastern Argentina, etc. Such variety, when combined with the geographic distribution of different economic activities, leads to a wide range of supply and demand

conditions for water resources, and hence of problems for water law, policy, and management.

Notwithstanding such variety, there are several economic, social and political factors that are common to water resource issues in most of Latin America. As identified in a United Nations analysis in 1980, these factors are: growth in both population and economic production; increasing urbanization (i.e., geographic concentration of development); water resources which are abundant but typically distant from population centres; rapid adoption of modern technology; and centralization of both political and

¹ By "regime" I mean both the legal conception of property rights themselves, as well as the associated complex of public institutions through which such rights are concretely expressed.

economic power and decision-making. These combine to produce two principal kinds of water resource problems: i) problems of quantity, regulation of flow, and water and land use conflicts; and ii) urban problems of bad water quality, especially associated with poverty (United Nations/ECLAC/UNEP, 1980). This and subsequent analyses have shown the need

for more integrated institutional operations, more equitable distribution of both costs and benefits of water development, and more effective and participatory long-term planning (see also ECLAC, 1989). Reaching any of these objectives will depend in large part on the nature of property rights regimes and the role of the State.²

III

Contradictions between private property and economic development

Private property is an idea and institution that has been much argued and fought over. Both its proponents and critics, however, have often failed to distinguish among different kinds of and justifications for private property, thereby mixing together arguments that are not always compatible and may even be contradictory.³

The classic political argument, for example, is that private property is the best guarantee of individual liberty, delimiting a private sphere of activity within which State intervention is prohibited. This argument may also have moral or philosophical aspects, since such liberty includes the right to individual self-expression, free will, and the like (Ramos, 1991). The classic economic arguments are twofold, but need not go together: the first is that private property stimulates production and productivity by giving rights-holders incentives both to labour and to invest wealth, since they are guaranteed the fruits of their activities. The second is that such property is vital to the operation of markets, since the exchange of goods and services is impossible unless people have exclusive and alienable rights to their possession.⁴ Note that these two arguments, although commonly associated, are logically independent since production incentives do not necessarily imply a market economy.

These political and economic arguments come into fundamental conflict when a private property regime is combined with rapid economic growth and industrialization. Under such dynamic conditions of capitalist development, the need for security of existing private rights clashes with the demand for economic and technological change, which involves newer claims to resources. This has been the case in many

parts of Latin America during the 20th century, especially since the Second World War, and is also clearly illustrated by the example of the 19th century United States. During that century U.S. law underwent a fundamental transformation, from a system of customary rules inherited from England, based on substantive notions such as "fairness" and "equity," to a utilitarian conception in which laws were used as policy instruments to stimulate economic expansion. Such diverse areas of law as property, contracts, torts, and corporations were reshaped to free private initiative from its traditional social obligations, to promote what the legal historian Willard Hurst called the "release of creative energy." Property law in particular lost its traditionally static character, rooted in protecting the "quiet enjoyment" of land ownership, to become both more dynamic and more abstract: existing vested rights were increasingly disregarded in favor of newer commercial ventures, which helped to

² In this paper I am concerned with issues of water quantity rather than quality; nonetheless, many of my conclusions are directly applicable to the latter as well, in that they deal with the relation between State authority and different kinds of private property rights.

³ Useful surveys of property theory are given in MacPherson (ed.), 1978 and Reeve, 1986.

⁴ The North American "law and economics" school argues, therefore, that the principal function of property law should be to remove obstacles to private bargaining, thereby increasing economic efficiency through market mechanisms. This requires that property rights be exclusive, transferrable, and universal, i.e., that as many things as possible be treated as pure commodities. See Ackerman (ed.), 1975, Cooter and Ulen, 1988, and Posner, 1977.

fuel economic expansion.⁵ Water rights, as we will see below, played a leading role in this transformation.

These changes in property law resulted from repeated State intervention. The chronic scarcity of capital in the 19th century U.S. induced state and national legislatures to grant special legal privileges to any private interests that would stimulate economic development, e.g. by building infrastructure—roads, canals, bridges, etc.—or by exploiting natural resources in the public domain. Prominent among these “legal subsidies” to private parties was the grant of the government’s *eminent domain* powers, which allowed the expropriation of private

property when necessary for a “public use” or “public purpose.”⁶ Despite their usual protection of vested rights, the courts supported this legislative policy because of the shared conviction that economic growth was a “public purpose” regardless of the distributional consequences (Scheiber, 1973; Scheiber and McCurdy, 1975). By the end of the century, however, legal policies of this sort had resulted in such concentration of economic and political power, and therefore social tension and inequality, that reform movements were able to modify the legal system in the direction of increased public regulation (Hurst, 1956).

IV

Water as a problem for private property regimes

Water is a substance whose peculiar characteristics blur the public/private distinction and pose serious problems for private property as usually understood. “Water is life”—vital to biological survival and to a wide range of economic and social activities. Its fluidity and mobility link together different ecosystems while making it hard to capture and hold. The physical connections are unavoidable: how someone uses water in one part of a hydrologic system directly or indirectly affects how other people use it somewhere else.

Because of these physical and social characteristics, private rights regarding water have nearly always been defined as rights to use rather than ownership, with the latter remaining public. Different people may have use-rights to the same “parcel” of water at different times or places in a hydrologic system. Water rights are thus fundamentally conditional rather than exclusive, fitting into a set of relationships that express overlapping claims to the uses and

benefits of a shared resource. Such rights are hard to treat as commodities or to subject to market mechanisms, since exchanges usually affect other rights-holders who are not part of the immediate deal.⁷ Use-rights in general, therefore, can be seen as an inherently non-capitalist form of property (MacPherson (ed.), 1978)—inherently, but not inalterably, as I will argue below.⁸

⁵ The major references for this legal transformation are Horwitz, 1977 and Hurst, 1956. Two additional comments of Hurst’s are particularly interesting: he argued that private property, after having been primarily a political idea in the 18th century, became primarily an economic idea in the 19th; and he explained the overall legal evolution by pointing to the market as the dominant image and idea of 19th century U.S. society.

By the “abstract” nature of property I refer to the increasingly universal tendency, by the late 19th century and beyond, to recognize claims to natural resources based on stock and bond ownership, debt and credit instruments, and so forth, rather than concrete use or other direct activity. See the essays collected in MacPherson (ed.), 1978.

⁶ This must not be confused with the doctrine of *dominio eminente* found in some Latin American countries, which refers to inalienable public/State ownership of certain key resources, particularly minerals. The U.S. usage refers to the State’s power to take private property for public purposes subject to the payment of compensation.

⁷ These third-party effects have led one prominent “law and economics” figure from the University of Chicago to argue that water is an exception to the principle that property should be shaped by and for the market (Posner, 1977). See also MacPherson (ed.), 1978 and Reeve, 1986.

⁸ The problems posed by water use-rights, far from being limited to water, indicate a deeper weakness in the neo-classical theory that forms the basis of the North American “law and economics” school (or the so-called “property rights” school): the definition of *value*. Neo-classical economists assume that “value” means “market or exchange value,” and argue that it is changes in such value that force changes in property rights regimes. Recent work in the “institutional economics” tradition, in contrast, argues the reverse, i.e., that changes in property relations, expressed through legal, political and economic processes, determine how value is defined. Both schools of thought agree, however, that how market institutions work depends on property arrangements set up *beforehand*. See Bardhan, 1989; Bromley, 1982; MacPherson (ed.), 1978, and Reeve, 1986.

Besides the juridical fact of public ownership, the practical need for coordination and control of water uses is also evident. Some form of public regulation is thus both indispensable and legitimate. "Public," however, can mean different things and different scales, from a local community organization to a centralized State. The institutions in question

may be predominantly political, administrative, judicial, or even religious or cultural in nature. These different possibilities have markedly different effects on the way decisions are made and conflicts resolved, on what kinds of arguments are brought to bear, and on how different social groups can influence the process.

V

Water rights doctrines in the 19th century United States

The history of U.S. water rights law illustrates the wider 19th century transformation of property mentioned above, as well as the influence of different climatic conditions on such rights. The following summary will set the stage for the case study that makes up the next part of this paper.

Upon winning national independence, for reasons of utility and shared cultural heritage the U.S. initially adopted almost the entire body of English common law, including water rights law.⁹ The English legal tradition had developed the doctrine of *riparian water rights*, according to which any owner of riparian land—i.e. land bordering or containing a water-body such as a stream, river, or lake—had the right to use that water. This riparian right was a private property right which derived from, and was supplemental to, the ownership of land. But because *all* riparian landowners, regardless of amount of property or date of title, had an equal right to use the water touching their land, the courts developed rules prohibiting them from consuming it without returning it, and mandating its equal sharing among all rights-holders. Since both Britain and Eastern North America were humid regions, agriculture and livestock raising could rely on rainfall, and the main uses of water resources until the 19th century were for navigation and fisheries; both of these required continued and uninterrupted

flow, which was guaranteed by the so-called "natural flow" doctrine. In this way the riparian doctrine expressed values of social equality and cooperation—at least among property owners—and "an attitude of non-interference with nature...[which] therefore was biased against economic development." (Worster, 1985, p.88)

It was this bias against development that gave water rights their leading role in the transformation of American property law. Beginning in the 18th century, the Industrial Revolution generated an increasing demand for water-power for use in the expanding grain, saw, and textile mills, as well as iron foundries. Developing water-power required building dams that blocked natural streamflow and created reservoirs, then letting the water through at irregular intervals. Since this was a clear violation of others' riparian rights, both upstream and downstream, for many years the courts routinely ruled against mill-owners in lawsuits; by the late 18th and early 19th centuries, however, they came to approve new state legislation that gave power developers priority over riparian landowners. This change of policy and principle was justified by the utilitarian concern to promote industrialization and economic growth (Horwitz, 1977; Scheiber, 1973).

Aside from this modification the riparian doctrine retained its key features of prohibiting off-stream consumption and ensuring equal sharing of available water. In the arid West, however, these rules in turn became major obstacles to development after 1850, as the westward march of European American settlement reached the Great Plains and Rocky Mountains, and the Gold Rush sparked migration to California. In all of those places agriculture required irrigation, which

⁹ This did not include constitutional law, of course, which did not exist in England; in this area Americans developed an innovative federal system, distinctive relationships among the legislative, judicial, executive, and later administrative branches of government, and a Bill of Rights.

was impossible if consumptive water use was prohibited, and in any case precipitation was so scarce and unpredictable that equal sharing made water rights very uncertain. These were serious disincentives to annual cultivation, let alone investment in canals and other irrigation works. As a result, in the 1870s and 1880s a new doctrine known as "prior appropriation" was developed in the Western United States, under which water rights referred to specific quantities of water, which could be consumed off-stream and which were ranked in order of priority according to the principle "First in time is first in right."¹⁰ In this way, at least the earliest ("senior") appropriators had secure claims in all but the worst drought years, and more junior appropriators worked down the order of priority each season until there was no water left. These rights were private property

and, unlike riparian rights, could be bought and sold independently of land ownership.

The most common explanation of the spread of the appropriation doctrine throughout the Western U.S. is the classic environmental argument: the change in property rights was required by the needs of agriculture in an arid climate, showing the pragmatic ingenuity of the American pioneer (Webb, 1931). The associated changes in State administrative structure, if mentioned at all, are generally considered secondary (Dunbar, 1983). In the following case study I will argue that this interpretation is wrong on both counts: it overstates the importance of climate, while it understates the changed role of the State and ignores the ways in which the new regime overcame some of the obstacles presented by water to capitalist forms of property.

VI

North American case study:

Washington State, 1890 - 1940

The State of Washington, from the late 19th to mid-20th centuries, provides an especially useful illustration of the legal, geographic and political/economic issues discussed above. Located on the Northwest coast of the U.S., it contains both humid and arid sections, divided by the Cascade Mountains: the former lie between that range and the Pacific Ocean, while the latter stretch east from that range to the Northern Rocky Mountains of Idaho. Conflicts arose from the contrasting climatic conditions and from disagreement over the legitimacy of different forms of private property, as for several decades the State maintained *both* the riparian and appropriation water rights doctrines simultaneously, abandoning the former much later than other Western states. The outcome of these conflicts was a property regime designed to maximize capital investment, whose functioning depended on comprehensive State administration. During the same period the new technology

of hydroelectricity emerged and grew rapidly, although State policy and intervention in water resource development remained preoccupied with irrigation. The eventual transformation of this State role both responded to, and had a major impact on, the pattern of regional economic development.¹¹

1. Conflicting water rights doctrines and the move towards administrative rationalization

Washington's contradictory approach to water rights was established in 1889, the year it became a state, and in part involved an institutional conflict between the legislature and the courts. The legislature responded to demands from irrigators and to the example of other Western states by declaring that water use-rights "may be acquired by appropriation, and as between appropriations the first in time is the first in right."¹² When

¹⁰This principle had its roots in California mining claims, in which private individuals competed for parts of the public domain (Pisani, 1984).

¹¹I focus on Washington State law, not Federal law, for two reasons: i) under the U.S. Constitution non-navigable waters fall under the former's jurisdiction; and ii) State law provides a more accurate picture of local and regional dynamics.

¹²Laws of 1889-1890; Laws of 1891, Chap. 142.

adopting its Constitution, however, Washington followed the usual practice of adopting the existing body of English and American common law, which included the riparian doctrine of water rights. Thus, the State Supreme Court, as guardian of the Constitution, refused to recognize appropriation rights except in respect of waters on Federal public lands, where such rights were recognized by national law.¹³ Although legally consistent, this distinction became a nightmare in the arid eastern part of the state, where most watersheds contained both public and private lands. Repeated lawsuits asked the Court to abandon the riparian doctrine as "not applicable to the arid portions of the state," but in an 1897 landmark case the Court rejected this environmental argument, holding that:

"It certainly cannot be true that a difference in climatic conditions or geographical position can operate to deprive one of a right of property vested in him by a well-settled rule of common law."¹⁴

Nonetheless, the Court showed its desire to encourage irrigation by developing the principles of "reasonable" and "beneficial" use in the early 1900s. With "reasonable use", the Court modified the riparian doctrine's "natural flow" requirement to allow riparian rights-holders to divert and consume some water for irrigation; with "beneficial use" it went further by allowing non-riparians to claim riparians' unused water rights, explaining:

"It is not to the state's interest that the water of a non-navigable stream should be idle or going to waste because one of its citizens, having a preference right to its use, unjustifiably neglects to avail himself thereof, while others stand ready and willing, if permitted, to apply it to the irrigation of their arid lands."¹⁵

¹³ See, for example, *Tenem Ditch Company v. Thorpe* (1889) 20 Pac 588; *Rigney v. Tacoma Light and Water Company* (1894) 38 Pac 147. The Federal laws were the Mining Acts of 1866 and 1870 and the Desert Land Act of 1877. In this and other notes, the abbreviation "Pac" refers to judgments of the Supreme Court of the State of Washington compiled in the official Western U.S. review of jurisprudence, *The Pacific Reporter* (National Reporter System - State Series, St. Paul, West Publishing Co.). The number before the abbreviation indicates the volume and the number after, the page.

¹⁴ *Benton v. Johncox* (1897), 49 Pac 495, 496-7.

¹⁵ *State ex rel Liberty Lake Irrigation Company v. Superior Court of Spokane County* (1907) 91 Pac 968, 970.

Riparians objected strongly, of course, but the Court repeatedly asserted "the necessity of beneficial use by the riparian owner," contradicting its geographic reasoning quoted above (see footnote 14) by saying that this met "the general needs and welfare of the state, especially in the arid and semi-arid regions," and "deprived no one of any rights which he may justly claim."¹⁶

Despite these judicial decisions, after 1900 there were a series of political attempts to clarify the situation by adopting a State Water Code based on the appropriation doctrine. The main forces behind the proposal were irrigation interests in eastern Washington (including the U.S. Reclamation Service, see below), who argued that new investment and development, which depended especially on Eastern capital, was prevented by the uncertainty of water rights and the open-ended claims of riparians to future water use. The Chairman of the Governor's Water Code Commission, for example, criticized the inaction of such riparians and said, "It should be the privilege of other people to appropriate and make use of all water then running to the sea and doing nobody any good." An attorney on the Commission agreed:

"In this Western country we have claimed that *the proper use of water is what a man's rights should be based on*. He should not be permitted to let it run by just because it is pretty to look at or to let ducks swim in it, but some *beneficial use* should be made of it." He added that "the needs of eastern Washington are based on one theory, to wit, irrigation, [while] the needs of... western Washington are based on the use of water for power, logging, etc. So we have two divergent interests in water matters in this state."¹⁷

But the political geography was not so simple. The reform efforts were defeated again and again in the Washington legislature from 1905 to 1917, by opponents arguing that such a Code would unconstitutionally expropriate riparians' vested property rights, without compensation. This objection was so well-founded that it troubled even lawyers who favoured the Code. In addition to riparian landowners in

¹⁶ *Brown v. Chase* (1923), 217 Pac 23, 25-26; *Proctor v. Sim* (1925), 236 Pac 114, 118. "Beneficial use" has been defined as "in an exclusive manner so as to reap an economic as distinguished from an aesthetic benefit." (Morris, 1956, p. 258).

¹⁷ Letter dated 2 October 1913 to Governor Lister; address by I.P. Englehart to the Washington Irrigation Institute, 1914, both in Governor Lister's *Papers*, which are to be found in the Washington State Government Archives, Olympia, Washington (emphasis added by the author).

western Washington, many of the Code's most active opponents were in fact irrigators in eastern Washington who had invested heavily in riparian land and stood to lose much of their property's value if their riparian water rights were no longer protected. Most of their prominent spokesmen were lawyers and businessmen from the eastern city of Spokane. As one of them protested to the Governor, "There is no farmer in the state of Washington but what is attacked by this procedure."¹⁸

The position of hydroelectric power interests was also more ambivalent than it first appeared. Since their water use was non-consumptive, they initially preferred the riparian doctrine, and helped to defeat some early versions of the Code (Dunbar, 1983). Most power development had taken place in humid western Washington, where the riparian doctrine had not presented serious obstacles; although constrained by the rights of both upstream and downstream riparians, power developers could buy those rights if necessary, and the courts consistently supported their exercise for power generation. A 1913 decision is illustrative:

"Where power is desired the rule [guaranteeing natural flow] must yield to the necessity of gathering the water into reservoirs.... Each owner is entitled to a reasonable use, and any interruption in the flow unavoidable by a reasonable and proper use is permissible."¹⁹

But power developers in eastern Washington had had no trouble under the appropriation doctrine either. From 1889 the courts had recognized their claims to waters on public lands, and given them priority over junior appropriators who were irrigators.²⁰ Appropriation rights had the added advantage of being free, as long as there was water available, whereas riparian rights could be secured only by land ownership or by purchase from existing landowners. As a result, a

number of riparian spokesmen believed the power interests to be secretly in favour of the appropriation doctrine, since "it would give them all the water rights on non-navigable streams which they now have to pay for."²¹

The constitutional argument over property rights was finally resolved in 1917, when the legislature passed a misleading compromise and put its future resolution in the hands of a new state administrative agency. The 1917 Water Code adopted the appropriation doctrine as state law, while inconsistently declaring that this did not "lessen, enlarge, or modify the existing rights of any riparian owner." Those rights, however, became subject to condemnation (expropriation) by other water users, and the requirement of "beneficial use" was made statutory. The most important change was the creation and unprecedented authority of the Office of the State Hydraulic Engineer. This had a number of administrative powers and duties: to review requests for appropriation water rights and issue permits, free of charge, to those whose requests were granted (i.e., if there was water available); to keep a central record of water rights and usage; to supervise stream diversions according to established rights; to gather hydrologic data to aid in water resource planning; to inspect the engineering safety of dams, canals, and related infrastructure; and—most controversial of all—to take over the courts' function of determining water rights in the event of conflicts.

This adjudicative authority was soon challenged in court as unconstitutional. Irrigators whose rights had been denied in one such conflict argued that the Code unconstitutionally gave the State Engineer both executive and judicial powers, and that his decision was an uncompensated taking of private property. In 1921 the State Supreme Court strongly disagreed:

[The Code] "was intended to cover the whole field of irrigation and correct the abuses inherent in earlier irrigation methods. [It] appears to be broad enough to include almost any conceivable rights with reference to irrigation....[and] authorizes the hydraulic engineer to control all of the waters of the state for irrigation purposes."

¹⁸ Wilbur Yearsley, letter dated 4 March 1913, in Governor Lister's *Papers*.

¹⁹ *Sumner Lumber and Shingle Company v. Pacific Power and Light Company* (1913), 131 Pac 220, 224. See also an earlier case in which a sawmill was awarded substantial damages when an upstream municipality reduced the flow: "Whatever of benefit, whether of power or otherwise, comes from the flow of water in the channel of a natural stream, is a matter of property, and belongs to the riparian owner, and is protected in law just as fully as the land which he owns." *City of New Whatcom v. Fairhaven Land Company* (1901), 64 Pac 735, 740.

²⁰ See, for example, *Ellis v. Pomeroy Improvement Company* (1889), 21 Pac 27; *Sander v. Bull* (1913), 135 Pac 489.

²¹ See letters dated 27 January 1913, 14 February 1913 and 8 January 1915, in Governor Lister's *Papers*. Emphasis in original. These letters describe the case of a planned irrigation project in the eastern Cascades which had been blocked because speculators in power development had appropriated the necessary water.

Two years later the Court confirmed that:

"The Water Code saves all existing rights in land and water. That, however, does not militate against the right of the state, in the exercise of a supervisory control, of administering the use of water for the public welfare."

The Court was equally deferential in 1930 when the legislature amended the Code to specifically mention hydroelectricity (for the first time), and gave the State Engineer the power to decide conflicts between hydroelectric development and other water uses.²² Thus a water rights system which had originally been designed mainly for irrigation (a consumptive use) proved to be equally suited to hydroelectric power (a non-consumptive use), despite their apparently contradictory needs.

In conclusion, the climatic differences proved to be more important to the initial debates over water rights doctrines than to the institutional structure that eventually resulted. The strength of the state government's commitment to the new system is highly significant. The legislative and judicial response to the legal protests was so firm and unified that the Code and the appropriation doctrine ceased to be an issue in Washington politics within a few years. In particular, business groups and capitalists interested in water resources were untroubled by the new state administrative role, and evidently considered it both to serve their interests and to promote an acceptable model of economic growth. The eventual decision of the power companies to stop opposing the Code can be understood in the same way: they wanted an end to the confusion and had a strong stake in overall regional economic investment and growth. The system of state permits to use water was a move toward centralized administrative control, and away from the judiciary with its traditional concern for private rights, but it solved part of the "problem" of private property in water. Water rights were still *use*-rights, but they were now more secure and predictable than they had been before, and thereby encouraged private investment.

²² *West Side Irrigating Company v. Chase, Hydraulic Engineer* (1921), 196 Pac 667; *State v. McBee* (1923), 215 Pac 347; *Funk v. Bartholet, State Supervisor of Hydraulics* (1930), 289 Pac 1018.

2. Evolution of State intervention in irrigation and power development

Shortly after the rationalization of water rights law in the mid 1920s, the nature of governmental intervention in irrigation and hydroelectric development underwent a transition. Intervention in these two forms of water use differed greatly and evolved slowly during the period from 1890 to 1930, with very similar patterns at local, state, and Federal levels. For most of this period the amount of intervention was inversely related to the sector's economic vitality: that is, it was early and important in the case of irrigation, whose performance disappointed most hopes, and bitterly contested in energy production, whose growth exceeded all expectations. This reflected the traditional North American belief that the State should stay out of all economic activity in which private enterprise could make a profit. These priorities began to be reversed in the 1920s, a period of growing political and economic crisis in U.S. capitalism.

a) *Judicial policies in eminent domain law (expropriation of private property)*

The Washington legislature, like that of other states, regularly tried to facilitate economic development by delegating its eminent domain power –i.e., the power to expropriate or "condemn" private property, with compensation– to certain private enterprises (see section III above). On constitutional grounds, the courts would not approve this unless it was for a "public use or purpose," which over a 25-year period the State Supreme Court interpreted in such a way as to establish a clear preference for irrigation over hydroelectric development.

In 1899 the legislature passed companion statutes (Chapters 130 and 131) giving both lumber companies and irrigators the power to condemn property as needed for rights-of-way. In 1903, in its first major decision in this area, the Court overturned the former statute and flatly rejected the argument that an expanding private lumber industry generated "public" benefits:

"It cannot be that, within the meaning of the Constitution, the distinction between public policy and public use is to be obliterated.... The use under consideration must be either a use by the public, or by some agency which is quasi-public, and not simply a use which may incidentally or indirectly promote the public interest or general prosperity of the state."²³

²³ *Healy Lumber Company v. Morris* (1903), 74 Pac 681, 684-5.

From 1905 to 1927, the Court applied the same logic to deny private power companies the right to condemn land for damsites and reservoirs. Since they were producing electricity for commercial sale, either to private industry or to the public without public service obligations, they could not justifiably be given such legal privileges.²⁴

Irrigators got different treatment, however. In 1904 the Court confirmed the second statute without a blink, and in 1910 even extended the privilege to a private land speculation company; it was "immaterial" that the investors were speculating in canal systems rather than planning to actually raise crops, because "irrigation will promote the public good." The Court explained, in stark contrast to its earlier reasoning:

"The benefit to the public which supports the exercise of the power of eminent domain for purposes of this character, is not public service, but is the development of the resources of the state, and the increase of its wealth generally, by which its citizens incidentally reap a benefit."

This distinction was legally (if not economically) justified by the "vast difference between the use of water for manufacturing [i.e. power] and for irrigation. In the latter case there is no choice of means or location....Not so with a manufacturing plant. The choice of location or motive power is one of economy or convenience at most."²⁵

This judicial policy continued into the 1920s, receiving an added boost from the 1917 Water Code, which granted broad eminent domain powers "including the right and power to condemn an inferior use of water for a superior use."²⁶ In conflicts between irrigation and hydroelectric power, the Court considered the former to be "superior."²⁷

²⁴ The key decisions were *State ex rel Tacoma Industrial Company v. White River Power Company* (1905), 82 Pac 150; *State ex rel Harris v. Superior Court of Thurston County* (1906), 85 Pac 666.

²⁵ *Weed v. Goodwin* (1904), 78 Pac 36; *State ex rel Galbraith v. Superior Court of Spokane County* (1910), 110 Pac 429, 433-4. The last quotation is from *Tacoma Industrial* (see footnote 24 above).

²⁶ This grant was remarkably broad, giving "any person...the right of eminent domain to acquire any property or rights... necessary for the storage of water for, or the application of water to, any beneficial use" (Section 4 of the Water Code).

²⁷ See, for example, *State ex rel Kennewick Irrigation District v. Superior Court for Walla Walla County* (1922), 204 Pac 1.

This attitude finally changed in 1927, by which time hydroelectric power had assumed new economic significance and State intervention was becoming politically more acceptable. When a private utility sought to condemn land to enlarge its reservoir at Lake Chelan in the eastern Cascades, planning to sell some of the electricity to private industry, the lower court followed the established precedents and denied the request. But the State Supreme Court overruled this decision "in view of the changed conditions of society." In the 22 years since the earlier decisions, it ruled:

"We have seen the uses [of electricity] multiplied a thousandfold, until there is scarcely an industry of any kind that has not felt the beneficial influence of electrical energy, and it can almost be said that its use is universal....[Therefore,] *the use of electric energy for all purposes is a public use.*"

Noting that the state had created a Public Service Commission in 1911 to regulate private utilities' rates and services, the Court continued:

"The unfettered and untrammelled development [of water power]...is a thing much to be desired, and when this can be accomplished through public control and regulation... no decision of this court should stand in the way. The vanguard of progress moves steadily onward."²⁸

b) *Direct governmental involvement: irrigation*

These evolving judicial policies reflected the changing political and economic context. The state government actively supported irrigation development from 1889, mainly through its authorization and subsidy of special "irrigation districts." These districts were an attempt to promote capital investment while avoiding private monopolies, following the California model of a few years earlier (Pisani, 1984): they were local, quasi-public organizations formed voluntarily by local property owners in order to build, expand and maintain irrigation systems. The legislature granted these organizations several important legal privileges, including the power to use eminent domain, to tax their members, and to raise capital through the sale of public bonds (Department of Conservation and Development, 1987). Unfortunately, the success of those bond issues depended on the districts' financial condition, which like the rest of the

²⁸ *State ex rel Chelan Electric Company v. Superior Court of Chelan County* (1927), 253 Pac 115, 117-119 (emphasis added).

agricultural sector was weak for most of the state's first half-century.²⁹

To save the districts from collapse and prevent serious social and political unrest in eastern Washington, the legislature had to intervene year after year with direct subsidies and purchase of bonds, as well as continual financial reorganization. These concerns far outweighed the districts' actual construction activities.³⁰ The financial pressures also induced the state, from 1915 to 1933, reluctantly to give the districts increasing rights to develop and sell electricity to help meet expenses. The same pattern was evident in the state's plans for a major public irrigation project in the Columbia Basin: beginning in 1919 it promoted a design with a small and incidental amount of power generation, rejecting an alternative in which hydroelectric power was a central component. It changed its mind only in the late 1920s in order to match the Federal government's growing emphasis on hydropower.³¹

Federal involvement in irrigation projects similarly came almost 30 years earlier than in hydropower. In 1902 the U.S. Congress passed the Reclamation Act³² in response to several decades of disappointing private irrigation development (i.e., land reclamation). This Act set up a new government agency, the Reclamation Service, to plan and build irrigation projects, which were financed by the national budget but which were to be repaid by the farmers who were the beneficiaries. In Washington, the valleys east of the Cascade Mountains became the sites of several major Federal projects, chosen because of good soils and climate, proven agricultural

productivity, and access to railroads. These projects accounted for nearly half of the state's expansion of irrigated acreage in 1900-1910, and nearly 100% of its irrigation storage capacity by 1920 (Coulter, 1951; Fahey, 1986). Unfortunately, low crop prices and high irrigation costs, in Washington and throughout the Western states, prevented farmers from repaying the Reclamation Service, which needed continuing infusions of cash from an unwilling Congress. Thus, the Service was on the verge of financial collapse in the 1920s (Gates, 1968).

c) Direct governmental involvement: hydroelectricity

State and Federal involvement in hydroelectric development was limited and controversial until the late 1920s, as "public [electric] power" came to symbolize the larger political conflict over the proper role of government in the U.S. economy. In Washington State, however, there was an important "public power" movement at the local level. Soon after 1900 the state's two biggest cities, Seattle and Tacoma, created municipal utilities to produce energy—almost entirely hydroelectric—for public consumption and to contribute income to the city governments. These enterprises competed with private utilities inside city limits and became important symbols of public service in the early 20th century Progressive reform movement (Dodds, 1986; MacColl, 1979). By 1920 the two utilities produced 25% of the state's total hydropower³³ and continued to expand and build new dams, arguing for the right to provide service beyond city limits. They were backed by a coalition of urban Progressives, labour unions, and farmers (some of the latter were populists and some were simply frustrated at the private utilities' failure to provide rural services). In 1923 they got a bill to this effect passed by the legislature and it was sent to a public referendum for approval.

The municipal utilities were bitterly attacked by private power companies, which produced the remaining 75% of the state's hydropower. Two of these companies were most important, one in eastern Washington and one in the west, each of which produced more than the city utilities combined. The private companies complained of unfair competition, since the city utilities were exempt both from paying taxes and from regulation by the Public Service Commission. Together with other business interests and political conservatives, the private utilities organized

²⁹ See Clark, 1976; Dodds, 1986; Fahey, 1986. The only prosperous periods resulted from the Federal irrigation projects in 1905-1909 (see below) and the brief boom during World War I. From 1920 to 1938, irrigated acreage rose only 11%, well under 1% per year. See the *Biennial Reports of the State Hydraulic Engineer and Department of Conservation and Development, 1918-1946*.

³⁰ This is evident both in the statutes passed during this period and the *Biennial Reports of the State Reclamation Board*.

³¹ For the irrigation districts this was first mentioned as a supplemental measure in a 1915 law (Chap. 179), though it was not until 1927 that they were authorized to use power sales to underwrite and repay bonds (State Reclamation Act, Chap. 254). On the Columbia Basin project, see Harding, 1954, as well as Laws of 1919, Chap. 60, Laws of 1927, Chap. 260, and Laws of 1933, Chap. 81.

³² This Act concerned the reclamation of land by means of water development projects. Henceforth, this activity will be referred to as "land reclamation".

³³ *Biennial Reports, 1917-1920, State Hydraulic Engineer*.

a massive publicity campaign against the bill, warning of a dangerous increase in governmental power and a threat to individual freedom, and thus succeeded in defeating the referendum (Fahey, 1986; Ficken, 1979).

Nonetheless, throughout the 1920s public power remained a hot political issue. As the economy deteriorated and state finances came under severe pressure, total hydroelectric capacity nearly doubled and continued to rise, becoming an increasingly strategic and attractive policy concern.³⁴ Finally in 1930, when the Great Depression had already begun, Washington voters approved a second and broader referendum, despite a similar opposition campaign warning of "socialism" (Washington Water Power Company, 1952). The new law authorized county-sized "Public Utility Districts" (PUDs), analogous to irrigation districts, which could produce and distribute electricity, issue bonds, levy taxes, and exercise eminent domain powers to condemn or force a linkage with private generation and distribution facilities (Laws of 1931, Chap. 31). The principle of public ownership and control was thus established, though for some years the economy remained too weak to allow any new development.

It was the Federal government's commitment to hydropower that eventually transformed Washington's economy and opened a nationwide era of large-scale, multiple-use water development. Federal policy was of decisive importance both because Federal law controlled all navigable waters—and thus the bigger rivers—and because many of the nation's most promising water-power sites, especially in the Western states, were on public lands. But deep political disagreement within Congress over the nature of the government's role created a stalemate for nearly 20 years, until finally the 1920 Water Power Act found a compromise, allowing Federal agencies to plan and build power dams but requiring them to lease the facilities to private utilities for the energy production itself (Hays, 1959).

Even so there was little actual development until the economic crisis of the 1930s, when part of President Franklin D. Roosevelt's "New Deal" included massive public works projects that were intended

both to provide public employment and to fuel regional economic development. To achieve the latter goal, Federal agencies drew on the hard lessons of previous decades by making hydroelectricity the central element in multiple-purpose water projects; in this "cash register dam" strategy, power revenues were used to subsidize less economically viable water uses such as irrigation, flood control, and recreation. The Bureau of Reclamation (the new name of the Reclamation Service), in particular, followed this strategy to save itself from being abolished, thereby entering upon several decades of bureaucratic growth and prosperity, even though irrigation remained its official purpose (Gates, 1968; Swain, 1970).

In Washington the Federal government built two big dams in the 1930s, named Bonneville and Grand Coulee, both on the Columbia River in the eastern part of the state. Finished in 1937 and 1941, respectively, they more than trebled the state's total power production.³⁵ The Bonneville Power Administration (BPA), an independent Federal agency, was established in 1937 to stimulate regional economic development by distributing this huge energy surplus, using and expanding the existing transmission network, and encouraging public consumption by offering very low wholesale prices to Public Utility Districts, municipal utilities, and rural electric cooperatives. The PUDs were thus relieved of the capital-intensive burden of production, allowing them to expand rapidly for the first time since they had been authorized in 1931 and even take over some existing private distribution facilities (Pacific Northwest Public Power Records Survey, 1981; Washington Water Power Company, 1952). The BPA became a major symbol of both President Roosevelt and the New Deal, representing the crucial role of government in boosting economic and social welfare, and providing a standard of comparison for the rates, services and operations of the private utilities.³⁶ At the time, however, there was no demand for such large quantities of energy, and the need to stimulate both distribution and consumption soon led the BPA to work closely with private utilities and sell them power at the same wholesale prices.

³⁴ Capacity increased from 380 000 to 700 000 hp between 1920 and 1928 (84%, or more than 10% per year), and then to 1 000 000 hp by 1936 (an additional 43%, or more than 5% per year at the height of the Depression). See *Biennial Reports, 1920-1936*, State Department of Conservation and Development.

³⁵ Total state production rose from 2.9 billion kwh in 1935 to 10.0 billion in 1943, almost entirely attributable to those two dams. State Planning Council, *6th Report, 1934-44*.

³⁶ The BPA's first director was a leading figure in the regional "public power movement," who had directed the dramatic expansion of Seattle City Light for 25 years; at his death he was described as a man "whose love for mankind expressed itself in kilowatts" (MacColl, 1979, p. 561).

The Federal dams and the BPA made possible a regional economic transformation during and after the Second World War, based on a boom in energy-intensive industries such as metallurgy, aluminum-smelting, shipyards and airplane-manufacturing. This established lasting geographic patterns and determined the course of water resource development to the present day. After the war Federal agencies built ten more big dams in eastern Washington and 15 others elsewhere in the Columbia River

basin, in Idaho and Oregon. Some of these provided water for new irrigation development, including hundreds of thousands of acres in the Columbia Plain, but the first priority and driving force was electricity: generated in the arid East of the state, but mostly exported to western Washington and out-of-state (Butcher and Wandschneider, 1986). Thus, after half a century of statehood, Washington's economy had become heavily dependent on water-power and Federal intervention.

VII

Conclusions relevant to Latin America

This case study offers several lessons about property rights and the role of the State in water resources that are relevant to Latin America today.

First, geographic conditions seem to have a less determining influence on the nature of water rights than is commonly believed. Although in Washington the debate over water rights doctrines was often put in terms of the climatic differences between the eastern and western halves of the state, the essential issue was the security of title needed to attract private capital investment. Given that security, regional economic dynamics were much more important than either the geographic basis of legal doctrine or the climate itself in determining the course of water resource development. A key illustration of this is that the hard-fought implementation of a Water Code supposedly designed for the needs of arid-country agriculture was almost immediately followed by the rise to dominance of water-power for urban and industrial purposes—with the bulk of that energy produced in the arid part of the state.

Second, the nature of private property under capitalism is more ambiguous than either its proponents or opponents often realize. The security of private rights necessary to stimulate capital investment in Washington was only achieved at the expense of other property rights that were equally private and equally market-oriented, but less amenable to maximized economic growth or capital accumulation. For political, economic and social reasons, therefore,

it may be necessary to favour some kinds of private property but not others, and arguments supporting one kind do not necessarily support another—a point which is usually lost in both ideological and pragmatic debates.

Third, the evolution of the Washington water rights regime highlights both the historical and continuing dependence of private property and capital accumulation on State intervention. Although private rights to water became defined as administrative permits for its use, these functioned in fact as a capitalist form of private property, encouraging capital investment and market-oriented economic development. Such a system is absolutely dependent on continued State maintenance of its rules, premises and practical necessities: resolving conflicts, gathering and keeping technical data and legal information, and so forth. Thus “property,” like “the market,” must not only be understood as a socially and collectively created institution—it must also be appreciated that it cannot successfully function otherwise.

Fourth, the crucial importance of State involvement in both types of water development is evident. In Washington, both state and national governmental activity began as a reaction to economic conditions—to the stagnation of irrigated agriculture on one hand, and to the promise of hydroelectricity on the other—but once established it then became the *sine qua non* of regional growth. Furthermore, the integrated and multiple-purpose character of water use was due entirely to central governmental control.

Finally, the property regime adopted in Washington –i.e., a combination of investment-oriented private rights with centralized State administration and control– was able to overcome the main obstacles posed by water to private property (see section IV). The fact that water rights were still *use-rights*, and that water uses were qualitatively different from each other and inextricably related, did not prevent the establishment of institutions intended

to fully incorporate the resource into the process of capitalist economic development. This effort was so effective that it casts doubt on the limited character of much of today's debate about "environmentally sustainable development": if the goal is to incorporate the logic, qualities and relationships of ecological systems into existing political and economic models, the necessary institutional and structural reforms will have to be truly fundamental.

Bibliography

- Ackerman, Bruce (ed.) (1975): *Economic Foundations of Property Law*, Boston, MA, Little, Brown & Co.
- Bardhan, Pranab (1989): Alternative approaches to the theory of institutions in economic development, in P. Bardhan (ed.), *The Economic Theory of Agrarian Institutions*, Oxford, Clarendon Press.
- Bromley, Daniel (1982): Land and water problems: an institutional perspective, *American Journal of Agricultural Economics*, vol. 64, p. 834 *et seq.*, Lexington, KY, American Agricultural Economics Association (AAEA).
- Butcher, Norman and Philip Wandschneider (1986): Competition between irrigation and hydropower in the Pacific Northwest, in Kenneth Frederick (ed.): *Scarce Water and Institutional Change*, Washington, D.C., Resources for the Future.
- Clark, Norman (1976): *Washington: a Bicentennial History*, New York, Norton.
- Cooter, Robert and Thomas Ulen (1988): *Law and Economics*, Glenview, IL, Scott, Foresman.
- Coulter, Calvin (1951): The victory of national irrigation in the Yakima Valley, 1902-06, *Pacific Northwest Quarterly*, vol. 42, p. 99 *et seq.*
- Department of Conservation and Development (1987): *Irrigation, Diking, Drainage, and Reclamation Districts, 1919-55*, Olympia, WA, Department of Conservation and Development.
- Dodds, Gordon (1986): *The American Northwest: a History of Oregon and Washington*, Arlington Heights, IL, Forum Press.
- Dunbar, Robert (1983): *Forging New Rights in Western Waters*, Lincoln, NE, University of Nebraska Press.
- ECLAC (Economic Commission for Latin America and the Caribbean) (1989): *La gestión de los recursos hídricos en América Latina y el Caribe*, "Estudios e Informes de la CEPAL" series, No.71, Santiago, Chile, April. United Nations publication, Sales No. S.89.II.G.9.
- Fahey, John (1986): *The Inland Empire: Unfolding Years, 1879-1929*, Seattle, WA, University of Washington Press.
- Ficken, Robert (1979): *Lumber and Politics: the Career of Mark E. Reed*, Santa Cruz, CA, Forest History Society.
- Gates, Paul (1968): *History of Public Land Law Development*, Washington, D.C., Public Land Review Commission.
- Harding, Robert (1954): Water from Pend Oreille, *Pacific Northwest Quarterly*, vol. 45, p. 52 *et seq.*
- Hays, Samuel (1959): *Conservation and the Gospel of Efficiency: the Progressive Conservation Movement, 1890-1920*, Cambridge, MA, Harvard University Press.
- Horwitz, Morton (1977): *The Transformation of American Law, 1780-1860*, Cambridge, MA, Harvard University Press.
- Hurst, James Willard (1956): *Law and the Conditions of Freedom in the 19th Century United States*, Madison, WI, University of Wisconsin Press.
- MacColl, E. K. (1979): *The Growth of a City: Power and Politics in Portland, Oregon, 1915-50*, Portland, OR, Georgian Press.
- MacPherson, C. B. (ed.) (1978): *Property: Mainstream and Critical Positions*, Toronto, University of Toronto Press.
- Morris, Arval (1956): Washington water rights - a sketch, *Washington Law Review*, vol. 13, p. 243 *et seq.*
- Pacific Northwest Public Power Records Survey (1981): *Guide to Historical Records of Pacific Northwest Public Power Utilities*, Seattle, WA, Pacific Northwest Public Records Survey.
- Pisani, Donald (1984): *From the Family Farm to Agribusiness: the Irrigation Crusade in California and the West, 1850-1931*, Berkeley, CA, University of California Press.
- Posner, Richard (1977): *Economic Analysis of Law*, Boston, MA, Little, Brown & Co.
- Ramos, Joseph (1991): *Más allá de la economía, más acá de la utopía*, Santiago, Chile, Economic Research Corporation for Latin America (CIEPLAN).
- Reeve, Andrew (1986): *Property*, London, Macmillan.
- Scheiber, Harry (1973): Property law, expropriation, and resource allocation by government, 1789-1910, *Journal of Economic History*, vol. 33, p. 232 *et seq.*

- Scheiber, Harry and Charles McCurdy (1975): Eminent domain law and Western agriculture, *Agricultural History*, vol. 49, p. 112 *et seq.*
- Swain, Donald (1970): The Bureau of Reclamation and the New Deal, 1933-40, *Pacific Northwest Quarterly*, vol. 61, p. 137 *et seq.*
- United Nations/ECLAC/UNEP (United Nations Environment Programme) (1980): *Agua, desarrollo, y medio ambiente en América Latina*, Santiago, Chile, July.
- Washington Water Power Company (1952): *The Public Utility Districts of Washington State: Promises Compared with Performance*, Spokane, WA, Washington Water Power Company.
- Webb, Walter Prescott (1931): *The Great Plains*, Boston, MA, Ginn & Co.
- Worster, Donald (1985): *Rivers of Empire: Water, Aridity, and the Growth of the American West*, New York, NY, Pantheon Books.

Poverty and *adjustment:* the case of Honduras

Jorge Navarro

Director of National Planning, Ministry of Planning of Honduras. This article is based on a paper presented by the author at the Seventh National Congress of Economists of Honduras in July 1992.

The impact of the structural adjustment process on the level of poverty has been a highly controversial issue in recent years. In this article, a macroeconomic approach is used to analyse the adjustment's short-term effects on income levels, especially among the poor. Income has been chosen as the chief determinant of poverty levels because, in a market economy, income and related inflows are what determine how much control individuals have over the main factors influencing their living conditions. This variable is also quite elastic in respect of macroeconomic conditions and therefore reflects short-term effects. A distinction is made here between earned income, disposable income, social income and real income, and a summary analysis is made of those categories for which information is available. In an effort to formulate an explicit definition of poverty, a seemingly simple measurement of poverty levels is taken using a reference line based on both biological factors and considerations relating to basic needs, and the evolution of poverty levels in recent years is then examined. The author concludes that the capacity for ascertaining the impact of the adjustment by empirical means needs to be strengthened and that measures should be designed and implemented to place the poor in a better position within the "virtuous circle" of the production system.

I

Conceptual and methodological approaches

Various conceptual and methodological approaches have been used in an attempt to formulate a more precise definition of what we mean by "poverty".¹ Over the years, poverty has been thought of as an endogenous phenomenon of the individual and as an effect of economic and social structures. Many people would say that "poverty, like beauty, is in the eyes of the beholder",² thereby implying it is nothing more than a value judgement.

The main studies on the subject in Honduras³ have used a normative working concept: that is to say, their definition is based on a certain set of minimum requirements as regards the satisfaction of individuals' basic needs. This entails setting a minimum threshold for the coverage of material and other needs that will ensure a given level of well-being.

1. The poverty line

This threshold—or poverty line—is based on a measurement of two types of consumption: one is the necessary level of expenditure to meet a minimum nutritional standard and to acquire other basic items; the other relates to the concept of well-being and includes access to health care, literacy and goods within the public domain. The criterion used in setting the poverty line is thus a combination of biological elements and factors relating to basic needs.

The poverty line is defined as an income level sufficient to meet basic nutritional and other needs (health care, education, housing, etc.). The indigence line is drawn at an income level that is just sufficient to meet an individual's nutritional needs as defined by a shopping basket of staple foods. Thus, a typical

household would be classified as indigent if its members' monthly income is only enough to cover the per capita cost of this shopping basket.

In contrast, the poverty line adds a percentage for the consumption of other items to this minimum food intake level. Thus, if in urban areas of Honduras about 50% of the average per capita income is used to buy food, then the poverty line would be twice the value of the indigence line while, in rural areas, if around 75% of the average income goes for food, then the applicable poverty line would be only 1.33 times the value of the indigence line.⁴

This serves as the basis for what is essentially a biological concept of poverty, one which is absolute rather than being relative to income distribution. In a country such as Honduras, where the unsatisfied needs are so great, the problem of poverty overshadows considerations of equality.

