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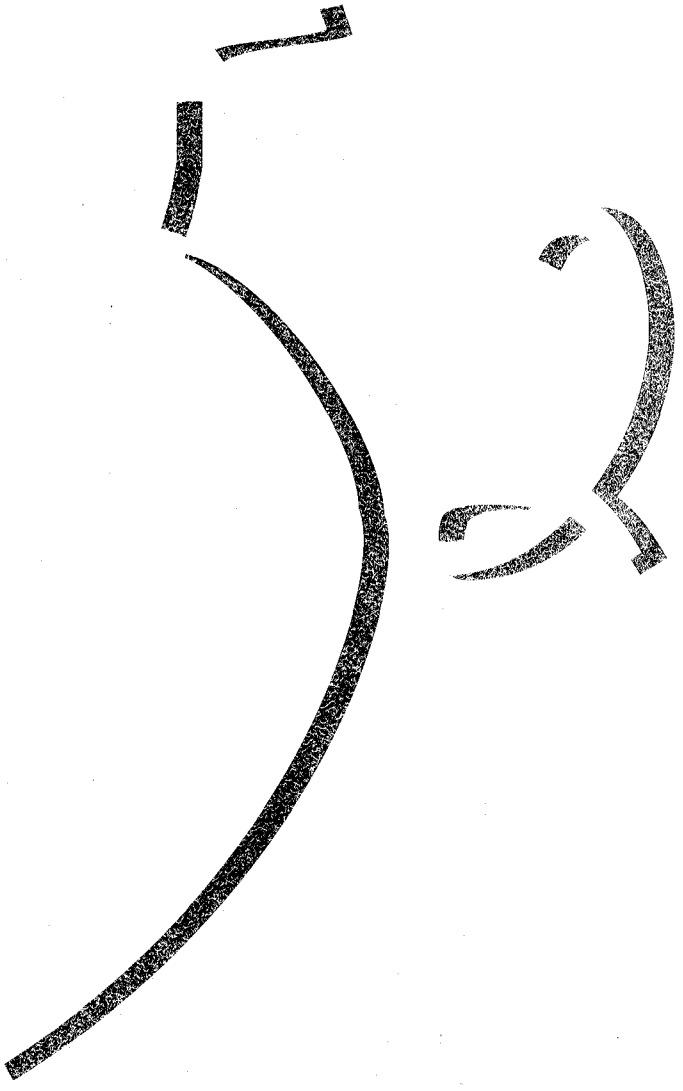

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ECONOMIC COMMISSION
FOR LATIN AMERICA AND
THE CARIBBEAN

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Notes and explanation of symbols

The following symbols are used in tables in the Review:

(...)	Three dots indicate that data are not available or are not separately reported.
(—)	A dash indicates that the amount is nil or negligible.
	A blank space in a table means that the item in question is not applicable.
(-)	A minus sign indicates a deficit or decrease, unless otherwise specified.
(.)	A point is used to indicate decimals.
(/)	A slash indicates a crop year or fiscal year, e.g., 1970/1971.
(-)	Use of a hyphen between years, e.g., 1971-1973, indicates reference to the complete number of calendar years involved, including the beginning and end years.

References to "tons" mean metric tons, and to "dollars", United States dollars, unless otherwise stated.
Unless otherwise stated, references to annual rates of growth or variation signify compound annual rates.
Individual figures and percentages in tables do not necessarily add up to the corresponding totals, because of rounding.

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CONTENTS

Income distribution *and poverty* through crisis *and adjustment*

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This article analyses the costs in terms of income distribution of the crisis and adjustments of the 1980s, as well as the effects of the subsequent recovery and resumption of sustained growth patterns. This analysis is based on comparable pairs of estimates of income distribution and poverty prepared by ECLAC for the ten largest and predominantly urban countries of the region. The method of analysis consists, on the one hand, of comparing the changes in distribution and in the macroeconomic and labour market variables during similar macroeconomic phases in the course of the adjustment process in different countries and, on the other hand, of comparing the income distribution situations in each country before and after the adjustment. It is concluded that although economic recovery and the reduction of inflation are relieving poverty situations, medium-term growth without an improvement in income distribution will cause the process of reducing poverty to be excessively prolonged, and there are grounds for believing that the new form of operation and the new rules followed by public policy in these economies may involve still greater inequalities as regards income distribution.

I

Introduction

Most Latin American countries are painfully recovering from the protracted crisis they suffered during the 1980s and from the traumatic adjustments they had to undergo in order to extricate themselves from it and to lay the bases for a new phase of sustained growth.

The net transfer of resources to the region, which before the crisis represented more than 2% of its GDP, suddenly became negative. Between 1982 and 1989, the Latin American countries' net export of capital was equivalent to almost 4% of their aggregate GDP. The turnaround in the net transfer of resources was thus tantamount to a permanent pressure of 6% on domestic resources during this period.

After the external adjustment and recession that brought the regional per capita product down by 10% between 1980 and 1983, most Latin American economies wavered between recession and inflation, muddling through the debt tangle and its domestic sequels for most of the decade. At its close, per capita product was still at the 1983 level and real national per capita income was 15% lower than in 1980. In 1991-1993, however, growth has been steadier, there have been signs of a reanimation of private investment along with the return of significant capital flows, the trend towards price stabilization has become generalized, and most of the huge fiscal adjustments of the previous years have held fast.

Although in some cases stabilization processes still display some fragility, most Latin American economies are now working on new foundations. These are characterized by a firmer orientation towards exports (whose volume has, in many cases, at least doubled during the past decade), trade liberalization, fiscal austerity, more prudent management of monetary policy, and greater reluctance to resort to State regulation of economic activity.

For the poor and lower-middle income groups, the severe economic crisis of the 1980s involved damaging declines both in real income and in access to and quality of social services.

Almost all countries experienced acute redistributions of income among households during the crisis decade, in most cases with regressive net outcomes at the end of the decade. At the same time, regressive changes in relative incomes and the fall of real per capita income during the first half of the decade, when most economies suffered recessionary adjustments, or had only just begun to recover, led to significant increases in absolute poverty, which only in a few cases were partially reversed with the stabilization and growth processes of more recent years.

Economic recovery and the abatement of inflation are bringing relief on the poverty front, but there are increasing grounds for suspecting that the new modality under which the economies are functioning and the new rules of public policy involve greater income inequalities and more precarious employment situations than in the past, in a certainly tighter fiscal environment.

□ The author wishes to express his gratitude for the valuable comments made by Robert Devlin, Norberto García and Arturo León, as well as the expert assistance provided by Gloria Bensan and Guillermo Mundt, but it goes without saying that they bear no responsibility for the final results.

II

The approach adopted

1. The data base on income distribution and poverty

Income distribution statistics in Latin America are of varied reliability and are not directly comparable with each other.[1] Among the many factors distorting their comparability, underestimation of income affects differently both income levels and their concentration. In order to somehow sidestep this obstacle, the analysis of changes in the relative distribution of income is based on pairs of available estimates (see table 1), selected for being similar –and, therefore, apparently comparable– with regard to the concept of income, the technique for measuring income and the geographical coverage of the surveys used to collect the data, as well as the units and criteria used by the respective authors in processing or adjusting the survey data.[2] However, in many cases proven or assumed differences in any of these aspects invalidate the possibility of going beyond these pair-wise comparisons and simply pooling estimates.

The poverty estimates for the 1980s (table 2) are those produced by ECLAC (1991a and 1992a). They are the result of cutting estimated distributions of households by per capita income, previously adjusted for income underestimation,[3] by means of country-specific poverty lines representing minimum normative budgets of private consumption based on minimum food budgets that adequately cover nutritional requirements.[4] The poverty lines used for different years of the 1980s were held constant in real terms: a criterion that is acceptable for a period of recession and recovery.[5]

The present paper uses only headcount ratios as the poverty measure, which are available for several years of the past decade, for each country considered.[6] These are given in table 3, which also includes the incidence of extreme poverty or destitution, defined as the proportion of households with a per capita income less than the value of the minimum food budget.

These estimates actually build up national measures of poverty from urban and rural estimates. However, it should be borne in mind that headcount estimates for rural areas are of considerably shakier quality than those for urban areas. On the one hand, the norms used to draw rural poverty lines have an unavoidable urban bias, in spite of taking into account urban-rural differences in prices and consumption. On the other hand, available measurements of rural incomes and of their distribution are usually even less accurate than those of urban incomes from the same survey. Finally, some of the rural estimates are no more than educated guesses based on relevant but indirect data (Altimir, 1991).

[1] See Altimir (1987) for a review and discussion of the reliability of income measurements from different types of surveys in Latin America and their comparability problems.

[2] For a detailed compilation of the income distribution statistics available for each country and the selection of comparable pairs, see Altimir (1992). In particular, the manner of selection based on the similarity of data and their treatment makes it possible to compare Gini coefficients –and calculate their variations, as is done in table 1– which have been computed on the basis of similarly grouped data.

[3] For the method of adjustment applied, see Altimir (1987), and for the details of the adjustments see ECLAC (1991a).

[4] See ECLAC (1991a) for details on these country-specific minimum food budgets and how they were set. Minimum food baskets were drawn on the basis of the composition of food consumption of those strata of households that in each country attained with some latitude the minimum nutritional requirements, although such reference baskets were adjusted to those minima as well as to mean national availability of each foodstuff and were freed of high-price-per-calorie or nutritionally superfluous items. Therefore, the criterion to establish the minimum food baskets was one based on habits, taking into account availability and cost, rather than one of minimum-cost, taking into account availability and habits, as used in Altimir (1979) in order to obtain estimates for the 1970s.

[5] For a discussion of the case for shifting poverty lines during periods of economic growth, see Altimir (1991).

[6] ECLAC (1991a) also includes estimates of the poverty gaps, but only for 1986.

TABLE 1

Latin America (10 countries): Changes in income distribution in selected periods

Country	Period	Source	Coverage [a]	Income concept [b]	Changes in concentration (%)		Changes in shares of income groups (% of total income)		
					Gini coeff-icient	Ratio of top 10% to lowest 40%	Lowest 40%	Middle 50%	Top 10%
Argentina	1970-1974	Altimir (1986)	MA	HI	4	9	-0.7	-0.7	1.4
	1974-1980	Altimir (1986)	MA	HPCI	10	28	-2.1	-1.2	3.3
	1980-1986	ECLAC (1991b)	MA	HPCI	11	27	-1.5	-3.2	4.7
	1980-1989	Psacharopoulos *et al* (1992)	MA	HPCI	17	47	-2.9	-3.0	5.9
	1985-1990	Beccaria (1991)	MA	HPCI	...	33 [c]	-1.4 [d]	-3.4 [e]	4.8
Brazil	1979-1987	ECLAC (1991b)	MA	HPCI	4	32	-2.3	-1.3	3.6
			RU	HPCI	7	9	2.7	-5.5	2.8
	1979-1989	Psacharopoulos *et al* (1992)	N	HPCI	7	28	-1.3	-2.4	3.7
	1987-1989	Hoffman (1992)	U	IR	8	31 [f]	-2.1 [g]	-2.8 [h]	4.9
	1987-1990	Hoffman (1992)	U	IR	2	9	-1.0	-	1.0
	1987-1990	ECLAC (1991b; 1993)	MA	HPCI	-6	-18	0.4	6.3	-6.7
			RU	HPCI	1	53	-5.1	5.2	-0.1
Colombia	1978-1988	Londoño (1990)	N	IR	-1	-3	-0.2	0.3	-0.5
	1980-1986	ECLAC (1991b)	MA	HPCI	-3	-12	0.2	0.8	-1.0
			RU	HPCI	-5	-	0.4	3.0	-3.4
	1980-1989	Psacharopoulos *et al* (1992)	U	HPCI	-9	-27	1.9	3.2	-5.1
	1986-1990	ECLAC (1991b; 1993)	MA	HPCI	-2	-1	-0.4	2.7	-2.3
			RU	HPCI	-9	-2	1.9	1.4	-3.3
Costa Rica	1981-1988	ECLAC (1991b)	MA	HPCI	7	22	-1.5	-1.6	3.1
			RU	HPCI	14	3	-1.9	-3.2	5.1
	1981-1989	Psacharopoulos *et al* (1992)	N	HPCI	-3	-10	1.4	-1.9	0.5
	1988-1990	ECLAC (1991b; 1993)	MA	HPCI	-6	-13	1.1	1.1	-2.2
			RU	HPCI	-6	-15	0.4	3.0	-3.4
Chile	1968-1974	Heskia (1980)	MA	HI	-10	-23	2.0	1.8	-3.8
	1974-1980	Heskia (1980), Riveros (1985)	MA	HI	21	60	-2.8	-6.2 [h]	9.0 [i]
	1981-1983	Riveros (1985)	MA	HI	2	14	-1.1	-0.5 [h]	1.6 [i]
	1968-1983	ECLAC (1979), Rodríguez (1985)	N	HI	23	38	-1.6	-6.2	7.8
	1969-1978	Ffrench-Davis, Raczynski (1987)	MA	HE	...	54 [j]	-4.9	-1.6 [h]	6.5 [i]
	1978-1988	Ffrench-Davis, Raczynski (1987)	MA	HE	...	23 [j]	-1.9	-1.7 [h]	3.6 [i]
	1987-1990	ECLAC (1991b; 1991c)	U	HPCI	-2	-3	0.4	-0.4	-
Mexico	1977-1984	ECLAC (1988), Lustig (1992)	N	HI	-9	-41	2.8	0.7	-3.5
	1984-1989	Lustig (1992)	N	HI	...	28	-1.4	-3.7	5.1
Panama	1979-1989	Psacharopoulos *et al* (1992)	N	HPCI	16	66	-3.5	-2.8	6.3
Peru	1985-1986-1990	Psacharopoulos *et al* (1992)	MA	HPCI	2	5	-0.7	0.5	0.2

TABLE 1 (concluded)

Country	Period	Source	Coverage[a]	Income concept[b]	Changes in concentration (%)		Changes in shares of income groups (% of total income)		
					Gini coefficient	Ratio of top 10% to lowest 40%	Lowest 40%	Middle 50%	Top 10%
Uruguay	1973-1979	Melgar (1981)	MA	PHI	32	100	-4.7	-8.3	13.0
	1979-1981	Melgar (1981), Melgar-Villalobos (1987)	MA	PHI	-2	-4	-1.2	6.3	-5.1
	1981-1986	ECLAC (1991a; 1991b)	MA	HPCI	7	20	-1.2	-2.4	3.6
	1986-1989	ECLAC (1991a; 1991b)	MA	HPCI	-9	-19	1.4	3.1	-4.5
			RU	HPCI	-7	-12	1.5	0.1	-1.6
	1981-1989	Psacharopoulos *et al* (1992)	U	HPCI	-3	-7	0.8	-0.2	-0.6
Venezuela	1981-1986	ECLAC (1991b)	MA	HPCI	8	19	-2.5	-1.7	4.2
			RU	HPCI	18	46	-2.6	-3.1	5.7
	1981-1989	Psacharopoulos *et al* (1992)	N	HPCI	3	8	-0.4	-1.3	1.7
	1986-1990	ECLAC (1991b; 1993)	MA	HPCI	-4	-7	0.8	-0.4	-0.4
			RU	HPCI	-	3	-	-0.6	0.6
	1987-1989	Márquez-Mukherjee (1991)	N	HPCI	6	11	-0.2	-3.5	3.7
	1989-1990	Márquez-Mukherjee (1991)	N	HPCI	-4	-14	0.9	1.8	-2.7

[a] MA: metropolitan area; RU: remaining urban areas; U: urban areas; N: nationwide.
[b] HI: household income; PHI: primary household income; HPCI: household per capita income; HE: household expenditure; IR: income of recipient.
[c] Ratio of top 10% to lowest 30%.
[d] Corresponds to lowest 30%.
[e] Corresponds to middle 60%.
[f] Ratio of top 10% to lowest 50%.
[g] Corresponds to lowest 50%.
[h] Corresponds to middle 40%.
[i] Corresponds to top 20%.
[j] Ratio of top 20% to lowest 40%.

The set of countries considered in this paper includes the major Latin American nations as well as some others for which comparable inequality and poverty measurements are also available both at the beginning of the decade and at some later point in time. It excludes predominantly rural countries, such as Guatemala and Honduras, for which poverty estimates were also produced by ECLAC, because the method of analysis used here and the variables on which it rests capture mainly urban phenomena. The mere dimensions of rural poverty according to those estimates (affecting four-fifths of the rural population and representing at least three-quarters of all the poor) both underline the irrelevance of an urban-centered analysis and suggest that poverty measurement and analysis in such cases should be based on surveys, poverty yardsticks and explanatory variables more closely applicable to rural conditions.

In this data base, income generally measures household disposable cash income, [7] including both primary income (wages and salaries and entrepreneurial income) and other monetary income (pensions, transfers, rentals, interest, etc.) after direct tax payments. It therefore excludes imputed income from public goods and services provided free of charge or heavily subsidized and, hence, the redistributive effects of such public expenditure. These income measurements do not capture the incidence of indirect taxes on real income, either.

[7] Income in kind and imputed income, such as receipts from family subsistence activities or rent of owner-occupied dwellings, is either explicitly excluded or so poorly measured as to be considered excluded in most of the surveys in the data base, which are labour or income surveys. Only a minority of them are income and expenditure surveys, which may somehow measure such items (see Altimir, 1987).

TABLE 2

Latin America [a]: Estimates of poverty and indigence in 1980, 1986 and 1990

Area	Poverty [b]						Indigence [c]					
	1980		1986		1990		1980		1986		1990	
	Millions	%	Millions	%	Millions	%	Millions	%	Millions	%	Millions	%
					Households							
Nationwide	24.2	35	32.1	37	37.0	39	10.4	15	14.6	17	16.9	18
Urban	11.8	25	18.7	30	22.7	34	4.1	9	7.0	11	8.7	13
Rural	12.4	54	13.4	53	14.3	53	6.3	28	7.6	30	8.2	30
					Persons							
Nationwide	135.9	41	170.2	43	195.9	46	62.4	19	81.4	21	93.5	22
Urban	62.9	30	94.4	36	115.5	39	22.5	11	35.8	14	44.9	15
Rural	73.0	60	75.8	60	80.4	61	39.9	33	45.6	36	48.6	37

Source: 1980 and 1986: ECLAC, 1991a. 1990: ECLAC, 1992a.

[a] 19 countries. Based on data for: Argentina, Brazil, Colombia, Costa Rica, Guatemala, Mexico, Panama, Peru, Uruguay and Venezuela, for 1980 and 1986, and also for Chile, Honduras and Paraguay for 1990.

[b] Corresponds to household per capita income below poverty lines equivalent to twice the country-specific minimum food budgets, which range from 22 to 34 dollars of 1988 per person per month, for urban areas.

[c] Corresponds to household per capita income below the value of the country-specific minimum food budgets used to draw the poverty lines.

2. The method of analysis

The above caveats should warn us not to confuse the map with the actual territory. Although our ultimate concern is with changes in social stratification and with disentangling those changes that are permanently reshaping Latin American societies from those related to peoples' transitory accommodation to hard times, we are able here to focus only on aggregate changes in the relative distribution of welfare and the incidence of poverty, leaving out changes in the composition of households and in their economic strategies, including their ways of participating in the labour market.

Moreover, the analysis is limited to changes in the distribution of private income, and it excludes the distribution of social incomes (that is to say, those accruing to households in the form of public goods or subsidies), focusing instead on the distributive results of peoples' participation in the productive process and of their institutionalized entitlements. This focus leaves in the shadows the immediate redistributive consequences of social policies implemented through public expenditure (though not the results of entitlements to social security payments) but captures both the short-term effects of economic policy on the distribution of income and the more mediate and eventual influences of public policy on the structure of income, mingled though they may be with structural changes quite beyond the influence of policy.

With these limitations, I have tried to assess the *distributive costs* of the crisis and adjustments, which are more than the "social costs" sometimes measured as losses in aggregate welfare, but are far less than the total social costs, if we recognize that the social structure is more than just the distribution of welfare and that living conditions are not only determined by income.

Evaluating the specific nature of the costs is another matter. The distributive changes recorded by available income distribution measurements incorporate the effects of adjustment, institutional changes involving policy reform and underlying restructuring processes, as well as those of failed adjustment and the acceleration of inflation. However, since the crisis of the 1980s is the counterpart of an epoch-making transformation of Latin American development, the measured distributive losses are attributed to the changes –including the periods of instability and inflation, failed policies or policies involving overadjustment– that have marked such processes in some countries.

TABLE 3

Latin America (10 countries): Incidence of poverty and indigence in the 1980s
(Percentage of households)

	Poverty			Indigence		
	Urban areas	Rural areas	National level	Urban areas	Rural areas	National level
Argentina						
1980	7	16 [a]	9	2	4 [a]	2
1986	12	17 [a]	13	3	6 [a]	4
1990	19 [b]					
1991	15 [b]					
Brazil						
1979	30	62	39	10	35	17
1987	34	60	40	13	34	18
1990	39	56	43	17	31	20
Colombia						
1980	36	45 [a]	39	13	22 [a]	16
1986	36	42	38	15	22	17
1990	35			12		
Costa Rica						
1981	16	28	22	5	8	6
1988	21	28	25	6	10	10
1990	22	25	24	7	12	10
Chile						
1980	32 [c]	41 [c]	33 [c]			
1987	37	45	38	13	16	14
1990	34	36	35	11	15	12
Mexico						
1977			32			10
1984	23	43	30	6	19	10
Panama						
1979	31	45	36	14	27	19
1986	30	43	34	13	22	16
1989	34	48	38	15	25	18
Peru						
1979	35	65 [a]	46	10	38 [a]	21
1985/86	45	64	52	16	39	25
Uruguay						
1981	9	21 [a]	11	2	7 [a]	3
1986	14	23 [a]	15	3	8 [a]	3
1989	10	23 [a]	15	2	8 [a]	3
Venezuela						
1981	18	35	22	5	15	7
1986	25	34	27	8	14	9
1990	33	38	34	11	17	12

Source: ECLAC (1991a; 1991b; 1992a).
[a] These estimates should be considered "educated guesses" based on relevant but indirect information.
[b] Author's estimate, based on Beccaria and Minujin (1991).
[c] Author's estimate, based on Pollack and Uthoff (1987). See Altimir (1991).

The focus is not on the interaction of macroeconomic variables (which has been analyzed elsewhere), [8] but on the relationships between changes in income distribution and poverty and the processes of adjustment, policy reform and structural mutation underlying the changes in those macroeconomic variables.

However, neither the depth nor the characteristics of the restructuring of production are adequately revealed by changes in the set of macroeconomic variables used, and their permanent distributive consequences can only hinted at by considering distributive situations after stabilization and adjustment.

On the other hand, the association of distributive changes with policy reforms poses methodological and time-related problems. Economic policy reforms generally oriented towards facilitating or promoting sustainable growth on the basis of freer trade and private investment may have a share in the short-term effects on income distribution caused by the package of stabilization and adjustment policies through which they have been implemented. Moreover, some of these effects may have been imposed by the political economy of reforms designed to cause such desired advances to take root. In the longer term, reforms may have negative distributive effects if a trade-off between growth and more equitable income distribution is observed or is to be expected on the basis of the pattern of growth promoted by the particular reforms undertaken. Whether economic restructuring promoted by these policy reforms and by the new structural circumstances involves more unequal distribution of income is a matter whose full empirical verification can only take place after the long-term deployment of their effects. For the moment, we can only consider what appear to be the "normal" or more or less "stable" distributive structures once each economy regains a sustained growth path.

Even though the distributive costs of external adjustment, stabilization, fiscal adjustment and economic restructuring are intertwined, the characteristics and sequencing of policy packages certainly make a difference in terms of the magnitude and duration of distributive losses (see for example García, 1991). However, the income distribution and poverty estimates in our data base are too scanty to give more than very broad hints in this regard.

[8] See, for example, Bianchi, Devlin and Ramos (1985; 1987) and ECLAC (1986).

Moreover, in many instances the periods of analysis imposed by the availability of data include adjustment or stabilization policies, followed by their failure and the acceleration of inflation, thus encompassing the distributive costs of both kinds of processes.

The basic assessment criteria I have used in this study are, on the one hand, to compare distributive changes and changes in macroeconomic and labour market variables during similar macroeconomic phases in the course of the adjustment process in different countries and, on the other hand, to compare the distributive situations before and after adjustment in each country.

Consequently, the analysis is carried out for different phases of the macroeconomic evolution of each economy during the 1980s, the underlying hypothesis being that different relationships between distributive changes and macroeconomic changes may prevail during instability, recession, recovery and growth close to the production frontier. In view of the scarcity of distributional measurements for each country and the lack of uniformity as to their correspondence with similar macroeconomic phases, this inhibits us from attempting a formal econometric exercise.

In the selection of macroeconomic variables, both their availability and their analytical relevance were taken into account. The implicit conceptual model links changes in inequality with variations in: real national per capita income, [9] the real exchange rate as a proxy for relative prices, public consumption expenditure at constant prices [10] as a proxy for government employment and real wages, inflation, real urban wages and urban labour underutilization (i.e.: urban unemployment and informal employment). Changes in urban poverty are, in turn, related to variations in real per capita income, inequality and the real minimum wage. Changes in rural poverty, on the other hand, are linked to changes in real per capita income, agricultural product and the real exchange rate.

[9] That is to say, the per capita product after net factor payments and the effect of terms of trade variations; therefore, this variable incorporates the direct (i.e.: accounting) effect of external shocks represented by changes in the terms of trade and in accrued interest on the foreign debt.

[10] That is to say, public consumption expenditure at current prices deflated by the GDP deflator. This is different from public consumption expenditure in real terms as estimated in the national accounts, which in Latin American practice reflects, at best, government employment.

There are a number of measurement limitations that hinder a rigorous association between observed changes in income distribution and poverty and observed changes in macroeconomic variables. Foremost among them is the fact that observed income distributions from household surveys of the type generally used for these estimates (i.e., those including questions on labour) measure incomes in a specific month of the year, whereas measures for most of the relevant macroeconomic variables are made available on a yearly basis, with quarterly data being much more difficult to obtain. Moreover, the years for which income distribution or poverty measurements are readily available do not always correspond to relevant phases of the conjunctural movements of the economy (which in many cases have been numerous and often of different direction) or to periods when a specific policy package was in force.

The analysis of associations between distributive changes and macro variables focuses on the distribution of income and poverty in urban areas, with only a summary analysis of changes in rural poverty. There are various reasons for disaggregating the analysis. Firstly, as noted above, income distribution and poverty measurements at the national level incorporate or mix urban and rural measurements of very different degrees of reliability or accuracy, making the "constant bias over time" assumption less tenable. Also, however, most macro variables available have a different relationship with either urban or rural incomes (e.g.: the exchange rate) or a tenuous or remote relationship with rural incomes (e.g.: unemployment or informal employment), or almost no bearing at all on them in the short run (e.g.: urban wages); hence, analysis based on aggregate income distribution or poverty at the national level blurs their differential explanatory value.

Furthermore, for some countries or periods only measurements for urban areas are available. To be sure, this is a hindrance for distributional analysis. However, it is a less serious problem than in other developing regions, since in most of the Latin American countries considered more than 60% of the population is urban (more than 80% in the Southern Cone countries and Venezuela) and less than half the poor are rural (20% or less in the Southern Cone and Venezuela).

Finally, the distributive changes of the 1980s are also assessed in the context of the previous trends of the 1970s (i.e., before the crisis), when different growth processes were in place and –in some countries– policy reforms were undertaken.

III

The record of the 1970s

1. Inequality

Analysis of changes in income distribution and growth in the main countries of the region during the 1970s (Altimir, 1992) suggests, as summarized in table 4, that:

i) Even if they had very different degrees of income concentration at the beginning of the decade, countries which experienced disrupted growth, such as Argentina, Chile or Peru, suffered significant increases in inequality;

ii) In countries (such as Costa Rica or Uruguay) which had moderate average per capita growth rates (between 2% and 3%) over the decade and in which income concentration, at its beginning, was at an intermediate level, there was a deterioration in the distribution situation;

iii) Three countries (Colombia, Mexico and Venezuela) which had solid average sustained per capita growth rates (over 3% per year), significantly reduced their previously high (Gini coefficients over 0.5) income concentration;

iv) In contrast, the high and sustained per capita growth rate (close to 6% per year) of Brazil during the 1970s was not accompanied by a reduction in the very high income concentration (Gini coefficient of around 0.6) established during the previous decade.

2. Poverty

Changes in the incidence of absolute poverty depend on growth of average real income, changes in the distribution of income, and also the stance regarding

TABLE 4

Latin America (10 countries): Growth rates and changes in income distribution and incidence of poverty in the 1970s

Countries	Changes in income concentration [a]	Changes in incidence of poverty		
		Nationwide	Urban	Rural
Slow growth (< 1%)				
Argentina	I	M	I	D
Chile	I	I	I	I
Peru	I	D	I	D
Moderate growth (2-3%)				
Costa Rica	I	D	M	D
Panama	...	M	I	D
Uruguay	I		I	
Rapid growth (>3%)				
Brazil	M	D	M	D
Colombia	D	D	D	D
Mexico	D	D	D	D
Venezuela	D	D	D	D

Source: Altimir (1992).
[a] I: Increased; M: Maintained similar level; D: Decreased.

the change in poverty norms over time.[11] Using comparable estimates of the incidence of poverty for 1970 and around 1980, with poverty lines both constant and shifting over time (Altimir, 1992), the following highlights emerge for the sample of countries (see table 4):

i) Argentina, Chile and Peru, a group of countries with increasing inequality and low and unstable growth during the decade –as a consequence of economic shocks and institutional disruptions– registered either discouraging or downright dismal results on the poverty front. In Argentina the incidence of poverty at the national level may have increased only slightly and in Peru it may even have decreased, if the respective "educated guesses" about the decrease in rural poverty are accepted, but in both countries urban poverty tended to increase. In Chile, there was a virtual explosion of poverty in both urban and rural areas.

ii) In the two countries which experienced moderate growth and increasing inequality (Costa Rica and Uruguay), urban poverty either remained unchanged or increased, with rural poverty deceasing or remaining about constant, respectively.

iii) Those countries which attained high rates of per capita growth and decreasing inequality (Colombia, Mexico and Venezuela) showed significant reductions of absolute poverty, both in urban and rural areas.[12]

iv) Brazil's intense growth resulted in the reduction of poverty, even in spite of the lack of improvement of the relative income distribution; however, if some shifting of the poverty line is accepted, to allow for the possible effects of such a growth process on the prevailing style of living, the incidence of poverty in urban areas would have remained more or less constant.

v) The incidence of poverty in rural areas showed a downward trend during the 1970s in almost all of the countries considered, irrespective of the rate or stability of their growth, with the marked exception of Chile.

vi) Rural-urban migrations, which were particularly intense in the 1970s, may have been more important than the improvement of economic conditions in rural areas in explaining the absolute reduction in the number of rural poor in Argentina, Brazil and Venezuela. In contrast, the latter factor has been more important than migrations in reducing absolute rural poverty in Colombia, Mexico and Panama and in bringing down the incidence of rural poverty in Costa Rica and Peru. In Chile, rural-urban migrations merely cushioned the general rise in the incidence of poverty.

[11] Contrary to the widespread fashion of using poverty lines constant over time in real terms, there is a strong argument for shifting even *absolute* poverty lines over time, in a context of growth and societal progress (see Altimir, 1991).

[12] Even if the poverty lines were shifted because of high growth, poverty would still have gone down, although to a lesser degree.

IV

The 1980s: a review of ten countries

Income concentration and poverty increased in the urban areas of almost all Latin American countries during the 1980s, as is evident from tables 1 and 3. Colombia is the only clear exception, while Mexico and Costa Rica appear to have cushioned to some extent the distributive deterioration caused by the adjustments of the decade, and Panama only suffered when it was affected by political and international conflicts. Brazil, which already had a high degree of inequality, also suffered relatively less additional deterioration. Chile, Argentina and Uruguay experienced severe distributive losses during different phases of their reform and adjustment processes of the last two decades, and their record of the 1980s has to be considered in this context. Peru and Venezuela also suffered heavy distributive losses, from different combinations of shocks and policy failures. The changes in income concentration [13] and urban poverty in each country and period are compared with the changes in relevant macroeconomic and labour market variables summarized in table 5.

The exceptional case is *Colombia*, where all available data show an improvement of income distribution during the decade: between 1978 and 1988 there was a relatively slight reduction of income concentration among wage-earners (Londoño, 1990), while between 1980 and 1986 there was a significant decrease in the share of the upper decile of households, mainly in favour of the middle strata; moreover, up to 1990 that improvement deepened, favouring also the lower four deciles of households. However, the incidence of urban poverty in 1990 was roughly similar (around 35%) to the 1980 and 1986 marks.

These results are roughly consistent with the initial conditions before the crisis, the macroeconomic trends of the period and the traditionally prudent style of Colombian economic policy. When the systemic financial crisis of the 1980s broke, Colombia was not heavily indebted; adjustment did not take place until 1984-1985, and even then the policy followed was a gradual one, deliberately aimed at minimizing wage and employment losses. In fact, during the rest of the decade economic policy included job creation and sustaining wages among its objectives (García, 1991).

In 1986, when the country's comparatively mild external adjustment had just been completed, real per capita income was already 5% higher than in 1980 and real wages were 12% higher. However, urban unemployment was 4 points (i.e.: almost a half) higher than in 1980 and 2% more of the urban labour force (i.e., 27% of it) was employed in informal activities. The 1986/1990 period has been one of growth with stability, of sorts, for the Colombian economy, though the macroeconomic situation deteriorated somewhat in 1990. Real per capita income expanded more than 4% over the period, with exports, public consumption expenditure and private consumption leading the expansion. Unemployment correspondingly decreased (by more than 3 points) as did the importance of informal employment, while real wages increased slightly up to 1989 and decreased significantly only in 1990.

In *Mexico*, available measurements show a significant decrease in inequality, accompanied by a reduction of poverty at the national level, between 1977 and 1984, and a subsequent deterioration between 1984 and 1989: a period during which the government's policy stance radically changed (Lustig, 1992). The 1984 observation falls in the midst of the first adjustment and stabilization programme, at a time when a moderate economic recovery from recessionary adjustment was taking place (Lustig,

[13] Even reliable income distribution measurements are not able to capture income received by the country's residents from assets held abroad. Capital flight during the initial years of the crisis has been substantial, particularly in Argentina, Mexico and Venezuela (see Cumby and Levich, 1987). With the yields current at the time, property income on assets accumulated abroad by the private sector of those countries may have represented around 3% of household disposable income in Argentina and Mexico and as much as 5% in Venezuela. These proportions have most likely increased the share of the upper decile or quintile in total household income, adding to the changes recorded in table 1 for the first half of the decade. Similarly, the later fall in international interest rates and related yields should have been reflected in an inverse change (of about half the size of the previous one) in the "total" (i.e.: from domestic and foreign sources) share of the upper-income groups.

TABLE 5

Latin America (9 countries): Changes in macroeconomic and labour variables and in income distribution in different phases of the 1980s

Countries	Periods	Macroeconomic variables [a]			Labour market [b]						Changes in income distribution [c]	
		RNIpc	REER	INF [d]	MW	RMW	UNAL	NALI	UU	GEpc	Concentration (Gini coefficient)	Urban poverty
I. Periods of recessionary adjustment to external shocks												
Argentina	1980-83	-23	77	I	-1	37	10	1	81	-19	I?	I+?
Brazil	1979-83	-13	26	I	-18	-5	20	24	8	-7	M	I
Colombia	1980-83	-5	-12	D	8	7	12	9	21	7	D	M?
Costa Rica	1980-83	-26	40	I/D	-18	-1	12	12	42	-30	I?	I+
Chile	1981-83	-22	34	I	-11	-19	32	5	111	-8	I	I
Mexico	1981-84 [e]	-12	40	I	-30	-32	12	7	36	-14	I?	I?
Peru	1982-84	-12	14	I	-25	-20	32	31	35	-22	...	I+
Uruguay	1981-86	-19	55	I	-13	-14	...	...	60	-14	I	I+
Venezuela	1981-86	-30	51	-	-19	6	24	6	78	-21	I	I+
II. Periods of recovery after external adjustment												
Argentina	1983-86	-	-	D	8	7	10	8	19	24	I	I?
Brazil	1983-87	19	13	D/I	37	-23	-11	-1	-45	42	I	D
Colombia	1983-86	10	67	I	4	6	4	-2	18	-3	D	M
Costa Rica	1983-88	8	15	I	8	16	-4	8	-25	11	I?	D?
Chile	1983-87	12	72	-	-3	-27	-25	-16	-37	-23	I	...
Panama	1982-86	10	-		16	13	...	...	26	-3	...	M?
Peru	1984-87	16	-	D/I	40	-3	-15	-7	-46	28	...	D?
Uruguay	1986-89	13	12	M/I	6	-12	...	...	-20	-20	D	D
Venezuela	1986-89	-6	52	I	-38	-15	-5	4	-20	-20	I	I
III. Periods of recession due to domestic imbalances												
Argentina	1986-89	-13	34	I/H	-19	-62	14	8	36	...	I	I+
Brazil	1987-89	-1	-31	I	-11	-1	-6	-6	-11	17	I	I
Mexico	1984-87	-8	44	I	-16	-17	21	36	-32	-20	I?	...
Panama	1986-89	-22	-		-1	-1	...	...	61	-22	I?	I
Peru	1987-90	-30	-49	I/H	-69	-64	...	...	73	-58	I?	I
IV. Periods of disinflation and recovery												
Argentina	1990-91	5	-24	D	-7	39	...	...	-13	...	...	D
Mexico	1987-89	2	-11	D	-2	-16	9	14	-7	-10	I?	...
V. Periods of growth after recovery												
Colombia	1986-90	4	31	I	-5	-5	-13	-7	-25	20	D	D
Costa Rica	1988-90	-	-4	D/I	2	5	-4	1	-14	20	D	I
Chile	1987-90	18	5	I	11	27	-15	1	-45	-3	D	D
Venezuela	1989-90	10	4	D	1	-5	2	-	8	-9	D	...

Source: Changes in macroeconomic and labour variables: ECLAC and PREALC. Distributive changes: tables 1 and 3.

[a] RNIpc: real national per capita income; REER: real effective exchange rate; INF: inflation.

[b] RW: real urban or industrial wages; RMW: real minimum wage; NALU: non-agricultural labour force underutilization (per active person), equal to NALI+UU; NALI: Non-agricultural labour force in informal activities (PREALC definition); UU: urban unemployment rate; GEpc: real per capita government consumption expenditure.

[c] I: increased; I+: greatly increased; D: decreased; M: maintained; "?" indicates most likely presumption for the phase (see text) in the context of the changes observed in tables 1 and 3 for a longer period.

[d] I: increased; D: decreased; M: inflation rate was maintained; H: entered into hyperinflation.

[e] This period includes a transient recovery.

1992). However, real wages had dropped almost 30% in two years, and per capita public consumption expenditure had decreased 14%. It is likely that the improvement in concentration with respect to 1977 (quite apart from the ever-present possibility that the two measurements are not comparable) conceals a deterioration from a substantially better distributive situation reached during the period of vigorous growth (6% a year) prior to the crisis, particularly in urban areas.

Be that as it may, there is evidence of an increase in inequality between 1984 and 1989, when the Mexican economy was recovering to a moderate rate of growth with inflation under control, after absorbing an oil shock (real per capita national income was still 7% lower than in 1984), and in a period when fiscal discipline and policy reforms were progressively gaining ground. Over this time-span, per capita public consumption expenditure was reduced more than 30% in real terms and urban real wages declined a further 26%. At the same time, unemployment dropped to levels below those registered during the oil boom and informal employment increased 10 points, to more than 30% of the non-agricultural labour force. Both developments, consistent with the remarkable flexibility of real wages, must have cushioned the impact on the incomes of poor and lower-middle households (Lustig, 1992).

Costa Rica has been traditionally characterized by political and economic stability and the adjustment of its economy during the 1980s was significantly aided by official transfers from the United States. Nevertheless, the distribution of urban incomes worsened between the beginning and the end of the decade, although the improvement of rural incomes may have helped to maintain the previous concentration of income at the national level.[14] The deterioration that took place between 1981 and 1988 was only partially reversed during the subsequent two years, and this reversal favoured the middle strata more than the poor. Consequently, urban poverty increased significantly between 1981 and 1988 and also advanced a little more up to 1990.

There is evidence that impoverishment was acute during the recessionary external adjustment of 1981/1982, while later stabilization and recovery in 1983/1986 brought absolute poverty down to levels close to those registered prior to the crisis (Trejos, 1991). At least, this is what appears to have happened at the national level; real devaluation may have increased the incomes of the rural poor, as argued by Morley and Alvarez (1992), while the real rise of wages in formal activities after the adjustment may have improved the situation of the lower-middle strata. On the other hand, the deterioration of real incomes in informal activities –which had expanded– may have increased the number of the urban poor.[15]

In the subsequent period, marked by policy reform (especially trade liberalization) and unstable expansion, the available evidence indicates a relative stabilization of the incidence of poverty at the national level (Trejos, 1991; ECLAC, 1992a), but also –as already indicated– a tendency for urban poverty to increase, in the context of a reduction of real wages, a gradual decline in real per capita income, and relative stability of the real exchange rate. On the other hand, the expansion of public consumption expenditure in real terms (20% per capita) must have helped the observed improvement of the relative position of middle income groups.

The external shocks that set off the crisis in other Latin American countries had a delayed and milder impact on the economy of *Panama*, which only suffered a brief stagnation of economic activity in 1983/1984. In spite of a 23% rise in real per capita income and a 14% increase in real wages, between 1979 and 1986 urban poverty fell only slightly, to less than 30% of households. The political crisis cum international conflict that pushed the Panamanian economy into recession in 1988/1989, however, brought real per capita income to 5% below the 1979 level –although this was not so with real wages–, reduced per capita public consumption expenditures more than 20% and forced up open unemployment of the urban labour force by 10 percentage points. As a result, the concentration of income significantly increased, as did poverty, which spread to 34% of urban households.

[14] Morley and Alvarez (1992, tables 7b and 7c) argue that the real devaluation that was required for external adjustment presumably increased agricultural wages after 1981, although the bulk of the devaluation occurred in that year. They also note that between 1981 and 1989 rural nominal incomes in the lower deciles of the national distribution increased more than those of urban households in the same deciles.

[15] Morley and Alvarez (1992, table 7h) note that among urban households there was a sharp deterioration of nominal wages in non-basic services compared with industry between 1981 and 1986.

The already highly unequal income distribution of *Brazil*, which had not improved even during the previous decade of high growth, worsened further during the 1980s. The inequality of the distribution of household income remained relatively stable during the 1981-1983 recession and later recovery and improved slightly and briefly in 1986, in the climate of growth and temporary stability created by the Cruzado Plan. Between that year and 1989, however, with the acceleration of inflation and the beginning of the present recession, income concentration increased, though there is evidence (Hoffman, 1992) that in 1990 inequality of household income improved somewhat.

Consequently, the distribution of income in 1989 was more concentrated than in 1979, and poverty affected 5% more of urban households, while real national per capita income and industrial wages remained at about the same level as at the end of the previous decade, but unemployment had risen by more than 3 percentage points, as also had informal employment. On the other hand, expansion of public consumption expenditure (55% growth in per capita terms between 1979 and 1989) must have helped to cushion the relative deterioration of the middle-income groups. The fall of economic activity and incomes in 1990, which was accompanied by a 20% real reduction of industrial wages, increased urban poverty by 4 additional points, to almost 39% of households.

External shocks and policy reforms under the authoritarian rule of the Pinochet regime, along with the ensuing instability and low average growth, caused major changes in income distribution and poverty in *Chile* during both the 1970s and the 1980s. Income distribution suffered significant deterioration: not only was the short-lived redistribution that lasted up to 1974 reversed but the distributive pattern of Chilean society underwent a complete change.

By 1980, after the recovery from a deep recession (per capita GDP was only 6% higher than in 1970), the implementation of a radical trade liberalization programme, the reversal of agrarian reform, and institutional reforms that allowed for greater labour market flexibility but also for labour repression (Ffrench-Davis and Raczynski, 1987), the upper decile of households was receiving at least five points more of total income than in 1968, to the detriment of the shares –and real incomes– of both the middle and lower strata. Real wages were still more than 10% lower than in 1970, 17% of the labour force was unemployed and 28% was in informal activities. Absolute poverty virtually exploded, both in urban areas –from 12% in 1970 to around 28% in 1980– and in rural areas, bringing the incidence of poverty at the national level to about 30% of the households (Altimir, 1991).

During the 1982-1983 crisis, the existing inequality was further aggravated –although perhaps only marginally, compared with the turnaround of the previous period– and urban poverty increased still further.[16] The deterioration may have continued until 1987, when real per capita income and real wages were respectively still 12% and 5% lower than in 1980, per capita public consumption expenditure had shrunk more than 30%, and unemployment still affected 17% of the labour force, although the share of informal activities had been reduced. Under those circumstances, urban poverty had risen by about 4 points (14% on a per capita basis) and the distribution of income had further concentrated in favour of the upper quintile, whose share of expenditure increased by almost 4% of the total with respect to 1978, to the detriment of the middle and lower strata, the latter having suffered a relative greater loss.

Only between 1987 and 1990, with the Chilean economy reaching full utilization of its capacity and progressive reforms of the labour laws, did the distributive picture improve somewhat. Real per capita income increased 18%, real wages 11% and unemployment was reduced by almost 6 points, to about 7% of the labour force. At the same time, urban income concentration decreased slightly, in favour of the lower income groups, and urban poverty was reduced by 2 points, while rural poverty decreased more significantly, bringing the incidence of poverty at the national level to less than 35% of households.

Major distributive changes have also taken place in *Argentina* since the 1970s, under successive spells of economic instability and political disruption. After a military regime came to power in 1976, policy reforms were introduced to liberalize prices, trade and the financial market, but not employment and wages (which were repressed for most of the period). Economic activity followed a stop-go pattern in the context of a situation of high inflation, in spite of

[16] Pollack and Uthoff (1987) estimate that absolute poverty increased by 8 percentage points (from 40% to 48%) in Greater Santiago.

the explicit anti-inflationary policy stance which permeated three successive programmes (Canitrot, 1981).

Between 1970 and 1980 income concentration significantly increased: the upper decile of households enlarged its share of total income by almost 5 points, while the lower strata lost almost 3 points. Urban poverty increased by 2 points, to 7%. Most of this deterioration, however, took place after 1974.[17] In 1980, real per capita income was roughly similar to the 1974 level and real wages in manufacturing were still 14% lower than in that year, though unemployment was very low.

The sizeable fluctuations in economic activity, the magnitude of the external shocks and ensuing adjustments, and swings in relative prices associated with high and accelerating inflation during the 1980s were accompanied by movements of the relative distribution of income, although these were perhaps not as intense as the macroeconomic ebb and flow (Beccaria, 1991). By 1986, income concentration had further increased with respect to 1980, involving a dramatic change from the beginning of the 1970s: the share of the upper decile had grown about as much as it had in the previous decade, but this time at the expense mainly of the middle-level strata. Urban poverty had increased 6 points (i.e., almost doubled), to more than 12% of households. Although the economy was recovering under a successful stabilization programme, real per capita income was 22% below the 1980 level, unemployment was 3 points higher, and informal employment 2 points higher; on the other hand, real wages were 6% higher than at the beginning of the decade.

After 1986, the acceleration of inflation and the fall in real wages were accompanied by a further deterioration of relative income distribution, which reached its high point in 1989; with the burst of hyperinflation and recession reaching its trough, concentration stood at its peak. In 1990, income concentration among individual recipients receded to the still high level reached in 1988 (Beccaria, 1991). Between 1986 and 1990, poverty may have spread to an additional 6% of urban households (an increase of more than 50% on a per capita basis) and the situation improved only in 1991, when prices stabilized and economic recovery began.

[17] See Altimir (1986) for the evolution of income distribution and Beccaria and Minujin (1991) for the evolution of absolute poverty during the period.

Uruguay is the other Southern Cone country in which policy reforms were already undertaken in the 1970s, under authoritarian rule, with significant distributive consequences. Starting in 1974, the financial market was liberalized and price controls were gradually eliminated, while wages continued to be administered, and as from 1979 a trade liberalization programme was put into effect. The 1973-81 period was one of relatively high growth (3.4% per capita a year); nevertheless, the distribution of income deteriorated sharply between 1973 and 1979 –at the expense of both the middle and lower strata– improving somewhat later, but only to the benefit of the middle income strata. This evolution closely followed that of the relationship between real national per capita income and real wages: the former increased 12% between 1973 and 1979, while the latter dropped 32%, and between 1979 and 1981 real income expanded 4% but real wages rose about 17%. On the other hand, urban poverty increased by 4 percentage points (40% on a per capita basis) between 1970 and 1981.

External shocks and ensuing adjustments slashed real per capita income by 19% between 1981 and 1986; real wages fell 8% and unemployment increased 4 points, while per capita public consumption expenditure was reduced more than 30%. Income concentration increased yet again, and urban poverty expanded by 5 additional percentage points, to 14% of households. As a result of economic recovery and later stagflation, real per capita income in 1989 was 13% higher than in 1986 and real wages were 6% higher, while unemployment had decreased 2 percentage points. Consequently, the distribution of urban incomes improved and urban poverty decreased by 4 percentage points. Thus, at the end of the decade, the relative distribution of income and the incidence of absolute poverty were roughly similar to those at its outset, while real wages were substantially lower and unemployment somewhat higher than in 1981.

Continuing deterioration of real national income in *Venezuela* between 1980 and 1986, caused by the fall in oil revenues, and the ensuing reduction (around 20%) of real wages and per capita public consumption expenditure were accompanied by a significant worsening of the distributive situation. Between 1981 and 1986 urban poverty increased 7 percentage points (almost 40% on a per capita basis) while the relative distribution of income also became more unequal.

Economic policy failed to adjust to the fall in oil prices in 1986; external and fiscal imbalances widened and the rate of inflation trebled. The orthodox stabilization programme implemented at the beginning of 1989, along with the first trade and price liberalization measures of a programme of policy reform, brought a recession and sharp falls in public consumption expenditure and real wages, while previous gains in employment were reversed and informal activities expanded. Consequently, poverty increased[18] and income distribution apparently "equalized downwards". The rise in oil earnings caused by the Persian Gulf conflict in 1990, and ensuing public expenditure in 1991, fuelled an extraordinary –and unsustainable- expansion of economic activity. This, however, was mainly to the advantage of the upper-middle strata; urban poverty in 1990 was still 9 percentage points higher than in 1986 and 16 points higher than in 1981 (i.e., almost double). On the other hand, there is evidence indicating that by 1991 –at least at the national level– poverty may have receded somewhat.[19]

The worsening income distribution in the urban areas of *Peru* in the 1970s was aggravated during the 1982/1985 crisis and external adjustment, in a climate of increasing violence. By the end of 1985 and the beginning of 1986, when the economy was recovering under the drive of an unsustainable heterodox stabilization programme implemented by the newly elected García government, real national per capita income and real wages in the private sector were still 9% and 5% lower than in 1979, while an additional 10% of the non-agricultural labour force was employed in informal activities (thus reaching more than 40%). At that time, urban poverty still affected 45% of urban households: 10 percentage points more than in 1979.

Although there are no comparable observations for later years, there is some evidence that by 1990, in the midst of hyperinflation and economic collapse, poverty may have expanded by more than half with respect to 1985/1986, and it worsened still further in 1991, when the Fujimori government put into effect the present stabilization programme.[20]

V

Rural poverty

For most of the countries in our sample there is evidence of a decrease –however slight in some cases– of the incidence of rural poverty in the course of the 1980s, thus somehow at least inertially continuing the trend towards abatement of rural poverty that was manifest in the previous decade. The only clear exceptions are Panama and Venezuela, where that trend appears to have reversed by the end of the 1980s, and possibly Argentina, for which a slight increase of rural poverty has been estimated. Chile is a special case, since the rural impoverishment of the 1970s continued well into the following decade, only to be reversed in the latter years (table 3).

Those exceptional increases are associated with falls in real per capita income, but the reverse does not hold true: of nine recorded spells of rural poverty reduction, this coincided with an increase in real national per capita income in only four cases;[21] in the remaining five rural poverty decreased along with

[18] Marquez (1992) estimates that, at the national level, poverty affected 28% of households in 1985, 32% in 1987 and 41% in 1989.

[19] Marquez (1992) puts the incidence of poverty at the national level in 1991 at 35% of households, compared with 41% in 1989, a point when it was no doubt higher than in 1990.

[20] See Figueroa (1992, table 2) and Abugattas and Lee (1991, table 4). On the other hand, comparison of the distribution of Lima households by size of per capita consumption expenditure, on the basis of the 1985/1986 and 1990 surveys of the standard of living (Psacharopoulos *et al.*, 1992), shows little increase in inequality between the two observations; this may reflect another case of "downward equalization" by recession, with the real consumption of the poor falling by almost 7% a year and the real consumption of the richest decile by almost 6% a year.

[21] Brazil (1979-1987), Colombia (1980-1986), Chile (1987-1990) and Panama (1979-1986).

TABLE 6

Latin America (8 countries): Changes in rural poverty and in relevant macroeconomic variables in the 1980s
(Percentage change over each period)

Country	Period	Changes in rural poverty [a] (per cent)	Changes in macroeconomic variables (per cent)		
			Per capita real national income	Agricultural GDP	Real exchange rate
Argentina	1980-1986	4	-23	12	75
Brazil	1979-1987	-3	4	41	43
	1987-1990	-6	-7	-	-38
Colombia	1980-1986	-7	5	11	47
Costa Rica	1981-1988	-3	-5	18	-6
	1988-1990	-10	-	10	-4
Chile	1980-1987	11	-13	33	89
	1987-1990	-19	18	14	5
Panama	1979-1986	-4	23	11	-
	1986-1989	11	-22	7	-
Peru	1979-1985-1986	-2	-9	12	-9
Venezuela	1981-1986	-3	-30	23	51
	1986-1990	12	3 [b]	1	59

Source: ECLAC.
[a] Taken from estimates in table 3.
[b] 1986-1989: -6%.

declines in real national income. In contrast, there is a close association of rural poverty reduction with expanding agricultural output, which holds good in eight of the nine cases, suggesting that peasants somehow share in general rural prosperity. In contradiction to conventional wisdom, however,[22] the association is weaker with real devaluation of the exchange rate, since it is observed in only four of the cases, and in most of them with low parameters (table 6).

All this suggests that, in the absence of major institutional reform, [23] slow-moving structural changes in the rural milieu affect the process of reduction of rural poverty more than short or even medium-term changes in macroeconomic variables, although these may be able to slow down or even temporarily reverse such a process.

These slow-moving changes are in part reflected in the continuous transfer of rural poverty to the urban areas through migrations. In the 1980s, these have been less intense than in the previous decade, but they were nevertheless substantial. In most of the countries, rural-urban migrations were the main force sustaining the trend towards the reduction of poverty in rural areas, although they may not have been sufficient –as they had been in the 1970s– to prevent an absolute increase in the rural poor.

[22] At least, this is true if no allowance is made for time lags between real devaluation, reallocation of resources to tradeables, ensuing expansion of agricultural output, and eventual participation of peasants and labourers in such expansion.

[23] Such as agrarian reform, as in Peru, or its reversal, as in Chile, both in the 1970s.

VI

Transient and permanent changes in income distribution

In order to shed some light on whether and to what extent changes in inequality during the decade of crisis and adjustments may be permanent, it is crucial to consider the different macroeconomic phases through which the Latin American countries have passed and the structural circumstances in which each of them is situated at present, as well as the nature and depth of policy reforms undertaken. Changes in macroeconomic and labour variables and distributive changes in selected periods corresponding to different macroeconomic phases of the 1980s are summarized in table 5.[24]

1. Income distribution and poverty in different phases of adjustment processes

Recessive adjustment to external shocks at the beginning of the decade has had adverse effects on inequality and devastating effects on urban poverty all over Latin America. Income concentration certainly increased in Argentina, Chile, Uruguay and Venezuela and perhaps also in Costa Rica and Mexico, while in Brazil inequality apparently remained unchanged through the rapid adjustment of 1981-1984 (Hoffman, 1992). In all these cases urban poverty increased during the adjustment, along with underutilization of the urban labour force[25] (which rose by between 10% and 20%, depending on the country) and there were sizeable falls in real per capita income, real average wages[26] and real per capita public consumption expenditure.

Colombia stands out as an exception, partly because of its lesser initial debt burden. The economy went through a smooth external adjustment –even with real currency appreciation– with reduction of inflation, which allowed for real rises in minimum and average wages, and even for the real expansion of per capita consumption expenditure. Such was the background for the probable improvement of income distribution and the lack of aggravation of absolute poverty. Although Panama also underwent a mild adjustment in 1982-1984, with rising real wages but an increase in unemployment, in this case there is no indication of the distributive changes over that period.

The recovery after external adjustment only brought relief on the poverty front in certain countries. In Brazil, it may be associated with the cumulative rise in real per capita income (close to 20%) and real wages (37%), and with decreasing labour underutilization, in spite of a probable increase in inequality.[27] If Peru also experienced a slackening of urban poverty during this phase –which is not known for certain, but is likely– this may have been due to a similar configuration of changes in the level of activity and the labour market. The decrease of poverty in Uruguay –along with inequality– and perhaps in Costa Rica and Panama, and the possible maintenance of its already limited incidence in Colombia, are also associated with changes in income and the labour variables in the same direction but to a less spectacular extent.[28]

In contrast, recovery in Argentina, Chile and Venezuela was accompanied by further increases in urban poverty, although for different reasons. In Argentina, the unsteady and only partial recovery and

[24] The intervals between measurements of poverty (table 3) or income distribution (table 1) usually cover more than one phase of economic evolution; in these cases, the changes in distribution shown in the table are also based on the evidence referred to in the text.

[25] The indicator of underutilization of the urban labour force used here is the sum of the rate of open (urban) unemployment and the proportion of the non-agricultural labour force engaged in informal activities, estimated by PREALC.

[26] In Argentina, however, real wages recovered and the minimum wage increased sharply in 1983, at the end of the disintegrating military regime, even with accelerating inflation. In Chile, real average wages (in formal activities) rose up to 1982, in a context of moderate inflation, high labour underutilization (almost half of the non-agricultural labour force) and a new labour regime that gave the labour market total flexibility (García, 1991).

[27] However, the conspicuous increase in real per capita public consumption expenditure (42%) must have improved the relative position of some middle-income strata.

[28] Mexico's brief and mild recovery in 1984 did not significantly alter the results of the previous recessive phase, although "the very circumstances that triggered it contributed in part to its demise" along with worsening terms of trade in 1985 (Lustig, 1992, pp. 34-36).

the increase in unemployment and informal labour apparently outweighed the modest rise in real wages and the temporary abatement of inflation. In Venezuela, too, until 1989, the recovery had been partial and subject to adverse external shocks, with accelerating inflation, while shrinking (-38%) real wages and per capita consumption expenditure (-20% in real terms) outweighed the very modest decrease in labour underutilization, providing the background for increases in inequality and urban poverty. In the case of Chile, complete labour market flexibility allowed for a deterioration in equity in the medium-run; the 1983-1987 recovery was vigorous and underutilization of the labour force decreased significantly (although it still remained at more than a third of the urban labour force), but real wages and per capita public consumption expenditure barely held steady, in a context of moderate and roughly constant inflation, while both inequality and absolute poverty increased.

Those countries which again plunged into recession, after recovering from external adjustment, due to pervasive internal imbalances, additional external shocks and accelerating inflation combined with stabilization efforts, experienced further increases in inequality and absolute poverty.

In Argentina and Peru such imbalances drove the economies to hyperinflation, and in Brazil to the brink of it; real incomes and wages plunged and labour underutilization increased, as also did absolute poverty and income inequality. Argentina's emergence from hyperinflation in 1990 stopped the fall and even brought some marginal improvement in inequality, although it did not prevent a further increase in poverty. The acceleration of inflation in Brazil took place along with some economic expansion and further increases in per capita public consumption expenditure, albeit with stagnating real per capita income and falling real wages; however, the 1990 stabilization package brought about disinflation with recession, which apparently increased poverty still further.

External shocks in 1985-1986 and stabilization efforts in Mexico also led to a new recessionary spell; the increase in informal activities and the drop in real wages suggest that there may have been a further increase in urban poverty and that –jointly with the fall in per capita public consumption expenditure– part of the observed increase in inequality up to 1989 may have taken place during this period. Panama's deep recession of 1988-1989, triggered by political and international conflicts, increased urban poverty and possibly also inequality.

The two cases of stabilization and recovery from high inflation and recession in the late 1980s (Argentina in 1990-1991 and Mexico in 1987-1989) included moderate increases in real income and in the utilization of the urban labour force and also moderate reductions in real wages. In the case of Argentina, urban poverty decreased from the high level of incidence attained during the previous spells. In the case of Mexico, however, there is no evidence of a similar abatement of poverty or of a decrease in inequality.

In almost all of the few observable instances of sustained or even unsustainable growth after recovery, such circumstances brought about an improvement of the relative income distribution and some decrease in urban poverty. Only in Costa Rica in 1990 was there a rise in urban poverty, with the acceleration of inflation and particularly the elimination of subsidies and the increase in public service rates. In both Colombia and Chile inequality and poverty decreased; in the latter case the rises in real incomes and wages were more substantial, but in Colombia there was an expansion in real per capita public consumption expenditure. In Venezuela, there are indications of a reduction of income concentration in 1989-1990, in spite of falling real wages and increasing unemployment.

2. Permanent changes in income concentration

Let us consider first the countries that have already attained a stage of full-capacity growth. Colombia is the only one in which income concentration at that stage is actually lower than before the crisis, but in Costa Rica in 1990 urban inequality was only slightly higher than in 1981. In both countries, real wages and per capita public consumption expenditure were higher than at the beginning of the decade (table 7).

In Chile, in contrast, after regaining a medium-term growth path, the income structure is significantly more concentrated than before the crisis and certainly much more than the relative income distribution prevalent at the end of the 1960s, before the socialist-populist experiment and the authoritarian structural reforms of the 1970s (see table 1). This, in spite of an almost recovered real wage. Also in Venezuela, income concentration is higher than before the crisis, after recovery evolved into rapid albeit unsustainable growth; in this case, both real wages and per capita public consumption are substantially lower than before the crisis.