2. Information sources

Since 1970 Honduran experts have been working on the definition and quantification of a shopping basket of staple foods that would cover the average caloric and protein requirements of the Honduran population. This government-defined shopping basket was subjected to an exhaustive analysis in early 1991 and is the one used here (Honduras, SECPLAN, 1991). This basket is structured in such a way that its value can be calculated on the basis of the price information compiled by the Central Bank of Honduras for its computations of the general consumer price index (Central Bank of Honduras, 1982).

¹ There is a great deal of literature on this subject. For an excellent analysis of the concept, see Sen, 1992.

² Sen (1992) attributes this statement to Mollie Orshansky.

³ Reference is made here, in particular, to the studies conducted by the Ministry of Planning, Coordination and the Budget (SECPLAN) with support from United Nations bodies.

⁴ This standard is based on the proportion of household income spent on food and other basic items, as measured by expenditure and income surveys conducted in Honduras in 1978 and 1979 and ECLAC studies prepared by O. Altimir.

The only regular source of information on income in Honduras is the Multipurpose Permanent Household Survey Programme run by SECPLAN. This programme was launched in September 1986 and, as of September 1991, it had conducted seven biannual surveys (May and September) of the labour force and one survey on own-account workers and micro-entrepreneurs. One of the programme's objectives is to gather information on the ways in which wage-earners receive their incomes. These surveys are not specialized income surveys, however, and the reliability of the information they provide may therefore be questioned on those grounds; they do, however, provide a wealth of useful data for the identification of income trends.

Using the information obtained from these sources and the methodology described above, the per capita cost of the shopping basket of staple foods was calculated for the years from 1986 to 1991 (see table 1); these figures reflect an upward trend in prices as well as price fluctuations. It may also be seen from the table that urban prices moved downward from the general trend in 1988. The reliability of price information obviously influences the placement of the poverty line.

3. Recent poverty trends

Once household indigence and poverty lines have been calculated, we can determine how many households are below each of these lines and how many are

above them. As shown in table 2, between September 1988 and May 1991 the percentage of poor households rose from 68.5% to 73.0% and the proportion of non-poor households fell from 24.5% to 18%, while the percentage of indigent households climbed from 54.1% to 58%. Hence, during this period there was an increase in the number of households which, statistically speaking, had incomes below those needed to buy the shopping basket of staple foods. The percentage of poor households, on the other hand, tended to hold steady, although the increase in indigence might be expected to be due to the movement of households from the "poor" to the "indigent" category. The decrease in the number of non-poor households could, however, account both for the increase in indigence and the constant percentage of poor households.

4 Has poverty grown worse following the implementation of adjustment policies?

In circles linked to international lending agencies, the aims of typical adjustment policies, involving measures such as devaluation, are clearly defined as being to increase foreign exchange earnings, improve the countries' creditworthiness and bring about more efficient allocation of resources. It is admitted, however, that it is not known whether these policies lead to lower levels of well-being for the population in the short run (Squire, 1991). Behrman and Deolalikar (1991) have concluded that it is virtually impossible

TABLE 1

Honduras: poverty and indigence lines based on the per capita cost of a shopping basket of staple foods, 1986-1991
(In current lempiras)

	1986	1987	1988	1989	1990	1991	
						May	September
Cost of food basket (daily)							
Urban	2.34	2.68	2.59	2.86	3.66	5.15	5.56
Rural	1.59	1.68	1.82	1.98	2.44	3.77	4.02
Indigence line (monthly)							
Urban	70.2	80.2	77.7	85.8	109.8	154.6	166.80
Rural	47.7	50.3	54.7	59.4	73.2	113.0	120.75
Poverty line (monthly)							
Urban	140.4	160.4	155.4	171.6	219.6	309.1	333.60
Rural	63.6	67.0	72.9	79.2	97.4	150.3	160.60

Source: Data based on the shopping basket of staple foods formulated by the Ministry of Planning, Coordination and the Budget (SECPLAN) and price information provided by the Central Bank.

TABLE 2

Honduras: incidence of poverty among households, 1988-1991
(Percentages)

Households	1988 (September)	1989 (September)	1990 (May)	1991 (May)
Indigent	54.1	52.0	57.7	58.0
Poor	14.4	16.0	14.4	15.0
Below poverty line	68.5	68.0	72.1	73.0
Not poor	24.5	25.5	19.6	18.0
No response	7.0	6.5	8.3	9.0
Total	100.0	100.0	100.0	100.0

Source: Permanent household surveys, Ministry of Planning, Coordination and the Budget (SECPLAN).

II

The adjustment and income

1. General aspects

The impact of stabilization and adjustment programmes on income in general and on variations in the poor sectors' real income levels, in particular, has been the subject of particularly heated debate in recent years.⁵ The relationship between income distribution and economic policy has long been a recurring issue, however, in the debate regarding development strategies.

Thus, following the Second World War it was argued that as economies grew and developed, the benefits of that growth would trickle down to the poor. However, even though many economies grew rapidly, the benefits did not in fact reach this segment of the population. New approaches were then devised, such as those focusing on "growth with social equity", "basic needs", "assistance for the poorest of the poor", "redistribution with growth", "payment of the social debt", "adjustment with a human face", "changing production patterns with social equity" and "human

to ascertain *a priori* the impact of adjustment policy measures on the poor; they contend that such an impact can only be determined empirically *a posteriori* and that people must simply have faith that, in the long run, the adjustment will serve to raise the population's level of well-being.

Not all the poverty in Honduras is due to the adjustment process, since the country exhibits a high percentage of structural poverty. Be that as it may, the figures indicate that, rather than having halted its expansion, poverty is actually on the rise. At the same time, however, it cannot be categorically argued that poverty has grown worse as a result of the stabilization and adjustment effort until the question has been analysed further.

development". The World Bank (1980 and 1990a) has studied the causes and extent of poverty in the world, as have other international bodies (ECLAC, 1990 and 1992; UNDP, 1990). Generally speaking, these studies have related primarily to long-term development strategies. Less research has been done on the short-term effects of financial stabilization and structural adjustment programmes in terms of income distribution and the real income levels of the poor.⁶ Even the chief proponents of adjustment acknowledge, however, that it has a social cost; at first, they asserted that this effect was only temporary, but more and more of them are beginning to admit that greater attention needs to be devoted to protecting the poor, especially since, as they themselves note, the adjustment process generally takes years, and its costs may be high during the transition (World Bank, 1992, particularly p. 3).

Today, however, practically everyone realizes that the economic model in use until recently has now run its course and needs to be replaced, and more and more people are accepting the fact that adopting a

⁵ In 1990 the World Bank held a symposium on the subject and later devoted an entire issue of *The World Bank Economic Review* to an analysis of poverty and adjustment (World Bank, 1991b). The preceding issue (World Bank, 1991a) included articles on the subject of measurement.

⁶ There are differences of opinion on this score among international bodies (see Berg and Hunter, 1992). This question was addressed by the Honduran authorities in a continent-wide television conference on 23 June 1992 organized by the United States Information Agency and the United States Agency for International Development (USIA/USAID). The topic of the conference was "economic stabilization programmes and their effects on the poor".

new model means changing the economic structure and the ground rules for resource allocation. The question as to what kind of policy package should be implemented is still being debated, however, particularly in regard to the kinds of measures that, along with the correction of major financial and real disequilibria, will also eliminate or at least mitigate the drop in the real income levels of the poor.⁷

It is axiomatic that the structural adjustment process will have effects on income and its distribution. At any given point in time, economies have a certain production pattern or structure for tradeables and non-tradeables, a given level and composition of aggregate demand, and an associated set of prices and payments to factors of production. This, in conjunction with an array of implicit and explicit monetary transfers, is what determines the distribution of income as well as the income levels of social and economic actors in absolute terms.

By definition, financial stabilization and structural adjustment programmes seek to modify the level of aggregate demand (usually the aim is to reduce it in order to bring expenditure into line with income) and the composition of production (by increasing the proportion of internationally tradeable goods and reducing that of non-tradeables) and to realign the prices of goods, services and factors. Obviously, with all these changes, income distribution and levels will be altered.

Consequently, this process will inevitably create winners and losers, especially in the short run, since in the long run the whole of society should be far better off. What interests us here, however, is how this process affects the poor and most vulnerable sectors of society.

Although some economic policy-makers are often skeptical about the existence of indicators that can measure the impact of the adjustment process on the population's well-being, the scheme proposed by Corden (1986) and a number of others with respect to income levels can certainly be of use in such an analysis.⁸ If we use the logic of adjustment in regard to

resource allocation—since the main factors influencing people's living conditions are to be found in the market—then income is the element which, generally speaking, determines how much access people have to those factors. The total income of persons or households can be analysed in terms of their earned income, disposable income, social income or real income. Earned income is income obtained through the sale of labour and capital. When taxes and direct transfers are subtracted from or added to this sum, the result represents disposable income. Social income, for its part, represents the value of services provided by the government. When disposable income and social income are added together, and then deflated by a price index corresponding to the group in question, this gives a person's or household's real income.

This scheme permits us to move closer to an evaluation of the degree of success achieved by an adjustment programme, especially if we bear in mind Keynes' famous observation to the effect that, in the long run, we will all be dead anyway. This type of evaluation will be all the more reliable if income and its distribution are based on a sustainable type of performance, such as rapid, sound economic growth of a type that creates jobs, rather than on temporary measures.

2. The cost of the adjustment in Honduras

Ever since the intensive phase of the adjustment process began, the Honduran authorities, along with international organizations, have acknowledged that the macroeconomic programme has certain costs. Thus, the World Bank predicted that the economic reform programme would hurt employment and that the unemployment rate could rise to 17% (this figure is four points above the actual rate for 1988). It also felt that the economic adjustment would probably have sufficiently negative impacts on health and nutrition indicators to reverse the trend of steady improvements observed over the preceding 20 years (World Bank, 1990b, p. 42). The same opinion was voiced by another World Bank mission in one of its reports (Castafeda, 1990) when it noted that the programme was being accompanied by sharp price increases in staple foods, transport and other services and that the consumption of staple foods would quite probably decrease as a result of the reduction of real wages and rising unemployment, especially among persons living in marginal urban areas, small farmers who were net food consumers, and agricultural wage-earners,

⁷ The International Monetary Fund (IMF) asserts that the effects of the adjustment process on the poor depend on the structure of poverty and the policy mix (see Heller *et al.*, 1988).

⁸ Advocates of adjustment policies generally contend that aggregate indicators of well-being should not be taken too seriously and that it is better to analyse trends in social indicators over the medium and long terms. They also focus their economic and social analyses on the question of what would have happened if previous policies had been continued.

despite the favourable exchange rate for exports. The report also said that other social indicators were expected to reflect severe impacts as well.

The World Bank, the IMF and the United States Government acknowledged Honduras' impoverishment when they classified it as eligible for aid from the International Development Association (IDA) and for the IMF's extended structural adjustment facility, as well as condoning part of its external debt. The Government of Honduras, for its part, faced with the prospect of newly poor contingents of the population joining the ranks of the structural poor, has responded to the situation with a poverty relief strategy.

Be that as it may, analyses of this process need to establish whether or not, after being in operation for two and one-half years, the Government's economic and social compensation programmes have managed to halt the deterioration of the population's living conditions or, better yet, whether living conditions have improved to a point where they exceed the levels achieved in the past. Some partial answers to these questions can be provided by applying the income method described earlier.

a) *Earned income*

The level of earned income will depend primarily on the demand for labour generated by production activities. This makes necessary an analysis of the aggregate growth of the gross domestic product and, even more importantly, of sectoral growth, since the demand for manpower varies from sector to sector. According to official figures,⁹ production fell in real terms in 1990. The decrease was particularly sharp in manufacturing and construction, and was less severe in services; agriculture and extractive activities, on the other hand, continued to show some growth. In 1991, production began to find its way back to the path of recovery, and agriculture and extractive activities (especially mining and quarrying) exhibited some buoyancy, in contrast to their weak performance of the year before. The rest of the country's sectors of production remained somewhat sluggish (see table 3)

⁹Since there is no other source of information with which to corroborate the official figures, the latest revised statistics of the Central Bank of Honduras (1992a and 1992b) have been used. These figures, which were discussed at the Seventh National Congress of Economists in Tegucigalpa in July 1992, have been received by the Association of Economists with some reservations.

TABLE 3
Honduras: principal macroeconomic variables
(Real growth rates)

	1988	1989	1990	1991
Gross domestic product at factor cost	4.6	5.4	-0.4	1.2
Agriculture and extractive activities	1.0	10.2	0.5	3.5
Manufacturing and construction	7.1	6.4	-0.2	0.8
Other	5.7	2.4	-0.2	0.1
Exports	-0.9	3.9	-0.6	-2.0
Private investment	18.7	31.6	3.0	11.5
Public investment	4.0	10.3	-32.3	30.3
Private consumption	2.5	5.7	0.1	3.9
Public consumption	9.0	2.8	-13.5	-11.4

Source: Based on data supplied by the Central Bank of Honduras, May 1992.

In the farm sector, the output of all the basic grains (i.e., maize, beans, paddy rice and sorghum) except maize increased considerably, especially in 1991. On the other hand, production levels of traditional export products (coffee, bananas, unginced cotton and raw tobacco) declined; this setback did not affect sugar cane or African palm, however. In 1990-1991 the number of agricultural, agro-forestry and coffee-growing cooperatives plunged to one third its former level, with the drop in agricultural cooperatives being the sharpest.

This trend in agricultural production was reflected in a real decrease in exports. The volume of banana exports followed the downward path of banana production levels, but exports of coffee, cotton and tobacco were maintained despite the smaller harvests of these crops. Chilled meat and shrimp and lobster showed an improvement, although that of the latter was less marked. The output of extractive activities, especially of lead, zinc and cement, was below 1989 levels. In current values, export performance was so disappointing that the IMF granted approximately US\$61.9 million in assistance to offset foreign exchange losses on exports.¹⁰

¹⁰IMF press release No. 92/18 (14 February 1992) announced the award of US\$44 million in Special Drawing Rights through the Fund's compensatory financing facility and standby arrangements.

Following a slump in 1990, the manufacturing and construction sectors stagnated in 1991. Production of sugar cane, pasteurized milk, vegetable oil and vegetable fats –but not wheat flour– went down, and the same was true of cement and iron rods, though the output of asbestos cement sheets continued to rise. The volume of cement exports was not even 15% of the 1989 level, and the commercial and industrial construction projects approved, as measured in square metres, for the first quarters of each year in the 1990-1992 period showed a significant decline, even though the current value of industrial construction has risen considerably.

The rest of the country's economic activities virtually stagnated; this was especially true of activities related to the civil service and to community, social and personal services, which for the most part are still below their 1987 levels. It is somewhat surprising that –despite reductions in electricity sales, water use, the number of inter-urban passengers carried and the number of people entering and leaving the country by air– electricity, gas and water, transport, and communications services all displayed some vitality.

To sum up, after slackening in 1990, production made a slight recovery in 1991 but still did not show strong growth; in fact, it did not even regain the average levels recorded in 1987-1989. Economic growth can therefore not be said to have led to an improvement in living conditions. As regards employment, the available figures are not conclusive but do provide an indication of a general trend.

In agriculture and related activities, the total number of people employed in 1991 declined, as did the sector's share as the leading employer in the economy. The same trend was seen in mining and quarrying, following an unusually sharp increase in 1990. The same tendency to employ fewer people was observed in electricity, gas and water services as well (see table 4).

Open unemployment registered a series of slight increases as it moved from 4.0% to 4.3% between 1989 and 1991, while concealed underemployment climbed from 31.7% to 34.3%. Nevertheless, in keeping with the expansion of production, the overall percentage of the workforce experiencing employment difficulties shrank slightly after having risen from 52.0% in 1989 to 54.7% in 1990.

These unemployment figures confirm that the Honduran economy needs to gather more momentum in order for an improvement to be seen in living conditions. Indeed, as noted by the Regional Employment

TABLE 4

Honduras: employment in selected branches of activity in September of each year, 1988-1991

(Number of persons)

	1988	1989	1990	1991
Agriculture	654 733	628 571	641 833	616 210
Mining and quarrying	2 021	2 553	6 434	3 932
Electricity, gas and water	7 614	8 776	8 290	8 250
Total	1 365 862	1 394 281	1 482 902	1 523 097

Source: Permanent household surveys for each period, Ministry of Planning, Coordination and the Budget (SECPPLAN).

Programme for Latin America and the Caribbean (PREALC), "the adjustment has caused a slowdown in job creation, higher unemployment and underemployment, and a decline in labour income" (Wurgaff, 1991).

b) Disposable income

In respect of disposable income, it may be noted that the Government's policy regarding direct taxes has been to streamline the tax structure, raise the minimum income level at which income taxes begin to be levied, and enforce income tax laws more strictly. In other words, those who are in a position to pay income taxes are doing so in accordance with the law, while the growing number of people whose ability to pay income taxes had been eroded are now exempted from that obligation.¹¹ None the less, the aim of securing a progressive taxation system has for all intents and purposes been replaced by a regressive, undifferentiated system as the Government has come to rely more heavily on indirect taxes, and although such taxes do not affect the level of disposable income, they do lower that income's purchasing power. Thus, the sales tax was hiked from 5% to 7%, and excise taxes on such items as beer, liquor and petroleum products were also raised or modified.

Receipts from indirect taxes climbed from 1 098 million current lempiras in 1989 to 1 674 million in 1990 and 2 343 million in 1991. Generally speaking, Honduras' tax burden is one of the heaviest in Central America, and it is still heading upwards, since tax revenues rose more rapidly than income did (thanks, in particular, to a reduction in tax evasion).

¹¹ As a result of this streamlining, the number of wage-earners paying income tax went down from 92,992 in 1989 to 12,714 in 1990 and 7,628 in 1991 (see De Figueroa, 1992).

The Government's policy has been to eliminate, as far as possible, the more general types of explicit and implicit transfers and subsidies and to replace them with explicit ones targeted at the most vulnerable groups, as well as to eliminate any element that distorts the prices of goods and services. Obviously, this policy too has created winners and losers. Implicit subsidies applying to the rates charged for such public services as electricity, water and telecommunications are among those that have now been eliminated. Explicit subsidies for low-volume electricity consumers are being provided on a temporary basis, while for all other consumers the rates have been rising steadily; it is expected that all such electric power subsidies will have been terminated by 1993. Decree 18-90 also provides for other subsidies (while altering the way in which they are administered) on urban passenger transportation and on some foods, mainly grains.¹²

One important component of the adjustment programme is the monetary transfers made under the Family Allowance Programme in the form of vouchers issued to women heads of household and new mothers. These explicit monetary transfers are intended to help offset the social costs of the adjustment programme, as well as to mitigate structural poverty. The Family Allowance Programme was designed to operate for a set amount of time, i.e., during the transition to a more dynamic economy, but recently the Government has been taking steps to extend its duration and expand its coverage. This decision reaffirms the view held by international bodies that the transition may take many years.

In order to improve the employment programmes which Honduras has been carrying out since 1974 in an effort to counteract the devastation caused by Hurricane Fifi and other natural disasters, in 1990 the Honduran Social Investment Fund (FHIS) was created. Although its original purpose was to create temporary jobs and to help bring marginal workers into the labour market, it has developed into a flexible mechanism for attracting and managing resources and for setting up projects to meet basic needs, and as such has complemented and in some cases displaced traditional executing agencies. The FHIS has not been very energetic in its efforts to facilitate the incorporation of

marginal or quasi-marginal workers into the production process on a permanent basis under more favourable conditions, however, as shown by the fact that it has allocated only 7% of its resources to micro- and small-scale enterprises; moreover, in many cases these resources have been used to provide working capital for commercial activities, such as those engaged in by market vendors. Nor has the development of economic infrastructure works such as small-scale irrigation and soil conservation projects been a concern of this compensatory mechanism. According to a report of the IDA (1992), however, the FHIS has directly contributed to the creation of the equivalent of between 17% and 33% of the total number of jobs estimated to have been lost as a result of the adjustment programme.

One of the beneficial spinoffs of the compensatory or monetary-transfer programme has been the methodological progress made in respect of targeting. In order to reach the poorest or most vulnerable groups, the Government has been fine-tuning its "poverty maps" and, as a result, is now in a better position to provide compensatory assistance to the neediest groups within the population.

c) *Real income*

An across-the-board process of price increases coupled with a realignment of relative prices will inevitably have a distributive impact on the economy, and the inflation thus generated creates a great deal of uncertainty within the production apparatus, thereby discouraging both production and investment and, hence, job creation.

Between 1990 and the end of 1991, Honduras witnessed an inflationary process unlike anything it had ever seen in its entire history, coupled with an absence of economic growth and what the World Bank (1992) euphemistically referred to as a "lull in investment". The country's traditional sectors—which are not known for their flexibility, speed or adaptability—came out of this process as losers. Wage-earners also saw their real incomes fall simply because of time lags in the adjustment of minimum wages,¹³ while poor, marginal sectors watched helplessly as the cost of the shopping basket of staple foods rose and their chances of earning any sort of income at all diminished (see table 5).

¹² For 1990 and 1991, 30.5 and 67.4 million lempiras, respectively, were allocated for transportation, while 3.4 million and 13.3 million lempiras went for staple goods (Honduras, Ministry of Finance and Public Credit, 1992, p. 20).

¹³ Minimum-wage adjustments were made on the following dates: 15 July 1981, 30 December 1989, 1 October 1990, 15 July 1991 and 30 May 1992.

TABLE 5

Honduras: average prices nationwide for selected essential goods between January and June of each year, 1989-1991
(In current lempiras)

	Unit	1989	1990	1991	192
Beans	Pound	1.16	1.19	1.19	1.40
Maize	Pound	0.28	0.34	0.64	0.48
Vegetable fats	Pound	1.46	1.59	2.65	2.75
Vegetable oil	Gallon	14.83	15.02	23.90	30.67
Milk (liquid)	Litre	1.11	1.22	2.04	2.46
Beef	Pound	3.40	4.40	7.07	8.36
Sugar	Pound	0.60	0.58	0.89	1.06
White bread	Loaf	1.47	1.64	2.67	2.82

Source: Central Bank of Honduras, *Boletín, índice de precios al consumidor*, Tegucigalpa, June 1992.

One of the few economic agents that exhibited a high degree of flexibility and an ability to adapt to the inflationary process was the Government, which indexed electricity rates and "dollarized" the rates charged by the National Port Corporation (ENP) and HONDUTEL, as well as some business taxes.

3. Income concentration

Income distribution is one of the most rigid structural elements in any economy. It can take years for the effects of measures aimed at improving income distribution to make themselves felt, even when achieving a more equitable distribution of income and of an economy's productive assets is an explicit policy objective. The situation becomes even more complex when an improvement in labour income is a long-term policy goal and when policymakers look to market mechanisms as a possible means of bringing about a redistribution of assets. In addition to all the above, the analysis of income distribution is an exercise which places heavy demands on the information systems of low-income countries.

In Honduras, one of the first studies on income distribution was conducted in 1967 (see table 6). In that year, the poorest 40% of the population received just 7.3% of total income, while the richest 10% of the population accounted for 50% of total income. The Gini coefficient for this distribution pattern (0.6038) shows how deplorable this situation was (García Tudero, 1990).

TABLE 6

Honduras: income distribution, 1967

Percentage of population	Share of income (%)
20	2.3
40	7.3
60	15.3
80	32.2
90	50.0
100	100.0

Source: García Tudero, *Reclasificación de Honduras como país de menor desarrollo relativo*, Mission report, Ministry of Planning, Coordination and the Budget (SECPLAN)/United Nations Development Programme (UNDP), June 1990.

TABLE 7

Honduras: distribution of labour income, 1989 and 1990

Percentage of population	Share of income (%)	
	1989	1990
10	0.6	0.5
20	2.2	1.9
30	4.8	4.3
40	8.4	7.7
50	13.1	12.3
60	19.3	18.3
70	27.3	26.3
80	38.6	36.9
90	55.2	53.0
100	100.0	100.0
Gini coefficient	0.56	0.58

Source: Ministry of Planning, Coordination and the Budget (SECPLAN), on the basis of household surveys for September 1989 and 1990.

Some of the later studies suffer from numerous limitations and are of only partial coverage, mainly due to the lack of updated household expenditure and income surveys (the last was carried out in 1978-1979). Recently, attempts have been made to take measurements using household surveys, but the information obtained by this means includes labour income only while failing to pick up interest, rent and profits. Moreover, nearly 10% of the respondents do not answer the question on income.

III

Conclusions

The adjustment's impact on the most vulnerable groups in society will continue to be a controversial issue. Although there are many different conceptual and methodological definitions of poverty, in a country as poor as Honduras quite a basic approach suffices for analysis and policy formulation and the design and implementation of the corresponding measures.

A clear understanding of the ultimate objectives and effects of adjustment policies leads to a growing realization that the transition may take many years. What is more, it has proved virtually impossible to determine *a priori* how adjustment policy instruments will affect the poor; the only possibility left to us, therefore, is to make an empirical *a posteriori* evaluation and have faith in the idea that, in the long run, once all the reforms entailed by the adjustment process have been completed, the population will be better off.

In Honduras an empirical assessment is hindered by the scarcity and unreliability of information on the subject. Subject to these limitations, the available indicators show that the percentage of households below the poverty line rose from 68.5% in 1988 to 73% in 1991. Moreover, the lacklustre performance of production activities, the low rate of job creation and the unprecedented resurgence of inflation are signs that overall poverty in the country may rise still further.

Studies carried out in 1990 by SECPLAN 14 show that in 1989, the households in the bottom 40% in terms of wage income were earning 8.4% of total labour income, whereas the households in the top 10% were drawing 44.8% of the total. The Gini coefficient was estimated at 0.56. By 1990, the proportion of total income earned by households in the bottom 40% had slipped to 7.7%, while the portion accounted for by the richest decile had climbed to 47% (see table 7).

None the less, the empirical data do not in themselves conclusively prove that the adjustment has increased poverty or that, if reforms had not been implemented, the population would be worse off than it is now. Therefore, setting ideologies aside, Honduras needs to strengthen its capabilities for the preparation of empirical evaluations of the adjustment's impact and for the design and implementation of measures that will put poor people in a better position to participate fully in the virtuous circle of the production system. A parallel effort needs to be made to rework existing systems of economic and social indicators so that up-to-date, reliable information can be made available.

In the end, we have no choice but to ask ourselves the same question as was posed by *The Economist*: Will Central America's poorest citizens wait patiently for the benefits of growth to trickle down to them too?¹⁵

¹⁴ Namely, the study by García Tudero (1990) and studies conducted by the Project on Population Policies, Poverty and Employment.

¹⁵ *The Economist* (1992).

Bibliography

- Banco Central de Honduras (1982): *Indice general de precios al consumidor, base 1978. Metodología y series cronológicas*, Tegucigalpa.
- (1992a): *Cuentas nacionales de Honduras 1978-1990*, Tegucigalpa, May.
- (1992b): *Indicadores económicos de corto plazo*, Tegucigalpa, May.
- (1992c): *Boletín, índice de precios al consumidor*, Tegucigalpa, June.
- Behrman, J. R. and A. B. Deolalikar (1991): The poor and the social sectors during a period of macroeconomic adjustment: empirical evidence for Jamaica, *The World Bank Economic Review*, vol. 5, No. 2, Washington, D.C., World Bank, May.
- Berg, E. and G. Hunter (1992): *Social cost of adjustment: the case of Latin America and the Caribbean*, Maryland, USAID Development Alternatives, Inc., February.
- Castañeda, Tarsicio (1990): *A Strategy for Alleviating the Social Cost of Adjustment in Honduras*, Washington, D.C., RUTA/World Bank Mission.
- Corden, W. M. (1986): *Inflation, Exchange Rates and the World Economy*, Third edition, Chicago, IL, The University of Chicago Press.
- De Figueroa, C. N. (1992): "El control del déficit fiscal en el proceso de ajuste: la experiencia de Honduras", paper presented at the Seventh National Congress of Economists, Tegucigalpa, July.
- ECLAC (Economic Commission for Latin America and the Caribbean) (1990): *Changing Production Patterns with Social Equity*, Santiago, Chile. United Nations publication, Sales No. E.90.II.G.6
- (1992): *Social Equity and Changing Production Patterns: An Integrated Approach* (LC/G.1701 (SES.24/3)), Santiago, Chile, February.
- García Tudero, C. (1990): *Reclasificación de Honduras como país de menor desarrollo relativo*, mission report, Tegucigalpa, Ministry of Planning, Coordination and the Budget/United Nations Development Programme (UNDP), June.
- Heller, P. S., L. Bovenberg, T. Catsambas, K. Y. Chu and P. Shome (1988): *The Implications of Fund-Supported Adjustment Programs for Poverty: Experiences in Selected Countries*, Occasional Paper No. 58, Washington, D.C., International Monetary Fund (IMF), May.
- Honduras, Ministry of Finance and Public Credit (1992): *Memoria 1991*, Tegucigalpa.
- Honduras, SECLAN (Ministry of Planning, Coordination and the Budget) (1991): *Definición de la canasta básica de alimentos de Honduras*, Tegucigalpa, April.
- IDA (International Development Association) (1992): *Honduras: Proposed Second Social Investment Fund Project Progress Report*, Washington, D.C., March.
- IMF (1992): Press Release No. 92/18, 14 February.
- Keynes, J. M. (n/d): *A Tract on Monetary Reform*.
- Sen, A. (1992): Sobre conceptos y medidas de pobreza, *Comercio Exterior*, vol. 42, No. 4, Mexico City, Banco Nacional de Comercio Exterior, S.N.C., April.
- Squire, L. (1991): Introduction: Poverty and adjustment in the 1980's, *The World Bank Economic Review*, vol. 5, No. 2, Washington D.C., World Bank, May.
- The Economist* (1992): "Central America. Out of the Ditch", London, 6 June, p. 21.
- UNDP (1990): *Human Development 1990*, Bogotá, Tercer Mundo Editores.
- World Bank (1980): *World Development Report 1980*, Washington, D.C.
- (1990a): *World Development Report 1990*, Washington, D.C., Oxford University Press.
- (1990b): *Social Investment in Guatemala, El Salvador and Honduras*, Washington, D.C., June.
- (1991a): *The World Bank Economic Review*, vol. 5, No. 1, Washington, D.C., January.
- (1991b): *The World Bank Economic Review*, vol. 5, No. 2, Washington, D.C., May.
- (1992): *The Third Report on Adjustment Lending: Private and Public Resources for Growth*, Washington, D.C., World Bank/IDA.
- Wurgaft, J. (1991): "Posibilidades y limitaciones de los fondos de inversión y de emergencia social", paper presented at the Seminar on Social Dimensions of the Adjustment in Central America, Panama.

The trade union *system: its* background and *future prospects*

Fernando Calderón G.

Regional Expert on Social Development in the ECLAC Social Development Division. This article is based on a paper presented at the Symposium on the Response of Trade Unions, the Political System and the State to the Crisis and Structural Change: European and Latin American Experiences (São Paulo, August 1992).

Since the early 1980s the labour movement has had to deal with a series of radical changes in Latin American society and in its own identity. These transformations have been linked to the political changes associated with the termination of dictatorships, the transition to democracy or alternatively the weakening of democratic systems, and to economic changes brought about by the crisis, the external debt, the social consequences of adjustment policies, and the de-industrialization and retrofitting processes. The trade unions are having to cope with the close of one stage in history—a stage marked by a model of dependent industrialization and a neo-corporate, proprietary State—and the beginning of another—a stage of industrial renewal based on technological innovation and a democratic State—whose outcome is highly uncertain. Criteria and forms of sociopolitical legitimacy are being redefined at such a dizzying pace that trade-union structures and policies themselves are being transformed, as also (at a more theoretical level) is the relationship between politics and economics. This article, based on case studies of Argentina, Bolivia, Brazil, Chile, Paraguay and Uruguay, explores these issues with particular attention to the as yet erratic efforts that are beginning to be made to devise innovative strategies for the trade unions' participation in the restructuring and modernization processes. This innovation is starting to engender what might be thought of as a cultural pattern of flexibility.

I

The sociocultural setting and the economic outlook

As we approach the threshold of a new century, we must ask ourselves: What is happening to the workers and entrepreneurs who, through conflict, built the most powerful cultural ethos of the modern world? How can we go about devising, from the vantage point of our society, a new, integrative, politically democratic model of economic development?

For Latin Americans, industrialization has been directly linked to the building of their nations and States and to the creation of political parties and institutional systems, the emergence of modern values and, most of all, the deep desire for an integrative form of economic development. Industrialization has also brought, especially for the workers, hard-won victories on the battleground of political and social citizenship. The truth is that the Latin America of the twentieth century would be unimaginable without the cultural contributions made by workers in all spheres of economic and political affairs.

In seeking to create this modern-day ethos, workers were not only striving to define their central role in history. Their actions were primarily directed towards different horizons, such as the national/popular or communist movements and their potential in the continent; but they also made us think about death and the absurdity of the labours of Sisyphus. What peasant farmer, what student, doctor or artist did not see himself reflected in the workforce and in the labour movement? What employer did not think about the role that unionized workers might play in his factories?

Is all this disappearing? Or is it only that a certain way of thinking about the construction of today's modern societies is coming to an end? What other proposals are surfacing? Is structural adjustment the first step in an historic action? What role can workers play in this process besides simply putting up resistance? Is it a viable proposition from a political standpoint to seek to change production patterns with social equity? Do modernization and democratization mix?

For the time being, the most salient fact is that the dependent form of industrialization we have pursued during the twentieth century has been a failure. It is also quite clear how deeply workers and

modern Latin American culture have been affected by technological retrofitting and the resulting robotization and automation of industry. After retrofitting, industries seem to employ no more than a handful of workers. Does this mean that action by workers on a global or international scale is no longer possible? Will medium-sized and small industries become extinct in the not-too-distant future, with all the effects this would have on vast numbers of workers? What social and political options will the market, the State and the political apparatus offer to these workers?

Perhaps the pivotal element in these issues, which are beginning to be a cause of concern for the peoples of the region, is the emergence of a "programmed society", i.e., a society increasingly based on computerized communications and programming in which the market and the cultural industry (which is more and more a product of transnational corporations) spoon-feed us advertising about products we do not make but might fancy consuming. Can workers do something about this, or are we witnessing the birth of a new, cybernetic society that heralds the advent of an unprecedented potential for human action of an increasingly systemic nature, one that does not allow for sociocultural and political action or conflict?

Most likely, it will be neither one extreme nor the other. It is true that things are changing at a dizzying pace, but it is also true that the basis of those changes is the societal actors' own cultural experiences.

The social contract which led to the emergence of the Welfare State in developed countries, and which included entrepreneurs, the State and workers, began to disintegrate and then to reshape itself in the 1970s and 1980s. This gave rise to a new socio-historical matrix whose core elements are the retrofitting, communications and business management processes and whose main driving forces are the transnational corporations, the scientific/technological and administrative intelligentsia, and the modernized State. When thinking about this process, we should remember, as Manuel Castells has noted on repeated occasions, that the world economy is beginning to function

more and more as a single time-unit in which the processes of industrial retrofitting, communications and management are the forces that organize the development of national economies (Castells, 1988). This dynamic is so powerful that the existence of autonomous national economies is becoming increasingly untenable. The growth of the market and productivity are directly related to the rationale of management and, especially, to the use of the time between technological research and new consumption patterns.

The technological revolution, especially in the fields of information sciences, electronics and telematics, is aligning the associated changes into a cross-configuration. Put very briefly, it would seem that society is beginning to make the transition from employment-based social relations to relations based on modes of information in which the connection between knowledge and its symbolic interactions with the political system is starting to play a fundamental role.

The changes occurring in the productivity of capital, primarily as a result of investment in science and technology and the concentration of the highest rates of productivity in the electronics industry, along with new sorts of working conditions based on workers' capacity for action and use of information, are important examples of this new dynamic.¹

In Latin America, however, these potential innovations are heavily dependent upon the characteristics and direction of the economic restructuring processes and, in particular, the characteristics of the adjustment.

Although adjustment policies have certain general traits in common in almost all parts of the region, especially during the stabilization phase, their actual implementation varies not only because the conditions in each country differ, but also because of the nature of the times and political processes they have lived through. Thus, Chile—where the early stages of the adjustment were carried forward by a military regime virtually without the presence of any strong social actors—is clearly a different case from Brazil, where the adjustment process is only just beginning and trade unionism is a socially and politically strong movement, all this within the framework of a weak democratic system.

Hence, we would be ill-advised simply to settle for an automatic, all-embracing ideological description of neoliberal policies. It is important to specify how and how much these policies are affecting productivity and the market and whether or not they are

linked to the bureaucratic practices and featherbedding associated with times gone by. It is therefore necessary to gain an understanding of the different time lags that can arise in economic adjustment processes and their implications for the retrofitting of the production apparatus, social equity and the stability of democracy—i.e., their effects in terms of the pace, stages, course and intensity of adjustment policies—and of the roles played by the various political agents. The range of possibilities will surely differ from country to country, as will their consequences for the trade unions.

Indeed, some trends are already in evidence which demonstrate the need for a more detailed analysis. One example is the case of recurrent adjustments that produce stability but no economic growth or social integration. Another example is that of adjustments which bring only fleeting economic reactivation or which are confined to the export cycle, so that they eventually saturate the available external markets (which, moreover, remain segmented and protected). In essence, the minimum goal for virtually all the various types of adjustment policies is the governance of the economy and the maintenance of a balanced democracy, while their more ambitious strategies envisage progressive governance and successful retrofitting. The achievement of these goals will depend as much on the matrix of social and political forces in each country as it will on the limited economic prospects of the region as a whole.

According to a number of recent prospective studies, Latin America's share in the world economy will continue to shrink during the 1990s,² and the region will be heavily influenced by the economic shifts associated with changes in the developed countries.

² See CIEPI, 1984, and Bouzas, 1988. By way of example, the projections of per capita gross domestic product (GDP) prepared by CIEPI for each region indicate that the economic gap between rich and poor countries will widen further: Latin America's per capita GDP is expected to climb from around US\$2,500 to US\$3,000 between 1990 and the year 2000, whereas that of the United States will rise from US\$14,000 to US\$17,000, Japan's will go from US\$12,000 to US\$15,000, that of the EEC will move up from US\$9,000 to US\$12,000 and that of the newly industrializing economies (NIEs) will jump from US\$6,000 to US\$11,000; in sub-Saharan Africa, on the other hand, per capita GDP is expected to remain at US\$500 (see CIEPI, 1992). From the standpoint of social differentiation, a recent ECLAC study covering the period 1960-1980 on 32 countries that are either located in the Latin American and Caribbean region or belong to the Organization for Economic Cooperation and Development (OECD) found that the social gap between the Latin American and OECD countries was growing wider, that developed countries were becoming more homogeneous and that the inequalities among the countries of the region were becoming greater (ECLAC, 1992a).

¹ For a statistical analysis of productivity by industrial sector and of the corresponding technological impact, see CIEPI, 1984.

Within this context, these studies outline two foreseeable scenarios. On the one hand, if the central economies do not undergo any major changes, then the region's economies may maintain their limited rates of economic growth and expand their export markets to some extent without, however, managing to reverse the regressive trend of income distribution. On the other hand, if the developed economies slip into recessions, then the Latin American economies will experience a greater deterioration in their own situation, and external factors may even derail their adjustment processes.

II

The social and historical background

As from the early 1980s, the labour movement had to cope with a series of radical changes in Latin American society and in its own identity. These changes were associated with such political changes as the end of dictatorships, transitions to democracy or, alternatively, the weakening of democratic systems, and also economic changes linked to the crisis and the external debt, to the social implications of adjustment policies (e.g., decreases in wages, in employment and in workers' quality of life) and to the de-industrialization and retrofitting processes, with all the social costs they entail.

In the 1990s, trade unions are having to deal with the close of one stage in history—a stage marked by a model of dependent industrialization and a neo-corporate, proprietary State—and the beginning of another—a stage of industrial renewal based on technological innovation and a democratic State—whose outcome is still uncertain.

These are times during which criteria and forms of sociopolitical legitimacy are being redefined, and these changes are taking place so rapidly and so tumultuously that the trade unions' structures and policies themselves are being transformed, as also, at a more theoretical level, is the relationship between politics and economics.

Furthermore, as we noted earlier, this dynamism is part of a series of highly internationalized changes. To a great extent, these problems and experiences are shared by the societies and trade unions of developed and developing countries. Nevertheless, the

The outcome will surely depend as much on the specific traits of each country's economy—particularly the stage reached by its retrofitting process, its degree of political stability, the extent of its export diversification, and its supply of petroleum and other natural resources—as it will on the quality of the sociopolitical matrix and the institutional power of its social actors (Calderón and dos Santos, 1992, chap. 6).

Given its experiences and its potential for influencing the path of history, the working class can play a fundamental role in all of this, provided that it first reforms itself. An attempt is made to analyse this question in greater detail in the following section.

socioeconomic bases are different, since crises and restructuring processes in developed countries took place in the presence of a stronger Welfare State and more socially integrative markets, whereas in Latin America the market has not, for the most part, been a source of social integration or equity. Once the nationalist/popularist regimes faded away, the State devoted itself to featherbedding, corporate relations and narrowly-defined private interests rather than concentrating on the promotion of social integration and development. In contrast to the situation in areas such as South-East Asia, economic growth in the region—particularly in countries under authoritarian rule—has had nothing to do with social integration (ECLAC, 1990).

In the early 1980s, economic activity dropped off sharply and the dependent industrialization model began to falter. Hyperinflation and attempts to use adjustment policies containing a large fiscal component to achieve economic stability were typical features of the social and political scene of the period. One of the actors that was the most strongly affected by these policies was the State, as was reflected, for example, in cuts in public spending, the curbing of demand, the elimination of subsidies, the achievement of a fiscal balance, the lifting of price controls and deregulation.

Within this environment, the trade unions oscillated between taking action to promote democracy as a basic right and taking defensive action against the effects of the economic crisis and adjustment policies.

The union movement took three different paths during those years. The first, which predominated in Colombia and Venezuela, encouraged the trade unions, at least in the early days of the crisis, to remain subordinate to the State and the major political parties rather than seek some degree of institutional autonomy as a class (later on, these partnerships or pacts broke up or splintered). The second, which was followed by most trade unions in the Southern Cone, concentrated on the formulation of demands for the recovery or establishment of the political and social rights of citizenship. The third was directed towards the consolidation of a form of institutional autonomy that was closely associated with criticism of the political parties. In this last connection, there are two cases which were very similar in terms of social autonomy but whose dynamics were quite the opposite of one another: on the one hand, there was the crisis experienced by the Bolivian Workers' Confederation (COB) and its loss of

power, while on the other, there was the upsurge and strengthening of the Brazilian union movement. The former was associated with the political crisis in the Left and the collapse of the tin market, while the latter was related to the decline of authoritarianism and the growth of sophisticated industrial activities.

These new situations and experiences are all reshaping the role of the trade unions in contemporary society, both in terms of their identities and their forms of organization and action and as regards the relationship between the union movement and other sociopolitical and cultural actors. This has forced the unions to see themselves and others in a different light and, ultimately, to redefine workers' identity and place in modern society on the basis of their own cultural and historical experiences. Crucial aspects in all of this are the linkages between workers and new technologies and those linkages' sociopolitical and cultural implications.

III

Technology and images

According to a study coordinated by L. Coutinho and W. Suzigan, the main directions of technological change are related to the following factors: the growing importance of the electronics industry within the industrial matrix; flexible production capabilities and the merging of mechanical engineering with digital electronics; the revolution taking place in the realm of work processes, which is giving the labour force a bigger role in the management of the production process; the transformation of business structures and strategies; the new foundations for competitiveness; the intensification of the internationalization process and the economy's oligopolization by sector and product category; the globalized management networks of many businesses; the interrelated ownership of equity and financial capital together with the close interconnection between financial and exchange markets and investment portfolios; and the new cooperative alliances formed among major oligopolistic groups on the basis of new production technologies (Coutinho and Suzigan, 1990, as cited in Da Silveira, 1992).

A recent ECLAC study demonstrates the complexity and heterogeneity of workers' images and

perceptions in relation to technological innovation. A brief summary of a portion of that study's findings will shed some light on the trends observed (ECLAC, 1992b).

According to the results of interviews with trade union members in different industries in Chile, Argentina and Brazil, technological change is regarded as something that is determined by transnational corporations and as a form of external power and domination which is not exactly the outcome of internal evolution but which is none the less an inevitable process. The interviewees therefore saw a need for workers to participate in the modernization process. The "appropriation" of new technology is essential in order to escape subordination to it. Within this context, technology appears to be closely linked to new power relationships and to the political processes associated with them: "in order to become knowledgeable about technology, one must have access to information, and having control over such knowledge is a source of power; this is why the trade unions demand the democratization of the power afforded by technology and information" (ECLAC, 1992b, p. 150).

The interviewees felt that the most negative aspect was the unemployment caused by the introduction of new machinery and the anxiety provoked by the resulting job instability. They also, however, realize that companies have to modernize if they are to remain in business and that, in this sense, new technologies help to maintain existing sources of jobs.

New technologies also call for more highly skilled and trained workers, however, and this type of training is generally not provided either by employers or the formal education system. The study notes that all the interviewees complained about the companies' performance in regard to training.

On the other hand, a positive attitude is taken to the new technologies as such. Some think that these technologies will "humanize" existing jobs, since less physical effort but more intellectual effort will be required, which will give workers greater autonomy. Fewer supervisors and technicians will be needed, because the work will all have been designed by computer and will therefore require less supervision (others, however, believe that, even with fewer supervisors, it will become easier to bring pressure to bear upon them). Workers will not be displaced by new machines; they will be interrelated with them, since the worker will then have the "power" to give the machine its instructions either correctly or incorrectly. The use of new technologies may therefore require more responsible behaviour and closer attention from workers, and the value of each machine will also be transferred to the worker who runs it.

Other interviewees, however, felt that the use of these technologies leads to a loss of creativity and turns workers into virtual robots, as well as engendering occupational stagnation and reducing the career prospects of workers, since the highest-ranking posts will go to highly skilled professionals. ("Promotion can no longer be won on the basis of hands-on experience", said one man interviewed in a Chilean mining company.) There may also be a loss of "worker solidarity" in the workplace, although this has more to do with labour's new organizational pattern than with the

use of technology *per se* (since workers perform their jobs alone and in isolation).

Some interviewees felt that technological innovation would help to raise their occupational status, but others thought that it would do just the opposite by, in effect, expropriating workers' skills and incorporating them into the new machinery. Still others said that workers' job status might rise or fall depending on the particular type of industry in question; for example, a lathe operator might see his status enhanced but a process worker in the petrochemicals industry might lose status.

All the interviewees criticized the practice of confining the use of technology to production activities alone. Technology should also be placed at the service of society as a whole to improve education, health care, living conditions and working conditions. The workers interviewed felt that firms should be aware of their responsibility to society, and they criticized the speculative attitude of management (Argentina), the harshness of the policies maintained by employers (Chile) who feel they "own" the modernization process (especially in export-oriented agricultural activities), their insensitivity to social conditions, and their habit of viewing labour relations only as a function of production, with no consideration of working conditions. These workers want to share in the productivity made possible by the use of new technologies; they want job stability and the possibility of career development, and they want the workplace to be humanized and working conditions to improve. Concern about the need to professionalize management and technical functions was also expressed.

When all these ideas and views are considered in the aggregate, they not only attest to workers' sensitivity, concern and interest in technological innovation; they also bespeak a positive attitude about the need for knowledge as a fundamental factor in terms of their own action and participation in the economic restructuring process. If this view takes hold and becomes widespread, workers will play an active role in the new social order that is emerging.

IV

Current trends in the trade union movement as a turning point in history

During the 1980s, trade unions took a defensive, pragmatic approach in dealing with the social repercussions of the crisis and economic stabilization policies on a case-by-case basis; during the 1990s, in addition to coping with the consequences of the adjustment and restructuring processes, they will also have to develop their own capacity for cultural modernization and innovation.