Although they were not yet on a full-capacity growth path in 1989, Mexico and Uruguay were

TABLE 7

Latin America (10 countries): Inequality, urban poverty and macroeconomic variables at the end of the 1980s, relative to pre-crisis levels
(Indices)

Country	Year	Base year	Macro phase [a]	Application of significant policy reforms	Inequality (Gini coefficient)	Urban poverty (incidence)	GDP	RNIpc [b]	RGCpc [c]	NALF [d]	RW [e]	RMW [f]	REER [g]
Argentina	1990	(1980 = 100)	D&R	Recent	113	205	93	69	...	88	77	40	185
Brazil	1990	(1979 = 100)	RDDI	Partial	108	130	127	97	158	98	85	55	89
Colombia	1990	(1980 = 100)	SGAR	Partial	91	96	135	110	125	99	106	108	192
Costa Rica	1990	(1981 = 100)	SGAR	Yes	103	138	128	95	115	103	102	134	90
Chile	1990	(1981 = 100)	SGAR	Yes	113	107	126	104	69	108	96	76	240
Mexico	1989	(1977 = 100)	D&R	Yes	100?	>95	147	106	76	89	54	41	111
Panama	1989	(1979 = 100)	RDDI	No	116	111	116	95	99	...	108	93	
Peru	1990	(1979 = 100)	RDDI	Recent	...	190	94	72	62	...	36	24	40
Uruguay	1989	(1981 = 100)	RAEA	Yes	98	109	100	92	86	...	93	76	173
Venezuela	1990	(1981 = 100)	UG	Recent	110	188	105	72	68	93	48	63	240

[a] D&R: Disinflation and recovery; RDDI: Recession due to domestic imbalances; SGAR: Sustained growth after recovery; RAEA: Recovery after external adjustment; UG: Unstable growth.
[b] RNIpc: Per capita real national income. [c] RGCpc: Per capita real government consumption expenditure. [d] NALF: Index of the proportion of the non-agricultural labour force employed in formal activities (opposite of NALU (under-utilization of non-agricultural labour force per active person)). [e] RW: Real urban or industrial wages. [f] RMW: Real minimum wage. [g] REER: Real effective exchange rate.

approaching the culmination of their respective recoveries; at that stage, income inequality had nearly returned in both cases to pre-recession levels.[29] In Mexico, this occurred in spite of drastic reductions of real wages and public consumption expenditure, whereas in Uruguay both variables were more moderately eroded.

The countries that were still labouring under recession and instability at the end of the 1980s (Argentina, Brazil, Panama and Peru) showed degrees of inequality substantially higher than those prevailing before the crisis. Stabilization and recovery in Argentina only brought some improvement of income inequality, but this nevertheless remained high compared with the pre-crisis level, which was substantially higher than that prevailing before the disruptions of the 1970s. On the other hand, in the spells of recovery after external adjustment, income distribution improvements –where they existed– only took place along with real wage increases, as outlined above; these are less likely during the stabilization processes still faced by Brazil and Peru and have not occurred during the current Panamanian recovery.

[29] However, if pre-recession (i.e., around 1981) inequality in Mexico was even lower than the level observed in 1977, as suggested earlier, post-recovery inequality would have been somewhat higher than that previous mark.

Consequently, one should not expect significant equity improvements in these countries as a consequence of stabilization and recovery. Indeed, full deployment of policy reforms and associated adjustment measures –particularly on the fiscal front– may still bring a medium-term increase in income inequality. Furthermore, if the experiences of Colombia and Chile are taken as examples, all these countries can only expect a modest reduction of income inequalities later, when they attain a sustained growth path.

In sum, "normal" distributive patterns in the coming phase of sustained growth, when this materializes in most Latin American countries, once they have recovered from the crisis and its sequels, completed structural adjustments, and deployed policy reforms, tend to be more unequal –at least in the urban areas– than those prevailing in the last stages of the previous growth phase, during the 1970s.

Only Colombia, Costa Rica and Uruguay –and, just possibly, Mexico– have managed to restore their previous degrees of inequality (table 7). It is no accident that this should have happened in countries in which social justice values have traditionally imbued institutions, objectives of equity have been quite consistently incorporated in policy design throughout the adjustment phase, and both adjustment and pol-

icy reforms have been approached gradually and pragmatically.[30] This suggests that the tendencies that increase inequality of primary earnings (before the eventual corrections involved in public social spending) can be positively corrected by economic policy design and implementation.

VII

Prospects for poverty alleviation

Even without any significant changes in the relative distribution of income,[31] absolute poverty will be reduced by economic growth; and this will take place more quickly –at least in economists' estimates– if constant poverty lines are used, or more sluggishly if shifting poverty yardsticks are deemed normatively more appropriate.

The record of the 1970s, outlined earlier, shows urban poverty decreasing only in rapidly growing economies which either maintained or reduced their concentration of household income. In Colombia, Mexico and Venezuela, where equity improved, the reduction of urban poverty showed elasticities of -0.5 to -1 with respect to the increase in real per capita income and of -0.4 to -2 with respect to real wages. In Brazil, where there was no significant improvement in income concentration, such elasticities were much lower (table 8).

Recession and recovery in the 1980s left most Latin American countries with a sometimes markedly higher incidence of poverty in urban areas than before the crisis. Only Colombia and possibly Mexico were able to end their respective recovery phases with less urban poverty than before the recession, in both cases because of a decrease in inequality (table 7).

Available poverty estimates seldom permit a sharp differentiation between periods of recession and those of recovery. When they do, the beneficial effects of recovery on poverty appear weaker than the negative effects of the previous recession. In Uruguay, the elasticity of poverty with respect to real income in the 1986-1989 recovery was -2, while during the recession it had been -3. In Argentina, disinflation plus recovery abated poverty as elastically (-4) as recession had increased it, but the recovery itself was then very incipient. In Venezuela, on the other hand, the completion of recovery did not prevent poverty from widening still further.

In other instances (Brazil 1979-1987, Costa Rica 1981-1988, Chile 1980-1987 and Peru 1979-1986) the culmination of the recovery phase left the economy with a greater degree of inequality and a higher incidence of urban poverty. In Costa Rica, not even sustained growth after 1988 was able to prevent the increase in urban poverty, as a consequence of price deregulation (table 8).

In most cases, real wages at the end of the recovery process were lower than before the crisis, which helps to explain the weaker effect of recovery on poverty. Although in Argentina and Brazil, at the culmination of the respective heterodox stabilization programmes, and in Costa Rica real wages were higher, that fact appears to have been offset by other factors which increased inequality and, particularly in the first case, by the fall of real per capita income. In Colombia and Panama, in contrast, higher real wages have reinforced the effect of the recovery of real income in preventing an increase in urban poverty. This was not so, however, in Mexico, where real wages in 1984 were substantially lower than before the crisis (table 8).

On the other hand, the few observable growth spells at the end of the 1980s (Colombia 1986-1990 and Chile 1987-1990) show elasticities with respect to real per capita income (-0.7 and -0.4, respectively) similar to those recorded in the 1970s in rapidly growing economies where income inequality was decreasing. Only in Chile, however, has poverty reduction been more elastic with respect to real wages than to real incomes, as had happened in all cases in the 1970s (table 8).

[30] The gradual approach has been abandoned in Mexico in the last phase of the reform process, but it must be borne in mind that this phase has coincided with the preparations for the incorporation of the country into the North American Free Trade Agreement (NAFTA), a strategic leap forward which, when fulfilled, will radically change the structural conditions of the Mexican economy and, among them, its distributive structures.

[31] Including, to be sure, the absence of changes in either the composition of households and their work and resource utilization strategies, which is a highly artificial assumption.

Rural-urban migrations will continue to exert pressure on the ability of the economies to alleviate urban poverty. If the experience of the last two decades (Altimir, 1991) is any indication of what might happen, in the relatively less urbanized countries with a high incidence of poverty in the rural areas, the migrating rural poor may swell the ranks of the urban poor at a rate equivalent to an absolute increase of 1.3-2.0 % a year.

To sum up all this evidence, it is likely, on the one hand, that countries accomplishing their recovery into full-capacity growth will undergo a change in their ability to reduce urban poverty in the short run, requiring relatively more expansion of economic activity than in the recovery phase for each percentage point of poverty reduction. On the other hand, medium-term growth with no improvement of income inequality would permit only a slow process of poverty abatement: slower than in the cases of high growth and equity improvement of the 1970s, and slower than during recent growth spells in Colombia and Chile, when income distribution also improved.

TABLE 8

Latin America: Changes in urban poverty and their relation with changes in income concentration and real income in different periods

Country	Period	Changes in income concentration [a]	Percentage variation				Elasticity of urban poverty in relation to:		
			Urban population	RNIpc [b]	R W [c]	RM W [d]	RNI [e]	RW	RMW
I. Growth periods in the 1970s									
Brazil	1970-1979	M	-14	67	48	-1	-0.2	-0.3	14
Colombia	1970-1980	D	-21	44	17	27	-0.5	-1.2	-0.8
Mexico	1970-1984	D	-30	31	15	-20	-1.0	-2.0	1.15
Venezuela	1970-1981	D	-30	71	...	-3	-0.4	-0.4	10
II. Periods of recession and recovery in the 1980s									
Argentina	1980-1986	I	71	-23	7	47	-3.1	10	1.5
	1986-1990	I	52	-15	-22	-64	-4.0	-2.4	-0.8
	1990-1991	...	-22	5	-7	39	-4.4	3.1	-0.6
Brazil	1979-1987	I	13	3	19	-27	4.2	0.7	-0.5
	1987-1990	I	15	-6	-29	-26	-2.5	-0.5	-0.6
Colombia	1980-1986	D	-	5	12	13	-	-0.1	-
Costa Rica	1981-1988	I	31	-5	16	27	-6.5	1.9	1.1
Chile	1980-1987	I	14	-13	-5	-31	-1.1	-2.8	-0.5
Mexico	1977-1984	D	-6	14	-34	-40	-0.4	-0.2	0.2
Panama	1979-1986	I	-3	23	14	-6	-0.1	-0.2	0.5
	1986-1989	...	13	-22	-1	-1	-0.6	-13	-13
Peru	1979-1986	...	29	-7	-5	-39	-4.1	-5.8	-0.7
Uruguay	1981-1986	I	56	-19	-13	-14	-3.0	-4.3	-4.0
	1986-1989	D	-29	13	6	-12	-2.1	-4.8	2.4
Venezuela	1981-1986	I	39	-31	-19	6	-1.3	-2.1	6.5
	1986-1990	D	32	3	-41	-19	9.4	-0.8	-1.7
III. Growth periods in the late 1980s									
Colombia	1986-1990	D	-3	4	-5	-5	-0.7	0.6	0.6
Costa Rica	1988-1990	D	5	-2	2	5	-2.8	2.5	1.0
Chile	1987-1990	D	-8	18	11	27	-0.4	-0.7	-0.3

Source: Table 5.

a M: Maintained similar level; D: Decreased; I: Increased.

[b] RNIpc: Per capita real national income.

[c] RW: Real urban or industrial wages.

[d] Real minimum wage.

[e] Real national income.

VIII

Conclusions

After overcoming the difficult period of the 1980s, Latin American countries are entering into a new era of potential growth under a different pattern of development and a new style of State intervention. The adjustments to absorb both exogenous changes, those required in order to adapt to resource availability and utilization, and the structural changes still under way have caused most Latin American societies to suffer more unequal distribution of income and a higher incidence of poverty among their people. The few exceptions are the result of deliberate and persistent concern for equity in economic policy design and implementation. Moreover, the prospects for poverty alleviation through growth alone, without improvement of the relative distribution of incomes and vigorous social policies, appear so limited as to be disheartening and seem likely to be counterproductive for social integration and, ultimately, for sustained growth (ECLAC, 1990).

Given the unlikely prospect that primary earnings will become less unequal, even if there is deliberate concern for this in economic policy, the improvement of equity and particularly the abatement of absolute poverty will have to lean much more on social policy and its effectiveness. With fiscal resources reduced or still constrained by the debt burden, however, the scope for welfare transfers will be restricted to no more than the provision of a basic social safety net, with preference being given to social expenditures that can be considered as investment in human resources.

Eventual gains in equity of income distribution will depend on the spread of productivity improvements and their actual appropriation by households. The structural transformations underway tend to increase the productivity of capital and total factor productivity, thus enhancing labour productivity in the economy at large. However, for income distribution to improve on the basis of differential productivity gains three developments are required. First, employment in formal or modern activities must be extended, along with productivity increases, to a larger proportion of the labour force, thus absorbing underemployment. Second, those productivity increases must be effectively translated into proportional wage rises. Third, the capital per worker in the labour force remaining in the informal, small business and traditional sectors of the economy must increase dramatically.[32]

In order to attain these objectives it is necessary, as well as raising the productivity of capital in general, to increase the skills of the different segments of the labour force, while at the same time restructuring the availability of skills so as to enhance the technological capabilities of the productive system at large. For this purpose, and in order to ensure long-term progress, heavy investment in human resources (education, training and retraining, nutrition and health) must supplement investment in fixed capital (ECLAC, 1992b). Indeed, there are some grounds for substituting investment in human capital for investment in physical capital, in so far as a greater contribution to total factor productivity can be expected from the former, in a long enough term.

Fulfilling these requirements involves substantial amounts of investment resources, partly originated and handled in the marketplace, but also partly raised and allocated by the State. At the same time, in order for higher skills to be reflected in workers' income, pay structures must meet the double challenge of being at the same time institutionalized and flexible.

The efficient absorption of capital by the underemployed, effective widespread access to the acquisition of skills and their efficient application to production, and correspondence between contributions to productivity and earnings all call for substantial organizational improvements at the company level and profound institutional reforms in public policy.

[32] The capital for those remaining in such activities should perhaps be doubled, but even so this would demand much less capital than the amount required for each job created in the more modern or larger-scale activities.

Abating structural poverty follows the same lines as general improvements in income distribution but poses different obstacles that must be overcome if policies are to be effective. On the one hand, the physical capital required may be lower than in modern activities, but the skills gap is greater. On the other hand, effective public policies are more demanding in terms of organizational requirements and institutional creativity. Finally, the remedies must address the whole vicious circle of circumstances that reproduce poverty from one generation to another.

Strategies for equity improvement must take these differences into account. The usual way in which social policy is designed –which actually restricts access mainly to the strata above the poverty line, for which such policies may be more easily implemented, and thus leaves the poor to fend for themselves– may lead to further progress for a segment which is already integrated into society and actually endorse the disintegration of the poorer strata into a segregated underclass. At the other extreme, a unilateral strategy focusing only on the poor may further weaken the low and middle strata of the population, where a rich reservoir of skills, social cohesion and political dynamism is located. What is required is a "two-tier" strategy that recognizes the differences between the poor and the non-poor working population in terms of potential, response and deterioration of life styles and aims at integrating both universes into a single dynamic society.

(Original: English)

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New directions *for public* management

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Consideration of the roles to be played by the public and private sectors in a country's development strategy naturally leads to an analysis of the public sector's main orientations regarding both its own actions and the establishment of a regulatory framework for the performance of certain types of activities. These orientations are expressed through public policies, i.e., the courses of action followed by the public sector in pursuance of a more or less well-defined objective. The administration, made up of the various government ministries and departments, is what provides the institutional underpinnings for this sector's direct and indirect participation in the development strategy. Viewing the matter from another vantage point, we can say that public policies are being implemented when the public sector's management of material and non-material resources is done in such a way as to move the country in the direction indicated by those policies. If the public sector's participation in the development strategy is to be evaluated on the basis of its results, then such management is the main link in the chain. It is management that determines the concrete expression of the selected courses of action, and their outcome will depend on its effectiveness and efficiency. The following article seeks to provide some guidelines for the reform of public management as it relates to policy design, the need for various types of institutional changes, more efficient expenditure patterns and improved human resources management, more widespread use of certain management tools and mechanisms, attention to and satisfaction of the needs of consumers, the management of public enterprises and modalities for their privatization and regulation, and the refinement of policy overseeing and evaluation functions.

I

The reform of public management

1. Why this is necessary

The reasons for reforming the way in which a government is managed may be summarized as follows. One reason is that, because the public sector has highly important roles to play in any development strategy involving social participation, failure to consider the question of management may have markedly adverse social consequences. Some policies may either not be implemented at all or may be applied only partially owing to failings in the area of management, or there may be idle or even redundant management capacity. If the public sector's management is inappropriate in terms of either its quality or its orientation, simply increasing the supply of resources will not guarantee optimum results.

A second reason is that the public sector, in its present form, suffers from limitations whose elimination could have the effect of increasing the sector's contribution to the common good. These limitations have to do with various administrative matters and some aspects of personnel and wage policies; the design, management and evaluation of government policies; the service provided to public-sector consumers; and the management of public-sector enterprises. Public institutions function within the framework of the type of organizational culture associated with the traditional State, which is more concerned with procedure than with results. Frequently, however, these shortcomings are partially offset by the spirit of public service exhibited by many civil servants.

A third reason is that the stock of human and financial resources (including, among the former, resources that have a bearing on the ability to govern) will always fall short of what is required by the wide range of tasks at hand, and steps must therefore be taken to optimize their yield. Regardless of the level of public expenditure, its effects will depend on the way it is managed.

2. Approaches

There are a variety of opinions as to the best way to conceptualize public management reform.

One school of thought is formed by the macro-reformists, whose analyses focus on a goal that has never yet been achieved: the attainment of a stage of State reform at which the State's organizational structure has been brought completely up to date and its administrative statutes have all been fully corrected. In addition to being formalistic, this approach is politically naive: things do not work that way in government.

Then there are the quantitative modernizers, who believe that the most important thing is to increase the supply of certain inputs and resources: more computers, higher salaries, broader career paths for civil servants. This approach runs the risk –inherent in any bureaucracy– of failing to take account of the Sisyphean nature of the tasks involved and of encouraging civil servants to indulge in exercises of self-justification. A larger supply of resources will not, in itself, guarantee optimum results.

Another approach, however, is gaining ground. It focuses on public policy management, and while it acknowledges the obvious need to rationalize the structure of the State and to upgrade the quality of its human resources and material inputs, its emphasis is on considerations relating to the design, management and assessment of meaningful groupings of governmental courses of action in regard to specific issues. It holds that it is on the basis of this flow of information and action that problems in the structure and management of the public sector should be ranked and resolved. [1]

The concept of public administration refers to a structure, whereas the concept of public policy management refers to a process and an output; the former is a concept of stock while the latter is one of flow; administration is a concept of equilibrium, while policy management is a concept of dynamics.

This does not mean that public policy options are not determined by administrative considerations. The rigidity of the administrative apparatus often stands in the way of the modification of existing public policies or their replacement. Governmental administration also, however, plays a substantive role in

[1] See Lahera (1980) and Heclo (1972).

their implementation, especially when there is a great deal of room for the administrative exercise of discretionary authority. Hence the need for a number of public administrative reforms. Nevertheless, given the scarce supply of resources and the need to have a clear idea of the ultimate objective of public management reform, the concept of public policy takes on a great deal of importance in that process.

Once a decision is taken to give priority to this approach, it should be clearly understood that, in considering the issue of public management, it would be a mistake to think that each policy package –or even each individual policy– demands a special type of management. This is far from being the case; management is an issue that cuts across the spectrum in that it is relevant to all spheres of governmental action but cannot be confined to any one of them. Each sector does, certainly, have specific features of its own, but even these must be managed in accordance with general principles whose application may take a variety of forms.

The quality of governmental management hinges upon the clarity of its objectives, the quality of its organizational leadership, the level of training possessed by civil servants, transparency, flexibility, decentralization, specialization, and the separation of decision-making, executive and evaluatory functions, among other things. The homogeneity of management principles is an important factor in determining the quality of management as a whole.

3. Criteria

(i) *Realism.* Public management is making a transition from its earlier state of equilibrium to a new and as yet unattained configuration of objectives and instruments. It is evident that this form of management will be of an increasingly decentralized and regulatory nature (as opposed to the more centralized model in which the State is a direct supplier of goods and services) and that this process will lead to a new definition of administrative and bureaucratic roles as well as to greater functional differentiation of the agents responsible for putting these new approaches into effect. The public sector will be smaller and more specialized, public-sector supply will be diversified, and, given the presence of a number of different suppliers, the sector's demand will be characterized by an increasing degree of "privatization of choice" and "joint financing".

The transition to a modern State will call for a knowledge of the entire range of different elements that are a factor in today's public sector, above and beyond any sort of voluntarism or ideology. It will be necessary to recognize the various levels of the transition and to manage them efficiently without departing from the broad thrust of the transition process (Lahera, 1992).

ii) *Selectivity.* The ability to govern is a scarce good whose utilization should be prioritized, and the public sector should therefore develop a selected –and, hence, limited– set of public policies. The true power of the State lies in its effectiveness, and this is measured not only by the amount of State action, but also by the quality and coherence of such action.

(iii) *Emphasizing results.* Within the sphere of public management, there is a tendency towards a new sort of pragmatism that stresses results rather than actions, outputs rather than inputs, and policy implications rather than policy tools (Jacobs, 1992). Hence the importance of timely assessments.

(iv) *Recognition of diversity.* The modernization of public management should be based on an awareness of the fact that such modernization will heighten its diversity. The chief argument against assuming that public management is homogeneous derives from real-world situations. The issues entering into such management are extremely varied, as are the degrees of participation and types of roles which the public sector plays in the various markets.

(v) *Responsible autonomy and decentralization.* Both of these qualities should be promoted in the widest possible range of sectors and should be coupled with responsible management, performance standards and clearly-defined objectives and incentives.

(vi) *Flexibility.* Flexibility is an essential characteristic of a reformed public sector, as is only fitting for an organization whose job is to process and act upon information: what is needed is a public sector that receives inputs and generates outputs in the form of initiatives, structures and functions; a consensus-building State that works with the private sector and social organizations; a public sector whose fiscal apparatus is flexible and has a relatively low level of rigid, set expenditure; and a decentralized State that deters the politicization of disputes.

(vii) *Greater transparency.* In order to increase the effectiveness and efficiency of public policies, more transparent mechanisms need to be used for public-sector operations and for those activities in which the public sector's participation is important (e.g., social services).

II

Policy recommendations

1. Improved public policy analysis and decision-making

A medium-term strategic perspective is needed that allows for an appropriate blend of the political and technical dimensions of public policy. To this end, a "road map" for governmental management needs to be institutionalized and then periodically evaluated and updated. Prospective analysis should become a formally-constituted routine in the management functions of the Executive branch.

a) *Formalization*

The system for the formalization of public policies and the development of legal or administrative initiatives needs to be improved. This is a particularly important stage in the process because it is here that policy-makers devote their attention to various specific aspects or parts of many different policies. Consideration of the various ministries' annual goals offers an opportunity to examine an extremely varied range of policies.

In order to make use of that opportunity, intra-sectoral and inter-ministerial coordination must be consolidated so as to create or strengthen the technical and operational capabilities of a Presidential Secretariat and of ministerial committees for particular sectors.[2] An independent technical advisory unit also needs to be established within the Legislative branch to provide support, in particular, for the debates conducted within parliamentary committees or commissions. Another step in this direction would be the consolidation of an external market of policy analysis capabilities in which both public and private suppliers could participate. Formal academic institutions and various types of non-governmental organizations are valuable sources of alternative policy analysis (Paul, Steedman and Sutton, 1989).

b) *From ministerial to inter-ministerial goals*

Government ministries' goals relate to the priority tasks or programmes which they and certain types of autonomous agencies plan to conduct in the following period. These goals or tasks are not determined solely on the basis of each ministry's particular sphere of action, but also reflect due consideration of inter-ministerial areas of endeavour defined in accordance with a specific programming criterion.[3]

The establishment of inter-ministerial goals can help to make the decision-making process more efficient as well as to identify the needs that may exist in terms of coordination and support for major programmes. Such goals facilitate the monitoring of performance levels and help to provide a picture of the work being carried out by the Government at any given point in time. They also contribute to the identification of bottlenecks or other obstacles (including conflicts) hindering their achievement, the formulation of inter-ministerial legal initiatives, the designation of directors for projects and programmes designed to achieve ministerial or inter-ministerial goals, and the identification of emerging goals and objectives whose attainment may suffer from delays. In addition, they facilitate the evaluation of public policies both in the course of their implementation and –even more importantly– once their implementation has been concluded. Finally, the relationship between the formulation and design of inter-ministerial goals constitutes a valuable input for the preparation of the proposed budget for the coming year.

In order for all this to come about, inter-ministerial goals should refer to precisely-defined and, if possible, quantified objectives, and the specific responsibilities associated with each goal should be clearly outlined: the designation of project and programme directors should be formalized, and the necessary co-determination of goals and of the funding required to achieve them should take place at a level higher than that of each ministry.

[2] As a possible alternative, close attention should be paid to Bolivia's recently-initiated experiment of creating three "super-ministries": the Ministry of Economic Development, the Ministry of Human and Social Development, and the Ministry of Sustainable Development, in addition to the more traditional types of ministries such as those of the Interior, Foreign Affairs, Justice, Labour, Defence, the Presidency and Social Communications.

[3] In the case of Chile, these areas are: political affairs, the economy, economic and social affairs, infrastructure and production development (Chile, Ministerial Office of the Presidency, 1993).

c) *Increased participation and consultation*

The State should promote efforts to incorporate social demands into the design of integrated social development projects and to increase the links among organizations representing the interests of groups in society which have benefited least from the modernization process; to enhance the ability of State agencies that take decisions regarding the use of public resources to process the demands of such groups; and to develop links between the political system and the agents and demands of the populace. The coordination of efforts with non-governmental organizations would be very helpful in the formulation of social policies for small-scale units, both because of the links already established by these organizations with such groups and because, in the course of their work in the field, the experts from these organizations have learned to devise strategies for mobilizing human resources, encouraging participation and motivating the community (ECLAC, 1992).

A system of political parties of high political and technical level is needed, in order to add together and balance the demands of different social agents. The relationship between such parties and the Government could be formalized to some degree so as to define what kind of influence they would have with the Executive in cases where this is not spelled out by the Constitution.

Considering the subject from another angle, users should be routinely consulted regarding the quality of public management and its results. Consultation with the private sector should also be systematized, to which end efficient counterparts are needed on both sides.[4]

2. Desirable institutional changes

a) *The role of ministries*

Generally speaking, government ministries should not act as executive administrative bodies; instead, it should be their job to propose and evaluate policies and plans, to study and propose standards and regulations to be applied in the sectors under their authority, to enforce those standards and regulations, to allocate resources and to oversee the activities of their sectors.[5] A systematic effort should be made to ensure a reasonable degree of autonomy and decentralization for government ministries, while also providing a clear definition of their powers and responsibilities.[6]

In order to avoid conflicts of interest, the new institutional blueprint should separate the following functions: (i) policy-making, planning, the proposal of standards and regulations, and the assessment of programme implementation; (ii) the implementation of programmes and projects, and the utilization and administration of facilities and services; (iii) the regulation, supervision and control of business activities; (iv) the evaluation of investments; and (v) budgetary allocation and control (Bitrán, 1993).

b) *Improved coordination*

The traditional ministerial structure is often unable to deal with the complexities of public management. A large number of equally ranked ministries cannot be expected to function well or creatively; their responsibilities need to be clearly defined, and coordination among them needs to be improved. A progressive form of coordination of government ministries in line with broader objectives than those pursued by each individual ministry may provide a practical means of overcoming their fragmentation and thereby strengthening and hierarchizing public management.

One interesting example of coordination is to be found in Chile, whose coordination scheme includes inter-ministerial committees as the usual and preferred forum for the analysis of issues whose scope exceeds the bounds of any single ministry and for the exchange of information among ministries that perform similar or interrelated functions. These committees are provided with technical support units.

[4] Some Asian countries that have achieved excellent growth rates have consultative committees of businessmen, government officials, journalists, labour representatives and academics. These bodies provide a formally-constituted channel of communication for private-sector representatives and public-sector officials through which they can reach consensus regarding policy initiatives.

[5] An interesting case in this connection is that of Sweden, where public management is highly decentralized. There, the main job of government ministries, with the help of a small team of experts, is to define strategies and evaluate policies. The task of operational management is delegated to agencies whose directors enjoy a considerable measure of freedom of action. These directors are appointed for a term of several years and are judged by their results (see Stoffaes, 1992).

[6] The main feature of the reforms proposed for the British civil service in 1988 was the creation of service agencies which would have a wide range of action in implementing public policies once their objectives and budgetary resources were determined by the relevant ministerial bodies (see HMSO, 1988).

National commissions have also been set up to address subjects that extend beyond the jurisdiction of individual ministries or, for a given period of time, to tackle critical problems that cannot be dealt with by any one ministry. In addition, working groups composed of under-secretaries and senior officials have been formed for predetermined periods of time to pursue specific objectives, one of which is usually the screening of relevant information for decision-making purposes.

c) *Decentralization and deconcentration*

Decentralization –a process which is under way in almost all the countries of the region– has raised serious administrative and financial problems in most cases. [7] In order for this process to be successful, there must be a genuine transfer of decision-making power to the local level as well as adequate funding, and the necessary management capacity must be assured at the regional and local levels.

The regional and municipal levels of management need to be greatly strengthened through efforts involving both the public and private sectors (e.g., via participation in development corporations or associations) in order to reconcile the progress and consolidation of the relevant processes with the demands of a sound, coherent economic and financial policy at the national level, with due consideration for sectoral priorities and quality standards in project assessment and management as well as other areas. Special attention should be devoted to budgetary decentralization in order to avert local financial imbalances. To do this, the resources needed to fund specific programmes of local scope should be handed over to the municipalities; billing procedures should be improved and the job of tax collection should either be streamlined or turned over to an outside organization; the national-level common municipal treasury should be administered with greater transparency; and the portfolio of delinquent municipal debts should be auctioned off, among other measures. The automatic allocation of a certain percentage of the national budget to the municipalities would be a step in the direction of greater financial autonomy for that level of government. One financial option that would avoid some of the problems mentioned above would be to work towards a nationwide standardization of taxes and to divide up tax revenues according to a pre-determined formula (Rivlin, 1991).

From a political standpoint, it is essential that local governments should have the institutional capabilities to assume their new responsibilities. Representative bodies, armed with sufficient authority and funding, are therefore needed. It is also usually advisable to set up a regional development council composed of elected representatives of groups reflecting the interests of businessmen, workers, professionals and the common citizens. Regional or municipal governments can also set up or participate in non-profit foundations or corporations to promote and disseminate artistic and cultural activities.

Decentralization also requires a clear delineation of the jurisdictions of the different levels of the administration, not only by sector, but also as regards their functions in relation to each governmental service in terms of regulation, planning, implementation, funding, overseeing and evaluation. The relationships among the various levels and the nature of the roles of the intermediate or regional levels also need to be clearly defined, while there should also be a specific indication of which level should act as a back-up in the event of a failure on the part of the level that bears principal responsibility for a given function.

Mayors should be elected directly by the members of their constituencies in order for the accountability of the executive within the municipal government to be clearly established. The minutes of the community council meetings should be made public, and the municipalities should develop information systems as well as schemes for allowing the public to voice its opinions and for holding regular consultations with different organizations and sectors.

In a country's main macro-regions, consideration should be given to the possibility of establishing governments at the metropolitan-area level.

In the event of some sort of crisis in specific areas within a country, there needs to be a national consensus regarding the way in which those cases should be dealt with and the types of steps that should be taken. The same is true of issues arising at the nexus between regional and sectoral matters, when it becomes necessary to respond to needs in distressed areas of activity that have a strong influence on the regional economy.

Finally, deconcentration should include the delegation of authority to territorially-based and

[7] See, for example, Ribeiro (1993) and Crowther (1990).

function-based bodies, the delimitation of jurisdictions and the establishment of an operational plan for their transfer, the creation of dispute settlement procedures, and arrangements for the relocation of some activities.

3. Increasing the efficiency of public expenditure

a) *Improving resource allocation*

The establishment of a better system for the evaluation of public investments is a prerequisite for sound allocation of public expenditure. In addition, project evaluation methods should gradually be applied to the allocation of all public resources, including areas other than investment and infrastructure.

The Government's budget should be its main fiscal policy tool and should therefore be strengthened in macroeconomic terms on a systematic basis. Debates on this subject within the Legislative branch should also be institutionalized; it might be particularly helpful to present medium-term fiscal projections along with the budget proposal at the time of its submission in order to outline the main options and commitments that will be faced in the area of public finance in the coming years. It is also wise to lay down clearly, as a permanent principle, that the total sum of current expenditure approved in the budget represents an upper limit that cannot be exceeded unless express authorization to do so is granted by law (Marcel and Vial, 1993).

The annual budget exercise should be modernized. A zero-base budget could be established for various sectors, with emphasis on programme budgeting and budgeting by programme objectives. The starting point for discussions on this subject should be the establishment of an exact sum, and during the process of deciding how to allocate that sum, it should be made clear that any increase in one item will require a matching decrease in another.

One subject of major importance is the linkage of ministerial goals to budget levels. The annual budget exercise should emphasize the use of programmatic budget items, since this may make possible various means of reducing budgetary inertia. The budget should be based on programmes with specific goals that lend themselves to evaluation, and it should be backstopped by an information system that provides a coherent flow of data from the operational to the decision-making levels.

The basic principles of such a budgetary system include fiscal discipline, which involves the placement of limits on public expenditure and the regulation of sources of fiscal finance; comprehensive coverage, facilitated by regulatory and procedural centralization for all the relevant public agencies so as to ensure fiscal governability and forestall the creation of unexpected quasi-fiscal deficits; sufficient flexibility to adjust the pace of budget performance without impairing legally-mandated budgetary guidelines; and the establishment of a central fiscal authority, to be responsible for the administration of public finances and to ensure that spending does not exceed the corresponding ceilings as they are adjusted to conform to macroeconomic realities.

b) *Improving financial performance*

The level of efficiency in the use of public resources will be determined by project evaluation, management quality and ongoing supervision of management functions during the budget performance cycle so that departures from established goals and objectives may be promptly detected. It will also depend on prompt and efficient ex post evaluation of programmes in progress. A special unit should be responsible for maintaining efficiency and should carry out in-depth spot checks of the efficiency of expenditure in given offices or agencies.

The financial performance of public policies should be as transparent as possible, so that it may be evaluated in a timely fashion. To that end, a minimum set of simple measurements capable of generating meaningful indicators should be used. The submission of annual reports on the effective achievements of the various public institutions should be encouraged.

4. Improving human resources management

Recognition of the high status of public service should be reinforced. Reforms should be implemented with the participation of public-sector workers rather than without their involvement or in the face of their opposition.

a) *Modernization also means diversity*

This principle leads to a number of conclusions about the institutional structure and about public-sector wage and personnel policies. Rather than advocating or accepting a growing but unrealistic idea that the public service is the same in all cases, flexible

systems need to be brought into widespread use that will permit the necessary degree of differentiation. Examples of such systems include recruitment based on competitive examinations; performance ratings that focus on merit and merit-based promotion; differentiated measures to strengthen civil service training, for which accredited institutions would be contracted; and productivity bonuses. Consideration might also be given to the introduction on a very limited scale of extra allowances for special responsibilities.

The legal provisions relating to civil servants should also be made more flexible in order to permit more accurate classification of public-sector personnel and to facilitate specialized training in the various types of agencies. In the case of officials acting as regulators, their salaries should not be substantially lower than those received by the professionals or executives working in the sectors they regulate.

Within the overall policy framework of the civil service, steps could be taken to do away with statutory manning tables and set the number and type of staff by executive order instead.

b) *Directorial staff*

The most recent organizational theories underscore the importance of directors' and supervisors' personal qualities and especially their leadership ability, in the modern sense of the term, which involves *inter alia* their ability to provide clear guidance, to work as part of a team, to delegate responsibilities, and to take account of personal situations. The political affiliation of the persons occupying key positions in the civil service should be regarded as secondary to the above-mentioned features.

c) *Human resources management*

Consideration should be given to the possibility of using a system of recruitment based on competitive examinations, performance ratings that focus on merit, and merit-based promotion. Steps must be taken to ensure the recruitment into government service of young people who are outstanding in their fields, without, however, diminishing the professional diversity that is so necessary within the public sector. It is important for the sector to be of a multidisciplinary nature, and this may be adversely affected if recruitment activities are focused too narrowly on a limited number of university schools. The need for merit-based promotion mechanisms should also be considered (Boeninger, 1993).

d) *Training*

Upgrading of civil servants through training –provided by accredited institutions under contract– could be combined with productivity bonuses and accelerated career promotion paths, as well as with speedy procedures for dismissal in cases warranting such action. In a State in transition, it is essential that executive and management staff should be provided with ongoing training.

e) *Remunerations*

The problem of public-sector wages and salaries is often more a question of structure than of insufficiency. The distortions within the sector need to be eliminated, along with the wage gap sometimes found between comparable jobs in the public and private sectors. To this end, consideration should be given to the possibility of introducing transparent incentive schemes, highly specific special duty assignments and the addition of tax-free wage components for some personnel performing key tasks.

The establishment of performance-based wage differentials in the public sector poses a number of practical problems. One of these problems is the difficulty of defining what "good" performance is and of measuring the marginal product of an individual, since the value created by that individual is often inseparable from the value generated by others, or is attributable to external factors. In addition, service activities are often difficult to quantify. Another foreseeable problem is the "inflation" of job performance ratings. Nevertheless, such an approach might well lead to a more accurate definition of individual functions and create a stronger link between them and broader objectives (Maguire and Wood, 1992).

f) *Labour relations*

In-house communications are highly important, but their effectiveness is far from being assured in organizations suffering from the negative aspects of verticality, where communications obey the law of gravity and thus usually flow from the top downward. A purely hierarchical relationship between directors and their staff may inhibit innovation and the development of a commitment to public service, may lead to a generally passive attitude and, as a result, may discourage personnel from trying to become more efficient. Lateral communication among different functions is necessary in order to prevent the creation of personal fiefdoms. One way of ensuring

communication from the bottom up is to maintain an open-door policy whereby any written communication will bring a response in the form of an investigation conducted by an independent unit not forming part of the hierarchical structure to which the originator of the communication belongs (Maisonrouge, 1991).

For the proper operation of the government service, it is essential that civil servants should play a part in determining the terms and conditions of their employment; this practice appears to be considerably more limited in the developing world than in developed countries (Ozaki, 1988). Developing countries often stick to the principle of unilateral decision-making as regards the terms of government employment. Where the civil service unions are strong, however, consensus-based methods frequently come into use (often in what might be described as grey areas of the relevant statutes or even sometimes outside the established rules). It would seem better to confront the problem head on and to solve it through the establishment of appropriate legal provisions (ILO, 1988). One crucial issue is that of government employees' right to strike, which needs to be regulated in a very specific manner.[8] An important objective of participation mechanisms should be the rational and peaceful settlement of disputes and reconciliation of conflicting interests between workers' groups and the administration.

5. Bringing different management mechanisms and tools into general use

a) *Management tools*

Some basic management tools need to be brought into general use. These include such practices as computerization, cost-centre organizational schemes, programme costing, and the use of quantitative indicators and measurements of yield and productivity.

In order for the State to discharge its allotted tasks successfully, it needs to have at its disposal computerized data processing capabilities, network hook-ups and access to databases around the world that contain information needed for development (technical data, information on markets, weather, etc.). Steps in this direction should be based on a careful definition and selection of sources, recipients and interlocutors so that public management may be improved on a manageable, relevant and priority-conscious basis. Major informatics programmes should be based on a proper baseline analysis of existing needs, after which standards and terms of reference should be formulated for each contract that is to be put up for bidding.

Working jointly with each chief of service, objectives or targets should be defined and a yearly evaluation of the performance in respect of each of them should be prepared; this evaluation would then serve as a basis for acknowledgements of merit, promotion or removal. Performance agreements are a useful tool in this connection.[9] This type of instrument should differentiate between a unit's mission, its general guidelines, its specific objectives, its targets for a predetermined period, and the steps necessary to achieve them.

One innovative intra-ministerial form of organization that makes it possible to improve management quality involves the creation of the post of general director for technical and financial matters. Such a post would rank just below the most senior level of the ministry and would be similar in level to that of a general manager. Its operational features would permit its occupant to coordinate different projects and to make proper arrangements for such projects with the relevant internal and external authorities and institutions.

Most countries have posts whose occupants answer directly to the President and who work closely with him. It would be advisable to put an end to the practice of using appointments to these posts to pay off political favours, so as to make available instead a potentially important source of flexibility and renewal of the government service. Such posts could then be given to officials whose selection has been based on considerations of excellence.

[8] The position taken by the ILO is that only those services whose interruption might endanger the life, safety or health of all or part of the population should be prohibited from going out on strike. Workers whose right to strike is restricted in any way should be compensated by means of appropriate, impartial, fast-acting procedures for reconciliation and arbitration and should be allowed to take part in the various phases of those processes. Compliance with the resulting settlements should be mandatory for both parties, and such settlements should be executed fully and promptly (ILO, 1983).

[9] These are also known as programme contracts or management contracts (see Maristela de André (1993)).

Outsourcing makes it possible to concentrate on the central functions of each institution, to determine its actual costs and, perhaps, to reduce them. This approach is as yet in its early stages, however, and its substantive limits have yet to be determined. At the start, this division of labour was between the various stages of the production or administrative process, but there is now a growing tendency for it to be used within each stage as well.

Public service contracts are awarded to a firm for the establishment, construction and operation of the facilities needed in order to provide the service in question. Such contracts are often granted for an indefinite period, and the contract holder becomes the owner of the concession. The contractor's obligations include fulfilment of the necessary conditions for the provision of the service, its quality and compliance with government standards. In the event that the concessionaire fails to fulfil the obligations set forth in the contract, the State may impose fines or, in extreme cases, declare the contract null and void.

It has been argued that the authority calling for bids on a government service should not insist that bidding be competitive in cases where a portion of what the potential concessionaire has to offer is the result of an original idea (which may or may not be presented for consideration). Complementary policies include the reimbursement of bidders for the costs incurred in preparing their bids and respect for the intellectual property contained in such proposals. In any event, the public sector has a great deal of preparatory work to do if it is to encourage a steady flow of private project proposals. Co-financing policies are another type of instrument that may contribute to the private funding of public services.

The regulations and obligations to which firms are subject should be clear and transparent. From another standpoint, as one of various cost-reduction incentives, it is also essential to have projections of the ideal efficiency levels of a hypothetical firm for use as a frame of reference.

A regulated form of competition promises to be a factor of increasing importance in satisfying the social demands of people who, as individuals, cannot gain access to a given good or service or can only do so under onerous or inappropriate terms and conditions. The main policy recommendation to be derived from this concept is that employers and employees –or other groups– should join together to form large-scale sources of demand and receive bids from a number of different suppliers that are competitive in terms of both price and quality.[10] With regard to environmental protection, more widespread use should be made of tradeable emission permits, the total number of which should be gradually reduced.

b) *More transparent mechanisms*

These mechanisms cover such practices as contracting outside organizations; differential user charges including non-transferable subsidies for access to services or goods supplied on a competitive basis; the delimitation of public property rights to ensure a clear definition of responsibilities; greater flexibility for managers in apportioning professional staff resources; obligatory competitive bidding; the separation of purchasing agencies from supplier organizations and of project design bodies from executing agencies; intra-governmental cost recovery; competition for funds; and outsourcing.[11] Bidding systems might include the mechanism used by the electronic stock exchanges, which would entail prior clearance of products to be put up for bid later on.

Incentives should be proportionate to the specific ends sought and should constitute an efficient means of achieving those ends. Therefore, they should not be excessively high or granted for indefinite or very long periods of time but should instead be precisely targeted and temporary. Furthermore, performance requirements should be limited in number and precise in terms of the aims pursued.

The enforcement of various types of regulations should be transferred to private agents in both service and goods-producing sectors.

6. Improving service to consumers

a) *Consumers' interests*

Users should be guaranteed that the public services they receive will be of a satisfactory quality. In cases where the quality of such services falls short, some means of inspection must be established and a progressive schedule of specific quality targets must be set.[12] The State should be liable for any damage or injury caused by its management or its failure to

[10] This concept was developed by Alain Enthoven and Paul Ellwood, acting as consultants to the State of Wyoming in the United States. See *Wall Street Journal*, 2 November 1992.

[11] In this connection see Davies (1992) and Lacasse and McGlynn (1992).

[12] Regarding Spain's experiences in connection with the quality of health services, see Ruiz (1993).

provide services, apart from any liability that may correspond to the public officials in question. To that end, a competitive fund might be established to which various public services could submit upgrading projects for financing. Institutions serving as defenders of the consumer should expand their research and information activities to include the public sector.

Information offices assist users in asserting their right to submit requests, suggestions or complaints. They should also assist users carrying out formalities in public entities and should respond to their complaints and suggestions. There is a minimum set of elements which are necessary for transmitting information and providing guidance, including forms, plans or maps, signs or symbols, directories, manuals and mail services, etc. In cases where there is a large-scale demand for standardized services, computer programmes could be designed to handle the proper routing of complaints through multiple telephone lines.

b) *Simplification of formalities*

The agencies working in each field should make an ongoing effort to simplify their rules, regulations and procedures. Regulations and practices should be outlined and made known to the users of the various public services so that difficulty in understanding those rules and procedures does not constitute an access barrier. Each procedure and management function should be structured so as to conform to the flow of information.

One way of creating more efficient management mechanisms is to make the necessary changes within each service so that users can deal with a single service window.

7. Improving the management of public enterprises

Enterprises which are not economically viable in the long term, perform development functions satisfactorily or are politically necessary for the State may continue to belong to the State and be administered efficiently by it. Reforms to ensure greater effectiveness and efficiency should be undertaken immediately in this limited number of firms.

In the case of companies that operate in imperfect markets or that perform social functions, an effort should be made to design and set up a subsidiary regulatory structure as a basis for a subsequent analysis of the advisability of privatizing such firms.

Flexible management, operational decentralization and relative autonomy, combined with a prudent measure of planning and controls together with more and better investment, make up the strategic framework for public enterprises. The objective is to maximize the profits such firms generate for furthering national development, on sustainable terms. Although very difficult to achieve, there is a very necessary point of optimum balance between the autonomy and accountability of public enterprises. This can be facilitated by good information systems, the existence of objectives that can be translated into quantitative indicators, and the existence of some sort of body that will oversee and evaluate their performance (Shirley, 1989).

Public-sector production activities need to be performed by autonomous enterprises that are equipped with efficient price-determination mechanisms and include profit maximization among their main objectives. This implies the abandonment or delimitation of non-economic or redistributive objectives in the operation of such companies. When feasible, they could well compete with one another as well as with private-sector firms. In the financial sphere, an effort could be made to achieve greater autonomy and transparency by moving towards the elimination of subsidies or, when necessary, modifying their magnitude and duration.

The articles of association of public-sector enterprises should also be amended so that they can operate more like private corporations run by a board of directors who will retain their seats on the board only if certain targets are met. They should be autonomous bodies whose operations are independent of whatever administration may be in office at any given time, and they should meet reporting requirements at least as stringent as those applying to open limited companies. They should also be able to operate just like other companies in key respects and should not reject the development of new businesses in partnership with private-sector agents. Progress towards such an objective would be facilitated by putting an end to their dependence on various ministries or departments.

Public enterprises should operate autonomously and their owners should assert their rights through a board of directors, whose members should be appointed on the basis of technical considerations for

terms in keeping with the needs of the firm; their management and financial duties should be clearly and strictly defined, and political considerations should play no part in any of this. Boards of directors should be subjected to evaluation, and the executives of public firms should be accountable to the State for their results and goals.

An investment policy tailored to each firm's strategic planning scheme should be established for several years ahead and should not be a part of the debates on the budget which take place each year. From now on, it should be the policy of public-sector companies to draw upon the wealth of the national and international financial markets in order to secure the funds needed for their development, thus giving the private sector an active, preponderant role in financing their growth by setting up joint ventures with national and foreign capital as well as other types of partnerships (Méndez, 1993). In order to do so, however, these firms must put together a portfolio of projects that will enable them to take advantage of the opportunities that arise. For its part, the State should make sure that the firms have access to direct or indirect financing for the investments needed to meet the requirements inherent in any viable project: a rate of return in excess of the opportunity cost of the capital used, consistency with corporate strategy, and the maintenance of a strategically competitive position.

In the area of corporate responsibilities, performance agreements are a valuable tool for clarifying quantifiable objectives which the public firm commits itself to achieve within a specified time period. Through such agreements, a firm pledges to attain certain objectives with regard to economic results, physical production, productivity, quality of service, etc. in exchange for a commitment from the Government to provide the necessary financing and to compensate the firm for its obligatory performance of non-commercial activities in the public interest. The criterion of the additionality of private investment should be systematically applied.

Such measures facilitate separation of the roles of owner and manager and make it possible to simplify controls and processes which are external to the firm and to redirect them towards the analysis of results. In addition, they help to reduce the power of interest groups which try to pressure public enterprises into taking on roles that run counter to those explicitly agreed upon with the owner.

8. Carrying out the necessary privatizations properly

There are firms that pose no problems regarding regulation of the market, long-term profitability as private firms, or other matters that might justify their continued ownership by the State. In such cases, the government should proceed with their privatization, using procedures that will ensure that their sale will be transparent and will not be prejudicial to the public interest or their workers; the end result should be more rather than less competition.

In each case, the rate of privatization should be such that its benefits will outweigh its costs. The movement of enterprises or activities out of the public sector calls for a combination of a realistic approach that obviates the risk of losses or non-transparent asset transfers and the steady progress afforded by a clearly-defined course of action.

A number of general principles need to be taken into account in order to conduct the necessary privatization operations properly (Devlin, 1993). Various conditions need to be present in order for the process to be a transparent one: access to information, clearly-defined subsidies, a specified destination for the revenues generated by divestiture, an *ex post* evaluation, disclosure requirements, rules regarding conflicts of interest and an appropriate pace.

In order to maximize prices, it may be necessary to make various estimates of the firm's value, to restructure it before its sale, to make a public call for bids when preparing to contract the banks that are to act as agents, to sell to the highest bidder with very limited regard for considerations other than that of efficiency, to sell off stock in small blocks, to demand payment in cash, and to reserve a special share package for the public sector.

Viewing the process from a different angle, consideration should be given to the possibility of using the revenue from privatization for special allocations to social funds. In addition, comprehensive support mechanisms are required to assist employees of public enterprises who are made redundant.

It is also important to have an effective regulatory scheme that incorporates pre-existing regulatory systems; impersonal, direct, clearly-defined and technically sound standards and rules that take into account the need for a dynamic form of efficiency, autonomy of regulatory bodies and the need for sufficient funding of their staff; and a legal framework for

the settlement of disputes that includes appropriate sanctions and the review of the regulatory scheme over a set period.

9. The need for regulations conducive to competition

Unlike the situation in most developed countries, in the region any attempt on the part of the State to play a preventive role in safeguarding free competition is subject to serious constraints. Modifications in market structures to ensure or promote free competition, as well as limitations on the purchase of enterprises or on vertical or horizontal integration schemes with the same object, usually do not enjoy the legitimacy needed for the development of an efficient market economy.

Regulation is generally designed to deal with market imperfections or to make up for the absence of a given market; it follows that its aim should therefore be to create conditions as close as possible to those of the market for the operations of the firms involved, for consumer protection and information, and for the regulation of price rates and the quality of service (Jacobs, 1992). Regulation should send out correct signals and provide the proper incentives to promote efficient resource allocation.[13] Since this is not a perfect substitute for a correct industrial structure, however, competition is preferable to regulation wherever possible. In any event, regulation, when used, should be directed towards the promotion of competition.

Proper regulation keeps discretionary elements to a minimum or eliminates them altogether, particularly with regard to pricing, while at the same time generating automatic mechanisms that heighten the regulatory provisions' flexibility and efficiency. Overseeing the operation of the regulatory system is a job that the public sector cannot delegate to any other agent. This supervisory function should be based on similar criteria for all the various sectors in order to ensure that, while recognizing relevant differences, it is of a non-discriminatory character. It would also appear to be desirable for the various regulatory processes to be simplified or made to correspond with one another in so far as the specific features of each area permit. Where there are a number of sectoral regulatory agencies, they should also be brought together in a public utilities regulatory commission, for in spite of the technical differences that exist from one sector to the next, they have numerous factors in common as regards the regulatory process, its objectives and assessment.

The State's regulatory capacity must necessarily be founded upon the existence of a suitable policy framework, high-level technical teams and an institutional structure capable of ensuring the regulators' effectiveness. Regulatory activities should be guided by clearly-defined, pre-established rules and, in the more crucial areas, the decisions of regulatory bodies should be subject to appeal: for example, to an anti-trust authority.

As is also true in the case of privatizations, in order to attain the chief aim of deregulation, which is to promote competition, it is best if the relevant sector or enterprise is restructured before the deregulation process is begun. Regulation should only be undertaken if it seems apparent that the distortions produced by it will be more limited than those generated by the market operating on its own. Competitive activities should be separated from those that continue to display monopolistic characteristics in order to forestall cross-subsidization and avoid protecting inefficiency. The scales of charges adopted should send out correct pricing signals to consumers while at the same time encouraging efficiency and self-financing.

Following deregulation, corporate mergers should be analysed with special care, since they could put an end to the competitive situation that deregulation sought to create. They may also give rise to agreements aimed at suppressing competition, which must naturally be prevented. Deregulation can also, however, lead to mergers that promote more efficient allocation of resources, and it is clearly important to distinguish between the two situations (OECD, 1992).

10. Refining policy monitoring and assessment

Improving evaluation capacity is a pivotal component of reforms aimed at boosting operational efficiency. Without accurate assessments, it is impossible to provide incentives or to delegate responsibilities and grant autonomy in a proper fashion. Evaluations cannot, however, take the place of an informed public debate (although they can make a

[13] See Sappington and Stiglitz (1987) and Hay (1993).

contribution in that respect), nor can they be used as substitutes for the necessary political or administrative decisions, although they can help place the decision-making process on a more rational level of discussion.

a) *Ex-post evaluations*

Ex-post evaluations [14] of both substantive and operative aspects of public policies should be undertaken on a routine basis (Booth, 1989). Assessments of effectiveness focus on results; assessments of efficiency look at the way in which the State's means of taking action are applied in practice. *Ex-post* evaluation permits an accurate analysis of the level of efficiency, facilitates its improvement at the margin by detecting shortcomings and suggesting other solutions, and permits the generation of information regarding the results and the most efficient manner of achieving the proposed objectives. [15]

There are at least two types of evaluations. The first is an in-depth evaluation which includes an analysis of policy objectives and options. The second type focuses on management aspects and has more limited aims.

In order to facilitate the evaluation of public policies, it is wise to use a systematic form of policy formulation, to try to ensure that analyses performed prior to the adoption of decisions and the results of *ex-post* evaluations complement each other, and to include the revocation of the policy in question among the options of the evaluation process (France, Commissariat Général du Plan, 1986).

It is also necessary to define the expected policy outputs increasingly clearly and to develop indicators that will contribute to that end. [16] Given the wide range of different objectives and the lack of any universally accepted criteria for assessing public management, progress needs to be made in the specification of quantitative and qualitative indicators. These indicators should include such aspects as economic factors (the cost of inputs), efficiency (the input/output ratio), effectiveness (the extent to which outputs contribute to the achievement of established objectives), quality of service (user satisfaction) and production. [17] [18]

The public sector should provide relevant, current information on its fiscal management, as should individual public enterprises. The accounts maintained by public agents should be up to date and subject to outside audits.

A routine procedure should be established for the evaluation process; it should include the methods to be used, the public availability of its conclusions and the types of options to be considered. [19] Those responsible for preparing the evaluation should be at liberty to redefine the questions to be answered so as to convert them into hypotheses that may then be tested. The evaluation team should be of a multidisciplinary nature and its membership should provide a guarantee of its independence and competence.

The evaluation of public enterprises should begin with an examination of their profit statements; a number of adjustments should then be made for such factors as, for example, whether some internal (private) costs contribute to the public welfare (e.g., taxes). Shadow prices must also be used, since public and private valuations differ. The focus should be on the analysis of trends rather than levels, and changes in quantity should be distinguished from changes in price (Jones, 1991).

[14] See Lahera (1980).

[15] An interesting case in this regard is the reasoned evaluation of public policies conducted by the General Accounting Office in the United States.

[16] In late 1985 the United Kingdom decided that all proposals intended for submission to the Government or ministerial commissions must be accompanied by detailed information on their objectives, possible delays, implementation costs and methods for their evaluation.

[17] In this regard, see Tironi and others (1992). Numerical indicators may include the following: operational or production costs, percentage of error or of rejects, market share, reduction in processing time, complaints as a percentage of customers served, staff turnover and employee absenteeism. There are, of course, other possible indicators of user satisfaction that could be derived from survey data (Tironi, 1993).

[18] A law recently passed in the United States regarding government performance and results provides that the directors of Federal agencies must submit five-year strategic plans in which they set forth performance targets for their programmes of activities. In addition, yearly progress reports must be submitted to the Executive and to Congress; these reports must present performance indicators, specify the stage attained by each programme and make a comparison with the goals contained in the plan for the relevant fiscal year (*El Diario*, 1993).

[19] In France, a committee of ministers selects the policies that are to be evaluated. The resulting proposal is submitted to a scientific council for evaluation, which subsequently issues its findings regarding the proposal's feasibility. This same council also presents its views regarding the quality of the proposal. Finally, the committee of ministers takes whatever decisions it deems appropriate once the evaluation has been completed (Trosa, 1993).

The budgetary rationale upon which evaluations are based should be explicitly stated, and finance ministers should either take evaluation initiatives themselves or process other ministries' requests for evaluations (Perret, 1993). Experience has shown that it is impossible to prepare an evaluation without going into the matter of financial management, without providing training for senior personnel and without adequate organization. Each ministry should have some sort of unit that serves as the institution's memory and can help in the definition of operational objectives (Rouban, 1993).

b) *Ongoing parallel evaluation*

An interesting possibility would be to create a public efficiency office or unit staffed by a small team of full-time professionals and linked to the Office of the President. The main purpose of such a unit would be to examine the efficiency levels of governmental sectors and to identify the steps needed to improve management and increase the effectiveness of the use of public funds.

c) *Monitoring*

In order to expedite policy implementation, verification of the legality of governmental action by the Office of the Comptroller (i.e., the constitutional and legislative review process) should be undertaken following, rather than prior to, policy adoption. To make this possible, it will be necessary either to strengthen existing internal monitoring capabilities or to use the services of outside organizations. Whichever choice is made, governmental authorities must abandon the practice of expecting any problems that arise to be put right along the way by agents other than those responsible for the delays. The manager himself would therefore be accountable for his actions to the relevant authorities.

Review of the legality of administrative actions would be facilitated by the establishment of an efficient, specialized adjudicatory authority which could hear the complaints of those who feel they have been unjustly affected by administrative decisions.

d) *Improved inspection facilities*

The various inspection services should have the necessary flexibility and means to increase their effectiveness so that they can meet the increasingly complex demands associated with the process of inviting tenders for investment projects or awarding contracts for social development projects and their follow-up.

In some countries, the Legislature performs a supervisory role. If so, this function needs to be discharged in a way that is both genuine and effective but that does not represent so heavy a burden as to interfere with the job of managing public affairs.

The bodies responsible for the inspection of public services should be independent of the services to be inspected.

(Original: Spanish)

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The petrochemical and *machine tool industries:* business strategies

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Recent structural reforms in Argentina, Brazil and Mexico have set up entirely new conditions for competition. The biggest changes are those affecting trade and industrial policy and the system of public-private production relations. In this new environment, manufacturing firms receive less protection and less State assistance and have less leeway in which to devise price differentiation strategies for the domestic market. The orthodox literature and conventional wisdom in the region suggest that more competition will spur firms on to increase their activities and efforts in the field of technology. Others have voiced a dissenting opinion, however, arguing that a reduction in protection and assistance will put these firms out of business. Research findings suggest that neither the "increased-efficiency" nor the "de-industrialization" hypothesis will prove to be true in the immediate future; rather, they appear to indicate that the process is a much more complex one and that firms' and sectors' past experiences will influence the strategies they use today. In Mexico, where the reform programme has been in place the longest, firms have fallen back on more mature products, have abandoned or deferred plans for expansion or for specialization in new products, and have cut back on their technological activities significantly. Their Argentine and Brazilian counterparts, which are dealing with more recently established reforms, have taken decisions in the short run that would seem to put them on the same path. In none of the three cases has there been, at least thus far, large-scale closure of plants or a changeover to strategies based primarily on the marketing of imported goods.

I

Introduction

Recent case studies conducted in Argentina, Brazil and Mexico –by Chudnovsky, López and Porta (1992), Erber and Vermulm (1992) and Unger, Saldaña, Jasso and Durand (1992), respectively– have all used a similar methodology to analyse how the structural adjustment processes launched by these countries in 1982 in response to the external debt crisis have affected business strategies in the petrochemical and machine tool industries.[1] The purpose of this article is to discuss and compare the main findings of these three research projects as they relate to the hypotheses on which the studies were based.

Despite the relative uniformity of these three countries' macroeconomic situation and public policies in 1980-1990, their entrepreneurial behaviour patterns were expected to differ. The researchers hoped to identify the numerous determinants of microeconomic behaviour and to ascertain how these factors interacted. It was thought that the explanation for the various types of different business strategies was to be found not only in the particular features and characteristics of each firm, but also in the structural pattern of the corresponding industrial sector and in the prevailing form of macroeconomic regulation.

The study focused on one sector that produces widely used inputs and one capital goods sector. The techno-economic and market configurations of these two sectors were very different, as also were the characteristics of a "typical" firm in each of the sectors. In the petrochemical industry, companies belonging to large national economic groups and subsidiaries or affiliates of transnational corporations predominate. In the machine tools industry, on the other hand, most of the firms operate on a small or medium scale and, even in the case of some subsidiaries of transnational corporations, exhibit a decision-making structure that is based on the personality of the owner or of immediate family members (usually European immigrants or their first-generation descendants). The first-named sector's greater financial capacity, strategic planning capabilities and lobbying strength, along with other comparative advantages, enable it to process exogenous signals more successfully.

The study analysed the entrepreneurial strategies followed during two periods marked by very different macroeconomic and economic policy configurations: (i) the stage of external and fiscal adjustment that began with the 1982 debt crisis; and (ii) the stage of structural reform (liberalization, deregulation, privatization) that began in the second half of the 1980s in Mexico and in the 1990s in Argentina and Brazil.

During the first of these stages, the high inflation rates, recurring external crises and sluggish economic growth seen in the 1980s led to low levels of private investment and the increasingly widespread use of survival strategies. According to orthodox theory, since these were closed economies, firms could not be expected to be technologically innovative or to raise their productivity and quality standards. None the less, as the manufacturing sector became increasingly heterogeneous, some firms actually did expand their production and export capacities and introduce new technologies during this period.

The second stage might be described as having a more competitive climate that could be expected to encourage firms to invest, renew their efforts in the field of technology, restructure obsolete operations, introduce new products and seek out new markets (Frischtak, Hadjimichael and Zachau, 1990). Earlier experiences with liberalization had shown, however, that firms had primarily exhibited defensive reactions entailing the abandonment of their own production activities and the importation of similar foreign products instead, a deterioration of production or technological capabilities, and rationalization of corporate structures (especially in terms of staff).

□This article summarizes a comparative study (Chudnovsky, López and Porta, 1993) conducted as part of a project on structural adjustment and business strategies in Argentina, Brazil and Mexico. The project, which was carried out in 1991 and 1992, was coordinated by CENIT (Buenos Aires), with the participation of Fabio Erber (BNDS, Rio de Janeiro) and Kurt Unger (CIDE, Mexico) and funding by the International Development Research Centre (IDRC) of Canada. The authors are especially grateful for the assistance provided by Martina Chidiak.

[1] In addition to compilations of the relevant literature and the analysis of secondary sources, interviews with executives of firms in these two sectors were an essential component of these research efforts.

It was more difficult to evaluate private business strategies in Argentina and Brazil because the policy changes in those countries are so recent. In the case of Mexico, however, entrepreneurial strategies could be expected to be more clearly defined, since that country's liberalization and deregulation policies have been in place for a longer time. The repetition in Argentina and Brazil of behaviour patterns observed in Mexico was another of the hypotheses to be tested. In this respect, it would be necessary to bear in mind that although these countries' adjustments and structural reforms have all been based on the same theoretical/ideological matrix, each country has conducted these processes in its own way within the context of different economic structures and different political and sociological factors.

The essentially ahistorical and atemporal approach that permeates the orthodox literature on corporate behaviour was not felt to be an appropriate means of testing these hypotheses. This approach regards business firms as institutions that take decisions on the basis of changes in market conditions and in the available stock of physical capital for the purpose of maximizing their profits. Rather than looking at business firms as an object that merely shifts from one equilibrium position to another, the present research effort used a dynamic neo-Schumpeterian approach (Dosi and others (eds.), 1988).

Using this approach, corporate decisions are seen, in part, as a legacy from the past and the circumstances prevailing at that time. When those circumstances change, new decisions will be based on an investigative process marked by uncertainty and will depend on the specific climate in which the relevant firm is operating (Nelson and Winter, 1982). Corporate decisions are, therefore, strongly influenced by the point in time and the historical context in which they are taken, as well as by the nature of the decision-making process and the way in which the firm itself is organized. As time goes on, a kind of learning process takes place and technical and commercial information and expertise are built up. This contributes to the creation of a stock of intangible assets which, depending on their quality, will guide corporate decision-making in response to new circumstances as they arise.

The specificity of the national cases covered in the study made it necessary to take two quite significant facts into consideration: first, the quantitative and qualitative differences between the endogenous technological activity of firms in these three countries and that of firms from some developed countries; and, second, the fact that relatively less importance is attributed to production strategies than to financial enhancement or profit- or subsidy-seeking strategies.

Having thus set forth some of the premises on which the analysis of corporate behaviour was based, it is essential to make the point that these behaviour patterns cannot be understood without taking the sectoral dimension into consideration. The characteristics of the production process, the type of demand, the pace of technological change, access routes to spearhead technology, the configuration of the relevant industrial branch at the world and national levels, and the form taken by competition (price-based competition or competition extending beyond that factor) are key components of the environment in which firms define their long-term strategies.

The predominant form of sectoral regulation should also be examined. The structure and development of many industrial sectors have been based on active State involvement, and these regulatory frameworks were altered substantially during the period covered by the study. The analysis of firms' growth trajectories led to a review of the design and application of regulatory instruments in each country's particular institutional context. Sectoral structures and the specific nature of the corresponding regulations have a direct influence on entrepreneurial strategies while at the same time dampening or heightening the impact of changes in macroeconomic variables and public policy.

With regard to macroeconomic factors, one priority area of analysis was the effects of fluctuations in the main relative prices and in the levels of economic and investment activity. The way in which significant changes in commercial and industrial policy are converted into signals for short- and long-term corporate decision-making was also examined.

The analysis of the impact of public policies called for an exploration of the environment formed by society and the State and of the degree of certainty existing among private agents regarding the sustainability of a given macroeconomic configuration, as well as their delayed reaction to changes in that structure, with a distinction being drawn between short- and long-term measures. An effort was made to focus on those types of institutional matters that

affect the way in which the market –especially in sectors dominated by large economic groups– interacts with the State, as the voice and supposed representative of the public interest, during a period of fiscal crisis in which a liberal ideology is rapidly gaining ground.

Section II of this article presents a comparison of current corporate strategies and evaluates a number of decisive factors. Section III contains an analysis of past corporate and sectoral events within the context of the policies that predominated in the 1980s, since this background information is essential to an understanding of present strategies. The changes that have occurred over time in the macroeconomic and institutional situations and their effect on business decisions are explored in section IV, and finally, in section V, the study's chief findings are analysed in the light of the questions posed at the outset. [2]

II

Business firms and structural reform

In all three countries, the outlook for firms in these two sectors in terms of corporate profits is less bright than before owing to the international recession, the countries' macroeconomic situation and the implementation of structural reforms. The firms' response has been a defensive one and has included the suspension of investment projects, staff cuts, the downscaling of management structures and decreased expenditure on both in-house and outside technological activities.

1. Mexico

Mexico has been implementing its reforms, applying price stabilization measures and striving to achieve macroeconomic equilibria for a longer period of time than the other two countries. The consolidation of its deregulation and liberalization policies and, above all, its free trade agreement with the United States and Canada, have reduced the level of uncertainty for business enterprises, and within this context, corporate strategies in Mexico appear to be more definite and clear-cut than in Argentina and Brazil. [3]

Mexican companies in these two sectors have tended to consolidate and increase their activities in the more mature production segments or product lines in an attempt to defend their oligopolistic market position (petrochemicals) or their location-related advantages (machine tools). They have also cut back on the scope and level of their technological efforts.

This orientation in the business strategies studied in Mexico is closely connected with the consequences of nearly a decade of recession and sluggish investment. The liberalization policies and efforts to re-establish links with the international economy which, in this case, were undertaken early on, did help stabilize the situation in terms of the outlook for business firms, but they also prompted companies to adopt a predominantly defensive stance which was a far cry from the aggressive action in the areas of technology and investment that greater exposure to international competition would supposedly foster.

Will this turn out to be a looking-glass in which we can foretell the as yet relatively undefined trends in corporate behaviour in Argentina and Brazil? The characteristics and consequences of the macroeconomic adjustments made by these two countries in the 1980s were, generally speaking, similar to those seen in Mexico. The orientation of recent structural reform policies and the main policy tools likely to be used in this regard are also fairly similar. In all three countries, although there may be differences of degree, these reforms represent a sharp break with previous protectionist policies.

The developing countries (and their business firms) have little or no chance of playing an active role in defining the sectoral parameters for

[2] Except where otherwise stated, the information and concepts presented in relation to each country were drawn from the case study on that country.

[3] Although these two industrial sectors are representative of the prevailing situation for industries producing widely-used inputs and mechanical capital goods, the statements made here should not be regarded as applicable to other branches of manufacturing industry in the countries covered by the study. Research now under way in Argentina and Brazil does, however, suggest that the trends in some other industrial sectors (including some consumer goods producers) are similar.

competition, however. The production and demand structures, the dynamics of technical progress and the relevant sectors' forms of internationalization are externally-determined conditions that offer a limited measure of manoeuvering room for Argentine, Brazilian and Mexican firms.

Consequently, the macroeconomic framework, public policy configuration and structural factors affecting these sectors are similar in all three cases. It is reasonable to believe that the two sectors' strategies of "digging in" in relatively mature segments of the market where there is less competition will be repeated in Brazil and Argentina. Studies conducted in those countries have indeed found that businesses are adopting survival strategies involving the abandonment of investment projects and the implementation of adjustments designed to "streamline" payrolls and operational structures.

There is no evidence that companies are moving along a path of technological innovation in either of the two industries. Innovative activities by large local firms and subsidiaries of transnationals in the petrochemical industry were very limited throughout the period studied.[4] In the machine tools sector, during the 1980s Argentine and Brazilian firms that had developed their own design capabilities took advantage of opportunities for copying technologies to move into the development of CNC (computerized numerically-controlled) machine tools, although they lagged somewhat behind the international leaders. In any event, the persistence of depressed markets and the steps taken to open up the economy have had a marked effect on this more innovative course of action.

The past history of these branches of industry and, in particular, of the business enterprises covered by the study has not, however, been similar in the three countries. Nor are their specific modes of micro-macroeconomic linkage the same. These differing circumstances generate some degree of freedom in this regard, so that, despite their relatively similar macroeconomic and sectoral frameworks, the paths chosen by firms in the three countries may tend to diverge in the future. Furthermore, the specific ways in which the structural reform and adjustment processes are being carried out, as well as their sociopolitical contexts, exhibit individual features in each of the three cases. It can therefore not be ruled out that the business enterprises studied in Brazil and –with less probability– in Argentina may follow a different path from that taken by the Mexican companies.

[4] Local firms do appear to have made a greater effort to gain technological expertise, within the narrow confines of the characteristics and relative stability of this industry's technological paradigm.

2. Structural factors

The model for the establishment and development of the petrochemical industry was based on a high degree of direct involvement of the State in the upstream stages and of private enterprises (primarily monopolies and single-item producers) in each successive downstream phase. This public-private linkage reproduced, albeit with a greater degree of entrepreneurial fragmentation, the scheme of vertical integration and large-scale operations that predominates at the international level, and it enabled this industry to share in the distribution of primary income. The new regulatory framework that has accompanied structural reform makes it necessary to carry out changes if these three countries are to maintain that sectoral scheme.

Because of the reduction in the level of State involvement in the production of hydrocarbons and petrochemicals and the deregulation of raw material prices in the sector, the petrochemical production chain needs to be redefined in order to ensure a supply of inputs and to internalize the primary-income transfer/competition process. The future development of this activity will require a changeover from a model of vertical integration within this branch of industry (the petrochemical pole) to a scheme of intra-firm vertical integration. The particular forms that this transition takes on in each country will depend on the extent to which the State moves out of the production of inputs (completely in the case of Argentina, partially in those of Mexico and Brazil) and on the corresponding entrepreneurial configurations.

In Argentina, the regulatory apparatus that was in place until the late 1980s has now been dismantled, and the State has withdrawn from the production of hydrocarbons. In Brazil, reforms have moved forward more slowly, and promotion mechanisms have been cut back but not eliminated; for example, PETROBRAS, the State oil company, still maintains a subsidized price for gasoline sales to the petrochemical industry. Mexico's government oil company,

PEMEX, still accounts for a large percentage of petrochemical output, although it has begun to withdraw from downstream production activities. The Mexican State still works to promote the development of the petrochemical industry in that it maintains some subsidies for the sale of raw materials and intermediate products. In any event, in all three countries the prices of petrochemical raw materials have risen, and at the same time the lowered levels of protection have tended to bring domestic prices for final petrochemical products into line with international prices.

Firms have responded to the prospect of smaller profits with defensive action, abandoning investment plans and laying off workers. They have continued along a "natural" process optimization path, but are relying much more heavily on the type of expertise gained through hands-on operations than on systematic research and development efforts. Probably because of the larger size of their domestic markets, firms in Brazil and Mexico seem more interested in developing new applications for their products than do their Argentine counterparts, but they too have de-activated specialty-production projects that were in their early stages.

Meanwhile, some companies belonging to large economic groups have begun to formulate longer-term strategies that include vertically integrated operations; this has been made possible primarily by the privatization of the relevant enterprises. These operations tend to be directed "backward" in Argentina and Brazil and "forward" in Mexico, with the difference being due to the specific characteristics of these countries' regulatory frameworks.

Clearly, until such time as a new stage of rapid growth appears to be in the offing in one of these three countries, the redefinition of this industry's technical/corporate structure will tend to move in the direction of a greater concentration of capital and of supply, which works to the benefit of some of the established private producers. A firm's ability to take a more active role in this process will hinge upon the relevant conglomerate's flow of resources, the relative buoyancy of the sub-market in which it operates, and the firm's chances of gaining access to suppliers of technologies. These new "winners" seem to be more clearly defined in Mexico and Argentina than in Brazil, where the reform process is less advanced and the network of business relationships associated with the previous model appears to be more rigid, thus hindering vertical integration.

An examination of the petrochemical industry illustrates how the sector's structural factors (its international logic and national regulation) influence the viable alternatives for private strategies. Owing to the characteristics and relative stability of the sector's technological paradigm, the existing range of technological options was quite limited. At the same time (given the relative size of the firms), the fact that Latin American companies could afford to spend much less on research and development than the leading firms in the international marketplace ruled out any major innovations in processes or products. On the other hand, in order for projects involving mature products and relatively widespread technologies to have a satisfactory commercial outcome, it was necessary for these firms to engage in an operational learning process that included routine technological activities.

So long as national regulation supplanted the logic of intra-firm vertical integration with public-private linkages within this branch of industry, local production activities were provided with a very high level of protection, which limited competition in the domestic market. The narrowness of their technological path and the broad scope of regulatory mechanisms left no room for any substantial degree of differentiation in business strategies.

The changes made in the regulatory framework have led to a re-working of corporate strategies, even in cases where technological factors have not been altered in any significant way, but they do not necessarily entail major differences in current business decisions. Specifically, technological/production upgrade strategies are still conspicuous by their absence. Be that as it may, in order to remain in business firms must make an active effort to move towards greater vertical integration. Their chances of being relatively successful in this (i.e., in comparison with other producers) will depend primarily on their ability to compete in the privatization process.

The technological path open to established firms is tending to narrow even further. On the one hand, more intense competition in domestic markets boosts the minimum level of technological activity necessary to ensure a firm's continued existence. On the other, spending cuts in this area limit the level of technological training as well as the chances of introducing improvements in processes or products. Although a firm's survival will probably not be threatened in the short run, over the long term its ability to select

and absorb technologies for possible future investment will diminish. What is more, in the cases of Mexico and Brazil it has been found that the conditions under which firms are able to gain access to outside technologies have worsened since the late 1980s.

The machine tools industry's structural determinants are different and, as a result, a greater degree of differentiation was seen among the strategies of firms in this sector than in the petrochemical industry during the period in question. The structural reforms now under way would also appear to pose a greater threat to the continuation of the bolder sorts of corporate technological/production strategies. From the standpoint of the sectoral configuration, the effects on the machine tools industry appear to be leading in the direction of a marked deterioration in production and a widening technological gap between these nations and the developed countries.

In the countries studied, this industry was affected by two different trends during the 1980s. On the one hand, a new production paradigm –based on the incorporation of CNC tools– came into widespread use, thereby ushering in a new generation of products and production processes in this branch of industry. On the other hand, the recession –which had a particularly serious impact on investment– weakened demand for the output of this sector in particular. The combination of these two factors generated a complex set of circumstances in which the industry's technological momentum carried it in the direction of offensive strategies while its dwindling market prompted defensive measures.

Unlike the situation in the petrochemical industry, neither Mexico nor Argentina had a specific regulatory apparatus that could have altered the depressive signals generated by the prevailing macroeconomic conditions, although Argentine companies did benefit from the preferential access to the Brazilian market (which was booming in the period 1985-1989) that they received under a binational capital goods integration agreement. In contrast, however, even without any special promotion scheme such as that implemented for the petrochemical industry, Brazilian firms were able to obtain financing on preferential terms and enjoyed a relatively higher level of protection from imports.

In other words, the elements exerting the strongest influence on the configuration of structural factors in the machine tools industry were general macroeconomic adjustment policies and rapid changes in the pattern of technical progress. In the 1980s the industry began to undergo a restructuring process which put an end to a recently inaugurated government programme for establishing the industry in Mexico and led to the disappearance of a large number of firms in Argentina and a somewhat smaller number in Brazil. In these two countries some companies managed –with varying results– to fit in with the new technological paradigm. Clearly, the greater flexibility of this industry's production processes, the possibility of copying technology and the absence of a specific regulatory framework (three significant differences between this industry and the petrochemicals sector) have permitted the deployment of more widely differentiated business strategies.

The leading market positions in Argentina and Brazil have been held by companies that have incorporated a substantial proportion of CNC machine tools into their product mix. All of these companies had previously acquired a considerable amount of experience in product and process engineering and, except in the case of one Argentine firm whose subsequent growth was seriously weakened, all these companies gained access to the new paradigm through links (of ownership or through licensing arrangements) with leading enterprises at the international level. Brazilian firms' relatively higher level of development appears to be due to their earlier entry into commercial production of CNC machine tools, their greater size, their status as subsidiaries or affiliates of transnational corporations (in three out of the four cases identified), a comparatively less recessionary macroeconomic configuration, strong protection against imports and the continuation of some promotional mechanisms for financing sales.

Vertical integration and the wider spread of products exceeding international standards –trends which became more marked in the context of the uncertainty and instability of the 1980s– had already been restricting the development of these companies within the new paradigm. Although leading Brazilian firms are now increasing their exports sharply (with their competitive position tending to be based on the use of conventional equipment and better access to marketing networks by virtue of their status as foreign firms), the recessionary conditions existing in the domestic market are making it more difficult to sustain these leadership strategies. Access to less expensive imported components is, on the other hand, a potentially favourable factor, and Brazilian firms

claim they do not feel threatened by competition from imported CNC machine tools (which are still subject to a high tariff). Nevertheless, in response to the present economic situation, companies in this segment have considerably reduced their internal technological efforts and have cancelled investment projects.

The continued growth of Argentine firms has become particularly problematical in both regional and domestic markets owing to the combined effect of abrupt changes in the conditions relating to competition, a lagging exchange rate and a shortage of financing for domestic and foreign users, all of which has cancelled out the advantages afforded by their location and export experience. Under these conditions, plans for expansion have been suspended, production and exports have been cut back sharply, the number of employees has been considerably reduced and a large Italian corporation has taken over one of the industry's leading firms.

The build-up of inertial factors and uncertainty as to the chances of competing successfully in this new environment have undermined leadership strategies and, hence, the possibility of at least avoiding any further widening of the gap separating the most advanced segment of the machine tools industry in these countries from the international leaders. It has also become more necessary than ever to form partnerships with foreign companies, which will bring about a significant change in the traditional entrepreneurial structure of the sector. Intermediate strategies adopted by some firms in Argentina and Brazil, which entailed a gradual upgrading of products and process technologies and more timid forays into the production of CNC machine tools, also appear to have suffered severely. The know-how learned over many years of labour, the continued existence of a substantial market for conventional machinery and the continuing importance of maintaining a direct relationship with widely scattered users account for the widespread use of fairly passive survival strategies in all three cases.

III

Prior history of the firms and sectors

In order to understand the rationale behind the recent changes in microeconomic strategies and in the industrial setup, we need to take a look at the past history of the relevant companies and sectors and to examine the specific micro/macro relationship in each case. These elements –which impose certain constraints and determine the range of possibilities for a firm's current business activities– will be analysed below.

1. The petrochemical industry

The growth rates for petrochemical output and apparent consumption in Argentina, Brazil and Mexico were far higher than those countries' GDP growth rates in 1970 and 1980 (see table 1), which indicates that petrochemicals were being substituted for traditional materials on a large scale.

Owing to the larger size of their domestic markets and their success in maintaining a rapid economic growth rate, especially during the 1970s, the Brazilian and Mexican petrochemical industries have grown to be much larger than Argentina's (see table 2). [5]

a) *Structural characteristics*

The petrochemical industry is characterized by the predominance of mass-production processes, high capital/output and capital/labour ratios and significant effects of scale. These features give rise to highly concentrated supply patterns in producer countries, and this is especially true in the case of developing countries.

[5] If the industry's output of synthetic fibres and fertilizers is also taken into account, then the difference between the sizes of the Brazilian and Mexican industries and that of Argentina would be even greater.

TABLE 1

Argentina, Brazil and Mexico: Annual growth rates of GDP and of output and apparent consumption of petrochemicals[a]
(Percentages)

	GDP		Petrochemical output		Petrochemical consumption		Consumption of final petrochemical products	
	1970-1980	1980-1990	1970-1980	1980-1990	1970-1980	1980-1990	1970-1980	1980-1990
Argentina	2.6	-1.1	6.4	8.6	4.3	7.0	5.6	2.2
Brazil	8.6	1.5[b]	27.3	4.9[b]	22.5	3.7[b]	15.8	3.0[b]
Mexico	6.6	1.6	12.7	12.0	12.3	8.8	11.3	5.0

Source: Prepared by the authors on the basis of data from APLA (1988 and 1991), IDB (1991), Clemente de Oliveira (1990), Chudnovsky, López and Porta (1992), Erber and Vermulm (1992), Gutiérrez (1991) and Unger, Saldaña, Jasso and Durand (1992).
[a] For purposes of this comparison, the data for the three countries have been standardized on the basis of a set universe of petrochemical products which includes primary and intermediate products, thermoplastic and thermorigid resins, elastomers and solvents. It does not include synthetic fibres, fertilizers or specialty chemicals.
[b] 1980-1989.

In Argentina, Brazil and Mexico, average plant size has increased as the industrialization process has progressed, although in the beginning the plants were constructed on a small scale to fit the domestic market. By the 1970s, however, the plants being opened in Brazil and Mexico were built on an internationally efficient scale. In Argentina, this size transition was more uneven and was not completed until the 1980s. Plant size in all three countries is now being brought into line with optimum international levels.

Progress has been made in all three countries in the construction of integrated petrochemical complexes or poles in which the State has generally controlled the production of raw materials; these complexes have served as substitutes for the high degree of vertical integration of the large petrochemical transnationals in developed countries.[6] In Brazil, this trend has been even more generalized, and three great poles have been built which exhibit high-density input/output flows and are almost wholly self-sufficient in terms of supply.

In Argentina, the construction of two major integrated petrochemical complexes was carried forward in the late 1960s, but private investors' withdrawals or delays gave rise to imbalances in input/output flows which have yet to be fully corrected and have led to large export and import flows of basic products (see table 3). As a result, the production structure is insufficiently integrated, and many branches of the petrochemical "tree" are still missing, a particularly noteworthy example being that of intermediaries for fibre products.

Mexico is situated between these two extremes. It has placed less emphasis on the construction of integrated complexes than Brazil (the most modern of the PEMEX plants come closest to fitting in with the idea of poles). As in Argentina, the industry suffers from some imbalances in the sectoral input/output chain, which is reflected in rather high import coefficients (although these figures were moving downward throughout the 1980s). Much of the responsibility for the disjointed nature of the input/output chains may be attributed to the suspension by PEMEX of investments which it should have made during that decade in primary and intermediate product segments.

Although exports were the most dynamic demand factor in all three countries in the 1980s, they were not a growth leader. Most of the plants were designed with import substitution in mind, and exports were merely a response to the fact that local demand was lower than expected. Without them, the cost and productivity advantages afforded by the

[6] The importance of economies of scale, the fact that the most commonly used processes generate co-products, and the high cost and risk of transporting some products justify a high degree of technical integration in the petrochemicals industry. In developed countries the main producers also display a high degree of vertical integration, which gives them significant comparative advantages (transfer prices, guaranteed supply, etc.).

TABLE 2

Argentina, Brazil and Mexico: Output, foreign trade and apparent consumption of petrochemicals, 1990
(Thousands of tons)

	Output	Imports	Exports	Apparent consumption
Argentina	2 299.4	289.8	576.3	2 012.9
Brazil [a]	10 138.5	277.9	1 107.3	9 309.1
Mexico	10 459.7	1 129.7	1 535.6	10 051.9

Source: Prepared by the authors on the basis of data from APLA (1988 and 1991), IDB (1991), Clemente de Oliveira (1990), Chudnovsky, López and Porta (1992), Erber and Vermulm (1992), Gutiérrez (1991) and Unger, Saldaña, Jasso and Durand (1992).
[a] 1989.

construction of international-scale plants would have been undermined by high levels of idle capacity. Thus, in addition to performing a counter-cyclical role, exports have also been a response to the slowing of domestic growth in the three countries during the 1980s.[7] In any event, taking into consideration their experiences during that decade, the strategies of all the firms which were interviewed provide for a continuing flow of exports as a means of maintaining some degree of market diversification.

b) *Regulatory frameworks and types of companies*
In the 1970s and 1980s, the petrochemical industry received a heavy flow of private and public investment in these three countries; indeed, during the latter decade this flow contrasted sharply with the decline in total investment rates. One of the reasons for this is the amount of time that elapses between the moment when an investment decision is taken and the opening of the plant. Another key factor is the presence of generous government inducements.

Investment costs in this industry are high, and project lead times are quite long. The situation tends to be worse in developing countries due to longer construction times, defective infrastructure and higher machinery and equipment costs.

Because of the need to make up for these disadvantages, which are compounded by the greater difficulty of obtaining credit, it has become usual in developing countries for the Government to use various instruments to promote capital formation, as has been the case in the three countries analysed here. There is reason to believe that, if it had not been for these sectoral promotion mechanisms, no more than a small part of the investments made in these three countries would actually have been carried out.

These systems of incentives appear to have been most generous (as well as involving a considerable degree of redundancy) in Argentina and Brazil, where the extension of credit on preferential terms –as was also done in Mexico– was coupled with very attractive fiscal promotion policies which meant that the capital actually invested by private enterprises was a minority share of the total investment in each case. The objective of these incentives was to promote the construction of plants to produce import substitutes. The only *quid pro quo* in these public policies was a requirement that the plants should at least attain a certain minimum scale and, in Brazil, a requirement that a certain amount of equipment and technology for the plants to be constructed had to come from domestic suppliers, together with disclosure requirements regarding foreign partners' technology packages.

Given the importance of hydrocarbons in the sector's cost structure, all three countries have maintained preferential pricing systems for hydrocarbons to be used in the petrochemical industry; the benefits from this system have tended to be concentrated at the point of the industrial processing of these materials, thereby transferring to petrochemicals producers the financial benefits obtained from the extraction and production of fuels. In Brazil, the supply of raw materials at subsidized prices has been counterbalanced by the establishment of price controls that limit producers' profit margins; this transfers the subsidies to users and prevents local prices from rising too far above the international level.

[7] The highest export coefficient for the petrochemical industry is to be observed in Argentina, which experienced the most notable slowdown in growth (see table 3).

TABLE 3

Argentina, Brazil and Mexico: Petrochemical export and import coefficients, in physical volumes, 1980 and 1990
(Percentages)

	1980		1990	
	Exports/output	Imports/apparent consumption	Exports/output	Imports/apparent consumption
Argentina	25.8	26.5	25.1	14.4
Brazil	3.4	6.2	10.9 [a]	3.0 [a]
Mexico	6.0	26.7	14.7	11.2

Source: Prepared by the authors on the basis of data from APLA (1988 and 1991), IDB (1991), Clemente de Oliveira (1990), Chudnovsky, López and Porta (1992), Erber and Vermulm (1992), Gutiérrez (1991) and Unger, Saldaña, Jasso and Durand (1992).
[a] These data refer to 1989.

In Argentina, price controls have also been used, but State-owned primary commodity producers (regardless of whether the State owns the firm outright or is simply the majority shareholder) have not passed on the savings from lower input prices; as a result, even though the producers of final goods are working with profit margins similar to those of Brazilian firms, they have taken advantage of protection mechanisms to charge prices far above international levels. Mexico has also subsidized raw materials used by the private sector (tied to export and employment targets) but has been unable, except in a few cases, to bring the domestic prices of final goods into line with international prices.

Another significant factor has been the existence of tariff and non-tariff protection mechanisms. The range of protection was used most fully in Argentina and Mexico, while in Brazil there appears to have been a certain amount of redundancy (owing to the simultaneous existence of price controls). The possibility of price-based discrimination between the local and external markets has constituted a source of very considerable implicit export subsidies in Argentina and Mexico. In Brazil, on the other hand, explicit promotion mechanisms have been more influential. Be that as it may, in all three countries the rapid growth of exports during the 1980s can be accounted for primarily by their domestic recessions and the high levels of international prices observed during the second half of that decade.

Brazil appears to exhibit greater consistency and coordination in regard to the Government's various policy instruments for this sector. The Brazilian Government has not only helped to generate both supply and demand at the same time and has fostered the formation of a corps of national entrepreneurs (as has also been done in Argentina and Mexico) but also, through the Industrial Development Council, has designed a policy for structuring the sector within the framework of its overall industrialization strategy.

The three countries' State hydrocarbons enterprises have made inroads, either on their own or through subsidiaries, in the petrochemical industry. Their involvement in the industry has taken different forms, however. PEMEX has controlled most of the petrochemical production chain, including intermediate and final products, while transferring income via subsidized prices. In Brazil, PETROQUISA (a subsidiary of PETROBRAS) has also participated in various segments of the chain, usually in partnership with private firms, but does not seem to have followed any group strategy. The State-run suppliers of hydrocarbons in Argentina –Yacimientos Petrolíferos Fiscales (YPF) and Gas del Estado (GDE)– have participated in the construction of the country's two major primary production plants, but it was the Military Production Bureau (DGFM) which appears to have been in charge of sectoral planning.

The most salient aspect of this comparative analysis is that, unlike the situation in Brazil and Mexico, in Argentina the State oil and gas companies' involvement in the petrochemical industry has been more a matter of form than of fact and has been based on a private-enterprise, profit-seeking rationale in that these companies have not passed on the gains received by them in the form of subsidized raw materials.

Transnational corporations have played a pivotal role in the establishment and development of the petrochemical industry in developing countries.

Initially, their involvement took the form of direct investments to supply protected domestic markets; then, starting in the 1970s, they moved into co-investments, licensing arrangements and turnkey contracts for projects involving some level of export activity.

Transnational corporations maintain a more limited presence in Argentina than in the other two countries despite these firms' predominant role in the start-up of the industry. Although economic instability, the restrictive policies applied in the early 1970s and, in one case, a decision to abandon activities in the petrochemical industry all played a part in this partial withdrawal, the main reason for the transnationals' reduced presence is that –in contrast to what occurred in Brazil and Mexico– they have not played a major role as technology-contributing partners of local firms, perhaps because of the fairly small commercial volumes involved. They have, however, been active as licensors of technology.

In all three countries large local-capital groups have maintained a very significant –and, during the period studied, growing– presence. Another shared trait is that these conglomerates are highly diversified, with activities that extend beyond the petrochemical industry to include not only other manufacturing sectors (with or without linkages to petrochemicals) but also finance, construction, etc. [8] These groups' size and level of integration are very limited in comparison to those of the large chemical/petrochemical transnationals, owing both to the presence of institutional constraints on efforts to move into the production of primary goods or hydrocarbons and to the small size of local markets.

The Mexican groups appear to have the highest degree of concentration in petrochemicals –mainly in final products and related manufactures, given the extensive markets reserved for PEMEX– and the most clearly-defined business strategies. In Argentina, on the other hand, revenue from this activity tends to account for a smaller portion of the conglomerates' total income and, in some cases, a specific strategy for the sector seems to be lacking. The strategies of such groups in Brazil appear to be blocked by the highly dispersed nature of stock ownership caused by the tripartite organizational model in use in that country. [9]

c) *Technological activities*

It can be argued that there are upper and lower structural limits on possible technological strategies in this sector in developing countries. The lower limit in this case would be represented by those functions essential to the optimization of processes and the satisfactory management of production plants which must be performed in order for a business to be competitive. The upper limit would be determined by the amount of resources which the enterprise is in a position to devote to research and development. The expenditure threshold required in this industry in order to make major innovations in processes or products has been beyond the reach of local firms, and transnational corporations have simply not assigned this sort of activity to their subsidiaries in these countries.

As a result, the technological strategies of the enterprises analysed in these three countries have all been rather similar, although the types of technological activities undertaken vary depending on the product in question. In upstream segments, the emphasis has been on process optimization and energy conservation, while downstream concerns have done more work in the fields of product technology and technical assistance for customers. This has come about more or less naturally, with efforts being made in those areas necessary to a firm's market operations, and these efforts have thus established the lower limit for technological activity. The more aggressive firms with more money to spend on research and development have set themselves more ambitious goals, such as modifying process technology with the help of their own basic engineering expertise (setting up pilot plants), developing new catalysts or improving existing ones, and developing new varieties or qualities of the products they manufacture. [10]

[8] Spurred by State promotion policies, these local groups moved into petrochemicals –especially in Argentina and Brazil– with almost no previous experience. As this industry has developed, they have managed to acquire their own business expertise based on their practical experience in business administration.

[9] The State provides a majority portion of the investment and supplies raw materials; the local private sector furnishes the remainder of the investment and takes responsibility for the commercial and administrative management of the firm, while foreign enterprises participate as technology-contributing partners.

[10] The upturn in exports seen in the 1980s does not appear to have spurred firms to make greater technological efforts in any of the three cases studied.

Local firms have engaged in more in-house technological activity than foreign companies have (especially in the case of those which have never had a technology-contributing partner or have lost that partner) and, at least in Argentina, have been more heavily involved in working agreements with public institutions. In Brazil, outside technological ties have been limited, and the firms that have been most active in forming such ties have been among the most ambitious in terms of technological advances. In Mexico, government research centres are held in very low esteem due to their overly bureaucratic nature.

Owing to the small size of most of the companies analysed, research and development efforts have been quite scattered. Brazilian firms appear to have attained a relatively higher degree of technological autonomy and to have formed a significant pool of know-how sufficient to guarantee the efficient operation and proper maintenance of existing facilities. Furthermore, Brazil's petrochemical industry has begun to develop and market its own technology in some fields. On average, Argentine enterprises spend the least on research and development, and the upper limit of their technological activities has therefore been the lowest; State enterprises and some small private firms appear to have been the most active in this field. Mexican firms have concentrated on making their production processes more efficient rather than on developing new products; the larger companies that spend the most on research and development have started up their own projects in an effort to make headway in technologically complex areas, such as that of specialty products.

The effective assimilation of imported technology –whether in relation to processes or basic principles– has been limited. The acquisition of know-how has focused on detailed engineering aspects (this area is less well developed in Argentina), assembly and operation. The most progress of the three appears to have been made in Brazil. Brazilian firms have undertaken projects to expand their production capacity using their own engineering expertise, have cut back on restrictive clauses and made headway in "unwrapping" the packages contained in transfer contracts, have upgraded personnel training and their participation in plant design, and have attained a better understanding of basic process principles. One contributing factor in this connection has been the Brazilian Government's policy of focusing on the development of local technological capabilities, which provides for research and development loans, prohibits the inclusion of restrictive clauses in transfer contracts, and promotes the adoption of aggressive negotiating positions, among other measures.

In Argentina and Mexico, on the other hand, there have not been any significant sectoral policies on technological training, although (mainly as the result of an isolated event) Argentina can boast of a case in which public research institutions and a number of firms in the sector established successful linkages in the areas of technical and professional training and the provision of services and technical assistance in various fields. Argentine enterprises have been less active than their Brazilian counterparts in "unwrapping" technology contracts, and it is more usual for them (including even those firms that already have years of operational experience in the sector) to purchase turnkey facilities. The lack of any State legislation requiring petrochemical projects to use a higher percentage of local technology goes a long way towards accounting for these differences.

2. The machine tools industry

A high level of protection from imports, granted within the context of an expanding domestic market, was for many years the main impetus for the production of machine tools –in an industry developed by immigrants– in Argentina and Brazil. In Argentina, however, the opening of the economy to imports in 1978-1981 triggered the closure of many plants. Although protection was restored in 1982, the concessional financing arrangements subsequently made with Spain and Italy for the supply of equipment undermined its effect. The capital-goods integration agreement concluded with Brazil was perhaps the only exception to the general rule of very limited incentives for this industry in Argentina. Brazil, for its part, tended to generate a *de facto* reserved market by virtue of the extension of the criterion of similarity. In addition, unlike Argentine enterprises, the firms located in Brazil benefited from generous systems and mechanisms for financing their sales, at least until the late 1980s.

The history of this sector in Mexico is quite different, apparently because of its traditionally lower levels of protection and the proximity of its North American suppliers. The Government sought to promote the manufacture of machine tools by joining in various initiatives between 1975 and 1978 as a direct

participant. The government policy in this area included financing and tariff protection, as well as preferential treatment in State purchasing. For a number of reasons, however, these semi-State ventures were not successful. Given the macroeconomic conditions prevailing since 1982 and the liberalization of trade starting in the mid-1980s, few companies have been able to withstand the pressure from imports, especially of used machine tools.

Brazil is the largest machine-tool producer in Latin America. Brazilian output climbed steadily until 1980, but then plummeted during the 1981-1983 recession. Following a steady recovery which, by 1988, had raised the production volume above the peak level recorded at the start of the decade, it slumped once again, with 1990 sales amounting to US$314 million as opposed to US$628 million in 1988. Argentina reached its highest production level in 1978, but then lapsed into a downswing until 1984, followed by an upturn that lasted until 1988, when the value of output amounted to US$48 million (far less than in 1978). The subsequent recession pulled production down to only US$30 million in 1991. In Mexico, the value of the industry's output plunged from a high of US$96 million in 1982 to only US$33 million in 1987.

In contrast with Argentina and Mexico, Brazil's industry has been fairly closed to international trade, although some changes have been made in recent years. [11] The export coefficient for Brazilian output averaged less than 5% in 1985-1989 but rose to 14% by 1990, while the import coefficient increased from 10% in 1985-1986 to 44% in 1990. In Argentina, the export coefficient for 1986-1990 was 55% and the import coefficient was 63%. In Mexico, imports have been covering between 80% and 90% of apparent consumption while exports are undertaken on a fairly considerable scale.

a) *Structural features and types of companies*

Small and medium-sized enterprises dominate machine-tool production in Argentina, Brazil and Mexico, although in Brazil there are some exceptions. In the late 1980s, the leading firm employed 2 000 people and was invoicing nearly US$100 million. In contrast, the largest Argentine company provided jobs for only 320 persons and invoiced US$10 million in 1988.

Although the copying of technology is a very common form of absorption in this industry, the obtaining of manufacturing licenses, co-investments and, to a lesser extent, foreign direct investment (FDI) have been gaining in importance. Nevertheless, FDI has reached significant levels only in Brazil, which witnessed the establishment of a number of German firms in the 1960s in line with the growth of the subsidiaries of various motor vehicle manufacturers.

In an industry where technological change is an inherent part of its growth dynamics and international deployment, technological progress has been picking up speed ever since the mid-1970s as a result of advances in the field of microelectronics. The most visible manifestation of this trend has been the incorporation of numerical control (NC) technologies. This innovation, which made it possible to bring the advantages of automation to what had, until that time, been the inaccessible area of small-batch production, was devised in the United States in the 1950s. With the incorporation of microcomputers into control units and their conversion to computerized numerical control (CNC), this technology began to spread rapidly from 1975 on.

Although the manufacture of numerically-controlled machine tools in Brazil dates back to 1973, it was not until the second half of the 1980s that CNC production volumes rose above 1 000 units per year. In 1989, CNC machine tools represented 44% of total sales of lathes or milling machines. In Argentina, local production of CNC machine tools began in 1979 and, after several years of very small production volumes (between 8 and 13 units), in 1987 output reached 100 units (of which 77 were exported), representing a quarter of the total value of the machine tools produced. In Mexico, even though imported CNC machine tools are quite widespread, their production has not reached significant volumes. At all events, during the 1980s most of the markets in these three countries were oriented towards conventional types of machine tools, and most of the firms covered by this study specialized in that area.

Economies of scale have not been a very influential factor in the manufacture of conventional machine tools, although their importance has

[11] The internationally tradeable proportion of this industry's output is high and continues to climb. Between 1970 and 1990, its worldwide export coefficient rose from 36% to 47%, while the imported supply coefficient in countries which were themselves producers increased from 31% to 41%.

increased in the production of CNC machine tools. Economies of specialization, on the other hand, are indeed significant in this industry and are found not only in final production processes but are also a hallmark of the vertical de-integration often observed in this industry in developed countries.

Unlike the situation in those countries, the manufacture of machine tools in Brazil exhibits a high degree of national and vertical integration and of diversification in production. The market-reserve policy that has been in place in the informatics sector since 1982 has encouraged the domestic production of CNC machine tools and this, in turn, has increased the level of national integration; indeed, the leading producer (which has been self-sufficient in CNC units) has augmented the vertical integration of its production activities. Although Argentine plants are less vertically integrated and less diversified than Brazilian facilities, they have been hurt by a lack of part and component suppliers and by their scant economies of specialization. Mexican plants, for their part, are quite diversified and, with some exceptions, display little vertical integration due to the type and local content of the machine tools they manufacture.

b) *Production and technological strategies*

Unlike the petrochemical industry, this sector has deployed a whole range of business strategies, especially in Argentina and Brazil. The main reason for this difference between the two sectors lies in the dynamics of technological change, the access routes to it, and the greater rigidity of the petrochemical industry's production process and regulatory framework. In the machine tools industry, the incorporation of CNC tools reshaped its products and processes while at the same time erecting higher barriers to the entry of companies which sought to undertake their production later on, but there were nevertheless still many opportunities for using conventional machinery. Within this context, producers of machine tools had more leeway, from a technical standpoint, in choosing among various production options than their counterparts in the petrochemical industry did.

On the basis of a comparative analysis, the companies studied can be placed in one of three categories. The first is made up of firms which have followed a leadership strategy, won a significant share of the market and pioneered the introduction and manufacture of CNC machine tools on a commercial scale. The second includes firms which have allocated resources for the purpose of updating their product and process technology but are farther away from attaining international standards than the leading firms are and have been slower to embark upon the production of CNC machine tools. Companies that have followed a relatively passive survival strategy form the third category. [12]

The fact that three of the Brazilian firms that have followed a leadership strategy were able to count on a supply of technological inputs from their overseas headquarters or foreign partners underscores the importance of this technology access route. The other locally-owned Brazilian company in this category took a giant technological leap forward in product and process engineering in 1986 with the help of foreign licenses. One of the Argentine companies used a similar procedure in 1983 to obtain product-related technology. The other Argentine firm, in contrast, is the only one to have followed through with the strategy of relying on its own efforts; this decision is due entirely to the personal views of the owner.

All of these firms have, in addition to investing heavily during the second half of the 1980s, allocated a substantial level of resources to personnel training in the fields of production and design. The technological efforts made by the locally-owned Brazilian enterprise and by the Argentine firm that has managed to progress on its own have, however, been greater than those of their competitors in the two countries.

The upswing in the Brazilian market starting in 1984 created a favourable environment for these companies' activities. The Argentine firms also benefited from these circumstances thanks to the integration agreement which had entered into effect for these products in 1986. The subsequent recession and the reduction in the supply of financing for sales

[12] The first category includes four Brazilian enterprises (of which two are foreign subsidiaries, one is a semi-public company and the other is Brazilian-owned) and two locally-owned Argentine firms. The second category is formed by five companies in Brazil (of which one is foreign) and three in Argentina. The third category includes all the Mexican firms that were studied, four Argentine companies and five Brazilian enterprises.

caused these firms to halt their investments and cut back on staff, including personnel assigned to technological activities. A similar, although less marked, trend was to be observed among the Brazilian companies that were following leadership strategies.

The Brazilian firms in the second category (all of which are medium-sized, except for one small company) began to produce CNC machine tools between 1985 and 1988. The two small Argentine manufacturers of conventional milling machines in this group began to produce their first CNC equipment between 1986 and 1990. Another small Argentine producer of high-speed presses has also automated its machine tools. These Argentine firms are notable for having upgraded their product and process technology and made investments to expand their capacity in the late 1980s.

Three of the four locally-owned Brazilian companies in this group tried to obtain licenses in order to progress in CNC technology but were unsuccessful. One firm decided to develop its own technology, while the other two chose to mount joint ventures with a foreign partner. The Argentine firms, in contrast, did not seek licenses.

One of the differences between the Argentine and Brazilian enterprises in this category is that the former are not yet producing CNC equipment on a significant commercial scale. Even the Brazilian firms in this field have made sales only in the domestic market, however. Another major difference is that the Brazilian companies have managed to cut costs with the help of process innovations such as manufacturing cells, just-in-time production and computerization. These innovations, which require relatively small investments, were achieved mainly with the assistance of local consultancy firms. As in the case of the firms in the first category, all the companies in this group have reduced their staff engaged in technological activities and have abandoned work on products that were still on the drawing board.

The fact of operating in markets where location-related advantages seem to be of importance (e.g., where there are technical or vocational schools, small machine shops or sugar mills), the controls on wage hikes in place since 1987 and the need for (or strong commitment with) these manufacturers have all contributed to the survival of the Mexican firms.

Machine-tool manufacturers using stamping-type processes have survived by modifying their product lines and reducing the level of national content (in the case of presses). Manufacturers of lathes or milling machines and of tools for such machines have made some investments and have incorporated CNC machine tools without altering their line of products, but they have reduced the percentage of national content and increased their customer services.

The four Argentine companies in this category have employed fairly active, rather than passive, survival strategies and have sought to improve their product technology.[13] Generally speaking, they registered high export coefficients during the second half of the 1980s, but they did not invest in expanding their capacity, nor did they modify their process technology. Their competitive position has been based on their specialization in conventional machinery and in the adaptation of products to specific user needs, but these designs –generally devised by the owner– have not been included in the firms' production costs.

Four small and medium-sized firms that employed passive survival strategies during the 1980s were identified in Brazil. These companies produce for the domestic market (none of them exports) on a highly diversified and vertically integrated basis. In response to the economic slump of recent years, all such firms –in all three countries– laid off employees. One effect of their specialization in conventional machine tools seems to be a lower degree of exposure than other firms to the effects of trade liberalization measures.

[13] It is important to bear in mind that the Argentine study did not cover those establishments which survived the 1980s without changing their product lines, by going into the repair or servicing of machinery.

IV

The macroeconomic environment and public policy

The configuration of structural factors that shape the context for corporate strategies exhibits some significant differences between the two sectors as well as considerable similarities among the three economies during the period in question. The structure of production and demand, the dynamics of technical progress, the predominant forms of internationalization, the characteristics of a typical firm and the internalization of these elements in sectoral regulations account, in large part, for the different paths taken by these two sectors and their repetition in the three national economies considered. At the same time, the particular features of the regulatory framework in each country and of macroeconomic and institutional trends, intertwined as they are with the history of each firm and sector, help to account for the differences found within the same sector in the three countries.

1. The crisis of the developmentalist State

The 1980s were a time of crisis for the developmentalist State in all three countries. In the course of more than 40 years of industrial development based primarily on import substitution and the growth of the domestic market, the State came to play a very large and direct role in the production apparatus and to occupy a leadership position in investment and capital formation; from that position it deployed an enormous array of regulatory instruments aimed at the promotion of economic activities while retaining the capacity to arbitrate and intervene in distributive conflicts via the pricing system and the fiscal budget. Social practices have invariably been determined by reference to this decisive capacity for intervention.

At the same time, a quite diversified industrial apparatus was being set up which included basic industry and capital goods sectors. This process reached its height in Brazil in the late 1970s. Within this context, a number of disequilibria began to build up in this substitution-based development process which tended to be manifested primarily in periodic balance-of-payments crises in Mexico, outbreaks of inflation in Brazil, and a combination of the two in Argentina. The consequences of the countries' external borrowing in the mid-1970s –summed up in the appearance as from 1981 of ongoing fiscal and external constraints equivalent to an estimated range of from 5 to 10 points of GDP– signalled the breakdown of the model and of the effectiveness of developmentalist institutions.

Ironically, one of the essential factors in these three economies' ability to cope with the corresponding external adjustment was the fruition of the major investment projects undertaken in the industrial and energy sectors during the closing stage of substitution-based promotional efforts. These projects, whose design had been based on the estimates of domestic-market growth made in the 1970s, were then redirected towards external markets. The process was accompanied by steep devaluations that gave rise to abrupt changes in relative prices. A shaky fiscal position –with spending pressures on the rise and inefficient, regressive collection structures– gave rise to a persistent demonetization process.

The fiscal situation not only weakened the currency but also squeezed public investment and reduced the range of opportunities for using direct incentives for private investment. A self-perpetuating pattern of high inflation appeared, while exchange and monetary policies grew increasingly ineffective. The economic agents anticipated this crisis, placing priority on mechanisms for making financial gains and other speculative operations and thereby further undermining the State's already very limited mechanisms for intervention.

In each of the three countries the crisis of the State and the relationship between it and the various elements of society took on different forms. In Argentina, the pattern of income distribution began to undergo a radical change in 1976 which put an end to the extensive growth pattern that had characterized the domestic market. At the same time, the

centralization of capital accelerated with the foundation and consolidation of a relatively small number of economic/financial conglomerates whose privileged relationship with the State gave them a greater ability to generate and appropriate surpluses. This process quickly led to the demise of a relatively more balanced social configuration and weakened the industrialization agenda. The adjustment of the 1980s functioned on the same basis, as it intensified pre-existing trends. At the same time, hyperinflation reflected the breakdown of the State and paved the way for far-reaching changes in the economic/social regulatory pattern.

Brazil, on the other hand, embarked on its adjustment immediately following a large-scale, State-led investment programme which (literally) completed the construction of the country's industrial matrix, promoted a better energy balance, increased the country's agricultural production capacity and generated new components of exportable supply. At its height (in the 1970s), economic growth was proceeding at a spectacular pace, and the eventual solution of problems of social inequity was equated with the continuation of this growth rate. Under these circumstances, the adjustment was seen as an essential, but necessarily temporary, measure to deal with the external shock faced by the country. Social demands for growth continued to carry a high priority –even higher than that of stability– and industrialization continued to be regarded as the best way of achieving it.

The Mexican State was not able to escape the crisis but, thanks in part to its status as the owner and direct exporter of large amounts of petroleum, its macroeconomic management of the adjustment was more successful. Along with other factors associated with the country's political and social structure, this appears to have given it a greater relative degree of autonomy, which would also explain how it was able to triumph over the expected kinds of resistance from within and thus institute structural reforms earlier on than the other two countries. The country's close economic and political ties with the United States also seem to have played a pivotal role in making it possible to implement the recommendations of the Washington Consensus in the midst of this crisis. Likewise, the subsequent negotiations regarding the North American Free Trade Agreement (NAFTA) also helped to consolidate the reform programme.

These differences –which arise out of the socio-State matrix of each of the three countries– are expressed in the debate regarding these issues and in mainstream positions on industrial policy. In Argentina, economic policy priorities were ultimately focused on price stability and complete deregulation of the market, while approaches involving intervention in mercantile resource-allocation mechanisms were abandoned. In practice, the lack of selectivity tended to accentuate the economic concentration process. Although big business openly declared its ideological commitment to the new regulatory scheme set up as part of the reform process, investment in sectors producing internationally tradable goods has still not revived.

The predominance of the "industrialist culture" and persistent demands for more growth have been reflected, to some extent, in Brazil's structural adjustment programmes. This is reflected in a greater degree of graduality and a less thorough-going liberalization of trade, as well as in the formulation of explicit policies regarding the promotion of technological development, the enhancement of business firms' endogenous competitive position, and support for export activity. The failure to rectify the macroeconomic disequilibria, however, makes it more difficult to finance these promotional instruments and introduces an element of uncertainty regarding the future course of industrial policy.

In Mexico, the industrial policy debate is set against the backdrop of the implementation of NAFTA, which supersedes whatever selective strategy the Government might have. This has not, however, led to such an intensively market-oriented policy package as in Argentina. There are at least three pieces of evidence to back up this statement: i) the presence of well-established mechanisms for macroeconomically-based negotiations with employers and trade unions; ii) the continued existence of some internal regulatory mechanisms and of State ownership of certain key resources (e.g., petroleum); and iii) the demonstration by the Government of Mexico, in the course of the NAFTA negotiations, of its intention to obtain differential treatment for certain strategic sectors.

2. The impact on business strategies

Within this overall framework, the differences in terms of the relative priorities and consistency of the policies used and their results are of significance when it comes to discerning less obvious differences

among sectoral trends and business strategies. In Argentina, the institutional and regulatory crises associated with the import-substitution stage were handled in a way that led to a comparatively greater impairment of the structures and linkages of production activity. Two phenomena attest to this difference, which appears to play a crucial role in determining the nature of the nexus between public policy and private strategies. One is the much more recessionary character –entailing a deeper and longer-lasting slump– of the adjustment carried out during the initial phase of the process. The other is the virtual disappearance of a formal finance and credit system. One major consequence of this was the more widespread use, at a relatively earlier stage, of defensive, cost-cutting corporate strategies.

This difference persists when we compare the steps taken during the structural-reform phase. It was, once again, in Argentina where the most drastic and broadest liberalization, open-trade and deregulation measures were taken and where they were implemented most abruptly in the shortest period of time. This had a twofold impact on firms' corporate strategies. First, it did not give companies time to make a gradual adaption to new competitive conditions, since the measures were implemented in one fell swoop and were in outright contradiction to the lessons gradually learned by those firms from past experiences. Second, it engendered a sense of irreversibility that forced a hasty adoption of long-term decisions. Under such circumstances, there is a tendency either to form partnerships with foreign operators who wish to stay on in the country or to sell off one's holdings and withdraw from the business in question. There are some indications that this path is being taken by many of Argentina's industrial enterprises, including some in the petrochemical industry, and it appears to be the most likely choice for several machine tool enterprises in which family traditions are less of a factor.

It is also evident that, in all three countries, concern to maintain macroeconomic equilibria in the context of mounting constraints on the financing of the external and fiscal deficits was the overriding factor in determining the nature of the design and implementation of industrial policy. Consequently, as greater attention was devoted to their earlier failings and as recommendations for liberalization gained widespread acceptance, sectoral policies were progressively weakened. Here too, however, significant differences are to be observed. In addition to the increasing difficulty in obtaining financing, the need to establish instruments for promoting and orienting investments and exports of manufactures continued to be a concern in Brazil during both the adjustment and the structural-reform phase.

The greater attention devoted in Brazil to more expansionary macroeconomic policies and to some elements of industrial policy was reflected in short periods of accelerating economic growth in the sector during the adjustment and in the relatively more protectionist nature of trade reforms. It was also manifested in the comparatively greater weight which corporate strategies placed on investment and on expanding production capacity. There appears to be a strong inertial component –what might be likened to a "growth-oriented culture"– in Brazil which influences both public policy and corporate decision-making and which is currently fuelling a heated debate as to the real sustainability of the adjustment and reforms in the absence of a prolonged economic reactivation. Parallel with this, demands for stabilization are less emphatic and concern about the need to define a long-term strategy orientation is more pronounced.

We have tried to make the point that a business firm's own history influences its decision-making process. It also influences the way in which companies interpret the macroeconomic and public-policy signals they perceive. Thus, when companies prepare to adopt long-term strategies, it is crucial that they should have a predictable time horizon in respect of the trends in economic variables and the consolidation of signals regarding long-term production patterns. The beneficial effects of the interaction of consistent public policies, their credibility as an enduring policy base, and the adaptation of business practices to suit the investment requirements generated by those policies appear to be the foundation for the sustainability of any reform programme. The timing and sequencing of policies and strategies is, therefore, of the utmost importance.

Mexico's experiences can serve to illustrate this point. The basic aspects of Mexico's trade reform programme involving the sharpest departures from the preceding scheme were already in effect as of the end of 1988. At the same time, the successes of the anti-inflationary plan were also beginning to take hold, although the probable terms on which long-term debt would be renegotiated with foreign creditors were still uncertain. The first steps were also

being taken to negotiate a free trade agreement with the United States which, if achieved, would have a strong impact on the restructuring of production, whose form and magnitude would also depend on the provisions of such an agreement. In other words, even though the situation had stabilized to an extent that contrasted with the volatility exhibited by relative prices in preceding years and even though the trade liberalization initiative was under way, a high degree of uncertainty remained with regard to the financial and production environment over the long term.

Business firms' initial response to this state of affairs was to place priority on defensive and cost-cutting measures while shelving initiatives relating to technology and investment and focusing their strategies on commercial operations and on the replenishment of financial stocks and corporate assets. It was not until 1992 –after more than three years of fairly stable domestic price levels, after two years of participation in a Brady Plan arrangement, and after the NAFTA negotiations had advanced quite a long way– that the investment process seemed to revive. None the less, more active strategies in the area of technology are still lacking.

A number of lessons can be drawn from an examination of the situation in Mexico. First, it is necessary to take into account the time period that will elapse between the implementation of reforms and the redefinition of private strategies and, in particular, the importance of making the economic agents feel certain about the long-term outlook, as a guide for business decisions. Second, if companies delay the resumption of their investments this may destabilize the country's fiscal and external positions, thereby prompting further uncertainty. How to go about balancing the two would appear to be the chief economic policy issue at the present time for the open economies of Argentina, Brazil and Mexico.

V

Conclusions

Protective policies and State assistance encouraged the establishment and development of a strong industrial production base in Argentina, Brazil and Mexico. However, excessive levels of protection and the redundancy of some promotional incentives enabled industrial firms to operate with high costs and to obtain windfall profits. These firms' market power and the increasing consolidation of patterns of high inflation made it possible for them to pass on these high costs in their prices and inhibited a better distribution of the benefits derived from the maturity of projects to final or intermediate consumers.

The above features characterized the development of the petrochemical and machine tool industries in all three countries, especially during the 1980s. They were more marked in the petrochemical industry, due to a combination of promotion programmes designed specifically for that sector and the presence of oligopolistic markets and large enterprises. In the machine tools industry, on the other hand, these characteristics were somewhat less evident because the promotional instruments used in this sector were weaker, its protection was undermined by tariff rebates for imports of equipment, and the small and medium-sized machine tool firms that make up the majority of the sector had less market power.

These companies' maturation, in terms of technology and production, was associated with the expansion of their production capacity and the prospect of a broader demand base. The petrochemical companies covered by the study invested in international-scale plants equipped with what were state-of-the-art technologies at the time (1970s and 1980s), thanks to strong government incentives. Brazilian and Argentine machine-tool firms that were prompted to move into the production of CNC machine tools during the 1980s by the emergence of a new technological pattern based their leadership strategies on what appeared to be a predictable scenario of expanding national or regional markets.

In the petrochemical industry, once the firms had ruled out the possibility of reaching the research and development expenditure threshold necessary to attain major process and product innovations, they successfully set about optimizing production processes and ensuring proper management of their plants so as

to maximize the rates of return on their operations, and in Brazil and Mexico, some companies planned to produce more complex specialty products. In the machine tools industry, there was greater leeway for decision-making regarding technical and production matters, and some firms moved into the production of CNC machine tools (usually with the support of foreign partners or licensors), although they lagged somewhat behind the main firms and producer countries. Others, however, whether for reasons of size, because they were risk-averse or because they specialized in less dynamic products, chose not to strike out in a new direction.

A closed economy proved to be no obstacle to some firms' decision –in the context of specific prospects for expansion or reserved markets– to undertake technological activities and efforts within the bounds defined by the structural conditions and pattern of internationalization in each sector. Their increased productivity was not, however, passed on in the form of lower prices. The lack of incentives or pressures to induce firms –once their projects and their manufacturing capacity had reached a mature stage– to transfer more of those benefits to users was a major failing of the industrial policy pursued in the 1970s and 1980s.

The combination –to varying degrees in each country– of an adverse international situation, macroeconomic difficulties and structural reforms interrupted the growth of these firms. Under these new circumstances, the response of most companies was to streamline operations and cut costs in order to eliminate the accumulated "fat" that could no longer be easily incorporated into prices and to position themselves in mature product lines while de-prioritizing or abandoning projects to expand their capacity and upgrade their technology. The greater exposure to competition that accompanied the new macroeconomic and public-policy setup has led to a relative reduction in domestic prices; however, far from prompting more aggressive action in the areas of production or technology, it appears to have done just the opposite.

When they found themselves in an open economy, the petrochemical companies which had intended to move into the production of more complex products abandoned those plans, while machine-tool producers that had forged ahead with the new CNC paradigm began to encounter difficulties in sustaining their production levels. With the exception of the machine-tools sector in Mexico, the cases analysed in this study all refer to well-established industries with a long history in the sector which have already developed entrepreneurial, manufacturing and technological capabilities. The initial responses of such firms would not normally be expected to include the abandonment of their line of business or their conversion into importers.

When the growth path of these enterprises was affected by these changes, they took refuge in mature products and market niches protected by location-related advantages. The prospect of greater competition brought about by reform programmes neither awakened nor engendered a bold or enterprising spirit in producers, but it did not immediately push them out of the sector either. These firms are betting that they can survive by downscaling their business structures and, in some cases, taking in foreign partners. It might be argued that not enough time has passed to prove either the "increased-efficiency" or the "de-industrialization" hypothesis. Some reflections on this point are warranted.

First of all, the decisions taken by companies when responding to a new set of conditions are influenced by their past history; in a situation where they are uncertain as to future trends in national and international markets and are without the potential benefits of a promotion-oriented regulatory framework, business enterprises will prefer to take defensive action. In turn, their responses in the short run will influence their possible choices with regard to future action. Thus, the passage of time is not a neutral factor, as the "increased-efficiency" argument would seem to suggest.

In the petrochemical industry, sharp reductions in staff assigned to non-routine tasks not only caused local firms to set their technological sights lower than before, but also weakened their bargaining position with international suppliers. Under these circumstances, the cost-cutting steps being taken will clearly influence future decisions regarding any possible expansion of a firm's physical or technological capacity. To keep market opportunities open, however, some enterprises will have to become vertically integrated –a process that will be facilitated by the moves towards privatization and deregulation now being made. This will help such firms to attain a more competitive scale of operations and will place them in a position to arrive at private agreements that will help to put the market in order and reduce the scope of externalities associated with increased competition.

In the machine tools sector, the cancellation of investment plans and sudden lay-offs of skilled personnel –the most highly valued asset in this industry– may seriously jeopardize attempts to maintain existing operations or, some day, to expand them in the most technologically sophisticated segments. The acquisition of a leading firm in Argentina by a large Italian enterprise and the increasing difficulty in gaining access to this type of technology without the help of foreign partners are indications of more limited degrees of freedom for progress by local firms outside of those market segments in which location-related advantages carry a great deal of weight.

These trends stand out more clearly in Mexico, where more time has passed since the introduction of reforms. The above discussion regarding structural factors that influence corporate decisions suggests that the strategies currently being used by Mexican firms may be adopted later on by Argentine and Brazilian industries. Changes in the macroeconomic and public-policy environment could, of course, generate different scenarios. If this were to occur, and considering Brazil's history of industrial development and the particular features of its State and entrepreneurial class, a more dynamic and complex set of conditions might well emerge in that country.