The issues of representation, scientific and technological knowledge, and the recognition and projection of ethical and aesthetic values relating to autonomy, diversity and tolerance will play a fundamental role in building a new institutional order and in revitalizing national development strategies.

Against this backdrop, considerations regarding the reform or modernization of the State and, hence, the reformulation of the relationships between the State, society and the economy will surely be essential elements in future union action as well.

Some aspects of the present situation in selected countries in relation to these issues will be summarized below.

Although Argentina's chronic economic instability and its associated industrial stagnation now seem to be a thing of the past, the fact remains that during the 1980s the country's de-industrialization and the de-proletarianization of its society deepened and were accompanied by a greater degree of economic concentration and a highly regressive pattern of income distribution (Palomino, 1991), as well as a progressive reduction in the importance of the State's role in the economy.

Thompson (1992) contends that, under these circumstances, the phenomena having the greatest impact on the behaviour of the trade unions were the contraction of the labour market, the decrease in workers' wages, the shrinkage of the public sector and the cuts made in social spending. When trade union members split into two different confederations, the prospects for a new social contract became even more remote, since this reduced the movement's power to

take action, both at the national level and in respect of the union rank and file, as well as gradually eroding its ability to veto the Government's policies. This situation revived the issue of the trade unions' ability to represent their members and their functionality within the framework of the adjustment and economic restructuring processes. More specifically, trade union practices in Argentina at the present time reflect the preponderant role being played in the public arena by unions in the services sector, the more prominent position of public-sector trade unions, and the greater heterogeneity of union organizations themselves.

Within this setting, the relations of the two union confederations and the principal sectoral organizations with the Government have ranged from a defensive form of opposition marked by a relative absence of social mobilization and a very scant degree of influence over the definition of national economic and social policy, to wholehearted support for the Government and its economic policies. It would seem that, ultimately, ideologized isolationism and subordinate pragmatism both serve to hasten the decline of the workers' presence in the political decision-making system. What really seems to be at stake here is the way in which the trade unions will relate to the processes of reform of the State and retrofitting of the economy.

Nevertheless, although dispersion, resignation and pragmatism may be the dominant traits of Argentine trade unions today, the redefinition of a more autonomous union movement—one which would be more of a social than a political force—is also an important issue for discussion by union members.

In Uruguay, the union movement has had a number of difficulties, but it has none the less managed to remain united and to play an important role in the political and economic affairs of the country. The track record of CONAPRO (the Uruguayan trade union confederation) and its experience in negotiating with the Government and with employers' associations have enabled it to acquit itself quite well in the

ongoing debate and dialogue with the Government (the social dialogue) regarding wages, employment and prices, reform of the State, integration and the retrofitting of the production apparatus.

Above and beyond the vagaries of present circumstances, the key elements in the Uruguayan situation—both for the State and for the social actors—are the tensions that exist between a strategy of cooperation and one of confrontation and between a closed, defensive position and sociocultural innovation in social practices themselves. Here, the labour movement may have a number of comparative advantages that give it an edge over other social actors. In that connection, Jorge Notaro has said that the union movement tends to place greater value on productivity and investment as a necessary foundation for an improvement in living conditions in the country (Notaro, 1992). Nevertheless, policies on reform of the State, especially those referring to the rationalization of the institutional structure, privatization and new employment regulations, are important elements for the country's democratic and economic future, since Uruguay is currently witnessing the configuration not only of a new economic/production profile, but also of the union movement's position and significance in the nation's democratic reconstruction.

The Trade Union Congress (CUT) in Chile is one of the leading actors in the country's transition to democracy and in its consensus-building process, in which tension between the Government, management and the labour unions is now often eased through dialogue and the conclusion of agreements among these parties on an equal footing. The CUT has, however, been temporarily deferring a series of demands regarding fuller recognition of its labour-related rights and its right to participate in political affairs. The rebirth of a strong party system in Chile has somehow been a factor in inducing the trade unions to play a new role as an autonomous social force which has its own political influence but is, none the less, subordinate to the ruling political parties. It must surely be the case, however, as Guillermo Pérez has said, that both Chilean society and the Chilean trade unions have a vision of the future that includes the challenge of defining a socially inclusive form of modernization that will ensure equitable development (Pérez, 1992).

María E. Feres' studies on trade unions have led her to conclude that the key elements needed for the development of labour relations are more efficient systems of union representation and representativity, a predominantly cooperative form of action among

the social actors, and the modernization of the production apparatus, together with the adaptation of workers' rights to fit new situations. Thus, issues such as the need to make the labour market more flexible, the provision of unemployment insurance, the continuity of social benefits and ongoing training for workers are some of the basic ingredients in a socially inclusive form of economic modernization (Feres, 1992).

As a result of the political transition and their long struggle to establish a national labour movement in Paraguay, the trade unions of that country are still in the process of laying their foundations and of winning recognition as a sociopolitical actor in the nation's society and its decision-making system. The reform of the labour code and the possibility of a new constitution are surely indications of this. Céspedes (1992) argues that the unions are making a transition from a corporative and party-based movement linked to the State and the Colorado Party towards a movement which is pluralistic in terms of both the trade unions themselves and the market. Within this new setting, he sees the government-endorsed Paraguayan Workers' Confederation (CPT), the United Workers' Confederation (CUT) and the National Workers' Confederation (CNT) all coexisting in competition with one another, each with their own specific types of political-party links and with different avenues for exerting an influence on society; the greatest challenge posed by such competition among different trade unions would lie in the changeover from being an opposition force to a source of constructive proposals; as in the cases of the labour movements in Argentina, Brazil and Uruguay, this transition may be further complicated by subregional economic integration processes, such as, for example, MERCOSUR.

During the period from 1989 to 1992, which was a time of continuing economic and political stability in Bolivia, the nation's labour movement found itself in the midst of a series of conflicts as it strove to reclaim its functional role within society. These conflicts revolved around the nature of socially-oriented employment and services-infrastructure policies, wages and working conditions for teachers, disputes between State mining companies and workers over comparative risk policies, disputes relating to the production and sale of coca, budget policy and, in particular, policies on reform of the State, especially in regard to decentralization and privatization. With regard to the latter, the trade unions managed to persuade the Government to enter into an agreement

whereby the privatization of State companies must be approved on a case-by-case basis.

According to Jorge Lazarte, the union movement in Bolivia seems to be entering a phase of redefinition, since it is apparently developing some of the capacity for negotiation that it has traditionally lacked. During the period in question, he contends, the Bolivian trade unions have become defensive, instrumentally-oriented, and primarily concerned with expressing their grievances and demands (Lazarte, 1992). Their disputes and struggles have become fragmented. The union leadership, however, especially at their congresses, continue to focus on strategy formulation (Rivera, 1992). Since these developments have been accompanied by a steep drop in the total wage mass as a result of the recession, one of the issues that the labour movement will probably have to address, besides its modernization, will have to do with its representation and representativity in national affairs.

The growth of the union movement in Brazil has been closely linked to the processes of industrialization and social differentiation taking place in that country over the past 30 years, especially since the 1970s and the famous strikes of the metal workers of São Bernardo. The trade unions have gone back and forth between concentrating on fighting for better wages and working conditions, asserting the identity of the labour movement, and joining in the sociopolitical dynamic of Brazil's transition to democracy

(Abramo, 1986; Da Silva, 1981). The development of a new sense of dignity among workers –which is not unrelated to the exclusion and degradation of workers by employers and the authoritarian State– has also engendered a renewed esteem for industrial modernization although, despite its strong political impact on the nation, this process has thus far not provided the means to ensure political stability or to restructure the economy.

In view of the crisis situation in Brazil's economy and industries, however, the use of strikes as the main form of union action has not provided the trade unions with a way to move beyond reactive and grievance-based modes of activity to a point where they might define more strategic positions regarding the retrofitting of the economy and the construction of a more socially integrative economy (Barbosa de Oliveira, 1992).

This is surely linked to their experiences during the application of the developmentalist model championed by the military government, as well as to the marked heterogeneity and segmentation of Brazilian society itself, which limits the potential for cooperative, consensus-based strategies. Da Silveira (1992) raises this issue once again and envisions the possibility of a new national production and social integration pact whose core component would be composed of strategies for reintegration into the new technological paradigm.

V

Political reform and strategies for innovation

For some time now there has been a sociological thesis which encompasses the above considerations. It holds that development and the consolidation of democracy in the region can only come about if the social agents' capacity for action is strengthened (Calderón, 1988).

Such a daring sociological proposition entails three fundamental challenges which are linked to the possibility of certain changes taking place in Latin American society.

The first challenge is to recreate, on the basis of Latin America's own national/popular (and, in this case, classist) historical background, a forum for the

political representation of social concerns: in other words, an institutional arena in which the actors –whether directly or via political parties, in conflict or not– can make their demands heard and can express their interests as a means of arriving at the consensus necessary for furthering development. The issues of democracy and local development could certainly play a crucial role, both as a form of democratic affirmation and as a technological catalyst.

The second challenge is to devise a policy for the social –and above all the political– integration of the poorest sectors of our societies. Only if they are politically autonomous can these sectors fight for their

social integration on their own; this would, in effect, amount to recognition of the political citizenship of men who, when all is said and done, already fought for it a century ago with Bolívar.

The third challenge is to strengthen the State by modernizing it and adapting it to the new features of the transitional society in which we live, yet at the same time subordinating it to the institutional logic of democracy. The State will surely continue to be a leading actor in the modern world for a long time to come, and the types of reforms—which are, in any case, indispensable—that are introduced will be of strategic importance for our societies. The problem lies in how they will affect decision-making, since what is at stake here is the alteration of the State's system of decision-making and the extent of the influence which the democratic system of government will have over it.

Essentially, strategies for innovation relate to the trade unions' search for an active role in the restructuring and modernization processes of Latin American society. Unless they forge a role for themselves, decisions affecting the unions and their societies will be taken by others.³

As Lanzaro has argued in such a thought-provoking manner, the process of innovation needs to be set within a culture which fosters a flexible response to the new socio-historical processes we are now living through (Lanzaro, 1991).

One of the most compelling reasons, from a societal standpoint, why we must think about the need to ensure that workers will play a more active role in the current restructuring process is its exclusive, fragmented rationale, which is a result, *inter alia*, of the weakened position of the trade unions and the State and the stronger position of business interests.

The trade unions' structures and functions are increasing in complexity at a dizzying pace in terms of their relationships with both employers and the State and with the rest of society.

In coming years, the union movement will have to continue to remember and understand the fact that political and institutional stability are necessary conditions for the retrofitting of industry and the achievement of social equity as well as for the modification of the unions' own representative structures. It will also have to continue dealing with the reform of the State, whose policies on privatization, decentralization and social issues may pave the way for a convergence of interests with other social and political actors, whether public or private, external or internal. This convergence would permit a joint redefinition of the necessary conditions for the re-establishment of the unions' position within the new international economic and cultural structure and the construction of a democracy which maintains some sort of balance of power in its decision-making processes and in terms of participation in modern public life.

The cultural pattern of flexibility mentioned earlier would, in this sense, serve as a means for innovation, adaptation and facilitation of an ongoing flow of information about processes of change whereby the political attitudes of the trade unions would include a revitalizing approach to the management of complexity and uncertainty without, however, setting aside the values of solidarity, autonomy and liberty which have been consubstantial with the past experience of workers.

Taking part in the restructuring process, democratizing the flow of information and knowledge, gaining access to communications systems and expanding their system of representation in an effective manner are probably the central components of many Latin American trade unions' new strategies of innovation. In order to pursue these strategies in practical terms, the unions' legitimate specific and individual demands must be linked up with existing processes of nation-building. The aggregation of demands, the rationalization of their conduct and the politicalization of their interests can help workers to play a more effective and constructive role in modern society. It must be remembered, however, that the desired political constructs entail a system of ongoing interaction by the social actors. The strength of a given party or class will depend on how well they can champion their interests within the institutional structure and how effective they are in reaching agreements with their opponents.

³ For an illustration of this situation, see the monograph (ACINDAR) on the subject by Palomino and Novick (1992), which analyses the tensions existing within the union movement in connection with the restructuring process.

VI

Political and cultural forces

Rather than being more innovative, the democracies of today are becoming increasingly querulous and unstable. With each passing day it is also becoming clearer that economic adjustment programmes—which are a strong force of social differentiation, especially if they do not include significant compensatory mechanisms—are, in the long run, sources of political instability and social chaos. Thus, it is worth asking ourselves whether reintegration into a programmed society is possible without the reactivation of the social and cultural actors. That reactivation does not, however, appear to be taking place.

From what source can these faltering societies draw strength? The political and cultural spheres are the only possible answers. Politics, because it is the only arena in which the disaggregative processes now under way in the countries might be brought together into a unified whole; only political action on a nationwide scale can hope to elicit an integrative response from the societal actors, and only politics can raise the issue of the State and development under different conditions. Culture, because in the final analysis, only history and cultural experiences can shape the tolerance and the work ethic which are these societies' source of strength. Is this enough? Or must there also be some other way of relating to technology and, in particular, to the informational and cultural dynamism of programmed societies? I believe the latter is the case.

However, unless our societies and actors strengthen themselves, we will only manage to build scattered strongholds of modernization on a vast wasteland of poverty where, eventually, perhaps not even these strongholds will remain. Or to put it another way: if we choose the path of giving greater power to our societies, we are also choosing the path of rational political action over the long term.

Perhaps, in these times of change, workers, too, can use their traditional forms of action—which have been more politically than socially oriented—and their political culture—which has been of a more corporative and heroic, rather than pluralistic, cast—to aid in the effort to fashion a network of social and political

actors devoted to building a bridge between modernization and democracy. After all, they carry on their shoulders a whole body of modern rational experience. Can they do it? And if they do, will other political and social actors join them? When all is said and done, the democratic modernization of our societies must be a shared political creation.

A major problem is appearing on the political horizon, however. That problem is the dynamic of historical time, in that, while collective action remains on the defensive and continues to slowly accommodate itself to the adjustment, the adjustment is proceeding full steam ahead—with no *prise de conscience* whatsoever—to alter the State, the economy and the political activity of our societies. While it is true that adjustment policies are introducing these changes, it is also true that their implementation is eroding society's ability to form a consensus, weakening the efforts being made to build democracy, and actually reducing the chances of retrofitting the economy successfully.

We therefore find ourselves in the midst of a paradox in which the powerful dynamic of modernization—its chief form being that of structural adjustment—is increasingly draining off the force of democracy, while the consolidation of democracy demands an integrative, modern development process which is being blocked by the true characteristics and forces of the adjustment. Once again, the only tools that can be used to tear down this barrier are those of politics, namely, a socially integrative national policy.

Entrepreneurs are another fundamental element in this process, not only because of the shifts currently being observed in adjustment policies and in the ideologies of international organizations, but also because the programmed society itself is essentially entrepreneurial. Even the most quintessential of market operations contains a cultural element, and even the most indirect mathematical operation of making a rational choice contains a political component.

The question arises, then, as to how much autonomous capacity for action is possessed by each Latin American entrepreneur, and also how much of a truly entrepreneurial content there is in their actions and

how much is actually of a cultural and political nature. Are they really still content simply to seek immediate economic gain and to continue to imitate the consumption patterns of the North? Why do they have to follow cultural patterns which are socially, economically and psychologically alien to them? What are they afraid of? And, finally, what is the real social and political culture of, for example, a Brazilian businessman who straightens his Italian tie every morning and summons up his faulty command of English? How do transnational corporations and their agents in Latin America operate in a cultural sense? Is it possible to regulate the cultural behaviour of these agents by political means? What image do local entrepreneurs project for their Japanese or Swedish colleagues? What practical concept and what rational programme in respect of privatization policies do entrepreneurs have? Are they truly modern entrepreneurs? What can the other social actors do to reinforce corporate action?

If questions of this sort were to be asked of different social and political actors, perhaps one would arrive at the conclusion, or at least the hypothesis, that in these new times the social and political (but not the cultural) actors are harking back in an

uncreative way to the past, are experiencing what psychologists would call a form of cognitive dissonance; in the face of this new and changing programmed society that is emerging, they respond with forms of behaviour and beliefs that belong to the past, to the era of the nation-State, which has now run its course. At times, it even seems that the privatization process is functioning, in a political sense, on the basis of clientage and bureaucratic practices in which even those who are to be sacrificed are taking part.

Living in the past is not the same thing as maintaining a secret, essential bond with past experiences that allows them to be imbued with new meaning in the avatars of these new times. The Latin American labour movement was organized to defend people's jobs, grew to take on a political identity, and formed close ties with the State and with quasi-State national-popular movements and parties. Perhaps now a critical review of the best moments of its past will enable its members—as, indeed, the most lucid and economically better-off groups among them are already beginning to do—to forge a new position for the unions on the national scene with a modern and democratic agenda for the future.

Bibliography

- Abramo, Lais (1986): O resgate da dignidade (A greve de 1978 em São Bernardo), Master's thesis, São Paulo, Brazil.
- Barbosa de Oliveira, Carlos (1992): Política de ajuste económico e sindicatos no Brasil, ISCOS/ICFTU/CLACSO International Symposium on the Response of Trade Unions, the Political System and the State to the Crisis and Structural Change: European and Latin American Experiences, São Paulo, Brazil, August (mimeo).
- Bouzas, Roberto (1988): Los escenarios económicos internacionales de corto y largo plazo y América Latina: una revisión de algunas proyecciones disponibles, Proyecto sobre Ciencias Sociales, Crisis y Requerimientos de Nuevos Paradigmas en la Relación Estado, Sociedad, Economía, UNDP/UNESCO/CLACSO Regional Project RLA/86/001, Buenos Aires (mimeo).
- Calderón, Fernando (1988): Potenciar la sociedad para consolidar la democracia, *Le Monde diplomatique*, vol. 4, No. 222, Paris, August-September.
- Calderón, Fernando and Mario dos Santos (1992): Lo socio-cultural y lo político en la reestructuración, Santiago, Chile (mimeo).
- Castells, Manuel (1988): *Nuevas tecnologías, economía y sociedad*, Madrid, Universidad Autónoma de Madrid.
- CIEPI (Centre for International Prospective Studies and Information) (1984): *Economie mondiale 1980-1990: la fracture*, *Economica*, Paris.
- (1992): *Economie mondiale 1990-2000: l'impératif de croissance*, *Economica*, Paris.
- Céspedes, Roberto (1992): Políticas sindicales frente a la crisis: Paraguay, ISCOS/ICFTU/CLACSO International Symposium on the Response of Trade Unions, the Political System and the State to the Crisis and Structural Change: European and Latin American Experiences, São Paulo, Brazil, August (mimeo).
- Coutinho, L. and W. Suzigan (1990): *Desenvolvimento tecnológico da indústria e a constituição de um sistema nacional de inovação. Relatório síntese*, FECAMP (mimeo).
- Da Silva, Luis Ignacio (1981): *Lula sem censura*, Petrópolis, Brazil, Ed. Vozes.
- Da Silveira, Carlos (1992): Brasil: crise, política industrial e sindicato, ISCOS/ICFTU/CLACSO International Symposium on the Response of Trade Unions, the Political System and the State to the Crisis and Structural Change: European and Latin American Experiences, São Paulo, Brazil, August (mimeo).

- ECLAC (Economic Commission for Latin America and the Caribbean) (1990): *Changing Production Patterns with Social Equity*, Santiago, Chile, March. United Nations publication, sales No. E.90.II.G.6.
- (1992a): *Comportamiento económico y desigualdad social* (LC/R.1249), Santiago, Chile, Social Development Division, 29 December.
- (1992b): *Imágenes sociales de la modernización y la transformación tecnológica* (LC/R. 971/Rev.1), Santiago, Chile, Social Development Division, 17 March.
- Feres, María E. (n/d): Ajuste económico y política laboral: visión sindical, Expert Seminar on Latin American Labour Relations, ILET, Santiago, Chile (mimeo).
- Lanzaro, Jorge (1991): El sindicalismo en la fase pos-keynesiana. Crisis y renovación en el fin de siglo, *Cuadernos del CLAEH*, Nos. 58-59, vol. 16, 2nd series, Montevideo, Latin American Centre of Human Economics (CLAEH).
- Lazarte, Jorge (1992): Movimiento sindical y políticas de ajuste en Bolivia, La Paz, (mimeo).
- Notaro, Jorge (1992): Consolidación democrática, estancamiento económico y propuestas sindicales: Uruguay 1984-1992, ISCOS/ICFTU/CLACSO International Symposium on the Response of Trade Unions, the Political System and the State to the Crisis and Structural Change: European and Latin American Experiences, São Paulo, Brazil, August (mimeo).
- Palomino, Héctor (1991): Respuestas sindicales y reconversión industrial, Seminario sobre reconversión productiva, Buenos Aires, August (mimeo).
- Palomino, Héctor and Marta Novick (1992): Estrategia empresarial y respuesta sindical frente a la reestructuración económica. Estudio de un caso, Buenos Aires (mimeo).
- Pérez, Guillermo (1992): Políticas sindicales frente a la crisis y a los cambios estructurales en Chile, Santiago, Chile, Centre for Humanistic Labour Studies (CELAH), July (mimeo).
- Rivera, Alberto (1992): Políticas sindicales frente a la crisis y a los cambios estructurales en Bolivia, 1985-1992, ISCOS/ICFTU/CLACSO International Symposium on the Response of Trade Unions, the Political System and the State to the Crisis and Structural Change: European and Latin American Experiences, São Paulo, Brazil, August (mimeo).
- Thompson, Andrés (1992): Economía, política y organización sindical. Argentina 1983-1990, ISCOS/ICFTU/CLACSO International Symposium on the Response of Trade Unions, the Political System and the State to the Crisis and Structural Change: European and Latin American Experiences, São Paulo, Brazil, August (mimeo).

Shaping *competitiveness* in the Chilean *wood-processing industry*

Dirk Messner

*Scientific researcher,
German Development
Institute, Berlin.*

The neoliberal view is that outward orientation and general liberalization should result in efficient factor allocation and thus in the formation of competitive economic structures. Its policy recommendations are therefore generally in the "get prices right" mould. The adjustment and learning processes needed for the creation of competitive advantages at the level of enterprises, institutions and the infrastructure, and the support they might receive, are not *a priori* singled out for discussion from this angle. In this article, the author bases his arguments on a dynamic and systemic approach to international competitiveness, summarizing its determinants whose interaction forms a complex system. Primarily, the concept of "systemic competitiveness" is an approach that runs counter to simplistic market ideologies. At the same time, however, it also criticises one-dimensional Statist planning projects. The Chilean wood-processing industry is considered to be an interesting case for examination in this respect for two reasons: firstly, because it is a natural resource-based sector, and it may be assumed that in view of the low efficiency of their industrial sectors, most of the Latin American countries will likewise have to take their first steps towards outward-oriented specialization through modernization of the sectors making intensive use of natural resources. Secondly, analysis of this case reveals that while, on the one hand, such sectors have considerable potential for growth and modernization, on the other hand it must be noted that even in the example in question, which does not appear to be at all complex, it is very difficult to make the transition from the production and export of labour-intensive goods with a low level of processing to industrial products of greater added value, while at the same time ensuring and improving sustainable competitiveness.

I

Reorientation of development strategies in Latin America

The Latin American debate on development strategies is gradually leading to a consensus that the development model of protected inward-oriented industrialization (industrialization through import substitution), which dominated the region for decades, has proved unsound. With the small size of domestic markets preventing growth beyond a certain point and excessively high tariff barriers erected for indefinite periods excluding the pressure of external competition, the gap between Latin American and international productivity levels steadily widened, making it impossible to achieve the original goal of gradual integration into the world economy. The internal crisis factors were further exacerbated by world economic trends (e.g. the decline in the prices of raw materials, and high interest rates in the early 1980s). The Latin American countries have

consequently been overtaken by a far-reaching crisis in their development model. It is generally agreed today that patterns of development which ignore the world economy are doomed to failure. Practicable methods of becoming part of the world economy and concepts for developing competitive economies are therefore being sought (ECLAC, 1990 and 1992). The economic policy being pursued by the Latin American economies as they make the transition from excessive inward orientation to an approach focussed on the world economy is essentially determined by neoliberal policy models. The liberalization of foreign trade and the deregulation policies applied are leading—in Mexico and Argentina, for example—to the erosion of the traditional development model and exposing the national economies to international competition.

II

How does competitiveness arise?

The neoliberal view is that outward orientation and general liberalization should result in efficient factor allocation and thus in the formation of competitive economic structures. The neoliberal school concentrates on incentives rather than structural factors, so that its policy recommendations are generally in the “get prices right” mould (Bletschacher and Klodt, 1991). The adjustment and learning processes needed for the creation of competitive advantages at the level of enterprises, institutions and infrastructure and the support they might receive are not therefore singled out for discussion a priori from this angle. The structural factors which are at the heart of research on technological innovation (OECD, 1991) do not form part of the neoliberal debate.

This paper takes a position opposed to this simplistic view of how the market works. It is accepted that the inward orientation of their industries led the Latin American countries into a development

cul-de-sac, thus making orientation towards the world market as a frame of reference and efforts to establish competitive economies unavoidable (Messner and Meyer-Stamer, 1992). It is shown, however, that the challenge of achieving industrial competitiveness is not adequately covered by the categories of textbook economics and cannot be met with entirely “market-neutral” macro policies.

If active strategies for integration into the world market are to be developed in Latin America on the basis of sound technology and industrial policies, some fundamental questions, treated as a “black box” by neoliberal theoreticians with a passing reference to the remarkable qualities of the market and to the dynamic Schumpeterian entrepreneur, need to be asked: how do competitive advantages in fact arise, what are their essential determinants, and how does sustained competitiveness that is not based on absolute cost advantages (e.g. low wages, favourable resource

endowment) develop? As Sanjaya Lall puts it: "It is certainly better to get prices right than wrong, but it is a necessary condition for industrial success and not a sufficient one" (Lall, 1990, p. 11).

Chile's rapidly growing woodworking industry will be taken as an example in the discussion of these questions below.¹ Chile is an interesting case because as early as 1973 the military dictatorship began to pursue a radical strategy of outward orientation, which led to the destruction of the traditional development model, whereas the first steps in this orientation towards the world economy are only now being taken in most Latin American countries. After a difficult "streamlining process", which exacted a heavy social and ecological toll, and the collapse of many inefficient industrial sectors, the development of the Chilean economy has looked very promising since the mid-1980s (Muñoz, 1988; Meller, 1990). The driving forces in the country's development are a number of export-oriented, natural-resource-intensive sectors which have specialized in certain products. After a development sequence characterized primarily by an increase in exports of raw materials and products with a limited degree of processing, the country now faces the challenge of placing industrial competitiveness on a broader footing. Chile is thus a "model case": a country that has already completed what others may have yet to begin in terms of entering the world economy (Mármora and Messner, 1991).

The wood-processing industry is worth considering for two reasons:

– Firstly, it is a natural-resource-based sector, and it must be assumed that, given the limited efficiency of their industries, the majority of Latin American countries will similarly take the first step towards world-market-oriented specialization in sectors of the economy which make intensive use of natural resources and which need to be modernized.

– Secondly, the Chilean woodworking industry reveals, on the one hand, that natural-resource-intensive sectors too have considerable potential for growth and modernization,² while on the other hand it shows how difficult it is even in this apparently uncomplicated sector to make the transition from the production and export of labour-intensive and largely unprocessed products to that of manufactures with a higher value added, while at the same time achieving and improving sustained competitiveness.

The analytical background to our study is the heuristic concept of "systemic or structural competitiveness". This approach is designed, on the one hand, to extend the debate on the international competitiveness of individual enterprises to include an analysis of their competitive strength in the context of efficient institutions and a suitable macroeconomic environment. It also considers the development of the international competitiveness of economies, which cannot be seen as a simple aggregation of the individual rankings of enterprises in international markets. On the other hand, unlike the standard static textbook models, it not only examines the given structure of comparative advantages and disadvantages but also, and above all, analyses the ways in which firms develop and become more dynamic. The learning processes which the actors and institutions concerned undergo and which underlie the development of competitive advantages are analysed. This view also implies that –although they are very necessary– stable macro policies which facilitate outward orientation are not of themselves enough for the development of international competitiveness.

In a report for the OECD, F. Chesnais summarizes this dynamic and systemic view of competitiveness as follows:

"We recognize the international competitiveness of national economies as being built on the competitiveness of the firms which operate within, and export from, their boundaries, but we also identify the

¹ This article is based on the findings of an empirical study undertaken in Chile in the spring of 1991 by a German Development Institute working group. The study would not have been possible without the support of the "Instituto Forestal" of Santiago, Chile. The empirical phase consisted largely of interviews with 55 enterprises (average duration, including an inspection of the plant: about 4 hours) and discussions with experts of all the various institutions with close links to the forest industries sector. The author was joined in the study by Ingolf Dietrich, Jürgen Friederici, Roland Guttack, Kerstin Kiehl und Wolfram Klein. See Messner, Dietrich, Friederici, Guttack, Kiehl and Klein, 1992.

² An interesting example is that of Taiwan. This country is the most important furniture exporter of the developing nations. The 2500 furniture manufacturing companies in Taiwan import wood from the United States and export "ready-to-assemble" furniture worth over US\$700 million per year. The competitiveness of this industry is not based on low-cost resources but on modern enterprises, adaptation of state-of-the-art technology, a solid infrastructure (e.g., training and upgrading institutions for workers, design centres, research and development programmes), and close relations between enterprises in order to improve the entrepreneurial level of the sector (UNIDO, 1986, p. 53).

competitiveness of national economies as being something more than a simple result of the collective or 'average' competitiveness of their firms. We propose the notion of 'structural competitiveness' as a way of expressing the fact that, while the competitiveness of firms will obviously reflect successful management practices by entrepreneurs or corporate executives, it will also stem from the strength and efficiency of a national economy's productive structure, its technical infrastructure, and the other factors determining the externalities on which firms can build" (Chesnais, 1988, p. 86).³

This concept goes beyond one-dimensional approaches to an explanation and takes account of the complexity of the determinants of international competitiveness. The factors that influence industrial competitiveness form a complex system, and figure 1 attempts to structure this wide range of determinants. If competitiveness is to develop, stable economic policies that can be anticipated by the various parties concerned are needed at the macro level. Competitiveness emerges and is developed in enterprises that are under the pressure of competition and also develop forms of inter-company division of labour and cooperation, which are becoming increasingly important (micro level). Sustainable competitiveness and the establishment of competitive structures depend on the existence of specific sectoral policies of

private or public institutions (meso level) designed to optimize external economies (e.g. policies on infrastructure, technology and training), to ensure the sustainability of industrial development (environmental policy), and to guarantee social stability and the creativity of employees (social policies). In the final analysis, economic development and thus competitiveness form part of politico-social systems (meta level), although unequivocal causal relationships cannot be established here (Dauderstädt, 1987; Olson, 1982). This "schematic fresco" for approximating the phenomenon of industrial competitiveness requires the backing of empirical evidence if the relative weighting of the various factors influencing it is to be determined.⁴

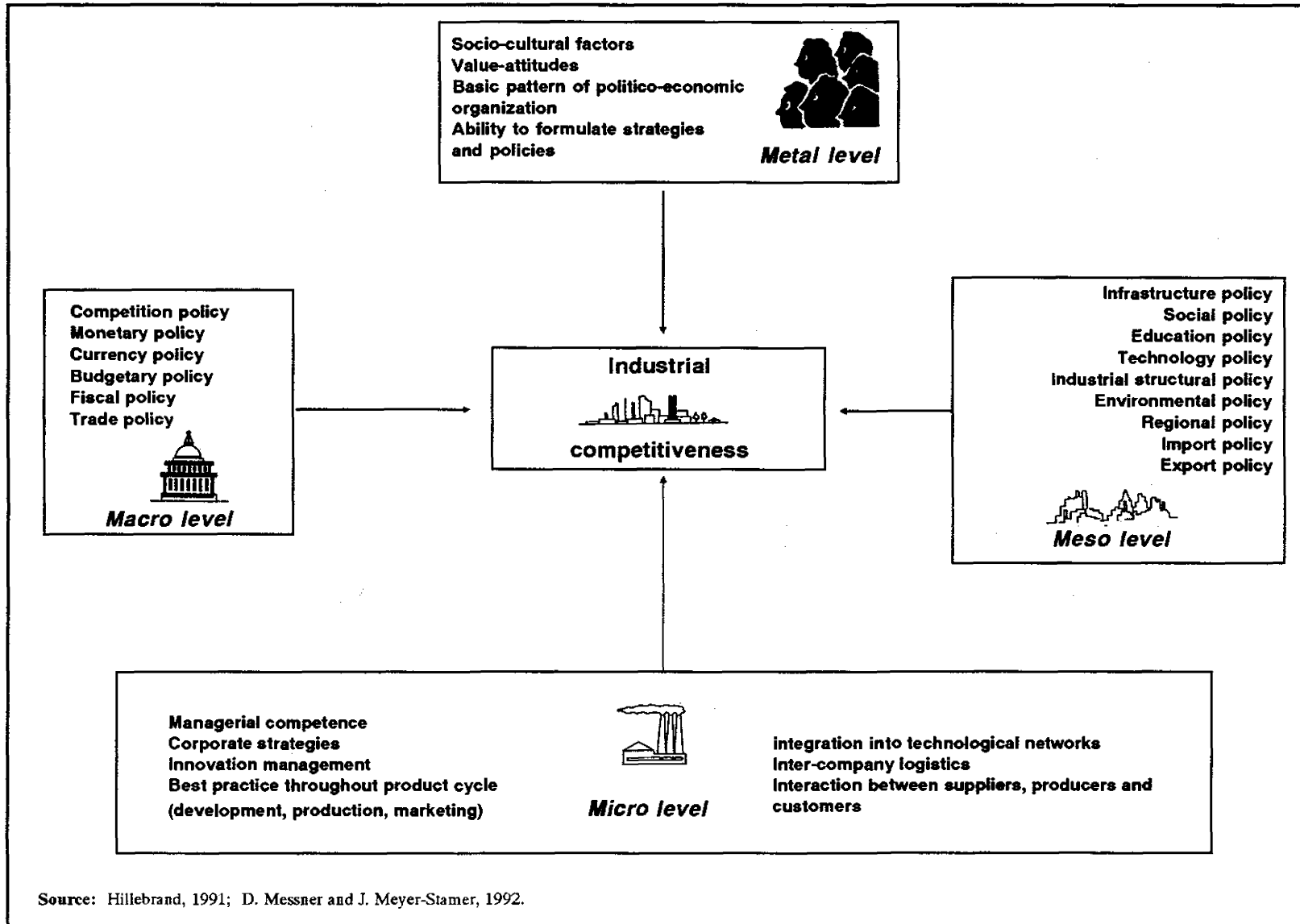
The following sections primarily concern trends at the micro level (sections IV and V) and changes in the relationship between employers' and employees' organizations (meta level, section VI) as the transition is made from inward to world market orientation and competitiveness emerges. It becomes clear that "catch-up modernization" in the area of structural policy (meso level) and a flexible and constructive interplay of entrepreneurial, government and trade union actors and institutions (section VII) are needed in the Chilean wood-processing industry in order to accelerate the emergence of technology-based competitiveness.

³ A similar view is taken in other, more recent studies on competitiveness, although they differ widely in the importance they attach to the various factors and in the conclusions for economic policy they then draw. See, for example, ECLAC, 1990; Porter, 1990; Best, 1990, and Hillebrand, 1991. Esser (1991b) outlines the challenges that outward orientation poses for the Latin American countries and attempts to distinguish sequences in the development of competitiveness.

⁴ This approach should not be seen as functionalist. A State technocratic strategy to make the various influencing factors compatible with the goal of "producing competitiveness" ("blueprints") would be hopelessly overextended. It is important to grasp the societal and social dimension of "competitiveness" (and of socio-economic development as such) in order to correct the reductionism of mainstream economics. Experience shows that quite different development styles and forms of regulation can contribute to the emergence of viable economies. "Workable markets" are undoubtedly only one element of the "wealth of nations", which is likely to depend primarily on the mobilization of creativity in society. Just as wrong as the functionalist version of this concept, of course, would be the assumption that absolutely any approach is viable.

FIGURE 1

Determinants of international competitiveness



Source: Hillebrand, 1991; D. Messner and J. Meyer-Stamer, 1992.

III

The Chilean forest industries sector

With output valued at well over US\$1 billion (1991), the Chilean forest industries sector⁵ accounts for slightly over 3.5% of the country's gross national product and employs some 3% (80 000 people) of the total labour force. The role it plays in the economy is more clearly revealed by its contribution to the country's export earnings, for whose favourable trend it has been largely responsible since outward orientation began. While timber and wood-pulp exports accounted for only 3.8% of total exports in 1970, the figure had risen to about 10% by the early 1990s. These relative figures represent a tenfold increase in production over this period.⁶ Exports rose from about US\$40 million in 1973 to US\$850 million in 1991. Some 90% of the raw material handed by the wood-processing industry originates from forestry plantations (currently occupying an area of 1.2 million hectares), and only 10% from the remaining natural forests. As the timber potential of the plantations will approximately treble by the year 2010, a concept of sustainable forest management is conceivable in Chile provided the government enforces effective protection of the natural forests (Messner *et al.*, 1992).

Government-subsidized afforestation programmes aside, there have been no specific sectoral policies. The dynamism of the development of the forest industries sector is thus essentially due to macro policies that promote exports and to the enterprises' own dynamism.

Two phases of development are discernible in the Chilean forest industries sector between 1974/75 and 1991, after it had been inward-oriented and far from dynamic in its development until the mid-1970s:

– With Chile's outward orientation, an "extensive export phase" featuring high growth rates began in 1974/75. This upward trend was largely due to exports of such natural-resource-intensive products as round and sawn timber and wood pulp. Absolute cost advantages gained from the natural availability of timber resources (forest growth well above the average), the sharp rise in timber potential due to government-subsidized afforestation programmes (since the 1960s) and low labour, transport and environmental costs, together with a macro policy that encouraged exports (devaluation of the national currency, reduction of import duties, withdrawal of foreign exchange restrictions), formed the basis of the sector's dynamic development and its international competitiveness (factor-driven development). According to World Bank calculations, production costs (from the cost of afforestation to the cost of transport to the export terminals) for logs of the most important species in Chile, Monterey pine (*Pinus radiata*), are only 30% to 50% of costs at such production locations as the USA and the Scandinavian countries, which compete directly with Chile in the world market (World Bank, 1986). A few large enterprises accounted for the bulk of export revenues during this "easy export phase".

– After a serious crisis in the early 1980s, the forest industries sector stagnated until the middle of the decade. Since 1986 there has been a new, dynamic growth phase, accompanied by heavy investments. The value of the sector's output (excluding furniture) increased from US\$492 million in 1985 to about US\$1.2 billion in 1991, export revenues in the same period rising from US\$326 million to about US\$850 million.

Two trends are important in this context: firstly, traditional natural-resource-intensive products continue to be largely responsible for the dynamism of growth, but their quality is being significantly improved, which is already leading to an increase in domestic value added. Secondly, the processing of available timber resources is expanding, and the sawn timber, furniture, board and paper subsectors are diversifying their products. Exports of non-traditional products (e.g. veneers, packaging materials and furniture) and new investment in these subsectors have

⁵ The term "forest industries sector" is used henceforth as a synonym for "sector forestal", the standard term in Chile. The sector is divided into the forestry sector (forest management) and the wood-processing industry, which is in line with the classification used in the Chilean literature and statistics.

⁶ Timber production grew by 87% between 1974 and 1980, and by 42% between 1980 and 1987, while over the same periods the output of the furniture industry grew by 120% and 37%, respectively. Timber exports increased from US\$9 million to US\$152 million between 1970 and 1987, while over the same period exports of timber and wood pulp together grew from US\$35 million to US\$365 million.

been rising sharply since the mid-1980s (factor-creating and investment-driven development).

In the past five years the domestic market has absorbed a stable share of 30% of the output of the forest industries sector in value terms, which means that it has developed just as dynamically as the trend in exports. There has been considerable diversification of export markets. By the late 1980s the Chilean wood-working industry was exporting to 58 countries (compared with about 40 in the early 1980s). Owing to the persistent economic crisis, the importance of Latin America, which was the leading market until the early 1980s, has waned, while exports to Europe, Asia and even the USA have risen sharply (INFOR, 1990).

The available literature has little to say on the features underlying these macro figures on the growth and modernization of the industry at the enterprise level, changes in the business environment, or the initiators of this structural change. Clearly, the dynamic development in the highly natural-resource-intensive sectors (wood pulp, round timber, sawn timber) was due to heavy investment by the large enterprises in

these subsectors. Product diversification and the export of new products also seems –from an analysis of the available material– to have been largely due to investment by larger enterprises.

As the export statistics (Aldunate, 1990, p. 176) show, however, that over 500 firms in the Chilean forest industries sector were exporting in the late 1980s compared with about 250 in 1983/84, and as the seven largest firms' share of the sector's total export revenues fell from 80.5% in 1986 to 63% in 1990 (Contreras, 1988, p. 248), small and medium-sized firms had obviously emerged and stepped up their exports. It is unclear what led to the dynamic development of the many small and very small firms which are to be found in the various subsectors and which previously supplied the generally undeveloped and still undemanding domestic market. The large number of new export firms indicates, however, that the dualistic structure of the sector which dominated until the early 1980s, with export-oriented large firms on the one hand and small firms geared to the domestic market on the other, had at least begun to change.

IV

The development of competitive advantages in the wood-processing industry as a cumulative learning process

The competitiveness of the Chilean wood-processing industry has improved, if the yardstick used is the agreed definition of international competitiveness: the growing ability of a sector to export, accompanied by rising national factor income. Market indicators (rising exports, product and market diversification, a positive trade balance, etc.) reveal whether the competitive position of a sector or economy has changed, but not how or why (Feser, 1990, p. 23). The following pages outline learning and modernization processes at the level of enterprises and institutions, with the object of shedding light on the dynamism of the development of competitive advantages in this world-market-oriented area of specialization. Particular attention is paid to the small and medium-sized enterprises (SMES) that began exporting in the mid-1980s.

1. Reorientation at the enterprise level in the transition from inward to export orientation

The crisis that occurred in the domestic market in the early 1980s forced more and more SMES to take a greater interest in exports. The growing number of export-oriented SMES include sawmills, timber-processing firms (producing packaging materials, toys, wood for the interiors of buildings) and furniture manufacturers. This trend gave the lie both to the export pessimism previously prevailing among SMES and to the view circulated by exporters of raw materials who had become established by the mid-1980s that the Chilean wood-processing industry's competitive position would decline as soon as it ceased to enjoy the existing comparative cost advantages (low wages; unlimited supply of cheap raw material).

The SMES' growing export orientation was accompanied by a complex organizational and technological learning process. When they first changed their strategy, the "new exporters" had neither enough export know-how in the fields of transport, marketing, international quality standards and protectionism, nor sufficient manufacturing competence (knowledge of technology, organization of work, management strategies, an adequately trained workforce). Consequently, many firms failed in their attempts to export. Moreover, because of the inadequate business environment, even the successful firms needed a great deal of time and starting capital to find their way into the world economy and become accustomed to the production and marketing techniques typically used at the international level. They lacked the viable sectoral structures (e.g. efficient suppliers, systems that provide information on technological and market trends, technology-oriented institutions) on which enterprises in the industrialized countries can normally rely.

Exporting manufactures requires a high level of competence in all areas of business. The most serious problem the firms initially faced was recognizing the completely different requirements of the world market compared with those of the domestic market and translating them into appropriate corporate strategies. It was particularly important to improve such non-price aspects of competition as the organization of work, the technological level of production, product quality, design and image, punctuality of deliveries, and marketing. These heavy demands on the enterprises call for a specialization strategy and the use of external know-how (production- and export-related services). The SMES, which had been inward-oriented until the mid-1980s, were as a rule vertically integrated, had little contact with other firms or suppliers (autarkic mentality) and—because local demand was limited—offered a very wide range of products (from sawn timber through packaging materials to furniture). Overcoming these internationally uncompetitive entrepreneurial structures and strategies was not only a capital, know-how and technology problem but also a mentality problem: in the early stages of reorientation the first generation of "new exporters" were still convinced of the efficiency and viability of the entrepreneurial concepts that had proved successful in the domestic market. Consequently, many initial attempts to export failed, and the continued application of past production concepts led to unwise investments.

Some furniture manufacturers, for example, told us of visits to the USA to seek potential customers for their products. In order to appear as competent producers, they presented a very wide range of products of (as they see it today) mediocre quality. These first attempts failed, resulting at best in requests from the potential customers visited for one or two samples. It is impossible to say how many firms fell at this hurdle. What can be said, however, is that some of the firms visited by our working group had already invested (unwisely) in new manufacturing equipment with a view to exporting a wide range of products, and some of this equipment was standing idle.

2. Stages in the modernization of dynamic enterprises

The enterprises made comparatively rapid progress in marketing and in acquiring and applying the necessary export know-how (quality standards, punctuality of deliveries, etc.). Both the large exporters of raw materials and the medium-sized firms have created joint marketing channels (e.g., establishment of a trading company or of a joint marketing office set up by a trade association) which ease the burden on individual firms in this field. This professionalization has proved to be an important step in improving the competitiveness of the enterprises, which are hardly likely to find their way into the world economy acting alone.

It is evident from the technical problems (adaptation problems, incompetent maintenance, parts of the production apparatus at a standstill) encountered particularly (but not exclusively) in technologically more complex branches of production (furniture, particle boards) that manufacturing competence and the technological level of production are still low. Integration into the world economy almost always coincides with the introduction of imported modern production equipment. The introduction of production technologies commonly used elsewhere is no guarantee that their productivity and performance potential will be fully tapped, however, as is apparent, for example, from the particle board industry. Despite heavy investment in equipment, numerous technological adaptation problems are making it particularly difficult for this sector to achieve international quality standards.

The operating and maintenance personnel clearly do not yet have sufficient manufacturing skills or technological know-how to ensure that the equipment

(imported from Germany or Italy) is used as it should be. A problem area encountered in some cases has been the inability of a firm's own engineers to repair technical faults on production lines (e.g. the failure of microelectronic control systems) and to solve fine-tuning problems in the linking of operations. Although experts flown in by the various machine manufacturers are able to correct technical faults quickly, the general problem of mastering the technology persists. Experience in industrialized countries shows that the installation and optimization of production lines based on the new production technologies is often a process of trial and error, in which close contact between makers and users is essential (Döhl *et al.*, 1989; UNIDO, 1992). In this case, the organization of work is more important than when traditional technologies are being used. According to calculations made with respect to the introduction of electronically controlled equipment, 60% of the profits derived from higher labour productivity are due in this case to organizational restructuring (which varies greatly from one firm to another) (Peres, 1988). As a rule, the maker's and user's engineers work together to optimize production structures and processes. This cooperation does not end with the installation of the machines, but continues in order to ensure the continual optimization of production methods (incremental learning). These synergic effects, which stem from the close relationship between the makers and users of machinery, cannot be copied in Chile. The existence of highly qualified engineers, ongoing training measures for production workers and technological and organizational cooperation among enterprises, which is lacking at present, is therefore all the more important.

Our observations confirm the findings of many empirical studies of technological change in Latin American enterprises, which have shown that firms must be capable of "imitative innovation" and independent "incremental technological change" if the productivity potential of modern production equipment is to be exploited (Herbert-Copley, 1990). The neoclassical conception of a given state of the art is a highly simplified view: "learning by doing" is not enough to ensure the successful application of technologies, their adaptation to the prevailing circumstances, and constant incremental improvements to optimize production; active strategies and conscious decisions by management are also needed (Katz, 1984 and Meyer-Stamer *et al.*, 1991). Unless selective investments are made in the training of workers

and engineers, organizational changes are effected, and technological services are used to encourage the learning of new technologies in the firm, the efficiency potential of production equipment, however modern, will not be adequately tapped. Innovation in this sense of the term is a social process, and can therefore be shaped.