(Original: Spanish)

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Productivity, growth *and industrial exports* in Brazil

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Because productivity is a determinant of comparative advantages over the medium and long terms, the relationship between productivity, industrial growth and exports of manufactures is coming under increasing scrutiny in studies on development and trade policy. This article analyses that relationship in Brazil, where the rise in industrial productivity has been slowing since the mid-1970s. The author examines this slowdown together with its causes, which include macroeconomic conditions, trade strategies, growth policies and technological trends. The theoretical aspects of the relationship between growth, productivity and export orientation are also explored, and the performance and structure of Brazil's exports of manufactures are examined, as are changes in their competitive position according to different estimates. Data from the 1985 industrial census are used to delve further into this subject, and finally some salient conclusions are presented.

I

Introduction

In addition to being the only way to raise the living standards of our societies, productivity growth is also one of the few ways of improving a country's competitive position in the international marketplace over the long term. From the standpoint of price competitiveness, if a country's productivity is consistently lower than that of its trading partners, then the only way it can compete at the international level is to pay lower wages. The sole alternative is to raise its productivity.

The fact that Brazilian industry's productivity growth appears to have been slowing down since around the mid-1970s is therefore a cause for concern (see table 1). This article will demonstrate in some detail how this productivity dynamic is closely related to long-term variations in industrial growth rates.[1] Thus, the average annual growth rate of industrial output for the period 1920-1992 was 6.24%, while the corresponding rate for employment during the same period was 3.46%. This means that labour productivity climbed at an average annual rate of 2.68% during that 72-year period. By comparison, the lackluster performance seen in the 1980s provides an alarming contrast, despite the seeming improvement registered between 1985 and 1992.

Actually, the results for this latter period are almost entirely due to the fact that employment fell far more steeply than output during the last two of those years.[2] The question as to how much of this change is accounted for by the need to adjust to the trade liberalization measures now being implemented and how much is due to a decline in production that has not been balanced by a matching change in the pace of technical progress is a subject that warrants further study.[3]

The logical questions to be asked when analysing this slowdown in productivity growth are whether it is due to macroeconomic factors, whether it is a reflection of pre-existing trade or development strategies, whether it stems from technological trends, or whether it is merely the result of the types of development processes being experienced in Brazil. A closely related question, in view of Brazil's increasing integration into the international economy (a process which has gathered speed since 1990 thanks to the country's ambitious experiment with trade liberalization), is what kind of relationship (if any) exists between this process and the slowing of productivity growth. One way of looking into this question is by analysing the country's export performance.

Brazil's exports of manufactures have undergone a notable expansion and diversification in terms of both products and geographical markets as part of a process that began in the mid-1960s and continued until quite recently.[4] Until the mid-1980s, these increases had to do with the difference between the returns to be obtained from producing for export versus producing for the domestic market. During the second half of the 1980s, however, something quite baffling occurred: exports continued to expand, or at least held steady at their existing levels, despite a steep decline in all indicators of competitiveness. This suggests that some other sorts of factors are at work which competitiveness indexes have failed to pick up.

□ This article is a revised version of a paper prepared for ECLAC in August 1992, considerably improved thanks to the comments made by Armando Castelar Pinheiro.

[1] The figures for the 1950s merit a more careful examination because they do not appear to fit in with this long-term trend. This anomaly may be due to the type of industrialization that took place in the 1950s, which involved the introduction of new, highly capital-intensive, labour-saving technologies on a scale never before seen in the country.

[2] Manufacturing output dropped by about 0.6% in 1991 and by another 5% in 1992. The decreases in employment for those years were 10.2% and 8.9%, respectively (the variation in the number of paid hours of labour in production activities has been used in place of the number of man/hours worked). Consequently, the increase in labour productivity for 1991-1992 amounted to 15.4%.

[3] This result might also be a reflection of a "tertiarization" of industrial activities, since the data on production refer to gross output rather than to value added. However, given the magnitudes involved, this hypothesis would appear to be insufficient to account for all of the productivity growth registered in those two years.

[4] Exports of manufactures rose from about US$1 billion in the late 1960s to about US$30 billion by the start of the 1990s.

TABLE 1

Brazil: Annual average growth rates of manufacturing output and labour productivity in selected periods
(Percentages)

	1920-1939	1939-1949	1949-1959	1959-1970	1970-1975	1975-1980	1980-1985	1985-1992
Output	6.3	7.9	9.3	7.2	10.7	7.3	-0.6	-0
Productivity	1.4	2.7	6.8	3.0	3.3	1.5	0.4	1.7

Source: Estimates prepared by the author on the basis of census data; up to 1985, see Brazilian Geographical and Statistical Institute (IBGE, 1989); after 1985, see IBGE, *Pesquisa industrial mensal. Produção física* and *Pesquisa industrial mensal. Datos gerais* (various issues).

At least three possible explanations for this phenomenon –none of which are mutually exclusive– may be advanced: (i) a shift in the product mix towards more competitive products; (ii) hysteresis in terms of export volumes due, for example, to the previously-incurred costs involved in penetrating external markets; [5] and (iii) cross-sectoral differentials in productivity growth, which would generate comparative advantages for some of those sectors. The object of this article is to evaluate these possibilities on the basis of an empirical analysis of the relevant variables.

II

Competitiveness of exports of manufactures

Since the mid-1960s, Brazilian exports have undergone rapid growth and diversification in terms of both their product mix and geographical markets, with the share of total exports represented by manufactures jumping from 41% in 1970 to 87% in 1989-1991 (see table 2).[6] Both the growth rate and the structural changes seen in the country's export pattern were more marked in the 1970s than in the following decade. During the 1970s, traditional exports steadily lost ground, whereas during the 1980s only a small group of industries (metal products, transport equipment and, to a lesser extent, paper and paperboard and communications and electrical equipment) exhibited significant growth. Until the mid-1980s, these increases were associated with profit differentials between external and domestic sales. However, some of the policies adopted to boost exports had to be abandoned towards the close of the 1970s, with their place being taken by real devaluations of the cruzeiro during certain periods, such as 1983-1985. This, coupled with the existence of idle industrial capacity and the growth of the world economy up to 1989, helped to bring the value of exports up to present levels. Despite this apparent success, Brazil's export performance since the mid-1980s has been quite odd in that exports have increased, or at least held steady, despite a decline in various indicators of competitiveness.[7] This question will be investigated further in the remainder of this section.

[5] In this context, the hysteresis would take the form of a delay in reacting to sharp changes in the exchange rate; this phenomenon may be heightened if domestic demand is weak.

[6] The Brazilian Geographical and Statistical Institute (IBGE) classifies processed agricultural raw materials as industrial products. Using the classification of the former Bureau of Foreign Trade (CACEX) –now the Department of Foreign Trade (DECEX)– the share of manufactures and semi-manufactures in total exports is around 70%.

[7] Although the data for 1992 are not yet available, the classification used in table 2 serves to show that the country's export performance for that year fits in with the above-mentioned trend. Total exports climbed from US$31.3 billion in 1991 to US$36.2 billion in 1992: an increase of some 16%.

TABLE 2

Brazil: Exports of manufactures by industrial sectors in selected years (1970-1991)
(Billions of dollars FOB and percentages)

Sectors	1970	%	1975	%	1980	%	1985	%	1989	%	1991	%
Metal products	112	10.0	263	4.3	1 165	6.8	2 627	11.9	6 343	21.3	6 112	22.4
Machinery	65	5.8	408	6.7	1 494	8.7	1 492	6.7	1 966	6.6	1 735	6.4
Electrical equipment	24	2.1	178	2.9	488	2.8	593	2.7	1 178	4.0	1 110	4.1
Transport equipment	23	2.1	317	5.2	1 434	8.4	1 804	8.2	3 812	12.8	3 049	11.2
Wood	109	9.7	140	2.3	383	2.2	299	1.4	408	1.4	443	1.6
Paper and paperboard	6	0.5	58	1.0	513	3.0	534	2.4	1 286	4.3	1 230	4.5
Leather	42	3.7	71	1.2	126	0.7	166	0.8	256	0.9	314	1.2
Chemicals	107	9.5	1 013	16.7	3 014	18.1	4 868	22.0	5 495	18.4	4 094	15.0
Textiles	75	6.7	422	7.0	738	4.3	786	3.6	1 083	3.6	1 095	4.0
Wearing apparel and footwear	14	1.2	138	3.9	477	2.8	1 017	4.6	1 473	4.9	1 364	5.0
Foodstuffs	464	41.3	2 607	43.0	6 008	35.1	6 053	27.4	4 670	15.7	4 504	16.5
Tobacco	33	2.9	149	2.5	295	1.7	459	2.1	539	1.8	799	2.9
Miscellaneous	9	0.8	61	1.0	225	1.5	272	1.2	474	1.6	521	1.9
Other [a]	41	3.6	143	2.3	689	4.0	1 143	5.2	830	2.8	935	3.4
Total	**1 125**	**100**	**6 066**	**100**	**17 136**	**100**	**22 114**	**100**	**29 812**	**100**	**27 303**	**100**
Manufactures / Total (%)	141.1		70.0		85.1		86.3		86.7		87.3	

Source: Bureau of Foreign Trade (CACEX)/Foreign Trade Research Centre Foundation (FUNCEX)/IBGE.
[a] Includes non-metallic minerals; furniture; rubber; pharmaceuticals; perfumery, soap and candles; plastics; beverages; printing and publishing.

One indicator (not often used in Brazil) for estimating trends in a country's price competitiveness is the unit cost of labour as compared to that of its trading partners.[8] From a longer-term perspective, a series on unit costs of labour for the Brazilian manufacturing sector shows a nearly continuous growth trend, with definite interruptions only in 1982-1984 and possibly 1991.[9] Furthermore, annual movements are, in large part, accounted for by variations in the ratio between wages and the exchange rate (see table 3), which are strongly influenced by movements in the latter variable (Thompson-Flores, 1992; BNDES, 1992). Of course, the unit-cost index can be expressed as the relationship between average wages in real terms (or denominated in a foreign currency) and labour productivity. The table clearly shows that, on average, productivity rose very slowly after 1980. After 1987, the increases can be accounted for by the decline in employment levels, as noted earlier. This means that dollar-denominated wages were the main cause of the variation in the unit cost of labour,[10] especially in the 1980s.

The table also shows the average unit cost of labour (UCL) for a group of countries that purchase around 70% of Brazil's exports and, in the last column, the ratio between the unit cost of labour in these trading partners and in Brazil, i.e., the relative unit cost of labour (RUCL). According to this indicator, in the years between the mid-1980s and 1989, Brazil witnessed an unprecedented deterioration in the competitive position of its exports. The upturn seen in 1990 and, especially, in 1991 brought the relative unit cost of labour back up to the levels of the late 1970s. This analysis therefore points to the

[8] The unit cost of labour is measured as the wage cost per unit of production; for comparisons between different countries, this indicator should be expressed in a common monetary unit. See, for example, BNDES (1992).

[9] See Fagerberg (1988) for a critical review of the use of unit costs of labour as long-term competitiveness indicators.

[10] Average wages in dollars rose by 12.5% per year between 1970 and 1972 and 1980 and 1982, chiefly because of the devaluation of the dollar in the 1970s. The data also indicate that real wages in cruzeiros followed a pro-cyclical trend during that period. Between 1984-1985 and 1989, the cruzeiro devaluation rate was below domestic inflation and wage policies were being relaxed (BNDES, 1992).

TABLE 3

Brazil: Unit costs of labour, productivity and relative unit costs of labour (RUCL), 1970-1991
(1987 = 100)

Year	UCL in Brazil	Productivity of labour	Wage/exchange rate ratio	Average UCL in countries purchasing Brazilian exports	RUCL [a]
1970	44.0	79.9	35.2	33.0	75.1
1971	36.0	83.8	30.2	35.5	98.5
1972	34.7	89.4	31.0	38.6	111.3
1973	44.3	94.1	41.7	43.6	98.4
1974	53.0	92.2	48.9	49.7	93.7
1975	63.0	93.8	59.1	58.1	92.2
1976	68.9	97.8	67.3	57.9	84.1
1977	78.0	95.8	74.7	63.1	80.9
1978	89.9	97.1	87.2	72.1	80.3
1979	95.1	98.4	93.7	80.3	84.4
1980	89.4	100.9	90.3	88.0	98.5
1981	109.1	95.4	104.1	85.2	78.1
1982	119.1	99.3	118.3	83.7	70.3
1983	78.6	98.7	77.6	79.7	101.4
1984	68.6	103.4	71.0	74.5	108.6
1985	76.9	102.8	79.0	74.3	96.7
1986	90.9	100.9	91.7	90.3	99.3
1987	100.0	100.0	100.0	100.0	100.0
1988	115.5	100.5	116.1	102.0	88.4
1989	166.3	106.2	176.7	100.4	60.4
1990	165.2	103.2	170.4	110.6	66.9
1991	135.1	114.2	154.3	115.8	85.7

Source: Organization for Economic Cooperation and Development (OECD), IBGE and International Foundation for Science (IFS)/ International Monetary Fund (IMF). For 1970-1985, Thompson-Flores (1992); after 1985, estimates prepared by the author.
[a] Ratio between the weighted average of the UCLs for Brazil's 11 main trading partners and Brazil's UCL, expressed in dollars.

conclusion that during the 1980s the competitiveness of the country's exports was greatly impaired by macroeconomic conditions –especially fluctuations in the exchange rate– rather than by changes in productivity.

The question that arises here is whether or not this conclusion holds true for this indicator only. In order to find the answer to that question, we may examine a number of other indicators (see table 4). Regardless of which index is chosen, the figures leave no doubt as to the fact that price competitiveness diminished up until 1990, and the recovery seen in the last biennium was not strong enough to return the indicators to the levels seen in the mid-1980s.

The surprising aspect of all this is that export levels have held steady –and have sometimes even increased, as in 1988-1989– despite the deterioration of price (or cost) competitiveness. The econometric results, based on estimates of export functions (Bonelli, Franco and Fritsch, 1992), also support the conclusion that non-price-related variables have become relatively more important than price in accounting for the country's export performance. There are at least three possible explanations for this:

(i) A shift in the export product mix towards more competitive products. However, the figures presented above indicate that structural changes in the export pattern during recent years (e.g., between 1985 and 1989) have been slight, which makes this factor less relevant;

(ii) Hysteresis in export volumes due, for example, to prior unrecoverable costs. According to this explanation, the maintenance of large export volumes could be a reflection of the costs incurred by business firms in penetrating new markets or of the existence of long-term contracts (e.g., in the case of metal ores or wood pulp), with the hysteresis phenomenon in this case taking the form of a delay in reacting to sudden exchange-rate variations, due perhaps to the existence of unrecoverable costs

TABLE 4
Brazil: Export competitiveness indicators
(1988 = 100)

Year	Wage/ exchange rate ratio	Real exchange rates		
		Deflated by CPI [a]	Effective	Deflated by WPI [b]
1985	138.1	...	132.9	102.9
1986	115.0	122.1	131.3	109.7
1987	111.0	108.5	120.6	113.7
1988	100.0	100.0	100.0	100.0
1989	80.4	77.5	84.0	81.9
1990	69.7	57.8	64.1	66.0
1991	84.9	65.4	85.9	85.4
1992	79.4	69.1	83.2	86.0

Source: Economic status report by the Economics Department of the National Federation of Industry (CNI).
[a] CPI: consumer price index.
[b] WPI: wholesale price index.

(Krugman, 1989). In other words, once a company has managed to win a new market or to sign a long-term contract, it will be inclined to continue supplying that market even if price/cost margins narrow or disappear altogether (albeit only temporarily). This effect tends to be more marked if domestic demand is slack or if the firm was founded for the sole purpose of exporting. This hypothesis reconciles the indicators with the country's export performance. It also implies a narrowing of export profit margins for some time, unless other cost-cutting measures have been implemented; [11]

(iii) The existence of sectorally differentiated changes in productivity that could give comparative advantages to certain activities or products. This hypothesis will be explored in greater detail in sections V and VI.

III

Causes of Brazil's export growth in the 1980s and in selected sub-periods

This section will present the results obtained by applying the constant market shares (CMS) model to Brazilian export growth in the 1980s (from 1979 to 1989/1991) [12] and in selected sub-periods and will discuss how those results compare with the figures for the 1970s, using a sample composed of 26 countries. [13] The shares of Brazilian exports purchased by these countries, grouped by major areas, are shown in table 5.

The categories of merchandise used in the breakdown correspond to the 10 sections of the Standard International Trade Classification (SITC). Table 6 shows the share of Brazil's exports in each of these categories in 1979, 1984, 1989 and 1991.

One of the main hypotheses of the CMS model is that a country will increase its share in world trade –i.e., it will rise above the mean– if its exports: (i) are concentrated in merchandise for which demand is expanding more rapidly; (ii) are directed to markets or countries in which demand is expanding relatively more rapidly; and (iii) benefit from other forms of increased competitiveness, apart from those mentioned above.

[11] Incidentally, it should be noted that increases in labour productivity such as those recorded in 1991 and 1992 (a cumulative rise of about 15% for the biennium) also help to reduce costs.

[12] See Bonelli, Franco and Fritsch (1991 and 1992) for similar exercises for the period up to 1989. See also Batista and Fritsch (1993) for an analysis at a higher level of disaggregation, using a different methodology, for the period 1979-1990.

[13] The sample covers 77% of total Brazilian exports in 1979 and in 1984 and nearly 75% of total exports in 1989, which means that exports may have become more diversified; this, in turn, suggests a higher degree of competitiveness than was indicated by the analysis. The share of world imports accounted for by the group of countries making up the sample also expanded between 1979 and 1989 (75% in 1979, 74% in 1984 and 78% in 1989, according to the *International Financial Statistics Yearbook, 1990).* The countries included in the sample were: United States and Canada; Austria, Belgium, Denmark, France, Germany, Hungary, Italy, Netherlands, Portugal, Spain, Sweden, Switzerland and United Kingdom, plus Egypt; Argentina, Chile, Mexico, Paraguay and Venezuela; Japan, China, Hong Kong, Australia and the Union of Soviet Socialist Republics.

TABLE 5

Brazil: Exports to sample country groups, 1979, 1984, 1989 and 1991
(Percentages)

	1979	1984	1989	1991
United States + Canada	20.5	30.0	26.5	21.2
Europe [a]	35.3	28.7	31.0	32.5
Latin America	12.5	7.9	7.2	12.3
Asia + Union of Soviet Socialist Republics	8.8	10.1	10.9	10.4
Total	**77.1**	**76.7**	**75.6**	**76.5**
Share of world imports accounted for by countries in sample	75.2	74.3	79.4	80.2

Source: Brazilian foreign trade statistics.
[a] Includes Egypt.

TABLE 6

Brazil: Exports by SITC sections, 1979, 1984, 1989 and 1991
(Percentages)

SITC sections	1979	1984	1989	1991
(0) Food and live animals	41.5	35.2	16.8	21.1
(1) Beverages and tobacco	2.5	2.8	2.0	3.2
(2) Crude materials, inedible, except fuels	15.0	12.3	16.7	15.8
(3) Mineral fuels, lubricants and related materials	0.3	0.4	2.8	1.7
(4) Animal and vegetable oils, fats and waxes	2.7	1.7	1.1	0.1
(5) Chemicals and related products, n.e.s.	2.7	5.7	6.0	6.1
(6) Manufactured goods, classified chiefly by material	15.2	18.7	25.3	25.0
(7) Machinery and transport equipment	14.3	11.8	22.2	19.5
(8) Miscellaneous manufactured articles	5.4	7.4	7.0	7.3
(9) Commodities and transactions not classified elsewhere in SITC	0.3	0.1	0.2	0.2
Total	**100.0**	**100.0**	**100.0**	**100.0**

Source: United Nations, *Yearbook of International Trade Statistics*, (various issues) and Brazilian foreign trade statistics.

The implicit assumption is that if it were not for these factors, the country's share in international trade would remain constant. The difference between this norm and a country's actual trade performance is attributed to competitiveness, which can then be broken down into a product-mix effect, a market-distribution, or destination, effect and a competitiveness effect per se, which may be obtained residually as a result of the interaction between factors of demand and of supply, including such factors as productivity growth (Leamer and Stern, 1970).

A negative residual would signify that a country has not been able to maintain its trade share. A positive residual would mean that it has managed to increase that share. In either case, the result may be due, for example, to: (i) (permanently or temporarily) differential rates of increase in export prices (since exports are measured at current prices), which may be caused by exogenous factors (such as rising international prices) or endogenous factors having to do with the movement of the exchange rate; (ii) differential rates of improvement in quality; (iii) the production of new exports; (iv) improvements and increases in the efficiency of marketing activities or the financing of export sales; and (v) relative changes in the skill and speed with which orders are filled.

TABLE 7

Brazil: Sources of export growth, 1979-1991 and selected sub-periods
(Annual percentages)

	Percentage variation in exports						
	1979-1980	1980-1984	1984-1985	1985-1989	1989-1990	1990-1991a	1979-1989
Expansion of international trade	20.1	-1.0	6.3	12.2	14.6	-4.8	6.9
Export product mix	-13.9	1.4	-0.7	1.3	...[b]	...[b]	-0.5
Market distribution	6.5	-0.4	-1.6	-2.3	-2.5	15.6	-0.7
Increase in competitiveness	14.3	8.5	-8.8	-4.3	-16.6	-11.2	2.4
Total[c]	**27.0**	**8.5**	**-4.7**	**6.9**	**-4.5**	**-0.3**	**8.1**

Source: Estimates (see table 6).
[a] The figures for 1990-1991 are preliminary.
[b] Data unavailable; this category is included in the competitiveness residual.
[c] The totals do not necessarily equal the sum of the individual entries due to rounding.

Table 7 gives the results of a breakdown using the CMS method for selected periods between 1979 and 1990-1991 (in partial terms for these last years, since the information is incomplete) and for the periods 1980-1984 and 1985-1989 as a whole. Since the order in which the product-mix and market-distribution effects are computed alters the results, we chose to present an average of the two alternatives. The estimates for 1990-1991 merge these two effects into one. In the breakdown shown in this table, and in all the others that follow, results are given as a function of average national growth rates for the relevant period.

Looking at the period 1979-1989, we arrive at the conclusion that increased competitiveness accounts for about one-third of the growth rate for Brazilian exports during that time; when 1990 and 1991 are included, however, the significance of the increase in competitiveness becomes almost negligible, which gives us an idea of just how large a loss was sustained during those two years. It should also be noted that both the export pattern's product-mix effect and its market-distribution, or destination, effect played a part in slowing down Brazil's export growth rate. This is particularly true of the destination effect, which indicates that total exports are concentrated in the more slowly growing markets.

The results for the entire decade (1979-1989) are, up to a point, similar to those obtained by Horta (1983, p. 519) for the period 1971-1978: 71.4% of the growth rate for total Brazilian exports (excluding fuels) is accounted for by the expansion of world trade and 39.1% is attributable to the competitiveness effect; the product-mix effect accounts for -9.0% and the destination effect for only -1.5% of the total growth rate. Our results (i.e., the averages of the results for the two different orders in which the breakdown can be performed) for 1979-1989 for these two effects are -5.9% and -12.6%, respectively.[14]

When the two five-year periods 1979-1984 and 1984-1989 are examined, it becomes clear that the figures for the decade as a whole fail to reflect some quite marked differences. In particular, it is only during the first of these sub-periods that substantial increases in competitiveness are to be observed. If we exclude the year 1979 on the grounds that it is atypical, then the estimates shown in the above table indicate that virtually all of the increase in exports seen between 1980 and 1984 was due to improved competitiveness (i.e., greater penetration of international markets). This is all the more remarkable when we consider the fact that international trade declined between the beginning and closing years of that period.

[14] It should be noted that the breakdowns are based on quite different export growth rates: in the period 1971-1978, the average annual growth rate was 23.6%, whereas in the period 1979-1989, it was 8.1%.

When we look at the period 1979-1984, we see that one-fifth of export growth is accounted for by world trade growth, while nearly 90% can be attributed to increased competitiveness. The destination effect is positive (owing to the concentration of exports in the United States and Canada) but small, while the export pattern's product-mix effect reduced the aggregate growth rate by about 10%.

The breakdown for the following years yields strikingly different results, including a decline in competitiveness and, secondarily, a reduction in the expansion of exports owing to their concentration in markets where demand was growing more slowly. The downturn in the competitiveness of Brazil's exports, according to this method, appears to have begun as early as 1985.

The above analysis can be carried further by breaking down exports into two groups: manufactures and non-manufactures. For our purposes here, the former can be equated with SITC sections 5 through 8 (whose share of total exports rose from 37.6% in 1979 to 59.9% in 1989) and the latter with the remaining sections. This classification is much more restrictive than the one used by CACEX (according to which manufactures represented nearly 72% of total exports in 1989) and IBGE (which put the figure at 87.5% for 1989). Table 8 shows the results of the breakdown for manufactures while table 9 gives the figures for non-manufactures.

Once again, if we consider the decade 1979-1989 as a whole, we see that nearly half the growth rate for exports of manufactures (versus one-third, in the case of total exports) is attributable to increased competitiveness. As before, the product-mix effect of the export pattern is negative, but only slightly so (only 2.5% of the average rate). In contrast, the negative effect of the market-distribution factor represents about 13% of that rate. As in the case of total exports, if we divide the relevant period in two, we find that increases in competitiveness were largely concentrated in the first half of the decade. Furthermore, the whole of the decline recorded during the second half of the decade, in the case of manufactures, took place in 1985; in fact, there was actually a positive change in competitiveness –equivalent to nearly 18% of the rate– during the four-year period 1985-1989, and it would have been even greater had it not been for the very negative influence of the market-distribution effect (equivalent to nearly one-third of the rate) on the export growth rate.

Table 9 shows the results of the breakdown for SITC sections 0 through 4, which mainly include primary commodities and manufactures involving a low level of processing. The slow growth of world trade in these products as compared to manufactures is striking, since the former's increase in value amounted to only 17% for the decade (occurring mainly in 1980) versus 153% for manufactures. It is also interesting to note that, contrary to the situation with respect to manufactures, the product-mix effect for sections 0-4 was markedly positive and, because of the figures for the years from 1985 to 1989, played the largest part in determining the growth rate. This means that Brazil's exports of non-manufactures are concentrated in the products for which demand is growing most rapidly. This effect exerts the strongest influence of all from 1984 on.

An analysis of this table also reveals the source of the deterioration in the competitive position of total exports for the four years from 1985 to 1989 and, hence, the cause of the slow pace at which competitiveness increased for the decade as a whole: indeed, during this four-year period the figure for the competitiveness effect was a negative 49.2%. This figure, when added to the negative 9.8% registered for 1984/1985, more than outweighs the increase of nearly 53% recorded for this effect for the years between 1979 and 1984.

Thus, if we break down the sample into two different product categories, we see that the loss of competitiveness is chiefly due to the performance of non-manufactures. Even in the case of manufactures, however, the breakdown shows that the increase in competitiveness between 1985 and 1989 was small, not only in absolute terms but also in comparison to the growth of world trade. This is all the more serious because, as mentioned earlier, Horta (1983) estimates the increase in manufactures' competitiveness at 71% of the corresponding growth rate between 1971 and 1974, versus 43% for the years between 1974 and 1978. In our study, as we have seen, the figure plunges from nearly 75% of that rate between 1979 and 1984 to 6.5% between 1985 and 1989. In short, according to the CMS analysis, between 1985 and 1990 even the performance of Brazil's exports of manufactures was not what could be called brilliant in terms of increased competitiveness.

TABLE 8

Brazil: Sources of growth in exports of manufactures (SITC sections 5-8), 1979-1989
(Annual percentages)

	Percentage variation in exports				
	1979-1980	1980-1984	1984-1985	1985-1989	1979-1989
Expansion of international trade	10.6	2.9	10.9	16.4	9.7
Export product mix	0.3	-0.4	-1.9	...	-0.3
Market distribution	10.5	-1.7	-2.0	-4.5	-1.7
Increase in competitiveness	1.0	12.9	-7.7	2.6	5.6
Total	**22.4**	**13.6**	**-0.7**	**14.5**	**13.3**

Source: United Nations, *Yearbook of International Trade Statistics*, various issues, and Brazilian foreign trade statistics.

TABLE 9

Brazil: Sources of growth in exports corresponding to SITC sections 0-4, 1979-1989 and selected sub-periods
(Annual percentages)

	Percentage variation in exports				
	1979-1980	1980-1984	1984-1985	1985-1989	1979-1989
Expansion of international trade	23.0	-3.7	-1.4	2.8	1.5
Export product mix	-19.8	2.6	4.4	7.9	2.3
Market distribution	4.3	0.3	-1.3	-0.5	0.2
Increase in competitiveness	22.5	5.7	-9.8	-15.6	-3.5
Total	**29.9**	**5.3**	**-8.0**	**-1.0**	**3.5**

Source: United Nations, *Yearbook of International Trade Statistics*, various issues, and Brazilian foreign trade statistics.

IV

Productivity, growth and exports: representative data

Considerable attention has been devoted to the relationship between the growth of productivity and of production and export performance in the specialized literature on trade and development policy, owing to the pivotal role this relationship plays in the design of trade and growth strategies. Since productivity growth is a potentially significant factor in determining comparative advantages over the medium and long terms, a number of different hypotheses have been formulated as researchers seek to explore its causes and implications with regard to foreign trade performance.

The existing literature has not conclusively shown that more open trade policies are invariably associated with more efficient production or greater productivity, however. This may be due to a lack of formal, verifiable models, since it is only very recently that theoretical models which relate these variables have been formulated. This absence of precise, formally-established means of analysis is compounded, in the case of developing countries, by the difficulty of arriving at empirically-based estimates of the relevant variables. These difficulties notwithstanding, one of the indexes of efficiency in innovation that is

often used in empirical research projects is the amount by which the growth rate for output exceeds the growth rate of total inputs. [15]

In lieu of suitable models, research in this area has relied on general data as a source of provable hypotheses. Nishimizu and Robinson (1986), for example, outline the links between trade policy and productivity performance on the basis of three different hypotheses: [16]

i) The first is based on the existence of a positive correlation between the growth of production and the growth of productivity (Verdoorn's Law, in the case of labour productivity). This argument is founded upon the existence of economies of scale, especially in manufacturing, the contention being that a trade-generated expansion of the market may give rise to an increase in productivity and a decrease in costs (Rodrik, 1992, p. 159). Although it is generally used in relation to the expansion of exports, this argument also applies to import substitution, in which case the end result will depend upon the size and structure of the domestic market. Thus, an outward-looking policy will probably be associated with greater efficiency by virtue of the effects of a larger market for exports, which makes possible fuller use of production capacity and specialization-based economies of scale. It should also be borne in mind that the greater use of factors of production (especially the utilization of production capacity) may also be a result of trade policy. In other words, the effects of trade policy in terms of efficiency/productivity take both direct (increased competition and efficiency in resource use) and indirect forms (fuller use of production capacity, a rise in investments that incorporate new technologies, and increased skill acquisition);

ii) The second hypothesis implies the existence of a challenge-response mechanism which, even though it is not always explicitly characterized as such in studies on the subject, refers to "X-efficiency": the increase in international competition brought about by trade liberalization (and export promotion) tends to raise domestic efficiency and to reduce costs. Protectionist policies, on the other hand, tend to reduce competitiveness and lead to inefficiency, as do excessive export subsidies. The causal mechanism implies that the expansion of exports and import substitution may boost productivity, depending upon the impact of cost-cutting incentives and market structure. [17] In perfect-competition models, a more open economy helps to improve resource allocation, thus prompting an increase in the value of domestic output. However, when the companies operating in a given country wield market power, competition from imports may cause them to expand their activities or to move out of the market. The net effect of liberalization on productivity depends on the characteristics of the demand shifts that accompany liberalization, the ease of entry and exit, and the nature of the competition in general; [18]

iii) The third hypothesis is taken from the literature on growth processes subject to the influence of foreign-exchange constraints and is based on the idea that, in developing countries, domestic intermediate goods and capital are not perfectly substitutable for imported intermediate goods and capital owing to the technical progress incorporated in the latter. Therefore, overprotection and the repression of imports will generate a less successful performance in terms of efficiency than will policies that increase the availability of imported raw materials and capital, such as, for example, policies aimed at boosting exports. It should be noted that, from this vantage point, exports are important solely as a source of funds for purchasing imports.

Not all authors agree with the idea that trade regimes and productivity are related, however. This position is expressed, for example, by Rodrik when he asks whether there is any reason to believe that trade strategy options will consistently have an effect

[15] In a recent essay, Pack notes that studies on productivity growth in less developed countries base their research primarily on growth performance accounting. Although this method has been criticized, it is difficult to imagine any feasible alternative. According to the same author, flaws in the measurement of total factor productivity notwithstanding, the learning process taking place in industry in general ought to be reflected in a corresponding increase in the measurements of such productivity (Pack, 1992, p. 28).

[16] Rodrik (1992, p. 158) adds a fourth. Inward-oriented systems often suffer from an exchange bottleneck and stop-and-go macroeconomic cycles; certainly, macroeconomic instability and the resulting tendency for output to drop below the level of full capacity at periodic intervals militate against productivity growth. The author concludes that these arguments tell us nothing about trade policy *per se*.

[17] However, opponents to this position contend that, whenever possible, entrepreneurs who maximize their profit margins will reduce their costs even if there has been no increase in competition.

[18] See also Tybout (1992) for a well-organized outline of the links between the trade regime and productivity.

on the level of technical efficiency and on how it changes over time; he then goes on to answer that question in the negative, arguing that trade policy theory generally tells us nothing about the effects of liberalization on the *growth rate* of production or productivity (Rodrik, 1992, p. 157).

Moreover, these hypotheses are not mutually exclusive, and their effects may not be distinguishable or independent from one another.[19] Perhaps the most important point here is that empirical studies have not even been able to determine the direction of causality, i.e., whether the more rapid growth of total factor productivity (TFP) is the result of a more open trade policy or vice versa. It is possible, in cases where domestic demand is limited (due, for example, to a recession), that exogenous productivity growth may cause a shift in the supply curve and create export incentives. In this connection, Pack (1988, p. 350) observes that correct specification of the structure of the lag is crucial, but has received little attention; the increased growth of TFP after liberalization has been completed can be interpreted as a delayed effect of the earlier import-substitution system. Alternatively, the failure of TFP growth to accelerate when liberalization is undertaken could also be a delayed negative effect of prior import substitution efforts.

Similar arguments can be advanced in regard to the expansion of exports. The most that can be said of recent cross-country studies, which have been strongly influenced by the high growth rates of newly industrializing countries in Asia, is that differences in the growth rates of production are associated with the expansion of exports (Pinheiro, 1989). Pinheiro's careful research into the relationship between export promotion and the growth of output leads him to conclude that the somewhat frustrating results of those studies have given rise to a change in the approach taken to variations in productivity. One conclusion of particular relevance to the subject at hand is that a cross-country analysis of the production function is not the best way to study the links between the orientation of trade policy and supply-side sources of growth (Pinheiro, 1989, p. 32).

This points up the need for detailed sectoral country studies that take the trade regimes and policies of each country into account.

V

Measuring productivity and export performance

The growth of production can be broken down, on the supply side, into the expansion of the production resources used and increases in the efficiency of their use (i.e., productivity). TFP is a possible measurement of that efficiency. Estimates of its variation are, at the very least, useful as descriptive statistics on productivity. Clearly, there would be more interest in their use if they could be formulated as a function of other variables.

One frequently-used approach to the rationalization of this concept is based on the assumption of the existence of a production function that expresses output as a concave function of the inputs vector and of a time index that permits the function to shift in response to technological change or to improvements in the efficiency of existing technologies. The time-indexed elasticity of output is TFP, which represents the difference between the growth rate of output and average growth rates of inputs, weighted by the elasticity of output in terms of each input. According to the (admittedly extreme and restrictive) hypothesis that each factor is the payment or value of its marginal product and that there are no fixed inputs, these elasticities would be the same as the factor shares and TFP would be estimated using, for example, a Divisia-type index[20] or, in the case of discrete variations, a Tornqvist index.

[19] Apart from international competition, domestic factors may also influence total factor productivity.

[20] Note that if prices were not equal to marginal costs and if the cost reductions occasioned by the expansion of capital were not equal to the rate of equipment rents, then two additional sources of profitability and, hence, of TFP could arise. See Bernstein and Mohnen (1991).

In any case, the resulting estimates sometimes meet with skepticism. During the past decade there has been growing recognition of the fact that traditional Tornqvist indexes of productivity growth actually reflect much more than innovation, economies of scale and efficiency-promoting movements: problems of errors in measurement, disequilibria and biases of aggregation may easily create the illusion of trends and correlations that have no basis in the economic processes we are trying to comprehend (Tybout, 1992, p. 206).

In recent years we have also witnessed the emergence of new, more flexible and less restrictive functional ways of measuring productivity. In all of them, however, the rate of variation of TFP is defined as the portion of the growth rate of output that is not accounted for or "explained" by the combined use of the relevant inputs and factors. This is the context for the estimates presented here.

Recent estimates of TFP trends in Brazil are to be found in studies by Bonelli (1976), Pinheiro (1989 and 1992) and Bonelli (1992), with either added value or the value of output being used as a measurement of production. The methodological differences between these studies notwithstanding, the more recent studies have one thing in common: they all indicate that the growth of TFP appears to have been greater during the first half of the 1980s than during the second half of the 1970s. Since the former period was a time of slower growth owing to the 1981-1983 recession, this finding is surprising and, at first glance, appears to contradict Verdoorn's Law. However, a recent study using a cross-sectional analysis found that within each period the growth of output correlates with the growth of TFP at the two-digit level of the Brazilian industrial classification (Bonelli, 1992).

Thus far no estimates of TFP growth have been prepared for years after 1985. A pioneering effort to do so in a way that does not involve measurements of the stock of capital is presented below (on this subject see also Harberger, 1990). Let us first consider a model for breaking down added value:

$$v = a \times l + b \times c + tfp$$

where v is the growth rate of value added in real terms, a and b are weightings ($a + b = 1$, as is customary), l and c are the growth rates for inputs of labour (hours worked) and capital, respectively, and tfp is the productivity growth rate. Note that capital inputs can be represented as the real stock multiplied by the capital use rate. In terms of rates of variation (ignoring second-order variations) it can be said that:

$$c = k + w$$

where k is the real growth rate of the capital stock and w is the rate of variation in capital use. If, in addition, we assume that the potential capital/output ratio (VA) is roughly constant, then the conclusion is that the stock of capital and *potential* real output will grow at the same rate:

$$k = v^*$$

where v^* is the growth rate of potential output (or potential VA). Since the relationship between actual output and potential output is determined by the rate of utilization of production capacity, however, we can say, in terms of variation rates, that:

$$v^* = v - u$$

where u is the rate of variation in capacity use and terms of the second order are not taken into account. If we substitute these last three (approximate) identities in the first equation, we get:

$$v = a \times l + b \times [v + (w - u)] + tfp$$

If we then add the hypothesis that the use rates for capital and production capacity vary by the same proportion (i.e., that $w = u$), we find that:

$$tfp = (l - b) \times v - a \times l = a \times v - a \times l = a \times (v - l),$$

since $(l - b) = a$

It has thus been demonstrated that in the short run (which is when these approaches are probably the most valid), the variation in total factor productivity must be very close to the variation in labour productivity. Note, too, that the foregoing could also have been done starting with the concept of the value of output, instead of VA, plus material inputs. In this case we would begin with an expression for the variation of TFP such as:

$$y = a \times l + b \times c + d \times m + tfp$$

where y is the growth rate for the value of output, m is the real increase in raw material use and $a + b + d = 1$, as is customary. This raises the additional problem of how to estimate the increase in real raw material use (m). Nevertheless, if we assume that there will be little change in the product mix of output, then it would seem reasonable to hypothesize that raw material use will rise by the same proportion as output ($m = y$). In this case, we get:

$$y = a \times l + b \times y + d \times y + tfp$$

As before, the following step can be used to arrive at the variation in total factor productivity:

$$tfp = (l - b - d) \times y - a \times l = a \times (y - l)$$

which is directly related to the rate of variation of labour productivity. We next use an expression of this type to estimate the annual variation in the TFP of Brazilian industries between 1985 and 1991, taking care to update the weightings for each year. Table 10 gives the annual average for that period as well as for the two preceding five-year periods, the growth of industrial output between 1975 and 1991, and the growth rate of exports of manufactures for 1975-1990.

These figures corroborate the findings of earlier studies which have concluded that, for manufacturing as a whole: (i) the growth rate for TFP was higher during the recessionary period of 1980-1985 than it was in 1975-1980; and (ii) after 1985, increases in TFP were almost negligible, especially if we exclude the year 1991 (and 1992, which does not appear in the table). [21]

Examination of the data also reveals that the first three columns are not interrelated; in other words, the arrays of TFP variations did not remain constant during the periods analysed here. The Spearman coefficients of correlation approach 0.2, which belies the hypothesis of association. The arrays of the last three columns are indeed associated, however. The Spearman coefficient for output/exports is 0.36; for TFP/production variations it is 0.51; and for TFP/export growth it is 0.49. In no case can the hypothesis of (positive) association be ruled out. In the following section we will continue this analysis with data at a higher level of disaggregation; given the computational difficulties involved in estimating TFP at a more disaggregated level, we will use labour productivity as the central variable.

[21] Indeed, it may be seen from the computational note that during the five years from 1985 to 1990 the average rate of variation in TFP was almost nil.

TABLE 10

Brazil: Total productivity, output and exports, by industry, 1975-1980, 1980-1985 and 1986-1991
(Percentages)

Industry	Total factor productivity (TFP)				Output (1975-1990)	Exports (1975-1990)
	1975-1980	1980-1985	1985-1991	1975-1991		
Non-metallic minerals	0.84	1.66	0.46	0.95	1.55	12.4
Metal products	0.37	0.91	0.26	0.50	2.22	22.4
Machinery	4.12	-1.81	0.20	0.77	0.78	9.4
Electrical equipment	4.30	4.37	0.50	2.88	5.41	12.9
Transport equipment	1.85	2.97	-0.20	1.44	1.76	16.6
Paper and paperboard	1.91	2.09	0.53	1.45	5.51	22.4
Rubber	6.54	3.00	0.27	3.05	2.82	18.0
Chemicals	1.29	3.12	0.53	1.57	3.78	10.7
Pharmaceuticals	-2.33	1.77	-0.16	-0.28	1.62	10.4
Perfumery, etc.	4.50	1.21	0.25	1.86	6.18	17.0
Plastics	2.34	0.78	0.05	0.99	2.33	15.7
Textiles	1.89	1.40	-0.21	0.95	0.37	5.8
Wearing apparel	0.34	2.11	0.05	0.78	1.22	12.0
Foodstuffs	0.92	-0.22	0.32	0.34	2.74	4.0
Beverages	0.19	-0.13	0.49	0.20	4.62	6.1
Tobacco	3.51	2.28	0.56	2.01	3.93	9.7
Total	**0.48**	**1.09**	**0.25**	**0.58**	**2.64**	**10.4**

Source: See text.

VI

Export performance and labour productivity: an industry-by-industry analysis

In this section the existence of an association between export orientation, productivity and the growth of production will be demonstrated using data from the 1980 and 1985 industrial censuses. The analysis will be confined to labour productivity, and the more disaggregated results, at the four-digit level of the Brazilian industrial classification, refer to the metal products, machinery, paper and paperboard, and rubber industries.

The econometric calculations shown in the upper portion of table 11 demonstrate the existence of a close link between the levels of industrial labour productivity and gross investment per worker. Variations in productivity, in their turn, are also related to variations in output, in accordance with Verdoorn's Law[22] (see the bottom section). We also find that the *levels* of productivity are closely related in 1980 and 1985 (see the middle section). The table gives the results for three of the industrial classification's levels of aggregation.

Equation No. 1 indicates that approximately half of the cross-industry variation in productivity in 1985 is accounted for by gross investment per worker (a variable that serves as a substitute for the capital/labour ratio). The result applies to the analysis at both the two-digit and three-digit levels of the industrial classification. Equation No. 2 supports the conclusion that there is a close association between productivity levels in 1980 and 1985. The association becomes weaker as we move down from higher to lower levels of aggregation. A 1% increase in cross-industry productivity in 1980 is associated with a 1.14% increase in 1985 when the analysis is conducted at the two-digit level, but the increase is only 0.74% when the four-digit sample is used. Equation No. 3 corroborates Verdoorn's Law. Its results indicate that an absolute variation of 1% in the production growth rate, by industries, translates into a 0.8%

[22] This result also holds true for the relationship between the variation in total productivity and growth between 1975 and 1985 (Bonelli, 1992).

TABLE 11

Brazil: Results of regression analyses: labour productivity, investment and output [a]

Equation No.1: log (productivity) = constant + a* log (investment/worker). 1985			
2 digits	5.858	+0.347	R2=0.54
(n=22)	[32.8]	[4.82]	
3 digits	5.871	+0.369	R2=0.47
(n=128)	[73.3]	[10.49]	
Equation No. 2: log (productivity 1985) = constant + a* log (productivity 1980)			
2 digits	-0.823	+1.137	R2=0.89
(n=22)	[-1.41]	[12.80]	
3 digits	0.83	+0.871	R2=0.87
(n=128)	[3.82]	[28.51]	
4 digits	1.708	+0.741	R2=0.67
(n=79)	[4.28]	[12.59]	
Equation No. 3: productivity growth rate = constant + a* (output growth rate). 1980 and 1985			
2 digits	5.270	+0.770	R2=0.52
(n=22)	[1.67]	[4.66]	
3 digits	-8.370	+0.250	R2=0.29
(n=128)	[-4.31]	[7.12]	
4 digits	-1.400	+0.447	R2=0.27
(n=79)	[-0.37]	[5.31]	
Metal products	0.99	+0.560	R2=0.41
(n=35)	[0.15]	[4.80]	
Machinery	-14.3	+0.380	R2=0.28
(n=24)	[-4.00]	[2.95]	

Source: See text.

[a] Variations for the period 1980-1985. Values of *t* are given in parentheses. The deflator used to estimate increases in productivity in industrial activities at the two- and three-digit levels is the implicit deflator for the corresponding industrial activity.

increase in productivity at the two-digit level. At more precise levels of aggregation, not only is the coefficient lower, but production growth rates also account for a considerably smaller portion of the cross-industry variation in productivity. Therefore, the growth of output is related to productivity growth, but the direction of causality has not been determined.

The variable chosen to represent the export orientation of each industry is the percentage of total sales accounted for by exports in 1985 (VMEX). Table 12 presents the results of computations using this variable at different levels of aggregation.

Equation No. 1 in table 12 indicates that the percentage of total sales represented by exports in 1985 is positively associated with productivity growth between 1980 and 1985. However, the productivity coefficient departs from zero by a significant amount only at the 7% level (analysis at the two-digit level). Only a small part of the cross-industry VMEX variation is explained by the variation in productivity. This conclusion is corroborated when a more disaggregated sample (three digits) is used. The fact that only a small part of the cross-industry variation in export orientation is accounted for by variations in productivity may be due, among other factors, to lags between increases in productivity and in competitiveness. Equations Nos. 2 and 3 tell us that the percentage of sales represented by exports is associated with the level of productivity. Analyses of individual industries at the four-digit level (not given in the text) exhibit closer associations. For the paper and paperboard industry, the coefficient of determination is of the order of 0.8-0.9. For the metal products and machinery industries, the proportion of the cross-industry variance of VMEX that is explained by the productivity variable is of the order of 0.14-0.18.

Since the growth of output is associated with productivity growth, it seems safe to conclude that export orientation is positively influenced by the growth of manufacturing output, although the direction of causality cannot be established. Nevertheless, we may speculate that an increase in production for export would speed up productivity growth by speeding up the growth of production (i.e., an effect of scale).

TABLE 12

Brazil: Results of regression analyses: variation in productivity, 1980-1985, and exports

Equation No. 1: VMEX = constant + a^* (productivity growth rate)			
2 digits (n=22)	8.75 [5.33]	+0.121 [1.60]	R2=0.11 is not significant at 5%
3 digits (n=128)	10.97 [8.36]	+0.142 [2.74]	R2=0.06
Equation No. 2: VMEX = constant + a^* (productivity 1980)			
4 digits (n=79)	3.24 [1.33]n.s.	+0.0059 [3.01]	R2=0.10
Equation No. 3: VMEX = constant + a^* (productivity 1985)			
4 digits (n=79)	-1.55 [-0.5]n.s.	+0.0115 [4.31]	R2=0.19

Source: See text.

VII

Conclusions

In this study we have analysed questions relating to the expansion of exports and the growth of productivity and production in Brazilian industry. The effects which Brazil's recent liberalization of its foreign trade regime may have on production and productivity are underlying concerns in this regard. Analysis of the data presented in section IV suggests that both the import liberalization process and the increase in the competitiveness of exports which can be attained through higher productivity tend to serve as means of boosting the competitiveness of the industrial system as a whole; this underscores the importance of studying the interconnection between export orientation and variations in productivity.

The analysis demonstrated that labour productivity is related to the long-term growth of output. Thus, the fact that the increases in productivity recorded since the start of the 1980s have been below the

historical mean may be a consequence of the marked slowdown in industrial growth which occurred during that period. At the same time, the share of total exports accounted for by manufactures rose only marginally, with the expansion of exports being heavily concentrated in just a few years (1981, 1983-1984 and 1987-1988); this would seem to be due to the implementation of recessionary macroeconomic policies combined, in most cases, with devaluations of the currency in real terms.

In keeping with the above, the trend in industrial competitiveness, based on the unit costs of labour, appears to be one of almost continuous growth over the long term, primarily as a result of movements in the exchange rate. Productivity increased very little, if at all, in the 1980s, in contrast to the pace of productivity growth seen in the 1970s. Analysis of the index of relative unit costs of labour also suggests that in the period from the mid-1980s to 1989, the competitive position of Brazilian exports deteriorated more sharply than ever before. In sum, their competitiveness during those years was impaired by macroeconomic conditions (domestic recession plus variations in the real value of the currency) to a much greater extent than by variations in productivity.

It is interesting to note, however, that exports apparently did not diminish a great deal as their competitiveness declined, with the exception of a few very specific periods, such as late 1986 and early 1987. A number of reasons for this phenomenon may be cited, with one of the main ones being the possibility of variations in competitiveness within the manufacturing sector.

The search for alternative explanations led us to explore the possible existence of a connection between export orientation, variations in productivity and the expansion of output. Theoretical studies and representative data based on the experiences of a number of countries both hint at the possibility of associations between these variables: i) trade-driven market growth increases both output and productivity (Verdoorn's Law), which leads to cost reductions and greater penetration of external markets through a self-perpetuating mechanism; thus, export orientation is related to increases in efficiency occasioned by specialization and increased scale; ii) exposure to international competition obliges national producers to raise their efficiency and productivity levels, which leads to a reduction in costs; and iii) the effects of trade policies may be direct (increased competition and efficiency of resource use) or indirect (increases in the capacity use rate, in investments involving new technologies, and in manpower skill acquisition).

We then explored the empirical implications of these hypotheses, after attempting to measure the productivity variations. We thus showed that, based on perhaps overly restrictive hypotheses that would only apply in the short run, total factor productivity can be estimated by using labour productivity, except for a factor of proportionality as regards the share of labour earnings in income or production.

As is well known, after 1985 the growth of production slowed sharply in almost all Brazilian industries, with the average growth rate for the manufacturing sector falling to an annual rate of -2.40% for the five-year period 1987-1991. Rates of manpower absorption were therefore also negative, with a time-lag being observed in the variations of this rate in respect of variations in production. Employment in manufacturing dropped by an average of 4.25% per year in the above period, largely owing to the influence of the 1990-1991 recession. The net result of these events was an increase of about 0.25% per year in total productivity between 1985 and 1991, but this figure is strongly influenced by the 1.57% rate estimated for 1991. Although slow, the growth of total productivity was positive, on average, for most industries. Moreover, total factor productivity represented a significant portion of the growth rate in a number of industries. An exploratory analysis of the arrays of variations in export growth and productivity by industries points to the existence of a positive association between the two series: the industries with the highest productivity growth rates also had the highest production and export growth rates.

Econometric estimates for industries at disaggregated levels suggest that: i) approximately 50% of the cross-industry variation in labour productivity is accounted for by the capital/labour ratio; ii) the growth of output is linked to the growth of labour productivity; iii) the share of total sales represented by exports is positively associated with the growth rate of labour productivity; and iv) the share of total sales accounted for by exports is also positively associated with the level of productivity.

It can therefore be concluded that a positive correlation exists between export orientation and the growth rate of labour productivity during the period in question. Furthermore, since the growth of output is related to the growth rate of productivity, it seems safe

to conclude that an export orientation is positively linked to the growth rate for manufacturing output. It should be noted, however, that the direction of causality is difficult to determine; in fact, we do not even know whether the link is a direct or indirect one.

One possible interpretation of these data would be that exports of manufactures are influenced by a complex set of variables which affect their competitiveness: real exchange rates, incentives and subsidies, the behaviour of domestic and international demand and, finally, variations in productivity. Productivity, in its turn, hinges upon the level of industrial investment. Just as the existence of idle capacity (which is determined by the behaviour of domestic and international demand) negatively influences investment expenditure, the expansion of output also influences exports. This accounts for the link detected between the degree of export orientation and the growth of production, which is a somewhat surprising result in view of the fact that increased use of capacity is negatively associated with export growth, as has been demonstrated in countless econometric studies. The discovery of a positive association between the growth of exports and of production indicates –as suggested by the theoretical analysis presented at the beginning of this article– that labour productivity, which operates as a function of increases in gross investment, is one of the determinants of export growth, without prejudice to the effects of other variables not considered here, such as, for example, the export orientation of transnational corporations as compared to that of local firms, market structure, etc.

(Original: Portuguese)

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Export processing *in the Caribbean:* the Jamaican experience

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Export processing, also known as *maquila*, is a widespread activity in Mexico and Central America and is becoming increasingly important to economies in the Caribbean. Countries of the subregion have successfully attracted both foreign and domestic investment in offshore data processing and in the assembly and manufacture of garments, footwear, electrical and electronic equipment, toys and other goods for export. Investors are attracted by low labour costs, freedom from foreign exchange controls and bureaucratic restrictions, and by the promise of exemption from all taxes, including taxes on profits and duties on imports of equipment, raw materials and intermediate goods used in production for export. The local economies receive foreign exchange, since local currency must be purchased from the Central Bank for wages and other local expenditures. In addition, they benefit from generation of employment and from possible linkages with the domestic economy and transfer of technology. The present paper is a case study, based on research carried out in Jamaica in June 1993, of one country's use of this instrument for industrial development. It argues that the benefits to Jamaica are reduced by misguided policies that confine exporters to economic enclaves and limit their contact with the rest of the economy.

I

Introduction

With a population of two and a half million people, Jamaica is the largest of the 13 English-speaking countries that comprise the Caribbean Community (CARICOM). In land area, it is also the largest English-speaking island in the Caribbean, though its territory is only half that of Belize and slightly more than a tenth that of Guyana.

In the 1970s and early 1980s, Jamaica experienced a severe and prolonged economic recession. In fact, its gross domestic product (GDP) contracted at an average annual rate of 1.0% between 1970 and 1985: the worst performance by far of the 23 countries listed in ECLAC's *Statistical Yearbook for Latin America and the Caribbean*. The recession caused unemployment rates to exceed 25% of the labour force. Lack of employment opportunities, combined with social tension, stimulated considerable emigration of skilled labour, including managerial talent. In 1986 a modest recovery began that continues to this day. Nonetheless, the economy remains highly dependent on the export of a few traditional commodities, all of which face depressed prices in world markets. The value of exports of four commodities –alumina, bauxite, sugar and bananas– amounted to two-thirds of all merchandise exports in 1991 and 1992.[1]

In an effort to earn foreign exchange and to provide productive employment for its population, Jamaica has turned increasingly to the promotion of tourism and export processing. In 1992, gross tourist receipts were an estimated US$850 million, up 11.3% from 1991. Exports of garments, which comprise the bulk of the export processing activity on the island, totalled US$384 million in 1992, up 28.7% from 1991.

II

An overview of export processing

The Jamaican economy provides employment for more than 900 000 persons, of whom 100 000 work in the manufacturing sector, 26 000 in the hotel (tourism) subsector and 31 000 in export processing companies. Export processing thus accounts for more than 3% of all jobs in the economy and nearly a third of the manufacturing jobs. Although only partial data are available, there is little doubt that export processing positions are filled predominantly by women, especially young women.[2] Some researchers argue that this has the effect of drawing secondary workers into the labour force rather than reducing the rate of unemployment of heads of households. On the other hand, young women in Jamaica are often single parents, and it is precisely this demographic group –young females– that exhibits the highest rate of unemployment on the island.[3]

The garment industry accounts for most export processing in Jamaica: two-thirds of the firms and nearly 90% of the employment. (table 1). Data

[1] The exact figures for exports of the four commodities were US$788 million in 1991 and, because of declining prices, US$682 million in 1992. Total merchandise exports in the same years totalled US$1151 million and US$1053 million respectively (Planning Insitute of Jamaica, 1993, tables 3.1 and 3.4). The merchandise trade data exclude exports from free zones, but include exports of manufactures from factories in the customs territory. Local expenditures of Jamaica's free zone companies are classified as service exports. Export processing plants in the customs territory carry out exactly the same activities as those in the free zones, so this disparate treatment of exports from free zones and the customs territory is confusing for users of Jamaican trade statistics.

[2] It is reported that 88.9% of the employees were female in five garment plants operating in the Kingston Free Zone in the late 1980s (ECLAC, 1990, p. 34). In the Garmex Free Zone, according to unpublished data, females accounted for 86.0% of total employment in 1991 and 82.6% in 1992.

[3] In 1992 the unemployment rate was 15.7% for the entire Jamaican labour force, but it was 40.5% for women under the age of 25 and 17.9% for men under the age of 25 (Planning Institute of Jamaica, 1993, tables 16.7 and 16.8).

TABLE 1

Jamaica: Export processing firms and employment in them, December 1992

	Firms		Employment	
	Number	%	Number	%
Customs territory [a]				
Garments	50	71.4	15 300	90.1
Data processing	20	28.6	1 678	9.9
Total	70	100.0	16 978	100.0
Free zones				
Garments	24	61.5	12 683	89.5
Data processing	6	15.4	867	6.1
Telemarketing	3	7.7	116	0.8
Other	6	15.4	506	3.6
Total	39	100.0	14 172	100.0
Customs territory plus free zones				
Garments	74	67.9	27 938	89.0
Data processing	26	23.9	2 545	8.2
Other	9	8.2	622	2.0
Grand total	**109**	**100.0**	**31 150**	**100.0**

Source: ECLAC estimates based on data supplied by Jamaica Promotions Corporation (JAMPRO), Kingston Free Zone, Garmex Free Zone and Montego Bay Free Zone.

[a] Includes an unkown, but small, number of apparel plants outside the free zones that have obtained free zone status.

processing is the second largest export activity, but the 26 companies are small compared to manufacturing plants and employ only 8% of the sector's workers. Export processing establishments are located not only in the free zones, but also in cities, towns and villages throughout the island.

1. Free zone companies

Of the 109 companies engaged in export processing activities, a total of 39, accounting for 45.5% of the employment, are located in the island's three publicly-owned free zones (table 1). Kingston Free Zone, the oldest and largest of the three, is in the industrial heart of Kingston, adjacent to a modern port. It was established in May 1976, but got off to a slow start and did not attract many investors until after 1982. The Garmex Free Zone, the second largest, was established in 1987 only two kilometres from the Kingston Free Zone. The Montego Bay Free Zone, located south-west of Jamaica's second city and largest tourism destination, was established in 1982 but did not commence operations until 1985.

In 1989 Jamaica Digiport International (JDI) opened in the Montego Bay Free Zone to provide low-cost satellite communications for data processing and telemarketing companies. JDI offers its clients speeds between 9 600 and 1 544 000 bits per second, international (800) toll-free numbers, credit card authorization for direct selling, and rates as low as 24 US cents per minute for calls to the United States.

Companies operating in the free zones must pay wages and other local expenses in Jamaican currency, but they are free to maintain foreign currency accounts and are exempt *in perpetuity* from taxes on profits, imports into the zone and exports to countries other than Jamaica. Most importantly, they are also freed from many of the administrative formalities of importing and exporting. Their main activity is the manufacture of garments, but Kingston Free Zone also contains a candy factory and an ethanol plant. In Montego Bay Free Zone there is a limited amount of data processing, telemarketing and assembly of electrical and electronic equipment.

2. Companies in the customs territory

Outside the free zones, there are some 70 companies engaged in export processing activities (table 1). They operate exclusively in the garment and data processing industries and employ, in aggregate, more labour than the free zone companies. With rare exceptions these companies, like their free zone counterparts, produce exclusively for export markets.

A few of the garment companies have obtained free zone status from the government. The remainder of the garment manufacturers, and some of the data processing firms, operate under the Export Industry Encouragement Act (EIEA), which dates back to 1956 and allows approved companies a holiday from taxes on profits and dividends as well as exemption from duties on capital goods and imported raw materials. These incentives are granted for a maximum of ten years, but it is a simple matter for a company to change its name every five or ten years and thus obtain the incentives indefinitely. The EIEA regime thus offers exporters in the customs territory nearly all the benefits associated with free zone status. The main difference is that EIEA exporters are not free from foreign exchange controls nor from quantitative restrictions on imports. In recent years, with the abolition of exchange controls and the removal of import quotas, there is even less distinction between the two regimes.

TABLE 2

Jamaica: Employment in the garment industry, 1982-1992

(Number of persons employed)

	Customs Territory [a]	Free Zones	Total
1982	5 741	450	6 191
1983	4 958	939	5 897
1984	5 125	2 704	7 829
1985	5 320	3 180	8 500
1986	11 527	7 399	18 926
1987	12 752	10 830	23 582
1988	14 089	6 490	20 579
1989	17 986	7 355	25 341
1990	14 200	10 300	24 500
1991	16 500	11 000	27 500
1992	16 000	12 700	28 700

Source: ECLAC, based on data supplied by Jamaica Promotions Corporation (JAMPRO), Kingston Free Zone, Garmex Free Zone, Montego Bay Free Zone and the Jamaica Textile and Apparel Institute.

[a] Includes an unkown, but small, number of apparel plants outside the free zones that have obtained free zone status.

3. Garment manufacture

Employment in Jamaica's garment industry has increased from approximately 6 000 persons in 1982 and 1983 to more than 28 000 today (table 2). This implies an average rate of growth of more than 19% per annum between 1983 and 1992, but in fact employment grew much faster up to the end of 1987 than it did in later years.