In Chile very few enterprises are currently making an active attempt to increase their manufacturing competence. The dominant view is that the introduction of modern machinery and "passive", uncontrolled or unsystematic learning by doing will raise a firm to international productivity levels almost as a matter of course. This view is also reflected in generally inadequate investment in the formation of human capital. Although the dynamic exporting enterprises attach more importance to the training of their employees than the traditional, inward-oriented firms, the majority nonetheless consider unsystematic on-the-job training to be sufficient to ensure that their workers attain an acceptable level of qualification. Training costs are often regarded as expenditure on consumption rather than as an investment. Without wishing to belittle what the enterprises have done to modernize, it can be said that many entrepreneurs still see low labour costs as more relevant to competition than efforts to improve the organization of work or to increase productivity through training measures. This view is evident from the fact that only a few entrepreneurs are committed to the development of a training system in the wood-processing industry.

It is apparent that the competitiveness of firms is at present based solely on partial rationalization efforts. The conclusion drawn from an evaluation of the modernization process at the enterprise level is therefore ambivalent:

– On the one hand, the sequence of modernization stages (marketing, introduction of new production equipment, limited efforts to improve technological competence, little training) reflects the requirements to be met when the transition is made from inward to world market orientation. Learning processes cannot occur simultaneously at all levels. The rapid improvement of marketing structures and the introduction of modern production equipment are likely to be of fundamental importance if integration into the world economy is to be at all possible.

– On the other hand, competitiveness will depend in the longer term on a constant increase in and the exploitation of technological and organizational

potential at the enterprise level. The tendency to prefer "soft-option" corporate strategies, which are still heavily based on the exploitation of the given factor endowment (low wages, enormous timber potential), was probably encouraged by the military dictatorship. There is a danger that this tendency will prolong the "factor-driven phase" and slow the "investment-driven sequence", in which it will be essential to optimize existing competitive advantages and create new ones. The Chilean forest industries sector, in which these two development sequences currently overlap, should therefore heed Porter's warning of the drawbacks of this blocking mechanism during the transition from the export of natural resources to the export of manufactures: "In a narrow conception of international competition, competitive advantage results from factor abundance. ... In actual competition, however, the abundance or low cost of a factor leads to its inefficient deployment. ... Local abundance of basic factors lulls firms into complacency and deters the application of advanced technology" (Porter, 1990, p. 82). All that needs to be added is that the application of modern technology must in turn be supported by changes in the organization of work and by training offensives.

3. Inter-company relations and the integration of enterprises into institutional networks

In the early stages of world market orientation, the new small and medium-sized exporters acted as individual, vertically integrated firms and did not try to cooperate with other firms or institutions. The absence of communication structures prevented rapid joint learning processes and led these firms to take similar misguided decisions that later proved costly (e.g. investment in equipment for the manufacture of too wide a product range). In recent years, however, a tendency to seek "collective efficiency" structures⁷ has gradually emerged. The modernization of inter-company relations and the formation of sectoral networks (vertical links and horizontal cooperation) are following the pattern observed at the enterprise level (first, optimization of marketing, later –and still underdeveloped– cooperation in the technology and training spheres).

⁷ This term was coined principally by H. Schmitz, who also emphasizes the importance of efficient structures and networks in his studies of the development of small enterprises in developing countries (see, for example, Schmitz, 1990).

In the marketing sphere, efficient private institutions or enterprises which were, interestingly enough, established or sponsored by the dynamic enterprises themselves have emerged. Marketing consortia, joint participation in trade fairs, and marketing offices are improving competitiveness, particularly in the case of the small and medium-sized enterprises.

Sectoral structures that might help to improve the technological dimension of the enterprises have hardly emerged so far. Instances of the enterprises themselves taking action in this respect are rare. They are often unaware that production-oriented services (e.g. maintenance, technical advice) or application-oriented research are vital if production efficiency is to be consolidated and increased. The absence of networks in the technological sphere leads to the dispersion of technical knowledge and hampers the rapid translation of technological know-how into improvements in productivity.

The Fundación Chile, a para-State technology transfer agency (Meissner, 1988), is the only institution to have tried (since the late 1980s, and with a high degree of success) to create an industrial technological environment and to give purposeful encouragement to technological learning processes in the (dynamic) enterprises by creating communication and information structures among them and between entrepreneurs and experts (e.g. seminars on new production technologies, "round tables" for entrepreneurs on technical and organizational problems in such subsectors as furniture, particle boards and sawmills, and ongoing management training).

Besides undertaking these activities, the Fundación Chile is currently establishing in one of the major timber-producing regions a furniture factory which will manufacture furniture parts. Although this firm is intended to operate profitably, it will also –and above all– perform an important "demonstration function". As in the very successful salmon-breeding and export projects run by the Fundación in the early 1980s (Huss, 1991), the aim is to show how best to establish and manage an enterprise in this sector that is capable of exporting: the production equipment at the furniture factory was installed under the guidance of international experts, and the workforce was trained at the factory's own centre, which will be made available to other interested parties in the future. In the first three years the firm will specialize entirely in the production of furniture parts in order to prepare the workforce for the manufacture of

better-quality furniture. The enterprise invites potential new investors and furniture manufacturers to inspect the plant and will offer this target group seminars on technology, marketing and training.

The aim of the Fundación's project is to reduce serious constraints and to "form structures" (networks) in the woodworking industry:

- "Visual instruction" is used as a means of directly counteracting the lack of information and the traditionally individualistic attitudes of entrepreneurs.

- The training of workers (the importance of which is to be demonstrated in the factory itself) is to be professionalized and offered as a service to other firms.

- The installation of the latest production equipment, the emphasis on the organization of work and appropriate linking of work processes, and the development of technological services (plant maintenance, repairs) will help to spread technological and organizational know-how.

The Fundación's involvement in the furniture sector will have an important catalytic effect on domestic and foreign investors and help to improve the regional location of the furniture industry.

If the still-underdeveloped technological dimension is to be strengthened in the current process of structural change, and if there is to be a lasting improvement in conditions for sustainable competitiveness, a major institutional effort will need to be made in the training sphere, where no serious attempts have yet been made to create a national training system.

4. "Islands of efficiency" in the wood-processing industry as stages on the long road to "systemic competitiveness"

To summarize these developments, advances in industrialization have so far been largely due to modernization at the enterprise level. The wood-processing industry is thus still a long way from the model of "competitive industrial complexes" that has been developed in imitation of the model adopted by the East Asian newly industrializing countries.

Although there are examples of efforts to get away from a sectoral structure that was highly dualistic until the mid-1980s, and signs of some emerging "competitive structures", a sound business environment in the form of "islands of efficiency" exists for only a limited number of enterprises (most of which are already dynamic) and in only a few spheres (e.g. marketing).

It is becoming clear that the particularly successful enterprises are those that abandon the incorrect vision of the vertically fully integrated firm and set their sights on a (vertical) division of labour and (horizontal) forms of inter-company cooperation. As a rule, these enterprises also develop contacts with sectoral institutions, universities and service organizations with a view to improving their external economies. In this way learning processes accumulate, communication structures emerge, the traditional distrust between firms is reduced, and "strategic groups of enterprises" form and purposefully shape their business environment. In this socio-economic process, which is induced not only by the market (competition) but also by non-market social factors (cooperation), the competitiveness of the dynamic enterprises and of the "strategic groups of enterprises" that have joined to form "islands of efficiency" based on collective efficiency is gradually improving. These network structures may be illustrated with the help of three examples:

a) *Formation of structures through the establishment of joint marketing enterprises*

The marketing enterprise ASUN (Aserraderos Unidos), which was established in the early 1980s, acts as an export agency for some 25 medium-sized sawmills and manufacturing firms in the wood-processing sector and provides marketing and export services. ASUN has a marketing office in Santiago, where it negotiates with buyers. It forges close links with customers, shares out orders that are too large for the production potential of individual firms, handles its member firms' exports, and gathers information on market trends, thus helping to create information and marketing channels without which small and medium-sized enterprises could not gain access to international markets. These services enable the firms to concentrate on production.

Besides marketing, however, ASUN gives advice on technology. The enterprises that export through ASUN, some of which have been in existence for a long time, often underestimate the requirements of the new markets when they make the transition to exporting. Despite the limited manufacturing complexity of their products (e.g. packaging materials, pallets), many enterprises found it almost impossible in the early 1980s to guarantee uniformly high quality (e.g. timber accurately sawn to the correct size, expert impregnation processing and punctuality

of deliveries). As the domestic market did not expect high quality, production equipment was not properly maintained, leading to losses of productivity and quality. ASUN's staff draw the manufacturers' attention to (often considerable) productivity potential that has not been tapped, maintenance techniques and necessary new investment, provide information on technological advances, carry out regular quality checks, which were not usual in the previously inward-oriented firms, and arrange meetings of all sawmill managers at irregular intervals for discussion of the normally similar technical and organizational problems the firms encounter. This division of labour has made rapid cumulative learning processes possible, accelerated and guided technological and entrepreneurial modernization efforts (the information provided by ASUN has at least reduced the incidence of misguided investment) and helped firms to acquire important export know-how (constant quality, flexibility, reliability and punctuality of deliveries). The result is a loosely networked group of competitive medium-sized sawmills with the marketing agency at its centre.

b) Forms of horizontal cooperation through entrepreneurs' organizations

Another example is the entrepreneurs' organization ASIMAD (Asociación de Industriales de la Madera), formed by medium-sized industrial enterprises in the wood-processing sector which felt poorly represented by the existing entrepreneurs' association, dominated by the large raw materials suppliers. Here again, the most important practical step in cooperation was the creation of joint marketing channels. The ASIMAD enterprises try to minimize the high transport costs and to offer a diversified range of products as a group. ASIMAD has an office in Santiago and acts as a central agency which importers can approach, establishes contacts between producers and buyers, organizes joint participation in trade fairs and is planning to open a showroom in Santiago so that the products of furniture manufacturers in the south of the country may also be presented to potential buyers. Joint marketing has resulted in a more intensive exchange of information (on design, technical problems, etc.) among the member enterprises, which has undoubtedly accelerated everyone's learning process. ASIMAD is seen in the wood-processing industry as an important information exchange for other enterprises wanting to export their products.

c) The Fundación Chile's contributions to the formation of "competitive cooperation structures"

The various forms of cooperation among enterprises are complemented and reinforced by institutional networks. The "sectoral working parties" ("mesas redondas") for "dynamic enterprises" initiated by the Fundación Chile have resulted in some enterprises exchanging engineers and inspecting each other's plants, which contrasts with the view held by entrepreneurs in the past that they must isolate themselves completely from their competitors. These approaches could lead to the emergence of viable and dynamic "competitive cooperation structures". The exchange of information among enterprises, the resulting increase in market transparency and the beginnings of networks of enterprises and institutions are beginning to:

- intensify competition (as enterprises attempt to emulate successful elements of other firms' strategies and to incorporate them in their own);
- facilitate and accelerate individual and collective learning processes;
- create scope for cooperation (e.g. in R&D, the specification of quality standards, the organization of joint seminars with the Fundación on technological problems);
- encourage the identification of joint interests, and
- enable a sector that previously consisted of enterprises isolated from each other to become an entity.

The Fundación Chile is thus making major contributions to the formation of sectoral structures and proving how important institutions are in the process of developing competitiveness. So far, however, it has tended to be a welcome exception. On the whole, the existing institutions have been a less important group of actors in the process of industrial modernization than the dynamic enterprises. The institutions that played a vital role in the structural change of the 1980s were (very largely) created by the dynamic enterprises themselves (e.g. ASIMAD). The other institutions (except in the case of the Fundación Chile) are not therefore paving the way for structural change independently; their modernization and adjustment—inadequate thus far—to conditions and requirements changed by dynamic enterprises tends to come "after the event", and they are typical "latecomers".

5. The typical development pattern of the "top performers"

The observations outlined above indicate that the development pattern of the "top performers" among the

dynamic enterprises as they make the transition from inward to world market orientation and try to become competitive may be summed up as follows:

- Orientation towards international efficiency and quality criteria raises the pressure of competition on the enterprises, mobilizes potential for creativity, creates potential for growth and triggers technological and organizational learning processes ("demand which provides the incentive to innovate" (Chesnais, 1988, p. 111)).

- Modernization at the enterprise level usually occurs in sequences: new technologies are introduced, marketing problems are solved, the workforce then undergoes initial and advanced training, good technicians are trained, and work is organized.

- "Strategic groups of enterprises" are formed which establish horizontal cooperation structures (e.g. ASIMAD) and develop vertical links (e.g. ASIMAD, ASUN), thus improving joint supply conditions and also (e.g. through imitation) increasing the internal pressure of competition (they develop external advantages and "spread innovation throughout the economic structure" (Chesnais, 1988, p. 120)).

- The enterprises or groups of enterprises form networks with technologically innovative services, institutions and universities (emergence of "systems of innovation" (Peres, 1988, p. 27)). Alfred Marshall, in his classical study on industrial districts, already appreciated the virtues of such networks when he said that "The information flow is in the air" (Marshall, 1920). Michael Porter comes to a similar conclusion, noting that "At this stage the whole group of enterprises becomes mutually supportive. Benefits flow forwards, backwards and horizontally" (Porter, 1990, p. 151).

This development pattern (which also suggests a time dimension) conforms to Carlota Peres's analysis of the development of competitiveness: "The new standards of competitiveness do not favor isolated enterprises, but those that can profit from the synergy of strong creative networks. They do not favor static enterprises, but those that can constantly innovate." The networking of enterprises and the interplay of enterprises and institutions lead to the emergence of a "national system of innovation". The formation of highly competitive structures is based on "network building, consensus building, focusing on results, decentralization, continuous learning, continuous improvement ... and, obviously, competition as an "ally" in restructuring." (Peres, 1988, p. 27).

As these modernization sequences have hitherto been confined to "islands of efficiency", "catch-up modernization" of the far from efficient business environment is essential if the sector is to develop sustainable industrial competitiveness and consolidate its world-market-oriented specialization. In the future all concerned will need to make even greater efforts to establish in the wood-processing industry a highly competitive "technico-social system" (Esser, 1991b, p. 44) that is capable of learning and feedback.

Networks⁸ of enterprises and of enterprises and institutions are appropriate in this context both at the pre-competition stage (e.g. cooperation between several enterprises and universities in basic research, cooperation between the government and enterprises on the specification of standards) and at the competition stage (e.g. technological cooperation among enterprises, joint marketing) (Teece, 1982). Network structures as an alternative to the highly vertically integrated enterprise that tries to subcontract as few activities as possible are particularly appropriate:

- where complementary factors of production can be supplemented and combined, thus enabling costs to be reduced (e.g. exchange of important know-how on markets and technology; exchange of engineers; joint marketing; additions to product ranges);

- in sectors where R&D costs are particularly high and "resource pooling" therefore becomes interesting;

- in sectors where rapid changes in demand and economic instability make heavy investment by the individual enterprise to establish a secure competitive position a very hazardous undertaking and risk-sharing therefore makes better sense than it does in growth segments (Dosi, 1988).

⁸ The term is cogently expounded by W.W. Powell (1990, p. 13): "... in network modes of resource allocation, transaction occurs neither through discrete exchanges nor by administrative fiat, but through networks of individuals or institutions engaged in reciprocal, preferential, mutually supportive actions. Networks can be complex: they involve neither the explicit criteria of the markets, nor the well organized routines of the hierarchy. A basic assumption of network relationships is that the parties are mutually dependent upon resources controlled by another, and that there are gains to be had by the pooling of resources. In network forms of resource allocation, individual units exist not by themselves, but in relation to other units. These relationships take considerable efforts to establish and sustain, thus they constrain both partners' ability to adapt to changing circumstances. ... Complementarity and accommodation are the corner-stones of successful production networks."

Many studies show that, as such network structures and joint learning processes call for fair contracts between the partners and good personal contacts (confidence), they go beyond what is otherwise usual in market relations among entities engaged in economic activities (Powell, 1990).

Policies restricted to the macro level are obviously not enough to ensure the comprehensive

modernization of national location and the emergence of an industrial/technological environment. On the other hand, the dynamic development of the Chilean wood-processing industry also shows that a stable, outward-oriented macro policy is in itself capable of mobilizing considerable potential within enterprises for creativity, growth and modernization.

V

The importance of old and new export enterprises

1. The "model and catalytic function" of small and medium-sized exporters

The structural change that has occurred since the mid-1980s has led to the emergence of a growing number of small and medium-sized enterprises which are now competitive. They paved the way for a second export phase, which began with the export of processed wood products. Until the late 1980s, the large enterprises in the sector concentrated on the export of primary goods and sawn timber and made little attempt to industrialize. The efforts made by the large enterprises to modernize should not be underestimated, however: for one thing, they have now attained an international level in primary goods and sawn timber; for another, the new investments some enterprises are now beginning to make and their plans for industrial projects indicate that they are likely to be responsible for the bulk of investment in the processing of timber in the future.

The new small and medium-sized exporters (with export earnings from about US\$300 000 to US\$7 million) are of secondary importance when viewed in purely quantitative terms (contribution to foreign exchange revenues, etc.). Nonetheless, they have shown that:

- even small and medium-sized enterprises are capable of integrating into the world economy, and
- they are capable of doing so with exports of manufactures, which not even the large enterprises had previously been able to achieve.

This trend has multiplier effects:

- In recent years the small and medium-sized enterprises have modernized their plants extensively,

penetrated markets and accumulated export know-how, without being able to make large profits during this start-up phase. Past learning processes and investments are only now beginning to translate into economically visible results;

- Both existing enterprises and new investors are being guided by the successes of the pioneering exporters (imitation effect) and are overcoming their fear of international competition. The large enterprises are being joined by a rapidly modernizing "substructure" of small and medium-sized enterprises;

- Although a sound sectoral environment has yet to emerge, the enterprises that are modernizing and the new investors can now take advantage of the experience (partly institutionalized in ASIMAD and ASUN, for example) of the "pioneering exporters". This is facilitating and accelerating learning processes;

- Not even the investment decisions of the large enterprises are likely to be completely unaffected by the success of the small and medium-sized enterprises in industrialization. Cracks can now be seen in the still widespread dogma that the further the Chilean forest industries sector removes itself from static cost advantages (cheap timber, low wages), the less competitive it will become.

Nevertheless, the outlook for small and medium-sized enterprises is still far from idyllic: export enterprises that are now small by international standards must grow to an internationally typical size in the future.

2. The "new" type of entrepreneur

Growing world market orientation has helped to produce a broader stratum of businessmen and a "new type of entrepreneur". Unlike their counterparts in other Latin American countries, Chilean entrepreneurs (including those in the sector of small and medium-sized enterprises) have overcome their fear of international competition and made considerable progress in such areas as management, quality requirements, marketing and punctuality of deliveries. Nonetheless, the "new entrepreneurs" are not yet (on the whole) advocates of an integral, comprehensive modernization project. Their priorities do not include investment in human capital, the modernization of labour-management relations or technological innovation. Chile does not have the industrial and craft traditions and inclinations that characterize the European or even the East Asian enterprise culture.

The dynamic Chilean entrepreneurs have so far been particularly neglectful of the primacy of technology, technological competence and the organization of work as determinants of sustainable

competitiveness, and of the fundamental importance of the productivity of labour as an indicator of economic efficiency. They often focus their attention less on changes in their enterprises and the improvement of existing products and the development of new ones than on "the market", exchange rate trends, and price fluctuations in their market segment. They are thus more interested in safeguarding existing competitive advantages than in creating new ones (reactive rather than active behaviour). They have accepted the world market as a frame of reference, but continue to take a very static view of competitiveness ("We do what the market requires").

It is not surprising in these circumstances that, while viable marketing structures have emerged, entrepreneurs have made little effort to join forces with a view to improving the technological infrastructure and the training system. Studies of international competitiveness stress the importance of entrepreneurial attitudes towards product development and especially of technical progressiveness as major determinants in the development of competitive advantages (Schlegelmilch, 1988). Chile still has some catching up to do in this respect.

VI

The relationship between entrepreneurs (or their organizations) and trade unions.

The socio-political dimension of competitiveness

The competitiveness of the forest industries sector is not, in the final analysis, determined solely at the sectoral level: economic development is always a politico-social process.

A marked feeling of distrust between entrepreneurs and trade unions, the entrepreneurs' reservations about (democratic) government and the fear of great social pressure from the trade unions regarding income distribution – after almost two decades of military dictatorship – seemed to impose serious restrictions on the formulation of an economic policy acceptable to society as a whole after the coalition of Christian Democrats and Socialists took power in March 1990. As the change was made from authoritarian to democratic government, it was widely feared that – given the backlog of social demands from the

lower and middle classes – the consolidation of economic development might be neglected, at least for a time. Our surveys of the forest industries sector and its environment qualify the validity of these scenarios, however. There is a political consensus between the government coalition, the employers' associations and the trade unions that:

- Chile's economic development will continue to be based on world market orientation;
- a sustainably viable social policy is not simply a question of redistribution (zero sum game): it must also be compatible with the country's economic development;
- the return to democracy is important in itself and must be defended whatever economic and social crises may occur.

This basic consensus underlies the reorientation of the actors involved in the process of democratization and gives the Economics Ministry more freedom to pursue active strategies aimed at improving the competitiveness of the economy, with the participation of all concerned.

1. The trade unions

Not least because they are aware of the catastrophic situation in other Latin American countries, the trade unions have accepted that there can be no going back to the conditions of the 1960s and the inward-oriented model. They support the goals of world market orientation and an improvement in the country's competitiveness and are prepared to join productivity alliances in which the object is both to ensure a high rate of investment and to increase the scope for real wage increases, while at the same time pursuing an active social policy to alleviate absolute poverty. Union activities are, moreover, no longer focused solely on wage rises, as they were in the 1960s, but increasingly on job security, health policy, training opportunities, pollution at the workplace, etc.: that is to say, in more general terms, on improved working and living conditions and also the overdue modernization of enterprises in these respects. The unions were probably prompted to change their attitude partly by the higher wages the more up-to-date exporting enterprises are normally able to pay (because of increases in productivity) and the better working conditions they offer compared with the traditional, undynamic inward-oriented enterprises. It must be borne in mind that after almost twenty years of military dictatorship the development of trade unions capable of taking action and asserting their interests against the well-organized enterprises is a medium-term project.

2. The entrepreneurs (and their organizations)

The entrepreneurs and their organizations are aware that they must come to terms with democracy, that a return to authoritarian government is very unlikely, and that they have no alternative but to accept the democratic parties and the trade unions. They do not therefore engage in active opposition to the government, even though, before the referendum on the continuation or termination of the dictatorship, they were very much in favour of Pinochet

staying in power. Most of the "new entrepreneurs" have no fixed political home, but they are guided by the philosophy of the Chicago school. The fixed point in their ideologically influenced thinking is "the market", which they consider as the best and most obvious means for determining resource allocation and industrial relations, for solving the problems of the education and health sectors, and even for preventing environmental degradation. The "new entrepreneurs" see themselves as the protagonists of economic change, a task which tended to be assigned to the government until the mid-1970s, in line with the views of the entrepreneurs of the time. The new entrepreneurs, however, feel completely independent of government and regard themselves as being at least its equal as negotiating partners.

Orientation towards the world market has undoubtedly led to the "modernization of entrepreneurial awareness" both economically and in terms of culture and policy. Compared with their counterparts in other Latin American countries, Chilean entrepreneurs now have a far less pronounced subsidy- and rent-seeking mentality, and not even small and medium-sized entrepreneurs are afraid of international competition. Most are also well aware from their business trips, visits to trade fairs and inspections of plants in Western democratic countries that they derived considerable profit margins from Chilean "capitalismo salvaje" and the accompanying authoritarian suppression of trade unions and democratic parties. This awareness may be at the root of the marked pragmatism and realism that characterizes the attempts being made by the entrepreneurs' associations to define their place in democratic society. The divergent views of different associations of this type and individual entrepreneurs on the trade union question, collective bargaining and the right to work and strike show that there is as yet no definite commitment to a model of industrial relations which employers take as their guide. Considerable interest is therefore being shown in the experience of various democratic countries.

Clearly, the entrepreneurs' associations are also actively redefining their societal attitudes, and after two years of the new government and an initial period of deep suspicion of its intentions (a Socialist as Economics Minister was seen by most entrepreneurs as a definite menace) enterprises are now more willing to talk to the government and trade unions.

3. Social cooperation

To summarize the attitudes and changes of view of the social actors and their search for orderly means of settling conflicts within the framework of a growing basic consensus, it can be said that all concerned are showing a considerable degree of flexibility and willingness to compromise. The existence of the basic consensus outlined earlier and the acceptance of fundamental social rules do not mean that political, social and economic conflicts will no longer occur in the future. The participants have, however, agreed on the new contours of a "socio-economic corridor" within which future conflicts will be settled. All sections of society are thus pursuing a common aim which will enable them to pool their potential for creativity and combine their forces, strengthen

the national capacity for transformation, and support the government's ability to establish policies and strategies.

Seen through Western European eyes, this meeting of minds on the foundations for the development of society may seem banal, but it is significant when Chile is compared with other Latin American countries, where this basic consensus has yet to emerge. It encourages the formulation of a longer-term development strategy geared to macroeconomic needs and the expansion of the social, political and ecological dimension of the world-market-oriented development model. In Chile there is thus the prospect of the development of a vision of future change, whereas other countries of Latin America tend to be characterized by manifestations of social decay, political polarization and paralyzation of the State apparatus.

VII

Conclusions

"Competitive advantage is created and sustained through a highly localized process. Differences in national economic structures, values, cultures, institutions, and histories contribute profoundly to competitive success. The role of the home nation seems to be as strong or stronger than ever. While globalization of competition might appear to make the nation less important, instead it seems to make it more so. ... The home nation takes on growing significance because it is the source of the skill and technology that underpin competitive advantages."

(M. Porter, *The Competitive Advantage of Nations*, 1990, p. 19)

It has become clear that making the transition from the "easy phase of export orientation" to the goal of "competition-oriented industrialization" and developing competitive advantages is not a linear, quasi-automatic process, but depends on lengthy—though optimizable—entrepreneurial and social processes of searching and learning, institution-building and the emergence of national technological competence. The Chilean wood-processing industry is still at the beginning of this process. In view of the profound structural change that has occurred since the mid-1980s, however, there is room for optimism. The continuation of the export-oriented growth strategy is based on stable, transparent macro policies and "clear rules of the game" for those engaged in economic activities. Policies relating specifically to the wood-processing industry (meso level) are also needed to help it overcome its structural problems.

It will be appreciated that there is a need to strengthen a sectoral environment in which the enterprises compete, but also complement each other and cooperate at the pre-competition stage (cooperative competition) in order to create a sectoral structure which is efficient and capable of learning and adapting (systemic competitiveness). We thus agree with the conclusion drawn by Hubert Schmitz in his analysis of processes of modernization of small and medium-sized enterprises that "the issue is not whether small enterprises have growth and employment potential, but under what conditions" (Schmitz, 1990, p. 13). Views differ on the importance to be attached to the various determinants of modernization. Schmitz's analyses suggest that "collective efficiency" is essential for the successful modernization of small and medium-sized enterprises and that modernization at the enterprise level can be virtually derived from this.

1. Industrial policies at the sectoral level

Structural policies, based on a suitable set of instruments, could strengthen the sectoral environment and improve the systemic competitiveness of the forest industries sector in the following respects:

– *Training*: The level of training of many workers, especially in small and medium-sized enterprises, is low. As the existing inter-company training centres have been neglected in recent years, they are no match for the new requirements. The development of a modern training system is urgently needed if the sector is to press ahead with technological and organizational modernization. This calls for close cooperation between government, enterprises and trade unions.

– *Technology*: Small and medium-sized producers, in particular, lack such production-related services as facilities for the drying and impregnation of timber, and maintenance, repair, planning and installation services for equipment and machinery. These shortcomings could be overcome by installing technical service and information centres in the wood-processing regions to provide such services and to advise entrepreneurs on technical and organizational matters.

– *Information networks*: Few enterprises have sufficient knowledge of export markets and of recent technological advances. The creation of open information structures is therefore essential. An agency assisted with public funds but run by entrepreneurs' associations might, for example, collect, file and computerize information on markets, prices, environmental protection standards and new trends in the international timber markets by carefully studying the relevant international press and the universally accessible electronic sources of information and make it available to interested enterprises as a service. The flexible forms of cooperation among successful small enterprises in the "third Italy" might be taken as a model for this (Pyke *et al.*, 1990).

– *Promotion of the establishment of small and medium-sized enterprises*: The entry into the market of new, young enterprises in sectors where value added is higher is important for the dynamism of the sector's industrialization. New small and medium-sized enterprises, however, often have difficulty obtaining venture capital for the start-up phase, during which they can expect to have little or no revenue. They are likely to make profits only when they have become established in the market. Private banks

prefer to become involved with young enterprises only when the start-up phase has been completed, whereupon their value can be expected to rise sharply. The Economics Ministry might set up guarantee funds to minimize the difficulties initially encountered by promising enterprises of this type. Other approaches to promoting innovative small and medium-sized enterprises could include the granting of tax concessions for enterprises investing in R&D or undertaking industrial research with other enterprises at the pre-competition stage.

– *Protection of resources*: Ecologically irresponsible overuse of forests and land must be prevented, and the preservation of the several million hectares of Chilean rain forest –the only such ecosystem in the moderate southern latitudes– should be ensured by legislation on protection and use. The democratic government is in the process of amending the Forestry Act to this end. Contrary to short-sighted views, ecologically sustainable use of the natural forest, together with the creation of nature conservancy areas and the expansion of environmentally less harmful plantation agriculture, would be a major competitive factor for the Chilean woodworking industry in view of the growing international awareness of the environment. This would require clear legislation and effective supervisory institutions and instruments.

2. A new approach in industrial policy

Our study suggests that the development of competitive factors very much depends on the ability of enterprises to modernize, for which institutional or inter-company networks are no substitute. It is the already dynamic enterprises which are capable not only of increasing their own efficiency but also of tapping further potential for rationalization through the inter-company division of labour and institutional networking. "Collective efficiency" thus occurs only if there is potential for modernization in the enterprises. As a rule, undynamic enterprises are not only overextended by internal requirements but are also unable to take much advantage of external offers and development potential (e.g. R&D funds, complementary opportunities for specialization).

This means that government or public institutions cannot by themselves create competitive structures, this being essentially a task for the enterprises themselves. However, public institutions can and certainly should make a crucial contribution to promoting the modernization potential of enterprises and backing

technological and organizational innovation and learning processes through appropriate policies (Messner *et al.*, 1992). Chesnais is therefore right when he says: "Government assistance in the strengthening of forms of co-ordination and co-operation previously identified by enterprises, notably small and medium enterprises, may lead to a development of externalities on which competitiveness can build and an expansion of the total 'system' within which industrial and technological learning processes take place" (Chesnais, 1988, p. 120).

The concept of "systemic/structural competitiveness" is first and foremost a model that is opposed to simplistic market ideologies. However, it also implies a criticism of excessively Statist planning approaches. In Chile as elsewhere the impending modernization of the economy cannot be a State technocratic act. Unlike classical Keynesianism, which concentrated primarily on demand-oriented macro policies, the emphasis of the structural policies needed to improve the industrial location and the supply conditions of enterprises is on decentralized decision-making structures. In the industrialized countries, industrial policy is pursued more at the regional and local level than at the national level.

Experience in industrialized countries (e.g. the Federal Republic of Germany) shows that regional industrial policy is no longer based solely (or is based less and less) on the classical means of intervention –i.e., legislation (trade policy and import bans, for example) and money (subsidies, promotional funds)– but is complemented by such consensus-oriented "soft guidance instruments" (Krumbein, 1991, p. 41 and Klönne *et al.*, 1991) as the flow of information, persuasion, pooling the know-how of various actors, integration of interests, and the adoption of agreed procedures.

The growing importance of "soft guidance instruments" and the increasing relevance of efficient channels of communication between major social groups, institutions and organizations is revealed by the "regional conferences" that have been set up in some of the States of the Federal Republic of Germany, especially in crisis-hit areas where comprehensive restructuring is about to begin (e.g. North Rhine-Westphalia) (Jürgens and Krumbein, 1991). The government acts as a broker, "facilitating the blending of abilities and promoting structural networking" (Aubert, 1992, p. 5). Many of those involved are trying to agree on future development prospects, to identify bottlenecks in the process of modernization, to anticipate (ecological

and social) modernization costs with a view to reducing them, and so to establish guidelines for political and entrepreneurial decisions. Socio-economic networks embracing entrepreneurs' organizations, trade unions, associations, local administrations, institutes of technology and universities are emerging in the regions. They occupy a position in between the government and the market (meso level), formulate visions –or, to put it more pragmatically, scenarios– of regional development, prepare strategic decisions of principle, and make possible non-Statist political control of economic restructuring programmes and the active and anticipatory shaping of structures. W. Hillebrand explains why such control of market processes is necessary:

"Countries which fail to develop a strategic perspective as the guide for corporate and government action and largely rely on spontaneous, *ad hoc* reactions and processes of trial and error underestimate in particular:

- the importance of the timely and resolute development of physical and above all non-physical infrastructure for the international competitiveness of enterprises;
- the time it takes to develop the main determinants of international competitiveness (human capital and technological infrastructure), and
- the adverse effects which uncertainty and risks have on aggressive corporate strategies" (Hillebrand, 1991, p. 185)

These new approaches to industrial and technology policy differ significantly from "hierarchical, excessively Statist control concepts" and require social actors who are efficient and capable of compromising, learning and transformation (Messner, 1992). In Chile this process of institution-building and the active shaping of structures to improve the economy's "systemic competitiveness" is still very much in its infancy. The direction to be taken, however, has been mapped out: "Although it sounds like some bureaucratic council with a lot of institutions, a successful national system of innovation is more a set of behaviour patterns harmonizing public and private organizations towards a common national goal. It involves deliberate consensus building to define a development strategy and move towards it, as well as deliberate construction of appropriate institutions to promote innovations and steer structural change and to systematically increase structural competitiveness" (Peres, 1988, p. 27).

Bibliography

- Aldunate, R. (1990): *El mundo en Chile: la inversión extranjera*, Santiago, Chile, Zig-Zag S.A.
- Aubert, J.E. (1992): What evolution for science and technology policies?, *The OECD Observer*, No. 174, Paris, Organization for Economic Co-operation and Development (OECD), February-March.
- Best, M.H. (1990): *The New Competition*, Cambridge, MA.
- Bletschacher, G. and H. Klodt (1991): *Braucht Europa eine neue Industriepolitik?*, Kieler Diskussionsbeiträge, Kiel.
- Chesnais, F. (1988): Technical co-operation agreements between firms, *STI-Review*, No. 4, Paris, OECD, December.
- Contreras, M. (1988): *Más allá del bosque*, Concepción, Chile.
- Dauderstädt, M. (1987): Free markets versus political consensus. The international competitiveness of societies, *Intereconomics*, vol. 22, Hamburg, Verlag Weltarchiv GmbH, January-February.
- Döhl, V. and others (1989): *Neue Rationalisierungsstrategien in der Möbelindustrie*, Munich.
- Dosi, J. (1988): Sources, procedures and microeconomic effects of innovation, *The Journal of Economic Literature*, vol. 26, No. 3, Nashville, TN, The American Economic Association, September.
- ECLAC (Economic Commission for Latin America and the Caribbean) (1990): *Changing Production Patterns with Social Equity*, Santiago, Chile, March. United Nations publication, Sales No. E.90.II.G.6.
- (1992): *Social Equity and Changing Production Patterns: An Integrated Approach* (LC/G. 1701 (Ses. 24/3)), Santiago, Chile.
- Esser, K. (1991a): Anmerkungen zur wirtschaftlichen und politischen Transition in Lateinamerika, D. Nolte (ed.), *Lateinamerika im Umbruch?*, Hamburg.
- (1991b): *Development of a Competitive Strategy: A Challenge to the Countries of Latin America in the 1990's*, Berlin, German Development Institute (GDI).
- Feser, H.D. (1990): Technologische Wettbewerbsfähigkeit und internationaler Handel, H. D. Feser (ed.), *Technologische Entwicklung und Internationale Wettbewerbsfähigkeit*, Regensburg.
- Herbert-Copley, B. (1990): Technical change in Latin American manufacturing firms: review and synthesis, *World Development*, vol. 18, No. 11, New York, Pergamon Press, November.
- Hillebrand, W. (1991): *Industrielle und Technologische Anschlussstrategien in Teilindustrialisierten Ländern*, Berlin, German Development Institute.
- Huss, T. (1991): Transfer of technology: the case of the Chile Foundation, *CEPAL Review*, No. 43, April.
- INFOR (Instituto Nacional Forestal y de Fauna) (1990): *Estadísticas forestales 1989*, Santiago, Chile.
- Jürgens, U. and W. Krumbein (1991): *Industriepolitische Strategien: Bundesländer im Vergleich*, Berlin.
- Katz, J. (1984): Technological innovations and comparative advantages, M. Frisman and K. King (eds.), *Technological Capability in the Third World*, London, The Macmillan Press, Inc.
- Klönne, A. and others (1991): *Institutionen Regionaler Technikförderung*, Opladen.
- Krumbein, W. (1991): Industriepolitik: die Chance einer Integration von Wirtschafts- und Gesellschaftspolitik, U. Jürgens and W. Krumbein, *Industriepolitische Strategien: Bundesländer im Vergleich*, Berlin.
- Lall, S. (1990): *Building Industrial Competitiveness in Developing Countries*, Paris, OECD.
- Mármora, L. and D. Messner (1991): Chile im lateinamerikanischen Kontext: ein Modell für Demokratisierung und Entwicklung in der gesamten Region?, D. Nolte (ed.), *Modellfall Chile?*, Hamburg.
- Marshall, A. (1920): *Principles of Economics*, London, Macmillan and Co., Limited.
- Meissner, F. (1988): *Technology Transfer in the Developing World. The Case of the Chile Foundation*, New York, Praeger.
- Meller, P. (1990): Revisión del proceso de ajuste chileno de la década del 80, *Colección Estudios CIEPLAN*, No. 30, Santiago, Chile, Research Corporation for Latin America (CIEPLAN).
- Messner, D. (1990): *Uruguay: el sector industrial ante la apertura externa*, Berlin, German Development Institute.
- (1992): Die südkoreanische Erfolgsstory und der Staat: von der Allmacht des Entwicklungsstaates zur Krise des "hierarchischen Steuerungsmodells", *Vierteljahresberichte* No. 130, Bonn.
- Messner, D. and J. Meyer-Stamer (1992): Lateinamerika, von dem "verlorenen Jahrzehnt" zur "Dekade der Hoffnung"?, *Blätter für Deutsche und Internationale Politik*, No. 1.
- Messner, D., I. Dietrich, J. Friederici, R. Guttack, K. Kiehl and W. Klein (1992): *Hacia la competitividad industrial en Chile: el caso de la industria de la madera*, Berlin, German Development Institute.
- Meyer-Stamer, J. and others (1991): *Comprehensive Modernization on the Shop-Floor: A Case Study of the Brazilian Machinery Industry*, Berlin, German Development Institute.
- Muñoz, O. (1988): Crisis y reorganización industrial en Chile, *Notas técnicas CIEPLAN*, No. 123, Santiago, Chile, CIEPLAN.
- OECD (1991): *Technology and Productivity. The Challenge for Economic Policy*, Paris.

- Olson, M. (1982): *The Rise and Decline of Nations, Economic Growth, Stagflation, and Social Rigidities*, New Haven, Yale University Press.
- Peres, C. (1988): The institutional implications of the present wave of technical change for developing countries: discussion paper for a World Bank conference on Long-Term Economic Growth Prospects, Washington, D.C., *mimeo*.
- Porter, M. (1990): *The Competitive Advantage of Nations*, New York, The Free Press.
- Powell, W.W. (1990): Neither markets nor hierarchy: network forms of organization, *Research in Organizational Behavior*, vol. 12.
- Pyke, F. and others (1990): *Industrial Districts and Local Economic Regeneration*, Geneva.
- Schlegelmilch, B. B. (1988): Der Zusammenhang zwischen Innovationsneigung und Exportleistung: Ergebnisse einer empirischen Untersuchung in der deutschen Maschinenbauindustrie, *Zeitschrift für Betriebswirtschaftliche Forschung*, No. 40.
- Schmitz, H. (1990): *Flexible Specialization in Third World Industries*, Sussex, Institute of Development Studies (IDS), University of Sussex.
- Teece, D. J. (1982): Towards an economic theory of the multiproduct firm, *Journal of Economic Behaviour and Organization*, vol. 3.
- UNIDO (United Nations Industrial Development Organization) (1986): *Industry and Development*, Vienna.
- (1992): *Production Management for Small- and Medium-Scale Furniture Manufacturers*, Vienna.
- World Bank (1986): *Chile: Forest Industries Sub-sector Study*, Washington, D.C., August.

Improving *urban transport* for the poor

Ian Thomson

*Economic Affairs Officer,
International Trade and
Transport Division,
ECLAC*

Even though Latin America and the Caribbean is the most urbanized and the least poor of the regions of the developing world, a quarter of the region's population live, or rather exist, below the poverty line. Many of these are town or city dwellers. Many lower income families spend more than 15% of their income on urban public transport: a proportion which has been rising continuously over the past few decades because bus operating costs per passenger have increased as cities get bigger and car-created congestion has made each bus less productive. Government policy, even though it might have good intent, often makes the problem worse. It does the urban poor no good to fix fares at less than cost if this discourages investment in buses and leaves the poor without services of any kind, except maybe those provided by pirate operators, plying illegally, charging high fares and running unreliable, uncomfortable and sometimes unsafe vans converted to carry people. It does not do them any good either to form public sector bus companies which succumb to political meddling, have half their buses out of operation for lack of spare parts, and "employ" around eight people per operating bus. Subsidies for metros, for their part, mainly benefit the middle and upper income groups which use them or own property near the stations. Various measures to reduce the misery of urban travel for the poor could be implemented cheaply and rapidly, however. They include well-conceived regulatory reform of bus services, redirecting subsidies to the people who really need them, giving bus transport priority over cars, and taking measures to even out peaking. Some such measures are proposed in this paper.

I

How do the urban poor travel?

1. An overview

In general, the urban poor of Latin America spend a great deal of time travelling, though they make few trips. Their usual mode of transportation is the bus, at least for trips to and from their place of work. In some cities, the middle class has a social aversion to using buses, so that the vast majority of all bus trips are effectively made by poorer people. Caracas is one such city, and Lima is another. The poor also spend a great deal of time walking. In certain corridors of a few cities, they may travel on low-fare, low-quality suburban trains. Their use of the metro (in those cities that have such systems) is limited, since this mode tends to cater to riders in a better economic situation. The bicycle is significant in only a few specific cases.

A survey conducted recently in a poor neighborhood to the east of Santiago, Chile, found that 75% or more of work trips are made by bus, 15% by bicycle and only 7% on foot (Jaramillo, 1991). Even so, long distances are often covered in walking to the boarding point, either to save paying an extra fare or because bus service is scarce. As detailed in table 1, between the late 1970s and the end of the 1980s, the proportion of the minimum family wage represented by 50 bus fares per month increased from approximately 3% to over 20%. This stimulated the practice of walking instead of making an additional bus trip. The case of Santiago and those of other Chilean cities is extreme, but similar although less spectacular cases can be found in other Latin American cities.

Because they have little money for travel, poorer families order their budgets by giving priority to the trip to work of the breadwinner. Moreover, they sometimes spend 20% or more of their incomes on basic urban transportation and hence must ration their travel. Time savings must be traded for money savings, with the result that up to two hours or more can be spent in travelling between home and work in the larger cities such as São Paulo. The poor cannot afford to live in suburbs with good accessibility, due to the prevailing high property values. They therefore congregate on the edges of cities, a long way from many of the places to which they might wish to travel. The relative inaccessibility of these locations

not only increases the time the poor spend making each trip, but also tends to reduce the number of trips they make and limits their opportunities for social advancement.

TABLE 1

Santiago, Chile, 1977-1987: percentage of minimum family income represented by 50 bus fares per month

Year	Percentage
1977	4.24
1978	2.93
1979	3.04
1980	4.12
1981	4.35
1982	6.26
1983	10.36
1984	15.20
1985	17.73
1986	21.82
1987	20.80

Source: ECLAC, based on data from the National Statistical Office of Chile (INE), and Dirección General del Metro, *Metro de Santiago*, Santiago, Chile, 1986.

2. Overall split between modes of transport

The meaning of the term "bus" varies from one city to another. Indeed, in many Latin American cities, the populace does not normally use the word, or reserves it for the interurban context. However, if a bus is defined as *a road-borne self-propelled vehicle for public transportation with a capacity of at least 20 seated passengers*, then this is the most-used form of transport in almost all Latin American cities with a population of more than approximately half a million.

Table 2 shows sample modal splits in capital and other principal cities. It should be noted that, apart from extracting walk-mode trips in those cases where they were originally included, no attempt has been made in this table to standardize the definitions used for the different cities, which are not always identical.

There are exceptions to the "rule" that the bus is the primary mode of transportation used by the urban poor. They occur principally in a few individual cities with relatively high car ownership—the most notable being Brasilia—and in various cities in countries with

TABLE 2

**Selected Latin American cities: Modal split
for trips made by mechanized means^a**

City	Year	Percentage of all trips by mechanized means using:					
		Car	Individual taxi	Collective taxi	Bus	Rail	Others
Santa Fe de Bogota	1980	14	1	-	80	-	5
Santa Fe de Bogota	1988	8	2	2	82	-	6
Buenos Aires	1970	21	^b	-	62	13	4
Buenos Aires	1980	18	7	-	63	13	-
Buenos Aires	1986	28	^b	-	58	10	4
Brasilia	1988	47	4	-	49	-	-
Caracas	1975	53	...	23	24	-	-
Caracas	1978	47	...	23	23	-	7
Mexico City	1972	11	...	3	76	10	-
Mexico City	1983	19	...	8	44	29	-
Mexico City	1989	14	...	21	46	19	-
Rio de Janeiro	1980	24	2	2	62	11	1
San Jose, Costa Rica	1980	29	5	-	63	-	3
San Jose, Costa Rica	1987	30	^c	11	62	-	3
Santiago, Chile	1980	16	1	2	76	5	-
Santiago, Chile	1988	18	^c	5	65	12	-
São Paulo	1980	32	3	-	54	10	1
São Paulo	1988	40	1	-	38	14	7
Tegucigalpa	1990	14	1	4	80	-	1

Source: City case studies conducted for ECLAC as part of the project on the impacts of subsidies and different forms of control and organization of urban public transport systems in Latin America; national presentations at the First Seminar of the Central American Urban Transport Commission (COCATU), Guatemala City, October 1991; Edgar Días A., *Experiencia en el subsidio del transporte remunerado de personas en la ciudad de San José de 1980 a 1987*, mimeo, paper presented at the Second Latin American Meeting on Urban Transport, Mar del Plata, Argentina, November 1987; Celia Benchimol A., *Sistema de transporte público de Caracas: Integración metro-metrobús*, paper presented at the same meeting, November 1987; Carlos Román, *La liberalización del transporte urbano en Santiago de Chile*, paper presented at the First Latin American Meeting on Urban Transport, Brasilia, October 1985; Coordinación General de Transporte del Departamento del Distrito Federal de México, *Reestructuración del transporte público en la Ciudad de México*, mimeo, paper presented at the same meeting; and World Bank, *Urban Transport: A World Bank Policy Study*, Washington, D.C., 1986.

^a The figures presented in this table should only be considered a general guide. The sources are heterogeneous, and are not always explicit or consistent about the definitions used. It is unlikely, for instance, that the share of the metro in the number of trips made in Mexico City rose to 29% in 1983 and then fell back; much more probable is a change in definition regarding the way to count trips made by metro with a transfer between lines. In some cases, trips by chartered bus are included in "others", but elsewhere they are counted with "buses". In certain cities, such as Mexico City, the mean size of vehicles counted here as collective taxis has been growing to such an extent that they now come within the definition of a bus.

^b Included under heading "Bus".

^c Included under heading "Collective Taxi".

high car ownership, such as Venezuela. In Caracas in the mid-1980s, buses accounted for only 18% of all trips made, while private cars performed 49% and *por puestos*, which were then mainly U.S.-style passenger vans, performed 29%: i.e., more than half as much again as the buses.

The low bus usage in Caracas is not due only to high car ownership, but also to a possibly unintentional tendency of the authorities to promote the supply of *por puestos* relative to buses. The situation in Caracas is now somewhat different, due to growth in

the unit size of the typical *por puesto*, so that it is now included within our definition of a bus. Nonetheless, in other Venezuelan cities, notably Maracaibo, *por puestos* are still much smaller in terms of unit passenger-carrying capacity. The characteristic of public transport management in Caracas to favour the growth in the fleet size of smaller vehicles, as opposed to buses, is also reflected in some other cities such as La Paz, Bolivia, where it is possible that the smaller *trufibuses* have now displaced larger vehicles as the dominant mode.

In many cities, the bus is not just the most important mode, but also performs more than half the total number of trips made. For instance, in Santiago, Chile, towards the end of the 1980s, 65% of all mechanized trips were made by bus, in Santa Fe de Bogota 75%, in Greater Buenos Aires 58%, and in Havana as much as 86% (a proportion which has probably since increased even more). These figures are approximate, since definitions and dates vary. Nonetheless, it is obvious that even where comprehensive metro or suburban rail networks exist, the bus predominates.

In some other cities the bus dominates without reaching a 50% share, as for example in the metropolitan area of Mexico City, where the bus share of all trips is estimated to have been approximately 46% at the time in question, or in São Paulo, where buses accounted for 38% of all trips. Cities in which the bus does not attain a 50% share tend to be larger and richer ones, with high car ownership and significant passenger-carrying rail networks. However, the bus share can also fail to reach 50% in smaller cities with less than half a million inhabitants where no serious attempt is made to impede the development of services offered by vehicles of lesser carrying capacity than the standard bus, as defined above.

The quality and quantity of information on urban transport in Latin America is directly related to the size of the city. This means that comparatively little is known about transport patterns in smaller cities. However, it is probable that in Chilean cities with populations of 50 000 to 200 000 people (such as Calama, Copiapó, Los Andes, or San Fernando), shared taxis carry more people than do buses.

Urban Latin Americans are not generally noted for their propensity to ride bicycles. Nonetheless, the use of this mode is important in a few smaller cities, principally in the south of Brazil. For example, in 1983, in the southern Brazilian town of Campo Bom, which then housed some 35 000 people, 33% of all trips were made on foot, 20% each by bus, bicycle and car, and the remaining 7% by unspecified means. In Cuba, the government reacted to the fuel crisis which hit the country in 1990, when the Soviet Union decided to cut back on its exports of subsidized petroleum, by withdrawing one-third of urban bus services and importing large numbers of Chinese bicycles, which it sold to the public for approximately US\$100 each. The bicycle population of Havana increased from 70 000 in December 1990 to 450 000 ten months later. This may have resulted in an increase in the share of bicycles as a proportion of all trips made

from approximately 2% to 15% or 20%. However, this experience has no parallel in other parts of the region.

3. Walking as a transport mode for the poor

Walking is already an important mode for the poor, and it seems to be getting more so all the time. In São Paulo, a walking trip has been defined for survey purposes as one of any length made on foot for work or educational purposes, or one of at least 500 metres for other purposes. So defined, walking trips increased by 82% between 1977 and 1987, from 5.2 million to 9.5 million a day, although the Metropolitan Region's population increased by only 56%. In 1987, 36% of all trips in São Paulo were made on foot.

Definitions of what constitutes a walking trip vary between surveys and cities, although the most usual one is any trip of more than 500 metres (or five blocks) made on foot. Relatively recent survey data indicate that 9% of all trips are made on foot in Santa Fe de Bogota, while in Greater Buenos Aires the proportion is 6%. One can be reasonably certain that the vast majority of these walking trips are made by poorer citizens. Information on walking is often non-existent or inexact, partly because a trip which involves a journey by bus or train plus a long walk as access is often classified only by the former. Another reason for the relative ignorance about walking trips is that for many years such trips did not interest transport planners and engineers very much.

4. Who travels by suburban train?

Few Latin American cities have important suburban rail systems. Only in Buenos Aires, Rio de Janeiro, São Paulo and Valparaíso/Viña del Mar can they be termed significant, although rail services of some kind exist in and around Recife, Lima, Fortaleza, Santiago, Porto Alegre, and a few other cities. Where they do exist, they are often used mainly by the poorer classes. In Brazil, in São Paulo and even more so in Rio de Janeiro, suburban rail fares are set low with the declared aim of helping the urban poor. This calls for large subsidies and reliance on non-passenger revenue to finance investment, which is often not made to the degree required to avoid deterioration of service quality. This is a matter to which we shall return later –i.e., that fares set at less than cost can in the long run harm the very people they were intended to benefit in the first place.

Apart from cases such as the *Trensub* system in Porto Alegre and *Metrobel* in Belo Horizonte, which are more akin to metros than traditional suburban rail systems, Latin American suburban rail networks have been in existence for upwards of 50 years, and occasionally more than 100. Some once catered to high-income people living away from the city itself, but the urban sprawl later expanded to encompass these locations. Competition from other modes—trams and buses in the cities, and buses and trucks on interurban hauls—hit railway finances hard. This set in motion a steady trend towards the allocation to suburban rail networks of investment budgets that were inadequate to cover the needs of depreciation and modernization. In São Paulo and Rio de Janeiro, as well as on some of the Buenos Aires network, electrification took place, but even so, service degradation occurred. Lower service standards lost the railways their high-class clientele, and the relative income levels of their passengers dropped steadily.

5. Who travels by metro?

The same process affected, to a limited extent, the 80-year-old Buenos Aires Underground system, the "Subte", which also came to suffer from underinvestment. Many of its riders were, and still are, rail commuters who switch to it at mainline railway stations to continue their journeys into the city centre. Therefore, to a certain degree it experienced the same change in the relative social status of its passengers as happened on the suburban railways. However, the change was less marked in the case of the Subte, which also caters to trips within central areas unconnected with railway stations and transports relatively high-income people who work in the city centre. In Rio de Janeiro, São Paulo and Santiago, Chile, the income level of the average metro passenger is probably quite high, as shown in table 3 for the case of São Paulo some years ago, when only the north-south line was operating.

Cities build their first metro lines in corridors where traffic flows are highest, partly as a measure to alleviate congestion. The first line almost always leads from a suburb, sometimes one with relatively high car ownership, to the city centre, where workers receive incomes higher than those for the city as a whole. Therefore, it is to a certain extent inevitable that metros in cities with small networks cater to people whose mean income level is quite high. If the network continues to grow, as it has in Mexico City, the mean income level of metro users tends to fall as it reaches people in steadily lower income brackets.

TABLE 3

São Paulo, 1977: Estimated relative family income of users of different transport modes
(Bus only = 100%)

Mode	Relative income (%)
Bus only	100
Car only	181
Taxi only	165
Metro only	161
Suburban rail only	71
Bus + bus combination	90
Bus + metro combination	113
Bus + suburban rail combination	90

Source: ECLAC, based on data from the Empresa Metropolitana de Transportes Urbanos de São Paulo.

In Latin America, where all but one of the networks are less than 50 km long, metros generally cater to middle-class citizens, whereas suburban railways concentrate on lower income groups. Table 3 shows that the mean income level of those who benefit most from the metro, i.e., those who use it without having to change to or from another mode, is more than 40% above the income of those who do. Nonetheless, those who probably gain more than anyone else from the building of metros are owners of property near metro stations.

6. Marginal transport in marginal zones

In almost all Latin American cities, the bus route structure is highly regulated, and only concession holders are officially allowed to offer services. Where the regulation process is not dynamic enough to respond to the growing transport needs of the city, incentives exist for informal or unauthorized services to spring up. This happens especially in rapidly-developing outlying communities where lower-income families live, unless the enforcement of regulations is strict enough to prevent it. As such informal transportation is not officially authorized, it has no legal right to exist, and this makes the operators reluctant to invest in order to improve the services they offer. Instead, they frequently rely on well-worn, unkempt, badly maintained vans converted to carry passengers. They charge fares that are not subject to official control and may be much higher than those for authorized bus services.

Informal services may also appear on routes which regular buses cannot serve for physical reasons, such

as steep grades or sharp corners, or where bus owners are unwilling to operate them because of inadequate security. In the hilly parts of Caracas, for instance, where routes to marginal suburbs are very steep and inadequately policed, service is provided by long-chassis jeep-type vehicles. On the routes they serve, they are the only form of public transportation available. No other vehicles have the adhesion and power-to-weight ratio needed to climb the hills fully loaded. For security reasons, however, they do not operate after nightfall. In 1975, the latest year for which data are available, they performed 11% of trips made in the city.

Due to the very nature of informal services, information on them is lacking. Nonetheless, there is no doubt that the poor in the outlying districts of many Latin American cities depend on them. In having to do so, they suffer the perverse consequences of public transportation policies that attempt to regulate services for the public benefit but leave them with no viable alternative to relying on expensive, unsafe, and unreliable services outside the scope of the regulations in force.

7. The trip-making propensity of low-income families

Trip making is highly correlated with car ownership, which in turn is directly related to income. The Latin American poor do not own cars, and as a result, make

comparatively few trips. The trip generation rate of the least well-off is also reduced by the fact that they simply do not have enough money to buy more than a minimum number of regular bus fares. Table 4 presents some illustrative trip generation rates for the case of Salvador, Brazil. Although these rates are to some extent influenced by the unusual geography of that city, the same overall trend can be observed in other cities as well. In general, for lower levels of family income, fewer family members travel on any given day, each member who travels makes fewer trips, and the total distance covered by the sum of these trips is less.

As already mentioned, in many parts of Latin America the poor tend to congregate in low-class housing on the edge of cities, from which they have to travel relatively long distances to get to workplaces and other potential destinations. In spite of this, distance travelled per family is positively correlated with family income. Clearly, lower income families are to some extent trapped in their unfortunate predicament. They are unable to travel to relatively inaccessible jobs which might pay higher wages than ones that can easily be reached, and they may find it very difficult to attend courses which might train them for better-paid occupations. They also have limited opportunities to take advantage of public entertainment or recreational facilities that are provided free of charge or at low cost, such as parks, museums and zoos.

TABLE 4

Salvador, Brazil, 1975: family trip statistics

Family income (cruzeiros/month)	Persons/ family	Family members travelling/day (%)	Trips/day/ family	Km/family/ day
0- 417	4.45	31	4.1	25.5
417- 834	5.22	34	5.4	39.4
835- 1 251	5.58	39	6.6	48.0
1 252- 2 085	5.99	45	8.9	61.0
2 086- 3 336	6.12	47	10.4	72.8
3 337- 4 587	6.18	50	11.2	78.7
4 588- 5 838	6.32	51	12.8	87.0
5 839- 8 340	5.51	58	13.8	83.2
8 341- 12 510	6.21	56	16.1	105.0
Over 12 510	6.48	59	18.6	114.4

Source: Economic Development Institute of the World Bank.

II

The basic problems and how they might be dealt with

1. The main problems

The previous section discussed how the urban poor travel in Latin America. It also noted that they do not travel very much, due to the relatively high cost and sometimes restricted supply of basic public transportation. But what are the basic causes of their plight? Leaving aside the fundamental problem that they have little money, there are other problems attributable to the transport system itself. These problems may be grouped into two categories, which might be termed *internal* and *external*.

Internal problems are those directly caused by the way the transport system is planned and administered, and their solutions depend essentially on transport planners and administrators. The following are internal problems:

i) Excessive control over fares, though intended to reduce transport costs for low-income people, tends to discourage investment in the supply of transport services, which aggravates travel conditions for those same people. Moreover, it can have the perverse effect of actually increasing the fares the poor must pay, by reducing the availability of services subject to fare control and thereby contributing to the establishment of informal services not subject to such control.

ii) Excessive regulation sometimes restricts the penetration of bus services into rapidly-expanding marginal communities on the outskirts of cities.

iii) Publicly-owned bus companies, many of which include among their specific objectives the provision of basic mass transportation for the poor, are often inefficiently managed. This manifests itself in various ways, such as low vehicle availability.

iv) Large proportions of capital and current public expenditures available for urban transportation are sometimes channeled into schemes such as metros and urban freeways that are of little benefit to the poor. Some public transport subsidy schemes are also wasteful, in that they provide help to people who do not need it, thereby reducing the amounts available to those who do.

v) Some of the benefits from schemes to give priority to buses, such as bus-only lanes on streets, are usurped by bus operators rather than passed on to passengers. Bus companies have also been found to lie to fare-fixing authorities about costs and ridership, thereby transferring resources to themselves from passengers who are called upon to pay fares that are higher than necessary. Bus drivers and fare collectors are sometimes involved in fraudulent activities that lead to fares being higher than they should be.

vi) Traffic congestion reduces bus productivity and raises operating costs.

vii) The Latin American norm of city-wide route-specific flat fares has disadvantages for the lower income classes, because it dissuades bus operators from providing adequate services on longer routes with relatively high operating costs per passenger.

External problems must be faced by transport planners and managers but are not essentially caused by them, at least not in the short run. The following are external problems:

i) The Latin American urban poor often live in outlying suburbs where land values are low, but so is accessibility. To get to desirable destinations, they may have to make one or more transfers, each of which costs time and –what is even more important– money.

ii) Urban transportation is influenced by general economic policy decisions, which rarely take the interests of the transport sector adequately into account.

iii) The concentration of demand in peak periods reduces bus productivity and contributes to congestion. Such demand peaking is to some extent caused by the concentration of particular social classes in specific geographical zones.

This list is not complete. Factors such as high fuel costs or city size and territorial extension could be added, but they are essentially outside the purview of transport system planners and administrators, and will not be dealt with here.

The rest of this section will deal in turn with each of the problems listed, and suggest possible ways to solve them.

2. Inappropriate fare controls

If any market (be it for urban bus transportation, telephone services, water supply, or whatever) is controlled by regulations which confer semi-monopolistic privileges upon operators, or if, in the absence of such regulations, operators engage in collusion, price control is necessary to ensure that they cannot exploit the situation for their own benefit. Fare control is thus necessary under regulation and may be desirable even if supply is deregulated. In either case, the justification for fare control would be to make sure the market produces that combination of service quality and user cost which the population, via its elected representatives, prefers.

The history of Latin American urban transportation abounds with examples of fares that have been fixed, not on the basis of technical or economic criteria, but rather in an attempt to assist lower income groups or for political convenience. Helping the poor and political convenience can amount to the same thing, since the voice of the lower income groups weighs heavily in election results. In a bid for popularity, local or national governments often fix fares at levels so low they make it impossible for operators to cover long-run costs at reasonable occupancy factors. There is no such thing as a Latin America-wide fare level which, in all countries, will permit the long-term stable growth of urban bus services. Nonetheless, it is obvious that city-wide flat fares as low as the US\$0.07 charged in Lima or the US\$0.05 charged in Quito during the late 1980s were insufficient to cover the long-run marginal costs of bus operators.

Fare setting must be taken out of the political arena. Technical formulae should be devised and applied by nonpolitical bodies. This is easy to say, but difficult –although not impossible– to put into practice. It requires the establishment by law of independent tribunals, well-defined cost estimation formulae, and periodic surveys to count the number of passengers each bus carries.

If fares fall relative to bus operating costs, service quality will fall as well, unless operators' revenues are augmented by compensatory subsidies. The opposite happens if fares increase. If fares are low, operators can only cover costs by carrying a large number of passengers per bus, which implies overcrowded conditions and infrequent service. If fares are high and entry into the business is not blocked by excessive regulation, occupancy factors will tend to fall until each bus owner earns just normal profits. In cities where fares are fixed, the respective authorities should be made fully aware

that fares and service quality are directly related, so that they must choose within a continuum of different fare and quality standards. Where personal income levels are low and public funds are insufficient to finance subsidies, low fares and low service levels may be the preferred option. In high-class suburbs, people may prefer to pay high fares for premium service.

In certain cities in certain periods of time (Rio de Janeiro in the mid-1970s, Santiago in the 1970s, Buenos Aires and Santa Fe de Bogota in 1992), the authorities have fostered the provision of two or more types of bus transportation. One type is basic, cheap and of low quality, being aimed at lower income groups. Another offers higher quality service at considerably higher fares. This is an interesting and attractive policy option that reflects the need for Latin American cities, with their wide income distributions, to provide different qualities of service for differing demands. It should not be applied, however, without sufficient attention being given to the following considerations:

(i) If an existing one-class bus service is split into parallel high quality/high fare and low quality/low fare services, the frequencies offered by the latter will necessarily be less than those of the former, if all other conditions are equal.

(ii) If one type of service is more profitable than the other, investment will be channelled into whichever gives better returns, possibly by diverting resources from the other type of service. Since the authorities would be under pressure to apply stricter fare controls to the basic low-quality service, this is the one that is normally liable to underinvestment.

(iii) Experience has shown that operators of high-quality services, provided exclusively for seated passengers, give in to the temptation to carry standing passengers, while still charging the higher fare (until the authorities react to what is going on).

(iv) Creating two categories of services can aggravate congestion, albeit marginally, by lowering the average number of passengers per bus and hence requiring more buses to carry a given number of people. However, this effect can be counterbalanced if the higher quality service succeeds in attracting passengers who would otherwise travel by automobile.

If sufficient attention is paid to these points, the creation of different qualities of service is well worth considering. It is only fair to note that when service differentiation is created, the middle class stands to gain more than the poor. The major benefit to the poor is that the government can direct any subsidies designed for their benefit directly at the basic service

category, leaving the middle class to cover whatever costs are needed to finance the superior-quality service. In this way, the funds available for subsidies benefit only the people who need them, avoiding the waste of subsidizing others who have no such needs.

3. Excessive regulation

Latin American cities traditionally grow rapidly, and the fastest-growing parts are the outlying suburbs in which migration of low-income families from the countryside is concentrated. To legally serve these peripheral zones, bus operators have to obtain some kind of license, concession, or permit. The granting authorities are often encumbered by bureaucratic procedures that adversely affect their ability to efficiently authorize new services with the necessary rapidity. Moreover, from the operators' point of view, extending an existing route to serve recently-developed outlying marginal zones may not be commercially attractive. On the one hand, there is a significantly greater risk of vandalism to vehicles and robbery of fare-box takings. On the other hand, due to the flat fares normally applied in Latin American cities, the entire amount of extra revenue needed to cover the costs of the increased route length must be earned by carrying a greater number of passengers. There is little or no chance of higher unit fares being granted. Consequently, authorized bus services are often not provided, or at least not provided quickly enough or on the required scale. One of two situations can then result: (i) little or no authorized service is provided, and people living in marginal zones have to walk to an existing terminal, or (ii) services are provided by informal and technically illegal operators to meet the demand. Having to walk is obviously unattractive, while having to use informal services is also undesirable, for the reasons previously explained. The solution to this problem is reform of the regulations, necessarily comprising the first of the following elements and preferably the second as well.

i) Reforms to simplify the procedures necessary to obtain official authorization to establish or extend routes

Ideally, no quantitative restrictions of any kind should be applied to limit the capacity offered, but basic quality controls on the technical condition of the vehicles and the training and working conditions of their drivers should be reinforced. Quality control should not be overdone. Vehicles must be safe, but there is little sense in requiring—for instance—that they conform to particular design norms developed for higher

income environments, that they be newer than a specified maximum age limit, etc. By imposing such stringent conditions, costs are unnecessarily increased.

ii) Reforms to encourage operators to serve outlying marginal zones without charging excessive fares

Unfortunately, the practical measures to do this all involve the intervention of public authorities, and therefore conflict with the need to minimize the amount of regulation. Various alternative measures may be suggested, but all of them have disadvantages. Perhaps the least unattractive is a version of a procedure developed in the United Kingdom whereby local authorities are empowered to invite bids for the operation of socially necessary but commercially non-viable bus services. They are obliged to accept the bid of whichever operator requires the lowest subsidy, provided the conditions stipulated in the bidding documents are satisfied (which in the Latin American environment would include the fare to be charged). The major problem associated with this system is that a public body, quite probably lacking adequate resources for the purpose, would have to decide what zones need additional bus service, to where, and at what times of the day or week.

Another option would be to apply a system similar to the bus vouchers (*vales transporte*) widely used in Brazil, whereby low-income wage earners receive vouchers from their employers for a certain minimum amount of urban bus transport. However, to be fully effective in low-income peripheral zones, the scheme would also have to include the unemployed looking for work and people employed in the informal sector. This would convert an already administratively complex scheme into a bureaucratic nightmare.

4. Publicly-owned bus companies

Bus companies such as *EMTA* in La Paz, *Ruta-100* in Mexico City and *ENATRU* in Peru include among their basic objectives the provision of essential transportation for low income citizens. The main trouble with these companies is that they tend to be very inefficient, with high costs, excess staff, and low vehicle availability (see table 5). It is not impossible to run a publicly-owned bus company efficiently, but all the evidence suggests that doing so in Latin America is very difficult. It is equally difficult to avoid arriving at the conclusion that such companies should be liquidated, perhaps by transferring their assets to their employees in place of part or all of the latter's severance payments. This was successfully done in Buenos Aires some 30 years ago.

TABLE 5

Latin America: basic operating data for urban bus companies, 1988-1989^a

City/Company	Buses in fleet	Buses in operation	Bus-km/month	Passengers/month (millions)	Number of employees	Percentage of drivers	Percentage of fare collectors	Percentage of maintenance workers	Mean model year
São Paulo									
Private ^b	5 982	5 408	35 253 579	112.67	29 790	38	41	12	1983
<i>CMTC</i>	3 519	2 829	16 700 000	47.58	24 351	34	33	5	1983
La Paz									
<i>EMTA</i>	94	31	147 235	0.39	166	45	...	28	1984
S. Bolívar	...	71	135 879	0.90	...	...	...	...	1977
V. Victoria	...	145	329 502	1.94	...	...	...	...	<i>idem</i>
P. D. Murillo	...	49	94 897	0.61	...	...	...	...	<i>idem</i>
E. Abaroa	...	176	325 123	2.26	...	...	...	...	<i>idem</i>
San Cristóbal	...	178	343 533	1.92	...	...	...	...	<i>idem</i>
Litoral	...	210	717 037	3.21	...	...	...	...	<i>idem</i>
Santiago, Chile									
... ^c	131	83	627 561	1.19	284	92	-	...	...
... ^c	362	...	...	2.75	733	95	-	...	...
Lima									
<i>ENATRU</i>	638 ^d	523	3 939 835	19.52	4 500	...	...	...	1981
San Miguel	25	22	186 846	1.02	130	26	29	27	1960
San Judas	24	20	168 000	1.01	127	34	45	...	1979
Lima Metro.	150	130	1 040 000	2.99	746	47 ^e	...	26	1982
SOTISA	63	61	366 000	1.23	217	35	57	^f	1970
Havana									
<i>Emp. Omn. Urb.</i>	2 325	1 567	11 360 000	104.63	12 159	34	2	48 ^g	1985
Brasília									
<i>TCB</i>	354	...	1 998 214	3.63	1 430	40	25	14	1978
Viplan	444	...	2 876 251	4.02	2 451 ^h	38	38	15	1985
Pionera	539	...	3 247 845	5.71	2 560 ^h	42	42	10	1985
Alvorada	201	...	1 432 270	3.57	1 228 ^h	38	38	15	1986
Mexico City									
<i>Ruta-100</i>	7 200	3 024	26 762 000	204.67	22 896	51	...	23	1983
Bogota									
La Nacional	534	...	...	...	...	...	...	...	1975
Copenal	365	...	2 059 498	7.10	...	...	...	...	1973
Sidauto ^j	1 036	...	2 512 148	6.71	...	...	...	...	1975
Sidauto ^k	259	...	735 884	1.57	...	...	...	...	1982
Cooptrans.	680	...	5 344 976	...	...	...	...	...	1982
Unión Com.	557	...	1 382 810	7.80	...	...	...	...	1974
Quito									
Alborada	26	23	65 156	0.38	52	88	...	...	1971
Car-Tarq.	88	80	482 144	1.50	190	93	...	...	1983
Sac Sur	25	19	134 400	0.40	47	85	...	...	1977
Libertad	119	101	382 946	2.69	223	95	...	...	1973
<i>Municipal</i>	9	7	34 960	0.32	65	46	5	15	1983
<i>Municipal^m</i>	70	54	459 000	1.80	350	50	...	...	1988
Buenos Aires									
Nuevos Rumbos	82	...	482 565	2.40	236	75	-	11	1984
San Vicente	229	226	1 954 747	3.91	616	81	-	9	1982
Micro Omn. Norte	392	361	3 590 264	6.51	1 364	79	-	12	1984
San Lorenzo	30	28	198 536	0.54	105	68	-	18	1981
T.A. Plaza	47	43	262 882	1.17	144	76	-	9	1981

Source: Case studies performed for ECLAC.

^a Bus companies whose names are in italics are publicly owned.

^b City-wide data for all private-sector buses.

^c Data not made available by the associations. Bus owners are responsible for maintenance, i.e., the associations do not employ maintenance workers

^d Excludes 582 buses officially considered to be under repair, but in fact probably waiting to be scrapped or sold.

^e Includes fare collectors.

^f Bus owners are responsible for maintenance.

^g Data include employees assigned to repair work (as opposed to maintenance).

^h Data refer, as far as possible, solely to regular bus services -i.e., they exclude charter operations, in which all four companies were heavily engaged until 1990. For statistical purposes, the private companies Viplan, Pionera, and Alvorada apparently attribute to regular services personnel who actually perform charter services, as a means of pressing for higher fares.

ⁱ Data not comparable.

^j Data refer to regular-size buses.

^k Data refer to smaller-size buses.

^l Bus owners are responsible for maintenance.

^m Data are for 1991.

The most efficient way to provide basic transportation for lower income groups is via competitive bidding along the lines suggested above. Services should be relet every so often, with no unfair preference being given to the incumbent operator. Normally, only legally constituted bus-owning companies would be allowed to submit bids, although it is feasible (but not necessarily desirable) to adopt the tendering system while doing nothing to change the organizational structure of the traditional route associations which operate so much of Latin America's urban public transport. The people or companies participating in the tendering process would make arrangements with individual bus owners to operate a route, should their bid be successful. In Santa Fe de Bogota, most bus transport is provided by companies which sign up different bus owners in order to operate the routes for which the companies hold concessions.

5. The use of public funds available for urban transport

Both in Latin America and in other parts of the world, a great number of investment projects in urban transportation have been inadequately evaluated. As a result, projects not really viable in socioeconomic terms have sometimes been implemented. To some extent, this stems from the use of inadequate analytical tools. Another fundamental cause is political expediency, whereby governments find it easier to borrow money for large investment projects, leaving it to another government years later to worry about where to find the money to repay the loan, rather than to adopt alternative measures which would improve the utilization of existing infrastructure but which might cause some inconvenience to politically influential sectors of the population, such as high-income car commuters.

There are various reasons why urban transport investment projects of dubious worth can come to be implemented, but lack of space prevents us from explaining them in the present paper (Thomson, 1985). The end result of such projects might be, for instance, the construction of urban freeways which increase congestion by causing trips to be switched from off-peak to peak periods, or encourage extra travel, or transfer bottlenecks from one point to another, etc. Metros are another case in point, because they consume vast amounts of resources to solve problems that can sometimes be solved much more economically by other means.

Metros seduced Latin American politicians in the 1960s and 1970s. They provided shiny new transport

capacity of great benefit to the masses travelling along high-demand corridors, without disturbing those who wished to drive their cars on city streets. The Caracas metro, for example, was constructed at a cost of well over US\$100 million per kilometre, without serious attempts having been made to improve public transportation through less expensive measures such as bus lanes, and certainly with no thought of liberating road space for buses and other public transport vehicles by imposing restrictions on car usage in central areas. The World Bank was instrumental in having an urban road pricing study carried out for Caracas at the beginning of the 1970s, but the Venezuelan Government never attempted to implement the proposed measures.

There is no doubt that expensive investment projects are sometimes worthwhile. But there is also no doubt that it is normally worthwhile first of all to examine less expensive measures for alleviating problems and to maximize the productivity of existing infrastructure, before resorting to costly investment projects. Among the policy options that are available but have not been taken advantage of in Latin American cities, either at all or to the required extent, are: i) strict controls over parking in city centres; ii) charging the users of congested road space appropriate tolls for the scarce resource they consume; iii) exclusive bus lanes, and iv) computerized area traffic management combined with parking control.

Such measures can often be shown to generate positive benefits for the community as a whole. They also benefit bus passengers in particular. Some of them, such as urban road pricing or taxes on parking, can even generate revenue which might be used for improving public transportation.

Quite apart from investments of dubious worth, vast sums have also been channeled into subsidizing the operation of urban transport, often in wasteful ways such as subsidies for inefficiently-run publicly owned bus companies (e.g. in Mexico), subsidies which encourage inefficiency among private operators (e.g. in Bogota), or travel subsidies for everybody, including many who do not require them (e.g. in Guatemala) (ECLAC, 1992). Important economies can be made in terms of the volume of resources needed, without affecting the poor and needy, by modifying the basis on which subsidies are assigned. Examples of models used in the United Kingdom or in Brazil for this purpose have already been presented in section 3 above.

6. Resource transfers that adversely affect low-income bus passengers

When bus priority measures such as exclusive bus lanes are introduced, there are normally two categories of beneficiaries. Firstly, users benefit, since they reap time savings. Secondly, the bus operators benefit, since higher operating speeds translate into savings in terms of the number of vehicles and staff required. However, fare-setting mechanisms rarely include any provision for translating the higher profitability of bus operations into lower fares for users.

However bus operators do not need to wait until a bus priority scheme is introduced to lay claim to resources which rightfully belong to bus passengers. It is often suspected, and has sometimes been proven, that bus companies mislead fare-setting tribunals by overestimating bus operating costs or underestimating ridership. By so doing, they try to obtain unjustifiable fare increases. Any fare higher than that necessary to provide sufficient revenue for bus operation amounts to a transfer of money from bus passengers to the companies or individuals providing the services. To a certain extent, the attempts of bus companies to mislead the fare-setting bodies stem from suspicions by the former that the latter distort their estimating procedures for political reasons, thereby fixing the resulting fare at too low a level to cover costs.

The ideal would be to get fare setting out of the political arena and place it in the hands of competent technicians and economists. But this may not be possible, for someone has to select the preferred point on the spectrum between high service quality/high fares and low service quality/low fares, which has already mentioned in section 2. Although theoretically that point could be determined by maximizing a welfare function, this is more a transport economist's dream than a real-world possibility. In practice, the elected representatives of the people should decide. However, they should not do so without being adequately aware of the costs of providing bus service.

Another kind of fraud is that perpetrated by bus drivers and fare collectors, who often pocket some of the money they receive, rather than passing it on to their employers. There is little doubt that, in general, such fraud raises fares and hurts bus passengers in general. However, the situation is complex. Sometimes passengers consciously pay the appropriate fare directly to the driver (or conductor) without demanding a ticket in exchange, knowing perfectly well that

the money goes straight into the driver's pocket. They justify this on the grounds that the driver is much poorer than the owner of the bus company, whom passengers suspect of committing the kind of fraud mentioned in the previous paragraph. At other times, an obviously destitute individual may ask to be allowed to ride for less than the official fare. The driver sometimes has compassion and lets the individual get on board, but cannot issue a ticket since the individual does not pay the full fare. Whatever the individual does pay thus goes straight into the driver's pocket. Such cases show that not all fraud is harmful to the poorer classes. However, most of it certainly is, and the poor stand to gain if it is reduced.

Sophisticated electronic ticketing schemes, with entry and alighting controlled by turnstiles or similar equipment, can solve most of the problem. However, simpler and cheaper measures can also be very effective. One ingenious scheme, devised by the general manager of a publicly-owned bus company in Cochabamba, involves selling return tickets at a heavy discount relative to one-way fares. Upon boarding a bus in the morning, the passenger requests a cut-rate return ticket, in order to avoid having to buy another expensive single ticket in the evening. Private-sector bus operators in Chile sometimes launch what are essentially lotteries, with bus tickets as entry coupons, which have similar effects to the Cochabamba system in encouraging passengers to ensure that they receive tickets.

7. Traffic congestion

Most urban traffic congestion is caused by cars. Each bus has a greater disturbing influence on traffic than each car, but there are normally many more cars than buses in the traffic stream, although this is not always true on certain city-centre streets in some Latin American capitals. Buses are also capable of generating their own congestion and getting caught in it, especially if there are many of them and they are confined to specific lanes. Nonetheless, it can be shown that cars do the most harm. In a typical urban situation, each car occupant causes 15 times as much congestion as each bus passenger, who is the primary victim of the situation. The effects of urban congestion on bus fares, and the extent to which fare reductions can be expected from measures introduced to restrict car traffic, were studied in a previous paper by the present author (Thomson, 1982). The probable amount by which fares will be reduced depends to a

large extent on the characteristics of the particular case in question. One critical variable is the route length, since over longer distances, increases in bus speeds resulting from decreases in the volume of car traffic still will not enable many buses to make an extra peak-direction trip within the peak period. However, a 4% fare reduction is attainable in most situations, and up to 6% in some.

Exclusive bus lanes, streets reserved solely for buses, bus-activated traffic signals, and other bus priority measures can be effective in alleviating the problems that car-generated congestion causes for buses. Still, they do not solve the basic problem of congestion itself, which can be most efficiently dealt with through road pricing. Although there is no obligation to use revenues generated by such a measure to improve public transportation, this is normally proposed as a way to soften the blow to car owners priced out of using their automobiles. This use of revenues can be justified on grounds of economic efficiency, since by providing car users with a reasonable alternative, the price elasticity of demand for car travel is reduced in absolute terms, which in turn makes road pricing schemes more viable socioeconomically. Even if revenues are not so used, market mechanisms should result in some improvements to public transportation anyway, since providing an alternative to expensive car travel would become profitable. Evidently, if public transportation is improved, the poor stand to benefit. The direct beneficiaries of urban road pricing are bus passengers, together with some affluent commuters who continue to travel by car because they value their trip-time saving more than the amount of the toll they are required to pay.

Other measures to reduce traffic congestion are less attractive from the standpoint of economic efficiency. Still, they are usually preferable to doing nothing, and they benefit the poor by enabling buses to move more freely. These measures include strict control of on-street parking in congested areas, general restrictions on both on- and off-street parking in zones to which cars travel over congested streets, and maybe even crude number-plate-based bans on car usage in city centres. Options which involve rationing through user charges are preferable to those based on physical restrictions, since pricing is an efficient rationing mechanism and the revenues generated can be used to improve public transportation.

8. Route-specific flat fares

If a flat bus fare is set for the city as a whole, operators will naturally prefer short routes with relatively high revenue to cost ratios. They will also favour routes with high passenger turnover. To some extent, the tendency to operate short routes can be countered by certain forms of regulation, such as assigning companies balanced packets of short and long routes, but the preference for concentrating resources on shorter routes would still exist. If n buses are required to operate two routes, one long and one short, and only $n - 1$ are available, the operator will reduce frequencies on the longer route. The poor often tend to make disproportionate use of longer routes, where the fare paid per kilometre may be low, but where frequencies and general service quality are also likely to be low. However, the scope for assigning each operator a packet of routes is limited within the context of individual bus ownership and route associations which prevails throughout much of Latin America, although this objective can be achieved by rotating buses among routes, as happens in La Paz or Quito.

Route-specific fare systems are another possibility. However, they require passengers who switch from one line to another to pay again. The poorer classes are especially subject to such multiple payments, because they tend to live on the outskirts of cities and do not work in the centre, where most routes converge.

Workable solutions to the problem of flat fares are few in number, bearing in mind the often limited technical, financial, and administrative resources available to most municipal supervisory agencies. One solution which might work successfully in some of the region's cities involves bus tickets valid not per ride but per day. They would be sold wholesale to newspaper stand operators, companies maintaining ticket vending machines, long-distance telephone call centres, and similar points of sale, which would resell them to the public. A passenger would have to possess a valid ticket—preferably magnetic or at least punch-coded—before he could board a bus. Upon boarding, the passenger would insert it into an inspection machine which would allow him to pass through a turnstile if it were verified as valid. Alternatively, the holder could show the ticket to the driver, who would check it. Revenues from wholesale ticket sales could be distributed among bus operators in proportion to daily mileage or hours operated weighted by bus type.

The greatest difficulty in applying this system lies in determining real daily mileage or hours operated per bus. In Curitiba and a few other Brazilian cities, revenues are pooled and then distributed according to bus-kilometres operated. In those cities, however, buses are run in a professional manner by a relatively small number of genuine companies, and routes are planned, authorized and inspected by a municipal agency. In the typical environment of route associations and inadequate route planning, efficient administration of such a system would be much more difficult.

9. Spatial distribution of the urban poor

As already mentioned, in many parts of Latin America the urban poor tend to concentrate in peripheral zones, from which travel distances to desirable destinations, such as reasonably well-paid jobs, tend to be high. In the industrialized countries, in contrast, the relatively affluent normally live furthest from the city centre, while the poor congregate in decaying inner areas where environmental conditions may leave something to be desired, but accessibility is normally adequate. In our region, rings around the central areas of cities such as Bogota, Caracas, and Lima house some low-income families, but such inner zones have insufficient space to accommodate large numbers of migrants from rural areas. For such housing to be provided, high-rise apartment blocks would have to be built, which the would-be residents are in no position to finance. Solutions to this problem involve long-term urban planning and renewal. All that transport planners and administrators can do is alleviate the adverse effects of such situations on the poor by applying measures such as those suggested in section 3 above.

10. Subordination of urban transportation to general economic policy

Urban transportation only receives attention from economic policy makers when a crisis demands immediate political action. In normal times, it is subordinate to, and has little influence on, overall economic policy. Transport ministers do not rank very high in the cabinet hierarchy. One example of this occurred in Chile in 1987, when a decree signed by the minister responsible for transport reintroduced an element of regulation into Santiago's bus transportation. This decree was overturned a few months

later by another decree emanating from the Ministry of Finance, which referred specifically to urban bus transportation but which the minister responsible for transport was not even invited to sign. In Ecuador and Peru towards the end of the 1980s, bus fares were fixed at very low levels by government authorities. Operators could only hope to renew their fleets if they were allowed to import used buses or granted low-cost financing to buy new ones, but these options were denied them by the ministries responsible for economic policy. In Jamaica in the 1980s, economic activities considered to be foreign-exchange earners—mainly tourism and certain agricultural and industrial sectors—were allowed access to low-cost credit and given other advantages, but these were denied to the urban public transport sector, which was considered to be a consumer rather than a generator of foreign exchange.

With the general adoption of neoliberal economic models, such practices are tending to disappear, yet there is no guarantee that neoliberal thinking will endure forever. Moreover, urban bus transportation is still sometimes discriminated against, with consequent regressive effects on income distribution. In many countries, imports of new buses continue to be strictly controlled to protect the domestic assembly industry, while used buses are excluded altogether.

11. Demand peaking

Demand peaking is a feature of modern urban life. The productivity of a city depends to some extent on most people being at work during the same hours. But changing the working or school hours of some sectors can often yield net benefits in the form of reduced transport costs, by spreading out peak demand. A few cities, such as Curitiba, have attempted to introduce such changes, but resistance is often encountered from some sectors of the population when such re-scheduling conflicts with the way society currently functions. As an example, many Latin American parents drop their children off at school on their way to the office. If either school or office hours were changed, families would have to find other means of transport for their children.

Nevertheless, scope for changing working hours exists. For instance, there is little sense in having stores in the city centre open at more or less exactly the same hours as downtown offices, if their potential clients are the workers in those offices. Instead, stores

might be open from perhaps 11:00 until 21:00 hours, while office hours remained the usual 09:00 to 18:00 or 18:30 with a break for lunch. It might also make sense for some shops to open on Sundays, when the whole family is free to frequent them, and close on Monday. Banks might open half an hour earlier than factories and offices, so that employees could conduct their business before starting work.

From the point of view of the transportation system, the advantage of changing working hours is that this can reduce costs. Rescheduling automatically reduces congestion by spreading a given number of trips over a greater period of time. However, for rescheduling to have the maximum benefit for bus passengers, the following aspects should be borne in mind:

i) Even without alterations in bus speeds, peak spreading can reduce costs per passenger if the given number of trips can be performed by fewer vehicles, thereby permitting capital-cost savings and reductions

in operating crews. Spreading is more likely to happen if routes are short and adjustments in working hours are significant.

ii) Most rescheduling schemes are based on the idea that each type of activity will have its own working hours, which are different from those of other activities. Thus, construction work might start at 07:00, factories at 08:00, offices at 09:00, banks at 10:00, etc. To obtain any significant reduction in operating costs under such a scheme, buses must be allowed to switch between routes. For example, demand for a bus on a route to an industrial zone will be minimal once all the factory workers have clocked in. That vehicle should therefore be permitted to transfer to a route serving the downtown area, so that it can carry a load of office workers.

It must therefore be concluded that the benefit to bus passengers of rescheduling working and school hours is greater if routes are short and regulations are not excessively rigid.

Bibliography

Dirección General del Metro (1986): *Metro de Santiago*, Santiago, Chile.

ECLAC (Economic Commission for Latin America and the Caribbean)(1992): *The impacts of subsidies, regulation, and different forms of ownership on the service quality and operational efficiency of urban bus systems in Latin America* (LC/L. 675), Santiago, Chile, 7 August.

Jaramillo, Jakeline (1991): La movilidad urbana en las estrategias de sobrevivencia de la población de menores recursos, paper presented at the Fifth

Latin American Congress on Urban and Public Transport, Santiago, Chile, ECLAC, November.

Thomson, Ian (1982): Urban transport in Latin America. Some considerations on its equity and efficiency, *CEPAL Review*, No. 17, Santiago, Chile, August. United Nations publication, Sales No. E.82.II.G.3.

—(1985): Los metros sudamericanos: un análisis de su evaluación económica, *EURE*, vol. XII, No. 33, Santiago, Chile, Catholic University of Chile, Institute of Urban Studies, August.

World Bank (1986): *Urban Transport: a World Bank Policy Study*, Washington, D.C.

Privatizations and *social welfare*

Robert Devlin

*Principal Economic Officer
in the ECLAC Economic
Development Division.*

*This article is based on a
paper prepared for the
Conference "The New Europe
and the New World",
Latin American Centre,
St. Antony's College,
Oxford University,
September 1992.*

*The author wishes to
express his special thanks
for the comments of
J. Martin, J. Ramos,
R. Ffrench-Davis, F. Jiménez,
O. Sunkel, R. Sáez and
L. Burkhalter, and
for the collaboration of
K. Paul and R. Cominetti
in the preparation
of the data.*

Privatization is an important dimension of the adjustment process in Latin America. The process is well advanced in a considerable number of countries, and there are few nations which have not embarked on a privatization programme, with special emphasis on the sale of public enterprises. This article analyzes the many factors propelling the privatization process in the countries of the region and examines a socioeconomic dimension of the process which has not hitherto received much attention: i.e., social equity. In this respect, it identifies shortcomings in the privatization process and suggests concrete ways of increasing its net social benefits. The article highlights five aspects which are of fundamental importance for achieving greater equity in such processes: transparency; systematic efforts to secure the highest possible price for the enterprises sold; integral compensation for employees obliged to leave the enterprises; assignment of the income received from privatization to a special social development fund, and more effective public regulation of privatized enterprises that may be able to exercise market power. The objective of social equity must, of course, be reconciled with the other objectives identified in the article as being germane to the decision to privatize. Nevertheless, reconciliation with many of the other express objectives of privatization will not necessarily demand any major sacrifices of equity, since many complementary factors also enter into play.

I

Introduction

The crisis of 1982 –the worst in the region since the 1930s– detonated a process of radical economic policy change throughout Latin America. It also proved to be relatively unresponsive to traditional conjunctural stabilization and adjustment policies.¹ Moreover, its magnitude and protracted nature dealt a fatal blow to the dominant economic strategy in the region, which had been typically characterized by an emphasis on inward-looking import substitution and ample direct State intervention.² What emerged to take its place, gradually at first, but with ever greater intensity as the decade proceeded, was a new paradigm inspired by the traditional liberal market principles that were especially fashionable in some industrialized countries during the 1980s. Thus, the policy focus of most Latin American countries broadened so that adjustment and stabilization efforts included major neoconservative-oriented structural changes focusing on internal and external liberalization and deregulation and the promotion of a subsidiary role for the State in the domestic economy. One of the cornerstones of the new approach (baptised the Washington Consensus) is the privatization of public enterprises.³

This paper provides an overview of the privatization processes pursued in the region, and focuses on some socioeconomic dimensions of the process which have not been given much attention to date. The first section discusses the magnitude of the privatization processes in Latin America. In the next section, an analysis is made of some of the apparent motives behind the countries' decision to privatize. The third section focuses on one objective which has sometimes been too easily traded off in privatization processes –social equity– and suggests ways in which the net social benefits of the process could be enhanced. The last section presents some conclusions.

The subject of privatization in developing countries raises a vast number of potential issues which become still more complex when examined in the fast-moving context of individual countries. For this reason the overview is relatively general in its focus and selective in its content. It also should be mentioned that the comments made concentrate on divestiture, which so far has been the most prevalent privatization technique in the region.

II

The magnitude of privatization processes

Public enterprises (PEs) have typically had a high profile in the economic activity of the region. Ironically, however, consistent and comprehensive data on the region's PEs are hard to come by. Their importance can nevertheless be illustrated by reference to a

few countries. For instance, just before the crisis the value added by PEs as a percentage of GDP was about 5% in Brazil, 14% in Chile, 8% in Mexico and 30% in Venezuela. Likewise, the region's PEs were major investors in fixed capital, with their activity in this area often equivalent to a quarter or more of total gross investment (table 1). Each country's story as regards the origin of its PEs is different, but in practically all cases there is a combination of factors related, among other things, to the deliberate promotion

¹ Apart from the sheer magnitude of the crisis and the fragility of the new democratic political regimes, the slow response was also undoubtedly related to the very serious shortcomings in the construction of multilateral conditionality and the official management of the debt problem, which tended to underfinance the adjustment process. See Devlin (1989), Ramos (1992), Killick *et al.* (1984) and Ground (1984).

² But the financial crisis was also a setback for the monetary approach to the balance of payments and for proponents of "self-regulated" credit markets. See Ramos (1986), Ffrench-Davis (1982) and Devlin (1989).

³ There is a whole range of privatization techniques, of which divestiture –total or partial transfer of State-owned enterprises to the private sector– is only one. For a discussion of this, see ECLAC (1992b).