These data do not distinguish between exporters and firms that produce for the domestic market, but in reality exporters account for all of this growth in employment and, particularly after 1983, for nearly all the numbers employed. Garment exports increased steadily from US$10.7 million in 1983 to US$384.4 million in 1992, with the largest growth occurring in the early years (1984 to 1988) (table 3). In 1991 and 1992 nearly 60% of the exports came from free zone companies, compared with 15% in 1982, 30% in 1983-84 and 55% in 1990. More than half the exports are garments made up from cloth cut in the United States, in order to take advantage of United States customs item 807 (recently renamed HS 9802.00.80) and pay duty only on the value added in Jamaica. Less than half the value of exports is accounted for by the "cut, make and trim" variety of garment manufacture, which creates more employment in Jamaica per dollar of exports even though the cloth is always imported.

Increasingly, the cloth utilized in "Item 807" offshore assembly is both manufactured and cut in the United States so as to qualify for the Caribbean Basin Initiative (CBI) Special Access Program (807A/9802A), also known as "Super 807". Under this programme, the United States has granted Jamaica generous quotas, known as Guaranteed Access Levels (GALs), and in 1992 Jamaica was the largest supplier of "Item 807" hosiery and underwear to the United States market. Even so, exporters did not suffer from quota restraints, for only 91% of the quota was filled in hosiery and 75% in underwear. The next highest use of a quota in 1992 was 65%, for knit shirts.

The United States is the principal market for Jamaica's garment industry: 80% of the industry's exports now go to that country, while the European Economic Community (EEC), which purchased 17.6% of these exports in 1992, represents the second largest market. The CARICOM market, which absorbed nearly a third of textile exports in 1982 and 1983, is now minuscule. The Canadian market, though growing, remains small: a reflection of the fact that textiles and clothing are not eligible for duty-free entry under CARIBCAN (the Canadian external trade, investment and industrial cooperation programme with the Commmonwealth Caribbean).

TABLE 3
Jamaica: Garment exports, 1982-1992 [a]

Year	Total (million US$)	Free zone (%)	CMT[b] (%)
1982	14.1	15.0	18.2
1983	10.7	30.9	29.9
1984	27.4	30.6	40.8
1985	55.9	47.8	39.7
1986	101.7	48.6	42.6
1987	184.8	46.3	45.3
1988	220.9	52.9	47.6
1989	243.2	49.6	41.4
1990	277.8	55.3	48.2
1991	298.7	59.3	46.6
1992	384.4	57.8	42.2

Source: Jamaica Promotions Corporation (JAMPRO) (International Trade Division).
[a] Excludes exports to members of CARICOM.
[b] CMT refers to "cut, make and trim", as opposed to simple offshore assembly of garments from pre-cut cloth.

4. Data processing

Ten years ago only five data entry and processing firms existed in all of Jamaica, and for the most part they serviced the domestic market. The industry grew rapidly when the government offered Export Industry Encouragement Act (EIEA) incentives to firms that were willing to specialize in export markets, to the exclusion of domestic clients. These services are exported almost exclusively to the United States. In 1985 the government ruled that for data entry services, unlike manufactures, tax holidays and duty-free import privileges would henceforth be restricted to companies located in the free zones. In practice, this means that companies must relocate to the Montego Bay Free Zone, for no facilities are available in either of the free zones in Kingston. The last EIEA incentives will thus end in the year 1995, and there is some question whether the data entry and processing industry will retain its present size of 26 firms with more than 2500 employees.

There is no technical reason to concentrate data processing in a single geographic location: the Digiport in Montego Bay can and does supply services over the local telephone lines to firms in Kingston and other parts of the island. Moreover, there is a cogent argument for decentralization because of the lack of public transportation, especially late at night, which is important in an industry that works at least two, and typically three, shifts each day.

Duty-free imports are less important to data processing firms than to manufacturers of garments, as the former do not import raw materials or intermediate goods. However, access to the latest capital equipment is important if data processing companies are to retain their competitive edge. Jamaica competes, for example, with northern Mexico, which has the advantage of proximity to the main market (the United States), and with the Philippines, which has the advantage of the English language and a fibre optical link to the United States. Moreover, data processing, unlike garment manufacture, is not protected by quota restrictions or international market sharing agreements. It is possible at the present time for a company to obtain a waiver of duties on the importation of specific capital equipment, but this is a costly and time-consuming process compared to the automatic exemption accorded by EIEA or free zone status.

III

Nationality of ownership

In the free zones of Jamaica there is a striking absence of Jamaican companies. Of the 39 export processing firms located there, only three are owned by Jamaicans, and all are located in the Montego Bay Free Zone. Roberts (1991, p. 167) makes much of this fact in a recent thesis; in comparing Jamaican free zones to those in Mauritius, he notes approvingly that in the latter "domestic equity participation has increased from an estimated 30% in 1983 to 53% in 1990."

The absence of Jamaican ownership of free zone companies is largely a result of government policy. After all, the free zones were established to attract foreign, not domestic, investment. The Jamaican government requires free zone investment to be in foreign currency, and until recently it was illegal for residents of Jamaica to hold foreign currency or foreign currency accounts. The sole Jamaican garment manufacturer in a free zone used the subterfuge

of a joint venture with Cayman Island capital in order to bring foreign currency to Jamaica. The sole Jamaican data processing company has the name "Bay Telemarketing Agency" because it could only obtain approval to operate as a telemarketing agency, which requires almost no investment in equipment. The company soon diversified into data processing, abandoning telemarketing along the way.

This dearth of Jamaican free zone companies also reflects a preference of Jamaican entrepreneurs for locations away from the free zones. The manager of Bay Telemarketing said quite frankly that his company would move away from the zone, or at the very least establish a satellite office at another location, if that could be done without losing export incentives. His complaint was that the influx of data processing companies resulted in strong competition for a small pool of trained operators. Companies can train their own operators, but they inevitably lose them to other companies in the same building.

The Managing Director of Davon Corporation Ltd., the oldest and largest Jamaican-owned exporter of apparel, [4] feels that the requirement that foreign funds be invested was never a deterrent to his company's investment in a free zone. Rather, he listed three reasons for his company's decision to locate its plants away from the established free zones:

i) There are inevitable transportation bottlenecks when thousands of workers attempt to board buses at the same time.

ii) Labour difficulties in one free zone factory affect morale in all the other plants, for the workers socialise during lunch breaks and after work.

iii) Rental fees for free zone factory shells (US$3.50 per square foot per annum in the Kingston Free Zone and US$4.25 in the other two zones) are much higher than those for comparable facilities in other locations.

Outside the free zones there are 70 export processing establishments whose activities are virtually indistinguishable from the 39 free zone companies, and as many as 48 of these are owned by residents of Jamaica. It cannot be said with certainty that all 48 are Jamaican-owned, for in the case of the 20 data processing firms operating in the customs territory it is only known that they are overwhelmingly owned by Jamaicans.

For all 109 export processing establishments, Jamaica is the largest nationality of ownership: quite likely 51 firms, or 46.8% of the total. Jamaican companies, however, are much smaller on average than foreign-owned companies, so they account for less than a quarter of total employment in the export processing sector (table 4). United States nationals are the second most numerous investors, with 36 plants. Hong Kong Chinese follow, with 13 plants, and South Koreans with 7. At the end of 1992 there was also one plant owned by U.K. investors and one by investors from Canada.

For the garment industry, Jamaica Promotions Corporation (JAMPRO) has tabulated historical data for the period 1982-1991 on exports by nationality of firm. These data are reported in table 5, but exports to CARICOM have been deducted from the exports of Jamaican companies on the (realistic) assumption that only Jamaican firms export to the protected CARICOM market. Jamaican companies dominated the industry from 1982 through 1984, with some participation by United States companies and a virtual absence of Asians (Hong Kong and South Korea). In 1985 and 1986 exports were split almost equally among the three groups of companies, and thereafter U.S. and Asian exports grew much faster than exports by Jamaican companies, so that by 1991 the Jamaican share had fallen to 20% while the shares of

TABLE 4

Jamaica: Export processing firms by nationality, 1992

Nationality	Firms		Employment	
	Number	%	Number	%
Jamaica [a]	51	46.8	7 479	24.0
United States	36	33.0	...	...
Hong Kong	13	11.9	...	...
South Korea	7	6.4	...	...
Other	2	1.8	23 671	76.0
Total	**109**	**100.0**	**31 150**	**100.0**

Source: ECLAC estimates based on data supplied by Jamaica Promotions Corporation (JAMPRO), Kingston Free Zone, Garmex Free Zone and Montego Bay Free Zone.

[a] Assumes all 20 data processing firms located outside the free zones are Jamaican-owned.

[4] Davon Corporation operates a plant in Kingston, another in Montego Bay (Windmill Garments) and a third near Ocho Rios (International Apparel). The company rents the Montego Bay factory shell from the government, and owns the other two properties.

U.S. and Asian exporters had increased to 39% and 41% respectively.

It is interesting to note in table 5 that the exports of Asian companies are overwhelmingly "cut, make and trim", i.e. cut and made up out of imported cloth (inevitably from Asia) as opposed to assembly of pre-cut cloth. On the other hand, exports of both the Jamaican and the United States companies are predominantly, though not exclusively, of the "Item 807" offshore assembly variety.

TABLE 5

Jamaica: Garments exports by nationality of firm, 1982-1992 [a]
(Millions of US dollars and percentages)

	Jamaican companies		US companies		Asian companies [b]	
	US$	%CMT [c]	US$	%CMT [c]	US$	%CMT [c]
1982	9.7	0.0	4.4	59.2	0.0	
1983	7.2	11.0	3.4	67.7	0.1	100.0
1984	20.7	33.4	6.4	61.9	0.3	100.0
1985	18.2	1.6	20.2	21.9	17.5	100.0
1986	30.0	8.2	36.7	15.9	35.0	100.0
1987	62.1	7.1	50.8	14.6	71.8	100.0
1988	68.5	15.9	68.9	16.0	83.5	99.5
1989	72.6	11.5	88.7	12.4	81.8	99.4
1990	68.1	15.1	101.5	15.7	108.1	99.6
1991	60.0	9.7	116.6	10.4	122.1	99.3
1992	...	...	...	...	155.3	...

Source: ECLAC, on the basis of data supplied by JAMPRO (International Trade Division).
[a] Excludes exports to CARICOM.
[b] "Asian" companies are actually only predominantly Asian, since they include all non-US, non-Jamaican companies.
[c] % CMT refers to the percentage of the exports that are "cut, make and trim" as opposed to "Item 807" garments.

IV

Transfer of technology

Although export processing is universally valued as a means of employing large numbers of relatively unskilled workers, its value as a vehicle for the transfer of technology is frequently overlooked or even denied. Nonetheless, the importance to an economy of introducing workers for the first time to the rigours of an industrial environment, to notions of punctuality, quality control and deadlines, should not be minimized. Moreover, for local entrepreneurs offshore assembly provides a low-risk method of entering export activity, since under subcontracting arrangements the customer provides the raw materials, which drastically reduces the export processor's need for working capital. As the industrialist moves along his learning curve, gaining confidence and access to finance, he can begin to import and cut cloth, and eventually to make his own patterns and designs.

In the garment industry, Jamaican entrepreneurs have not yet moved very far along their learning curve, for most continue to specialise in the assembly of clothing. Nonetheless, Davon Corporation began some years ago to engage in CMT ("cut, make and trim") activities by subcontracting for a South Korean free zone company, as well as producing on the same basis for the Canadian market, using imported Canadian cloth. More recently, the company obtained a contract from a trading company for the production of a line of casual clothing in which Davon Corporation has full responsibility for

sourcing the raw materials, making the patterns and cutting the cloth in addition to the normal sew and trim operations. In essence, the Jamaican company will do everything except market the product. More typical, however, is the case of Classic Manufacturing, a well-managed Jamaican enterprise with a single plant near the Montego Bay Free Zone. Classic is nearly as old (though not as large) as Davon Corporation, but has never entertained the notion of doing any work other than "Item 807" assembly of trousers for the U.S. market.

Since Asian-owned companies cut most of the cloth that they use to manufacture garments, one might conclude that through the training of employees they transfer more technology to Jamaica than the U.S. or Jamaican companies that operate as "Item 807" subcontractors to firms in the United States. It is true that cutters are invariably men, whereas sewing machine operators in Jamaica are almost always women.[5] Moreover, there is typically a six-month training period before an unskilled person becomes a competent cutter. With regard to sewing machine operators, the largest garment factory in Jamaica requires three months to train such workers, and other garment producers report training periods of up to six months because of the low existing skills and lack of character traits such as discipline and punctuality of new entrants to the work force, while the manager of a South Korean company claims to require 12 months to train fully a sewing machine operator, but his plant produces dresses for the upscale "boutique" market from cloth with difficult designs and texture.

A May 1993 survey of wages at factories in the Kingston Free Zone showed virtually no difference between cutters and sewing machine operators (table 6). If wages are a reflection of skill levels, then in terms of human resource development there is not much difference between cutters and machine operators, and the most that one can conclude is that CMT activities require a greater variety of skills rather than higher skill levels, compared to "Item 807" assembly.[6]

TABLE 6

Jamaica: Wage rates in the free zone garment industry, May 1993 [a]

(US dollars per hour)

	Minimum	Average
Sewing machine operator	0.34	1.13
Trainee sewing machine operator [b]	0.34	0.68
Cutter	0.34	1.13
Spreader	0.34	1.01
Presser and finisher	0.34	1.13
Storeman	0.34	0.68
Mechanic	0.39	1.13
Trainee mechanic [b]	0.39	0.56
Maintenance staff	0.39	1.13
Supervisor	0.51	2.25
Payroll clerk	0.39	0.79
Messenger	0.34	0.39

Source: Kingston Free Zone Company, Ltd.

[a] Wages based on standard 40-hour work week, excluding the cost of fringe benefits, which are a legal minimum of 18.8% (payroll taxes of 11.5%, including employer's contribution to the national insurance scheme, 9 public holidays and two weeks annual vacation).

[b] Training period not to exceed 12 weeks.

Although Jamaica has an abundance of unskilled labour, there is a definite shortage of skilled personnel, and nowhere is this more evident than in the case of management. Of the foreign-owned factories visited by the author, all but two relatively small ones were managed by expatriates. In fact, even Jamaican-owned companies resort to expatriate managers. In Montego Bay, for example, nationals of the United States manage each of the three large Jamaican-owned factories visited, while the Jamaican owners, for the most part, procure contracts and handle the finances. Expatriates are expensive compared to local managers, and the abundance of the former in Jamaican factories reflects a scarcity of the latter.

It is rare to see a Jamaican plant manager in factories producing garments for export, but people in the business claim that skills are improving: ten years ago even supervisors were imported from abroad, but now all supervisors are Jamaican nationals. On the positive side, although numerous high-level management positions are currently filled by expatriates, they will subsequently be available for a new generation of Jamaicans trained in fields such as industrial engineering. The knowledge that such

[5] The author observed male sewing machine operators at work in only two plants, and even in those plants the vast majority of operators were female.

[6] For a contrary view, see Kaplinsky (1993).

highly paid employment exists should encourage young Jamaicans to choose technical fields of study in the universities.[7] A shortage of skilled labour also affects the data processing industry, which prefers to hire high school graduates with typing abilities. Owners and managers of firms in the industry complain that they have difficulty recruiting data entry operators, and those that they do recruit have such poor general skills that they require a minimum of three to four months of training before they can even begin to do serious work. During the training period, they must be paid the legal minimum wage, even though their productivity is close to zero, and once trained, they often move to another employer, as there is fierce competition for the limited pool of trained data entry operators.[8] This, of course, is a classic case of externalities: the company that incurs the expense of training a worker is not able to recoup its investment, and therefore all firms invest too little in training new workers. It would be better if basic training were done outside the firm, with all firms in the industry sharing the costs. In addition, more of the cost would be borne by the trainee, for he or she need not be paid the minimum wage during training. The data processing firms in the Kingston area have, in fact, begun a programme of this type for high school graduates in co-operation with a government vocational programme called Human Employment and Resources Training (HEART).

Data processing in Jamaica provides interesting growth prospects because it is constrained by supply rather than demand. Managers of firms in the industry claim that they could employ many more operators were they available. The requirements are functional literacy and good typing skills; trainees who start with a basic commercial education can easily learn to manipulate the programmes for data entry and word processing. Nonetheless, this is a highly competitive industry, in which Jamaicans must compete with firms throughout the world, so wages remain low despite the severe shortage of personnel.

Firms operating in the data entry and processing industry must keep abreast of technological advances in both software and hardware if they are to remain competitive. This they appear to be doing successfully in Jamaica. Many of the companies are now incorporating image scanners in their operations, for these devices markedly increase productivity for some types of data entry.

V

Labour costs

Export processing firms are subject to the same labour laws as any firm doing business in Jamaica. The minimum wage in 1993 was 300 Jamaican dollars for a 40 hour week, equivalent to 34 U.S. cents per hour at the then current rate of exchange. Work in excess of eight hours per day, and any work on Saturday, must be paid at the rate of time-and-a-half. Double time is paid for work on Sundays or public holidays.

Piece rate systems are in effect in virtually all garment factories and data processing firms in Jamaica, with the result that the minimum wage is only a floor. Of course, workers who consistently produce much less than the equivalent of the minimum wage are dismissed. The manager of one free zone garment plant confessed that half of his sewing machine operators earned only the minimum wage. The manager of another garment factory, located outside the free zone, reported that his company requires operators to produce under the piece-rate system at least 80% of the minimum wage if they are to retain their employment.

With such strong productivity incentives, average wages are much higher than minimum wages. A survey of Kingston free zone companies in May 1993

[7] Higher education is, of course, not the only way to become a plant manager. Of the two Jamaican managers interviewed who work for U.S.-owned companies, one is an industrial engineer with a diploma in accounting, while the other has little formal education but successfully ran his own "Item 807" apparel factory before accepting employment with the overseas firm.

[8] There is also a shortage of trained, as opposed to trainable, sewing machine operators, but these do not move from company to company. The reason lies in the fact that garment manufacturers share employee lists, and refuse to hire a worker who comes from another company without first consulting with his or her former employer. Data processing firms, in contrast, compete rather than co-operate in the labour market.

revealed, for example, that (excluding overtime rates) the average pay of sewing machine operators (US$1.13 per hour) was more than three times the minimum wage (US$0.34). Even the average wage of trainees, in their first three months on the job, was twice the minimum wage (table 6).

A similar system is in effect for data entry operators, who are paid by the keystroke, or receive the minimum wage plus a productivity bonus. Survey data are not available for this industry, but in June 1993 managers mentioned average wages in the range of 500 to 600 Jamaican dollars per week, equivalent to 56-68 U.S. cents per hour. This is somewhat low for employees who have more formal education than the typical factory worker, but data entry operators work in quiet, air-conditioned offices, with flexible hours, so they enjoy greater non-pecuniary benefits than workers in the garment industry.

Piece rates are not used in the two electrical/electronic assembly plants on the island, but employees of these companies are eligible for group productivity bonuses, and they earn higher wages than sewing machine operators in the garment factories.[9] In telemarketing, telephone operators who answer toll free (800) numbers for hotel reservations and the like earn little more than the minimum wage. Direct sellers by telephone earn a basic wage plus commission on sales, and some of them do very well by Jamaican standards. Like data entry operators, telemarketing employees work in pleasant, air-conditioned offices.

Apart from the basic wage, the employer must also pay payroll taxes totalling 11.5%. This is in addition to the 6.5% deducted from the pay of the employee, who, in return, receives the benefits of the National Insurance Scheme. All employees receive pay for nine public holidays and two weeks annual vacation, which adds another 7.3% to the cost of labour. Employees are also legally entitled to up to two weeks of sick leave each year, and a medical certificate is required only for sick leave in excess of two consecutive days. To discourage misuse of sick leave, many companies pay their workers the unused sick leave days as a Christmas bonus at the end of the year. A female employee over the age of 18 who has worked for a minimum of twelve months is entitled to twelve weeks maternity leave, with eight weeks full pay.

Companies typically grant their employees additional fringe benefits that are not required by law, such as a punctuality bonus, free or subsidized lunches, free transportation to a central point (this is common practice in Montego Bay), additional health insurance, additional sick, vacation and maternity leave, and retirement benefits. These fringe benefits are more generous in the garment factories and assembly plants than in the data processing or telemarketing companies.

Jamaican law is quite permissive concerning retrenchment and layoffs. During the first three months, the employment of a worker can be terminated without notice and without paying any termination benefits. Afterwards, he or she must be given two weeks notice (or pay in lieu of notice), unless the worker has been employed for more than five years, in which case the notice is increased to four weeks. After ten years, the statutory notice is six weeks and after fifteen years it is eight weeks. If the employment is terminated through redundancy, there is further statutory provision of two weeks severance pay for every year of service after two years of employment up to ten years, and three weeks severance pay for each year of service in excess of ten years.

Unions are free to operate anywhere in Jamaica, provided a majority of workers in a company vote in favour of the union, but not a single free zone company at the present time is a union shop. A number of the garment producers operating outside the free zones are unionised, and labour relations in recent years have been good.

[9] The two plants also differ from garment factories in that they rely less on female labour. The electrical assembly plant has only male employees, while the electronic assembly plant has roughly equal numbers of male and female employees doing similar tasks for similar pay.

VI

Forward linkages

Since the Jamaican government is reluctant to allow free zone companies to compete with protected domestic firms, the free zones have almost no forward linkages with the rest of the economy. The free zone legislation makes provision for the export of goods from the free zones to the Jamaican customs territory upon payment of duty and with the consent of the Ministry of Industry, but to date such consent has been granted to only one company, a South Korean manufacturer of leather shoes that sells 10% of its output on the local Jamaican market.

Firms operating outside the free zones under the Export Industry Encouragement Act (EIEA) regime face severe obstacles if they attempt to produce for the local or subregional market, so all of them have opted to export the whole of their output to non-CARICOM markets. The only way they can legally supply the local market is by maintaining a physical separation in the factory between goods processed for export and goods processed for the local and CARICOM markets. However, the small size of the local market makes this unattractive. Even exporters that begin as producers of clothing for the local market soon specialize entirely in the export market, as the history of Davon Corporation illustrates very well.

Beginning in the late 1970s, Davon Corporation produced uniforms and other garments which it sold in Jamaica and exported to CARICOM countries. In 1981 the company began to expand, assembling clothing for the United States market under "Item 807" contracts. In 1984 the CARICOM market collapsed due to trade restrictions and the Jamaican market continued to shrink because of economic recession. Davon Corporation therefore elected to abandon production for the local and CARICOM markets and expand production for the United States market. All the workers who had been producing for the local market were made redundant and new, unskilled workers were hired and trained in their place.[10] The reason for this is the piece-rate system in effect in Davon's plants. In the words of the plant manager, "the operators were used to receiving 35 minutes of credit for a pair of pants that, by international standards, contained no more than 19 minutes of work. It was easier to change personnel than to reduce the piece-rates to which they were accustomed." Of course, given the lack of specialization and short production runs for the domestic market, productivity was low and generous piece-rates were necessary.

In recent years, the Jamaican economy improved and Davon decided to sell uniforms once again in the domestic market, where it had already built up a reputation. However, the company no longer produces uniforms for the Jamaican market, but instead subcontracts the production and supplies the uniforms with its own label directly to hospitals, hotels and other institutions. Davon is thus a subcontractor of U.S. firms, but in turn subcontracts Jamaican firms to supply the local market. The company has yet to return to the CARICOM market.

The result of this regulatory environment is a segmented garment industry in Jamaica. One segment is modern, large-scale, efficient, highly productive and produces solely for the export market. The other segment is small-scale, largely unspecialized, with low productivity and produces for the domestic and, to a very limited extent, CARICOM markets. There is virtually no contact between the two segments; neither workers nor managers move from one segment to the other. The government prohibits sales by exporters in the domestic market out of a desire to protect the inefficient segment of the industry. Nonetheless, considerable contraband (from suitcase traders, not the exporters) enters the country, with the result that the protected local industry supplies only an estimated 20% of the clothing purchased by Jamaicans.

[10] For the record, it should be noted that Davon is unionised, and severance pay was negotiated for the dismissed sewing machine operators.

VII

Backward linkages

Export processing plants in Jamaica have not developed backward linkages for the same reason that they have not developed forward linkages: i.e., on account of government policy. In order for a Jamaican business to supply any product or service to a free zone or EIEA company, it must be a registered exporter. Registration is a bewildering bureaucratic process filled with multiple forms and considerable administrative discretion. One requirement for exporters, for example, is that they obtain each month a tax compliance certificate that must be stamped by six different agencies.

This "red tape" discourages the local purchase even of small items such as office supplies, despite the willingness of companies to source some of their inputs locally. In the Montego Bay Free Zone, for example, Hanover Manufacturing, which assembles electrical equipment, was interested in adding more local value to its product by importing unpainted screws and subcontracting the painting to a local firm. Two companies were interested in the contract until they discovered the cost in both time and money of obtaining and retaining an export registration. As a result, Hanover continues to import the screws painted and ready for assembly.

In this regulatory environment, it is not surprising that export processing companies often find domestic products to be uncompetitive with imports in price and quality. Non-EIEA companies in the customs territory receive a tax rebate of 7.5% on "exports" to EIEA and free zone companies, as they do on exports to any non-CARICOM market, but this is not sufficient to overcome the competitive disadvantage caused by bureaucratic obstacles and by taxes on imported raw materials.

Not a single exporter purchases cartons or other packaging material from local companies. Managers of garment factories and the managers of the two electrical/electronic assembly plants interviewed by the author were of the unanimous opinion that Jamaican packaging costs many times more than comparable imported packaging. When Fargo Electronics began production in 1992 in the Montego Bay Free Zone, its manager attempted to source in the local market a variety of packaging materials, including paperboard boxes, plastic bubble packs and foam packaging. In all cases, he found very long lead times to begin production, high costs, and a requirement that the free zone company pay "up front" all the tooling costs.

Nonetheless, paperboard boxes are bulky items in which freight represents a large proportion of their CIF import cost, so an incentive exists to obtain this input locally. The largest garment producer in Jamaica (East Ocean Textiles, a Hong Kong company that employs nearly four thousand workers in the Kingston Free Zone) set up a box factory within its factory in September 1985. The factory houses modern equipment, including a boiler, the island's only double facer, cut & crease and printing machines. In it, a total of 35 employees produce an average of 40 000 boxes a month, a small portion of which are sold to other free zone companies.[11]

One activity does take place that might be interpreted as a backward linkage: subcontracting by free zone companies to companies that operate in the customs territory. Garment producers subcontracted a considerable amount of production in 1987 and 1988, when apparel exports were booming, and some subcontracting continues today. But these subcontracts can be awarded only to firms operating under the EIEA regime, so are actually "intra-export processing sector" purchases of services rather than linkages with the domestic economy. Moreover, unlike the case of subcontracting in South Korea, where "goods processed ... by the outzone activity" must be "components or intermediate products for production processes finalized in the export processing zone" (Healey and Lütkenhorst, 1989, p. 28), the Jamaican subcontractor carries out the entire process that would otherwise be effected by the contracting firm. Bongwon Apparel, for example, a South Korean

[11] For more details on the East Ocean Textiles box factory, see Kingston Free Zone Company Ltd. (1992).

company in the Kingston Free Zone, subcontracts the manufacture of blouses to Davon Corporation, an EIEA firm. Davon receives a container of cloth, thread and buttons from Bongwon, then cuts, makes and trims the blouses before returning the finished garments to Bongwon.

In sum, the subcontracting that takes place in Jamaica does not represent a linkage of any kind with the Jamaican domestic economy. Backward linkages do not exist between export processing firms and the rest of the economy, and this is a result –intentional or not– of Jamaican government policy.

VIII

Conclusion

Jamaica's success in export processing is due in part to factors that are beyond the control of its government. Data processing and telemarketing benefit from proximity to the United States and from the fact that Jamaicans speak English. Garment exports are stimulated by Jamaica's preferential access, via quota allocations, to protected markets. There are few examples of the assembly of goods such as household appliances, toys or electrical equipment, which are not allocated country-specific quotas in the industrial countries.

Nonetheless, the Jamaican government's role in development of the island's export processing sector has been far from negligible. In the first place, it is the government that grants tax concessions to companies in the form of free trade status or Export Industry Encouragement Act (EIEA) incentives. In addition, the Jamaican government has encouraged investment through promotional activities, by making factory shells available for rental and by facilitating work permits for expatriate managers and technical personnel.

Export processing provides productive employment for more than 30 000 Jamaicans. Since most of the jobs require little training, and plant managers for the most part are expatriates, it is tempting to conclude there has been little transfer of technology and little development of Jamaica's human resources. There are grounds for believing that such a conclusion is unwarranted, however, for two reasons. First, many of these workers have been introduced for the first time to notions of punctuality, quality control and deadlines: in sum, to a work ethic. Secondly, although there are skilled jobs that are currently filled by expatriates, the fact that expatriates are more expensive than local employees means that Jamaicans will gradually fill these jobs as qualified applicants become available. Indeed, this has already happened in the case of supervisors, who are now recruited entirely from the local labour market.

A conspicuous failure of export processing in Jamaica is the almost complete absence of linkages with the domestic economy. Forward linkages are frustrated by policies designed to shield firms in the domestic economy from competition: with rare exceptions, Jamaican workers and their families are not allowed to consume the goods that they produce. Backward linkages have not developed because domestic firms face serious, virtually insurmountable obstacles when they attempt to sell their products and services to exporters. The Jamaican government does not restrict export processors to *physical* enclaves: in most cases, they are free to operate plants anywhere on the island, but the tragic fact is that its policies do confine them to *economic* enclaves isolated from the rest of the economy.

Writers on this subject frequently assume that export processing companies have a distinct preference for sourcing their raw materials from abroad, so that backward linkages will not occur, regardless of government policy. It is possible to list export processing zones where virtually all material inputs are imported from abroad. Well-known examples, in addition to Jamaica, are the Dominican Republic and the northern border of Mexico. On the other hand, zones do exist where exporters have developed important linkages to domestic producers.

Export processors in such diverse countries as South Korea, Mauritius and Saint Lucia are known to purchase a significant amount of material inputs from local producers. When South Korea opened the Mason Export Processing Zone in 1971, local factories supplied only 3.3% of the raw materials and intermediate goods processed by it, but this share

increased to 25% in just four years, and eventually reached 44% (Healey and Lütkenhorst, 1989, pp. 24-32; UNCTC, 1991, pp. 331-343). Mauritius, a small island in the Indian Ocean, also inaugurated in 1971 an export processing zone that attracted considerable Chinese investment in garment factories. By 1985, domestic producers were supplying 41% of all the intermediate inputs into the zone's garment industry, including nearly all the paperboard boxes, and a large proportion of the cloth, thread, buttons and trimmings (Hein, 1989, p. 48). In Saint Lucia, a tiny Caribbean island with 137 000 inhabitants, 15 export processing plants manufacture and assemble garments, electrical equipment and plastic novelty items. Fourteen of the 15 companies purchase all their paperboard boxes from a local factory, and they rely on local suppliers for additional intermediate inputs as well (Willmore, 1993).

By implementing appropriate policies, these three countries have facilitated linkages between their export processing plants and the domestic economy. South Korea, Mauritius and Saint Lucia differ in many respects, but they have one thing in common: the authorities allow indirect exporters to import material inputs at duty-free prices, and encourage domestic producers to supply the export processing factories. This is not true in countries like Jamaica or the Dominican Republic, where, as a consequence of government policy, export processors import all their raw materials and intermediate goods.

(Original: English)

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Price elasticity *of Central American* agricultural exports

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The economies of the Central American countries (Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua) are largely dependent on four major traditional export products: bananas, coffee, cotton and sugar. The share of these products in total Central American exports, which is still close to 50%, only started to decline in the late 1980s. This paper explores the determinants of these four products' production trends, and the importance of non-price-related economic and social factors and of man-made and natural disruptions is fully acknowledged. However, an attempt is made to use the ECLAC-Mexico database to estimate the supply price elasticities for the four products over the 1960-1990 period, testing simplified linear regression models which include only output prices as the relevant explanatory variables. No significant statistical relations could be found between production and price in the cases of bananas and sugar, while cotton production appears to react to a certain extent only to year-to-year price changes. Supply elasticities could be calculated only for coffee, and they turned out to be quite low. The paper therefore concludes that the potential for export expansion in small, poor countries by means of orthodox policies affecting mainly macroeconomic prices should not be overestimated.

I

The role of traditional agricultural exports in the Central American economies

The Central American countries –Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua– are still heavily dependent on traditional agricultural exports, with bananas, coffee, cotton and sugar representing on average 57% of total exports for the region as a whole in the period 1980-1989. In no country was the figure less than 50%, and it was over 60% in Honduras and Nicaragua. The relative weight of the four products started to decline slowly only in the late 1980s, and for the first time in 1991 it was below 50% for the region as a whole (see table 1).

Traditional export products continue to be crucial to the Central American economies in spite of the fact that they constitute no exception to the general economic crisis which has been affecting the region since the early 1980s, owing both to unfavourable trends in international prices (with the exception of bananas) and to a lack of technical progress in production. During 1980-1989 the dollar value of total Central American exports declined on average at a yearly rate of 1.8%, and that of the four major traditional exports at 2.3% (see ECLAC-Mexico 1992b, table 30). The crisis was particularly acute for cotton, which all but disappeared as a source of foreign exchange, while exports of bananas were the only ones to grow during the decade, at an average rate of 4.4% in value. Cotton production declined precipitously, at an average rate of 12.8% per year, while that of the other products increased only marginally (0.8%, 1.2% and 1.8% for coffee, bananas and sugar cane respectively). In Nicaragua all four products experienced a decline in production, while only in Guatemala did the overall production volume increase substantially 1 (see table 2).

TABLE 1

Central America: Relative weight of the four traditional agricultural exports in total exports
(Percentages)

	1970-1979	1980-1989	1990	1991
Bananas				
Costa Rica	23	23	23	26
El Salvador [a]	...	...	...	...
Guatemala	3	6	7	7
Honduras	29	33	45	43
Nicaragua	1	5	8	11
Central America as a whole	*9*	*15*	*19*	*19*
Coffee				
Costa Rica	31	28	18	18
El Salvador	45	59	45	37
Guatemala	36	34	27	23
Honduras	25	24	22	20
Nicaragua	22	34	21	14
Central America as a whole	*33*	*35*	*25*	*22*
Cotton				
Costa Rica	...	...	...	...
El Salvador	9	4	...	...
Guatemala	13	6	2	2
Honduras	1	1	...	...
Nicaragua	24	21	11	18
Central America as a whole	*9*	*4*	*1*	*1*
Sugar				
Costa Rica	4	2	2	2
El Salvador	4	3	3	6
Guatemala	8	6	13	12
Honduras	1	3	1	2
Nicaragua	5	5	12	12
Central America as a whole	*5*	*4*	*6*	*6*
Traditional agricultural export products				
Costa Rica	56	52	43	45
El Salvador	58	66	48	44
Guatemala	59	52	50	44
Honduras	55	61	69	64
Nicaragua	53	65	52	55
Central America as a whole	*57*	*57*	*51*	*49*

Source: ECLAC-Mexico, 1992b, table 30.
[a] Three points (...) indicate a relative weight of less than 1%.

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[1] These data come from the ECLAC database and preliminary production estimates for 1991, based on official figures. For further statistical evidence on the production trends of traditional agricultural exports in Central America, see ECLAC-Mexico (1992b).

TABLE 2

Central America: Growth rates of production and exports of bananas, coffee, cotton and sugar [a]
(Percentages)

	Production				Exports			
	1970-1979	1980-1989	1990	1991	1970-1979	1980-1989	1990	1991
Bananas								
Costa Rica	2.1	3.5	8.1	5.6	12.3	3.7	13.9	20.7
El Salvador	...	...	...	...	...	...	...	...
Guatemala	3.3	-1.2	4.0	1.7	3.9	7.5	-1.0	-7.1
Honduras	1.8	-0.2	-4.2	-7.0	12.1	4.0	4.2	-9.1
Nicaragua	20.5	-2.1	7.4	8.9	41.0	9.6	34.5	5.9
Central America as a whole	*2.5*	*1.2*	*3.2*	*1.1*	*11.9*	*4.4*	*8.1*	*3.5*
Coffee								
Costa Rica	2.3	3.6	13.1	-6.1	17.6	1.6	-14.3	8.5
El Salvador	3.7	-1.5	-7.6	-1.6	22.2	-9.3	1.6	-13.5
Guatemala	3.0	1.0	4.8	-2.5	17.6	-2.2	-16.8	-11.1
Honduras	8.9	3.9	14.9	-11.5	25.2	-0.9	-5.2	-14.3
Nicaragua	4.0	-2.9	-35.5	45.6	19.5	1.0	-20.8	-48.1
Central America as a whole	*3.8*	*0.8*	...	*-2.7*	*20.1*	*-3.8*	*-10.8*	*-10.2*
Cotton								
Costa Rica	16.7	20.4	...	-50.9	2.5	...	...	...
El Salvador	2.4	-19.9	-24.1	-15.0	15.9	-40.4	62.5	23.1
Guatemala	11.3	-11.8	-8.0	8.8	24.6	-18.8	-9.7	-12.2
Honduras	17.7	-15.6	-1.5	-64.7	29.7	-25.1	...	...
Nicaragua	-14.1	-11.7	20.6	-5.7	16.5	1.0	12.9	28.9
Central America as a whole	*2.6*	*-12.8*	*0.5*	*-0.3*	*19.6*	*-15.9*	*1.7*	*12.7*
Sugar								
Costa Rica	2.3	-1.5	11.1	7.9	17.1	-10.3	69.9	17.3
El Salvador	8.6	0.6	21.9	13.5	16.1	1.3	34.4	72.9
Guatemala	10.0	5.4	12.5	4.7	21.6	3.2	66.0	-7.6
Honduras	7.1	-0.8	8.8	8.1	30.6	-10.6	11.8	22.8
Nicaragua	1.4	-0.8	16.8	-3.4	8.0	4.0	31.6	-19.0
Central America as a whole	*6.1*	*1.8*	*13.7*	*5.9*	*17.2*	*-0.7*	*53.8*	*1.2*

Source: ECLAC-Mexico, 1992b, tables 21 and 30.
[a] Growth rates of exports refer to their value in current dollars.
[b] Three points (...) indicate that growth rates are not applicable because levels of production and exports were zero or insignificant.

II

The relevance of non-price factors

The ECLAC Subregional Headquarters in Mexico recently carried out a study on the situation and prospects of traditional agricultural exports in Central America (see ECLAC-Mexico, 1992b). The study focused, among other topics, on the evolution of production and its main determinants.

Production changes were caused by a number of economic and non-economic factors, many of which are not quantifiable or even comparable with the others. Military conflicts disrupted economic life in rural areas for long periods of time in El Salvador and Nicaragua and, to a lesser extent, in Guatemala. Weather conditions affected production in various ways which cannot be explained on the basis of rainfall statistics nor the existing incomplete historical information on the frequent natural disasters.

Moreover, several other social and economic non-price factors affected production trends as well. The effective availability of credit and the controls on its utilization, more than interest rates, determined to a large extent farmers' ability and willingness to carry out the various activities which have to be performed in the course of the cultivation cycle and to engage in investment aimed at increasing their productive capacity. Ill-conceived reforms in trade, fiscal and market arrangements, as well as other legal, physical and infrastructural constraints on internal transport and trade, limited the market value and liquidity of export crops and hence the incentives to produce them. The availability of labour and the supply of basic manufactured products in many rural areas were severely curtailed by the military conflicts, reducing the real purchasing power of farmers' monetary balances and thus production incentives. [2] Uncertainty on property rights contributed in some countries to discourage investments in new productive facilities and even in the maintenance of existing ones.

Man-made ecological disruptions, the scope of which cannot be adequately measured, also played a role, the most serious of them being the long-term fertility loss caused by the excessive use of pesticides and other chemicals in cotton cultivation.

III

A simplified model

Notwithstanding the recognized importance of non-price factors, an effort was made to use information from the ECLAC-Mexico data base, covering the 1960-1990 period, to test the very general hypothesis that there might be a positive correlation between producer prices and production levels.

A number of studies have been carried out since the late 1940s on price responsiveness in agriculture, with particular reference to smallholders' behaviour and to the African continent. For instance, positive but moderate supply elasticities were found by Maitha (1969) and Ady (1968) for coffee, in Kenya and Uganda respectively, and by Olayide (1972) for cotton in Nigeria. The results of these and several other studies –many of which failed to establish significant correlations between production and prices– were commented by Helleiner (1975), who concluded that, while they helped to disprove the myth of generalized "irrational" or "non-economic" behaviour on the part of smallholders, the findings also demonstrated the limited justification for focusing exclusively on producer prices, as well as the complexity of farmers' decision-making patterns. More recently, the theoretical and policy-oriented debate has continued, fed by diverging interpretations of new empirical findings. Balassa (1990), Berg (1989) and Bond (1983), among many others, have emphasized the

[2] In many rural areas in Nicaragua, for instance, during most of the last decade, rationing of basic products, internal trade disruptions due to the armed conflicts and hyperinflation dramatically reduced small farmers' incentives to increase their monetary incomes.

importance of farmers' supply response to prices even in very traditional contexts. On the other hand, Helleiner, Lele, Lipton and Mellor are among those who argue against over-reliance on price policies, while advocating comprehensive, long-term agricultural and export-enhancing strategies (see, for instance, Gbetibouo, Lele and van de Walle, 1989; Lipton, 1987; and Mellor, 1990). The latters' position appears to have been strengthened by most of the evidence which became available in the 1980s, as recognized for instance by the World Bank (1990).

In the case of traditional export products in Central America, as well as in other studies of the same kind, a complete model should have included the cost of inputs and –when appropriate– the prices of competing crops, as the standard micro-foundation of price-responsiveness is that farmers engaged in the production of export-oriented crops seek to maximize profits against the background of the existing production constraints. [3] This was not possible, however, due to the limited coverage of the available data, which do not include complete series for the prices of inputs and of alternative outputs which might compete with the four traditional agricultural products for the use of the land. [4] As a matter of fact, the data base does include an aggregated index of the price of grains, which can compete with cotton for the use of flat, irrigated lands; however, preliminary attempts to use grain prices as explanatory variables in the cotton models showed that their influence, though of the right sign, was not statistically significant. As far as input prices are concerned, the limited data available for the 1980s show a strong upward trend (see table 3) which certainly played a major role in discouraging production, especially in the case of cotton, the most input-intensive of the four traditional crops.

Taking into account the incomplete availability of data, we decided to test very simplified linear regression models, which include only product prices as the relevant explanatory variables, whose influence on production can be modified in some cases by exchange rate variations or civil strife.

TABLE 3

Central America: Indexes of input costs in four Central American countries [a]

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Costa Rica											
Fertilizers	...	...	100	84	107	129	124	122	133	133	138
Herbicides	...	...	100	77	120	138	158	374	157	172	195
Insecticides	...	...	100	91	105	131	143	145	176	195	216
El Salvador											
Fertilizers	100	121	130	103	121	105	183	171	161	169	184
Guatemala											
Fertilizers	...	...	...	...	100	122	149	168	188	195	202
Pesticides	...	...	...	...	100	122	150	177	272	255	238
Honduras											
Insecticides	100	115	132	146	144	148	149	149	157	151	271
Herbicides	100	136	133	139	135	127	129	124	127	171	286
Fertilizers	100	119	121	122	107	101	99	91	92	115	190

Source: ECLAC-Mexico, 1992b, table 22.

[a] The price indexes for the product groups reported in this table are simple averages of the price indexes for single products.

[3] As is well known, the validity of the profit maximization assumption itself is limited by a number of factors, among which the following may be mentioned: the prevalence of incomplete and asymmetric information, contributing to complex and non-homogeneous expectation-building mechanisms on the part of different categories of producers; the possibility that small farmers may adopt a partial subsistence orientation, leading to zero or below-market evaluation of the price of family labour; and the cultural or prestige-oriented attachment to traditional crops on the part of wealthy landowners.

[4] An example is constituted by the price of cattle, which (together with expectations on the availability of export market outlets) can be relevant for investment decisions affecting coffee production.

IV

Structural differences among the four traditional export products

The results confirmed the *a priori* expectations. It proved impossible with reasonably simple models to obtain statistically significant econometric correlations between prices and production for bananas and sugar in any country. This negative result was to be expected for these two products, because their nominal prices, both in domestic and international markets, constitute wholly inadequate profitability indicators.

As is well known, in the banana business profitability and production decisions are essentially dependent on the strategies of a few transnational corporations, which effectively control world markets all the way from the plantation to the distribution networks in the industrialized countries.[5] It is logical to assume that, in a collusive or oligopolistically competitive fashion, the corporations fix international prices according to their perception of demand trends in the major markets, while they see farmgate prices on plantations as little more than internal accounting prices, so that producer prices and production targets for individual banana-growers are also determined by the transnational corporations. National producers in some Latin American countries have created independent trade channels in a few cases, but they control too small a share of the world market to avoid acting as price takers too. Furthermore, although to a lesser extent than for other traditional agricultural products, industrialized countries' discriminatory import and trade policies also help to complicate the relationship between the various prices prevailing in Europe, the United States and other developed areas and producers' expectations and behaviour in Central and South America, Africa and Asia.[6]

This latter factor is considerably stronger in the case of sugar. World markets are fragmented and distorted by government interventions on the part of the main developed countries, which, besides protecting very heavily their own growers and refiners, discriminate unilaterally among sugar exporters from the developing world by means of national quotas and arbitrary purchasing prices.[7]

Moreover, the technical features of the banana and sugar industries are such that their annual production levels are determined mainly by large infrastructural investments carried out in the past in a discrete fashion and for strategic long-term purposes.[8] This constitutes a further rigidity factor and makes it even more difficult to explore econometrically the relationship between prices and production.

On the other hand, in the cases of coffee and of cotton, production and trading activities are not vertically integrated, at least in Central America. Although large landowners traditionally play a very important role, a significant share of production is supplied by small and medium farmers, especially in the case of coffee. Moreover, even the large coffee and cotton producers are mostly Central American nationals and act as price takers when selling to the world markets, which are controlled by transnational trading corporations based in the developed countries.[9]

Statistically significant results, consistent with *a priori* knowledge of their production and marketing features, were obtained in most Central American countries for coffee and in Guatemala and El Salvador for cotton.

[5] Moreover, during the last decade this oligopolistic situation has been very unstable, with frequent takeovers, entries and exits from the market adding a further element of instability to the relationship between production and prices.

[6] See, for instance, Ellis (1984), López (1986), U.N.-ECOSOC (1989), Martínez Cuenca (1991), OECD (1991) and UNCTAD (1992).

[7] See, for instance, UNCTAD (1990, 1992), ECLAC-Mexico (1992a), Viatte and Cahill (1991) and Davenport (1988).

[8] See, for instance, Brown (1987), López (1986) and U.N.-ECOSOC (1989).

[9] See, for instance, UNCTAD (1992).

V

Empirical analysis[10]

1. Coffee

In principle, prices should affect coffee production through their influence on plant sowing and renewal decisions, with a 5-6 year cycle, and on pruning, fertilization and other annual activities.[11] Actually, however, no statistically significant relation could be found between production and prices when the latter were lagged by 5 or 6 years. This negative result might suggest (apart from the inadequacy of the data base) that major investments in coffee plantations depend on economic –and possibly social– factors different from the price of the grain.

On the other hand, in all countries but Nicaragua, satisfactory results were found using as explanatory variables the prices lagged by one year in logarithmic regressions which also included one or two lagged endogenous terms. For Costa Rica, Guatemala and Honduras domestic (producer) prices in dollars[12] were used as explanatory variables, while for El Salvador the best fit was obtained with the world price and the exchange rate as two separate explanatory variables.[13] The exchange rate coefficient has the expected (negative) sign, indicating in principle a positive effect of devaluations on coffee production.

The short and long-term elasticities of coffee production with respect to price –and, in the case of El Salvador, with respect to the exchange rate too– are presented in table 4. Short-term elasticities are low, suggesting that policy measures aimed at increasing the producer price in real terms –for instance, through subsidies, lower net taxation, multiple exchange rates or even overall devaluation– in order to promote production growth would have positive, but limited effects.[14] As far as long-term elasticities are concerned, they are presented mainly for the sake of the formal completeness of statistical information. Actually, their informative value is quite modest, because the existence of a positive correlation between production and price could be proved only in the short term.

TABLE 4

Central America (four countries): Elasticities of coffee production with respect to prices [a] and exchange rates

	Price		Exchange rate	
	Short term	Long term	Short term	Long term
El Salvador	0.1386	0.2014	-0.1908	-0.2886
Guatemala	0.1513	0.3721		
Costa Rica	0.0779	0.7853		
Honduras	0.1931	0.8915		

[a] Price elasticities refer to the domestic producer price in dollars for Costa Rica, Guatemala and Honduras, and to the international price for El Salvador.

[10] Only the main results of the study are given in this section.

[11] At the end of the production year, all past investment decisions are sunk costs, and coffee producers generally try to carry out harvesting activities in full even under very adverse market conditions. As harvesting costs constitute the lion's share of annual production costs in a normal year, the short-term responsiveness of production to prices is correspondingly diminished. However, international prices are currently so depressed that it is quite possible that, especially in remote mountainous areas, harvesting costs might exceed on-farm selling prices. According to preliminary reports, this has actually happened in various Central American countries with the 1991/92 coffee crop.

[12] The implicit assumption is that producers, instead of focusing on the amount of local currency they receive, see the dollar value of their earnings as the measure of their real purchasing power. This behaviour may be due to their interest in purchasing investment or consumer goods and services which can only be bought with hard currency (inside or outside the country), and/or to their habit of anticipating the inflationary outcomes of devaluations.

[13] This regression specification, however, shows a low R^2 (0.633). Alternative specifications including a dummy variable (WAR) were also tried for the years 1980-1990. These regressions did not perform well, and the coefficients and t-ratios of the dummy variable were extremely low. This negative result suggests that the war did not significantly affect coffee production in the 1980s. In contrast, the WAR dummy proved significant in the case of cotton production.

[14] Of course, this observation is only valid when market conditions are approximately "normal". In the present situation, with international coffee prices so low that many producers are actually experiencing net losses, government subsidies can be considered as a necessity in order to avoid a general collapse of the sector.

2. Cotton

Acceptable results for cotton were found only in the cases of El Salvador and Guatemala, using simple dynamic models where the (short-term) production growth rate is regressed on the (short-term) rate of growth of prices.

In reality, general dynamic regressions with the level of production on the left side and the lagged values of production and prices on the right side –as in the case of coffee– were run in the first place, and their results pointed toward a specification in first difference. The model was therefore modified in order to allow an estimate of the correlation between the growth rates of the variables.

The original one-year-lagged model was $P = f(P_{t-1}, p_t, p_{t-1})$, which could be expressed by the following log-linear equation:

$$(1) \quad log(P) = C + a\ log(P_{t-1}) + b_1\ log(p_t) + b_2\ log(p_{t-1}),$$

where
P = Production
p = Price.

Introducing the restriction $b_1 = -b_2 = b$ and subtracting $\log(P_{t-1})$ from both sides, we get the more restricted model:

$$(2) \quad log(P) - log(P_{t-1}) = C + (a - 1)\ log(P_{t-1}) + b\ [log(p_t) - log(pt-1)],$$

or

$$(3) \quad \dot{P} = C + (a - 1)log(P_{t-1}) + b\dot{p}$$

where $\dot{P}$ and $\dot{p}$ are growth rates.

Equation (2) could be estimated for Guatemala and El Salvador, adding the dummy variable WAR in the latter case (with value 1 in the period 1980-1990 and 0 in the other years). *t*-ratios for the price variable VARPRINAL and test statistics are satisfactory, although R^2 statistics are low (just over 0.5 for Guatemala and below 0.4 for El Salvador), reflecting the limited role of prices in explaining the evolution of production.

The coefficients of the variable VARPRINAL $(log(p_t) - log(p_{t-1}))$, which can be interpreted as short-term elasticities of the growth rates of production with respect to the growth rates of producer prices, are 0.4635 for El Salvador and 0.7556 for Guatemala, and they appear to suggest a strong short-term positive correlation between price changes and sowing decisions.

A possible explanation of producers' behaviour is that, in contrast to coffee plantations, the land suitable for cotton cultivation is flat and is also suitable for other crops, such as grains. Producers must decide every year if they are going to cultivate cotton –an option which implies a substantial short-term investment– or an alternative crop. Thus, year-to-year cotton price changes might significantly affect production in the short term. [15]

Coefficients and t-ratios for the lagged endogenous variable LPROAR (-1), which can be interpreted as reflecting the influence of long-term factors on production variations, were high and significant in the case of Guatemala but low and insignificant in the case of El Salvador. To check the hypothesis that long-term economic factors not related to producer prices have significantly different effects on cotton production in Guatemala and El Salvador, control regressions were also run for both countries dropping the variable LPROAR (-1). The regression fit, compared to the base case, worsened dramatically in the case of Guatemala, but only marginally in that of El Salvador. These results appear to indicate that the lack of political stability in El Salvador helped to restrict the behaviour of producers to the very short term, while their counterparts in Guatemala were able to plan their production strategies better, at least to a certain extent.

Finally, it may be noted that for El Salvador, the dummy variable WAR is significant and has a high negative coefficient (- 0.33), reflecting the disruptive effect of the war on cotton production.

[15] This explanation is also supported by producers' practical experience, as commented by Alfredo Gil Spillari of the Guatemalan National Cotton Council at a seminar on the current situation and future prospects of traditional agricultural export products, held at ECLAC-Mexico on 10-11 December 1992. Such an argument does not rule out the existence of a positive correlation between production and prices in the long run, which might be reflected in the coefficients of the lagged endogenous variable and in the explanatory power of the regressions, together with the influence of other variables affecting the evolution of production. As a matter of fact, the value of R^2, though acceptable, is lower than 0.8 in the case of Guatemala. For El Salvador, R^2 is higher, but the values of Durbin's h and Ramsey's RESET test statistics are high and only marginally acceptable, suggesting possible autocorrelation and mis-specification problems.

VI

Summary and conclusions

This exercise shows that, in the case of traditional agricultural exports in Central America, the response of production to price stimuli is not very important, and in some cases could not be statistically confirmed.

These results invite caution in assessing the merits of standard adjustment-cum-liberalization programmes in small, poor countries with a traditional, rigid and undiversified export structure, as market-induced shifts in production cannot be expected to be sizeable, at least in the short/medium run.[16] The weakness of price factors points to the importance of complementing the adjustment effort and fostering modernization and diversification, for example through specific industrial policies aimed at earmarking the bulk of additional imports for selected sectors with a recognized potential for export expansion.

(Original: English)

[16] Similar conclusions have been reached by various recent studies (see, for instance, Daniel, Green and Lipton (1985); Aziz (1990); Lipton (1987); Mullor-Sebastian (1990); Taylor (1988), and World Bank (1990). See also Brinkman and Gabriele (1992). In the case of Costa Rica, in particular, an econometric exercise based on data for the 1980s showed that exports as a whole tend to be price inelastic, and thus export subsidies do not constitute an efficient policy instrument (Hoffmeister, 1991, p.19).

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Ecuador: the country's *progress from* chronic to *moderate inflation*

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A new stabilization programme has been in effect in Ecuador since September 1992. This article examines the nature of this economic policy, briefly compares it with other stabilization efforts made in the country in the 1980s, and evaluates its achievements so far. By the end of 1993 it had been possible to bring inflation down to 32% per year, after five years in which the rate had averaged more than 55%. It has thus been possible to progress from a situation of chronic inflation to one of moderate price rises, but this has been accompanied by a decline in economic activity, in spite of the drop in real interest rates and the use of the exchange rate as a nominal anchor. Despite the latter, however, the trade balance has not suffered as much deterioration as might have been expected. The study ends with a rapid review of the obstacles that will have to be overcome in the future in the light of a further appreciable reduction of inflation in 1994, as planned by the monetary authorities.

I

Introduction

The performance of the Ecuadorian economy over the last ten years has been fundamentally unstable, for both domestic and external reasons. Rates of saving and investment fell substantially compared with the previous decade, while economic growth was only moderate. Generally speaking, the living conditions of most of the population deteriorated, and the Ecuadorian economy fell behind the rest of Latin America after having been among the most dynamic in the 1970s.

The problems worsened particularly from 1987 onwards, when inflation began to gather speed. Despite the stabilization efforts made as from the second half of 1988, the situation did not improve, as prices rose by an average of 57% per year between then and 1992.

In September 1992, only a few days after a new government had taken office, a new stabilization programme was applied. So far, the results have been encouraging, since the macroeconomic balances have been restored, inflation has been significantly reduced, and the international reserves have been substantially increased, although at the same time –perhaps inevitably– there has been a marked appreciation of the exchange rate in real terms and a slackening of economic growth. Considerable progress has been made in the fight against inflation, but there is still a long way to go, since so far it has been possible to move from a situation of chronic inflation to one of moderate price rises.[1] The experience of other countries of the region indicates that moderate inflation is particularly difficult to overcome.

This article aims to evaluate the results of the adjustment programme initiated in September 1992. In addition, it briefly analyses the short-term outlook for the economy in the light of the government's announced aim of bringing inflation down to a significantly lower level (section I); reviews the background to the introduction of the present stabilization programme, since this will make for a better understanding of the nature of the stabilization strategy chosen (section II); examines this strategy and makes a brief comparison with earlier stabilization programmes tried out in the country in the 1980s (section III); analyses the present situation and indicates the achievements and shortcomings of the policy applied (section IV); comments briefly on the feasibility of achieving the further appreciable reduction of inflation proposed by the government for 1994 (section V), and finally notes the most important conclusions that may be drawn (section VI).

II

Background to the present stabilization programme

Although the problems experienced by Ecuador during the last decade are usually associated with the external debt crisis, they were really being incubated in the 1970s and began to show themselves early in the 1980s. Thus, when the economy began to grow strongly with the initiation of petroleum exports and the subsequent rise in international oil prices, distortions were building up which were reflected in severe

□ The author wishes to express his gratitude for the valuable comments made by Augusto de la Torre, Santiago Bayas and José Samaniego, who of course bear no responsibility for any errors which may exist in this article.

[1] This level of inflation is usually defined as one in which prices rise by between 15% and 30% per year.

imbalances in the fiscal and external accounts.[2] The problems got worse in the first few months after the restoration of democracy in the country –that is to say, towards the end of 1979–, following the adoption of measures which led to fiscal expansion and a big increase in production costs. [3]

This situation could be endured as long as international interest rates stayed low and, in general, as long as the necessary external financing was available. The external debt crisis therefore uncovered problems which had been building up in the course of previous years.

From the onset of that crisis, there was an increase in the external vulnerability of the economy. Various exogenous events in the following years caused the country to suffer heavy foreign exchange losses: among these events were the floods in late 1982 and 1983, which caused a contraction in traditional exports, and the 1987 earthquake, which obliged the country to suspend its petroleum exports for some five months. Generally speaking, there was a steady decline in the terms of trade throughout the 1980s. In order to tackle these problems, adjustment policies were adopted on the external front, but these were not always accompanied by coherent policies in the area of aggregate demand, so that the decade was marked by growing inflation. Table 1 gives an overview of the performance of the Ecuadorian economy during this period.

Early in 1983, a first stabilization programme was put into effect, its aim being to tackle the external debt crisis and the destructive effects of the floods in the coastal region of Ecuador, which had reduced banana, coffee and cocoa exports. This adjustment programme was of a completely orthodox nature, being based on a fiscal and monetary adjustment, supplemented with a policy of depreciation of the exchange rate in real terms. As a result, between 1982 and 1983 it was possible to eliminate the non-financial public sector deficit, which had been amounting to nearly 7% of GDP, while the external current account deficit went down from over 11% to only 1% of GDP, thus making it possible to reduce the end-year inflation by more than half between 1983 and 1984 (from 52.5% to 25.1%). The restoration of the macroeconomic balances and the lower inflation made possible the reactivation of the economy, which grew by over 4% per year in 1984 and 1985.

This recovery process was interrupted by the rapid slump in oil prices in 1986 and the 1987 earthquake. Because of the shortage of foreign exchange, Ecuador ceased to service its external debt with the commercial banks, but on the domestic front the policies applied were not in keeping with this, because instead of becoming more contractive they became increasingly expansive. As a result, the fiscal and external imbalances got worse, and the annual growth rate of the monetary base ("seigniorage") rose still further, leading to a decline in the net international reserves to negative levels in mid-1988, cumulative inflation of nearly 50% per year in the first seven months of that year, and severe distortions in relative prices. This deterioration of the economy coincided with the last year of office of the then government.

A few days after taking office, at the end of August 1988, the new government adopted a stabilization programme which it called the National Emergency Plan, of a similar nature to the economic programme successfully applied in 1983. Essentially, the aim was to bring relative prices back in line and gradually reduce the existing macroeconomic imbalances. After the initial adjustment,[4] the main components of this programme were the establishment of an exchange policy based on gradual adjustments announced in advance, with the aim of maintaining the competitiveness of the sectors of the economy producing tradeable goods, and similar gradual adjustments in the prices of public goods and services, especially gasoline. Despite these efforts, however, at the end of 1989 inflation had only gone down to 54%, in contrast with the target of 30% announced by the government, and this undermined the credibility of the economic programme. At the same time, the programme had a high cost in terms of production, since the growth rate was barely positive.

[2] The way this external shock was transmitted was through the appreciation of the real exchange rate, which encouraged a form of resource allocation favouring domestic production activities and consumption to the detriment of the sectors producing internationally tradeable goods (except petroleum). This phenomenon has been extensively studied in the economic literature under the name of the "Dutch disease". In this respect, see for example Corden and Neary (1982) and Corden (1984) and, with particular reference to Ecuador, de la Torre (1987) and Jácome (1989).

[3] Due, for example, to the doubling of minimum wages and the reduction of the working day by nearly 10%.

[4] The measures included a 45% devaluation, price rises for public goods and services (in particular, the domestic price of gasoline was doubled), elimination of the wheat subsidy, wage increases of the order of 16%, and other measures in the area of taxation.