TABLE I

**Latin America: selected indicators of the
participation of public enterprises before the 1982 crisis**

	Value added as % GDP	Fixed investment as % of gross investment (1980)	Participation in domestic credit (1978)	Employment (% of total) (1980)
Argentina	4.6 ^a	15.4	...	3.1
Brazil	4.7 ^b	25.8 ^c	11.2	3.0 ^d
Chile	14.2 ^e	15.8	...	20.4 ^e
Colombia	2.6 ^a	12.7	...	...
Costa Rica	...	23.2	12.8	...
Ecuador	...	21.1	...	...
Guatemala	1.1 ^a	13.3 ^f	...	...
Honduras	...	14.6 ^g	...	...
Mexico	8.2 ^e	23.1	18.9	...
Paraguay	3.1 ^a	6.5 ^f	...	...
Peru	...	10.4	26.4	...
Uruguay	...	18.3 ^f	...	...
Venezuela	30.9 ^e	35.7	1.6	...

Source: Nair and Felippides (1988); Floyd, Gray and Short (1984).

^a1978-80 (factor cost). ^b 1982 (market prices). ^c 1981. ^d 1982. ^e 1980 (market prices). ^f 1978-80. ^g 1978-1979.

of investment and development, nationalization measures deriving from unexpected political or financial events, the support of macroeconomic stabilization objectives, and employment and distributional considerations.⁴

Data for a considerable number of the countries in the region indicate that just before the crisis the overall financial performance of the region's PEs was almost uniformly associated with heavy financing requirements (table 2). The picture improves markedly for a few countries when the PEs' balances are adjusted for transfers between the firms and central government. Nevertheless, it is noteworthy that even after that adjustment important pre-crisis financing requirements were registered for the PEs of Argentina, Brazil, Colombia, Costa Rica, Ecuador (non-oil) and Mexico (non-oil).

During the crisis years PEs confronted a very complex operational environment as central governments tried to stabilize domestic prices and reduce the public sector's financing requirements. The serious fiscal problems induced adjustments in the region's PEs and a reduction of their demands for financing:

between 1981-1982 and 1986-1987 the countries with initial deficits either lowered their negative balances or converted them into surpluses and, with the exception of Venezuela, those with initial surpluses increased their positive balances. Excluding Venezuela and the oil-producing PEs of Mexico and Ecuador, the total improvement in the PE balances of the countries listed in table 2 was equivalent to 2% of GDP. It should be noted, however, that while significant, the improved financial balance nevertheless had an artificial component because it included the effects of sharp and unsustainable cutbacks in investment activity. This is seen in column DH of table 2, which calculates financial balances on the basis of pre-crisis investment levels.

Expenditure cutbacks and adjustments in scales of charges were initially the most important instruments for reforming the financial performance of PEs. However, sooner or later almost all of the countries in the region began to opt for more drastic reforms involving outright divestiture or liquidation of their PEs.⁵ The scope of most of these privatization programmes has been extremely ambitious, including in

⁴ For an excellent history of public enterprises in Chile see Ortega (1989).

⁵ From here on, the term "PEs" will be used broadly to include public entities that are not necessarily formally classified as enterprises.

TABLE 2

Latin America: savings and deficits of public enterprises, 1980-1981 and 1986-1987^a
(Percentages of GDP)

Country	D 1980-1981 (1)	D 1986-1987 (2)	D* 1980-1981 (3)	D* 1986-1987 (4)	DH (5)	Absolute variation in D* (6)=(4)-(3)
Argentina	-3.39	0.59	-4.92	-2.75	-3.21	2.17
Bolivia	0.10	-2.90	3.65	7.95	7.70	4.30
Brazil	-1.69	0.10	-3.10	-2.10	-4.22	1.00
Chile ^b	-1.33	0.78	5.47	10.33	11.93	4.86
Colombia	-2.00	-1.41	-3.16	0.08	-0.21	3.24
Costa Rica	-2.37	0.97	-1.55	3.46	4.11	5.01
Ecuador	-0.63	-1.77	4.60	4.09	4.46	-0.51
(Non-oil-exporters)	(-1.60)	(-0.55)	(-1.92)	(-0.67)	(-1.44)	(1.25)
Mexico	-1.30	0.25	1.49	4.62	3.53	3.13
(Non-oil-exporters)	(-1.57)	(-0.26)	(-6.22)	(-4.97)	(-5.77)	(1.25)
Uruguay	0.26	0.10	2.69	3.14	3.00	0.45
Venezuela	-2.33	-2.62	11.08	5.16	-0.05	-5.92
Total^c	-1.48	-0.74	1.20	2.63	1.68	1.43
Subtotal^d	-1.14	-0.32	-0.80	1.22	0.90	2.02

Source: ECLAC, Economic Development Division.

^a The symbols used in this table are the following:

D = Total income less total expenditure .

D* = D - T (T = net transfers to central government, as registered in its accounts).

DH = D* plus difference in net capital account between 1980-1981 and 1986-1987.

^b For the period 1986-1987, the values used were those for 1985, which is the last year for which figures are available.

^c Simple average, excluding Chile.

^d Simple average, excluding Chile, Venezuela and the petroleum enterprises of Ecuador and Mexico.

almost all the cases major public services. The countries with the greatest experience in this respect are Chile and Mexico, followed by Argentina, Venezuela and Brazil.

Chile was the region's pioneer in privatization. In the period 1975-1982 the military government "reprivatized" more than 200 firms (mostly in the tradeable goods and finance sectors, and worth more than US\$1.2 billion in total) which had been nationalized or operationally taken over in the special circumstances of the controversial policies of the previous democratic government. Many of these reprivatized firms fell back into the government's hands in 1982-1983 as a consequence of a gigantic systemic collapse of the Chilean economy (Ffrench-Davis, 1982), but they were quickly transferred back to the private sector in 1984-1985 (Sáez, 1991; Hachette and Lüders, 1992). Soon afterwards, in 1985, the military government announced the beginning of the privatization of many of the country's large traditional PEs, which had hitherto been considered untouchable. Between 1985 and 1989 thirty public enterprises—producing both tradeable goods and major public services—were

divested in whole or in part, generating income equivalent to US\$1.3 billion (tables 3 and 4). At its peak in 1987-1988 the income from privatization operations was equivalent, on average, to 2% of GDP and 7% of current revenues of the consolidated public sector. At the end of 1989 there were 45 public enterprises in the country, compared to more than 200 in 1974 and 75 in 1970 (Sáez, 1991). These remaining PEs included the giant copper firm CODELCO, petroleum refining, and water and sanitation facilities.

In 1990, Chile's new democratic government slowed the pace and altered the content of the privatization programme: control of only a limited number of small public firms would be sold to the private sector, while a few other PEs would sell minority share packages. The government also planned to allow private participation in new public infrastructure projects, especially those sponsored by the public water and sewerage companies. In 1991 a small State shipping firm was sold and a minority share package in the Iquique free trade zone was offered on the local stock market.

TABLE 3

Latin America: value of privatization operations in six countries, ^a 1983-1991

Year	Amount ^b	GDP ^c (%)	Fiscal income ^d (%)
<i>Mexico</i>			
1983	40	-	-
1984	5	-	-
1985	115	0.1 ^e	0.4
1986	100	0.1	0.4
1987	170	0.1	0.4
1988	520	0.3	1.2
1989	730	0.4	1.6
1990	3 205	1.3	5.2
1991	10 550	3.8	12.7
<i>Chile</i>			
1983	...	...	...
1984	...	...	...
1985	10	0.1	0.3
1986	230	1.4	4.0
1987	310	1.7	5.6
1988	560	2.5	8.1
1989	235	0.9	3.0
1990	...	...	...
1991	...	...	...
<i>Argentina</i>			
1983-1989 (no privatization operations were effected)			
1990	2 105 ^f	3.4	19.2
1991	2 901 ^f	4.5	21.2
<i>Brazil</i>			
1983-1990 (no privatization operations were effected)			
1991	1 700 ^g	0.4	1.6
<i>Venezuela</i>			
1983-1990 (no privatization operations were effected)			
1991	2 300	4.5	15.0
<i>Colombia</i>			
1983-1988 (no privatization operations were effected)			
1989	50	-	-
1990	75	-	-
1991	690	0.2	...

Source: Calculated on the basis of data from Gerchunoff and Castro (1992); Hachette and Lüders (1992); Ruprah (1992a); National Economic and Social Development Bank (BNDES), Brazil; Fondo de Inversiones de Venezuela; and ECLAC, Economic Development Division.

^a Refers to value of sales and not necessarily to cash flow.

^b Millions of dollars.

^c Equivalent in dollars.

^d Current income of the non-financial public sector.

^e Equivalent in pesos.

^f Includes foreign public debt paper valued at secondary market rates. Also includes original terms for the sale of Aerolíneas Argentinas, which were modified in 1992.

^g Payment was almost exclusively in domestic debt paper.

TABLE 4

**Latin America: sectoral distribution of privatization, on the
basis of divestiture operations, 1989-1991**
(Percentages)

Sectors	Argentina	Mexico	Brazil	Venezuela	Chile	Colombia
Agriculture	-	2	-	-	...	-
Air transportation	14	3	3	6	...	-
Banking	-	52	-	5	...	3
Electricity	-	-	-	-	...	-
Manufacturing	2	10	95	-	...	72
Mining	27	-	-	-	...	-
Surface transport	5	-	2	2	...	25
Telecommunications	53	33	-	87	...	-
Others	-	-	-	-	...	-
Total	100	100	100	100	...	100

Source: *Latin Finance* (1991 and 1992) and ECLAC, Economic Development Division.

Mexico followed Chile in the pioneering of privatization in the region. The De la Madrid government initiated the process in 1983 and it was intensified in 1989 by the new Salinas de Gortari administration. The reform policy caused the number of public firms to decline from 1155 in 1982 to 280 in 1990 (Secretaría de Hacienda y Crédito Público, n.d.). About a third of this reduction was due to outright sale and the rest to liquidations, mergers and transfers to local authorities (Ruprah, 1992a; Tandon, 1992). The process initially focused on relatively small tradeable goods firms, but the size of the firms increased with time (Aeroméxico; Mexicana de Aviación) and the programme eventually included major public services, of which TELMEX is the most important. Road networks and commercial banks are also subject to privatization.

The total value of sales of PEs over the period 1983-1991 was more than US\$15 billion, 90% of this being concentrated in 1990-1991 (table 3). This concentration reflects the large size of the firms privatized in this period and the greater importance of outright sales relative to earlier years: the value of the sales in this latter period was huge, averaging the equivalent of 2.5% of GDP and 9% of current fiscal revenue. Unless the petroleum and electricity sectors become subject to privatization (the Constitution currently deems them to be strategic), it would appear that the Mexican process of divestiture could soon wind down.

Argentina began its programme in late 1989 under the new Menem government. In 1990-1991 seventeen publicly-owned firms involved in the

production of tradeable goods, including oil, and major public services were wholly or partially privatized; moreover, the most heavily trafficked highways were transformed into private concessions with rights to charge tolls. The value of sales of PEs in the period reached US\$5 billion, equivalent on average to 4% of GDP and 20% of current fiscal revenue (table 3).⁶ The Argentine scheme is probably one of the most ambitious in all Latin America, since the government plans to privatize all its remaining PEs and many public services during 1992-1993.

Brazil began to privatize under the Collor de Mello administration in October 1991. Four firms were sold during that year for a value of US\$1.7 billion, equivalent to about 0.4% of GDP and 1.6% of current fiscal income.⁷ The government initially identified 55 firms for privatization, all of them engaged in the production of tradeable goods. It is expected that the new government of Itamar Franco will introduce some modifications in the programme.⁸

⁶ About US\$1.1 billion of the total amount represents the market value of foreign debt paper which was used as a means of payment in several transactions.

⁷ Almost all the sales were paid for in the form of domestic debt instruments.

⁸ It is already known that the new government plans to modify some aspects of the privatization programme, in particular by drastically lowering the amount of debt paper that can be used as a means of payment.

Venezuela has about 370 State entities in a very wide array of sectors (Fondo de Inversiones de Venezuela, 1992); moreover, some of the firms are mixed capital ventures with foreigners. The government began a privatization process in late 1990 with a small bank. Then 7 firms producing tradeable goods and major public services were sold in 1991. The sales produced US\$2.3 billion, equivalent to more than 4% of GDP and 15% of fiscal revenue. Twenty-nine more firms in tradeable goods sectors and tourism services were scheduled to be sold in 1992. The original list, however, is rapidly expanding as 43

additional firms are being prepared for privatization, including the Caracas water supply company (Fondo de Inversiones de Venezuela, 1992). Nevertheless, the pace of the country's privatizations stagnated in the second half of 1992, due to events reflecting serious political instability.

Most other countries in the region are much less advanced in the privatization process than those mentioned above. However, by 1992 virtually every government in the region, except Cuba, had announced a major privatization programme and most had at least begun some minor sales of public firms.

III

Why are the countries privatizing?

In the theoretical framework of Jones, Tandon and Vogelsang (1990), a country should privatize public enterprises if this will bring about a positive net change in social welfare. This occurs when the social value of the privatized firm, plus the net social value of the public sector's receipts from its sale, is greater than the social value of the firm under public ownership.⁹

Of course few governments have had the time or inclination to make a complicated cost-benefit analysis in every case: they have typically relied on a more general and intuitive approach. Nevertheless, even in a more informal framework the number of factors potentially supporting privatization are often perceived to be so large that it is not surprising that so many governments have decided to initiate privatization programmes without more ado. Indeed, the scope of privatizations is becoming so massive that most governments seem in practice to be mimicking the strategy of Mexico's Salinas government: with respect to individual PEs the Mexican authorities changed the initial ministerial question from the De la Madrid administration's "Should we privatize?" to

"Why shouldn't we privatize?". This reformulated question has been behind the accelerated pace of privatization measures in that country (Ruprah, 1992a).

Below, I shall try to outline some of the major factors that seem to be explicitly or implicitly propelling the privatization processes in the region. The list is by no means exhaustive, but rather reflects those factors, or arguments, which I perceive to be of broad influence in the decision to privatize. The weights for each one, of course, differ among the countries.

It is also important to note that the analysis does not include detailed evaluation of the validity of the arguments involved. Such a task is beyond the scope of this article, in view of the very specific nature of many aspects of privatization, the difficulty of isolating many of the relevant causal factors, the as yet limited experience of the privatized enterprises, and the almost metaeconomic nature of some of the most enthusiastic arguments put forward in favour of divestiture.

1. Structural factors

a) Ideology

As mentioned above, there has been an ideological shift in the region that lays stress on private sector initiative. The central idea is the "subsidiary State", i.e., in the commercial sphere the public sector should be limited to essential activities that the private sector cannot or will not perform. The new focus has won growing theoretical support (summarized nicely by

⁹ In other words, the government should sell the firm if $V_{sp} + (\alpha_g - \alpha_p)Z > V_{sg}$, where V_{sp} is the social value of the firm under private ownership; V_{sg} is the social value of the firm under public ownership; Z is the sale price, and α_g and α_p are the shadow prices of the public and private sector income, respectively. Naturally, the social value of the firm under public or private ownership will be assessed in the light of a wide range of indicators of the net benefits for society. See Jones, Tandon and Vogelsang (1990).

Killick, 1989) and has been further encouraged by the political success of England's ambitious privatization programme during the Thatcher government. The interpretation can be subtle and selective, but it can also be more emphatic and quantitative, picturing government failure as nearly always worse than private market failure: hence the advocacy of drastic reduction of the size of the State in absolute terms, irrespective of the theoretical merits of public intervention. The benefits of the new strategy purport to be greater efficiency through the freeing-up of market forces and greater equity and social participation through the democratization of capital (Hanke, 1987).

The new ideology can be observed in virtually all the governments of the region, though it has not always been a first, or even second, order consideration in the decision to privatize. It was, however, clearly the main motivation of the Chilean privatization process of 1985-1989 (Hachette and Lüders, 1992), carried out as part of a programme proposed by the military government's ideologically hard-line "Chicago boys". Mexico's programme also had ideology as a first-order consideration. In that country, the emergence of a new young generation of U.S.-educated government bureaucrats, less emotionally linked to the Statist tradition that followed the Mexican Revolution, brought with it the perception that the State-dominated economy needed fundamental rebalancing (Ruprah, 1992a). The tone of Mexico's reform has been subtle and selective, however, with the government emphasizing that the State would redeploy its efforts to the social sector (Khanna, 1992).

b) *Internal efficiency*

Experience in the region suggests that the public sector often has difficulty playing the dual role of principal and agent. It is generally accepted that the principal-agent problem can be more difficult when ownership is dispersed, due to the limited access to information and the free-rider problem. Hirschman (1970) argued that the principal has two options in this respect: to defend his interests ("voice") or to retreat ("exit"); moreover, in the situation in question the exercise of "voice" to demand greater efficiency involves high costs, while a large part of the potential benefits of effective "voice" are bestowed on third parties. It is because of this that "exit" is often the preferred response; indeed, it reflects an old Wall Street dictum: "If you don't like the management, then sell your stock".

This traditional problem of the relationship between principals and agents could be considered potentially much more serious for a public enterprise, because in this case the dispersion of ownership is extreme: the public sector is permeated by society at large. In this environment the principal's potential objectives cover the entire spectrum of interests that can be effectively voiced by that society. However, as the use of voice and the monitoring of performance have high costs, voice will likely be exercised only by those groups which perceive enough benefits to pay the costs that are needed for that effective voice. Since the benefits of greater efficiency in a public firm are dispersed very widely throughout society, the exercise of voice for this objective can be neutralized by the stronger voices of groups with objectives that will bring them more tangible and concentrated benefits.

This intensified principal-agent problem of public firms is by no means an insurmountable obstacle, however, as is demonstrated by a number of countries with a tradition of efficient public enterprise management. Indeed, there is evidence that what really matters for efficient firm management is market structure rather than ownership *per se* (Vickers and Yarrow, 1988). Nevertheless, it could be plausibly argued that, other things being equal, the social cost (effort) of exercising voice on behalf of efficiency is relatively less for the principals of a privatized firm than for those of a public enterprise.

Exit (privatization) and the reallocation, or reduction, of the State's net worth could therefore be proposed as an attractive and less costly option for the achievement of greater efficiency. In effect, the privatization of PEs creates substantially more concentrated ownership, which in turn narrows the principal's potential objectives and enhances his power to monitor the performance of management and labour. In sum, it is assumed that the voice of profit maximization will face fewer competing voices (and hence lower monitoring costs) when the firm is in private hands.

Where monopoly power is involved, efficiency in the allocation of resources will require some type of public regulation of the privatized firm. However, since public monitoring must now take place "outside" the firm itself, there will be a rise in the public cost of gathering the relevant information needed for effective regulation. Nevertheless, a decision to privatize must mean that the new public costs of external

regulation are perceived to be less than the sum of the public costs that must be assumed if the State is to effectively play the triple role of principal, agent and public regulator of an enterprise. At least theoretically, privatization creates a more transparent division of labour, which makes for potentially better accountability: to put this simply, the private principals and agents must only pursue some mode of profit maximization, while public regulators must only pursue efficiency in resource allocation. Meanwhile, the State can reallocate its receipts from privatization to other activities with returns that are socially high, but privately too low to attract private capital, or else the receipts can be allocated to the reduction of public debt. Roughly speaking, in either case the government's net worth remains constant (assuming no undervaluation of the firm sold). Alternatively, the State can retreat and reduce its net worth, by using the privatization receipts to finance current public outlays.

All of the governments of the region have appealed to efficiency to justify the privatization of their firms. It is generally accepted that most PEs have traditionally confronted a proliferation of conflicting public objectives, such as investment, acting as conduits for foreign savings, charging low prices to aid the poor or to support stabilization efforts, creating demand for the products of domestic capital goods industries, regional development strategies, distributing political largesse of different types, etc. Some of these objectives were consistent with development, while others were not, but clearly the institutional arrangement was often inefficient, as a single instrument (the PE) was invariably used to accomplish multiple, and often conflicting, social objectives.

In practice, efficiency criteria seem to have been an especially important motivating factor in countries like Argentina, Peru and Venezuela, which have had notoriously inefficient PEs and government apparatus that has been judged too weak to effect the reforms needed to raise the voice of efficiency. In other words, authorities have seen "exit" (in the form of privatization) as the only viable option for overcoming the principal/agent problem. On the other hand, the efficiency factor may have been less of a driving force in a few countries with strong government apparatus and the potential ability to reform PEs, or those where the PEs' performance was already at least acceptable in general terms. The best example is Chile, where the military government had the power

and demonstrated capacity to reform enterprises: aided by an extremely authoritarian setting, the authorities effectively created greater concentration of ownership in PEs—thus lowering the costs and raising the benefits of exercising the voice of efficiency—even though the principal remained nominally public. As a consequence, Chilean PEs were generally relatively efficient and financially viable well before the decision to privatize them.¹⁰

c) Changes in sectors considered to be "strategic"
Since the decision of almost all the countries in the region to dramatically and rapidly liberalize trade (ECLAC, 1992a), governments have assumed that deregulated markets are now contestable and that foreign competition will cause the number of domestic monopolies and oligopolies in the tradeable goods sectors to decline markedly. In effect, regulation of rents by market forces in principle reduces the need for direct regulation via public ownership.

Many authorities are of the opinion that changing technology and innovative administrative techniques have eroded, or at least called into question, the presence of natural monopolies in many public services. Indeed, some technical support has emerged in favour of: i) depackaging certain major domestic public services, as has occurred in the Chilean and Argentine electricity sectors; ii) dividing former monopolies into duopolies, as in the case of the Argentine telephone system (this makes possible, at least in principle, external public regulation via "yardstick competition" between the two firms);¹¹ and iii) building and managing public infrastructure through regulated private concessions, as in the case of the Argentine and Mexican road networks. These technical developments, coupled with deregulation and the formation of contestable markets, have reduced the perceived need for PEs.

¹⁰ Moreover, many of the remaining instances of inefficiency were imposed by the military government's ideological preferences, which induced explicitly restrictive policies on the expansion of PE activity. For instance, the public telephone company was not allowed to diversify into new services; new investment was limited; profits were siphoned off to the central government budget, and the capacity to borrow was very restricted. This firm was also seriously hurt by the 1982/1983 economic collapse, induced in part by the government's macroeconomic policy (Castillo, 1991).

¹¹ For a discussion of yardstick competition, see Vickers and Yarrow (1988).

Monopolistic and oligopolistic control of internationally tradeable goods (including technologies), as well as the dominant position of the U.S. economy, has been sharply reduced by the great expansion of the world economy since the war. In effect, Latin American countries objectively face a more competitive world economy and a more complex geopolitical matrix than they did in the inter-war period and in the 1950s and 1960s. The active participation of European firms, including those from Spain, in the privatization processes of Argentina, Chile, Mexico and Venezuela,¹² as well as that of privatized Chilean companies in the divestiture processes of Argentina and Peru, bear witness to the dispersion of international economic power. In these circumstances it could be argued that there is less need for a strong countervailing force in the form of State ownership of productive enterprises.

d) Repositioned private sectors

One of the factors giving rise to the public entrepreneur was the immaturity of domestic private sectors and markets. After the considerable post-war growth and integration of Latin America with world economies and cultures, there is now a feeling in the region that the domestic private sectors have matured to the point where they are capable of successfully operating in many sectors formerly dominated by PEs.

Recent developments in the world economy have also strengthened the apparent attractiveness of transferring property to the private sector. The State's debt crisis, plus its forced absorption of private sector debts,¹³ have combined to help make the latter a superior player in world capital markets. There is also some perception that more competitive world markets have also shifted advantage to the private sector because of its capacity for quickly accessing and adapting changing technology and forming alliances with foreign partners. These developments have caused governments to seek opportunities for realigning their public investment portfolios.

¹² Ironically, some of the European firms like Telefónica, Iberia and France Telecom are public enterprises.

¹³ During the external debt renegotiations creditors frequently required the public sector to absorb the private sector's debts with foreign banks. This was a highly arbitrary policy with no real economic justification (Devlin, 1989).

e) The perceived need to project consistency

In the context of a transition to a model which gives priority to private capital, an important State presence—even an efficient one—in economic sectors that are attractive to local entrepreneurs can create a degree of conflict and uncertainty which may ultimately lead to a decision to privatize. For instance, when the State maintains a commercial presence in a sector that has been largely privatized, it could be a disincentive for private investment there, because of the private firms' fear that they will not be able to effectively compete with the State entity, which potentially can receive favours from public policies. On the other hand, the value of the public sector's patrimony in the sector can also effectively deteriorate if the government withholds new investments in order to avoid being accused of squeezing out private initiative. In these circumstances political pressures can eventually develop to a point where even potentially useful State firms are sacrificed in order to preserve or promote the new consensus about the division of labour between the public and private sectors.¹⁴

2. Conjunctural factors

a) Political credibility

Governments have often used privatization measures as a signal of their commitment to the new ideological model, thereby attempting to improve the expectations of domestic and international economic agents. While this motive is widespread in the region, it has been especially important for newly-elected governments which have become committed (by conviction or circumstances) to a neoconservative economic strategy, but which have initially lacked the ideological credentials of the Washington Consensus and/or have encountered difficulties in pushing forward reforms on other fronts.

Credibility was a factor of prime importance in the emergence of Argentina's first round of privatizations in 1989/1990. Assuming power in the middle of an economic crisis, the government's surprise announcement of the privatization of ENTel and

¹⁴ This problem seems to be emerging in Chile, especially in the electric power sector, where private and public firms compete in a sometimes conflictive setting. There has been a dispute between a State power generation firm and privatized power generation companies over investment in a thermal plant in Northern Chile.

Aerolíneas Argentinas was motivated in part by the need to transform a formerly populist image and stabilize the expectations of the economic agents.¹⁵ Credibility also seems to have been a first-order consideration in the Collor de Mello government's decision to privatize in Brazil; in effect, it did indeed produce some concrete forward movement in a troubled economic setting that had not been receptive to across-the-board reforms. Credibility also appears to have had a lot of weight in the privatization operations of the newly-elected governments in Venezuela and Peru, which also assumed power in the midst of severe economic crises. In the first-named government, it was part of a programme that erased an initially populist image, and in the latter it helped to give definition to a new political party that had lacked a clear image when it assumed power.

b) Fiscal crisis and stabilization

The sale of State assets can temporarily close macroeconomically destabilizing fiscal gaps. The sale itself creates an immediate financial transfer to the government, while it also affects future fiscal flows. If a firm was losing money, an annual negative fiscal transfer could be converted into positive flow of tax revenue, assuming private ownership is profitable. If the public firm was already profitable, the net future flow depends on the tradeoff between taxes and dividends of the public firm and taxes paid by the privatized firm.

The privatization option becomes tempting when possibilities for reducing fiscal expenditure have been exhausted; when the government is unable or unwilling to raise revenue through increased tax collection, or when non-inflationary sources of public finance have become exhausted. In these circumstances there is the option of capitalizing the potential future receipts of a public enterprise through its privatization. This might be termed a "Pan Am" effect, as financial distress induces the sale of potentially profitable assets to finance expenditures which cannot be compressed without threatening the short-term viability of the entity in question.

A fiscal deficit which generates serious inflation and balance of payments problems is obviously a socially costly phenomenon: the situation can inhibit reforms, bring unwanted conditionality from the IMF,

paralyze investment and growth, and have regressive distributional effects. Hence, every peso of additional revenue today, employed to close the fiscal gap, could have a very high social rate of return. Moreover, in a situation of severe macroeconomic disequilibria and recession, a peso of fiscal revenue will usually have a higher shadow price than a peso of private consumption or investment.

In these circumstances, an increase in tax collection could be an attractive option, especially if the taxes involved are not regressive in character. However, in an open, highly deregulated economy with an economic recession and a weak political and institutional setting, greater tax collection—especially of a progressive type—could be very difficult to effect. Indeed, in today's fragile political settings, an increased tax burden can intensify capital flight and deepen the recession, with negative net consequences for fiscal income and stabilization. A more assertive tax policy will also frequently be accused of sending the wrong signals to the private sector; after all, the strategy that is fashionable today views most taxes as distortionary and welfare-reducing (Atkinson and Stiglitz, 1980).¹⁶

Privatization is clearly an expedient way to bypass the above dilemma. But using the privatization receipts to finance expenditure is analogous to borrowing. Thus, when used to finance current outlays, privatization reduces the public sector's net worth; moreover, this strategy only postpones rather than eliminates the need for further fiscal adjustment in the form of increased taxes or cutbacks in expenditure (Hemming and Mansoor, 1988).

The desire to finance fiscal deficits has been an important consideration in decisions to initiate privatization. Since money is fungible, it is difficult to isolate the use made of receipts derived from divestiture. Nevertheless, the existence of global fiscal deficits during periods of privatization is indicative of financing via divestiture, and moreover, deficits on current fiscal balances hint of some financing of current expenditures, inducing a direct loss of public sector net worth.¹⁷ Using these assumptions, privatization

¹⁶ This latter argument would seem to be almost irrelevant for Latin America, which already confronts huge disequilibria and distortions due to the crisis. Indeed, in such a "third best" world, it is difficult to assert that direct taxes will be distortionary.

¹⁷ It has been argued that privatizations are analogous to emitting bonds and therefore should be a "below the line" item in the fiscal accounts. Governments, however, tend to put privatization receipts above the line, thus causing the published accounts to understate deficits or overstate surpluses (Mansoor, 1988).

¹⁵ Prior to being voted into power, the Peronist Party had opposed a partial privatization of ENTEL which had been proposed earlier by the Alfonsín government (Gerchunoff and Castro, 1992).

appears to have been used as a financing instrument in Chile in 1985-1986, in Argentina in 1989-91, and in Mexico in 1983-1990 (table 5).¹⁸ Also, the global surpluses registered in Mexico and Venezuela in 1991 would have been deficits without privatization receipts. As for the implicit financing of current outlays, this appears to have occurred in Argentina and Mexico up until 1991. More specific tracking of income and outlays in the case of Chile (Marcel, 1989) led to the conclusion that 50% of the Chilean privatization receipts in 1985-1986 went to finance current outlays, thus reducing the public sector's net worth. Finally it should be mentioned that a primary motive for the recent privatization operations in Venezuela and Peru has been the desire to relax severe fiscal constraints.

As a fiscal situation stabilizes, a country has more opportunities to use privatization receipts to finance reductions of public debt and to promote an overall improvement of net worth. In late 1990 Mexico began to earmark privatization receipts for a special fund, and a considerable amount of these resources has apparently been channelled to debt reduction: domestic public debt was reduced by US\$7 billion in 1991 and by US\$5 billion in the first quarter of 1992. Moreover, in 1992 the government quietly effected buybacks of US\$7 billion of public foreign commercial bank debt (equivalent to nearly 10% of the total public foreign debt) through the use of privatization receipts. It is estimated that total public debt, which in 1986 was equivalent to about 80% of GDP, was 29% of GDP by the end of 1992.¹⁹ Debt reduction became an important use for Chile's privatization receipts beginning in 1987 (Hachette and Lüders, 1992). The receipts from Argentina's initial round of privatization operations (1989/90) involved direct reduction of foreign debt, as a considerable part of the payment was made in promissory notes bought on the secondary market.²⁰ Much of the country's

receipts in the second round of privatization initially went to finance general expenditure, but with a fiscal surplus in 1992 more funds were being earmarked for reduction of public debt.

It is usually not easy to determine whether privatization has acted as a direct substitute for taxation. However, in Chile it is very likely that privatization financed the military government's fiscal reforms of 1984 and 1988, which sharply lowered direct and indirect taxes.²¹

c) *Investment constraints on public enterprises*

The fiscal crisis during the 1980s was seen as a serious obstacle to new investment in public firms and social infrastructure. As noted earlier, when the crisis broke, it was an easy matter to postpone the investments of PEs, and this was in fact done, in order to improve short-term financial balances (table 2). Even profitable public firms became prisoners of the central government's financial crisis. As the decade progressed, the investment lag became intolerable, especially in public services with a higher degree of visibility. As the public sector's debt problem persisted, privatization came to be perceived as a way to ease the public enterprises' growing investment bottleneck. In effect, through privatization a public firm could escape the central government's fiscal restraint and thus have more freedom to invest. Moreover, the receipts from the privatization could potentially allow the State to reinvigorate public social investment, or reduce debt. The investment bottleneck has almost always been used as one of the arguments for privatization, even in countries like Chile where many PEs were relatively efficient and profitable. As mentioned above, Mexico has laid special stress on the need to sell PEs in order to strengthen social investment.

d) *Catalytic effects.*

When an economy is in a deep recession, the public sector is traditionally expected to act in countercyclical fashion and stimulate activity through expansive monetary and/or fiscal policy. However, excessively procyclical public policies in Latin America were a major cause of the crisis; hence, when the crisis hit the region there were few degrees

¹⁸ There was an overall deficit in Brazil in 1991, but that country's privatization operations were paid for almost entirely in domestic public debt instruments. The Argentine privatizations of 1989/1990 were also paid for to a large extent with foreign public debt instruments.

¹⁹ According to the Minister of Finance of Mexico, as quoted in *Latin American Weekly Economic Report* (1992a).

²⁰ The privatization of ENTel and Aerolíneas Argentinas generated only US\$300 million of cash for assets valued at US\$1,500 million. This was due in part to the government's decision to receive payment in foreign bank debt, the nominal sum of which was US\$7 billion (Gerchunoff and Castro, 1992). The retirement of the debt had little effect on fiscal cash flow because the government was in a moratorium (Altimir and Devlin, 1992).

²¹ Some have characterized these reforms as regressive (Marfan, 1984).

TABLE 5

Latin America: fiscal balances for five countries^a
(Percentages of GDP)

	1983	1984	1985	1986	1987	1988	1989	1990	1991
	<i>Chile</i>								
Current savings	-0.5	0.3	3.6	4.8	5.3	8.0	7.0	5.6	5.5
Total balance	-3.5	-4.6	-2.9	-2.0	2.6	3.9	5.5	1.5	1.7
	<i>Mexico</i>								
Current savings	-2.8	-2.1	-3.4	-9.9	-12.2	-9.8	-5.7	-2.0	0.8
Total balance	-8.1	-7.1	-8.0	-14.5	-14.4	-9.7	-5.1	-2.9	3.4
	<i>Argentina</i>								
Current savings	...	...	-1.9	-0.5	-1.7	-3.5	-1.6	-2.9	-1.6
Total balance	...	...	-5.4	-4.1	-6.7	-8.6	-4.8	-5.1	-2.2
	<i>Brazil</i>								
Current savings	-1.4	-2.8	-8.1	-7.1	-6.1	-12.6	-20.1	-10.1	-10.0
Total balance	...	...	...	...	...	...	...	...	...
	<i>Venezuela</i>								
Current savings	...	...	...	...	8.1	4.0	10.4	12.6	10.7
Total balance	...	...	...	...	-4.4	-8.6	-1.1	0.2	1.2

Source: ECLAC, *Economic Survey of Latin America and the Caribbean*, various numbers and Centre for Economic and Social Development Studies (CEDES), Buenos Aires.

^a Consolidated public sector.

of freedom for stimulative public action. Moreover, the new paradigm in the region discouraged public activism. In these circumstances privatization could be interpreted as an unconventional form of economic "pump priming".

A severe crisis, coupled with the uncertainty generated by a shift to a new economic model and radically different domestic relative prices, can cause the private sector to initially boycott its own domestic economy, by refusing to repatriate flight capital and by withholding taxes and investment. This obviously aggravates the fiscal problem and also is not a very healthy situation for a strategy in which the private sector is supposed to be the primary engine of economic growth. Privatization seems to have been viewed as a last resort to "stir the pot" and break the stalemate. As mentioned above, privatization can generate extraordinary receipts for the government which help it to close the fiscal gap. While fiscal balancing through privatization can be only a temporary strategy, it does buy time until more permanent financing can be found. Moreover, since the domestic private sector will purchase State assets by repatriating capital and foreign participants will bring their own dollars, a significant part of the privatization

receipts should be in foreign exchange. This will have the double-barreled impact of closing the fiscal gap and anchoring the exchange rate, both of which can be conducive to short-term price stabilization and better expectations.

It is also perceived that privatization can raise the private sector's disposition to save and invest. This is because it is usually less risky to buy existing firms than to invest in a start-up operation. Moreover, public firms often provide greater and more accurate information than can be found in other sectors of the economy. Another consideration is that many PEs, but especially those that provide public services in monopolistic or quasi-monopolistic markets, are inherently attractive low-risk and cash-rich operations in which shareholders can more easily appropriate a significant part of any efficiency gains. Finally, in a crisis environment the investment activity of highly visible privatized firms—even if not additive—could conceivably create positive externalities and help turn around the private sector's expectations.

Privatizations can also broaden and deepen moribund stock markets, give rise to windfall profits (especially when the firms involved are undervalued),

and generate new wealth and more optimistic expectations. This, coupled with the externalities of reinvigorated privatized firms and relaxed external constraints, can contribute to a recovery in the rate of domestic economic activity. More growth, in turn, will naturally boost fiscal revenue and also provide a better environment for fiscal reforms; consequently, privatization receipts can be gradually replaced with more stable sources of revenue.

Isolating and measuring all the catalytic effects of privatization operations is clearly an impossible task. Nevertheless, there are some judgements which point to probable catalytic effects of privatization. For instance, the World Bank has judged that the massive return of flight capital and influx of foreign portfolio investment in Mexico in 1989-1991 is largely a derivative of that country's privatization programme (Tandon, 1992). Mexico's stock market, one of the fastest growing in the world, has been stimulated by the privatization of PEs, particularly that of Telmex, which accounts for more than a quarter of the market's index (Ruprah, 1990a). Indeed, it has been commented that recent stock market developments have given rise to a whole new set of entrepreneurs.²² The investment activity of privatized firms, for example in the telecommunications, air transport and finance sectors, has also generated much publicity and international interest, perhaps contributing to the growing optimism in that country (Ruprah, 1990a and 1992b). Likewise, the second selloff of the residual shares of Argentina's ENTel also stimulated a boom in that country's stock market (Gerchunoff and Castro, 1992).

In Chile, Hachette and Lüders (1992) controversially attribute several catalytic effects to the second round of privatizations in that country, pointing to the fact that during that period, private savings and investment levels, although relatively low, rose quite sharply. According to these authors, this may have reflected the higher marginal rate of return on investment in privatized firms. The privatization process is also judged to have broadened, deepened and stimulated the stock market,

creating a dynamic new source of private wealth in Chile.

e) Pacifying foreign creditors

Privatization processes are strongly "encouraged" by the international financial community. A programme of this type could therefore enhance external economic relations, especially with the IMF, the World Bank and commercial lenders.

This consideration was probably important in Argentina's decision to initiate privatization in 1989, when there was a perceived need to pacify the commercial banks. In early 1988 the country had fallen into a moratorium, which was relaxed only marginally in 1989 by the initiation of partial debt service payments. A stoppage of payments traditionally raises tensions with foreign creditors, and indeed in early 1989 the banks were becoming more aggressive in their dealings with countries in a moratorium, as manifested by Citibank's "set-off" of some official deposits of Ecuador, another country which was limiting its debt service payments just like Argentina (Altimir and Devlin, 1992).

A privatization programme like Argentina's, which makes foreign debt paper an eligible means of payment, creates attractive options for the banks, especially the big lenders making up the Advisory Committees that are in charge of debt renegotiations. On the one hand, the banks gain by the rise in the secondary market price resulting from the increased demand for debt paper (in the case of Argentina, that price rose by some 50% during the finalization of the first round of privatizations). In these circumstances, banks can sell off their bad loans at a smaller loss and also gain commissions if they are contracted to secure paper for third parties interested in participating in the privatizations. On the other hand, a bank can avoid a loss on its own loan portfolio by capitalizing it through the purchase of a PE. It is no surprise, therefore, that some very large banks on Argentina's Advisory Committee were attracted by the sale of ENTel, and ultimately two of the country's major lenders, Citibank and Morgan Guaranty, actually bought major share holdings in the newly privatized company (Gerchunoff and Castro, 1992).

²² See Moffett, 1992.

IV

Improving the social benefits of privatization

Latin America had a very difficult ten years of structural adjustment and stabilization efforts in the 1980s, coupled with delicate transitions to democracy. Substantial progress has been made on all fronts. Indeed, in the early 1990s cautious optimism has arisen about the region's future prospects: Chile seems to have fully turned the corner towards economic recovery,²³ Mexico could be following a similar path, and a number of other countries are to different degrees consolidating their adjustment and transformation processes (ECLAC, 1991). The slow recovery from the crisis of 1982 has been socially very costly, however, as there are signs that income distribution and social equity have deteriorated sharply in many of the countries, most of which were already noted for their serious inequalities of income and opportunities (ECLAC, 1992a).

The deteriorated social matrix can be judged worrisome not only on normative grounds, but also in more concrete respects. On the one hand, the sustainability of the recovery will require social stability, and this in turn requires improvements in social equity. On the other, many dimensions of social equity are functional—indeed vital—to the construction of the modern institutional and human capital needed to transform the region's economies into truly internationally competitive enterprises (ECLAC, 1990 and 1992a). The recent serious political problems in Venezuela, Haiti, Brazil and Peru have focussed international attention on the social plight of the region and contributed to a surge in international concern about the effects of adjustment on social equity. The new focus certainly vindicates some analytical pioneers who argued a number of years ago that adjustment policies needed a more human face (Cornia, Jolly and Stewart, 1988).

The region's privatization processes are an integral part of the adjustment efforts. However, evaluating the effects of privatization is difficult because of, among other things, the large number of tradeoffs that

must be considered, the excessively broad nature of the relevant counterfactuals, and the difficulty in accounting for the externalities that many attribute to the process. But even more importantly, the privatization experience in developing countries is still relatively immature, even for pioneers like Chile; hence it will be a number of years before we really know all the resulting social benefits—and costs—of the region's decision to privatize.

Notwithstanding the above, the World Bank (Galal *et. al.*, 1992) has attempted to grapple with some of these difficult problems. In a study of nine divestiture (privatization) operations in three developing countries, it found that eight of them improved global welfare. Thus, to its own question "did divestiture make the world a better place or not?", the Bank answers with a "resounding yes".

Needless to say, studies such as that carried out by the Bank involve numerous subjective judgements which many reasonable people could disagree with. But one conclusion can be drawn from the study without much debate: whatever the social gains from the region's divestitures have been and will be, they can undoubtedly be improved upon in future exercises.

In effect, divestiture processes have been conditioned by multiple objectives but, as has often been the case in questions of adjustment, social equity has not always carried much weight. This is unfortunate, because the tradeoff between social equity and other objectives can be relatively small, and indeed important complementarities would seem to exist. There are many ways that social equity can be enhanced in privatization exercises. While space is too limited for a comprehensive review, five key areas worth consideration are outlined below.

1. Transparency

Transparency improves social welfare because it reduces possibilities for corruption, collusion and the misuse of inside information, all of which permit privileged gains from the sale of public assets. It can

²³ Standard & Poor have just given Chile a BBB investment rating.

also be complementary with many other objectives. Since transparency opens the process to more public scrutiny, errors can be checked more easily and fairer evaluations can be made as to whether the government's stated objectives—regarding the privatization process as well as its end product—are being reasonably fulfilled. The closer results are to objectives, the more likely it is that privatization will have a "happy ending" for the firms, the government, and the general public, which in turn reduces the risk of policy backlash. Transparency also enhances the efficiency of the "learning by doing" process which is an inevitable part of any government's privatization programme. An enhanced flow of information will obviously also contribute to overall market efficiency and price maximization.

Transparency can also enhance the government's credibility and have catalytic effects, especially when past governments have had a reputation for corruption or cronyism. It is also consistent with the objective of democratization and broader participation in economic matters and in society more generally.

Of course, transparency trades off with the speed of the privatization process. This could be an important consideration, since some analysts have given top priority to this latter objective; as one highly regarded economist once commented: "privatization should be implemented with less concern about the correct way to do it and more emphasis on getting it done quickly" (Woodrow Wilson Center, 1991). However, most of the objectives that commonly drive privatization processes are not necessarily enhanced by speed; indeed many of them, such as productive and allocative efficiency, credibility, government revenue, catalytic effects, etc., to say nothing of social equity, can be seriously compromised by a hasty privatization process.

Most governments in the region have confronted very heavy external, and sometimes internal, pressure to greatly accelerate their privatization processes. It is encouraging that some have been able to resist such pressures, while at the same time proceeding in a deliberate fashion with their objective of privatizing PEs.

The conflicting pressures that governments face are captured in the remarks of a person who was formerly in charge of privatization efforts in Brazil, a country with one of the more transparent programmes: "...one can always choose urgency, make bad shareholder decisions, leave significant debts

pending, reduce the minimum price, etc. These, however, are not good recipes for a successful privatization programme. Indeed, they are detrimental to the principles of openness and transparency, as well as to the public wealth (represented by the assets being sold off). We chose to go about things carefully. Right from the start, we knew that this would result in us having to pay a political price: the ever alert critics, those who are not committed to openness, and even analysts who have good will, yet suffer from academic ingenuousness, would condemn the supposed sluggishness of the process. I do not have the slightest doubt, however, that we made the correct choice" (Marco Modiano, 1992).

While more transparency may be feasible, there is at least one area where the tradeoffs can be exceptionally great: fiscal urgency (earlier termed the "Pan Am" effect). Social welfare demands that a country with a highly destabilizing fiscal gap must close it as soon as possible, and a rapid privatization process could conceivably be the only way to do that. However, experience has shown that rapid processes can be prone to very serious errors (Hachette and Lüders, 1992; Gerchunoff and Castro, 1992); indeed, emerging problems such as corruption, undervaluation, etc. could conceivably neutralize the positive effects of financing the fiscal gap. But the mentioned tradeoff is nevertheless very real and is frequently a challenge for the region's policy makers.

In the face of fiscal urgency, one possible alternative to a rapid privatization process is a non-confrontational moratorium on foreign debt payments. However this is a tricky strategy in which only a few countries have been successful (Altimir and Devlin, 1992). A better public solution would be to strengthen the resource base of the World Bank, IMF and IDB, for this would enable the multilateral organizations to provide more direct compensatory budgetary support to governments formally committed to extensive privatization processes. As is true with the adjustment problem in general, adequate compensatory financing will allow a borrower to design a more deliberate, transparent, efficient and socially equitable privatization programme. This should also be of interest to the multilateral lenders, because more efficient and equitable programmes will clearly enhance their borrowers' creditworthiness.

What actions could improve transparency? The potential list is long, but a few key policies can be mentioned:

i) *Information*. Reserved documentation should be the exception rather than the rule. While a limited amount of reserved information may be justified during negotiations for the sale of PEs, the public should have easy access to all the information after the transaction is completed, including the preparations for the sale of the firm (debt absorption, labour relations, capital restructuring, etc.), reports on its valuation and on the preselection and selection processes, administrative and promotional costs, and details of the buyers and their financing of the purchase.

ii) *Subsidies*. If sales require subsidies, these should not be hidden in preferential prices and credit terms. Rather, subsidies should be awarded in such a way that they are explicit and easily accountable to the public (e.g., rebates which must be applied for *after* the firm has been purchased at an unsubsidized price). This is an important consideration because a double standard has tended to emerge during the period of privatizations: proponents of structural adjustment rankle at hidden subsidies in the social area but turn a blind eye to subsidies hidden in underpriced asset sales and below-market credit terms.

iii) *Earmarking of sale receipts*. These should be deposited in a special account (Mexico has done this). While earmarking is often frowned upon in public finance, it is justified here by the extraordinary nature of the income.

iv) *Ex-post evaluation*. An independent official technical agency (as opposed to a merely formal legal entity) should be responsible for ex-post evaluations of individual privatization operations, on the basis of *ex-ante* agreed criteria formulated jointly by the Congress and the Executive branch.

v) *Rules on disclosure*. Privatized firms should sometimes be subject to certain special disclosure rules which facilitate access to the types of information needed for effective *ex-post* evaluation of the results of privatization.

vi) *Conflicts of interest*. An explicit code of conduct should be adopted for government officials and subcontracted technicians involved in the decision to privatize and the process itself. For instance, central government employees involved in privatization operations could be prohibited from working in privatized firms for a given period, e.g., five years. Also, such government employees (including executives of the firms to be privatized) could be prohibited from owning shares in privatized enterprises for a stipulated period.