TABLE 1

Ecuador: macroeconomic indicators, 1980-1990

Year	Annual growth rate				As a proportion of GDP			Indexes	
					Balance				
	Real GDP	CPI [a]	M1 [b]	TT [c]	NFPS [d]	Current account	Seigniorage [e]	REER [f]	Real wages
1980	4.9	16.3	28.0	6.6	-4.7	-7.0	1.4	110.0	139.1
1981	3.9	17.2	11.3	-5.8	-5.6	-10.0	0.7	125.2	121.4
1982	1.2	24.4	20.2	-16.1	-6.7	-11.5	0.9	122.6	109.3
1983	-2.8	52.5	30.4	-22.4	...	-1.2	1.0	116.7	101.4
1984	4.2	25.1	42.2	0.4	-0.6	-2.6	2.2	96.3	102.0
1985	4.3	24.4	23.6	-2.0	1.9	1.0	1.5	100.0	100.0
1986	3.1	27.3	20.4	-27.1	-5.1	-5.7	2.0	80.5	103.6
1987	-6.0	32.5	32.3	-5.2	-9.6	-11.9	2.3	61.9	95.5
1988	10.5	85.7	53.8	-22.0	-5.1	-5.8	3.1	46.5	78.1
1989	0.3	54.2	38.1	2.7	-2.9	-4.6	1.8	53.8	61.6
1990	2.3	49.5	52.2	5.7	1.1	-1.2	2.4	49.5	57.9

Source: IMF, *International Financial Statistics*, various issues. Central Bank of Ecuador, *Información estadística mensual*, various issues.
[a] Consumer Price Index. [b] Money supply. [c] Terms of trade. [d] Non-financial public sector. [e] Annual increase in monetary base. [f] Real effective exchange rate (reduction indicates depreciation.)

From that time on, the fiscal effort was reduced, partly because Ecuador benefited from the rise in oil prices caused by the Gulf War. Exchange rate policy remained unchanged but included occasional discreet adjustments to keep the real exchange rate stable in line with criteria based on the purchasing power parity theory.[5] Against the background of this economic policy and a favourable international environment, inflation was kept at around 50% in 1990 and 1991 and the growth rate rose to 3.0% and 4.9%, respectively, thanks largely to the increase in banana and shrimp exports, which also raised the level of the international reserves.

Important changes were made at the structural level, the most important being the opening up of the economy, with the average level of customs tariffs plus import surcharges going down from 37% to approximately 15%, while the tariff spread was also reduced. This opening up of the economy was supplemented with the gradual establishment of a free trade area with Colombia and Venezuela. On the other hand, however, Ecuador continued to build up arrears in the servicing of its external debt with the commercial banks, and this adversely affected its image with the international financial community.

During the first half of 1992 the economy deteriorated still further, coinciding with the period of transition to a new government. The excess domestic demand due to the fiscal sector expansion had a bigger impact on the net international reserves than on price levels, and in the first seven months of the year the reserves dropped to less than half their previous level. In addition, the real exchange rate and prices of public goods and services lagged behind their real values, which they had maintained during the previous three years.

What happened in these months was a typical example of a "balance of payments crisis" (Krugman, 1979): the economic agents developed the idea that the new government would devalue the currency as part of a new stabilization strategy, and there was therefore an attack on the exchange rate in the form of capital flight which caused a decline in the international reserves of the Central Bank, a rapid rise in domestic interest rates, and, in general, demonetization of the economy.

[5] In addition, the export sector was provided with a subsidy through the decision that the Central Bank should buy that sector's foreign exchange in advance, with recalculation of the amount paid to take account of the difference between the rate prevailing when the foreign exchange was handed over and the rate applicable on the date of shipment of the goods. Exchange losses on this account came to nearly 1% of GDP in 1991, representing a substantial primary injection of liquidity.

III

The Macroeconomic Stabilization Plan

Only a few days after its entry into power, the government which took office in August 1992 introduced a new adjustment programme: the Macroeconomic Stabilization Plan. The main short-term aim of this Plan was to achieve "rapid reduction of inflation and a sounder fiscal and external position", while in the longer term its fundamental aim was to "reform the public sector" in order to make possible the "modernization and economic development" of the country (Banco Central del Ecuador, 1992).

This plan was different from the previous two programmes. This time, it involved shock therapy designed to bring about a rapid decline in inflation, instead of the more gradual approach adopted before. Moreover, the exchange rate was used as an anchor, in contrast with the previous two programmes, in which the money supply had been responsible for this function. Thus, the exchange rate was now used as a stabilization instrument, at the expense of the competitiveness of those sectors of the economy trading with the exterior. In this sense, this new experiment is similar to the adjustment programmes tried out in the Southern Cone countries in the late 1970s, which have been the subject of a number of studies (Solimano, 1990; Kiguel and Liviatan, 1992; Végh, 1992.

Once again, both the exchange rate and the prices of public goods and services rose significantly at the beginning of the programme. This time, however, the adjustment was greater, in order to leave more room for keeping these variables stable in the future. This largely broke the inflationary inertia which had been furthered by the continual adjustments made in these prices. The main measures adopted to begin with included a devaluation of some 30% and substantial increases in the prices of petroleum products and electricity. In particular, gasoline prices were raised by over 125%, while the price of gas for domestic use rose by nearly 300%. Since then, the two main pillars of the new economic policy have continued to be exchange policy and fiscal adjustment.

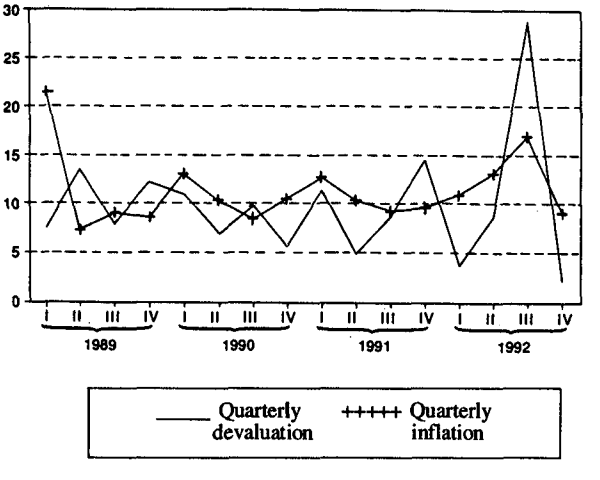
Exchange rate management, in particular, has been aimed at doing away with the inflationary expectations entertained until a short while ago by the economic agents, largely associated with the previous exchange rate regime, which had been based on mini-devaluations announced in advance. This close link between variations in the nominal exchange rate and price levels may be seen from figure 1. In order to break this link, after the initial devaluation the exchange rate was used as a nominal "anchor", although a fixed exchange rate was not established.

From the operational point of view, a band was established within which the exchange rate was permitted to float, so that it would remain stable in keeping with the Central Bank guidelines. This arrangement avoided both the macroeconomic problems associated with the application of rules designed to adjust the nominal exchange rate so as to keep it at a given level in real terms (Adams and Gros, 1986; Montiel and Ostry, 1991) and the constraints associated with the maintenance of a fixed exchange rate for a substantial length of time, which tends to give rise to appreciation of the real exchange rate and other macroeconomic repercussions. Subsequently, the band was eliminated, so that the current system consists of a managed float.

FIGURE 1

Ecuador: Devaluation and inflation

(Quarterly evolution)



Since the ceiling of the band became credible as a result of the initial over-devaluation and strict fiscal discipline was displayed in the following months, the expectations of depreciation were considerably reduced. The return on financial assets expressed in sucres therefore became very attractive, and this stimulated the inflow of capital.

Thus, discipline in handling the public finances was identified as a necessary condition for the success of the stabilization programme, as demonstrated by the experience of other countries of the region which had succeeded in stabilizing their economies. The policy applied has been based fundamentally on severe restriction of State spending rather than the raising of resources through taxes.

The role of monetary policy has been less prominent. This should not come as a surprise, since when the exchange rate is kept stable, monetary policy tends to be endogenous. In this context, during the early months the monetary efforts were aimed at partially sterilizing the monetization due to the increase in the international reserves, in order to avoid excessive growth of the amount of money in the economy. More recently, attention has shifted to the aim of moderating interest rate variations.

Unlike what happened with stabilization programmes adopted in other countries, such as Mexico and Israel (the so-called heterodox approaches), in the beginning the Macroeconomic Stabilization Plan did not explicitly include incomes policy as an integral part of the anti-inflation strategy. This is understandable in view of the low level of indexation characterizing the Ecuadorian economy and, above all, the lack of an environment favourable to the generation of consensus among the different sectors of society.

Finally, little has been done in the social field. The government has shown no intention of trying to give a social content to public spending, as was done in other countries (such as Chile and Mexico) which sought to offset the cost of the adjustment. The government's position in this respect has been that the greatest social benefit for the people is the reduction of inflation.

IV

Results of the Macroeconomic Stabilization Plan

All in all, the application of the Plan has brought positive results, since most of the main macroeconomic indicators have developed favourably (table 2). In particular, inflation has markedly slackened, a sound external financial position has been attained, and the fiscal deficit has been significantly reduced, even though the international environment has not been very favourable for the development of the domestic economy. On the other hand, economic activity seems to have slowed down markedly and the real exchange rate displays a growing lag. Less progress has been made at the structural level than in the field of stabilization.

1. Reduced inflation and higher international reserves

The most important achievement of the Macroeconomic Stabilization Plan has undoubtedly been the reduction of inflation to around 30% by the end of 1993, representing a reduction of the growth rate of prices by almost half since December 1992. This has had two important effects. The first of these is that it broke the inflationary inertia which had dogged the Ecuadorian economy during the previous five years, thus helping to cause the economic agents to lower their inflationary expectations. Figure 2, which shows the monthly evolution of inflation in 1988-1992 and 1993, [6] is eloquent in this respect. It may thus be seen that during the last year –except in May, when the government faced a serious domestic policy crisis which raised doubts about the continuation of the economic adjustment and caused an outbreak of speculation– the monthly rate of inflation was clearly below the monthly average for the period 1988-1992.

[6] Inflation of 1.5% was expected for December 1993.

TABLE 2
Ecuador: Main macroeconomic indicators

	1991	1992	1993[a]
	Percentage changes		
Growth of GDP	4.9	3.5	1.5
Inflation (end-year)	49.0	60.2	32.0
Inflation (annual average)	48.7	54.6	46.5
Real effective exchange rate (minus sign indicates depreciation)	4.8	-1.8	15.0
Money suply	47.1	43.3	42.0
Quasi-money	63.6	61.7	63.0
Terms of trade	-5.3	-3.2	-6.0
	Absolute values (millions of dollars)		
Net international reserves	760	782	1 250
Exports FOB	2 851	3 008	2 812
Imports FOB	2 207	2 027	1 940
	As a percentage of GDP		
Non-financial public sector	-2.0	-2.9	-0.5
Trade surplus	5.7	8.5	6.5
Current account balance	-4.1	-0.1	-2.4
Gross investment	21.7	24.1	21.1
Total external debt [b]	106.0	105.0	102.5

Source: IMF, *International Financial Statistics*, various issues; Central Bank of Ecuador, *Información estadística mensual*, various issues.
[a] Projected figures.
[b] Excluding interest on arrears of interest payments in the case of the external debt subject to restructuring under the Brady Plan.

FIGURE 2
Ecuador: Monthly inflation, 1988-1992 and 1993
(Percentages)

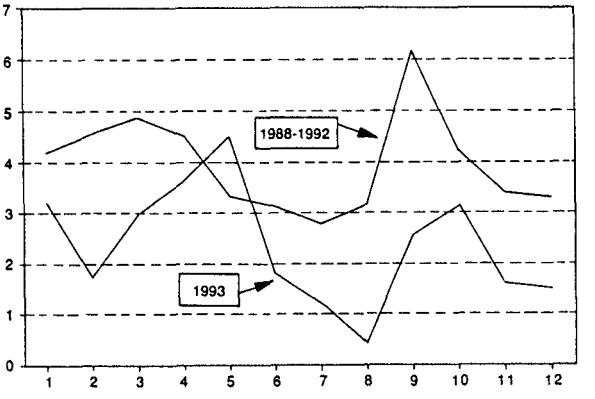
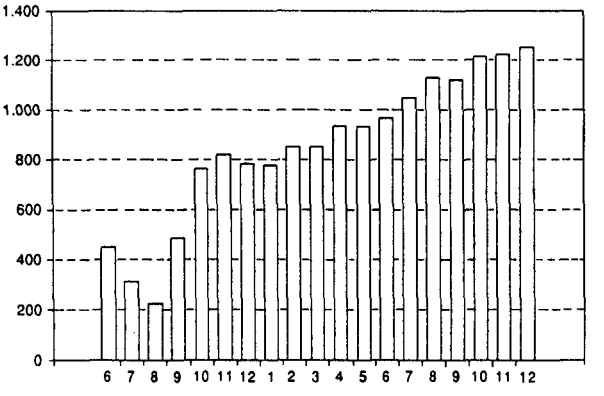


FIGURE 3
Ecuador: Net international reserves, June 1992 - December 1993
(Millions of dollars)



The second effect was that it maintained the credibility of the Plan, since inflation at the end of 1993 was very close to the target level originally announced by the government.

A further positive result has been the recovery of the international monetary reserves and their growth to the unprecedented level of some US$1.25 billion at the end of 1993 (figure 3). This level of international reserves not only contributes to the stabilization of the country by giving it a sounder external financial position but also makes more feasible the possible restructuring of the Ecuadorian external debt with the commercial banks in the coming months. It should be noted, however, that this increase in the reserves has been due fundamentally to inflows of short-term capital rather than to an improvement in trade, as we shall see below.

2. Fiscal adjustment, appreciation of the real exchange rate, and lower interest rates

As was to be expected, effective contributory factors in these results were the severe restriction of public expenditure and the form of exchange rate policy applied, which led to an inflow of capital from abroad and a fall in interest rates.

One fiscal adjustment measure was the accumulation of deposits of the non-financial public sector in the Central Bank –amounting to around 3% of the 1993 GDP– during the first year of application of the Macroeconomic Stabilization Plan. As a result of this policy, a virtual balance in the fiscal accounts was achieved in that year. Such a big accumulation of deposits in the Central Bank also served to partly offset the high level of monetization caused by the

increase in the international reserves, thus avoiding an excessive increase in the monetary variables which might otherwise have adversely affected the fight against inflation.

This assertion is backed up by figure 4, which shows the close relationship between the monthly flows of net international reserves and net deposits (credits less deposits) by the non-financial public sector in the Central Bank. The sterilizing effect of the fiscal restriction has partly reduced the need for the sale of short-term securities (Monetary Stabilization Bonds) by the Central Bank, thus avoiding an excessive increase in the quasi-fiscal deficit.

Not even such a great fiscal effort would have been sufficient to bring inflation down to the levels actually reached, however. The strategy of initial over-devaluation of the sucre made possible the subsequent stability of the nominal exchange rate in 1993, and this not only changed the inflationary expectations but also lessened the inertia persisting from previous years.

The impact of the tariff reform and the establishment of the free trade area also helped to slow down inflation. This opening up of the economy, together with the exchange rate lag already referred to, meant that the prices of tradeable goods remained stable.

At the same time, the initial over-devaluation and subsequent stability stimulated a strong inflow of capital, as expected, which exerted downward pressure on the nominal exchange rate and growing appreciation of the currency in real terms. The massive inflow of capital into Ecuador was due to the same factors responsible for this phenomenon in other countries of the region (Calvo, Leiderman and Reinhart, 1993) and in general terms was an external shock which substantially aided the process of stabilization of the Ecuadorian economy. Above all, this capital entered the country because the yield on assets in sucres was much higher in the early months of the economic programme: a situation which lasted almost the whole of 1993 (figure 5). [7] This capital flow made a significant contribution to the rapid improvement in the international reserves from September 1992 onwards.

FIGURE 4

Ecuador: Variation in international monetary reserves and net credits to the non-financial public sector, September 1992 - November 1993

(Monthly flows)

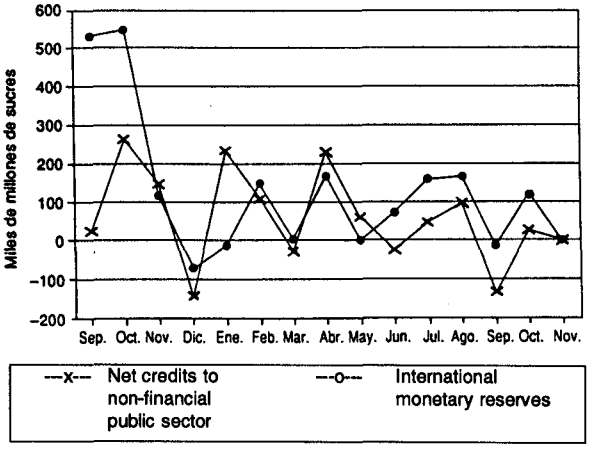
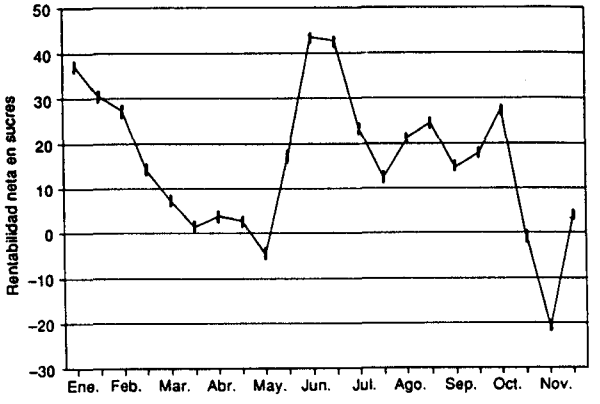


FIGURE 5

Ecuador: Difference in yield between assets in sucres and in dollars, 1993



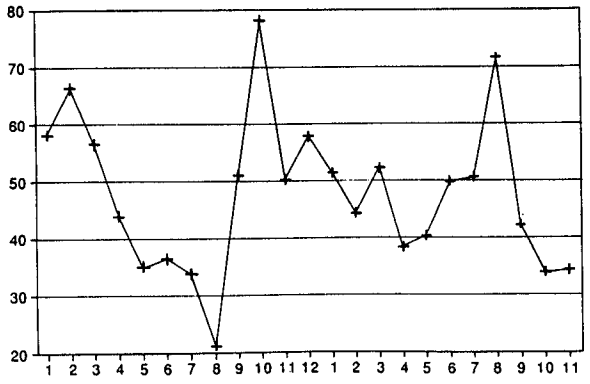
Thus, there was rapid remonetization of the economy from September 1992 onwards (figure 6), at rates in keeping with the slackening growth of prices. This was because the demand for money increased under the Monetary Stabilization Plan as a result of the change in the portfolio of assets of investors in favour of assets in sucres, because of their higher relative yield. As no imbalance occurred in the money market, the growth in the amount of money in the economy did not cause a rise in general price levels.

[7] Figure 5 compares the yield on the short-term securities (Monetary Stabilization Bonds) offered by the Central Bank with a maturity of 91 days with the yield given by the sum of the Prime Rate plus the expected depreciation, i.e., $r - (r^* + e^e)$.

FIGURE 6

Ecuador: Monetary base, 1992-1993

(Annual growth rate)



The capital inflow from abroad and the Central Bank's attitude of sterilizing only part of this inflow caused interest rates to fall to negative levels in real terms, with respect to current inflation (table 3).

3. Effect on the real sector

In spite of this fall in interest rates, economic activity went down as a result of the application of the adjustment programme, unlike what has been observed in other countries which have applied stabilization programmes based on an exchange rate anchor (Kiguel and Liviatan, 1992). In the case of Ecuador, the exchange rate lag which has been building up and the impact of the opening-up of the economy carried out in previous years apparently had much to do with this economic stagnation.

Thus, although the stability of the nominal exchange rate was a decisive factor in reducing inflation, it also had negative effects, since it caused the real exchange rate to fall behind by some 15% in the course of 1993 (figure 7).[8] This real appreciation in the exchange rate had an adverse impact on those sectors of the economy trading with the exterior, but acted as a stimulus for non-tradeable activities. The impact on economic activity was further heightened against the background of the opening up of the Ecuadorian economy, since imported goods became cheaper in relative terms as a result of the lowering of tariffs.

[8] Naturally, this figure does not mean that there was an equivalent real appreciation in the exchange rate, since what occurred is not being compared with a given equilibrium level. Moreover, no account is taken either of the shifts that such an equilibrium level might have undergone as a result of real exogenous shocks such as variations in the terms of trade or in permanent capital flows with the exterior.

TABLE 3

Ecuador: Real interest rates, 1992-1993

(Rates on deposits for 90 days)

	Nominal rates (%)	Inflation (%)	Real rates (%)
1992			
January	49.43	48.9	0.5
February	49.46	48.3	1.2
March	49.80	46.7	3.1
April	48.58	49.6	-1.0
May	48.54	48.8	-0.3
June	51.34	50.4	0.9
July	54.34	51.7	2.6
August	61.18	52.2	9.0
September	65.02	61.0	4.0
October	48.74	65.8	-17.1
November	38.89	63.9	-25.0
December	42.30	60.2	-17.9
1993			
January	36.89	58.5	-21.6
February	23.87	55.8	-31.9
March	21.13	56.1	-35.0
April	26.33	53.6	-27.3
May	39.94	54.8	-14.9
June	40.68	52.1	-11.4
July	40.68	49.9	-9.2
August	39.74	46.1	-6.4
September	30.69	35.5	-4.8
October	27.10	31.5	-4.4
November	23.12	32.3	-9.2
December[a]	27.00	33.0	-6.0

Source: Central Bank of Ecuador, *Información estadística mensual*, various issues.

[a] Projected figures.

FIGURE 7

Ecuador: Real exchange rate, June 1992 - December 1993

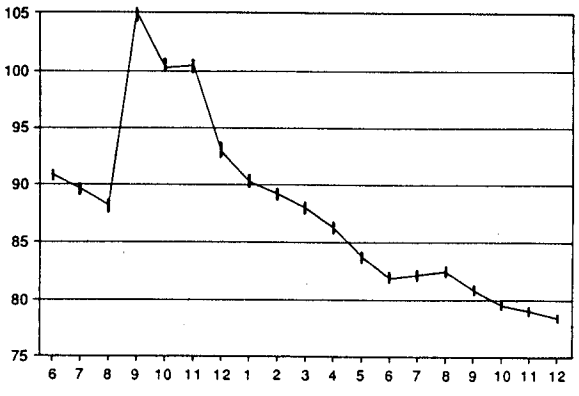


TABLE 4

Ecuador: Annual growth rates of real gross domestic product and of selected sectors, 1991-1993
(Half-years)

	1991		1992		1993
	I	II	I	II	I
Real GDP	5.1	4.7	4.1	2.9	1.4
(excluding petroleum)	4.7	4.1	4.0	2.6	0.9
Petroleum	8.4	8.9	5.3	4.4	5.0
Agriculture	5.6	6.4	6.5	3.0	0.8
Industry	2.4	2.7	5.7	3.2	0.7
Construction	-1.6	0.6	1.0	0.3	1.5

Source: Central Bank of Ecuador, *Cuentas trimestrales*, No. 8, 1993.

The loss of competitiveness of the tradeable goods sector accentuated the recessionary tendency of the economy (table 4). GDP growth slackened with the adoption of the Macroeconomic Stabilization Plan until it sank to only 1.4% per year in the first half of 1993. Tradeable activities slackened even more than this, whereas the construction sector (which is typically non-tradeable) tended to recover. This result is in keeping with the real appreciation in the exchange rate referred to earlier.

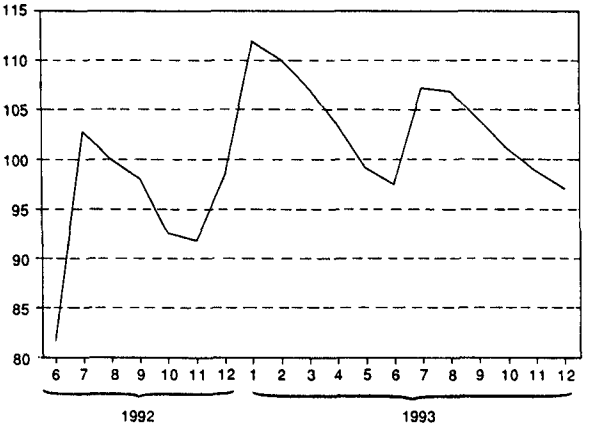
This decline in economic activity would also appear to indicate that the economic agents have decided to "wait and see" with regard to investments until they feel that the stabilization process has been consolidated and that, in general, there is a favourable climate for sustained reactivation.

With regard to wages, minimum wages fell slightly in real terms in the course of 1993, as may be seen from figure 8, which shows the evolution of the minimum living wage together with other benefits and allowances laid down by law for the lowest wage levels.

The evolution of middle-level wages cannot be determined conclusively because of lack of information. It is most likely that they have suffered a further deterioration, however, since the increases decreed by the government were the same in nominal terms for all the various wage levels. Thus, the percentage increase was smaller for those earning more than the minimum wage (the majority of wage-earners), against a background of virtual stagnation of the economy. This flexibility of wages made possible more rapid reduction of inflation, in contrast with other countries where this has been hindered by wage indexing.

FIGURE 8

Ecuador: Evolution of real minimum wages, June 1992 - December 1993



4. The impact on the external sector

In spite of the real appreciation of the exchange rate and the opening up of the economy, it is particularly noteworthy that in 1993 the trade balance suffered only slight deterioration compared with the year before, closing the year with a surplus of approximately 6.5% of GDP. This untypical result contrasts with the experience of other countries, such as Mexico and Argentina, which also tried stabilization programmes using the exchange rate as an anchor, but with adverse effects on the trade balance. In the case of Ecuador, this performance was fundamentally due to a drastic fall in the value of imports in line with the slackening of economic activity, which reduced the impact of the fall in the exchange rate on the value of exports.

Thus, imports as a whole went down in 1993 by some 4% because of the decline in the most important categories in terms of value, namely purchases of capital goods and raw materials. In contrast, as was to be expected, imports of consumer goods grew by nearly 30%.

Export performance was also uneven. Traditional exports (petroleum, bananas, coffee, cocoa and, to a lesser extent, shrimps) turned in a poor performance as a result of exogenous problems and low productivity, and this prevented them from making up for the effects of the exchange lag that built up during the year. In contrast, less traditional exports registered dynamic growth of around 50% between 1992 and 1993, showing the high competitiveness of these activities, but unfortunately these products only account as yet for some 15% of the total exportable supply.

Taking into account the balance on services, which has shown a chronic deficit because of the country's high level of indebtedness, the current account ended 1993 with only a small deficit, so that the capital account probably explains the significant increase of over US$400 million in the international reserves during the year.

The advances in the structural field have not been commensurate with those in the sphere of stabilization. In this respect, the Public Sector Budget Act and the Securities Market Act have been adopted. The first of these is aimed basically at increasing the Ministry of Finance's control of public spending, by including institutions which were previously outside the Ministry's control, such as public enterprises and other bodies linked with the government, in the hope of securing greater rationalization of State expenditure. The second Act is aimed at developing the capital market in Ecuador, and an important feature of it is that it sets up a monetary unit of constant value in order to stimulate saving in the country.

The adoption of the Act on Modernization of the State (the Privatization Act) has suffered excessive delays, since it has been under discussion for almost a year. This has adversely affected the investment climate in the country, since this was the main change that the government proposed to make. It could be said that the scant success registered in the structural field is tending to delay the reactivation of economic activity, in spite of the fall in domestic interest rates, since it affects the expectations that the public finances will be kept on a sound basis and hence that there will be lasting stabilization of the economy.

Furthermore, the country still has not regularized its relations with the international financial community. Interest payments on the external debt with the commercial banks have been suspended since mid-1992; Ecuador had been paying 30% of the amount due since mid-1989, after having suspended such payments altogether since the beginning of 1987. The country has also been in arrears with the Paris Club for several months past. Although the Ecuadorian Government has been negotiating the restructuring of its commercial bank debt for the past year, the fact that agreement has not yet been reached is a further element of uncertainty as regards the future evolution of the economy.

V

Some reflections on the short-term outlook

It may be seen from the foregoing analysis that Ecuador has progressed from chronic inflation (averaging over 50% per year for five years) to moderate inflation (around 30% per year). Future short-term economic policy will be aimed at fulfilling the government's announced objectives of bringing inflation down to 15% by the end of 1994 and reactivating real economic growth to a rate of around 3% per year.

These two objectives seem difficult to achieve simultaneously, since they involve growing at almost twice the 1993 rate while at the same time reducing the rate of price rises by over half compared with that year. The first objective could be more feasible, since a 10% rise in petroleum production is scheduled for 1994, but there seems little chance of achieving the second aim in view of the current characteristics

of the Ecuadorian economy and the arduous and prolonged efforts which have been required in other countries of the region (Colombia, Mexico, Chile) in order to secure a further reduction in moderate levels of inflation.[9]

In principle, in order to secure a rapid reduction in inflation such as that proposed by the government, economic policy in 1994 will have to be based on at least three major elements: control of aggregate demand, maintenance of the exchange rate as a nominal anchor, and an incomes policy in keeping with the proposed inflation target. In addition, in view of the vulnerability of the Ecuadorian economy to external shocks, a decisive role in the results obtained in 1994 will be played by developments in the international environment, especially world petroleum prices, the level of international interest rates, and the possibility to reaching agreement on the restructuring of the external commercial bank debt.

At the same time, it is not clear that, having brought inflation down to around 30%, it is really desirable to seek a further reduction as sharp as that proposed by the government. Although there is general agreement on the costs caused by inflation and, hence, the benefits of bringing it down –if possible, to a single digit– there is less consensus on the speed at which it should be reduced. This usually depends on such factors as the level of confidence in the economic policy, the degree of social consensus on the inflation target proposed, the progress made in structural changes designed to improve the efficiency of markets, and, in general, the political viability of embarking on an adjustment strategy which usually involves recessionary effects and increased unemployment.

In the case of Ecuador, the economic policy enjoys credibility as a result of the success obtained in 1993, when it was possible to bring inflation down to levels very close to the stated target. At the same time, however, there is currently a lack of consensus regarding the proposed economic policy strategy. This is particularly marked in the case of the workers, who are extremely loath to accept wage increases of only 15% (the inflation target for 1994) after a long period when inflation averaged over 50%, and it was still 32% even in 1993.

In the case of the business community, their disagreement is due to the limited progress made in the structural reforms and, especially in certain groups, the policy of maintaining an exchange rate lag. The viability of the policy is all the more difficult because there will be elections in 1994 to replace almost all the members of Parliament: a situation which limits the capacity to impose policies to restrict aggregate demand. Equally disquieting is the possibility of an unfavourable international environment due to a fall in the price of petroleum, which is the main source of fiscal income and the country's leading export item.

In view of these circumstances, it would seem that the strategy for the reduction of inflation in 1994 should be more gradual, while maintaining a firm determination to continue in this direction in subsequent years until levels similar to those of international inflation are reached. This approach would not only be less costly for Ecuadorian society but would also allow the government to effectively reactivate growth in that year and thus maintain the credibility of its economic policy. In this way, it would be possible to make the strategy for the reduction of inflation and reactivation of the economy in Ecuador sustainable in the medium and long term.

VI

Conclusions

This article has sought to give an analysis of the stabilization efforts made in Ecuador since September 1992, which have made it possible to bring inflation down from an average of over 50% in the 1988-1992 period to around 30% at the end of 1993.

After reviewing the economic background to the current stabilization programme, the most important features of the strategy used and the achievements registered up to the end of 1993 were described, with special emphasis on the fiscal discipline applied,

[9] There is an increasing number of studies of processes aimed at progressing from moderate inflation to single-digit rates of price rises. See for example Fernández (1992), Mancera (1992), Jadresic (1992), and Dornbusch and Fisher (1993).

without which it would not have been possible to obtain the success effectively registered. In addition, the use of the exchange rate as a nominal anchor in the process of reducing inflation was highlighted. This strategy made it possible to partially break the previous inflationary expectations, at the cost of relegating to a secondary position the possible role of the exchange rate as an instrument for promoting the tradeable sector of the economy. This is in clear contrast with other adjustment programmes adopted in Ecuador in past years, in which exchange policy was fundamentally aimed at this latter objective.

The recent stabilization experience in Ecuador shows the benefits of a joint policy of fiscal austerity and use of an exchange rate anchor in order to secure a rapid reduction in the rate of price increases in countries which have been suffering from chronic inflation. From another viewpoint, it confirms what has been observed in other Latin American countries: correction of the fiscal deficit is a necessary but not of itself sufficient condition for securing rapid reduction of inflation.

The results obtained also show that in spite of the establishment of an exchange rate anchor, reduction of real interest rates and the absence of substantial levels of indexing, the reduction in inflation has nevertheless been accompanied by slower economic growth, especially in the tradeable sectors (other than petroleum). An atypical result has also been observed in respect of the trade balance, since it has deteriorated to only a modest extent, despite the real exchange rate appreciation. This may be explained by the drastic fall in imports, except for those of consumer goods, which grew significantly. The decline in imports of raw materials and capital goods is in keeping with the slowdown in economic activity, while the growth of imports of consumer goods is due to the appreciation of the exchange rate in real terms.

The study carried out also highlights the slow progress made in the structural changes announced by the government and the absence of social programmes designed to mitigate the cost of the adjustment. The first of these features tends to limit the efficiency which might be expected from markets and raises some doubts about the viability of the stabilization process in the medium and long term. The second feature has not been favourable to a climate of social consensus-building which could make the road to stabilization less arduous.

Finally, with regard to the advisability of defining a strategy for the future aimed at rapidly reducing inflation from 32% to 15% in 1994, as announced by the government, it may be concluded that, once more manageable levels of inflation have been attained, it might be more advisable to pursue a gradual reduction which would at the same time permit the reactivation of economic growth, while maintaining the medium-term objective of bringing inflation down to levels similar to those of the world economy.

(Original: Spanish)

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New strategies of *transnational* corporations *in Argentina*

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This article analyses current trends as regards the role of transnational corporations in Argentine industry in the light of the structural changes taking place on the domestic, regional and international fronts, as compared with the conditions prevailing during the application of the import substitution model. Section I describes the new conditions observed at the national and international levels which are forcing all business enterprises to redefine their production, commercial, financial and technological strategies, with the Argentine subsidiaries of transnational corporations playing the leading role in this process. In section II, the essential characteristics of the transnationals' presence in Argentine industry are evaluated, and the differences between current conditions and those that existed during the period of import substitution are identified. Next, on the basis of information obtained from the major transnationals in 1992, section III discusses some of the most striking aspects of the transitions in these corporations' strategies, within the context of the economic changes taking place in Argentina and that country's place in the global economy. Finally, section IV offers some closing comments.

I

Introduction

The Argentine economy has undergone a series of major structural changes in the last two decades. These changes, which have reached to the very roots of the country's production structures, have been particularly intense in the manufacturing sector. Although the country's new industrialization model has yet to be fully defined, it is clear at this stage that it will differ substantially from the import substitution model on which the industrialization process was based from the early 1930s up to the late 1970s (Katz and Kosacoff, 1989; Kosacoff, 1992).

These changes are clearly discernible on three different planes. First, the economy is now much more open in terms of trade and financial operations than it was under the preceding model. Second, the process of regional integration through MERCOSUR (begun in 1986) opens up a vast array of opportunities thanks to the extraordinary market expansion it entails, but it also poses enormous challenges in the form of greater competition. Above and beyond these signals and the difficulties involved in harmonizing policies and eliminating disparities among the member countries, all the relevant economic actors (especially private business) see this process as irreversible. Third, there has been a significant change in the macroeconomic situation, involving a systematic stabilization effort and thorough-going reform of the State (with some of the most salient aspects of this process being the privatization of State-owned enterprises and changes in the regulations applying to economic activities) which are transforming the way the economic system works.

The economy is also undergoing a number of fundamental changes in terms of its external operations. The new conditions that have arisen in the international economy are characterized by the intensification of competition, manifested in increasing globalization of the economy, made viable by the fact that the transnational corporations (TCs) have recently been stepping up their foreign direct investments (FDI) in the light of the advantages they hold in the areas of ownership, internalization and location: a process heavily concentrated in the Triad (United States, the European Community and Japan) (Mortimore, 1992a; Dunning, 1988; UNCTC, 1991).

This new form of globalization is associated with sweeping changes in technology and industrial organization and with the recent specialization of trade: a process marked by an increase in the share of trade accounted for by knowledge-intensive goods (Ostry, 1992; OECD, 1991; Lall, 1992; Gurrieri, 1991).

The structural effects of increased TC activity in this area are of crucial importance in the various stages of competitive development and have prompted a debate regarding the spillover effects of these corporations, which may act as engines of economic growth, and the possibility of formulating competitive strategies in semi-industrialized countries. These new forms of competition entail new forms of investment, including strategic alliances among transnationals, which are being used more and more as a way of responding to the challenges of technological innovation and changes in market orientation associated with regional integration agreements (Ozawa, 1992; UNCTC, 1992; Esser, 1992; Oman, 1984; Mytelka, 1990; Vernon, 1992).

II

Basic features of the transnational corporations' presence in Argentine industry

1. Import substitution

Ever since Argentina embarked upon its industrialization process and became an active participant in the international division of labour, transnational corporations have played an important role. At first, these firms specialized in industrial activities that were needed to permit the exportation of raw materials, but eventually they became part of the whole industrial fabric of the country. Starting in the late 1950s and continuing on during the 1960s, in particular, transnational corporations –with the metal products and machinery and petrochemicals sectors in the lead– played a central role in the intensification of the import substitution process. During this stage the manufacturing sector turned in an excellent performance, and it continued to serve as the engine of the country's economic growth up to the mid-1970s.

The entry of transnational corporations on a large scale and their establishment in fast-growing sectors sharply increased their share in manufacturing output, which swelled from less than one-fifth in 1955 to nearly a third by the early 1970s. These corporations' forms of economic operation were in line with the typical model of a small, protected economy, in which investments are directed almost entirely towards the development of the domestic market. Before they set up operations in the country, this market had been characterized by a considerable amount of surplus demand owing both to difficulties in obtaining imported goods (caused by the external constraints affecting the Argentine economy) and to local constraints that limited progress in forming the more complex sorts of chains or linkages within the industrial structure, which, rather than merely requiring the expansion of operations through the incorporation of additional manpower, called for the use of technological processes and corporate structures that had not yet reached a sufficient level of development in the local economic environment.

Under these circumstances, the process whereby foreign capital moved in to fill the manufacturing sector's "empty boxes" displayed the following characteristics. First, in comparison to their domestic competitors, the transnationals operated larger plants and their labour productivity and wages were higher, as were their import coefficients and ratios of capital inputs per employee. Second, in terms of technology, they based their operations on the use of equipment and production practices previously developed by their parent companies which, although not quite at the cutting edge in the international marketplace, were certainly new within the context of the local market. In many cases, the establishment of these types of corporations in the country led to the appearance of local engineering concerns and enterprises specializing in operational organization and methods whose role was to adapt products and processes to local production conditions. Third, these corporations were primarily financed out of national savings, given the preferential access they enjoyed to lines of credit carrying negative interest rates. Their net foreign-exchange contribution in the medium term proved to be negative, since their outward transfers exceeded their capital inflows.

In these circumstances, the position held by transnational corporations had two very different facets. From the standpoint of the local market, these companies figured among the most important components of the industrial structure and occupied prime spots in the fastest-growing markets. Furthermore, they were notable for having generated a veritable "industrial revolution" by introducing technologies and forms of industrial organization previously unknown in the country. From the international standpoint, however, these subsidiaries were of negligible importance within their own corporate structures (with their share of global sales rarely exceeding 1%) and their technological level was a far cry from that associated with the best international practices.

The typical manufacturing plant of a local TC subsidiary was usually less than one-tenth the size of the plants producing similar goods in developed countries. Moreover, the weakness of the local industrial structure was manifested in a shortage of specialized suppliers and subcontractors. These two

factors ruled out economies of scale and specialization. The introduction of more sophisticated technologies into the local market also called for large teams of engineers specializing in the adaptation of production scales and the integration of production activity targeted at a small, heavily protected domestic market. The associated learning process followed an idiosyncratic course which was far removed from the competitive climate found in developed countries and therefore did not provide an opportunity to achieve higher levels of international competitiveness. In other words, even though these firms had to make technology-intensive efforts to adapt their operations to the demands of the local environment, these efforts entailed static and dynamic diseconomies with respect to both production scales and the division of labour.

As a consequence of these conditions, the possibilities offered by the domestic market were gradually exhausted as surplus demand was absorbed. At the same time, the considerable amount of technical progress introduced into the country inevitably opened up opportunities for creating dynamic comparative advantages for operating in international markets, in addition to the fact that the industrial structure itself had reached its upper limit in terms of its capability to generate increases in employment and productivity.

Meanwhile, the more industrialized societies were preparing to make the transition to a new techno-production paradigm whose organizational models for industrial production involved a very different rationale from that of the prevailing mass production models based on Fordism. One of the key factors in making such a change viable was the spectacular pace of development in microelectronics, which made it possible to move from the "electromechanical age" to the "electronic age". In Argentina, however, the local response to the difficulties of restoring dynamic industrial growth was not based on taking greater advantage of the pool of technological resources amassed during the preceding stage in order to surmount those difficulties, but rather on attempts to implement structural reforms associated with a more open economy. The failure of these attempts during the period 1976-1981 ultimately led to a dislocation of the production structure.

Given this situation, it is not surprising that the flow of direct investment began to undergo a notable change as from 1976. New investments in manufacturing virtually disappeared, making it necessary for a number of major firms either to close their doors or to scale down their operations,[1] and a large portion of what new investment there was tended to be directed towards the financial and petroleum sectors. The economic liberalization effort of 1978-1981, the crisis and stagnation of the manufacturing sector, local firms' preferential access to industrial promotion mechanisms in the economy's few buoyant sectors, external debt problems and the overall atmosphere of uncertainty and macroeconomic instability were some of the main reasons for the decline of foreign capital's share in Argentine industry.[2]

Beginning in the mid-1980s, a considerable increase in the flow of investment attested to renewed economic vitality on the domestic front, which in turn led to an increase in the share of foreign capital in the industrial structure. This trend did not spread throughout the country's industrial fabric, however, but was instead concentrated primarily in manufacturing activities associated with the utilization of natural resources (agribusiness, petroleum, petrochemicals, cement, etc.) and in the restructuring of the automotive industry. Meanwhile, the manufacturing plants of TC subsidiaries made major changes that greatly increased their productivity. Some of the steps that made this possible included discontinuing the practice of overstaffing, streamlining production lines and implementing significant organizational changes associated with the de-incorporation of technologies. As these changes were not accompanied by broad-based rehabilitation of already amortized equipment and facilities that fell far short of international standards, however –due in particular to the idiosyncratic scales of production and specialization which such plants had developed in order to serve small, closed domestic markets– by the end of the 1980s it had become clear that, in an economy in the process of transforming itself, particularly with regard to its external linkages, these changes had not been enough.

2. The 1990s

During the 1980s, macroeconomic conditions were the central element in a difficult economic situation that reached its most critical point with the spells of hyperinflation in 1989 and 1990. Three different

[1] A number of the major transnationals pulled out of the country during this period, including General Motors, Citroën, Chrysler, Peugeot, Squibb, Olivetti and others.

[2] According to the 1984 census, foreign firms's share of total output amounted to 26.8% at that time, whereas the figure had been 32% just one decade earlier (Sourrouille, Kosacoff and Lucángeli, 1985; Kosacoff and Azpiazú, 1989; and Azpiazú, 1992).

factors came into play simultaneously during this period and served as the fulcrum for the renewal of foreign capital's presence in the Argentine economy in the 1990s. The first had to do with the dynamics of the solution devised for the external debt problem, in which debt capitalization became the chief financial instrument for new investments and the privatization of State-run enterprises. The second was related to the consolidation of national economic conglomerates which, as agents of industrialization, were organized very differently from the typical family businesses of the import substitution stage, and which are called upon to play a fundamental role in the conclusion of agreements with transnational corporations regarding specific ventures. The third factor was linked to the rapid expansion of the natural-resource frontier in 1970-1990 (natural gas, fisheries, oilseeds, forestry, etc.), which, in contrast to its virtual stagnation during the four preceding decades and in the context of an open economy, led the country back to stronger specialization in natural resource-intensive products.

These changes are now influencing transnational corporations' decisions regarding their involvement in the country. A very mixed bag of behaviours and trends is to be observed at the present time, but the end result is proving to be a more active role for foreign direct investment than in the past two decades. Corporate mergers and international relocations, the acquisition of firms, the closure of some plants, a shift towards assembly and commercial activities and away from industrial ones, and the new relationship that has taken shape between the financial system and the manufacturing sector are just some of the everyday events that are leading the economy in various different directions from which it is as yet difficult to draw a clear general picture. In a context of sweeping economic changes and of the re-establishment of linkages with the global economy as part of an articulated process involving economic liberalization and the consolidation of MERCOSUR, some of the most salient aspects, which will be explored more fully later on in this article, are the spread of forms of globalization involving the manufacturing activities of local affiliates; the importance of debt-equity swaps and privatizations; the adoption of different forms of corporate partnerships; the return to natural resources as a "key" factor; and the new regulatory framework governing foreign capital.

Debt-equity swaps were not only one of the main mechanisms used to resolve the debt problem but also became a prime financial instrument in the transnational corporations' new strategy. In the second half of the 1980s, 82 transnational corporations used various sorts of debt-equity swaps to finance a total of US$660 million in investments (Fuchs, 1990). These investments were concentrated in the manufacturing sector and involved a number of ventures in the food, automobile, petroleum and chemicals industries (see table 1).

TABLE 1

Argentina: Capitalization of external debt by foreign-held companies

Firm	Sector of activity	Operation [a]	Home country	Thousands of dollars
Swift-Armour S.A.	Meat packing	pei/cpd	United States	138 018.7
Transax S.A.	Motor vehicle parts	cpd	United States	56 020.4
La Isaura S.A.	Petroleum	cpd	Spain	50 118.5
Louis Dreyfus y Cía. Ltda. S.A.	Export of grain and oilseeds	cpd	Switzerland	35 030.5
Maltería Pampa S.A.	Malt brewery	cpd	Brazil	33 748.0
Renault Argentina S.A.	Motor vehicles	cpd	France	28 189.6
Cervecería Río Paraná S.A.	Beer	cpd	Belgium	24 425.9
Dow Química Argentina S.A.	Chemicals	cpd	United States	13 027.4
Autolatina Argentina S.A.	Motor vehicles	cpd	United States	12 790.7
Syntex S.A.	Chemicals	pei	United States	11 872.2
Cía. Embotella. Argentina S.A.	Non-alcoholic beverages	pei	United States	11 765.0
GTE Silvania S.A.	Fluorescent tubes and light bulbs	cpd	United States	11 325.3
Pepsi Cola Argent. S.A.	Non-alcoholic beverages	pei	United States	9 800.0
Saab-Scania Argent. S.A.	Motor vehicles	cpd	Sweden	9 661.9
Parafina del Plata S.A.	Lubricants	cpd	Switzerland	9 573.1
Pirelli S.A. Platense	Tyres	pei	Italy	9 571.4
Coca Cola S.A.	Non-alcoholic beverages	cpd	United States	9 383.0
Kodak Argentina S.A.	Photographic equipment	pei/on	United States	9 370.9
Banco Beal S.A.	Banking	pei	Belgium	8 407.8

TABLE 1 *(continued)*

Firm	Sector of activity	Operation[a]	Home country	Thousands of dollars
Abbott Laboratorios S.A.	Pharmaceutical laboratory	pei	United States	7 500.0
Shell S.A.	Petroleum	on	Netherlands	7 499.8
Estab. Mecán. Jeppener S.A.	Metal products and machinery	cpd	Italy	7 196.7
NCR Argentina S.A.	Accounting machines	pei	United States	7 100.0
Lucas Indiel S.A.	Motor vehicle parts	cpd	Great Britain	6 560.1
Suchard Argentina S.A.	Confectionery	pei	Switzerland	6 469.2
H.F. Fuller Arg. S.A.I.C.	Adhesives	cpd	United States	6 422.0
Equitel S.A.	Telecommunications	on	Germany	6 400.0
Compañía Argentina de Té	Tea	cpd	Belgium	6 011.2
Carrefour Argentina S.A.	Supermarkets	pei	France	5 170.8
Productos Roche S.A.	Pharmaceutical laboratory	pei	Switzerland	5 000.0
Hughes Service S.A.	Petroleum-related services	pei	United States	4 594.8
Morgate Arg. S.A.	No information available	pei	...	4 548.7
Laborat. Glaxo Argent. S.A.	Pharmaceutical laboratory	cpd	Great Britain	4 355.1
Ciba Geigy S.A.I.C	Chemicals	on	United States	4 268.3
Frig. Rioplatense S.A.	Meat packing	pei	United States	3 990.0
Cargill S.A.C.I.	Food industry	cpd	United States	3 739.7
Cimet S.A.	Wire, cables, copper	pei	Germany	3 692.6
Asgrow Argentina. S.A.	Hybrid seeds	pei	United States	3 500.0
Química Hoechst S.A.	Chemicals and pharmaceuticals	cpd	Germany	3 260.6
Liquid Carbonic Arg. S.A.	Carbonic gases	cpd	United States	3 166.7
Cía Gillette S.A.	Razor blades	pei	United States	3 143.3
Neumáticos Goodyear S.A.	Tyres	on	United States	3 000.0
Dycasa Arg. S.A.	Civil engineering	on	Spain	3 000.0
Cyanamid Argentina S.A.	Chemicals	pei	United States	2 986.8
Eaton S.A.	Motor vehicle parts	cpd	United States	2 488.9
Stauffer Química S.A.	Chemicals	pei	United States	2 480.6
Aga Argentina	Compressed gases	pei	Sweden	2 076.9
Pioneer Argentina S.A.	No information available	cpd	United States	2 001.8
Foxboro Argentina S.A.	Motor vehicle parts	pei	United States	2 000.0
Siemens S.A.I.C.	Telecommunications	on	Germany	2 000.0
Laborat. Phoenix S.A.	Pharmaceutical laboratory	pei	United States	1 969.4
Perkins Argentina S.A.	Motor vehicle parts	pei	United States	1 928.5
Bausch y Lomb. Argentina S.A.	Optical and scientific items	pei	United States	1 800.0
Hudson, Ciovini y Cía. S..A.	Alcoholic beverages	pei	Canada	1 721.5
Arthur Martin S.A.	Stoves and heaters	pei	Belgium	1 573.9
Pittsburgh S.A.	Imports of chemicals and metal products	pei	United States	1 510.0
Vitrofar S.A.	Glass containers	on	United States	1 500.0
Banco Sudamericana S.A.	Tools	pei	Sweden	1 400.0
Mc Donalds Restaurantes	Food service	pei	United States	1 385.0
Punta del Agua S.A.	No information available	cpd	...	1 357.8
Worthington Argentina S.A.	Hydraulic pumps	pei	United States	1 177.0
Pond's Argentina S.A.	Cosmetics	pei	United States	1 007.0
Elab. Arg. Cereales S.A.	Food products	pei	United States	1 000.0
Semillas Interstate Arg. S.A	Hybrid seeds	pei	United States	1 000.0
S.A. Nestlé	Confectionery	on	Switzerland	900.0
Boerhringer Argentina S.A.	Pharmaceutical laboratory	pei	Germany	842.5
Baker Transworlds S.A.	No information available	pei	United States	800.0
Rovafarm Argentina S.A.	Pharmaceutical laboratory	pei	Switzerland	789.2
Argenmilla S.A.	Farming/livestock	pei	Italy	756.3
Macusa	Tannery	pei	Italy	750.0
Aerosol Filling Argentina S.A.	Chemicals	pei	United States	736.2
Fichet S.A.	No information available	pei	Germany	445.4
Macrosa S.A.	Metal products and machinery	pei	Italy	321.3
Magate Arg. S.A.	No information available	pei	...	290.0
Quim. Arg. Houghton S.A.	Industrial chemicals	pei	United States	250.0
MTM S.A.	Wire netting	pei	Germany	230.7
Laborat. Upjohn S.A.	Pharmaceutical laboratory	pei	United States	220.0
Cía. Sud. Kreglinger S.A.	Wholesaler	pei	Belgium	150.0
Fram Argentina S.A.	Motor vehicle parts	pei	United States	123.0
Black and Decker Arg. S.A.	Tools	pei	United States	120.0

TABLE 1 *(conclusion)*

Firm	Sector of activity	Operation[a]	Home country	Thousands of dollars
Dow Corning S.A.	Lubricants and silicones	pei	United States	49.2
Citicorp Asesora S.A.	Consultants	pei	United States	30.0
Total				**655 838.9**

Source: Compiled by Industrial Development Unit, ECLAC Buenos Aires Office, on the basis of information from the Central Bank of the Argentine Republic.

[a] pei: capitalization of external debt with exchange-risk insurance.
cpd: capitalization of public external debt.
on: onlending.

Since 1991, debt capitalization has been used in tandem with the privatization of State-run firms and has thus taken on a whole new dimension which has a very strong structural impact. This is one of the pivotal elements in the changes taking place in Argentine society, especially in the areas of telecommunications, petroleum, electric power, transport and roads and, within the manufacturing sector, in the iron and steel, petrochemical and shipbuilding industries (see table 2). Transnationals are deeply involved in this process (over 40% of the total equity of privatized enterprises is held by foreign-owned firms) (see table 3) and have, for the first time ever in Argentina, entered into partnerships with a select core group of national economic conglomerates for the coordination of specific ventures. In these alliances, transnational corporations usually take on the role of "technical operator" while administrative and institutional management duties are performed by the local firms. These consortia also link up with local and foreign banking institutions in order to put together the corresponding financial packages. In addition to North American transnationals, other corporations that maintain a high profile include firms from Spain (in telecommunications, transport, energy, water and natural gas); France (petroleum, energy, water, iron and steel, and telecommunications); Italy (natural gas) and Chile (energy); Japanese firms are conspicuous by their absence. Two distinctive features to be noted here are that, in the great majority of cases, this is the first time these companies have operated in the country, and a number of them are State enterprises.

TABLE 2

Argentina: Participation of foreign firms in privatization operations [a]
(Percentages and millions of dollars)

Sector	Enterprise privatized	Total amount received (Cash + debt paper) [b]	Transnational corporation	Country	%	Local group	%
			Cofivacasa	Spain	6.33	Riva S.A.	3.58
						F. de Vicenzo	3.26
Railways	Ferrocarriles						
	Rosario-Bahía Blanca		Iowa Interstate				
			Railroad	USA	...	Techint	...
	Mitre		Montana Rail Link	USA	...	Aceitera General Deheza	...
			Anacostia Pacific		...		
			RBC		...		
	Remainder of Línea Roca					Loma Negra	65.00
						Petroquímica Comodoro Rivadavia	10.00
						Acindar	10.00
						Decavial	5.00
						Banco Francés	5.00

TABLE 2 *(continuation 1)*

Sector	Enterprise privatized	Total amount received (Cash + debt paper)[b]	Transnational corporation	Country	%	Local group	%
						Asociación de Cooperativas Argentinas	5.00
	Línea General Urquiza		Petersen Thiele Railroad		6.25	Perscarmona	71.25
			Development Corp.	USA		Olmatic	12.50
						Alesia	10.00
Hotels	Hotel Llao-Llao	6.11	Choice Hoterls Int.	USA	10.00	COFICA and Sur Hotel	45.00
			Citicorp	USA	45.00		
Shipyards	Tandanor	59.80	Sud Marine Enterprises	France	5.00	Cía. Arg. de Transportes Marítimos	92.10
			Banco Holandés Unido	Netherlands	2.90		
Iron and steel	Altos Hornos Zapla	18.16	Société Industrielle de Métallurgie Avancée	France	19.33	Pensa	28.30
			Albert Duval	France	13.99	Penfin	5.01
			Citicorp	USA	33.37		
	Somisa	147.26				Propulsora (Techint)	90.00
						Siderca (Techint)	10.00
Petro-chemicals	Petropol	6.92				Indupa	...
	Induclor	27.92				Indupa	...
	Petroquímica Río III	7.30				Bunge y Born	...
	Polisur	22.30				Garovaglio y Zorraquin	...
	Monómeros vinílicos	14.60				Viniclor	...
Petroleum	YPF						
	Tordillo	179.09	Santa Fe Energy	USA	20.00	Techint	47.50
			Energy Development Corporation	USA	12.50	Pérez Companc	20.00
	El Huemul - Koluel	170.48	Total austral	France	10.00		
	Puesto Hernández	286.35	Oxy	USA	40.50	Pérez Companc	57.00
						Others	2.50
	Vizcacheras	167.69	Repsol	Spain	50.00	Astra	50.00
	Santa Cruz I	55.00	Quintana Petroleum	USA	28.56	Soldati	46.44
			Marc Rich	Switzerland	25.00		
	Tierra del Fuego	143.50	Chavuco Resources	Canada	33.34	Bridas	52.37
			Coastal Argentina	USA	14.29		
	Santa Cruz II	141.60				Inter Río Holding	
						Establishment	20.00
						Astra	40.00
						Pérez Companc	40.00
	Palmar Largo	36.00	Norcen Int. Ltd.	Canada	25.50	Macri	29.00
			Dong Won Co. Ltd.	Korea	20.00	Soldati	25.50
	Aguaragüe	143.70	Ampolex	Australia	35.71	Techint	35.72
			Petrobras	Brazil	21.43	Soldati	7.14
	Refinaria Campo Durn	64.10				Isaura	15.01
						Pérez Companc	39.99
						Macri	30.00
						Astra	15.00
	Ebytem S.A.	19.04				Isaura	100.00
	Destilería Dock Sud	11.71				Soldati	100.00
	Planta de Aerosoles	1.62				Superservicios (Beraldi)	100.00

TABLE 2 *(continuation 2)*

Sector	Enterprise privatized	Total amount received (Cash + debt paper)[b]	Transnational corporation	Country	%	Local group	%
	Oleoductos Troncales	77.05				Pérez Companc	33.00
						Bolland	20.00
						Bridas	17.00
						Macri	19.00
						Astra	10.00
						Techint	3.00
	Destilería San Lorenzo	12.21				Pérez Companc	56.49
						Soldati	42.51
Gas	Gas del Estado						
	Transportadora de Gas del Sur	356.20	Enron Pipeline Company	USA	25.00	Pérez Companc	25.00
			Citicorp Equity Investments	USA	25.00	Argentina Private Development	25.00
	Transportadora de Gas del Norte	210.22	Novacorp International	Canada	25.00	Techint	39.00
			Transcogas	Canada	36.00		
	Distribuidora de Gas Metropolitana	300.02	British Gas	U. Kingdom	41.00	Pérez Companc	25.00
						Astra	20.00
						Invertrad (Acindar)	14.00
	Distribuidora de Gas Buenos Aires Norte	155.55	Manra	Spain	21.00	Soldati	28.00
			Gas Natural	Spain	51.00		
	Distribuidora de Gas Pampeana	235.41	Camuzzi Gasometri	Italy	100.00		
	Distribuidora de Gas Litoral	103.60	Tractebel	Belgium	40.00	Garovaglio y Zorraquin	20.00
			Iberdrola	Spain	20.00	Diecisiete de Abril (Bemberg)	20.00
	Distribuidora de Gas Centro	138.00	Società Italiana per il Gas	Italy	25.00	Macri	75.00
	Distribuidora de Gas Cuyana	122.00	Società Italiana per il Gas	Italy	25.00	Macri	75.00
	Distribuidora de Gas Noroeste	72.03				Cartellone	40.00
						Banco Francés	20.00
						Cía de Consumidores de Gas de Santiago	40.00
	Distribuidora de Gas del Sur	148.03	Camuzzi Gasometri	Italy	100.00		
Electric power	SEGBA						
	Central Costanera	90.10	Endesa	Chile	50.01	Pérez Companc	12.50
			Distribuidora Chilectra Metropolitana	Chile	5.00	Inter Río Holding Establishment	12.50
			Enersis	Chile	15.00		
			Costanera Power Electricidad	USA	4.99		
	Central Puerto	92.21	Chilectra Quinta Región	Chile	17.50		
			Distribuidora Eléctrica Qtinta Región	Chile	82.50		
	Edenor	427.00	Electricité de France	France	20.00	Astra	40.00
			Endesa	Spain	10.00		
			Emp. Nacional Eléctrica del Ribagorzana	Spain	20.00		

TABLE 2 *(continuation 3)*

Sector	Enterprise privatized	Total amount received (Cash + debt paper)[b]	Transnational corporation	Country	%	Local group	%
			Société d'Aménagement Urbain et Rural	France	10.00		
	Edesur	511.01	PSI Energy Inc.	USA	10.00	Pérez Companc	40.50
			Enersis	Chile	19.50		
			Endesa de Chile	Chile	10.00		
			Distribuidora Chilectra Metropolitana	Chile	20.00		
	Central Alto Valle	22.10	Dominion Energy Inc.	USA	60.00	Coop. Prov. de Serv. Públicos (Neuquén)	40.00
	Central Güemes	86.20	Duke Güemes	USA	25.00	Soldati	25.00
			TEW Americas Development	USA	15.00		
			Iberdrola	Spain	20.00		
			The Argentina Investment Co.	Cayman Islands	15.00		
	Pedro de Mendoza	8.55				Acindar	74.97
						Massuh	25.03
	Dock Sud	25.00				Polledo	100.00
	Edelap	139.00	Houston Power Corporation	USA	51.00	Techint	49.00
	Sorrento	8.79				Malvicino	17.97
						Iate	17.97
						Elepring	3.98
						Argon	60.07
Water	Obras Sanitarias		Lyonnaise des Eaux-Dumez	France	33.30	Soldati	20.70
			Compagnie Générale des Eaux	France	...	Meller	10.80
			Anglian Water	U. Kingdom	4.50	Banco Galicia	8.10
			Aguas de Barcelona	Spain	12.60		
Telecom-munications	Entel Telefónica de Argentina	749.01	Holding B.V. (Telefónica)	Spain	10.00	Techint	8.31
			Banco Central de España	Spain	7.04	Soldati	5.00
			Banco Hispanoamericano	Spain	5.00	Pérez Companc	14.56
			Republic New York	USA	1.50		
			Manufacturers Hanover	USA	4.30		
			Bank of New York	USA	4.16		
			Southel Equity Corporation	USA	4.00		
			Citicorp Venture Capital	USA	20.00		
			Bank of Zurich	Switzerland	4.16		
			Centro Banco de Panamá	Panama	1.40		
			Vanegas	Panama	1.25		
			Banco Atlántico	Panama	0.75		
			Bank of Nova Scotia	Canada	0.10		
			Arab Banking Co.	Saudi Arabia	4.31		
			Bank of Tokio	Japan	4.16		
	Telecom	677.01	Cable et Radio	France	32.50	Pérez Companc	25.00

TABLE 2 *(conclusion)*

Sector	Enterprise privatized	Total amount received (Cash + debt paper)[b]	Transnational corporation	Country	%	Local group	%
			J.P. Morgan	USA	10.00		
			Stet			Italia	32.50
Air transport	Aerolíneas Argentinas	742.99	Iberia	Spain	47.50	Amadeo Riva	10.26
			Bco. Hispanoamericano	Spain	11.88	Devi S.A.	3.58
			Banesto	Spain	11.88	Medefin	1.73

Source: Prepared by the authors on the basis of information from the press and the Ministry of the Economy.
[a] Up to February 1993.
[b] Debt paper calculated at its market value.