2. Price maximization

It must be remembered that the government's revenues are a key determinant in the welfare gains from privatization (Jones, Tandon and Vogelsang, 1990). Thus, when public assets are for sale, prices must be maximized as much as possible. Price maximization is important because it eliminates hidden subsidies for privileged buyers and keeps public wealth in the public domain where it can be used for consensual public purposes. Unfortunately there is some evidence that privatization processes suffer from a tendency to seriously underprice the State's assets (Vickers and Yarrow, 1988; Seth, 1989; Marcel, 1989; Errázuriz and Weinstein, 1986; Herrera, 1991; Gerchunoff and Coloma, 1992). Another possible indicator of underpricing can be indirectly inferred from the aforementioned World Bank study (Galal *et al.*, 1992): of the total of four countries studied, only in Malaysia—a very cautious privatizer—was the government consistently a bigger winner in the privatization operations than the new private shareholders.

The price maximization strategy is conditioned by some important tradeoffs between these and other factors, as mentioned further on. Some central considerations for maximization are presented below.

i) When selling a firm, the price does not depend on its value to the public sector, but rather its alternative value as private property. Thus, the point of reference for price maximization should be an estimate of the firm's value to the private sector. This will usually be higher than the value of the firm for the public sector, due to efficiency differentials, synergies, opportunities for diversification, etc.

ii) The following sequence should be followed as far as possible: privatization should come near the end of the adjustment process, that is to say, after liberalization, correction of relative prices, settling down of interest rates to their long-term values, introduction of legal frameworks governing property, labour and market behaviour, and after economic recovery has already begun. In this way, the real value of the firm will be more apparent, private sector risk premiums will be less distorted, and the privatized firm itself will be more likely to be successful. Privatization should initially focus as much as possible on the tradeable goods sector—where learning by doing can have lower costs—and only later progress to any big public service firms which may be

earmarked for privatization.²⁴ Saving enterprises in the non-tradeables sector for the later stages is also useful because their sale will thus coincide with a period when exchange rates are probably appreciating with respect to the levels registered during periods of adjustment and thereby raising the relative value of the types of services they produce.

iii) Public firms, but especially large ones, should be restructured before sale, introducing reforms that are reasonably feasible and that enhance efficiency and profitability (Martín del Campo and Winkler, 1992). This will make the value of the firm more visible to the private sector and also raise the bargaining power of the seller, because it is easier to hold out for a higher price when a firm is commercially viable. Even when no reforms of the PEs are feasible, official valuation exercises should not necessarily be based on the firm's value "as is", since at least some of the private sector's reforms can be easily anticipated. Moreover, "normal" market discount rates should be used when valuing firms. In this way, the costs of undertaking a sale when private discount rates are distorted and unusually high become clear to the public. This approach moreover could raise political pressure for more optimal preparation, sequencing and pricing of sales.

iv) Firms should be sold to the highest bidder, minimizing as much as possible considerations that go beyond objective efficiency. Efforts should be made to attract as many bidders as possible: sometimes this may point to the desirability of encouraging foreign participation by such means as placement of shares on international stock and American Depository Receipt (ADR) markets. Sales on preferential terms should be avoided: as mentioned earlier, if subsidies are deemed necessary, they should be given directly and explicitly, separately from the sale transaction itself.

v) Since fixing the correct price is often a process of trial and error, there can be an advantage in selling shares in small packages that are timed to avoid market saturation and capture the best price. Beginning a privatization operation with the sale of a controlling package has been shown to maximize receipts in a number of cases; in effect, the transfer of control to a good operator, and/or favourable evolution of the

economy, can raise the value of the firm and allow the government to share in the gains through a later contingent sale of its residual share holdings.²⁵ Mexico's pursuit of this strategy was rather clever: it involved prior restructuring of TELMEX's capital so that voting control could be had for as little as 21% of the company's total shares; this raised the number of financially eligible bidders and later helped maximize the price of the government's contingent selloff of residual shares.

vi) Payment should be demanded in cash. Payment in debt paper has several disadvantages. First, it erodes transparency, since it is hard to determine the real value of the debt instrument. Second, payment in foreign debt can narrow the competitive base of bidding, since some potential bidders will not have easy access to the secondary market, while others (especially banks) will have exceptionally good access. Third, if reduction of foreign debt is an important goal, it would seem more efficient to follow Mexico's example: accept only cash sales and use the receipts to negotiate a concerted Brady deal and/or discreetly withdraw debt paper from the secondary market in such a way that it puts minimum pressure on prices. Fourth, as far as pacifying banks irritated by arrears is concerned, the need to do so on a grand scale may be exaggerated, as the banks have shown only limited ability to retaliate beyond the starting of a manageable brush fire (Altimir and Devlin, 1992).

vii) The State can retain a special "golden" share in a privatized firm, designed to entitle it to share in profits if, in the future, the yield of the enterprise exceeds some mutually agreed level. The "golden" share is a contingency formula which obliges both parties to share in the risk of privatization. This could be a useful strategy when a PE must be sold in adverse market conditions. This option could initially depress the sale price, but it would at the same time enhance the probability of a happy ending for the firm and recovery of the property's value for the State at a later date.

As already mentioned, price maximization must trade off with other objectives. However, once again the tradeoffs do not always have to be large and indeed one can find complementarities.

²⁴ Mexico, but especially Chile in the period 1985-89, followed this sequence (Martín del Campo and Winkler, 1992). Brazil has so far also been broadly following this path.

²⁵ This strategy has worked in Argentina and Mexico (Gerchunoff and Castro, 1992; Ruprah, 1990a).

There can obviously be a serious tradeoff between price and efficiency. The highest bidder is not always the most efficient operator (in a dynamic sense, which includes the operator's propensity to invest). Moreover, a higher price will be fetched for a firm with effective monopoly power than for one facing effective competition or external regulation. In sum, it is reasonable to condition price by dynamic internal and allocative efficiency criteria, since efficiency is the other major missing ingredient in Latin America's needed economic transformation (ECLAC, 1992a).

Price is often sacrificed for a specially targeted distribution of shares. Two prevalent target groups have been small investors (popular capitalism) and workers (labour capitalism). The former are ostensibly targeted to democratize capitalism and improve the efficiency of markets. The latter are targeted ostensibly to enhance productivity.

Popular capitalism, at least as sometimes practiced in the region,²⁶ raises legitimate questions about whether the implicit price subsidy is, socially speaking, really worth it. First, unless there is a virtual giveaway of the public firm to every citizen, there is reason to suspect that in a poor developing country the so-called popular capitalism will not be so popular.²⁷

Second, one of the technical justifications for promoting popular capitalism—discouraging market-efficient takeover threats—is weakened when the main motive for share participation is not risk-adjusted future

returns but rather exploitation of an easy and almost guaranteed rent.²⁸ On the one hand, the rent seekers have less incentive to be well-informed shareholders, making them prone to herd behaviour and exit.²⁹ On the other, uninformed and dispersed shareholders create favourable conditions for the emergence of an organized group that may take entrenched control of the firm; moreover, the group may well pay a price that is lower than if control had been sold by open bid at the time of privatization.³⁰ It should also be mentioned that the debate over whether concentrated or dispersed ownership is more effective for international competitiveness is by no means resolved (especially in the context of a developing country) (Akyuz, 1992; Welch, 1992), thus making popular capitalism something of an act of faith.

Third, if monetary incentives are deemed necessary to promote capitalist values (of course there may be better ways), it is more transparent and equitable to sell the shares at the highest possible price and offer the possibility of applying for clearly identifiable rebates that make the subsidy explicit and accountable to the general public. Of course, none of these considerations apply if popular capitalism is really a ploy to gain political or ideological advantages; in that case, the hidden subsidy may be a quite effective, albeit cynical, tool.³¹

Privatization operations have often transferred shares to the firm's workers on preferential terms. Chile probably has the region's most extensive experience in this area, but the strategy has appeared on

²⁶A number of countries in the region have engaged in preferential distributions, but Chile has clearly been the main practitioner of this strategy. During the military regime preferential sales to the general public and public sector workers (including the Armed Forces) created some 120,000 popular capitalists (Sáez, 1991).

²⁷Our examination of the home addresses of 46,000 popular capitalists in one of the largest Chilean privatization operations (the sale of the ENDESA electricity firm) suggests that it is extremely likely that there was disproportionate participation by upper income groups. This conclusion is based on the distribution of popular capitalists in the different municipalities of Santiago, a highly socially-stratified city with 40% of the country's population. About 45% of the shares sold to the popular capitalists (at a preferential price and with subsidized credit) were purchased by residents of this city. Of that amount, slightly more than 50% were bought by residents of four municipalities where nearly 70% of the households are in the top two income distribution deciles. (The primary data on popular capitalism came from CORFO, while data on income distribution were provided by Arturo León, of ECLAC's Statistics and Projections Division).

²⁸Regarding the preferential sales of ENDESA shares, the official brochure distributed to public employees stressed that "the offer involves no cost to the workers" (CORFO, 1988).

²⁹There are signs of erosion of the small shareholders' base in Chile's privatized firms; for example, ENDESA's small shareholders declined by 11% between 1989 and 1991.

³⁰In 1989, the holding company ENERSIS was set up and gained control of ENDESA with 12% of the company's total shares. The price paid was quite attractive, since share prices were relatively depressed at the time of the purchase. See Sáez, 1991.

³¹In Chile, the authorities also viewed popular capitalism as a way to discourage renationalization (Hachette and Lüders, 1992) and perhaps gain an advantage in the upcoming 1989 plebiscite. Popular capitalism in England also apparently had political objectives (Vickers and Yarrow, 1988).

a lesser scale in most other countries as well.³² The technical logic behind labour capitalism would seem to make most sense only if the workers gain a large enough block of shares to hold and sustain representation on the board of directors of the privatized firm. But in this case, since workers possess "inside" information about the firm, there would obviously be little reason to subsidize the price of their shares and credit. On the other hand, if workers receive subsidized shares without board representation, they could conceivably suffer in the medium term as short-term capital gains could erode a trade union's discipline and effectiveness as a collective bargaining tool.³³

The preferential distribution of shares to workers in the region has usually not been large enough to give them sustained representation on the board of directors. In reality, the underlying motive of the offer usually seems to have been the reduction of labour's resistance to privatization: a strategy which has tended to work quite well. However, if the main purpose of a subsidized share distribution is to co-opt workers, a more efficient alternative might be to simply link the privatization to the establishment of a profit-sharing arrangement for them, thereby reserving the sale of shares for the highest bidders. This approach could improve the net sale proceeds for the State, as it avoids the lower sale price deriving from the subsidy given on the shares distributed to workers and the uncertainty that prospective shareholders might feel regarding the future role of workers in the

management of the firm. Moreover, a profit-sharing programme could have larger spread effects in the local economy than a special subsidized sale of shares to workers of certain public enterprises. In effect, it establishes a precedent that other private firms can more plausibly be encouraged to imitate, which in turn opens up prospects of institutionalizing profit-sharing for all workers in the productive sector of the economy. Finally, as an incentive to productivity, profit-sharing for risk-shy workers may be better than a gratuitous distribution of shares because it avoids the problems of worker morale that can arise from unfavourable fluctuations in the region's still thin and volatile domestic stock markets.

The objective of price maximization could also conceivably trade off with a subsidy for capitalists, designed to serve as a catalyst for private sector investment and growth. While this particular tradeoff finds some support in certain technical circles, the awarding of rents to a select group of domestic capitalists in order to stimulate the overall economy's animal spirits is certainly a controversial hypothesis that is difficult to test. If subsidies are deemed necessary it is clearly more efficient and equitable to grant them directly in the form of a tax credit or other publicly accountable instrument. In any event, the externalities derived from hidden subsidies in a privatization operation are probably exaggerated and far less important than those emerging from sound overall public macroeconomic and social reform programmes (which can be aided by a share price maximization strategy), astute international bargaining and fortuitous exogenous events.³⁴

A price maximization strategy should also be compatible with the objective of projecting political credibility. Once again, a conflict could arise most easily in cases of great fiscal urgency. This is yet another reason why greater transitory direct compensatory budgetary support should be forthcoming from the international financial agencies.

³² In Chile at least 15 privatization operations offered shares to workers on preferential terms. Although the amounts of shares varied, the general pattern was that a few small firms (e.g., subsidiaries of ENDESA) were sold entirely to workers, while employees of large privatized firms were given small blocks of shares ranging from 6-10%. Major exceptions were CAP, where workers secured more than 30% of the shares in a highly controversial transaction (Errázuriz, Fortunati and Bustamante, 1989), IANSA (21%), and LAN Chile (15%). In a few privatization operations workers joined together of their own initiative to borrow resources in financial markets and purchase additional shares. However, even in cases where workers nominally gained a large block of shares it is difficult to ascertain to what degree they participated in decision-making, because shares often came to be managed by investment trusts. In Mexico, workers have also occasionally participated in sales: for example, they were sold 4% of TELMEX, in the country's largest privatization operation. In the case of Aeroméxico, the pilots' union secured 35% of the firm (Ruprah, 1992b). In Argentina, 10% of a privatized firm's shares are frequently earmarked for workers.

³³ My thanks are due to Hernán Gutiérrez for this latter observation.

³⁴ Privatization operations do not seem to have been the decisive factors in economic recoveries. In Mexico, the decisive factor appears to have been the announcement of the North American Free Trade Zone, coupled with a coherent and tough adjustment/stabilization programme (of which privatization was a part). In Chile, the recovery was underway before privatization began. This, coupled with a depreciating exchange rate, could be the principal reason behind rising private savings and investment. Recovery in Venezuela, for its part, was set off by the favourable effects of the Gulf War on the petroleum sector, coupled with a draconian adjustment programme.

3. Assignment of privatization receipts to a social development trust fund

If there were absolutely no alternative role for the State, the outcome of a privatization process would be a proportionate shrinking of the public sector. However, even if one were to make the extreme assumption that there is no future direct role for the State in productive activities,³⁵ there would still be a serious need to strengthen public goods in the social area. Indeed, after ten years of regressive adjustment in the region, most would concede that the social sector (including public infrastructure) is one area where the State should focus its future efforts. While in some instances support for social development could be provided by imaginative private initiatives, there is often no satisfactory alternative to public action.

In the social area it is not always easy to distinguish conceptually between current and capital outlays. Nevertheless, from an accounting standpoint, recurrent social expenditure has suffered most during the crisis, and in relative terms it is here that financial support is most urgently needed in the years ahead (ECLAC, 1992c). Thus, in addition to earmarking privatization receipts for a special account, it might be helpful to further earmark all, or at least a significant part, of the income for a national social development trust fund. This type of policy would establish a permanent and flexible base for increased social expenditure on either the current or capital account.³⁶ Of course, earmarking might be hard to accomplish when there is a general situation of fiscal urgency, but on the other hand, if authorities were legally required to earmark their extraordinary income for social expenditure, this could serve as a political tool to focus attention on other ways to balance budgets, e.g., tax reforms, cuts in excessive military expenditures, or more aggressive debt renegotiation strategies.

³⁵Of course, in practice, there probably is a future role for State enterprises due to the infant industry argument, considerations about strategic macroeconomic management, regulatory requirements for firm-level information in oligopolistic public service sectors; public choice, etc. Indeed, as Lahera (1992) has commented, there should be a flexible conceptualization of State participation in the economy. If the State's entrance into economic activity is easy and its exit difficult, there are probabilities of eventual inefficiencies and rents. On the other hand, if entrance is impossible and exit easy, the activity of the State will not always be compatible with development.

³⁶My thanks are due to Martine Guerguil for sharing with me her idea about a trust fund.

4. Fair compensation for PE employees

As an alternative to a strategy of layoffs followed by new hiring, greater efforts could be made to exploit possibilities of retraining and redeploying labour within the firm. Shares with representation on the board of directors, or profit-sharing, could be exchanged for concessions on wages. When systematic layoffs are necessary in privatization programmes, indemnification is simply not enough.³⁷ Cash payments can easily be squandered; hence, the workers affected need counselling, retraining, relocation assistance and follow-up monitoring of their reintegration into the market. Since redundant employment in State firms is a "public problem", it would seem appropriate to finance retraining, counselling and indemnifications with special solidarity taxes or soft loans from international development banks, which incidentally have historically been major creditors of many PEs.³⁸

³⁷Information on the fate of workers is an area of analysis that needs much more attention. Mexico's latter rounds of privatization operations were characterized by the official objective of avoiding layoffs; for instance, in the privatization of TELMEX, with 49,000 workers, there were no dismissals. This was due in part to the workers' acceptance of changes in labour contracts and the government's decision to establish a retraining facility within the firm for employees displaced by new technology. On the other hand, the peaceful tone of industrial relations was also influenced by demonstration effects: in 1988, as a prelude to privatizing Aeroméxico, the government confronted a striking union by suddenly declaring the firm bankrupt. The workforce dropped overnight from 12,000 employees to less than 4,000 (Ruprah, 1992b). Moreover, Mexican unions claim that 100,000 workers have lost their jobs either through direct privatization or through rationalization of State agencies (*Latin American Weekly Report*, 1992b). In Chile, privatization operations were not generally associated with massive layoffs; indeed employment in many firms expanded. However, the workforce of public enterprises had already been drastically reduced in earlier public enterprise reforms; by 1986 the labour force in major public enterprises was 40% less than it had been in 1974 (Sáez, 1991). In Argentina, although there has been a layoff of workers as part of the preparation for the privatization of a steel complex, the general strategy has been to cancel labour contracts and let workers renegotiate them with the privatized firms. The outcome of this process should be studied in order to ascertain how workers have fared in their new contractual limbo.

³⁸The World Bank has financed indemnification payments in some countries.

5. Effective regulation

From the standpoint of social welfare, a key assumption of successful privatization is that firms can be regulated externally by the public sector as well as or better than when they were under direct public ownership. However, the transfer of ownership creates new types of problems that must be surmounted.

It is often argued that liberalization of trade is sufficient to regulate tradeable goods sectors and ensure reasonable internal efficiency. However, this may be only partly true in a developing country, as there will be lags and remaining obstacles to price competition on account of, among other things, the small size of many markets, which creates price inelasticities; the upfront costs of establishing distribution networks; exclusive dealership arrangements; collusion; and the considerable transport costs in South America. Thus there will be a need for new domestic institutional and legal structures to promote desirable levels of competition and to control arbitrary pricing strategies, especially in the case of durable goods (technical norms for quality and consumer safety are, of course, also desirable).

As far as large public service firms are concerned, the usual strategy up to now has been to transfer public monopolies into private hands. This is not necessarily a bad decision; in spite of recent arguments which have undermined the strength of the traditional natural monopoly concept, in some sectors there is still legitimate room to debate the effects of deconcentration on allocative efficiency. In effect, a developing country may not want to assume the risk of experimenting with the breaking-up of integrated public service systems.

Notwithstanding the above, the new regulatory frameworks which have emerged in the region's privatization of public service sectors often allow for new entrants, which introduces the assumption of an immediate or future contestable market. However, when the dominant operator in the market is very large, it, rather than the potential new entrant, is the real threat to the market, so that in many cases the practical relevance of contestability as a serious regulatory factor is suspect (Vickers and Yarrow, 1988). Thus, even if a market is contestable in principle, effective direct price/quality regulation of the new privatized industries by public authorities is of paramount importance for allocative efficiency and social equity.

The region's regulatory challenge is a major one, especially in public services. First, effectively regulating powerful monopolies is inherently a difficult and sometimes conflictive task which can test the mettle of even the most zealous regulators and sophisticated government administrations.³⁹ Second, the speed with which regulatory systems have emerged in Latin America suggests that flaws are likely to be discovered in them after privatization, and when these are serious, countries will have to find ways to correct them without disrupting investment or the stock markets, where privatized public service firms usually carry much weight. Third, regulatory systems must also be flexible in face of the fast changing technological developments in some public service sectors. Fourth, regulators may also have to be international diplomats, as many new owners of public service firms are foreign enterprises and many of the latter are owned by foreign governments.

The signs are that the region's regulatory capacity is lagging far behind the speed of its privatization processes. The problem is not so much the lack of formal systems—they are often quite sophisticated and imaginative, as in the case of the Chilean electricity sector (Banlot, 1993)—but rather that they are emerging with little or no track record and apparently weak or non-existent enforcement systems.⁴⁰ The problem is aggravated by the fact that, in order to attract buyers and finance their investment commitments, scales of charges were often subjected to prior adjustments which were extremely generous to the privatized firms.⁴¹

When regulatory frameworks are permissive, this could mean that the authorities have decided to trade off the improved internal efficiency of a privatized firm against a potential deterioration in allocative efficiency, wagering implicitly that the loss of static

³⁹This has been shown by the experience with companies like British Telecom, British Gas, etc. (*The Economist*, 1992).

⁴⁰For the cases of Mexico and Argentina see Ruprah (1990a and 1992b) and Gerchunoff and Castro (1992), respectively. The Chilean systems have a track record, since they were first established in the early 1980s; even so, there has been much confusion in the interpretation and enforcement of the different systems.

⁴¹See Gerchunoff and Castro (1992) and Ruprah (1990a). In Chile, rates underwent severe adjustment well before privatization. It should be mentioned that the investment constraint argument in respect of privatization is weakened when the main source of finance for new investment is government-authorized increases in the scales of charges.

allocative efficiency and social equity will be more than compensated by the catalytic effects of the enhanced profitability of capital in the privatized sector. Unfortunately, from the standpoint of equity this could be another version of the "trickledown" approach to development that tended to dominate thinking in the 1980s. Moreover, it assumes that the tradeable goods sector can prosper even with potentially significant distortions in the relative prices of important domestic public services.

Key ingredients for success in regulation include the following:

i) Regulatory systems should be set up well before the privatization of a public service firm (Paredes, 1992) so that a track record can be established and some of the worst operational problems can possibly be ironed out while the firm is still State property. At the very least, it would be wise to avoid the simultaneous privatization of several public service sectors which still have "virgin" regulatory systems.

ii) Regulatory systems should be based on straightforward, impersonal rules that are clearly defined, technically consistent with the administrative skills of the country's prospective regulators, and comprehensible not only to shareholders and management, but also to consumers; sophisticated regulatory systems which may offer a great deal of theoretical satisfaction may in practice create more regulatory problems than solutions.

iii) Regulatory systems in developing countries must be designed to take into account dynamic and not just static efficiency.

iv) Regulatory bodies should be independent public entities whose board appointments should be staggered so as not to coincide with political cycles.

v) Regulatory personnel should be technically qualified, very well paid relative to the industry that is being regulated, and prohibited from working in the regulated industry for a specified period after their appointments are terminated.

vi) The regulatory board should have fluid channels of communication with its relevant industry, but at the same time it should always have the last word on regulatory decisions.

vii) A special legal framework should be established to settle disputes between firms and the regulators.

viii) The regulator must have a clear, practical, and increasingly severe set of sanctions at its disposal in case of a firm's non-compliance.

ix) Reviews of the regulatory framework for public service sectors should be spread out over an extended period so as to avoid the bunching of review sessions; in this way potential disputes could be less damaging to overall economic confidence.⁴²

It is often overlooked that an essential public service can never be fully privatized, because the operator of last resort will always be the public sector. To avoid the moral hazard that could affect private owners, the State should probably consider regulating privatized firms more comprehensively than is traditionally the case, including their debt accumulation, dividend policy, diversification and investment. An alternative would be to forego more comprehensive regulation but charge the privatized firm a risk premium for "public insurance" covering the contingent costs of State intervention should the firm enter into a critical operating condition. The moral hazard problem could be more volatile in regulatory frameworks that copy England's RPI-X formula,⁴³ because unexpected shocks arising from bad management decisions and/or exogenous factors cannot be passed on to prices. Finding commercially viable ways to control moral hazard is admittedly a difficult task. However, ignoring the problem could mean seriously underestimating the costs of privatization.

Finally, it could be argued that effective regulation will lower the sale price of PEs, compared with firms granted extensive market power. But perhaps the tradeoff is not all that large, since astute purchasers will surely discount the effects of excessively permissive regulatory frameworks that will very likely be subject to serious adjustments at a later date.

⁴² Long periods between review sessions could, however, create the need for very large adjustments. An alternative worth considering is a continuous review process which induces mini-adjustments, much like a crawling peg exchange rate system.

⁴³ This formula means that regulated prices rise on average by less than the rate of domestic inflation (the Retail Price Index - RPI). This is supposed to be an incentive for innovation and cost reduction. However, there may be little room to absorb shocks such as a failed project, debt refinancing problems, etc. The telecommunications sectors in Argentina and Mexico will be regulated by variants of the RPI-X formula. In the case of Argentina, however, there are adjustments for adverse movements of the exchange rate. See Gerchunoff and Castro (1992) and Ruprah (1990a).

V

CONCLUSIONS

Privatization is now a fact of life in Latin America. Most of the countries' programmes are very ambitious, and there is little sign of the trend slowing down before a large part of the region's PEs have been divested. The theoretical and practical benefits of divestiture in a developing country would seem to be strongest in most conventional tradeable goods sectors, where liberalized markets can be counted on to autonomously perform a large part of the regulatory function (hopefully complemented by anti-monopoly laws and consumer protection norms). In contrast, they are more problematical in sectors involving capital-dense public services, or those which have large externalities for macroeconomic management; in these cases, the impact of divestiture on social welfare will be intimately linked to the ability of governments to administratively regulate the privatized firms on a continuous and effective basis.

Clearly, the poorer a country and the more unsophisticated its public administration, the greater the need for caution in the decision to divest large public service firms.⁴⁴ In any event, only time will tell the degree to which the actual process and end product of divestiture improves social welfare. Whatever the benefits to be had from privatization, however, they can be improved upon if more attention is given to the objective of social equity.

We have focused proposals on five key areas that can raise the social benefits of privatization: greater transparency; more systematic efforts to maximize the sale price; fair compensation for displaced workers; the earmarking of sale receipts for social development, and effective public regulation.

Of course, social equity must trade off with other objectives. However, the tradeoffs with many

of the commonly stated objectives of privatization do not necessarily entail major sacrifices in terms of equity, for many complementarities would seem to exist. In fact, the most threatening tradeoff seems to be fiscal urgency. Thus, it would be helpful if multilateral organizations strengthened, or at least front-loaded, their budgetary support for developing countries willing to initiate a careful and socially equitable divestiture programme. This can be justified on grounds which these organizations readily understand: improved creditworthiness of their borrowers.

In sum, reform of public enterprises through privatization is necessarily a complicated task that must balance real tradeoffs. However, the prime factors in deciding on privatization should be social equity and dynamic efficiency, and these considerations should be traded off for other objectives only reluctantly and in ways which make not only the benefits but also the social costs of the decision explicit to the public. Latecomers in privatization can clearly learn lessons from more advanced programmes on how to improve the net social benefits of the process. Nevertheless, even the best privatization schemes will probably leave some problems that will have to be mopped up by later governments. In view of this, privatization should be seen not so much as an "event" but rather as a "process" in which one can expect that the divestiture of PEs will produce the need for other reforms, especially in the regulatory area. The success of governments in managing this latter transition will also be an important determinant of the net social benefits of privatization.

⁴⁴ Other alternatives might be explored, such as performance contracts for public firms or payment of fees to an experienced private operator who undertakes to pursue publicly outlined objectives.

Bibliography

- Altimir, Oscar and Robert Devlin: (1992), Una reseña de la moratoria de la deuda en América Latina, in Oscar Altimir and Robert Devlin (eds.), *Moratoria de la deuda en América Latina: experiencia de los países*, Mexico City, Fondo de Cultura Económica.
- Akyuz, Yilmaz (1992): Financial Reform and the Development Process, Geneva, United Nations Conference on Trade and Development (UNCTAD).
- Atkinson, Anthony and Stiglitz, Joseph (1980): *Lectures on Public Economics*, New York, McGraw-Hill.
- Banlot, Vivianne (1993): La regulación del sector eléctrico: la experiencia chilena, in Oscar Muñoz (ed.), *Más allá que las privatizaciones: hacia el estado regulador*, Santiago, Chile, Ediciones CIEPLAN.
- Castillo, Mario (1991): Privatizaciones de empresas públicas en Chile: el caso del sector de telecomunicaciones, Santiago, Chile, ECLAC, *mimeo*.
- CORFO (Corporación de Fomento) (1988): *Ponga su futuro en acción*, Santiago, Chile.
- Cornia, Giovanni Andrea, Richard Jolly and Frances Stewart (1988): *Adjustment with a Human Face*, vols. I-II, Oxford, Clarendon Press.
- Devlin, Robert (1989), *Debt and Crisis in Latin America: The Supply Side of the Story*, Princeton, NJ, Princeton University Press.
- ECLAC (1990), *Changing Production Patterns with Social Equity*, Santiago, Chile, United Nations publication, Sales No. E.90.II.G.6
- (1991), *Preliminary Overview of the Latin American and Caribbean Economy, 1991* (LC/G.1696), Santiago, Chile.
- (1992a), *Equity and Changing Production Patterns: an Integrated Approach* (LC/G.1701 (SES.24/3), Santiago, Chile.
- (1992b), *La reestructuración de empresas: el caso de los puertos de América Latina y el Caribe*, "Cuadernos de la CEPAL" series, No. 68, Santiago, Chile. United Nations publication, Sales No. S.92.II.G.9.
- (1992c), *Education and knowledge: Basic pillars of changing production patterns with social equity* (LC/G.1702 (SES. 24/4) Rev.1), Santiago, Chile.
- Errázuriz, Enrique, Rodolfo Fortunati and Cristián Bustamante (1989): *Huachipato*, Santiago, Chile, Academia de Humanismo Cristiano, Programa de Economía del Trabajo (PET).
- Errázuriz, Enrique and Jacqueline Weinstein (1986): *Capitalismo popular y privatización de empresas públicas*, Santiago, Chile, Academia de Humanismo Cristiano, Programa de Economía del Trabajo (PET), Working Paper N° 53.
- Ffrench-Davis, Ricardo (1982): El experimento monetarista en Chile: una síntesis crítica, *Colección Estudios CIEPLAN*, N° 9, Santiago, Chile, Corporación de Investigaciones Económicas para América Latina (CIEPLAN), December.
- Floyd, Robert, Clive Gray and R. Short (1984): *Public Enterprises in Mixed Economies*, Washington, D.C., International Monetary Fund (IMF).
- Fondo de Inversiones de Venezuela (1992): *Política de privatizaciones y reestructuración*, Caracas, June.
- Galal, Ahmed, Leroy Jones, Pankaj Tandon and Ingo Vogelsang (1992): Synthesis of cases and policy summary, paper presented at the Conference on the Welfare Consequences of Selling Public Enterprises, Washington, D.C., World Bank, 11-12 June, *mimeo*.
- Gemines (1989): *Análisis de la coyuntura económica*, Santiago, Chile, August.
- Gerchunoff, Pablo and Lilian Castro (1992), La racionalidad macroeconómica de las privatizaciones: El caso argentino, paper presented at the Regional Seminar on Reforms of Public Policy, ECLAC, Santiago, Chile, 3-5 August, *mimeo*.
- Gerchunoff, Pablo and Germán Coloma (1992): Privatizaciones y reforma regulatoria en la Argentina, paper presented at the Regional Seminar on Reforms of Public Policy, ECLAC, Santiago, Chile, 3-5 August, *mimeo*.
- Ground, Richard Lynn (1984): Orthodox adjustment programmes in Latin America: A critical look at the policies of the International Monetary Fund, *CEPAL Review*, N° 23, Santiago, Chile, ECLAC, August. United Nations publication, Sales No. E.84.II.G.4.
- Hachette, Dominique and Rolf Lüders (1992): *La privatización en Chile*, San Francisco, ICS Press.
- Hanke, Steve (1987): "Introduction" in Steve Hanke (ed.), *Privatization and Development*, San Francisco, ICS Press.
- Hemming, Richard and Ali Mansoor (1988): *Privatization and Public Enterprises*, Occasional Paper No. 56, Washington, D.C., IMF.
- Herrera, Alejandra (1991): *Privatización de los servicios de telecomunicaciones: El caso argentino*, New York, Columbia Business School, August.
- Hirschman, Albert (1970): *Exit, Voice and Loyalty*, Cambridge, MA, Harvard University Press.
- Jones, Leroy, Pankaj Tandon and Ingo Vogelsang (1990): *Selling Public Enterprises*, Cambridge, MA, MIT Press.
- Khanna, Vikram (1992): Mexico's economic resurgence highlighted at World Bank conference, *IMF Survey*, Washington, D.C., IMF, 25 May.
- Killick, Tony (1989): *A Reaction Too Far*, London, Overseas Development Institute.
- Killick, Tony, Graham Bird, Jennifer Sharpley and Mary Sutton (1984): The IMF: Case for a change in emphasis, in Richard Feinberg and Valeriana Kallab (eds.), *Adjustment Crisis in the Third World*, New Brunswick, Transaction Books.

- Lahera, Eugenio (1992): Un sector público con entrada y salida, *El Diario*, Santiago, Chile, 29 April.
- Latin American Weekly Economic Report* (1992a): Aspe announces big debt mop-up, London, 18 June 1992.
- (1992b): Counting the cost of privatization, London, 13 August.
- Latin Finance* (1991): Privatization in Latin America, Florida, USA, March.
- (1992): Privatization in Latin America, Florida, USA, March.
- Mansoor, Ali (1988): *The Budgetary Impact of Privatization*, Washington, D.C., IMF.
- Marcel, Mario (1989): *La privatización de empresas públicas en Chile 1985-1988*, Notas Técnicas, No. 125, Santiago, Chile, CIEPLAN.
- Marco Modiano, Eduardo (1992): Statement delivered at the Seminar on the Politics and Economics of Public Revenues and Expenditures, sponsored by the World Bank and Ministry of Economic Affairs, Brasilia, 10-12 June.
- Marfán, Manuel (1984): Una evaluación de la nueva reforma tributaria, *Colección Estudios* CIEPLAN, N° 13, Santiago, Chile, CIEPLAN, June.
- Martín del Campo, Antonio and Donald Winkler (1992): State-owned enterprise reform in Latin America, *CEPAL Review*, No. 46, April.
- Moffett, Matt (1992): Mexico's bull market lifts new generation into the wealthy elite, *Wall Street Journal*, 6 May.
- Ortega, Luis (1989) (ed.): *CORFO: 50 años de realizaciones, 1939-1989*, Santiago, Chile, University of Santiago, Department of History.
- Paredes, Ricardo (1993): Privatización y regulación: lecciones de la experiencia chilena, in Oscar Muñoz (ed.), *Más allá que las privatizaciones: hacia el estado regulador*, Santiago, Chile, Ediciones CIEPLAN.
- Nair, Govindan and Anastasios Filippides (1988): *How Much Do State-Owned Enterprises Contribute to Public Sector Deficits in Developing Countries - And Why?*, Washington, D.C., World Bank, Working Paper N° 45, December.
- Ramos, Joseph (1986): *Neo-Conservative Economics in the Southern Cone of Latin America, 1973-1983*, Baltimore, Johns Hopkins Press.
- (1992): Equilibrios macroeconómicos y desarrollo, in Osvaldo Sunkel (ed.), *El desarrollo desde dentro*, Mexico City, Fondo de Cultura Económica.
- Ruprah, Inder (1990a): *Privatization: Case Study Teléfonos de México*, Mexico City, mimeo.
- (1990b): *Privatization: Case Study Compañía Mexicana de Aviación*, Mexico City, CIDE, mimeo.
- (1992a): *Divestiture and reform of public enterprises: the Mexican case*, Mexico City, mimeo.
- (1992b): *Aeromexico*, Mexico City, mimeo.
- Sáez, Raúl (1991): *An overview of privatization in Chile: the episodes, the results and the lessons*, Santiago, Chile, mimeo.
- Secretaría de Hacienda y Crédito Público (n.d.): *El proceso de enajenación de entidades paraestatales*, Mexico City.
- Seth, R. (1989): Distributional issues in privatization, *Federal Reserve Bank of New York Quarterly Review*, Vol. 14, No. 2, Summer.
- Tandon, Pankaj (1992): *Mexico*, Vol. 1, paper presented at the Conference on the Welfare Consequences of Selling Public Enterprises, Washington, D.C., World Bank, 11-12 June.
- The Economist* (1992) Off with the lot, 15 August.
- Valenzuela Silva, Mario (1989): Reprivatización y capitalismo popular en Chile, *Estudios Públicos*, N° 33, Santiago, Chile, Centro de Estudios Públicos (CEP), Summer.
- Vickers, John and George Yarrow (1988): *Privatization: An Economic Analysis*, Cambridge, MA, MIT Press.
- Welch, John (1992): *The New Finance of Latin America: Financial Flows, Markets, and Institutions in the 1990s*, Dallas, Federal Reserve Bank of Dallas.
- West, Peter (1991): Latin America's return to the private international capital market, *CEPAL Review*, No. 44 (LC/G.1667-P), Santiago, Chile, August.
- Williamson, John (1990): *The Process of Policy Reform in Latin America*, Washington, D.C., Institute for International Economics.
- Woodrow Wilson Center (1991): *Noticias*, Spring.

Guidelines for contributors to *CEPAL Review*

The editorial board of the *Review* are always interested in encouraging the publication of articles which analyse the economic and social development of Latin America and the Caribbean. With this in mind, and in order to facilitate the presentation, consideration and publication of papers, they have prepared the following information and suggestions to serve as a guide to future contributors.

—The submission of an article assumes an undertaking by the author not to submit it simultaneously to other periodical publications.

—Papers should be submitted in Spanish, Portuguese or English. They will be translated into the appropriate language by ECLAC.

—Papers should not be longer than 33 double-spaced letter-size pages (US quarto), but shorter articles will also be considered. The original and one copy should be submitted, as should the diskettes, if any (in IBM or compatible Word-Perfect format).

—All contributions should be accompanied by a note clearly indicating the title of the paper, the name of the author, the institution he belongs to, and his address. Authors are also requested to send in a short summary of the article (no more than 250 words) giving a brief description of its subject matter and main conclusions.

—**Footnotes should be kept to the minimum, while bibliographical references and direct quotations should be carefully checked, since they are the responsibility of the author.** It is also recommended that the number of tables and figures should be reduced to the minimum and that they should not duplicate information given in the text.

—Special attention should be paid to the bibliography. All the necessary information must be correctly stated in each case (name of the author or authors, complete title (including any subtitle), publisher, city, month and year of publication and, in the case of a series, the title and corresponding volume number or part, etc.).

—The editorial board of the *Review* reserve the right to make any necessary revision or editorial changes required by the articles.

—Authors will receive a courtesy copy of the *Review* in which their article appears, plus 30 offprints of the article, both in Spanish and in English, at the time of publication in each language.

Recent ECLAC publications

Economic Survey of Latin America and the Caribbean, 1991 (LC/G.1741-P), Santiago, Chile (in the press).

This publication is volume I of the *Economic Survey of Latin America and the Caribbean* for 1991 and will be followed by a second volume containing detailed information on the individual countries. Part one provides an overview of the main trends in the regional economy and then goes on to offer a more detailed analysis of the level of economic activity, total supply and demand, macroeconomic policy and inflation, employment and wages, public finance, the external sector, the external debt, and trends in the Caribbean economies. Part two deals with the situation in the world economy, while part three examines exchange policy in Latin America in the early 1990s.

Ensayos sobre coordinación de políticas macroeconómicas (Essays on macroeconomic policy coordination) (LC/G.1740-P), December 1992, 249 pages.

This publication is intended to provide both scholars interested in the topic of integration and government decision-makers with inputs regarding the complex subject of macroeconomic policy coordination. The dearth of practical experience with such coordination in the region has prompted this effort to provide information about attempts to systematize some of the elements involved in the effort to build a "greater Europe" –which, making allowances for the differences between the two cases, may serve as a paradigm– as well as to communicate some thoughts about the viability of attaining some degree of coordination or convergence among the main macroeconomic policies being applied by countries that have banded together in subregional integration groups.

The book is composed of four parts, which are preceded by a general introduction. The introduction provides an overview of some of the issues addressed in the body of the text –particularly the tasks involved in the European unification effort– and then discusses certain aspects of the conceptual debate, of a possible analytical frame of reference, and of some of the experiences of the European Community and the Group of Seven (G-7) which are relevant to the region. The introduction also puts forward some of the ideas that emerged from the thought-provoking discussions which took place at the Meeting on

Macroeconomic Policy Coordination as a Factor of Integration in Latin America and in Europe, held in Santiago, Chile, on 28 and 29 October 1991.

Part one sets forth the conceptual aspects of macroeconomic policy coordination, part two deals with the lessons and dilemmas of European unification, and parts three and four discuss factors relevant to the case of Latin America. Each of these sections is an independent unit, so that there is no immediately apparent common thread which binds them all together; nevertheless, their different approaches complement one another and they have been organized in such a way that there is a progression from the general to the specific, as well as being arranged in ascending order of empirical corroboration. All of these analyses were prepared during 1991, so they do not address some major events that have occurred since that time. Another limiting factor is that the essays on Latin America refer primarily to MERCOSUR and only secondarily to other groups formed by member countries of the Latin American Integration Association (ALADI). Because this study is a pioneering effort in its field, it was deemed advisable to limit its scope, and other significant experiments undertaken in the region –such as the Central American Common Market (CACM) and the Caribbean Community (CARICOM)– are therefore not discussed.

The essays on Latin America contend that it is possible to work with two different types of methodologies: one for identifying the fundamental aspects of macroeconomic policy coordination in the presence of overall internal macroeconomic balances and in their absence; and the other for ascertaining whether or not a harmonious form of tariff protection exists among countries involved in a given integration initiative. The result is a matrix that encompasses situations of both macroeconomic equilibrium and macroeconomic disequilibrium, with differing levels of external protection and differing degrees of similarity in terms of the types of protective mechanisms used.

One element emerging from the proposed conceptual matrix is that, in highly unstable situations, the chances of coordinating macroeconomic policies are virtually nil. Even in countries that are, in general, reasonably close to equilibrium, however, these balances may not suffice if the countries' development models are different and, as a result, some of their specific policies (e.g., exchange policy) differ as well.

A second element is that common external tariffs and non-tariff barriers can, if they are coordinated, help to delineate an extended market by affording a degree of certainty, symmetry and sustainability. This offers the prospect of a sufficiently predictable set of competitive conditions to induce the types of investment decisions that will lead to an expansion of production capacity as entrepreneurs seek to achieve increasingly advanced levels of specialization and complementarity.

A third element refers to the level of development of the countries involved in an integration effort and their supply capacity. In an integration scheme involving countries (such

as Brazil) that have a diversified supply of exports, competitive effects will always be generated within this expanded market, even if the countries do not exhibit a great deal of certainty, symmetry or sustainability. This may change, however, when the only countries taking part in the market have a smaller export capacity or a limited supply of exportables.

The fourth and final element has to do with the fact that when countries have very low levels of protection and narrow, uncertain margins of preference, policy coordination would appear to be even more necessary than it was in the days of high tariffs and wide preference margins, since such protection afforded a great deal of leeway, thus making it permissible for other trade policies to cover a broader range of variation.

Another topic of discussion is the nature of the integration processes sought by the countries, since even a casual observer will note that both the ends and the means of the various integration schemes in place in the region differ from one another. For example, ALADI, MERCOSUR and the economic complementarity agreement between Chile and Mexico are not at all comparable.

It is noted that the countries of the region still have a long way to go before free trade becomes a reality for them. Only three of the ALADI member countries (Bolivia, Chile and Mexico) have eliminated virtually all non-tariff barriers to trade, and tariff levels vary widely, since they range from ceilings going all the way up to 85% to levels as low as 10%. In addition, tariff concessions granted and received by the countries participating in the various groups and subgroups in the region differ appreciably. It is therefore concluded that the task of opening up these economies in a genuine, homogeneous manner to the other countries of the region represents a formidable challenge.

In examining the various strategies as they relate to integration incentives, three major types of schemes can be discerned: macroeconomic policy coordination, structural policy harmonization, and the granting of trade preferences. These different strategies are not mutually exclusive, and the best solution is usually a synthesis or combination of the various types. Nevertheless, priority is usually assigned to the one that proves to be most viable within the context of the international trade environment, the domestic situation and the economic and political policies of the countries participating in a given integration process. Under current conditions, it is proposed that an effort should be made to achieve the harmonization of structural policies insofar as they relate to export incentives, government purchasing, rules of origin, etc., without trying to follow any specific formula. By taking this approach, countries can prevent too much importance from being placed on progress towards a common external tariff and can therefore avoid subordinating the promotion of other policies to the attainment of such progress.

At the same time, it is also pointed out that if the continuity of an integration process (such as MERCOSUR) is to be ensured, then macroeconomic policy coordination and

trade preferences are not issues that can be passed over, even though they may play only a subsidiary role in this process and the prospects of making significant progress in these areas are limited. The foregoing does not, however, preclude the assignment of priority to the harmonization of structural policies as a means of creating incentives to carry the integration process forward.

In sum, it is argued that, given the unilateral, wide-ranging nature of the trade liberalization initiatives being pursued by almost all the Latin American countries, it will be difficult to create integration incentives based on trade preferences. It will also be quite difficult to make headway in the area of macroeconomic policy coordination if the countries that should lead these processes are suffering from instability and an insufficient level of interdependence.

The information provided in this publication brings out a number of considerations that can be of use in addressing the case of Latin America in general from both a theoretical and an empirical standpoint; some references to the particular case of Argentine-Brazilian integration are also included. These observations relate to the lessons that can be learned from both political and economic theory regarding the link between integration and macroeconomic policy coordination and from the experiences of the EEC and G-7, the ways in which both of these can be applied to Latin America in general and to Argentina and Brazil in particular, and the observable impacts of macroeconomic policies on trade within the region.

At a more theoretical level, it is argued that from the standpoints of both economics and political science, the nexus between integration and the need for macroeconomic policy coordination lies in the concept of interdependence. However, these two disciplines measure and interpret the concept differently. Economists are chiefly concerned with the effects of certain marginal changes, i.e., with the impact of macroeconomic variations, especially as transmitted through elasticities, on bilateral investment and trade. Political scientists, on the other hand, are more interested in examining the average effects of economic interdependence with other countries or, in other words, in determining the extent to which the actions of those countries have to be taken into consideration because of their possible repercussions on the degree of freedom in respect of policy-making.

The contention is that although the effects of some macroeconomic disturbances in terms of marginal variations can hinder the formation of economic ties, especially in the area of trade, this is not a major concern from a political standpoint if the corresponding trade flows are not of great significance for the country as a whole, and particularly if there is a conflict of interest between the different national policy objectives.

It is therefore concluded that progress in the area of macroeconomic policy coordination should begin with an attempt to bring a number of key variables into line (including, for example, the rate of inflation) at the country's

own pace and in accordance with its particular capabilities. Only after some degree of convergence has been attained in this respect can a country move on to more ambitious forms of macroeconomic coordination.

Emphasis is placed on how little some macroeconomic variables affect bilateral trade; it is noted, for example, that the empirical evidence indicates that currency volatility has only a negligible effect on trade between Argentina and Brazil. This appears to be attributable to the existence of a large number of sectoral measures whose impacts are superimposed upon the influence exerted by exchange rates and to the fact that export promotion policies can cancel out most exchange risk. Finally, it is also argued that both external and domestic markets exhibit instability, which means that analyses should look at relative, rather than absolute, variations. Moreover, other empirical observations indicate that the reaction of bilateral trade to changes in domestic demand in both countries has been disproportionately large.