As regards the *regulatory environment for foreign capital*, in a departure from the highly restrictive legislative treatment of foreign capital seen during the import substitution stage, the philosophy underlying the laws now in force is one of liberalization and encouragement of foreign investors. The laws on foreign investment currently in effect are set forth in Act 21382 (of 1976, amended in 1980) as amended by Act 23697 (the Economic Emergency Act of 1989) and Regulatory Decree 1225/89. The original Foreign Investment Act (21382) represented a substantial move towards liberalization of the entry of foreign direct investment and of the activities of transnationals within the country. The repeal of all prohibitions regarding sectors of destination, the establishment of equal rights and obligations for transnational and national investors and the elimination of all forms of differential treatment (access to domestic credit, use of promotional arrangements, etc.), the possibility of investing in used (existing) capital goods and capitalizing intangible assets, the ability to remit profits and repatriate capital without hindrance, and the definition of relations between parent companies and their local subsidiaries as being between "independent entities" are some of the more notable features of this legislation, which marks a complete change from the regulatory and restrictive approach associated with earlier legal provisions. In rescinding the requirement that prior government approval be obtained for certain kinds of investments (in the areas of defence, national security, public utilities, energy, radio-telecommunications, etc.), Act 23697 and Decree 1225/89 establish full equality in terms of the rights of transnational and national corporations. Reaffirming this attitude towards foreign investors, Decree 2428/91 was signed in November 1991, making Argentina the first Latin American country to accede to the Articles of Agreement of the World Bank Multilateral Investment Guarantee Agency and thus doing away with any possibility whatsoever of restricting the operations of foreign firms in the country.

TABLE 3
Argentina: Privatizations, by origin of purchasing firm and sector of activity
(December 1992)

Purchasing firm/sector	Total equity[a]	
	Millions of US$	%
1. Argentine firms	4 607.0	27.9
2. Foreign firms	6 821.2	41.3
3. Argentine Government	5 104.5	30.9
Total	**16 532.7**	**100.0**
a. Telephone services	3 919.9	23.7
b. Airlines	874.1	5.3
c. Railroads		
d. Electricity	3 458.1	20.9
e. Ports	6.0	0.0
f. Roads		
g. Television and radio	13.9	0.1
h. Petroleum	3 500.1	21.2
i. Natural gas	4 065.9	24.6
j. Sanitation works		
k. Industry		
– Petrochemicals	260.9	1.6
– Shipyards	59.8	0.4
– Steel	199.4	1.2
l. Government-owned real estate	107.0	0.6
m. Other	67.6	0.4

Source: Argentina, 1993, tables 8 and 9.
[a] Total financial worth, computed as if 100% of the holding had been transferred.

III

New strategies of industrial transnationals in Argentina

In this section we will describe the main features of the new pattern of TC linkages with Argentine industry in the 1990s. This outline is based on information gathered in a survey of 61 of the main subsidiaries of industrial transnationals in Argentina.[3, 4] The common thread running through this characterization is provided by the strategies which local TC subsidiaries are using to establish a new type of position within the local economy. Three types of firms have been identified on the basis of their strategies, out of the array of transnational corporations operating in the manufacturing sector.

□ Companies whose manufacturing activities are based on the production of natural-resource-intensive goods and which have gained a competitive edge on the basis of these products that allows them to compete at the international level.

□ Companies which have used the industrial experience gained during the import substitution stage to win a place for themselves in the globalization schemes being pursued by their corporations; such companies specialize in a few items or components for export and satisfy domestic demand with wholly imported products or products having a large import content.

□ Companies that have fallen back on a scheme in which assembly activities and importation take on increasing importance in comparison to local production as part of their stategy for winning the domestic market.

These three types of strategies trace a profile which, although it has not yet taken on its final form, differs substantially from that of these same firms during the import substitution stage and has important implications for manufacturing, foreign trade, technological innovation and other aspects of the development model now taking shape in the country.

1. A stronger position in external markets

One conspicuous aspect of the renewed vitality being exhibited by industrial transnationals is the growth of their exports. During the import substitution stage, since the main objective of the transnational corporations' presence in the manufacturing sector was to supply the domestic market, exports were confined to enterprises whose activities were related to the exploitation of natural resources. [5] Under present conditions, however, although the domestic market continues to be a priority target, exports have become an important element for all the transnational corporations that continue to engage in manufacturing activities in the country. Although data on the percentage of total exports accounted for by these firms are not available, there are some indicators which provide an idea of the important role played by exports in these firms' new strategy for positioning themselves in the local market.

[3] A survey concerning the strategies of foreign-owned firms for dealing with structural changes, globalization and regional integration was carried out as a joint effort by Project ARG. 91/019 on economic integration (UNDP/Economic Research Department, Secretariat for Economic Programming, Ministry of Economic Affairs and Public Works and Utilities) and the project on the role of industry and international trade in the transformation of the Argentine economic system, funded by the Volkswagen Foundation and headquartered at the ECLAC office in Buenos Aires.

[4] The 61 firms covered by the survey account for 23% of total invoicing by the 200 largest industrial enterprises in the country and for nearly 60% of total sales by the 100 largest subsidiaries of industrial transnationals. In terms of foreign trade, they account for 8% of total exports, 12% of exports of manufactures and 13% of total imports by Argentina in 1991 (Bezchinsky and Kosacoff, 1993).

[5] In the mid-1970s this orientation began to change substantially. With the support of their local performance and a generous system of promotional support mechanisms, exports of manufactures –primarily to other Latin American countries– began to increase considerably. The interruption of the local conditions conducive to this trend and the failure to make a transition to new forms of competition soon undermined this export performance, however. On this subject see, for example, Bisang and Kosacoff (1993).

According to data obtained from the survey cited earlier, external sales rose by over 100% between 1981 and 1992, with particularly rapid growth during the five-year period 1986-1991, when they climbed at a cumulative annual rate of 15.8%. Although the exhaustion of the possibilities offered by the import substitution option created conditions that prompted all the transnationals operating in the country to seek, albeit to differing degrees, an export outlet for their goods, the various firms' reasons for doing so and the characteristics of their newly expanded position in external markets differ depending on the nature of their retooling strategies. Whereas external markets are the main destination for the goods produced by firms involved in globalization schemes, the behaviour of firms dealing in natural-resource-related areas depends, to a large extent, upon prices and conditions in the international market. Finally, for firms that continue to operate on an import-substitution basis, the trend in external sales is associated primarily with the domestic economic cycle rather than with any new strategy for local market positioning. In other words, the reactivation and contraction of the domestic market will have a much greater effect on the exports of this latter group of firms than on those of natural-resource-intensive firms and a much smaller impact on those of globalized enterprises. Table 4 presents survey data that illustrate these differences.

2. Increased import levels and a change in the import product mix

The import substitution model, which was the model in use during the time of Argentina's industrialization, was centered around the establishment of final goods industries (mainly consumer goods, plus some intermediate inputs), but the country continued to depend on the importation of large quantities of inputs and capital goods. The new conditions associated with the opening up of the economy make it necessary for the transnational corporations operating in the country to rethink their strategies for supplying the local market; both the importation of final goods previously produced in the country and the incorporation of more imported components into production functions, which were previously not feasible because of trade barriers and local content regulations, are now possibilities to which all the transnational corporations are devoting some consideration.

The above-mentioned survey also furnishes some information about how imports are changing. The first noteworthy factor is the transnationals' share of total imports: in 1992, the 61 firms in the survey purchased a total of US$1 857 000 000 worth of imports, equivalent to 13% of the value of Argentina's total imports for that year. An analysis of these imports by product category also yields some interesting results (see table 5). First, the small percentage of capital goods among these imports is significant in that it is symptomatic of a shortage of new investments. One reasonable explanation for this phenomenon is that many of the investments made in Argentina by transnationals in recent years have taken the form of the acquisition of existing companies or facilities. In addition, many firms are still in the midst of a transition which has thus far caused them to concentrate their efforts on organizational changes or specific improvements not involving any large-scale overhaul of their existing physical facilities.

TABLE 4

Argentina: Export trends, by type of corporate strategy, 1981-1992

Strategy	Cumulative annual growth rates (%)		
	1981-1986	1986-1991	1991-1992
Substitution	5.8	22.5	-1.6
Natural resources	-1.8	13.3	-1.7
Globalization	3.6	16.7	5.2
Total	**-1.2**	**15.8**	**-0.9**

Source: Compiled on the basis of data from a survey conducted jointly by Project ARG 91/019 on economic integration (UNDP/ Ministry of Economic Affairs and Public Works and Utilities, Secretariat for Economic Programming) and the project on the role of industry and international trade in the transformation of the Argentine economic system, funded by the Volkswagen Foundation and headquartered at the ECLAC Buenos Aires Office.

TABLE 5

Argentina: Import product mix, 1991 and 1992

Type of product	Percentage of total	
	1991	1992
Inputs	47.7	53.5
Capital goods	11.2	2.8
Final goods for sale	38.4	38.2
Total	**100.0**	**100.0**

Source: Same as table 4.

Second, the importance of the role played by imports of final goods for subsequent sale (which represented nearly 40% of total imports in both 1991 and 1992) points up one of the characteristics of the transnationals' new position within Argentine industry, in which the marketing of products imported from other units of the corresponding corporations is equally as important as the local production of manufactures, and in some cases more so. It could be argued that the scale on which final goods are being imported for subsequent sale is a transitory phenomenon due to these firms' inability to produce enough locally to cover the increased domestic demand occasioned by the reactivation of the domestic market. According to this line of reasoning, the trade liberalization programme made it possible for these corporations to deal with this situation by resorting to imports as the most readily available and economical source of supply, but in fact the phenomenon would seem to be due to a trend of a more structural nature. This change arises out of full utilization of the commercial, distribution and financing networks, after-sale service capabilities, brand recognition and other elements which these firms took pains to establish in Argentina over a period of several decades, and thanks to which it is easier for them to market imported final goods. In addition, the percentage of imported inputs is significant (their total value jumped by 40% between 1991 and 1992), since it reflects such goods' expanding role in the production functions of these enterprises. Thus, the tendency is towards a decline in local value added as the manufacturing processes being used are increasingly coming to be based on the assembly of imported parts.

The types of goods being imported also vary depending on the strategy of each corporation. The level of imported inputs used by natural-resource-based enterprises and firms pursuing globalization schemes is particularly high whereas, for companies that remain involved in import substitution, the weight of such imports is virtually equal to that of imports of final goods for subsequent sale. Even in the case of "globalized" firms, although 1992 imports of both inputs and final goods were markedly higher than those of 1991, the increase in the former was larger. These data are indicative of the differing rationales guiding the operations of the various types of companies (see table 6).

3. The importance of intra-firm trade

Large-scale international trade flows within transnational corporations have been one of the hallmarks of the trade matrix. By the same token, one of the main features of the current globalization process is the increasing degree of complementarity between foreign direct investment and trade, particularly intra-firm trade. Whereas, during the preceding stage of TC expansion at the world level, these corporations started up operations in the various countries as an alternative to importation, since they offered another way of supplying those markets (which meant that they were producing the same goods in different locations), transnationals are now seeking to organize their global production structures more efficiently by having their various affiliates specialize in different components of their internationalized output. The generation of large trade flows among their various

TABLE 6

Argentina: Import product mix, by type of corporate strategy, 1991 and 1992
(Thousands of dollars and percentages of total)

Strategy	Inputs (%)		Capital goods (%)		Final goods for sale		Total (thousands of US$)	
	1991	1992	1991	1992	1991	1992	1991	1992
Substitution	49.3	48.4	5.4	5.1	45.3	46.5	481 295.6	639 057.2
Natural resources	68.8	60.5	5.3	5.9	25.8	33.6	169 033.0	194 251.0
Globalization	42.9	60.1	18.6	1.3	39.0	38.6	524 797.5	1 024 442.0
Total	**49.0**	**56.6**	**11.5**	**3.0**	**39.5**	**40.4**	**1 175 126.1**	**1 857 750.2**

Source: Same as table 4.

affiliates is a direct consequence of this new form of organization. Although the figures that would be needed to gauge the scale of this phenomenon with any degree of certainty are not available, many authors regard it as one of the main aspects of the globalization process, in particular because of its implications in terms of the different States' policy implementation capabilities, especially in the less developed countries (Dunning, 1992; Mortimore, 1992; Ostry, 1992; Vernon, 1992).

The survey data confirm the existence of intra-firm trade, which is a factor of extraordinary importance in the case of Argentina. In fact, nearly 60% of these corporations' exports and almost 80% of their imports are actually intra-firm transactions. This indicator is extremely significant within the context of the major changes being made by transnationals in their strategies for making the transition from a heavily protected economy to an open one. Internationalized production and the new forms of globalization demand uniform quality standards for products and components and therefore entail a change in the production function and the import product mix of these corporations. Whereas before they assembled the final product using parts produced in the country or parts of differing qualities imported from a variety of sources, now these companies need to be sure that the components they import will meet the quality standards of internationalized production, and they do this primarily by using intra-firm supplies of such parts and components. Table 7 illustrates the increase in intra-firm trade in 1992 over 1991. The figures given in this table also show that, despite their increased involvement in external markets, these firms suffer from a large trade deficit and that intra-firm trade is a decisive factor in this regard. Although the retooling of TC affiliates has not yet been completed, and their ultimate configuration will largely depend on how the regional integration process proceeds, it seems clear that the resulting trade pattern is highly deficit-prone. Although we may expect an increase in exports of goods produced by natural-resource-based enterprises and parts manufactured by firms working within their parent corporations' globalization schemes, it is also quite likely that imports may increase further as globalization processes move forward and as many manufacturing concerns are converted into assembly plants and trade representatives of their parent companies. A change in this trend would involve large-scale retooling and export specialization initiatives which would necessarily have to be coupled with major investments in new industrial facilities.

Intra-firm trade also takes place on a large scale among corporate affiliates within the framework of MERCOSUR (see table 8). What is particularly remarkable about this trade flow is that it is even greater than intra-firm trade with the rest of the world; this suggests that, because of the difference between the levels of development of the region and the central countries, firms must resort more often to the corporate network within MERCOSUR in order to obtain goods that meet the technical and quality standards demanded of internationalized production.

TABLE 7

Argentina: Foreign trade, by type of transaction, 1991 and 1992
(Thousands of dollars and percentages)

	Intra-firm		Extra-firm		Total	
	1991	1992	1991	1992	1991	1992
Exports	495 142.7	560 108.0	463 495.0	391 174.0	958 637.7	951 282.0
%	51.7	58.9	48.3	41.1	100.0	100.0
Imports	822 926.7	1 455 884.8	352 199.4	401 865.4	1 175 126.1	1 857 750.2
%	70.0	78.4	30.0	21.6	100.0	100.0
Trade balance	-327 784.0	-895 776.8	111 295.6	-10 691.4	-216 488.4	-906 468.2

Source: Same as table 4.

The corporate trade matrix varies depending on the relevant firm's market positioning strategy. First of all, intra-firm trade takes on much greater importance for globalized corporations than it does for the other two categories of companies. Thus, whereas the destination of globalized firms' exports is almost always within the same corporation, in the other two cases the value of market transactions slightly exceeds that of intra-firm. Second, the exports (both intra-firm and outside sales) of firms in the other two categories declined in 1992, but intra-firm sales by globalized companies rose even though their sales to outside markets were down (see table 9). In the case of imports, intra-firm transactions are of great importance for companies that continue to use the import substitution model and are even more so for globalized enterprises. For natural-resource-based companies, imports from the parent corporation account for only slightly more than 50% of the total.

TABLE 8

Argentina: Structure of trade, by geographic origin/destination and by type of transaction, 1991 and 1992

Variable	Origin/destination and type of transaction		Percentages of total and thousands of US$	
			1991	1992
Exports (%)	To MERCOSUR	Intra-firm	15.0	20.8
		Extra-firm	11.0	8.4
	To rest of world	Intra-firm	36.7	38.0
		Extra-firm	37.3	32.7
Total (thousands of US$)			958 637.7	951 282.0
Imports (%)	From MERCOSUR	Intra-firm	24.1	33.4
		Extra-firm	4.1	4.9
	From rest of world	Intra-firm	45.9	45.0
		Extra-firm	25.9	16.7
Total (thousands of US$)			1 175 126.1	1 857 750.2
Trade balance (thousands of US$)	With MERCOSUR	Intra-firm	-139 645.9	-421 336.4
		Extra-firm	57 462.3	-11 141.8
	With rest of world	Intra-firm	-188 138.1	-474 440.4
		Extra-firm	53 833.3	450.4
Total (thousands of US$)			-216 488.4	-906 468.2

Source: Same as table 4.

TABLE 9

Argentina: Exports of transnational corporations, by type of transaction and corporate strategy, 1991 and 1992
(Thousands of dollars and percentages of total)

Strategy	Total (thousands of US%)		Intra-firm (%)		To rest of world (%)	
	1991	1992	1991	1992	1991	1992
Substitution	178 333.5	160 786.0	37.4	41.5	62.6	58.5
Natural resources	478 175.0	402 121.0	33.6	31.7	66.4	68.3
Globalization	302 129.2	388 375.0	88.6	94.2	11.4	5.8
Total	**958 637.7**	**951 282.0**	**51.7**	**58.9**	**48.4**	**41.1**

Source: Same as table 4.

In the final analysis, these enterprises' pattern of foreign trade is a reflection of the new type of position they occupy within the local economy. The large proportion of intra-firm transactions represents a striking departure from the past, since even though a majority of these companies' imports have surely been intra-firm purchases all along, the current levels of such imports are much higher, and the import product mix (a large amount of final goods for subsequent sale and very few capital goods) is very different from what it used to be. In the case of exports, not only are current levels much higher than they were during the import substitution stage, but a large portion of these sales are channeled through the corporate network as well, whereas in the past this was done only in the case of some exports of agricultural or agroindustrial products with a low level of processing or in specific, isolated instances. [6]

4. The importance of MERCOSUR

As the economy has become more open, thereby eliminating almost all incentives for local TC affiliates to produce for the domestic market, the formation of MERCOSUR has become a prime focus of attention for companies looking for ways to continue their industrial activities within the local setting. This process entails the creation of a large common market for which the transnational corporations are in a very good position to act as suppliers, since most of them have affiliates occupying leading positions in the two main markets involved (Brazil and Argentina). Most of the transnationals are taking steps to streamline their activities in these two countries and to make them complementary, while those having an affiliate in only one of these two markets are attempting to conclude complementarity agreements regarding production and marketing activities with other firms in the same position.

Data from the above-mentioned survey refute some widely-held beliefs about the difference in size between the Argentine and Brazilian markets and between the scales of production in various industrial sectors within the two countries. In fact, in 24 of the 48 lines of production for which information is available on both countries, the Argentine industries operate at a scale equivalent to over 50% of that of the Brazilian industries. [7]

Most of these lines concern metal products and machinery or automotive products, while items having to do with the exploitation of natural resources are concentrated in the 21 product lines that have no counterpart in Brazil (see table 10).

This is a highly significant fact when the time comes for a corporation to take decisions regarding complementarity of activities within the framework of MERCOSUR. Thus far, no transnational corporation is known to have decided to withdraw permanently from manufacturing activities in the country, and this is surely due to the fact that the local affiliates have facilities of by no means negligible importance in terms of production scale (especially at the regional level), have gained industrial experience, and possess a number of other assets [8] that can be used to maintain their presence in the zonal market. This same circumstance certainly plays a role in decisions as to whether or not to bring local affiliates into the corporation's globalization scheme, taking into consideration the demands associated with internationalized production in terms of technology, production scale and quality.

The importance of MERCOSUR for these firms is also reflected in this zone's share in their foreign trade. In 1991, the zonal market accounted for almost 30% of corporate exports and imports, while in 1992 these percentages were around 30% and 40%, respectively (see table 11). The trend in coming years will no doubt be towards an expansion of these shares, given the fact that this expanded market occupies a central place in the strategies of virtually all the transnational corporations.

TABLE 10

Argentina: Distribution of lines of production, by scale relative to Brazilian affiliate and corporate strategy

(Number of lines)

Strategy	0-15%	15-25%	25-50%	50-100%	+100%	Total
Substitution	1	6	8	10	5	30
Natural resources	2	1	4	4	1	12
Globalization	-	2	-	2	2	6
Total	**3**	**9**	**12**	**16**	**8**	**48**

Source: Same as table 4.

[6] One case in point is IBM, which launched one of the first efforts to incorporate Argentine affiliates into internationalized production processes (see, for example, Vispo and Kosacoff, 1991).

[7] Of these 24, three operate on a scale equal to that of their Brazilian counterparts and 8 Argentine firms operate on a larger scale.

[8] Such assets include, *inter alia*, skilled manpower and, in some cases, access to raw materials on preferential terms.

TABLE 11

Argentina: Foreign trade, by geographic origin/destination
(Thousands of dollars)

	MERCOSUR		Rest of world		Total	
	1991	1992	1991	1992	1991	1992
Exports	249 156.5	278 159.0	709 481.2	673 123.0	958 637.7	951 282.0
%	26.0	29.2	74.0	70.8	100.0	100.0
Imports	331 340.1	710 637.2	843 786.0	1 147 113.0	1 175 126.1	1 857 750.2
%	28.2	38.3	71.8	61.8	100.0	100.0
Trade balance	-82 183.6	-432 478.2	-134 304.8	-473 990.0	-216 488.4	-906 468.2

Source: Same as table 4.

The importance of MERCOSUR also varies depending on the corporate strategy being used, while the situations with regard to exports and imports differ as well. Exports within MERCOSUR are particularly important to companies that continue to base their operations on import substitution, for which nearly 60% of all exports (although the amounts involved here are fairly small) are directed to this zonal market (see table 12). Another notable feature of this group of firms is that their sales to customers in that market with which they have no organizational link outweigh intra-firm sales to it by a small margin. The situation for globalized firms is quite different, since MERCOSUR is a relatively less important export destination (although the actual amounts involved are much greater) and intra-firm exports account for over 90% of the total (see table 13). For natural-resource-based firms, MERCOSUR plays a very marginal role. Globalized enterprises' access to international markets is facilitated by the fact that they are working near the international technical frontier, while natural-resource-based firms' access to those markets is founded upon their comparative advantages in local primary production.

In the case of imports, the zonal market is of great importance for globalized companies, which make nearly 50% of their external purchases within that zone. For import-substituting firms, it plays a much less significant (and markedly intra-firm) role, while for natural-resource-based enterprises (as in the case of exports) the zonal market is of minor importance.

TABLE 12

Argentina: Importance of MERCOSUR in trade patterns of transnational corporations, by corporate strategy, 1992
(Percentages of corresponding total)

Strategy	Exports	Imports
Substitution	54.7	26.6
Natural resources	7.8	21.5
Globalization	40.9	48.7
Total	**29.2**	**38.3**

Source: Same as table 4.

TABLE 13

Argentina: Scale of intra-firm trade by transnationals (total and within MERCOSUR), by corporate strategy, 1992
(Percentages of corresponding total)

Strategy	Exports		Imports	
	To MERCOSUR	Total	From MERCOSUR	Total
Substitution	47.5	41.5	76.9	74.7
Natural resources	36.7	31.7	68.9	53.8
Globalization	91.3	94.2	92.2	85.3
Total	**71.3**	**58.9**	**87.2**	**78.4**

Source: Same as table 4.

5. Production and technology

The establishment of transnational corporations in Argentina during the import substitution stage took on certain specific characteristics owing to the fact that, because they were dealing with a small, heavily protected local market, they had to adapt their plants to much smaller production scales than those for which they had been designed in the transnationals' home countries and had to operate on the basis of a much higher degree of integration than before. The technological behaviour of these firms was based on

the introduction of products and processes previously developed in more advanced societies, which had to be adapted to the prevailing local conditions. This required a major effort in the areas of engineering and research and development (R & D) on the part of these corporations; the manner in which they undertook this effort, however, followed a localistic course that clearly departed from the best international practices.

In view of the new scenario confronting transnational corporations in Argentina, in which the demands associated with the formation of linkages with the global economy are mounting (to say nothing of the competitive pressure involved in being a part of the global corporate network), a number of them have decided to start bringing in products and processes that are much closer to the international technological frontier. [9] This is giving rise to a paradoxical situation in that, although under these new conditions business enterprises will use production technologies that will approach the best international practices more closely, the level of their local engineering and R & D requirements will be much lower because these technologies –owing to their greater flexibility and the new dimension in which they place the question of production scales, as well as the possibility of incorporating a greater import content– can be applied at the local level without any major modifications. Furthermore, the future manufacturing profile of TC affiliates does not justify huge R & D expenditures at the local level since they will be engaged, first of all, in the manufacture of products or parts using state-of-the-art technology on a production scale similar to that used at the international level; secondly, in the processing of natural resources, for which state-of-the-art technology developed outside the country will also be available; and, lastly, in manufacturing processes involving a great deal of assembly work and a low level of local integration.

The survey cited earlier also collected data on the R & D expenditures of 39 firms; these expenditures totalled US$32.6 million in 1991, which was a mere 0.1% of what the corresponding corporations spent on R & D during that year. This indicator tells us something about the essential features of the transnationals' technological/industrial position in Argentina. Local affiliates' share in R & D expenditure is negligible and is proportionately much smaller than their already slim share in the corresponding corporations' total sales. In other words, local affiliates have access to the knowledge generated in the laboratories of developed societies but themselves play no active part in the generation of any major innovations. Their efforts are focused entirely on the adaptation of those innovations, and even that process is becoming less necessary in the new international economic environment. This fact is illustrated by the low levels of R & D expenditure as a percentage of the local affiliates' total sales, which are far lower than the average values recorded within the corresponding corporations. In point of fact, these 39 local subsidiaries spent just 1% of the total value of their sales on R & D in 1991. In the most extreme cases, nine of these firms reported that they had made no R & D expenditures whatsoever; 24 firms spent less than 2%, while only six firms allocated more than 2% of the value of their total sales to R & D expenditures (see table 14).

TABLE 14

Argentina: Distribution of firms, by allocations for research and development as a percentage of sales, 1991

Percentage of sales	Number of firms
No R & D expenditure	9
0-1	12
1-2	12
+2	6
Total	**39**

Source: Same as table 4.

6. A marginal position within parent corporations

One point that has been brought out repeatedly in studies on transnational corporations in Argentine industry is the fact that, even though TC subsidiaries figure among the leading firms in their fields of activity at the local level, they are of negligible importance as a component of their parent corporations (Sourrouille, Gatto and Kosacoff, 1984).

This is still the situation today as regards the level of local affiliates' invoicing as a percentage of their parent corporation's total sales. In the survey mentioned earlier, 45 of the 61 firms furnished information regarding the corresponding corpora-

[9] Although not all transnationals in Argentina have yet taken this decision, it seems to constitute a tendency that will eventually be embraced by all the firms that continue to engage in some sort of manufacturing activity at the local level.

tions' invoicing in 1991. These 45 firms had total sales in Argentina of US$7 118 000 000 during that year (equal to nearly 90% of the sales made by all the companies in the sample), but this amounted to just 0.8% of the corresponding corporations' total sales (nearly US$848 billion) for the same year. This initial indicator confirms the conclusion that, in aggregate terms, local affiliates' importance as a part of the corresponding corporate networks remains marginal.

In fact, 28 of these companies accounted for less than 1% of their parent corporations' total invoicing. In these cases, no characteristic traits relating to the level of local invoicing or their positioning strategy have been identified. Only 17 companies' local invoicing totals exceeded 1% of total corporate sales, and even in those cases the figures ranged from just 1.3% to 3.2%.[10] As for employment, only six firms accounted for over 5% of their parent corporations' total employment levels, but (with just one exception) these firms do not occupy a significant position in the local market either.

A comparison of local affiliates' production scales with those of their parent corporations also yields some noteworthy results. If we consider the affiliate with the largest scale of production in each case, we find we have information on 59 lines of production in 28 firms. Eight of these lines are produced only in Argentina, and the products involved either are agricultural derivatives or are produced by companies whose local operations are unrelated to the parent corporation's main line of business. Of the 51 remaining product lines that are produced both in Argentina and by other affiliates of the same corporation, the majority are using production scales from 5% to 20% of the size of the corresponding corporation's largest scale of production; in this case no correlation was found between differences in scale and the type of local corporate strategy being used (see table 15).

TABLE 15

Argentina: Distribution of lines of production, by relative scale within parent corporation and corporate strategy

(Number of lines)

Strategy	0-5%	5-10%	10-20%	20-50%	+50%	Total
Substitution	6	7	11	4	2	30
Natural resources	1	4	2	...	3	10
Globalization	...	5	2	3	1	11
Total	**7**	**16**	**15**	**7**	**6**	**51**

Source: Same as table 4.

7. Alliances and ownership

The recent literature on the new-found dynamism of transnational corporations in the international arena refers to strategic alliances as one of the most notable new developments of the late 1980s and early 1990s. In recent years transnational corporations have formed a large number of alliances with other transnationals in the spheres of production, marketing and even (and most importantly) in areas playing a key role in determining their own ability to compete, such as R & D projects. Some of the causes cited (Mytelka, 1990; OECD, 1991) to account for this phenomenon –which would have been unthinkable when the Fordist-style system of organizing production was in its heyday– are the need to find a way to deal with rising R & D and investment costs, uncertainty about the future, and the complexity of melding together different technologies.[11]

At all events, transnational corporations are no longer seen as organizations whose importance lies in their ownership and control of large quantities of assets in different locations, but instead as the "central nervous system" of a vast international network of production, technological, marketing, financial and other capabilities over which the corporation does not necessarily wield control as a majority shareholder but which does bolster the corporation's competitive position in a "systemic" manner (Dunning, 1992).

The formation of these global networks has been heavily concentrated in what has come to be known as the Triad (the United States, the European Community and Japan) (UNCTC, 1991). The only developing countries to have participated in this process to any significant extent are a few South-East Asian nations, while the rest have done so in no more than a marginal capacity in very isolated cases.

[10] There was a single case of a company in the food industry whose local invoice totals represented 47% of its parent corporation's total. However, this was because the branch of activity in which this firm was engaged at the local level represented a marginal portion of the parent company's total operations, and the figure given for the corporation's total sales actually corresponded to the invoicing for that activity. In another three cases –with invoicing of from 1% to 3.2%– the situation was similar.

[11] Microelectronics, telecommunications, biotechnology, new materials, etc.

In Argentina, a large number of partnerships between transnationals and local companies have been formed in recent years. This is certainly a novel phenomenon within the local environment –where transnationals' stock holdings have always given them absolute control over their local affiliates– but these partnerships are quite different from the strategic alliances entered into within the Triad. First, their prime objective is to run a specific business which, in most cases, plays only a marginal role within the parent corporation as a whole; second, almost all of these partnerships have been formed in connection with the privatization of public utilities; third, the few such partnerships found in the manufacturing sector are established through the creation of new companies. Thus, according to the survey data, 49 of the 58 firms that responded to the relevant question are more than 90% foreign-owned (39 of them are 100% foreign-owned), and only three of the other nine are less than 50% foreign-owned.

8. The dynamism of transnational corporations in the local market

During the 1970s and almost the whole of the 1980s, foreign investment in Argentina exhibited a very different dynamic from that seen during the height of the import substitution scheme. [12] Since the early 1970s, when it began to become apparent that the import-substitution industrialization (ISI) model had run its course, the inflow of foreign investment slowed; this trend was not even partially reversed until a liberalization policy was implemented in 1976-1983, and even then investment flows displayed a number of characteristics that distinguished them from earlier flows. For one thing, this time the main recipients were the financial and petroleum sectors; for another, the increased inflow of foreign capital during this period was coupled with the departure from the country of some of the main industrial transnationals. [13]

The slowdown in foreign investment has only been fully reversed in the past few years, with the implementation of a series of structural reforms that are leading the country in the direction of an open economy with much less State involvement and a much higher degree of integration into world markets. In addition to the large flow of foreign investment brought into the country by the privatization of State-run enterprises, there is also a flow of new investment in manufacturing.

One of the most notable facets of the new dynamic of industrial transnationals is an increase in their sales beginning in the mid-1980s, which, within the context of Argentina's stagnant manufacturing sector, enabled them to regain the market positions they had lost in the 1970s, although the increase was not spread evenly among all such firms (see table 16). This uneven distribution serves to highlight the buoyancy of firms basing their operations on globalization schemes, which began to reach a particularly notable level in the mid-1980s, when the cumulative annual growth rate topped 11%; as a result, this category of firms, which accounted for 20% of total sales in 1981, had expanded its share to 40% by 1992. Natural-resource-based enterprises also increased their sales sharply, although in 1992 (when there was an upswing in the domestic market) they registered a growth rate of only 1%. Firms that continue to base their operations on import substitution had slower (yet still considerable) growth rates compared with the rest of the manufacturing sector in 1986-1991, although these rates declined very slightly in 1992.

TABLE 16

Argentina: Company sales, by corporate strategy, 1981-1992

Strategy	Cumulative annual growth rates (%)		
	1981-1986	1986-1991	1991-1992
Substitution	0.5	5.0	4.4
Natural resources	-1.6	9.1	1.0
Globalization	2.6	11.7	11.6
Total	**-0.8**	**8.5**	**5.6**

Source: Same as table 4.

[12] During the second phase of the import-substitution industrialization (ISI) process, in particular, the manufacturing sector was the engine of growth for the economy. In the inter-censal period 1963-1973, the manufacturing sector expanded at an annual rate of 8%, and this growth was clearly driven forward by transnationals' subsidiaries, whose share of manufacturing output rose from 15% in 1958 to 30% in 1973.

[13] According to national economic census data, the transnationals' share of manufacturing output was 30.4% in 1973 but had slipped to 26.8% by 1984.

IV

Conclusions

In this article we have analysed a series of events that attest to the recent dynamism displayed by transnational corporations and the new types of roles they are performing within the Argentine economy, which differ markedly from the roles they played during the import substitution stage.

There have been three important developments with regard to the pattern of foreign trade. First, export levels are rising, but import levels have been much higher as well, and a consequent increase in intra-industrial trade has been observed. Although the opening of the economy has forced business firms to re-think their local positioning strategies, as a result of which they have streamlined and specialized their operations, it has also acted as an incentive for them to base that specialization on a greater imported content than during the import substitution stage as well as on a stronger export orientation. Under these new conditions, the most advantages accrue to firms operating in natural-resource-related sectors, by virtue of the country's wealth of natural resources, and to companies taking part in globalization processes, since their production efforts are the ones most strongly oriented towards international markets. Second, intra-firm trade has become a highly significant factor: a finding which serves to corroborate the existence of a trend identified by recent studies on investment and trade at the international level. In fact, 60% of these corporations' exports and 80% of their imports are intra-firm transactions. Third, MERCOSUR plays an important role in these firms' trade patterns, which attests to the progress made in furthering their integration and complementarity with affiliates in other countries of the area. In all, 30% of exports and 40% of imports take place within this zonal market. The level of intra-firm trade is especially high in the case of imports and is higher within MERCOSUR than with the rest of the world. This situation is accounted for by the fact that internationalized production must meet technical and quality standards that can only be assured by the corporation in question, especially among the MERCOSUR countries.

Concerning the international position of local TC affiliates, the available data support the conclusion that even though these firms are the largest in the local market, they continue –as has been the case ever since they made their appearance in the country– to be of marginal importance within their parent corporations; this is illustrated by the fact that the average sales of the firms surveyed represent less than 1% of their parent corporations' sales. A similar asymmetry exists in terms of the technological level of these firms' local facilities, inasmuch as, even though they are the largest and most efficient plants in the local market, they fall far short of the size and technological sophistication of industrial plants in the developed countries. Ironically, although some firms have recently restructured their facilities in the country and have thus moved closer to the technological leading edge in the international marketplace (especially in product technologies), they are using technologies developed in the central countries, which they then apply directly in their local production processes, thereby saving themselves the major engineering effort demanded by the technologies used during the import substitution stage. This accounts for the low level of these firms' R & D expenditures, which amount to around 1% of their sales and just 0.1% of their parent corporations' R & D expenses.

Transnationals can be placed in one of four categories according to the strategy they use to adapt their local business structures to new domestic and international conditions:

□ *Firms that move into services sectors* in partnership with local economic groups as part of a *privatization* process. Generally speaking, the main feature of these partnerships is that the foreign companies take on the role of "technical operators" and the local groups take charge of the administrative and institutional management of the venture, while both local and foreign banks put together the necessary financial package. In this type of operation, debt-equity swaps are a pivotal factor, since they have been the preferred source of financing for such investments. In such cases, the transnationals' chief reason for participating in these operations is that the

businesses in question offer a high rate of return which is guaranteed by the high level of their prices and charges and their monopolistic position within the local market in specialized non-tradeables. An additional element in this overall picture is that this market has made a very late start in providing efficient, comprehensive services, and such situations are characterized by the existence of repressed demand. A clear sign of TC interest in this process is the fact that (with the exception of the recent sale of Yacimientos Petrolíferos Fiscales (YPF)), somewhat more than 40% of the stock in the country's privatized firms is held by foreign companies.

In addition to the macroeconomic effects of these privatization operations on fiscal accounts and income distribution (Guerchunoff and Cánovas, 1992), their impact on industrial competitiveness may be assessed by looking at the positive spillovers they generate. This involves measuring the improvement in resource allocation as well as the quality and price of services, on the one hand, and, on the other, their effectiveness in fostering the establishment of specialized suppliers and subcontractors which will then embark upon a competitive path that will make them viable as both local and international suppliers.

□ *Companies engaged in activities involving utilization of the advantages offered by the country's endowment of natural resources.* Following more than four decades of stagnation (1930-1970), Argentina's natural resource frontier has expanded rapidly during the past 20 years, spurred on by changes in agriculture (particularly the production of soybeans), the discovery of large natural gas fields and new petroleum deposits, the development of forestry resources in response to tax exemptions, fishery development, and the prospects for increased mining activity, which is as yet just beginning. Thanks to these new opportunities –whose linkages with production activities involving a higher level of added value entail the formation of production networks encompassing manufacturing activities, marketing, transport and other services– increased growth and larger flows of new investments are being observed, especially in agribusiness, petrochemicals and the paper industry. The basis for these investments is the exploitation of the country's natural advantages for the dual purpose of supplying an expanded market (MERCOSUR or Latin America as a whole) and exporting to world markets. An excellent example of this is found in the active presence (in the form, in some cases, of newly founded companies) of virtually all of the world's major transnational food producers, which has created a favourable environment for investment and purchasing –processes that are still in an incipient stage in many cases– on the part of the leading domestic firms.

□ *"Globalizing" firms.* It is here that we see the clearest changes in the industrial rationale of firms operating in the country, through the spread of TC globalization strategies in which local affiliates play an industrial role. Although the main reason for the presence of these firms in the country continues to be to serve the local market (which is now also the regional market), the strategy of today is quite different from the strategy used to supply the protected domestic market of the past. Now, the goods being sold on the local market are either wholly imported or contain an increasingly large percentage of imported components that have then been assembled in the country. Manufacturing is shifting towards a restricted range of goods or components for export, often through intra-firm channels. This specialization process is associated with the use of technologies approaching the international cutting edge and facilities that have only been constructed in the last few years. The pioneering steps taken by Saab Scania in the late 1970s in relation to its truck factory, with complementary activities being undertaken by its Brazilian affiliate; the reorganization of IBM's local facilities in the early 1980s for the production and export of printers and ribbons (Vispo and Kosacoff, 1991); and the retooling of the automotive industry, especially during the late 1980s, in order to permit it to specialize in certain categories of automobile parts for export, with an accompanying steep rise in the share of imports in its production function (Kosacoff, Todesca and Vispo, 1991) are some clear examples of the incipient spread of integrated business strategies as part of the globalization process. This different form of integration into the international economy is reflected in a movement (within the framework of ongoing negotiations with the economic authorities) towards a trade balance strongly influenced by intra-industry trade and an intensification of external trade.

□ *The remaining transnationals, which have apparently not yet defined their strategy and continue to function on an import substitution basis.* Although the new conditions associated with today's more open economy have done away with the incentives for local production which these firms once had,

none of them has, as far as is known, decided to leave the country permanently. Some appear to be seeking a suitable globalization scheme to apply in those cases where their production activities could be made more specialized; others are changing into representatives which market imported products for their parent companies. All of them are moving towards a new production function involving a larger imported content in local manufactures, complemented by increased activity in the marketing of imported final goods. The founding of MERCOSUR is clearly an incentive for these companies to remain "on the lookout" as they try to find some sort of retooling or reconversion scheme that will permit them to make use of the industrial facilities they already have (in many cases, in more than one country) while moving towards greater specialization and complementarity, or to utilize the marketing channels they set up during the import substitution stage in order to supply this expanded market with imports.

Judging from this characterization, the TC restructuring process seems to fit in with a new pattern of specialization in Argentine industry. Under current conditions in today's more open economy, the only industrial sector to retain significant competitive advantages is natural-resource processing, especially the agricultural/food and the petroleum/natural gas industries. There is little doubt but that the former sector's growth potential for the coming years is enormous, although it remains an open question as to whether this sector will move towards processes involving more added value that will yield high-quality products for both the local market and export or whether it will fall back on a simple scheme of exporting raw materials or products involving very little processing. The policies implemented at the regional level to encourage food production, along with suitable quality standards and control mechanisms, will surely play a crucial role in determining the future course of this sector, taking into account the attractiveness of MERCOSUR for both local and transnational corporations. This is the field in which progress towards differentiation and greater locally added value can generate the greatest spillovers for the rest of the economy, particularly as regards employment and the absorption of technical progress. Much the same can be said of the petroleum and natural gas, paper and fishery industries, but in these cases future trends will depend upon the nature of international business cycles.

For industrial sectors whose activities are not based on the processing of natural resources, and especially in the case of the metal products and machinery industry, the outlook is more uncertain. Globalization schemes, which require that the domestic market reach a "critical mass" in order to move these strategies forward, appear to be yielding substantial results in the production of superior goods, in terms of both technology and quality, at international scales. In addition, this type of scheme will introduce new organizational practices and new standards of efficiency into the industrial structure which have not yet come into widespread use. These practices are as yet confined to a few activities (as in the case of IBM and the conversion of the automotive industry based on its specialization in production of a limited number of types of parts), however, and thus far there are no signs that they are spreading widely to other economic activities.

In sum, a new environment is taking shape as the Argentine economy makes the transition to a new model of integration into the world economy and, in consequence, as transnational corporations make the transition to a new type of position in the local economy. The local context is entirely different from what it was during the import substitution stage, for reasons deriving from local, regional and international conditions. The corporate acquisitions, partnerships and mergers in which the transnationals are taking an active part are one of the manifestations of this transition as these firms seek to adapt to the new operational conditions prevailing in the Argentine economy.

(Original: Spanish)

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The informal sector *and poverty* in Latin America

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Informal economic activities are an important source of jobs in the region. The question as to how this phenomenon should be interpreted and the nature of its implications are, however, a subject of controversy. Some analysts regard the existence of the informal economy as a consequence of insufficient economic growth; they contend that it represents a survival strategy and, as such, an involuntary refuge for the poor. Others argue that it is the result of changes in the labour market brought about by government regulation and see it as offering attractive job alternatives that may yield a higher income than many wage-earning positions. The aim of this article is to set forth information that will help determine whether poverty really is associated entirely with the informal sector or whether the wage-labour sector also contributes to poverty in the region and, if so, to what extent. An effort is also made to ascertain what proportion of informal workers are in fact poor. For purposes of this analysis, members of the informal sector are defined here as own-account workers and unpaid family workers, workers in microenterprises (defined as production units that employ no more than five people), and people who perform domestic work. One of the main conclusions presented in the article is that while most poor people belong to the informal sector of the economy, this does not mean that all informal workers are poor.

I

Introduction

Analysis of the employment situation is a key element in describing the broader social situation. The relationships between labour supply and demand and between the level of productive employment versus spurious employment influence the social situation either directly, by affecting living standards, or indirectly, by triggering other social problems. Open unemployment and underemployment can therefore be identified as determinants of poverty, of its physical manifestations (urban marginality) and of greater social inequality. These problems also affect other spheres of social development because they influence the range of possible forms of participation and have a decisive impact on the country's political stability and, ultimately, the workings of the democratic system.

The relationship between employment, poverty and social integration is not the same throughout the region. The severity and urgency of these problems in the different countries vary depending on the extent of poverty, the relative proportion of the population excluded from the labour force, the coverage of social services, educational levels, organizational capabilities, and the availability of State or private aid (in the form of resources and technical assistance) to help the jobless take the initiative in seeking out occupational opportunities.

The informal sector –defined as that segment of the labour force that performs low-productivity jobs lacking in stability– accounts for a sizeable percentage of total employment. This fact, together with the persistence of the phenomenon (which has long been a part of the economies of the region), is sufficient reason to try to find out the ways in which this sector is linked to poverty. Assuming that the features attributed to it are in fact accurate, the informal sector could serve as a suitable indicator of underemployment; as yet, however, there is not enough empirical evidence to support this assumption. Indeed, some experts question this view of the informal sector, arguing that, in some economies, the informal sector generates the majority of the gross domestic product (GDP).

The only explanation for the existence of such diametrically opposed views is that perhaps the same word is being used to refer to different phenomena. It is a fact that a number of very different activities are grouped together under the label "informal". They range all the way from survival strategies to small production units and certain forms of commerce and services, which in some cases generate higher incomes than many wage-earners receive. We therefore need a working definition that will draw more accurate boundaries between what is and what is not "informal" and that will identify who belongs to that sector and the types of activities they perform within it. Here we have adopted the convention, used in a number of other studies, of confining the informal sector to three types of activities: own-account work and that performed by unpaid family members; microenterprises, defined as production units in which no more than five people work; and domestic service.

In order to place the informal sector within the context of the economic development of the region, we need to identify the degree and form of development as well as the economic dynamics of the countries concerned. Our thesis is that these factors influence both employment trends and the number and living conditions of people excluded from formal employment. The value of this approach, which is by no means new, is that it provides an empirical measurement of these categories of development in the region that permits us to: i) show the differences that exist in terms of the size of excluded groups according to the level of development; ii) identify the forms of development that lead to the greatest degree of exclusion; iii) ascertain in what economic contexts –in terms of the level and form of development– exclusion or incorporation at low wage levels are the main causes of poverty; and iv) substantiate or refute the assumption that membership of the informal sector is synonymous with poverty.

II

Differing approaches to the subject of informal labour

The various interpretations of the phenomenon of informal labour are not only based on different theoretical views; some of them also use a frame of reference formed by economic and social conditions foreign to the region, or use this same term to refer to different types of phenomena (such as the "black" (extralegal) economy). A brief outline will therefore be given here of the various approaches taken to the analysis of this subject; it may be noted in this respect that this article can properly be identified with the structuralist school of thought.

1. The structuralist approach

Numerous Latin American researchers, including Raúl Prebisch, Aníbal Pinto and those who have taken part in the wide-ranging efforts of the Regional Employment Programme for Latin America and the Caribbean (PREALC), have helped to enrich this school of thought. The baseline analyses set forth in many of the studies that use this approach look to employment patterns for an explanation for the emergence and growth of the informal sector. The thesis here, very briefly, is that the production process in the region incorporates imported technology whose design conforms to the constellation of resources available in its countries of origin. Accordingly, the technology being used in Latin America reflects the relative scarcities of factors of production prevailing in developed countries and the changes being made in the products consumed in those countries, with the demand for such products spreading to the region via imitative consumption patterns.

The absorption of this technology in the region takes place in a different structural context having two particularly important features: a highly unequal pattern of income distribution and a swiftly growing labour force. As a result, not enough jobs are created to absorb this rapidly expanding workforce and the price structure is inelastic in relation to changes in the economic process brought about by the absorption of new technology. This state of affairs is due to the fact that the prevailing market structures do not permit the increased income generated by productivity growth to be passed on to consumers.

2. The neoliberal approach

In simplified terms, this approach can be summed up as the school of thought that attributes the emergence of the informal sector to government intervention in the economy in general and, in particular, to government regulation of the labour market, which is accused of giving rise to rigidities in hiring and wage levels that alter the free interplay of supply and demand, discourage business expansion and hiring and, in many cases, lead to the establishment of businesses that evade legal controls and requirements.

The definition of the informal economy used by this school is quite confusing, in that it mixes together a wide range of very different types of activities, such as itinerant vendors, cottage industries in the fields of manufacturing and services, small subcontracting service companies, truckers, illegal commerce of all sorts (including smuggling and drug traffic), etc. Adherents of this approach in all countries have called for measures to make the labour market more flexible and, in particular, for an end to government intervention in economic activities.

3. The approach based on new forms of labour organization

This school of thought originated in the developed countries and contends that a new division of labour has arisen in response to a worldwide crisis whose chief consequences have been declining productivity and unstable demand. Against the background of the restructuring of the world's economic system, businesses have sought to reduce their overheads –particularly wages– by finding new forms of labour organization and personnel management (Piore and Sabel, 1984). New technologies have made it possible to replace mass production with diversified

production, thanks to multi-purpose machinery that facilitates the decentralization of production processes. These changes have gone hand in hand with the formation of networks of small businesses that maintain highly fluid subcontracting arrangements with other firms. In such cases, the subcontractors are informal economic agents who serve as highly productive distributors or input processors.

Labour subcontracting also occurs in Latin America, but under very different conditions, and it would therefore be a mistake to suppose that the two processes are similar or have the same causes. Although in both cases informal employment arises out of a lack of economic growth attributable to periodic crises in the international economic system, because of the more protracted effects of the phenomenon in the periphery and the different levels of development involved, own-account workers and unpaid family labour have a very different connotation from that existing in developed countries.

III

Economic development as a determinant of informal economic activity

This article propounds the thesis that a country's level of development, economic modality and economic dynamics have a strong impact on the employment situation and, consequently, influence the size of the informal sector and the living standards of its members. We will therefore start with a brief general description of the role these factors play in defining the issue.

Some degree of correspondence exists between a country's stage of economic development, on the one hand, and its employment levels and the stage of development attained by its social forces, on the other. This statement, which will be substantiated later on, is an essential element in any characterization of the status of members of the informal sector. By this we mean that the more developed a country is, the smaller the informal labour force as a percentage of the total workforce will be and the greater the percentage of the population that has been integrated into society via education or access to basic services.

These phenomena can be attributed to the urbanization and industrialization processes, which took place in the region in the 1950s and 1960s. The industrialization process, which served as the foundation for the economic growth of a large number of countries in that period, had a variety of economic and social consequences.

At the economic level, the prevailing modality during that period –industrialization– functioned by generating a wide-ranging network of linkages with other sectors of economic activity, thereby boosting the creation of productive jobs. The effects of these linkages were dampened to some extent, however, by the presence of a large labour supply due to the countries' high population growth rates during that time, and the consequences of this were high employment growth rates coupled with persistent underemployment.

At the social level, this modality played an important role in strengthening the labour union movement and grassroots political parties, which made a major contribution to the enactment of labour laws and the definition of social policy. Another factor –this time associated with the urbanization process– that helped move events in the same direction was the pressure brought to bear on decision-makers by local organizations made up of the inhabitants of squatters' settlements, among whom own-account and unpaid family workers constituted the dominant group.

An economic modality is the form of expression assumed by the development process within a given time period: in other words, it bears a relation to the way in which an economy works as it defines the scope of the structure that generates its growth and, hence, the types of investments that will be made. All this, in turn, influences employment patterns, since the shorter an investment's lead time and the greater its multiplier effect, the swifter and more positive its impact on employment will be. In line with this fact, the economic modality also defines different degrees of integration through employment. The level of

wage-earning employment that it generates is one of various attributes that must be taken into consideration in assessing the situation of persons excluded from such employment and in determining what part they play in the poverty existing in a given country. The other relevant features have to do with the levels of development reached by the production structure and social forces, since these determine the employment configuration and the degree of heterogeneity characterizing production units. The more pronounced this last trait is, the greater will be the differences observed in the wage levels of paid employment, the coverage of social services, the progressiveness of labour laws and the degree of social organization, including the modernization of the State apparatus and the development of political parties and trade union organizations, which together determine the nature of opportunities for participation and institutional channels for the expression of social demands.

Hence, a modality that generates less wage-earning employment will not necessarily be a more influential factor in terms of the extent of poverty, since this will be determined by the level of development at which the modality in question is operating. A given economic modality is a dynamic element which has only a temporary effect on the overall structure by accentuating or modifying its features (depending, in this last case, on how long and how intensively it acts upon that structure). Thus, in the final analysis, both the level of development and the economic modality are factors that need to be considered in assessing the status of the informal sector.

Growth rates may have different significations in terms of employment and social issues. Movements in such rates are the result of a simultaneous combination of different situations. On the one hand, there is the influence exerted by the economic modality itself, which defines the area of growth according to the type of economic activity on which it is based. The broader this area, the broader the range of dynamic activities will be and the greater their social impact in terms of job creation.

Other decisive elements in determining the behaviour of growth rates have to do with the source of growth: in the case of external demand, these elements are the countries' degree of competitiveness and the phase of the cycle in which the international economy is situated at the time, while in the case of domestic demand, the relevant factors are the size of the market and income distribution (the more even that distribution is, the greater effective demand will be). If the market is large enough, however, it is also possible that a highly unequal distribution of income may be coupled with high economic growth rates. This is because, under such conditions, even though effective demand is generated by a minority of the population, it may still be great enough, in absolute terms, to bolster economic growth. The growth that takes place in these two types of situations will have different social implications, since the sharper income inequalities are, the greater the social pressure and the more severe the problems of governance will be.

IV

Country classification

In order to try to clarify the situation with regard to the informal sector, it was necessary to identify the development scenarios in which that sector operated, and a typology of development styles was therefore used for this purpose (ECLAC, 1990).

This typology is based on two main elements: the development of the production structure and the openness of the economy. As a function of these attributes, two indexes were devised. The first and most important of the two ranks the countries according to the level of development reached by their production structure. The financial and agricultural sectors have a strong, but opposing, influence on this ranking. Thus, the financial sector is associated with highly developed production structures, while the importance of the agricultural sector increases as the level of development of the economic structures decreases.

The second index ranks the countries according to their market linkages and draws a distinction between those exhibiting a greater export bias and those having a greater propensity to rely on the domestic market. This makes it possible to identify the sources of the greatest economic growth.

The countries are then classified according to the combined results of both indexes. In using this procedure, another important element is the index averages, which serve not only to determine the mean value of the attribute being measured, but also to identify the countries whose level of development is close to the regional average.

The ranking of the countries according to the development of their production structures is the more important of the two because it serves as a basis for identifying their development modalities. The categories defined as a function of this attribute were the following: i) countries exhibiting a level of development above the regional mean; ii) countries situated at a level close to the mean; and iii) countries falling below the mean. If we then look at their market linkages, these groups can be further divided into two subgroups each, giving a total of six country groupings (see table 1).

TABLE 1

Latin America: Typology based on level of development of national production structures and economic linkages

Level of development of production structure	Market linkage	Countries
I. Level of development above regional mean; influence of financial activities	Growth driven by external market	Panama, Venezuela, Chile
	Growth driven by domestic market	Argentina, Brazil, Mexico, Uruguay
II. Level of development close to regional mean	Growth driven by external market	Costa Rica, Ecuador,
	Growth driven by domestic market	Dominican Republic, Bolivia, Colombia, Peru
III. Level of development below regional mean; influence of agricultural activities	Growth driven by external market	Honduras, El Salvador,
	Growth driven by domestic market	Guatemala, Paraguay

By looking at the groups at the two extremes, which reflect two very different situations (a high level of development associated with the financial sector and a low level of development associated with the agricultural sector), we can determine which countries are using financial and agricultural modalities. In order to distinguish different development modalities, we must understand their different rationales as regards the way the economy functions, as well as those rationales' social implications. This makes it possible to identify different scenarios in the light of the extent to which investment criteria, the creation of productive jobs, the spread of modernity, the skill levels of human resources, the definition and scope of social policies and the size and living conditions of the informal sector are a consequence of both structural economic and cyclical socio-political factors. On the basis of these elements, hypotheses have been formulated regarding the development styles found in agricultural societies and in those where the financial system is the main determinant of economic activity. As a first step, we will outline prototypes of the financial and agricultural modalities, which, although they may not exactly reflect the particular situation in each country, do constitute a valid basis for analysing actual conditions.

V

The financial modality of development

According to the above classification, the most highly developed countries in which the financial sector was found to be the most influential were Argentina, Brazil, Chile, Mexico, Panama, Uruguay and Venezuela. The overview of this modality given below will therefore refer to those countries.

1. The social context

Urbanization and industrialization began much earlier in the countries of the Southern Cone than in the rest of Latin America. This paved the way for the emergence of organized social movements which voiced their demands and brought pressure to bear in that regard on the State as well as on the business community. The demands presented by these groups were met to different extents depending on the social forces' level of development and the nature of the State. The important point here, however, is that, starting very early on, a social policy took shape in those countries which was highly favourable to urban areas, where most of the population lived. As a result, the presence of informal labour appears to be a phenomenon relatively dissociated from educational levels, health conditions and other characteristics that define the level of social development.

In Brazil and Mexico, the industrialization process also began quite early on, and the modernization process has penetrated deep into strategic areas, such as the production of capital goods. In these countries, however, urbanization has accompanied economic development only in the more rapidly developing geographic areas. This has led to great regional disparities: areas where a high level of economic and social activity has spread to significant segments of the population stand out in sharp contrast to the situation in economically and socially disadvantaged areas, whose social backwardness is manifested in low living standards and shortages of basic services. In short, the social make-up and demographic features of the informal sector in these countries are quite heterogeneous.

In Venezuela, the advent of industrialization and urbanization came somewhat later. Once it had begun, however, the latter process was so intense that, in a much shorter period than in the Southern Cone, Venezuela became one of the most heavily urbanized countries in the region. This process was associated with a rapid expansion of the manufacturing sector, where the growth rate of wage-earning employment (5.1%) outstripped that of the economically active population (4.6%) in the period 1950-1980. Moreover, because the State controlled the economy's main resource (petroleum), it was able to implement social policies that benefited vast sectors of the urban population.

Panama's economy is based on commerce and services, with the latter including the financial sector. Exports are a key factor in the workings of its economy, which is highly sensitive to international market fluctuations. Because of the particular nature of its economic base, there is a striking contrast between the country's metropolitan area, which contains virtually the entire modern sector of the economy, and the rest of the country, which is much more backward and is associated with traditional agriculture. As in the other cases mentioned, this duality is manifested in differences in social service coverage in the metropolitan area versus the rest of the country, although the decline seen in infant mortality rates during recent decades indicates that the coverage of health care services is more comprehensive than in the past.

2. Characteristics of the financial modality of development

This modality reflects a diversified economic structure in which financial capital has taken on a dominant role, influencing the orientation of production and fostering concentration of resources. Its chief characteristics include the formation of conglomerates which engage in a variety of economic activities and have a bank or finance company as their centerpiece. This gives them easier access to credit on better terms than other production units, and is thus conducive to concentration of resources; in fact, in many cases such situations generate monopolistic market conditions. Investment decisions are taken on the basis of a financial rationale and thus give preference to activities regarded as profitable from a

financial standpoint (i.e., activities that ensure rapid capital turnover and higher levels of liquidity). Under certain circumstances, this leads economic agents to engage in speculative activities.

3. The origins of the informal sector

Under such circumstances, the size of the informal sector is accounted for by the following factors: i) the inability of the modern sector to absorb the entire labour supply, which becomes even more marked during times of crisis, when not only is this absorption capacity weakened but previously employed workers also lose their jobs in this sector as well; ii) the high degree of job instability found in some of the activities promoted by this development modality; and iii) the existence of areas of economic activity that have not been encompassed by the modernization process and offer conditions conducive to the pursuit of own-account activities which may even be more advantageous than those existing for many wage-earning jobs.

a) *The absorption of manpower in the modern sector*

The extent of economic growth generated by the domestic market will depend on the size of that market and the distribution of income; the more evenly distributed income is, the greater effective demand and the more rapid job creation will be. Generally speaking, however, the countries of the region exhibit highly uneven patterns of income distribution, and this inequality affects capital formation in that it promotes the formation of non-reproductive capital (i.e., capital directed towards increasing the diversification and complexity of consumption patterns) at the expense of reproductive capital formation. Prebisch said that the difference between the two forms of capital formation was that the formation of reproductive capital permitted the attainment of productivity growth in tandem with increased employment. To this end, the increases in productivity made possible by technical progress should be directed away from the imitative consumption of luxury goods and reinvested in production activities that will continue to bring about a rapid increase in labour productivity: the more rapid this increase, the more rapid the formation process ought to be, thus providing an ongoing stimulus for job creation (Di Filippo, 1988). If we now take a closer look at the concept of capital formation, we may well conclude that the creation of technology is, by definition, the same thing as the formation of reproductive capital. Technological development is a process fuelled by the flow of knowledge (inputs), and through it the final goods –i.e., technological innovations– can be progressively refined, thereby generating a self-sustaining dynamic of job creation.

The conditions generated by the financial modality of development are not conducive to this type of capital formation; on the contrary, the greater concentration of income polarizes demand and accentuates its imitative character. The combined effects of the financial rationale plus consumerism are manifested in the channeling of domestic investments in such a way as to create a supply structure that revolves around sophisticated products or items dictated by fashions brought in from developed societies. In this type of situation, imports take on special importance, to the detriment of locally-produced items, but even the latter are oriented towards high-income sectors.

The role of financial intermediation is not confined to the sphere of production, but plays a part in consumption as well, since banks and finance companies stimulate consumption through the credit they provide; thus, they participate in both phases of the economic process (production and consumption), thereby further increasing their earnings. Large-scale capital investment projects extend beyond the time horizon of the financial rationale, in which the quickest possible capital turnover and the highest degree of liquidity are the parameters that guide investment. Thus, resources are siphoned off for the consumption of sophisticated products rather than being used to lay the most suitable economic foundations for a sustained increase in employment.

b) *Job instability*

Job instability is caused by the irregular trends characterizing certain activities, such as agriculture and construction, and by the short lives of many medium-sized and small businesses that are sensitive to the financial changes (interest rates, credit) associated with this modality. Job instability is not the only cause of informal economic activity, however. The cuts made to varying degrees in government payrolls by the countries of the region have also helped to swell the ranks of own-account workers as public-sector employment ceases to perform its erstwhile

role as a buffer for unemployment. Another phenomenon that has led to further lay-offs is the conversion of production units that once served the domestic market to an external-market orientation; this is because the prime concern in this process has been to make the production activity in question more efficient and more competitive, and to this end new technology has been brought in and manning tables have been reorganized in ways that have led to reductions in staff.