In the final analysis, then, if it proves possible to return to the path of sustainable growth, interdependence will increase and this, in turn, will promote macroeconomic coordination. In order for an economy to start growing again, however, the credibility and governability of macroeconomic policy (particularly as regards fiscal balances) must be restored, and this is hardly a task where help can be sought in external commitments. In other words, it is made quite clear that countries need to "put their own houses in order" before they can make progress towards greater integration.

In conclusion, emphasis is placed on the fact that the demand for policy coordination arises out of a desire to increase stability and the predictability of future scenarios as an essential element in creating an attractive environment for investment. On the supply side, the constraints affecting the countries' ability to control policy tools are reducing the Latin American countries' chances of participating fully in initiatives relating to macroeconomic policy coordination, and it is therefore necessary to seek out systematically those areas in which some headway can be made.

Reestructuración y desarrollo de la industria automotriz mexicana en los años ochenta: evolución y perspectivas (Restructuring and development of the Mexican motor industry in the 1980s: past evolution and future prospects) (LC/G.1672-P), "Estudios e Informes de la CEPAL" series, No. 83, Santiago, Chile, August 1992, 191 pages.

In recent years, few of Mexico's industries have been as successful as its automobile industry, either in terms of export growth or in wiping out long-standing trade deficits. This study attempts to uncover the reasons for this success, which is all the more remarkable because it was achieved during a period that many have called the "lost decade" of Latin American development and that, in Mexico, was a time (at least from 1982 on) when all the economic indicators—except in the area of exports—revealed stagnation or even outright retrogression.

The study is divided into five chapters:

The first chapter presents a critical assessment of the programme drawn up in 1983 by the Mexican Government for restructuring the country's industry and foreign trade. It examines the circumstances leading up to the 1982 recession, the Mexican Government's response, and the most salient features of the National Industrial and Foreign Trade Promotion Programme. It goes on to make a detailed analysis of the performance of the manufacturing and foreign-trade sectors during the period 1983-1988, with emphasis on the fundamental aspects of the macroeconomic environment that influence this sector, as well as the impacts of the main policies applied in the areas of industrial promotion, foreign investment, the rationalization of trade protection mechanisms, and the promotion of exports of manufactures. The chapter closes with a discussion of the role played by some of the sectoral industrial restructuring programmes in achieving the plan's proposed objectives.

The second chapter examines the programme for the restructuring of Mexico's automobile industry within the context of the changes taking place at that time in the international economy. It describes the most important aspects of the policy applying to this industry up to 1980, including its various stages and main achievements, and also provides an overview of the sweeping changes observed in the automotive sector throughout the world during the 1970s, noting that, from 1978 on, these transformations were important considerations in the design of policies for the Mexican automobile industry and, in particular, in the formulation of the 1983 Automobile Industry Reorganization Decree.

Chapter three contains a detailed evaluation of the development of the Mexican automobile and automobile parts industry during the 1980s. Particular attention is devoted to the trade balance, imports and, especially, exports. The exports of finished motor vehicles are broken down by company, type of vehicle and country of destination, and this information is then used as a basis for an attempt to arrive at meaningful conclusions regarding the reasons for this industry's export growth. The automobile parts industry's exports are analysed in the aggregate, with special emphasis on the increasing influence exerted upon its performance by foreign investment and, especially, by the major automobile makers. The discussion then turns to an analysis of trends in the Mexican motor vehicle market during the decade, its expansion, its contraction and its return to a growth trend in 1988, along with the ways in which the various firms in the motor vehicle and automobile parts industry satisfy their needs.

On the subject of export-oriented structural change, the study examines the strong influence exerted by various factors, such as the new pattern of modernized, competitive investment, the proximity of the North American market and the effect of the Government's investment promotion and regional development policies.

The impact, in terms of investment and exports, of Mexico's possession of an abundant supply of labour—which is not only inexpensive but, most importantly, is becoming increasingly skilled, productive and reliable—is examined, and it is concluded that this factor has made it possible to increase the competitiveness and the quality standards of the industry's new plants, including those which do not employ sophisticated technologies and which are not yet producing on an international scale.

The chapter closes with a discussion of the increasing importance in the 1980s of the role played in the production of automobile parts for export by the *maquiladoras* which have sprung up along the country's border with the United States, noting that these plants have become an important source of jobs and foreign exchange, although the amount of value added is quite small.

Chapter four presents a number of general conclusions, the principal one being that the Mexican automobile industry was successful in retrofitting its plants and in shifting to an export-oriented approach during the recession of the 1980s (which was certainly not a period conducive to the development of this industry) because of the convergence of a series of positive factors, including the following:

i) A competitive international environment that pushed major international corporations into seeking out major competitive centres for the assembly of motor vehicles and the supply of parts and components;

ii) A domestic macroeconomic situation which kept wages low, maintained the exchange rate at competitive levels and generated an array of export incentives and pressures, including a marked contraction of the domestic market following on the heels of a considerable expansion of installed capacity;

iii) The availability of low-cost yet skilled labour, experienced managerial personnel and recently modernized facilities; the combination of all these factors permitted the industry to assemble vehicles and produce parts at a reasonable cost and, most importantly, at very high levels of productivity while maintaining very high levels of quality in terms of international standards;

iv) A policy for the promotion of manufacturing in general and of the automobile industry in particular, which encouraged the competitive retrofitting of the industry and its exports within a context that was sufficiently stable in the medium term (five years) to permit the planning of investments and changes while, at the same time, being flexible enough in practical terms to permit the alignment of specific strategies with comprehensive plans and objectives.

Just as the period covered by this study was being completed, the Mexican Government took two steps that had very important implications for the automobile industry. First, in December 1989, new executive orders were issued whose purpose was to promote and modernize the automobile industry; these orders entered into effect simultaneously with the introduction of the automobile industry's 1991 models (November 1990), at which point

they superseded the 1983 legal code analysed in this study. Second, in 1990 Mexico announced its decision to enter into talks with the United States and Canada with a view to negotiating a trilateral agreement on trade and investment; such an agreement would, of course, alter the conditions under which the automobile industry operates.

In view of these significant changes, the then Joint ECLAC/UNCTC Unit on Transnational Corporations (now the Joint ECLAC/DESD Unit on Transnational Corporations) asked that an addendum be prepared. This addendum, which discusses the new laws affecting the automobile industry in Mexico and the prospects for a free trade agreement with the United States and Canada, is included as chapter five of this publication, under the title "The new Mexican motor industry legislation and the prospects for a free trade agreement with the United States and Canada".

By late 1991, the domestic market had improved considerably, and the effects of the December 1989 executive orders were beginning to make themselves felt, as was attested to by the appearance of new investment projects (Nissan, Ford, Mercedes-Benz); these changes were also reflected, however, in a steep increase in imports of components and, more recently, automobiles. Meanwhile, the portion of the free trade negotiations relating to the automobile industry was bogged down owing to the other parties' exacting demands regarding regional content, which were opposed by Europe and Japan. This situation was compounded by the fear that the 1983 decree regarding the automobile industry would soon be rescinded, which would also put an end to the support mechanisms still needed by Mexico's automobile parts industry.

Inversión extranjera y empresas transnacionales en la economía de Chile (1974-1989): Proyectos de inversión y estrategias de las empresas transnacionales (Foreign investment and transnational enterprises in the Chilean economy, 1974-1989: investment projects and strategies of the transnational corporations) (LC/G.1677-P), "Estudios e Informes de la CEPAL" series, No. 85, Santiago, Chile, August 1992, 257 pages.

The volume of the net outward transfer of financial resources being made in the form of net interest payments and profit remittances helps to account for the Latin American countries' persistent fiscal deficits and the resulting inflationary spirals. These factors have been a stumbling block for governments which have, in general, tried to reconcile their essential functions with the payment of their external debt. After eight years of adjustment, it does not appear reasonable to conclude that the countries' high rates of inflation are solely attributable to wage trends or to the level of government social expenditure.

The Chilean economy seems to be the exception to this otherwise generally gloomy picture. Is the Chilean economy a model which should be imitated by the other countries in the region? Has it found a solution to the complex syndrome

of structural disequilibria which has so seriously hindered the other Latin American and Caribbean countries' attempts to attain a sustained, stable form of development accompanied by low inflation and unemployment rates and economic agents desirous of investing in production activities?

The outward transfer of financial resources –a crucial problem observed by ECLAC throughout the region– will certainly be a factor in the Chilean economy's future as well. Indeed, its severity will probably increase substantially in the future as a result of the sharp upturn in foreign direct investment and debt-equity swaps seen in the late 1980s, which had the effect of giving transnational corporations a much larger role in economic activity. In fact, because of this situation, net remittances of profits are expected to increase so much from 1992 on that this capital may even wind up being repatriated to its home countries.

In recent years, the remittances of profits received by foreign investors have been exceeding, by an increasingly wide margin, both the volume of net foreign direct investment (defined as actual foreign investment minus the funds that have come into the country in the form of credits under the terms of law DL 600) and the annual depreciation of the stock of foreign investment in Chile which is sent back out of the country. According to information provided by the Central Bank of Chile, between 1982 and 1989 the Chilean economy's net outward transfer of financial resources amounted to about US\$ 6 080 million, which is equivalent to around one-third of the country's total external debt.

In addition to its impact on the country's external accounts, the volume of foreign investment seen in recent years (which amounts to over 50% of total investment) will also surely have a very strong effect on the Chilean economy's future pattern of development, since it will modify the latter's structure by providing greater support for the development of certain sectors of production.

These factors demonstrate the need for an exhaustive analysis of the principal features of foreign investment in the Chilean economy with a view to determining, *inter alia*, what trends are likely to take shape in coming years. This would also be a means of fully justifying the three pivotal components of this study, which are also, at the same time, the objects of the analysis: first, the annual pattern, recipient sectors and geographic sources of the investments, as defined by the legal provisions under which the investments entered the country; second, transnational corporations' strategies in terms of their policies on investment and expansion; and, third, the degree to which subsidiaries of transnationals control activities of vital importance to the Chilean economy and the probable impact of this intervention on the behaviour of some of the economic system's crucial macroeconomic variables.

The first section of this study analyses the operations conducted under the terms of law DL 600, covering both authorized and actual foreign direct investment between 1974 and 1989. In view of the strong impact of the 1982 recession on external capital flows and the substantive

change seen in transnational corporations' position within the Chilean economy following that crisis, this period is subdivided into two sub-periods (1974-1981 and 1982-1989). The analysis is complemented by an overview of the main provisions of law DL 600.

The second section covers operations conducted under the provisions of chapter XIX of the Compendium of International Exchange Regulations, which deals with the conversion of external debt paper by foreign investors and Chileans residing abroad. The analysis encompasses the period between June 1985 –when the relevant legal provisions entered into force– and December 1989, and is accompanied by a summary of the principal provisions contained in chapter XIX.

Inversión extranjera y empresas transnacionales en la economía de Chile (1974-1989): El papel del capital extranjero y la estrategia nacional de desarrollo (Foreign investment and transnational enterprises in the Chilean economy, 1974-1989: the part played by foreign capital and the national development strategy) (LC/G.1678-P), "Estudios e Informes de la CEPAL" series, No. 86, Santiago, Chile, August 1992, 163 pages.

This study's chief aim is to explore the role that investment by transnational corporations has played in Chile's present development strategy. To a large extent, these corporations are responsible for the country's current economic performance and its future prospects.

The study is divided into five chapters. The first describes the development strategy applied in Chile during the period 1974-1989; to that end, the strategy's basic and subsidiary components are identified in the course of a brief analysis of the economy during those years. The chapter closes with a comparison of the behaviour of a series of key economic variables during the period 1974-1989 and during the preceding years, starting with the end of the crisis of the early 1930s. The second chapter looks into foreign investment's place in Chile's development strategy and provides a number of conceptual explanations in that regard. In the third chapter, the regulations, incentives and modalities relating to the entry of foreign capital into the country are analysed and discussed. A particularly noteworthy feature of this section is its comparison of the costs and benefits associated with law DL 600 and with chapter XIX of the Compendium of International Exchange Regulations.

Chapter four presents a comprehensive historical account of the presence of foreign capital in the country since its birth as a republic. The fifth and final chapter describes and systematizes the business experiences of a number of different foreign investors in Chile, examines the country's overall investment needs and the role corresponding to foreign capital in this connection, and offers a quantified assessment of the growth potential of foreign investment for the period 1990-1995.



ECLAC publications

ECONOMIC COMMISSION FOR LATIN AMERICA AND THE
CARIBBEAN
Casilla 179-D Santiago de Chile

PERIODIC PUBLICATIONS

CEPAL Review

CEPAL Review first appeared in 1976 as part of the Publications Programme of the Economic Commission for Latin America and the Caribbean, its aim being to make a contribution to the study of the economic and social development problems of the region. The views expressed in signed articles, including those by Secretariat staff members, are those of the authors and therefore do not necessarily reflect the point of view of the Organization.

CEPAL Review is published in Spanish and English versions three times a year.

Annual subscription costs for 1993 are US\$16 for the Spanish version and US\$18 for the English version. The price of single issues is US\$10 in both cases.

The cost of a two-year subscription (1993-1994) is US\$30 for Spanish-language version and US\$34 for English.

Estudio Económico de América Latina y el Caribe

1980,	664 pp.
1981,	863 pp.
1982, vol. I	693 pp.
1982, vol. II	199 pp.
1983, vol. I	694 pp.
1983, vol. II	179 pp.
1984, vol. I	702 pp.
1984, vol. II	233 pp.
1985,	672 pp.
1986,	734 pp.

Economic Survey of Latin America and the Caribbean

1980,	629 pp.
1981,	837 pp.
1982, vol. I	658 pp.
1982, vol. II	186 pp.
1983, vol. I	686 pp.
1983, vol. II	166 pp.
1984, vol. I	685 pp.
1984, vol. II	216 pp.
1985,	660 pp.
1986,	729 pp.

1987,	692 pp.	1987,	685 pp.
1988,	741 pp.	1988,	637 pp.
1989,	821 pp.	1989,	678 pp.
1990, vol. I	260 pp.	1990, vol. I	248 pp.
1990, vol. II	590 pp.	1990, vol. II	472 pp.
1991, vol. I	299 pp.	1991, vol. I	281 pp.
1991, vol. II	602 pp.		

(Issues for previous years also available)

Anuario Estadístico de América Latina y el Caribe / Statistical Yearbook for Latin America and the Caribbean (bilingual)

1980,	617 pp.	1987,	714 pp.
1981,	727 pp.	1988,	782 pp.
1982/1983,	749 pp.	1989,	770 pp.
1984,	761 pp.	1990,	782 pp.
1985,	792 pp.	1991,	856 pp.
1986,	782 pp.	1992,	868 pp.

(Issues for previous years also available)

Libros de la CEPAL

- 1 *Manual de proyectos de desarrollo económico*, 1958, 5th. ed. 1980, 264 pp.
- 1 *Manual on economic development projects*, 1958, 2nd. ed. 1972, 242 pp.
- 2 *América Latina en el umbral de los años ochenta*, 1979, 2nd. ed. 1980, 203 pp.
- 3 *Agua, desarrollo y medio ambiente en América Latina*, 1980, 443 pp.
- 4 *Los bancos transnacionales y el financiamiento externo de América Latina. La experiencia del Perú*, 1980, 265 pp.
- 4 *Transnational banks and the external finance of Latin America: the experience of Peru*, 1985, 342 pp.
- 5 *La dimensión ambiental en los estilos de desarrollo de América Latina*, Osvaldo Sunkel, 1981, 2nd. ed. 1984, 136 pp.
- 6 *La mujer y el desarrollo: guía para la planificación de programas y proyectos*, 1984, 115 pp.
- 6 *Women and development: guidelines for programme and project planning*, 1982, 3rd. ed. 1984, 123 pp.
- 7 *África y América Latina: perspectivas de la cooperación interregional*, 1983, 286 pp.
- 8 *Sobrevivencia campesina en ecosistemas de altura*, vols. I y II, 1983, 720 pp.
- 9 *La mujer en el sector popular urbano. América Latina y el Caribe*, 1984, 349 pp.
- 10 *Avances en la interpretación ambiental del desarrollo agrícola de América Latina*, 1985, 236 pp.

- 11 *El decenio de la mujer en el escenario latinoamericano*, 1986, 216 pp.
- 11 ***The decade for women in Latin America and the Caribbean: background and prospects***, 1988, 215 pp.
- 12 *América Latina: sistema monetario internacional y financiamiento externo*, 1986, 416 pp.
- 12 ***Latin America: international monetary system and external financing***, 1986, 405 pp.
- 13 Raúl Prebisch: *Un aporte al estudio de su pensamiento*, 1987, 146 pp.
- 14 *Cooperativismo latinoamericano: antecedentes y perspectivas*, 1989, 371 pp.
- 15 CEPAL, *40 años (1948-1988)*, 1988, 85 pp.
- 15 ***ECLAC 40 Years (1948-1988)***, 1989, 83 pp.
- 16 *América Latina en la economía mundial*, 1988, 321 pp.
- 17 *Gestión para el desarrollo de cuencas de alta montaña en la zona andina*, 1988, 187 pp.
- 18 *Políticas macroeconómicas y brecha externa: América Latina en los años ochenta*, 1989, 201 pp.
- 19 CEPAL, *Bibliografía, 1948-1988*, 1989, 648 pp.
- 20 *Desarrollo agrícola y participación campesina*, 1989, 404 pp.
- 21 *Planificación y gestión del desarrollo en áreas de expansión de la frontera agropecuaria en América Latina*, 1989, 113 pp.
- 22 *Transformación ocupacional y crisis social en América Latina*, 1989, 243 pp.
- 23 *La crisis urbana en América Latina y el Caribe: reflexiones sobre alternativas de solución*, 1990, 197 pp.
- 24 ***The environmental dimension in development planning I***, 1991, 302 pp.
- 25 *Transformación productiva con equidad*, 1990, 3rd. ed. 1991, 185 pp.
- 25 ***Changing production patterns with social equity***, 1990, 3rd. ed. 1991, 177 pp.
- 26 *América Latina y el Caribe: opciones para reducir el peso de la deuda*, 1990, 118 pp.
- 26 ***Latin America and the Caribbean: options to reduce the debt burden***, 1990, 110 pp.
- 27 *Los grandes cambios y la crisis. Impacto sobre la mujer en América Latina y el Caribe*, 1991, 271 pp.
- 27 ***Major changes and crisis. The impact on women in Latin America and the Caribbean***, 1992, 279 pp.
- 28 ***A collection of documents on economic relations between the United States and Central America, 1906-1956***, 1991, 398 pp.
- 29 *Inventarios y cuentas del patrimonio natural en América Latina y el Caribe*, 1991, 335 pp.
- 30 *Evaluaciones del impacto ambiental en América Latina y el Caribe*, 1991, 232 pp.
- 31 *El desarrollo sustentable: transformación productiva, equidad y medio ambiente*, 1991, 146 pp.
- 31 ***Sustainable development: changing production patterns, social equity and the environment***, 1991, 146 pp.
- 32 *Equidad y transformación productiva: un enfoque integrado*, 1993, 254 pp.
- 33 *Educación y conocimiento: eje de la transformación productiva con equidad*, 1992, 269 pp.
- 33 ***Education and knowledge: basic pillars of changing production patterns with social equity***, 1993, 257 pp.
- 34 *Ensayos sobre coordinación de políticas macroeconómicas*, 1992, 249 pp.
- 36 *Cambios en el perfil de las familias. La experiencia regional*, 1993, 434 pp.

MONOGRAPH SERIES

Cuadernos de la C E P A L

- 1 *América Latina: el nuevo escenario regional y mundial/Latin America: the new regional and world setting*, (bilingual), 1975, 2nd. ed. 1985, 103 pp.
- 2 *Las evoluciones regionales de la estrategia internacional del desarrollo*, 1975, 2nd. ed. 1984, 73 pp.
- 2 ***Regional appraisals of the international development strategy***, 1975, 2nd. ed. 1985, 82 pp.
- 3 *Desarrollo humano, cambio social y crecimiento en América Latina*, 1975, 2nd. ed. 1984, 103 pp.
- 4 *Relaciones comerciales, crisis monetaria e integración económica en América Latina*, 1975, 85 pp.
- 5 *Síntesis de la segunda evaluación regional de la estrategia internacional del desarrollo*, 1975, 72 pp.
- 6 *Dinero de valor constante. Concepto, problemas y experiencias*, Jorge Rose, 1975, 2nd. ed. 1984, 43 pp.
- 7 *La coyuntura internacional y el sector externo*, 1975, 2nd. ed. 1983, 106 pp.
- 8 *La industrialización latinoamericana en los años setenta*, 1975, 2nd. ed. 1984, 116 pp.
- 9 *Dos estudios sobre inflación 1972-1974. La inflación en los países centrales. América Latina y la inflación importada*, 1975, 2nd. ed. 1984, 57 pp.
- s/n ***Canada and the foreign firm***, D. Pollock, 1976, 43 pp.
- 10 *Reactivación del mercado común centroamericano*, 1976, 2nd. ed. 1984, 149 pp.
- 11 *Integración y cooperación entre países en desarrollo en el ámbito agrícola*, Germánico Salgado, 1976, 2nd. ed. 1985, 62 pp.
- 12 *Temas del nuevo orden económico internacional*, 1976, 2nd. ed. 1984, 85 pp.
- 13 *En torno a las ideas de la CEPAL: desarrollo, industrialización y comercio exterior*, 1977, 2nd. ed. 1985, 57 pp.
- 14 *En torno a las ideas de la CEPAL: problemas de la industrialización en América Latina*, 1977, 2nd. ed. 1984, 46 pp.

- 15 *Los recursos hidráulicos de América Latina. Informe regional*, 1977, 2nd. ed. 1984, 75 pp.
- 15 ***The water resources of Latin America. Regional report***, 1977, 2nd. ed. 1985, 79 pp.
- 16 *Desarrollo y cambio social en América Latina*, 1977, 2nd. ed. 1984, 59 pp.
- 17 *Estrategia internacional de desarrollo y establecimiento de un nuevo orden económico internacional*, 1977, 3rd. ed. 1984, 61 pp.
- 17 ***International development strategy and establishment of a new international economic order***, 1977, 3rd. ed. 1985, 59 pp.
- 18 *Raíces históricas de las estructuras distributivas de América Latina*, A. di Filippo, 1977, 2nd. ed. 1983, 64 pp.
- 19 *Dos estudios sobre endeudamiento externo*, C. Massad and R. Zahler, 1977, 2nd. ed. 1986, 66 pp.
- s/n ***United States - Latin American trade and financial relations: some policy recommendations***, S. Weintraub, 1977, 44 pp.
- 20 *Tendencias y proyecciones a largo plazo del desarrollo económico de América Latina*, 1978, 3rd. ed. 1985, 134 pp.
- 21 *25 años en la agricultura de América Latina: rasgos principales 1950-1975*, 1978, 2nd. ed. 1983, 124 pp.
- 22 *Notas sobre la familia como unidad socioeconómica*, Carlos A. Borsotti, 1978, 2nd. ed. 1984, 60 pp.
- 23 *La organización de la información para la evaluación del desarrollo*, Juan Sourrouille, 1978, 2nd. ed. 1984, 61 pp.
- 24 *Contabilidad nacional a precios constantes en América Latina*, 1978, 2nd. ed. 1983, 60 pp.
- s/n ***Energy in Latin America: The Historical Record***, J. Mullen, 1978, 66 pp.
- 25 *Ecuador: desafíos y logros de la política económica en la fase de expansión petrolera*, 1979, 2nd. ed. 1984, 153 pp.
- 26 *Las transformaciones rurales en América Latina: ¿desarrollo social o marginación?*, 1979, 2nd. ed. 1984, 160 pp.
- 27 *La dimensión de la pobreza en América Latina*, Oscar Altimir, 1979, 2nd. ed. 1983, 89 pp.
- 28 *Organización institucional para el control y manejo de la deuda externa. El caso chileno*, Rodolfo Hoffman, 1979, 35 pp.
- 29 *La política monetaria y el ajuste de la balanza de pagos: tres estudios*, 1979, 2nd. ed. 1984, 61 pp.
- 29 ***Monetary policy and balance of payments adjustment: three studies***, 1979, 60 pp.
- 30 *América Latina: las evaluaciones regionales de la estrategia internacional del desarrollo en los años setenta*, 1979, 2nd. ed. 1982, 237 pp.
- 31 *Educación, imágenes y estilos de desarrollo*, G. Rama, 1979, 2nd. ed. 1982, 72 pp.
- 32 *Movimientos internacionales de capitales*, R. H. Arriazu, 1979, 2nd. ed. 1984, 90 pp.
- 33 *Informe sobre las inversiones directas extranjeras en América Latina*, A. E. Calcagno, 1980, 2nd. ed. 1982, 114 pp.
- 34 *Las fluctuaciones de la industria manufacturera argentina, 1950-1978*, D. Heymann, 1980, 2nd. ed. 1984, 234 pp.
- 35 *Perspectivas de reajuste industrial: la Comunidad Económica Europea y los países en desarrollo*, B. Evers, G. de Groot and W. Wagenmans, 1980, 2nd. ed. 1984, 69 pp.
- 36 *Un análisis sobre la posibilidad de evaluar la solvencia crediticia de los países en desarrollo*, A. Saieh, 1980, 2nd. ed. 1984, 82 pp.
- 37 *Hacia los censos latinoamericanos de los años ochenta*, 1981, 146 pp.
- s/n ***The economic relations of Latin America with Europe***, 1980, 2nd. ed. 1983, 156 pp.
- 38 *Desarrollo regional argentino: la agricultura*, J. Martin, 1981, 2nd. ed. 1984, 111 pp.
- 39 *Estratificación y movilidad ocupacional en América Latina*, C. Filgueira and C. Geneletti, 1981, 2nd. ed. 1985, 162 pp.
- 40 *Programa de acción regional para América Latina en los años ochenta*, 1981, 2nd. ed. 1984, 62 pp.
- 40 ***Regional programme of action for Latin America in the 1980s***, 1981, 2nd. ed. 1984, 57 pp.
- 41 *El desarrollo de América Latina y sus repercusiones en la educación. Alfabetismo y escolaridad básica*, 1982, 246 pp.
- 42 *América Latina y la economía mundial del café*, 1982, 95 pp.
- 43 *El ciclo ganadero y la economía argentina*, 1983, 160 pp.
- 44 *Las encuestas de hogares en América Latina*, 1983, 122 pp.
- 45 *Las cuentas nacionales en América Latina y el Caribe*, 1983, 100 pp.
- 45 ***National accounts in Latin America and the Caribbean***, 1983, 97 pp.
- 46 *Demanda de equipos para generación, transmisión y transformación eléctrica en América Latina*, 1983, 193 pp.
- 47 *La economía de América Latina en 1982: evolución general, política cambiaria y renegociación de la deuda externa*, 1984, 104 pp.
- 48 *Políticas de ajuste y renegociación de la deuda externa en América Latina*, 1984, 102 pp.
- 49 *La economía de América Latina y el Caribe en 1983: evolución general, crisis y procesos de ajuste*, 1985, 95 pp.
- 49 ***The economy of Latin America and the Caribbean in 1983: main trends, the impact of the crisis and the adjustment processes***, 1985, 93 pp.
- 50 *La CEPAL, encarnación de una esperanza de América Latina*, Hernán Santa Cruz, 1985, 77 pp.

- 51 *Hacia nuevas modalidades de cooperación económica entre América Latina y el Japón*, 1986, 233 pp.
- 51 *Towards new forms of economic co-operation between Latin America and Japan*, 1987, 245 pp.
- 52 *Los conceptos básicos del transporte marítimo y la situación de la actividad en América Latina*, 1986, 112 pp.
- 52 *Basic concepts of maritime transport and its present status in Latin America and the Caribbean*, 1987, 114 pp.
- 53 *Encuestas de ingresos y gastos. Conceptos y métodos en la experiencia latinoamericana*. 1986, 128 pp.
- 54 *Crisis económica y políticas de ajuste, estabilización y crecimiento*, 1986, 123 pp.
- 54 *The economic crisis: policies for adjustment, stabilization and growth*, 1986, 125 pp.
- 55 *El desarrollo de América Latina y el Caribe: escollos, requisitos y opciones*, 1987, 184 pp.
- 55 *Latin American and Caribbean development: obstacles, requirements and options*, 1987, 184 pp.
- 56 *Los bancos transnacionales y el endeudamiento externo en la Argentina*, 1987, 112 pp.
- 57 *El proceso de desarrollo de la pequeña y mediana empresa y su papel en el sistema industrial: el caso de Italia*, 1988, 112 pp.
- 58 *La evolución de la economía de América Latina en 1986*, 1988, 99 pp.
- 58 *The evolution of the Latin American Economy in 1986*, 1988, 95 pp.
- 59 *Protectionism: regional negotiation and defence strategies*, 1988, 261 pp.
- 60 *Industrialización en América Latina: de la "caja negra" al "casillero vacío"*, F. Fajnzylber, 1989, 2nd. ed. 1990, 176 pp.
- 60 *Industrialization in Latin America: from the "Black Box" to the "Empty Box"*, F. Fajnzylber, 1990, 172 pp.
- 61 *Hacia un desarrollo sostenido en América Latina y el Caribe: restricciones y requisitos*, 1989, 94 pp.
- 61 *Towards sustained development in Latin America and the Caribbean: restrictions and requisites*, 1989, 93 pp.
- 62 *La evolución de la economía de América Latina en 1987*, 1989, 87 pp.
- 62 *The evolution of the Latin American economy in 1987*, 1989, 84 pp.
- 63 *Elementos para el diseño de políticas industriales y tecnológicas en América Latina*, 1990, 2nd. ed. 1991, 172 pp.
- 64 *La industria de transporte regular internacional y la competitividad del comercio exterior de los países de América Latina y el Caribe*, 1989, 132 pp.
- 64 *The international common-carrier transportation industry and the competitiveness of the foreign trade of the countries of Latin America and the Caribbean*, 1989, 116 pp.
- 65 *Cambios estructurales en los puertos y la competitividad del comercio exterior de América Latina y el Caribe*, 1991, 141 pp.
- 65 *Structural Changes in Ports and the Competitiveness of Latin American and Caribbean Foreign Trade*, 1990, 126 pp.
- 66 *The Caribbean: one and divisible*, 1993, 207 pp.
- 67 *La transferencia de recursos externos de América Latina en la posguerra*, 1991, 92 pp.
- 67 *Postwar transfer of resources abroad by Latin America*, 1992, 90 pp.
- 68 *La reestructuración de empresas públicas: el caso de los puertos de América Latina y el Caribe*, 1992, 148 pp.
- 68 *The restructuring of public-sector enterprises: the case of Latin American and Caribbean ports*, 1992, 129 pp.
- 69 *Las finanzas públicas de América Latina en la década de 1980*, 1993, 100 pp.
- 69 *Public Finances in Latin America in the 1980s*, 1993, 96 pp.
- 70 *Canales, cadenas, corredores y competitividad: un enfoque sistémico y su aplicación a seis productos latinoamericanos de exportación*, 1993, 183 pp.

Cuadernos Estadísticos de la C E P A L

- 1 *América Latina: relación de precios del intercambio*, 1976, 2nd. ed. 1984, 66 pp.
- 2 *Indicadores del desarrollo económico y social en América Latina*, 1976, 2nd. ed. 1984, 179 pp.
- 3 *Series históricas del crecimiento de América Latina*, 1978, 2nd. ed. 1984, 206 pp.
- 4 *Estadísticas sobre la estructura del gasto de consumo de los hogares según finalidad del gasto, por grupos de ingreso*, 1978, 110 pp. (Out of print; replaced by No. 8 below)
- 5 *El balance de pagos de América Latina, 1950-1977*, 1979, 2nd. ed. 1984, 164 pp.
- 6 *Distribución regional del producto interno bruto sectorial en los países de América Latina*, 1981, 2nd. ed. 1985, 68 pp.
- 7 *Tablas de insumo-producto en América Latina*, 1983, 383 pp.
- 8 *Estructura del gasto de consumo de los hogares según finalidad del gasto, por grupos de ingreso*, 1984, 146 pp.
- 9 *Origen y destino del comercio exterior de los países de la Asociación Latinoamericana de Integración y del Mercado Común Centroamericano*, 1985, 546 pp.
- 10 *América Latina: balance de pagos, 1950-1984*, 1986, 357 pp.
- 11 *El comercio exterior de bienes de capital en América Latina*, 1986, 288 pp.
- 12 *América Latina: índices del comercio exterior, 1970-1984*, 1987, 355 pp.

- 13 *América Latina: comercio exterior según la clasificación industrial internacional uniforme de todas las actividades económicas*, 1987, Vol. I, 675 pp; Vol. II, 675 pp.
- 14 *La distribución del ingreso en Colombia. Antecedentes estadísticos y características socioeconómicas de los receptores*, 1988, 156 pp.
- 15 *América Latina y el Caribe: series regionales de cuentas nacionales a precios constantes de 1980*, 1991, 245 pp.
- 16 *Origen y destino del comercio exterior de los países de la Asociación Latinoamericana de Integración*, 1991, 190 pp.
- 17 *Comercio intrazonal de los países de la Asociación de Integración, según capítulos de la clasificación uniforme para el comercio internacional, revisión 2*, 1992, 299 pp.
- 18 *Clasificaciones estadísticas internacionales incorporadas en el Banco de Datos del Comercio Exterior de América Latina y el Caribe de la CEPAL*, 1993, 313 pp.
- 12 *Relaciones económicas de América Latina con los países miembros del "Consejo de Asistencia Mutua Económica"*, 1982, 154 pp.
- 13 *Campesinado y desarrollo agrícola en Bolivia*, 1982, 175 pp.
- 14 *El sector externo: indicadores y análisis de sus fluctuaciones. El caso argentino*, 1982, 2nd. ed. 1985, 216 pp.
- 15 *Ingeniería y consultoría en Brasil y el Grupo Andino*, 1982, 320 pp.
- 16 *Cinco estudios sobre la situación de la mujer en América Latina*, 1982, 2nd. ed. 1985, 178 pp.
- 16 *Five studies on the situation of women in Latin America*, 1983, 2nd. ed. 1984, 188 pp.
- 17 *Cuentas nacionales y producto material en América Latina*, 1982, 129 pp.
- 18 *El financiamiento de las exportaciones en América Latina*, 1983, 212 pp.
- 19 *Medición del empleo y de los ingresos rurales*, 1982, 2nd. ed. 1983, 173 pp.
- 19 *Measurement of employment and income in rural areas*, 1983, 184 pp.
- 20 *Efectos macroeconómicos de cambios en las barreras al comercio y al movimiento de capitales: un modelo de simulación*, 1982, 68 pp.

Estudios e Informes de la C E P A L

- 1 *Nicaragua: el impacto de la mutación política*, 1981, 2nd. ed. 1982, 126 pp.
- 2 *Perú 1968-1977: la política económica en un proceso de cambio global*, 1981, 2nd. ed. 1982, 166 pp.
- 3 *La industrialización de América Latina y la cooperación internacional*, 1981, 170 pp. (Out of print, will not be reprinted.)
- 4 *Estilos de desarrollo, modernización y medio ambiente en la agricultura latinoamericana*, 1981, 4th. ed. 1984, 130 pp.
- 5 *El desarrollo de América Latina en los años ochenta*, 1981, 2nd. ed. 1982, 153 pp.
- 5 *Latin American development in the 1980s*, 1981, 2nd. ed. 1982, 134 pp.
- 6 *Proyecciones del desarrollo latinoamericano en los años ochenta*, 1981, 3rd. ed. 1985, 96 pp.
- 6 *Latin American development projections for the 1980s*, 1982, 2nd. ed. 1983, 89 pp.
- 7 *Las relaciones económicas externas de América Latina en los años ochenta*, 1981, 2nd. ed. 1982, 180 pp.
- 8 *Integración y cooperación regionales en los años ochenta*, 1982, 2nd. ed. 1982, 174 pp.
- 9 *Estrategias de desarrollo sectorial para los años ochenta: industria y agricultura*, 1981, 2nd. ed. 1985, 100 pp.
- 10 *Dinámica del subempleo en América Latina. PREALC*, 1981, 2nd. ed. 1985, 101 pp.
- 11 *Estilos de desarrollo de la industria manufacturera y medio ambiente en América Latina*, 1982, 2nd. ed. 1984, 178 pp.
- 21 *La empresa pública en la economía: la experiencia argentina*, 1982, 2nd. ed. 1985, 134 pp.
- 22 *Las empresas transnacionales en la economía de Chile, 1974-1980*, 1983, 178 pp.
- 23 *La gestión y la informática en las empresas ferroviarias de América Latina y España*, 1983, 195 pp.
- 24 *Establecimiento de empresas de reparación y mantenimiento de contenedores en América Latina y el Caribe*, 1983, 314 pp.
- 24 *Establishing container repair and maintenance enterprises in Latin America and the Caribbean*, 1983, 236 pp.
- 25 *Agua potable y saneamiento ambiental en América Latina, 1981-1990/Drinking water supply and sanitation in Latin America, 1981-1990* (bilingual), 1983, 140 pp.
- 26 *Los bancos transnacionales, el estado y el endeudamiento externo en Bolivia*, 1983, 282 pp.
- 27 *Política económica y procesos de desarrollo. La experiencia argentina entre 1976 y 1981*, 1983, 157 pp.
- 28 *Estilos de desarrollo, energía y medio ambiente: un estudio de caso exploratorio*, 1983, 129 pp.
- 29 *Empresas transnacionales en la industria de alimentos. El caso argentino: cereales y carne*, 1983, 93 pp.
- 30 *Industrialización en Centroamérica, 1960-1980*, 1983, 168 pp.
- 31 *Dos estudios sobre empresas transnacionales en Brasil*, 1983, 141 pp.

- 32 *La crisis económica internacional y su repercusión en América Latina*, 1983, 81 pp.
- 33 *La agricultura campesina en sus relaciones con la industria*, 1984, 120 pp.
- 34 *Cooperación económica entre Brasil y el Grupo Andino: el caso de los minerales y metales no ferrosos*, 1983, 148 pp.
- 35 *La agricultura campesina y el mercado de alimentos: la dependencia externa y sus efectos en una economía abierta*, 1984, 201 pp.
- 36 *El capital extranjero en la economía peruana*, 1984, 178 pp.
- 37 *Dos estudios sobre política arancelaria*, 1984, 96 pp.
- 38 *Estabilización y liberalización económica en el Cono Sur*, 1984, 193 pp.
- 39 *La agricultura campesina y el mercado de alimentos: el caso de Haití y el de la República Dominicana*, 1984, 255 pp.
- 40 *La industria siderúrgica latinoamericana: tendencias y potencial*, 1984, 280 pp.
- 41 *La presencia de las empresas transnacionales en la economía ecuatoriana*, 1984, 77 pp.
- 42 *Precios, salarios y empleo en la Argentina: estadísticas económicas de corto plazo*, 1984, 378 pp.
- 43 *El desarrollo de la seguridad social en América Latina*, 1985, 348 pp.
- 44 **Market structure, firm size and Brazilian exports**, 1985, 104 pp.
- 45 *La planificación del transporte en países de América Latina*, 1985, 247 pp.
- 46 *La crisis en América Latina: su evaluación y perspectivas*, 1985, 119 pp.
- 47 *La juventud en América Latina y el Caribe*, 1985, 181 pp.
- 48 *Desarrollo de los recursos mineros de América Latina*, 1985, 145 pp.
- 48 **Development of the mining resources of Latin America**, 1989, 160 pp.
- 49 *Las relaciones económicas internacionales de América Latina y la cooperación regional*, 1985, 224 pp.
- 50 *América Latina y la economía mundial del algodón*, 1985, 122 pp.
- 51 *Comercio y cooperación entre países de América Latina y países miembros del CAME*, 1985, 90 pp.
- 52 **Trade relations between Brazil and the United States**, 1985, 148 pp.
- 53 *Los recursos hídricos de América Latina y el Caribe y su aprovechamiento*, 1985, 138 pp.
- 53 **The water resources of Latin America and the Caribbean and their utilization**, 1985, 135 pp.
- 54 *La pobreza en América Latina: dimensiones y políticas*, 1985, 155 pp.
- 55 *Políticas de promoción de exportaciones en algunos países de América Latina*, 1985, 207 pp.
- 56 *Las empresas transnacionales en la Argentina*, 1986, 222 pp.
- 57 *El desarrollo frutícola y forestal en Chile y sus derivaciones sociales*, 1986, 227 pp.
- 58 *El cultivo del algodón y la soya en el Paraguay y sus derivaciones sociales*, 1986, 141 pp.
- 59 *Expansión del cultivo de la caña de azúcar y de la ganadería en el nordeste del Brasil: un examen del papel de la política pública y de sus derivaciones económicas y sociales*, 1986, 164 pp.
- 60 *Las empresas transnacionales en el desarrollo colombiano*, 1986, 212 pp.
- 61 *Las empresas transnacionales en la economía del Paraguay*, 1987, 115 pp.
- 62 *Problemas de la industria latinoamericana en la fase crítica*, 1986, 113 pp.
- 63 *Relaciones económicas internacionales y cooperación regional de América Latina y el Caribe*, 1987, 272 pp.
- 63 **International economic relations and regional co-operation in Latin America and the Caribbean**, 1987, 267 pp.
- 64 *Tres ensayos sobre inflación y políticas de estabilización*, 1986, 201 pp.
- 65 *La industria farmacéutica y farmoquímica: desarrollo histórico y posibilidades futuras. Argentina, Brasil y México*, 1987, 177 pp.
- 66 *Dos estudios sobre América Latina y el Caribe y la economía internacional*, 1987, 125 pp.
- 67 *Reestructuración de la industria automotriz mundial y perspectivas para América Latina*, 1987, 232 pp.
- 68 *Cooperación latinoamericana en servicios: antecedentes y perspectivas*, 1988, 155 pp.
- 69 *Desarrollo y transformación: estrategia para superar la pobreza*, 1988, 114 pp.
- 69 **Development and change: strategies for vanquishing poverty**, 1988, 114 pp.
- 70 *La evolución económica del Japón y su impacto en América Latina*, 1988, 88 pp.
- 70 **The economic evolution of Japan and its impact on Latin America**, 1990, 79 pp.
- 71 *La gestión de los recursos hídricos en América Latina y el Caribe*, 1989, 256 pp.
- 72 *La evolución del problema de la deuda externa en América Latina y el Caribe*, 1988, 77 pp.
- 72 **The evolution of the external debt problem in Latin America and the Caribbean**, 1988, 69 pp.
- 73 *Agricultura, comercio exterior y cooperación internacional*, 1988, 83 pp.
- 73 **Agriculture, external trade and international co-operation**, 1989, 79 pp.
- 74 *Reestructuración industrial y cambio tecnológico: consecuencias para América Latina*, 1989, 105 pp.
- 75 *El medio ambiente como factor de desarrollo*, 1989, 2nd. ed. 1991, 123 pp.

- 76 *El comportamiento de los bancos transnacionales y la crisis internacional de endeudamiento*, 1989, 214 pp.
- 76 *Transnational bank behaviour and the international debt crisis*, 1989, 198 pp.
- 77 *Los recursos hídricos de América Latina y del Caribe: planificación, desastres naturales y contaminación*, 1990, 266 pp.
- 77 *The water resources of Latin America and the Caribbean - Planning hazards and pollution*, 1990, 252 pp.
- 78 *La apertura financiera en Chile y el comportamiento de los bancos transnacionales*, 1990, 132 pp.
- 79 *La industria de bienes de capital en América Latina y el Caribe: su desarrollo en un marco de cooperación regional*, 1991, 235 pp.
- 80 *Impacto ambiental de la contaminación hídrica producida por la Refinería Estatal Esmeraldas: análisis técnico-económico*, 1991, 189 pp.
- 81 *Magnitud de la pobreza en América Latina en los años ochenta*, 1991, 177 pp.
- 82 *América Latina y el Caribe: el manejo de la escasez de agua*, 1991, 148 pp.
- 83 *Reestructuración y desarrollo de la industria automotriz mexicana en los años ochenta: evolución y perspectivas*, 1992, 191 pp.
- 84 *La transformación de la producción en Chile: cuatro ensayos de interpretación*, 1993, 372 pp.
- 85 *Inversión extranjera y empresas transnacionales en la economía de Chile (1974-1989). Proyectos de inversión y estrategias de las empresas transnacionales*, 1992, 257 pp.
- 86 *Inversión extranjera y empresas transnacionales en la economía de Chile (1974-1989). El papel del capital extranjero y la estrategia nacional de desarrollo*, 1992, 163 pp.
- 87 *Análisis de cadenas agroindustriales en Ecuador y Perú*, 1993, 294 pp.
- 88 *El comercio de manufacturas de América Latina. Evolución y estructura 1962-1989*, 1993, 150, pp.
- 89 *El impacto económico y social de las migraciones en centroamérica*, 1993, 78 pp.

Serie INFOPLAN: Temas Especiales del Desarrollo

- 1 *Resúmenes de documentos sobre deuda externa*, 1986, 324 pp.
- 2 *Resúmenes de documentos sobre cooperación entre países en desarrollo*, 1986, 189 pp.
- 3 *Resúmenes de documentos sobre recursos hídricos*, 1987, 290 pp.
- 4 *Resúmenes de documentos sobre planificación y medio ambiente*, 1987, 111 pp.
- 5 *Resúmenes de documentos sobre integración económica en América Latina y el Caribe*, 1987, 273 pp.
- 6 *Resúmenes de documentos sobre cooperación entre países en desarrollo, II parte*, 1988, 146 pp.
- 7 *Documentos sobre privatización con énfasis en América Latina*, 1991, 82 pp.
- 8 *Reseñas de documentos sobre desarrollo ambientalmente sustentable*, 1992, 217 pp.

كيفية الحصول على منشورات الأمم المتحدة

يمكن الحصول على منشورات الأمم المتحدة من المكتبات ودور التوزيع في جميع أنحاء العالم. استعلم منها من المكتبة التي تتعامل معها أو اكتب إلى : الأمم المتحدة، قسم البيع في نيويورك أو في جنيف.

如何购取联合国出版物

联合国出版物在全世界各地的书店和经销处均有发售。请向书店询问或写信到纽约或日内瓦的联合国销售组。

HOW TO OBTAIN UNITED NATIONS PUBLICATIONS

United Nations publications may be obtained from bookstores and distributors throughout the world. Consult your bookstore or write to: United Nations, Sales Section, New York or Geneva.

COMMENT SE PROCURER LES PUBLICATIONS DES NATIONS UNIES

Les publications des Nations Unies sont en vente dans les librairies et les agences dépositaires du monde entier. Informez-vous auprès de votre libraire ou adressez-vous à : Nations Unies, Section des ventes, New York ou Genève.

КАК ПОЛУЧИТЬ ИЗДАНИЯ ОРГАНИЗАЦИИ ОБЪЕДИНЕННЫХ НАЦИЙ

Издания Организации Объединенных Наций можно купить в книжных магазинах и агентствах во всех районах мира. Наводите справки об изданиях в вашем книжном магазине или пишите по адресу: Организация Объединенных Наций, Секция по продаже изданий, Нью-Йорк или Женева.

COMO CONSEGUIR PUBLICACIONES DE LAS NACIONES UNIDAS

Las publicaciones de las Naciones Unidas están en venta en librerías y casas distribuidoras en todas partes del mundo. Consulte a su librero o diríjase a: Naciones Unidas, Sección de Ventas, Nueva York o Ginebra.

Publications of the Economic Commission for Latin America and the Caribbean (ECLAC) and those of the Latin American and the Caribbean Institute for Economic and Social Planning (ILPES) can be ordered from your local distributor or directly through:

United Nations Publications
Sales Section, — DC-2-868
New York, NY, 10017
USA

United Nations Publications
Sales Section
Palais des Nations
1211 Geneva 10, Switzerland

Distribution Unit
CEPAL — Casilla 179-D
Santiago, Chile