Employment in the agricultural sector exhibits sharp fluctuations owing to the seasonal nature of crops and ups and downs in external demand. Apart from these cyclical factors, increases in agricultural employment are associated with expansion of the area under cultivation, and since the agricultural frontier has been pushed out as far as it can go in most of the countries, further increases in the amount of farmland have been achieved by changing the property structure, which in many cases has led to the impoverishment of the peasant community.

The modernization of the agricultural sector in some countries has led to changes in the types of crops being grown, along with a transition from labour-intensive practices to highly mechanized modes of production, all of which has boosted rural unemployment and spurred migration. In other countries, however, agribusinesses have been founded that have created new jobs whose wage levels have helped to raise the living standards of some segments of the population in rural areas.

It is difficult to determine what the end result of these processes will be. We cannot state categorically that the living conditions of rural sectors have improved or deteriorated. We can say, however, that these activities, which account for the majority of the surplus, have not displayed increases in employment in proportion to the increases in productivity that they produce.

c) *Areas conducive to the pursuit of own-account activities*

Progress in the modernization of the economy generates a dynamic that extends only to certain areas of activity, leaving open other areas in which smaller production units and even own-account workers can earn a living. Thus, job opportunities are created by the expansion of consumption on the part of middle- and high-income sectors; for example, the increased use of motor vehicles and home appliances generates a need for repair shops and other services. Another significant consideration is that the demand originating in lower-income sectors is expressed in different markets from those patronized by higher-income groups, thereby supporting an array of lesser production activities of various sorts.

Although it may seem surprising, there is empirical evidence that small businesses and microenterprises may, in the short term, play a countercyclical role during economic slumps. PREALC (1987, pp. 4, 10 and 11, tables 2 and 6) notes, for example, that between 1980 and 1983 employment in large-scale businesses fell sharply in Venezuela, Brazil and Mexico, but rose in small businesses. A plausible explanation for this might be that, as demand fell, the reaction of large companies was to cut their payrolls by a greater amount than the decrease in demand, thereby maintaining or even boosting their productivity, whereas this was not the case in small production units. A variety of factors may have contributed to the continued growth of these smaller units, such as the transfer of some portion of the production or service activities of large firms to smaller units as a cost-cutting measure; changes in consumption patterns whereby some clients of large firms or users of luxury services change over to smaller units as a way of adapting their budgets to these new conditions; the revitalization of demand for the services of home appliance repair shops, since during hard economic times people tend to refrain from buying new appliances; and, finally, in the case of microenterprises, the fact that, as in the case of peasant farmers, a portion of such businesses' overheads corresponds to family workers.

The number of microenterprises (defined here as units of production in which no more than 10 people work) is strikingly high in these countries, especially Mexico (1975), Argentina (1984) and Panama (1974), where they account for an estimated 54%, 44% and 43%, respectively, of total employment in manufacturing (ECLAC, 1988, p. 8, table 3). This type of employment, however, accounts for only around 26% of the total in Uruguay (1978) and 38% in Brazil (1980).

These production units play a significant role in terms of job creation, and their output of goods and services fills the needs of a substantial portion of the population, yet their production activities cover only a minor part of effective demand, absorb very little investment and generate no exports at all. This strengthens the hypothesis that the great majority of informal workers are marginalized and are in that sector as a result of the way in which the economy works.

VI

The agricultural modality

In line with the classification described earlier, the countries exhibiting the lowest levels of development and the most dominant agricultural sectors were El Salvador, Guatemala, Honduras and Paraguay. The overview of this modality given below will therefore refer to these countries.

1. The social context

In this modality, employment opportunities, job quality and labour skills are all far below the levels found in countries where the financial modality is in effect. The reason for this lies in the course followed by their modernization processes, which have encompassed certain areas of the economy while cutting off large sectors and excluding them from that process. The consequences of this have been an underdeveloped production structure having weak intersectoral linkages, with, as a corollary, a large portion of the workforce in low-productivity temporary jobs or own-account activities. This economic modality has had a strong influence on these countries' social development, limiting both the population's opportunities for participation and the scope of social policies.

These features are a consequence of the way in which the development style was structured, i.e., of the makeup of the groups which were in control of society and determined how available resources would be used at that point in history when these countries were becoming independent nations.

These countries' economies were organized on the basis of one or two agricultural export products, supplemented, in some cases, by the export of some mineral resource. The early arrival of foreign capital, which heavily influenced the political power structure, ultimately consolidated the economy's orientation towards a single export product and was the reason why single-crop production was the foundation of economic activity for so long. This reduced these countries' chances of putting their production potential to work in a more diversified economic process that would be capable of creating more jobs and generating a more balanced form of economic growth.

The economic manifestation of this process was the emergence of highly self-sufficient enclave economies which were able to function without having any strong linkages with the rest of the economy; the result was a production structure which expanded through the addition of new activities unrelated to existing ones, rather than through the formation of a true economic system.

Because agriculture has been the main foundation for these economies, the analysis of land tenure and of the economic rent derived from that resource is very important for explaining these countries' economic behaviour, the development of their social forces, the character of the State and the nature of social policy.

2. The land tenure system as a determinant of social and political configuration

In agricultural societies, the entire structure of society is affected by the rules governing land tenure and the prospects for the continuation or modification of those rules. Land ownership is the mainstay of power, since land serves both as a source of production and as a basis for accumulation and political power.

Under the prevailing ownership structure (a legacy from the way in which land was appropriated during the colonial period), agricultural producers were divided into two categories: a minority of large and medium-scale landowners controlling most of the best farmland, and a great majority of small landowners, who had the least fertile, smallest plots. The former worked almost entirely with export crops, whereas basic grains, chiefly for on-farm consumption, were the principal activity of the latter. The lowly position occupied by small landowners was a result of the poor yields obtainable from their farmland, their lack of resources, the scattered distribution of their settlements and the absence of infrastructure, all of which formed an ongoing barrier to the marketing of their products on the domestic market. The poverty engendered by this situation obliged the heads of household to sell their labour to the large

plantations in order to survive, thus generating a supply of manpower that fitted in with the seasonally labour-intensive nature of certain export crops.

The inequality associated with this system of land tenure has played a pivotal role in the configuration of spheres of political participation. The dominant sectors (large and medium-scale landowners) have formed interest groups capable of exerting pressure on the State and have thus succeeded in wielding enough influence to preserve the existing ownership structure and ensure the continuation of this modality of development. Meanwhile, the bulk of the population, scattered throughout rural areas and with little education, have remained extremely disorganized and, except for the position won by some peasant organizations in certain circumstances, continue to be passive observers of the political system's development rather than acting as organized participants within that system.

3. The economic rent from land and social relationships in the modernization process

Land-derived rents are a key variable in accounting for the relationships established among the social actors in the course of the changes that occur as an economy evolves.

In a simplified, summary concept, the economic rent obtained from land can be understood as the appropriation by a landowner of income in excess of what would be regarded as a normal level of earnings. These excess gains have the following characteristics: i) they are derived from a natural agent of production in whose creation no labour whatsoever is involved; ii) this natural resource can be monopolized and is not accessible to all and sundry; and iii) a portion of its perceived value is due to infrastructure which has been constructed by the society or community in general rather than by the owner.

These features put land-derived rents in a different category from capital gains and place the social groups formed on the basis of those rents –whether they be peasants, medium-scale farmers or large landowners– in a different social class having habits and interests that differ from those of capitalists. Herein lies the origin of the specific character taken on by the development of capitalism within the agricultural sector.

Before the arrival of foreign capital, the determinants of these rents were the amount and fertility of the land, which, given the inequality of the land tenure system, placed large landowners in a privileged position in terms of their opportunities for accumulation. At this stage, the predominant form of activity was that of a mercantile economy in which landowners and merchants had a common interest in preserving existing social production relations and maintaining their monopoly of the available land. These interests on the part of the dominant groups in society went hand in glove with political control, with almost all such power being in the hands of these same groups. The resulting conditions and the absence of social policies placed the entire cost of reproducing the labour force squarely on the shoulders of the peasant economy.

With the arrival of foreign capital, however, the situation changed. The capital and technology provided by the enclaves led to the emergence of a production-based form of capitalism; under these new conditions, the productivity growth spurred by the availability of capital, technology and credit added its effects to those of the factors mentioned earlier. Foreign capital was the first to benefit from this situation; later on, some existing agricultural producers became capitalists and competed for this new type of rent. This development ushered in a new dimension in the social stratification of the agricultural sector by making a distinction, based on the use made of those resources, between traditional and modern producers. The introduction of productive capital was a very important event in the development of these countries' production and social forces. The expansion of wage-based employment brought about changes in the social relations of production and led to the establishment of union organizations and labour laws, while at the same time production began to become more diversified, with the appearance of some manufacturing activities and an increase in the urban population.

This process was reinforced by the demand for raw materials and agricultural products generated by the expansion of the international economy during the post-war period, which led to the spread of capitalism within the agricultural sector. Agricultural production became more diversified with the introduction of new export crops; complementary industries then developed alongside these activities; marketing mechanisms were improved; and a financial sector to support these initiatives became firmly established.

4. The role of the State

The modernization process also extended to the State, which thenceforth assumed a leading role in the course of social events as well as taking on new functions within society, including the definition and implementation of social policy; direct involvement in the creation of new agricultural activities which were later transferred to the private sector (thus acting as a mechanism of accumulation that contributed to the formation of a new agricultural bourgeoisie); the execution of infrastructure projects that permitted these countries to attain a degree of territorial integration which, even if incomplete, none the less helped to consolidate the constitution of the nation; and, finally, job creation, both directly, through the expansion of the institutional apparatus –manifested in the creation of new ministries and planning bureaus– and indirectly, through social spending, especially on education (thereby creating a greater demand for educators) and infrastructure works. All these processes, with the exception of the last-named, fostered the incorporation of middle-class strata.

Within this context, new social groups (the military, the new bourgeoisie, the middle class) emerged, making the power structure more complex. The old power groups lost their direct control over the State but formed alliances with the new social actors that enabled them to establish powerful pressure groups and thus continue to wield political influence on behalf of their interests.

As a result of this situation, the State's actions followed the course plotted by the dominant interest groups, with attention being focused on the export circuit and its complementary activities. On the sidelines of this process, and lagging far behind, were the owners of small farms or holdings, who lacked the technical assistance and resources they needed to improve their status; indeed, some land-intensive activities, such as stock raising, contributed to a further concentration of land tenure, thereby exacerbating the situation of the peasant population.

5. The dynamics of change and the informal economy

As has been noted many times before, the paradox in these societies is that although economic growth depends on the agricultural sector, this type of rural development clearly constitutes an obstacle to the attainment of a new stage of development encompassing the bulk of the population.

The exclusive nature of this development modality is the determinant of informal labour activity, and especially the concentration of such activity in rural areas. The living conditions of this segment of the population are so deplorable that it can rightly be identified as the sector in which poverty is concentrated.

The industrialization and urbanization processes have been subordinated to the dynamics of change in the modern agricultural sector and this sector, in turn, has been strongly conditioned by the behaviour of international demand.

During good economic times, the capitalist segment of the agricultural sector has fuelled the progress of industrialization, thereby also furthering urbanization. Informal economic activity in urban areas has been generated by the supply of manpower (the level of which is determined by natural population growth plus migration) and the demand created by the expansion of the manufacturing and services sectors.

Trends in informal activities within the agricultural sector have been governed by the relationships existing between the rate of increase in job opportunities opened up by new agricultural activities, the population growth rate and the rate of migration. Informal labour diminishes when the growth rate of the rural EAP minus the rate of emigration to urban areas is less than the rate of absorption in new jobs, and increases when it is greater than the latter rate.

These processes alter the conditions in which small farms and holdings operate. The modernization of agriculture causes at least the partial breakdown of the working relationships that have linked the latifundia with small landholdings. The prospect of finding gainful employment prompts a considerable portion of the working-age population to abandon the old rural settlements and move into new agricultural activities or emigrate to urban areas. The loss of manpower that occurs in such cases leads to the impoverishment of small landholdings.

During times of crisis, when economic activity contracts, traditional forms of production are maintained and this, in conjunction with population growth and the absence of emigration, leads to an increase in informal economic activity in rural areas and, once again, to the impoverishment of small landholdings.

VII

By way of conclusion: the figures tell the story

In this final section, figures will be presented to back up the argument put forward in this essay. The pivotal role is played by development modalities: all the statistical information has been aggregated on the basis of these modalities in an effort to determine to what extent the characteristics of informal economic activity tally with the different development modalities. The procedure used was as follows: first the correspondence between those modalities and the level of informal activity was analysed, after which social services, poverty, and informal activity as a component of poverty were considered.

The ECLAC Statistics and Projections Division and PREALC were the main data sources used. It should be noted that the regrouping of categories in order to characterize the urban informal sector was performed by the author for the particular purposes of this article, and the above sources bear no responsibility for the use made of that information here.

1. The level of informal economic activity

We will first examine the correspondence between levels of economic development and levels of informal economic activity in urban areas and nationwide, using different sources of information in each case. First, using census data, we will look at the percentage of own-account workers (OAW) and unpaid family workers (UFW) in the national labour force. Second, using household survey data, we will estimate the size of the informal sector in urban areas. Although the two exercises are not comparable in a strict sense, since different sources of information are used, they nonetheless make a valuable contribution to our understanding of the role of the informal sector in the economic development process.

(a) *Own-account workers*

Originally, the intention was to demonstrate the extent of informal economic activity at the national level, but lack of information made this impossible. Instead, own-account workers and unpaid family workers had to be used as proxies for this purpose. The picture provided by these figures, although incomplete, is still a valuable one, since it illustrates the magnitude of the largest component of the informal sector in the various countries (see table 2).

TABLE 2

Latin America: Proportion of labour force represented by own-account workers and unpaid family workers and by agricultural EAP, 1980

(Percentages)

	Proportion of labour force	
	OAWs and UFWs	Agricultural EAP
Countries with largest proportion of informal workers in EAP		
Paraguay	57	49
Ecuador	53	39
Peru	52	40
Guatemala	47	57
Honduras	47	57
Countries with a considerable proportion of informal workers in EAP		
Brazil	38	30
Mexico	37	31
Panama	37	32
Colombia	35	30
Countries with a smaller proportion of informal workers in EAP		
Venezuela	27	16
Chile	23	16
Costa Rica	22	29
Uruguay	21	17
Argentina	18	13

Source: PREALC, 1982; ECLAC, *Statistical Yearbook for Latin America and the Caribbean*, Santiago, Chile (various issues).

The countries are grouped in this table according to the percentages of OAWs and UFWs and of the agricultural economically active population (EAP) in their workforces. On the basis of this information, it was observed that there was indeed a correspondence between the size of the informal sector and the level of economic development. A close correlation was also found to exist between the presence of OAWs in the labour force and the percentage of the workforce represented by the agricultural EAP. Thus, in the first group –formed by Paraguay, Ecuador, Peru, Guatemala and Honduras– OAWs and UFWs together represented between 47% and 57% of the labour force, while the agricultural EAP totalled between 39% and 57%. In the second group –composed of Brazil, Mexico, Panama and Colombia– OAWs made up between 35% and 38% of the labour force and the agricultural EAP between 30% and 32%. Finally, in the group formed by Argentina, Costa Rica, Chile, Uruguay and Venezuela, OAWs and the agricultural EAP represented smaller proportions of the labour force (18%-27% and 13%-29%, respectively).

2. The level of informal economic activity in urban areas

The aim here is to illustrate the scale of informal economic activity in urban areas by looking at the sources of such activity (i.e., OAWs and UFWs, micro-enterprises and domestic employment) while grouping the countries according to their development modality (see table 3).

TABLE 3

Latin America: Proportion of urban informal workers in urban labour force
(Percentages)

	Micro-enterprises	Domestic employment	Own-account and unpaid family workers	Total informal workers as a percentage of urban EAP
	Financial-modality countries			
Argentina (Greater Buenos Aires)				
1980	13	4	22	39
1990	13	5	22	40
Brazil				
1979	17	8	19	43
1990	19	6	21	46
Mexico				
1990	11	4	21	36
Uruguay				
1981	8	7	17	32
1989	9	7	19	35
Panama				
1989	6	7	26	39
Venezuela				
1981	8	4	18	30
1990	7	4	22	33
Chile				
1980	...	8	27	35
1990	...	7	23	30
	Agricultural-modality countries			
Paraguay				
1990	16	11	23	50
Guatemala				
1990	14	7	33	54

Source: ECLAC, Statistics and Projections Division, based on special tabulations of household survey data.

It should be noted that a strong bias exists in the information on the two modalities considered. Although information concerning the size of the informal sector is available for seven countries having a financial modality of development, such information exists for only two of the agricultural-modality countries. Since this compromises the validity of this and other aspects of the information presented here on the characteristics of the informal sector, due caution should be used in interpreting the figures shown in these tables.

Returning now to table 3, the following observations may be made:

i) Around 1980, the informal sector constituted a sizeable component of the urban labour force in the countries exhibiting a financial modality of development, ranging from 30% in Venezuela to 43% in Brazil. Furthermore, in four of the countries for which this information is available, the percentages rose during the 1980s.

ii) The largest component of the informal sector was made up of OAWs and UFWs, followed by microenterprises. The latter were particularly significant in Brazil, where the percentage of people working in microenterprises was similar to the proportion of OAWs and UFWs taken together (nearly one-fifth of the workforce). Proportions very close to this were also found in Paraguay and Guatemala, where microenterprises absorbed 16% and 14% of the labour force, respectively, in 1990; in contrast, in Panama, Uruguay and Venezuela, microenterprises employed only a small part of the labour force (between 6% and 8%).

iii) The largest proportions of informal workers in the urban labour force were observed in the countries that exhibit an agricultural development modality (in Paraguay and Guatemala, such workers represented 50% and 54% of the urban EAP, respectively).

In conclusion, the information for urban areas confirms what was indicated by the figures on OAWs at the national level, i.e., that although exclusion of a segment of the population is a characteristic of economic development processes in general, it is more pronounced in the less developed, agricultural countries. With regard to the composition of the informal sector, it was found that OAWs and UFWs were the largest component, followed by microenterprises; the latter were particularly important in countries exhibiting a financial development modality oriented towards the domestic market and in those having an agricultural modality of development. Finally, although domestic employment was the smallest component in all cases, it was largest in agricultural-modality countries.

3. Social development in development modalities

The social environment of informal workers is an important aspect of this question. It may be assumed that the greater the coverage of social policies in these countries, the greater the probability that social services also extend to the informal sector. This is of the utmost importance, since it determines the living conditions and organizational capacity of informal workers. The status of such workers is linked to the broader phenomenon of social development, which in turn depends on the economic modality in effect.

Table 4 presents a social development profile for 1980 which shows the behaviour of selected social variables in two groups of countries: one made up of countries having a level of development greater than or close to the regional average, and the other made up of those exhibiting a below-average level of development. The figures given in this table clearly illustrate the differences existing between the two groups in terms of social services, and a detailed analysis of the information therefore need not be presented here. A brief review of the social characteristics of the two groups, based on an average of the relevant variables, may be helpful, however.

A comparison of the first group with the second reveals the following differences: in the first group, the per capita availability of doctors was more than twice as high, and the contrast becomes much greater when the countries at the two extremes –Argentina and Honduras– are compared (there were more than eight times as many doctors, in per capita terms, in Argentina as in Honduras). Likewise, life expectancy at birth was around 17% greater; the number of hospital beds was almost three times as high; the rate of infant mortality was nearly one half of what it was in the second group; the level of illiteracy was less than half; the consumption of newsprint was almost three times as high; the number of telephones was nearly five times greater; and private consumption was more than double what it was in the second group. If, in addition to these striking differences, we note that the standard deviation of the variables was much greater in the second group, the conclusion is that the coverage of social services is not only more limited in that group than it is in the first, but also varies markedly within the group.

TABLE 4

Latin America: Social development profile, 1980

	Persons per doctor (No.)	Hospital beds per 1 000 persons (No.)	Life expectancy at birth (years)	Infant mortality (o/oo)	Illiteracy (%)[a]	Apparent consumption of newsprint (kg/year/ person)	Telephones (per 1 000 persons)	Per capita private consumption (1970 dollars)
Countries having a level of economic development above or near regional average								
Argentina	357	5.3	68.7	40.5	6.1	9.6	75.6	924.3
Brazil	830	4.2	61.8	78.8	25.5	1.8	60.4	561.9
Chile	1 143	3.4	67.2	46.6	8.9	5.9	49.4	614.0
Mexico	1 245	1.2	65.4	59.0	16.0	4.6	70.9	911.9
Panama	1 074	3.8	69.2	31.6	12.9	1.3	88.4	656.3
Uruguay	504	6.0	69.7	42.4	4.6	6.0	98.7	981.7
Venezuela	925	2.7	67.7	43.3	15.3	9.3	51.3	980.8
Mean, total	868	3.8	67.1	48.9	12.8	5.5	70.7	804.4
Standard deviation	331	1.6	2.7	15.5	7.1	3.3	18.5	185.1
Countries having a level of economic development below regional average								
Bolivia	1 952	1.8	48.6	138.2	18.9	1.3	24.1	298.0
Guatemala	1 773	1.8	56.4	82.4	44.2	2.5	11.2	478.5
Honduras	3 022	1.4	57.7	89.9	40.5	1.6	7.3	224.4
Paraguay	1 459	1.1	66.0	52.8	12.3	2.5	18.6	416.5
Mean, total	2 052	1.5	57.2	90.8	29.0	2.0	15.3	354.4
Standard deviation	678	0.3	7.1	35.4	15.8	0.6	7.5	114.5

Source: Information compiled on the basis of data from ECLAC, *Statistical Yearbook for Latin America and the Caribbean* (various issues).
[a] Of the population aged 15 years and over.

Having demonstrated the existence of an association between the coverage of social services and the level of economic development, this forms a reasonable basis for the conjecture that in the more developed countries the informal sectors also figure among the beneficiaries of social measures.

Therefore, and taking into account the above conclusions regarding the size of the informal sector and the social conditions deriving from the modality of development, we can state that a country's level and modality of development govern such quantitative and qualitative aspects of its informal sector as the size of that sector and its members' living conditions, educational levels and organizational capacity.

4. Relationships between the development modality and poverty

The levels of poverty and indigence found in these countries are associated with their modality of development. This statement is supported by the figures given in table 5, which indicate the levels of poverty and indigence in the countries, grouped by development modality.

TABLE 5

Latin America: Distribution of poor and indigent households [a] in urban and rural areas, 1980-1990
(Percentages)

	Urban areas		Rural areas	
	Poverty	Indigence	Poverty	Indigence
	Financial-modality countries			
Argentina (Greater Buenos Aires)				
1980	7	2	16	4
1990	25	7	...	...
Brazil				
1979	30	10	62	35
1990	39	16	56	31
Mexico				
1984	23	6	43	19
Uruguay				
1981	9	2	21	7
1989	10	2	23	8
Panama				
1979	31	14	45	27
1989	34	15	48	25
Venezuela				
1981	18	5	35	15
1990	33	11	38	17
Chile				
1990	34	11	36	15
	Agricultural-modality countries			
Bolivia				
1989	50	22	...	...
Guatemala				
1980	41	13	79	44
1989	54	28	75	53
Paraguay				
1990	37	10	...	...

Source: ECLAC, Statistics and Projections Division, based on special tabulations of household survey data.
[a] The percentages shown for poverty include indigence.

The figures show that, around 1990, poor households in the agricultural-modality countries accounted for half of the urban population in Bolivia and nearly 40% in Guatemala and Paraguay, whereas the percentages drop sharply in some of the countries exhibiting a financial development modality oriented towards the domestic market, such as Uruguay (where 10% of urban households were poor in 1989), Mexico (23% in 1984) and Argentina (25% in 1990). The exception to this rule is Brazil, where the level of urban poverty was similar to that found in the agricultural countries. The situation changes when we consider the countries having an externally-oriented financial modality of development, such as Panama, Venezuela and Chile, where about 33% of all urban households were poor.

It should be noted that, although information on the subject is scanty, the available data do indicate that poverty increased during the 1980s. The situation was most dramatic in Argentina, where poverty and indigence in urban areas increased nearly four-fold (poverty jumped from 7% to 25% and indigence from 2% to 7% between 1980 and 1990). The trend was much the same, although less steep, in Venezuela, where urban poverty rose from 18% to 33% and indigence from 5% to 11% between 1981 and 1990. Finally, in Guatemala these levels climbed from 41% and 13% in 1980 to 54% and 28% in 1990.

Thus, the information substantiates the view that the countries having a financial modality of development not only have broader coverage of social services, but also have lower levels of poverty and indigence. An interesting point, however, is that among these countries, those oriented towards the external market exhibit poverty levels quite similar to those of countries having an agricultural modality of development. Finally, it should be noted that the increase in poverty during the 1980s was particularly marked in the agricultural-modality countries, where the high levels of poverty and indigence may well exacerbate many existing social conflicts.

5. The informal sector as a component of poverty

As part of this effort to shed as much light as possible on the nature of the informal sector, it is important to determine not only how many poor people there are, but also what their occupational status is. The aim here is to refute or corroborate the belief that poverty stems entirely from the informal sector.

This can be done with the help of the figures given in table 6, which groups the countries according to their development modality and provides information on the percentage distribution of poor people by occupational category. Based on that table, the following observations can be made:

i) Using data for 1990, it was established that, in both modalities, poverty was found not only in the informal sector but in the wage-labour sector as well.

ii) In the agricultural modality, the majority of the poor were members of the informal sector (around 70% in Guatemala and Paraguay).

iii) In the financial modality, the situation was much the same, although less pronounced, as illustrated by the cases of Brazil, Uruguay and Panama, where about 60% of the poor were members of the informal sector, while in Argentina and Venezuela, the figure was around 50%. Mexico was an exception, since only about one-third of all poor people belong to that sector.

iv) Within the informal sector, most poor people were OAWs or UFWs in the majority of the financial-modality countries; in Brazil and Mexico as well as all the agricultural-modality countries, however, microenterprises were equally or more important than own-account work and unpaid work by family members as a source of work for the poor.

TABLE 6

Latin America: Distribution of total urban poverty, by occupational category, 1990[a]
(Percentages)

	Businesses employing over 5 persons	Informal sector			
		Micro-enterprises	Domestic employment	Own-account and unpaid family workers	Total informal sector
	Financial-modality countries				
Argentina (Greater Buenos Aires)					
1990	46	14	8	29	51
Brazil					
1990	35	21	10	22	53
Mexico					
1990	66	17	4	9	30
Uruguay					
1989	28	14	18	17	49
Panama					
1989	18	6	8	15	29
Venezuela					
1990	32	10	6	21	37
	Agricultural-modality countries				
Guatemala					
1989	19	18	7	22	47
Paraguay					
1990	26	24	10	23	57

Source: ECLAC, Statistics and Projections Division, based on special tabulations of household survey data.
[a] The sum of the categories does not equal 100 because they do not include employers, professionals and technicians, or public-sector employees.

6. Some final observations concerning the informal sector and poverty

Although the information reviewed here shows that most poor people were members of the informal sector, this does not mean that all members of the informal sector were poor. Another point about which there might be some confusion is that, although it was established that in some cases one-half or more of all poor people were wage-earners, this does not mean that 50% or more of all wage-earners were poor.

Table 7 shows the poverty rate by occupational category, with the countries grouped by development modality. The poverty rate represents the percentage of employed persons in each category who reside in households having incomes below the poverty line. On the basis of this information (1990 data), the following conclusions can be drawn:

i) In the financial modality, the poverty rate was higher in the informal categories than in the wage-earning categories: thus, for the informal occupations the rate ranged from 10% among own-account workers in commerce and services in Mexico to 53% for domestic employment in Brazil, while the poverty rate among wage-earners ranged from 8% in commerce and services in Uruguay to 33% in manufacturing and construction in Mexico.

ii) In the agricultural modality, the poverty rate was much higher than in the other modality and was at quite similar levels for wage-earners and informal-sector workers.

TABLE 7

Latin America: Incidence of urban poverty,[a] by occupational categories
(Percentages)

	Total urban population	Total employed urban population	Employed population, excluding professionals and technicians						
			Establishments with more than 5 workers		Informal sector				
					Microenterprises		Domestic employment	Own-account workers	
			Industry and construction	Commerce and services	Industry and construction	Commerce and services		Industry and construction	Commerce and services
			Financial-modality countries						
Argentina (Greater Buenos Aires)									
1990	25	19	23	18	30	18	35	31	22
Brazil									
1990	43	34	31	29	55	38	53	43	37
Mexico									
1990	34	23	33	26	42	35	26	12	10
Uruguay									
1989	20	12	12	8	27	16	31	10	11
Panama									
1989	41	28	23	21	31	33	31	43	43
Venezuela									
1990	39	22	24	20	38	32	30	25	22
			Agricultural-modality countries						
Paraguay									
1990	42	32	44	32	57	44	29	41	31
Guatemala									
1989	53	42	45	32	62	52	42	47	34

Source: ECLAC, Statistics and Projections Division, based on special tabulations of household survey data.
[a]Refers to percentage of employed persons in each category residing in households with incomes below the poverty line.

A final point worth determining is what proportion of the economically active population is made up of poor informal-sector workers. The purpose of this line of inquiry is to ascertain how much truth there is in the speculation that all members of the informal sector are poor.

Table 8 shows the percentage of poor informal-sector workers in the urban EAP and the percentage of poor people in the total population of informal-sector workers, with the countries grouped according to their development modality. This information refutes the idea that all informal-sector workers are poor; it does, however, indicate that the situation varies somewhat depending on the economic modality concerned. For example, in the financial-modality countries (with the exception of Brazil), around one-fourth of all informal-sector workers were poor, whereas in the agricultural-modality countries nearly two-thirds of such workers were poor. This fact is even more telling when we consider the widespread poverty existing in these contexts.

Bearing in mind this last finding, the levels of remunerations for the wage-labour and informal sectors are shown in table 9 as a means of rounding out the picture presented here of informal-sector workers in the various economic contexts considered. The countries are grouped by development modality, and the level of remuneration is given by occupational category. On the basis of this information (1990 data), the following observations may be made:

i) As was to be expected, remunerations for informal-sector workers in agricultural-modality countries were close to the poverty line and were far lower than in financial-modality countries.

(ii) The remunerations received by OAWs and UFWs were the highest among the informal-sector categories and in some cases were quite similar to pay levels in the wage-labour sector; indeed, in Mexico OAW remunerations were estimated to be higher than those of wage-earners. This information, which should be interpreted with some caution, may find some basis of support in the conjecture that the composition of OAWs is very heterogeneous and that, as a consequence of the greater coverage of social policies in these cases, members of the informal sector may have more skills and resources with which to undertake these types of activities successfully.

(Original: Spanish)

TABLE 8

Poor informal workers as a percentage of the urban EAP, around 1990

	Poor informal workers in urban EAP				Informal workers in EAP	Poor as a percentage of total informal workers
	Micro-enterprises	Domestic employment	Own-account workers	Total		
			Financial-modality countries			
Argentina (Greater Buenos Aires)	3	2	5	10	40	25
Brazil	7	3	7	18	46	38
Mexico	4	1	2	7	36	20
Panama	2	2	7	11	39	28
Uruguay	2	2	2	6	35	17
Venezuela	2	1	5	8	33	24
			Agricultural-modality countries			
Paraguay	8	3	8	18	50	37
Guatemala	7	3	9	19	54	35

Source: ECLAC, Statistics and Projections Division, based on special tabulations of household survey data.

TABLE 9

Latin America: Levels of remunerations by occupational category in urban areas, around 1980 and 1990
(Expressed in terms of poverty lines) [a]

	Total population	Employers	Businesses employing over 5 persons	Informal		
				Micro-enterprises	Domestic employment	Own-account workers
			Financial-modality countries			
Argentina (Greater Buenos Aires)						
1980	8.1	19.3	6.3	4.9	3.2	8.7
1990	5.7	18.8	4.8	3.8	2.1	4.7
Brazil						
1979	4.0	17.1	4.9	3.1	1.1	5.2
1990	3.9	11.7	4.0	2.8	0.9	3.3
Mexico						
1990	5.6	27.6	3.6	2.5	1.8	7.4
Uruguay						
1981	6.0	23.6	4.3	3.0	1.7	7.1
1989	5.1	20.2	3.9	2.6	1.5	5.5
Panama						
1979	5.6	12.5	5.2	-	1.3	2.9
1989	4.9	13.4	4.7	3.0	1.3	2.0
Venezuela						
1981	7.6	11.5	7.5	5.0	2.9	5.0
1990	4.5	12.0	4.1	2.5	1.4	4.3
			Agricultural-modality countries			
Guatemala						
1989	3.5	18.1	2.8	1.7	1.4	3.0
Paraguay						
1990	3.4	10.2	2.8	1.8	0.8	3.6

Source: ECLAC, Statistics and Projections Division, based on special tabulations of household survey data.
[a] The value of the poverty line is equivalent to twice the cost of the basic shopping basket for the country in question.

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Regionalization processes: *past crises and* current options

"Bow thy head, proud Sicambrian; burn what thou hast adored and adore what thou hast burned"
(Words of the Bishop of Rheims to Clovis, King of the Franks, when baptising him as a Catholic)

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The scientific and technological revolution currently under way makes it necessary for us to devise new forms of regions which get away from the old restrictions of size and contiguity: structural complexity is now the crucial factor. The generation of regional structures at the national and supranational level demands flexibility, in view of the rapid changes taking place in the regional environment, the globalization of the economies, and the need for the regions to be shaped in a democratic manner. This article proposes a new classification which draws a distinction between *pivotal regions* (corresponding to the smallest units in the current politico-administrative form of division which have a sufficient level of complexity), *associative regions* (formed as a result of voluntary political union between one or more pivotal regions and one or more adjoining politico-administrative units), and *virtual regions* (formed as a result of tacit agreements between pivotal regions or associative regions which are not contiguous). In order to obtain the necessary flexibility, it is proposed that *dirigiste* efforts from the centre down should be replaced by initiatives stemming from a more basic level of society which will permit the shaping into regions of contiguous (and also non-contiguous) areas, even if they are in different countries. Section I of the article briefly reviews the meagre results obtained by regionalization efforts in Latin America over the last fifty years and raises some basic queries about the possibility of constructing reality. Section II looks at the structural features (especially their complexity) that should be taken into account in defining regions, while section III proposes three new types of regions and section IV maintains the need for the continued validity of the idea of building regional political and social institutions, but now applied also to associative and virtual regions.

I

Introduction

There is a certain repeated constant feature in the form of territorial organization observed at the global level. For the United Nations, the world is divided into regions (indeed, its five regional economic commissions –the Economic Commission for Latin America and the Caribbean (ECLAC) among them– reflect a first broad division of the globe into regions). Each of these regions is made up, in turn, of a number of countries which form subregions, and if we zoom in closer on these, we discover that each country is divided in turn into regions or more ancient political and administrative divisions. This has led to considerable confusion over the use of the term "region", which etymologically simply denotes a territory with royal or kingly attributes: i.e., a territory involving the idea of political power. From that perspective, the concept of region is more appropriate to a subnational rather than a farther-reaching geographic scale.

There are areas of the world (certain European countries, for example) where historical regional characteristics preceded and gave rise to a regional institutional framework (as in the case of the long-standing regional "communities" in Spain and their role in giving rise to the Autonomous Constitution). In those places, the new regions –which merely reflect the formalization, modernization and institutionalization of collective perceptions of identity with and belonging to certain territories and social practices– find it a relatively simple matter to secure their political, social and economic consolidation: in a sense, those regions are "born subjects". For this and other reasons, such regions are highly functional to the current process of globalization. Modernity has not completely deprived society of a feeling of belonging to the territory it inhabits, and there has not been consummation of the shift from a form of regulation based on a horizontal logic (that of territories) to a vertical one (that of sectors), as Muller (1990) would say. The paradox lies in the fact that today we are witnessing a return to territoriality, so that societies with "incomplete modernity" would seem to be better equipped –from that point of view– for international competition. Naturally, there is no question of going back to ancient, autarchic forms of territoriality, but seeking instead a highly interactive form of territoriality, as part of networks.

In other parts of the world, specifically Latin America, the opposite has been true, since generally speaking the institutional framework has preceded and generated regional characteristics. This means that deliberate political actions were taken to create (establish) regions without there being any pre-existing historical, sociological, anthropological or other kinds of elements to support such actions, which were based more on instrumental rationality than on the recognition of belonging to or identifying with a region. In such cases, it can be said that those regions were born as objects and have yet to become subjects.

In the vast majority of cases, these regional constructs arose from the joining-together of various units which already existed in the country's scheme of political and administrative division, bringing a variety of criteria into play in doing so (Stohr, 1969; Boisier, 1976). This has been happening in Latin America for at least half a century, if one counts from the time of the first regions identified as river basins, under the influence of the institutional model of the Tennessee Valley Authority.

It was only from the mid-1960s, however, that regionalization, as an authentic "national project", became established (but not necessarily successfully) as a continuous practice. The rationale behind this was associated with the theory of social modernization so much in vogue during those years. As Germani (1964) points out, the theory of social modernization –as a theory of the transition from underdevelopment to development– placed special emphasis on the idea that the lack of internal integration of the countries was an obstacle hindering our part of the world from taking the same road to progress as the industrialized economies. The shortcomings in internal integration were reflected in the lack of transport and communications infrastructure, the absence of

□ The author wishes to express his thanks for the valuable suggestions made by Gladys Zurita.

national markets (and the prevalence of segmented regional markets), and the lack of a single political and institutional framework, accepted throughout the territory. This analysis led to the obvious recommendation that what was needed was physical, economic and socio-political integration. In order to facilitate this task, it was considered that the old form of political and administrative division (which reflected the territorial organization of the colonial past) should be replaced by a new form of territorial division: regions. Such regions would cover the whole national territory, forming a true regional system.[1]

An assessment made in the early 1990s of regionalization efforts was rather disappointing. If the criterion for evaluation was whether regions had been given constitutional status or not, then the only successes were Chile (through its 1980 Constitution, the constitutional changes introduced in 1991, and especially the 1993 Basic Act on Government and Regional Administration) and Peru (through its 1979 Constitution and the Regionalization Act of 1987). Less legally perfected forms of regionalization existed in Colombia since the mid-1980s and in Venezuela, which has a long history of periodic attempts at regionalization, since 1968.

However, the vagueness surrounding the real meaning of "region" (as noted at the beginning of this article) was making "regionalization" a common word in political and technical language, and the term "region" was used to refer to different territorial realities.

At the moment, a kind of counter-regionalization trend is to be observed in Latin America.[2] To cite just the most outstanding examples:

i) Venezuela is dismantling the Regional Development Corporations and the national Government is emphasizing decentralization at the State level, at the expense of such action at the regional level.

ii) There is extensive country-wide discussion in Colombia on the real nature of the present regions and possible changes in them in the light of constitutional principles, while the national Government is apparently giving its backing rather to division into Departments and municipalities.

iii) In Peru, the Government has practically dismantled the whole regional institutional framework established by the Alan García administration,[3] although Chapter XIV of the draft Constitution voted on 31 October 1993 gives decentralization a second chance by assimilating regions with departments.

iv) The new Sánchez de Lozada administration in Bolivia is also in practice seeking to dissolve the Regional Development Corporations and, as in other countries, is moving towards the formation of Departments and municipal decentralization.

v) In Chile, which can be considered the country with the most solidly established regionalization process, the renewed sway of democracy and attempts to secure electoral advantages are bringing to light various regional divisions, tensions and centrifugal forces. The concept of full (political) regionalization never caught on –for obvious reasons– in the most traditionally federal countries, with the exception of Argentina in the 1960s and 1970s.

Thus, it would appear that the established status quo is stronger than the attempts which have been made to transform or reconstruct the current situation in a rational manner, through exogenous and dirigiste procedures. Initial voluntaristic political attempts to organize territory take a very long time to become social and cultural realities, and even taking into account the exponential speed at which social time elapses, it does not seem possible to sit back and wait for the consolidation of artificially created regions.[4]

Perhaps the time has come to recognize that "social engineering" attempts from the "centre downward" to form regions by adding together and joining political and administrative units have arrived at a dead end. There is strong resistance, and the hindrances encountered can lead to lost opportunities –for investments, markets, association– at a time when seizing opportunities is the only way to succeed in a competitive world. Competition is not a system that always allows the strongest to win, but it does permit the systematic triumph of those who know how to seize opportunities, that is to say, the smartest.

[1] Few government documents in Latin America reflect this kind of proposal better than the one published in 1968 by what was then called the National Planning Office of Chile (ODEPLAN, 1968).

[2] This is not a trend against regions as such, however, in so far as regions are expressions of the real world.

[3] According to comments heard in Peru, this was partially due to excessive interference by the political parties and the over-politicization of regional bodies.

[4] It should not be forgotten that the Departments of metropolitan France were created by an act of the French Revolution in a manner which was almost grotesque as far as their boundaries were concerned. Two hundred years later, however, the Department is the cultural reference-point and basis of identity for the people living in it. In Chile, the province –an administrative "artifact" created in 1786– is the immediate territorial reference-point.

Post-modernism [5] is an unwelcome guest in attempts to construct regions on highly artificial initial foundations. So-called post-modern ideas emphasize and value diversity, heterogeneity and fragmentation –sometimes unduly– and thus defend the uniqueness and identity of the original smaller territorial unit (the return to the local level). Post-modernism is also the latest refuge and shield of minorities and therefore is, or can be, a democratic factor, in so far as democracy asserts the value of diversity within unity.

"The problem in Latin America today is how to reconcile substantive rationality with formal rationality. The question of territorial diversity is of central importance today with the emergence of the new issue of national identities. The world is being globalized at the economic level, but at the same time identities are shrinking and national expressions are arising. In other words, when people are faced with the uncertainty of being universalized, they seek assurance in returning to the community or local level." This idea expressed by Vega (1991) is extremely apposite to the present discussion.

Probably one of the most negative characteristics of modernity has been its Faustian megalomania, as Berman (1991) would likely have put it, with its irresistible attraction to the uniformity and homogenization which cost regional planners of the 1960s so dear. [6] While on the subject of Goethe's tragedy, we should always remember the crime of Philemon and Baucis, as an example of that temptation to homogenize. From that point of view, post-modern ideas are extremely attractive. They are, in a certain sense, more humanistic, but one must be wary of new mirages.

"The collapse of the Welfare State and of the great social support networks that characterized it (large enterprises, large trade unions, steady employment and collective social security) strengthens local reality as a new territory of solidarity" notes Boisier (1992) in commenting on the essence of regional microcosms, i.e., the relation between human beings and the territory they inhabit.

In a recent book (Drucker, 1992) the words "The Return to Tribalism" are used (somewhat infelicitously) to describe a phenomenon that is a good deal more complex: the demand for a local dimension in a context in which, as already noted, it is necessary to think globally in order to act locally, or in which, once again, the scientific and technological revolution leads to the confusion of global reality with local reality.

It is the danger of the supremacy of the individual and the rise of a sort of territorial anarchism –as a pendular or dialectic response to totalitarianism and homogenization– which becomes the centre of concern.

II

Back to basics: what is a region?

Hilhorst (1980) was right when he wrote that "Although many seem to agree that the concept of region is a mental construct that finds no counterpart in reality, for others it remains an important issue". The "others" are precisely the human persons who live in regions ("human person" might seem like a tautology, but it is certainly not so in Thomist-Maritainist anthropology, where the "personality" of human beings is the attribute which distinguishes their spirituality from their mere material individuality) and decision and policy makers in the field of regional development. [7] Hilhorst does not answer the basic question posed in the title of this section and only suggests further research outside of the neoclassical paradigm.

[5] Post-modernism is the most unexplored ground that can possibly be imagined. Modernism, whose date of birth is uncertain, was based on three fundamental ideas: reason, history and progress. Freud, Nietzsche and Heidegger were those responsible for giving modernism a far from Christian burial. Post-modernism emerged at an uncertain date, but not long ago, when mankind realized that the "modern" project was no longer valid. Post-modernism's stamping-ground is in the street and in intellectual circles (Lyotard, Baudrillard, Vattimo). In this article, the concept of post-modernism is associated basically with one characteristic: fragmentation.

[6] The expression "regional planners of the 1960s" refers not only to a period of time, but above all to an attitude, unfortunately still very much alive in not a few public organizations.

[7] For a rapid overview of Christian anthropology, see Caiceo, 1993.

The Stanford Research Institute (SRI International, 1990) holds that "The traditional rationale for economic regions and many political boundaries is rapidly giving way to a new economic logic... The concept of regional agglomeration more accurately portrays contemporary economic patterns than do traditional political boundaries... The global economy has become a mosaic of economic regions spanning multiple political jurisdictions. This trend has produced and will increasingly require new forms of collaboration among the nations, states, counties and cities involved".

The main point is that the regional rationale is changing, as SRI states. Almost all contextual and structural changes connected with the concept of region are due to the dual impact of the scientific and technological revolution and globalization. This makes it necessary to rethink the concept of region, return to the basics, but without the absurd intention of re-establishing obsolete categories.

Three concepts closely linked to the practical definition of regions, and therefore closely linked to regionalization attempts, have been: distance, spatial friction and contiguity. These three concepts have become obsolescent due to robotization, miniaturization and satellites. The immediate impact was the sharp drop in transport (land, air and sea) and communications costs. The cost of an intercontinental telephone call now has nothing to do with distance, but rather with the intensity of satellite usage at the moment of the call and with the respective rate structures (which are normally part of the "regulated" area of markets). The growing importance of communications as a factor of location –as opposed to traditional factors– is giving rise to such terms as communications highways and teleports. Indeed, one "bit" of information can give rise to a larger economic operation in a region than a whole shipload of traditional goods. Because of this, virtually the whole intellectual construct of Walter Isard and his collaborators at the University of Pennsylvania, ambitiously entitled "regional science", is stuck in a dead-end street, as Holland (1976) predicted it would be.

In the past, the size of regions was a key criterion in their definition. A large region[8] was presumed to have a better chance of defending itself from cyclical crises caused by foreign trade and was also presumed to have greater political power. This latter assumption overlooked the fact that power depends not on size but on inequitable control of scarce resources, some of which are not even material.

Size, as a criterion for establishing regions, is also becoming obsolescent. Instead of size, what is of interest today is the structural complexity of an organized territory.[9]

Drucker (1992) rightly notes that as money and information have become transnational, even very small units are now economically viable. Large or small, the whole world has equal access to money and information on the same terms. Indeed, the real "unprecedented successes" of the last 30 years have been very small countries. It seems reasonable that "countries" could be replaced by "regions" in all this.

If the organized territory is seen as a systemic structure, its two most important characteristics are precisely its complexity and its final state. Complexity refers to: i) the variety of internal structures that can be identified in the system;[10] ii) the different hierarchical levels through which the feedback and control mechanisms of the system are established, and iii) the non-linear linkages in the system, which generate dissipative structures.[11] (In contrast, a typical example of linear linkages is that of technical input-output coefficients). Since the organized territory is a dynamic system, its final state depends on whether it is a closed or open system. If closed, the final state is one of maximized entropy, whereas in an open system the final state is one of maximized synergy.

[8] In the twofold sense of geographically and economically large. However, geographical size was assumed to be conveniently limited by technology and transport costs and their impact on the "presence" of the administrative apparatus in the whole region.

[9] The concept of territory passes through a number of stages: first, natural territories, which become equipped territories, which then progress to the most complex category: organized territories. The work of Nobel Prize winner I. Prigogine is an obligatory reference with regard to the concept of complexity.

[10] In this case, variety alludes to structures, which can be urban, productive, social and political.

[11] To refer once again to I. Prirogine, these structures may be understood as dynamic chaotic systems which spontaneously generate order out of chaos.

From a complementary viewpoint, and returning to the categories used by Vapñarsky (1969), the structural complexity of an organized territory, seen as systemic structure, can be measured through the attributes of interdependence and closedness. Structural complexity is characterized by high interdependence and low closedness.[12] A science of complex economies or an economic theory of complexity has yet to be developed, which would serve as a conceptual framework and perhaps provide the tools to work more concretely and operationally on the question of complexity.

Thus, the search today is not aimed at determining how "big" a region should be. On the contrary, what is of interest is to determine the smallest organized territory that is also highly complex structurally. For practical reasons, this "downward" search must be limited to the current political and administrative divisions (precisely what it was desired to eliminate twenty years ago).

At another level, territorial culture and identity are being revitalized today, not only as intrinsic values but also as factors of regional competitiveness. Organized territories are the new actors in international competition for capital, technology and market niches. Such territories –as regions– must project themselves as a unit with a recognized identity, as a differentiated whole, capable of offering a corporate image in the best sense of the word. This is possible only if the region can generate a regional project based on a broad social consensus, which is nothing other than an authentic "political project" that generates social mobilization. In many cases, that would be impossible if such a project is not accompanied by and coordinated with a "cultural project" that generates or reinforces a community's identity with its own regional habitat.[13]

Although many people are loath to use the term "regional marketing", in fact a new and important function in contemporary regional development efforts consists precisely of promoting the region in external markets. A suitable combination of endogenous and exogenous elements, which is the key to successful regional development, partly depends on the quality of such marketing, while modern transnational capital considers the territorial environment (collective perception, identification, consensus) as a strategic factor for its location.[14]

Flexibility, elasticity and ductility are indispensable requisites for any modern region, in so far as they are factors that facilitate rapid and timely movement in and out of networks.

Flexibility can be facilitated through rules, including constitutional ones, that allow for territorial association based on the political will of the parties involved. This undoubtedly has a lot to do with the democratic character of regions. The Constitutions of Colombia and Peru may well be noted in this regard. Article 306 of the Colombian Constitution provides that "Two or more departments may form administrative and planning regions with their own juridical personality, autonomy and patrimony, the main objective being the economic and social development of the respective territory", while article 307 states that "The conditions for requesting the conversion of a region into a territorial entity will be laid down in the respective Basic Act, subject to the views of the Commission on Territorial Organization. The decision of Congress will be submitted in each case to a referendum of the citizens of the departments involved...". Article 190 of the Peruvian Constitution (submitted to a referendum on 31 October 1993) reads: "Regions shall be constituted on the initiative and at the behest of the inhabitants of one or more contiguous departments. Contiguous provinces and districts may also join together or change their form of division...".

The elasticity and ductility of regions refer to their structural conditions that allow them to adapt to their surroundings, either by absorbing outside elements or by adjusting their size to the conditions of the environment. These two characteristics are in contrast to the rigidity of regional structures in the past.

[12] Interdependence refers to the proportion of real or effective interactions compared with the theoretical total, while closedness refers to the proportion of interactions which are completed within the system.

[13] For a detailed discussion of regional political and cultural projects, see Boisier, 1992.

[14] The importance of regional identity as a factor of regional development in Argentina is stressed in Colantuono (1991) and Palermo (1988).

III

From pivotal, to associative, and thence to virtual regions

Taking into account the characteristics that are of interest today as regional attributes, I suggest giving the title of pivotal regions to the complex, organized territories identifiable within the historical political and administrative divisions. These pivotal regions will be provinces in some countries, departments in others and states in certain federal countries. In all cases they are the smallest political and administrative units which at the same time are structurally complex, have their own culture and identity, and possess flexibility.[15]

These pivotal regions (which are somewhat similar to John Friedmann's core regions, but are not necessarily metropolitan) can form larger regions –associative regions– through voluntary union with adjacent territorial units. This is exactly what is provided for in the Constitutions of Colombia and Peru. Even though the Constitution of Colombia makes no explicit mention of contiguity, this is implicit in the text of article 4 of Bill No. 184 of 1992, which lays down that administrative and planning regions will be "territorial divisions for the pursuit of national planning functions". In Peru –as already noted– the Constitution explicitly mentions that the departments must be contiguous.

What is the difference between these associative regions and present regions? The difference lies in the fact that in them the partners come together by their own free will, therefore giving the region a democratic character which contrasts with the traditional divisions imposed from above by the central political authorities. In so far as the regions are an expression of free will, they eliminate a number of sources of conflict in the present regions that are hindering them from functioning as constructions really based on historical situations and the mentality of the people.

In some cases, the process of forming regions has entailed extremely high transaction costs. The possibility of forming associative regions would considerably reduce those costs.

Moreover, pivotal or associative regions can make tactical cooperative arrangements with other regions to form a higher category of regional organization: virtual regions. A virtual region is the result of a formal or informal contractual agreement between two or more pivotal or associative regions, aimed at achieving certain short- and medium-term objectives.[16]

Although this might sound like fantasy, it actually takes place. The worst thing that can happen to "regional development specialists" is to be overtaken by the facts yet again: caught in a permanent gulf between their ideas and reality.

With regard to Europe, Curbelo (in the press) notes that: "There are already many examples of regions and municipalities (usually the larger ones) that enter into cooperative arrangements with other regions and cities in the Community in order to develop joint programmes".[17] In Belgium, the objectives of the LEDA (Liège-Europe Development /Action) programme include the strengthening and promotion of international alliances between Liège and other comparable cities, under the slogan: "associate or die".

The concept of the virtual region undoubtedly owes much to the operational procedures developed by the big transnational corporations. The following very recent international press item illustrates the point:

[15] Some concrete examples of pivotal regions are the department of Antioquia in Colombia, the province of Valdivia in Chile, the department of Santa Cruz in Bolivia and the department of Arequipa in Peru.

[16] Usually in order to introduce a new high-technology product, occupy a market niche, or defend a "space" or "territory" of business and influence.

[17] Curbelo cites the example of the so-called "four motors" of Europe (Rhône-Alpes in France, Baden-Württemberg in Germany, Lombardy in Italy, and Catalonia in Spain) which have joined forces to carry out scientific and technological research programmes.

> "IBM, always present in major advances in the world of computers, has launched the first system based on the PowerPC. This, the most powerful microprocessor in the world, is the result of the alliance between three giants of the industry –IBM, Motorola and Apple– and is manufactured by the IBM Electronics Division".

This is a perfect example of a "virtual corporation": a temporary arrangement to achieve a specific goal (in this case, to compete with INTEL in the computer chips market). Once the objective is achieved, the association is dissolved. In other words, none of the three original partners lost its corporate identity in all this.

The virtual corporation is a temporary network of independent companies linked by information technology to share skills, costs and access to each other's markets. [18] The key attributes of virtual association are:

i) *Technology*. Informational networks will help far-flung companies and entrepreneurs to link up and work together from start to finish. The partnership will be based on electronic contracts to keep the lawyers away and speed the linkups.

ii) *Excellence*. Because each partner brings its "core competence" to the effort, it may be possible to create a "best-of-everything" organization. Every function and process could be world-class –something that no single company could achieve by itself.

iii) *Opportunism*. Partnerships will be less permanent, less formal, and more opportunistic. Companies will band together to meet a specific market opportunity and, more often than not, separate once the need evaporates.

iv) *Trust*. These relationships make companies far more reliant on each other and require far more trust than ever before. They will share a sense of "co-destiny", meaning that the fate of each partner is dependent on the other.

v) *No borders*. This new corporate model redefines the traditional boundaries of the company. More cooperation among competitors, suppliers and customers makes it harder to determine where one company ends and another begins.

The concept of relationship-enterprise, similar to the virtual corporation, refers to a network of strategic alliances among big firms, spanning different industries and countries but held together by common goals which encourage them to act almost as a single firm. Such an alliance is driven not just by technological change, but also by the political need to have multiple home bases.

It is not a question, of course, of transforming regions into enterprises, but modern regional development efforts clearly have much to learn from the strategies of large corporations. What is happening in the business world supports the proposal to consider regions as quasi-enterprises, i.e., complex organizations with ways of relating to their environment that are similar to the development strategies of large corporations.

The concept of virtual regions adds another, more subjective element which was already mentioned earlier: identity. A strong sense of regional identity is the only guarantee that the virtual association will remain balanced and not become a form of absorption or domination. Identity is the product of a regional culture, understood as a set of values, symbols and social practices (a cosmogony and an ethos) that unify and separate at one and the same time in order to produce identity – culture and identity based on the valuing of diversity (something very proper to post-modernism), as Cerutti-Gulberg (1991) explained so well at a symposium held at the University of Warsaw.

The earliest ideas of "regional virtuality", which are only a few months old, have attracted considerable interest, presumably for two reasons: they make it possible to overcome tensions that seem insuperable in many existing regions constructed from the centre down, and they clearly respond to a growing perception of the dynamics of the globalization process. [19]

[18] See the special report in Business Week (8 February 1993) entitled "The virtual corporation" and the article in *The Economist* of 6 February 1993 entitled "The global firm: R.I.P.".

[19] For example, the Bureau of Planning of the department of Antioquia (Colombia) produced an in-house report ("Proposal for the formation of an administrative and planning region in the Occidente region of Colombia") which states: "The Occidente region of Colombia is conceived as a process of strategic alliances among departments, in order to take advantage of opportunities and take up the challenges presented by new world and national scenarios". The press in Arequipa, Peru and in Concepción and Valdivia in Chile has given this kind of proposal an enthusiastic reception.

Commenting on the difficulty of distinguishing clear regional structures in Argentina, Grenier (1993) says: "...the highest level is in fact represented by the regroupings the provinces are attempting to achieve, in this climate of national and international competition promoted by economic neo-liberalism over the last twenty years. Since the average province is too small for such a context and previous regionalization efforts were predicated from a national development perspective, new formulae open to the exterior are being sought: for example, a "Norte Grande" region encompassing the already traditional Northwest and Northeast regions of Argentina and integrating through the GEICOS project (integration of the Centre-West part of South America) the neighbouring countries of Chile, Bolivia and Paraguay...".

This is clearly an attempt to construct virtual regions. Generally speaking, border integration projects –of which there are many in Latin America– are also practical examples of the search for virtual arrangements.

IV

Regional deconstruction now?

One of the most complete arguments in favour of the idea of constructing regions in a social and political sense was published by Boisier (1991) as the culmination of a series of studies on ways of combining endogenous and exogenous elements in regional development.

The regions now defined as "pivotal" are by definition regions with a high degree of self-construction, especially social. They can, however, have flaws in their political and administrative architecture, arising from low levels of political and territorial decentralization.

The social and political construction of regions, as an essentially endogenous process, will continue to be a challenge for most associative regions.[20] An explicit common will among all concerned will facilitate the design and implementation of a regional political project, without which the region will normally remain a mosaic of departments or provinces.

The importance of a common will to create associative regions needs to be emphasized. Poche (1985) commented on "regional aspiration as a social movement" from a sociological perspective in the following terms: "Such an aspiration transforms regional demands into a social movement, characterized by a *situation* of unequal development generated by a technical and bureaucratic central State and by its *actors*, who carry on a social struggle based on *the model of class warfare*. Since local identity was destroyed in the process of unequal development, its recovery forms the guiding light of this struggle, whose aim is to *reconstitute cultural and economic autonomy* on the basis of the reconstructed identity. The political and institutional dimension is finally surpassed in favour of the sociability dimension, which takes its place as the organizing principle of the social structure" (emphasis in the original).

In pivotal regions, political decentralization becomes a sine qua non for constructing from below a kind of "nesting" hierarchy of regions each fitting inside one another. Decentralization makes possible autonomous decision-making, rapid action and adequate operational resources. From this viewpoint, mere territorial decentralization (like that of Chile today) is not enough, since the formation of associative regions requires endogenous political decisions: i.e., decisions taken by regional political bodies directly elected by the population.

As associative regions are formed around one (or more than one) pivotal region, size and diversity is increased, but complexity and identity is lost.[21] Of course, a kind of marginal cost-benefit analysis could be used to decide on the limits to the enlargement of a region.

[20] For example, if the departments that comprise the present Atlantic Coast region or the present Occidente region of Colombia freely enter into an agreement (or use some other departmental arrangement) to assume the category of an administrative and planning region, their respective "construction" processes must be promoted to the utmost possible extent.

[21] The province of Concepción in Chile, a pivotal region, loses complexity and its identity becomes less clear as a result of its union with the neighbouring provinces of Ñuble, Arauco and Bíobío, so that the collective usefulness of the so-called "Bíobío Region" might be questioned. A similar query could be raised with regard to the relationship of the departments of Antioquia or El Valle in Colombia with the Occidente region.

Another complexity that arises in the practical application of these concepts is the possibility that not all units of the current political and administrative division of a country may join together as associative regions. In this case, there would not be a national regional system but rather the transformation of the national territory into a regional archipelago. If the main aim of national regional systems were to facilitate the regional disaggregation of national plans and to establish a national regional development policy, however (two questions that are completely alien to the current economic paradigm), then the formation of such an archipelago would be basically unimportant.

What political and administrative structures are required to make a virtual region operational? Since the virtual agreement is only temporary, there can be no question of creating stable, permanent bodies. This means that coordination, rather than unified management, must be the basic element in cooperation. Coordination, in turn, depends on communication, for the fact that present technology allows for real-time "face to face" communication facilitates virtual arrangements. Once again, the transaction costs may be high and, as Alexander (1992) points out, planning is needed in such cases as part of the response to high market transaction costs. Planning is associated, in particular, with the establishment of hierarchies ranging from simple unitary organizations to complex frameworks and inter-organizational systems, as virtual regions would be. When diffuse relations based on trust are developed –face to face relations, according to Berger and Luckmann (1980)– transaction costs are lowered, allowing for flexible specialization, as Rojas (1993) notes in a recent preliminary study on the weakness of the social actors in the Bíobío region of Chile.

Civil society and political society have different roles to play in the regions in the formation of associative and virtual relationships. The political actors are the leading elements in associative relationships, while the civil actors (entrepreneurs, etc.) are more important for virtual relationships.

The "nesting" hierarchy of pivotal, associative and virtual regions fitting inside one another clearly corresponds to a constructivist rather than a positivist view of reality, at least as regards its multiplicity and heterogeneity. It must also be kept in mind that the observer/operator must be part of that perception of reality, since this is the only definitive way to stop constructions from the top down or from the centre outwards. According to Edgar Morin, there can be no subject without a relationship to an outside environment which allows that subject to recognize, think, and hence exist; in this way, complexity is reflected better, avoiding analytical-Cartesian reductionism which "while seeking regularity, reduced the complex to the simple", in the words of Montero (1993).

Ultimately, self-determination and flexibility would appear to be the two major pillars of this type of "nesting" hierarchy of pivotal, associative and virtual regions. The resulting panorama can only be conceived of in dynamic and not static terms. The best metaphor for this panorama would be a slow-motion film of a fountain, showing the multiplicity of simultaneous structures that take shape and disappear, or a similar slow-motion film of a volcano erupting. Self-determination is a psychosocial and political matter, while flexibility is a technical and administrative issue.

Virtual arrangements also have the quality of being multiple: that is to say, a single pivotal or associative region can simultaneously maintain various virtual links, each of them formed on an *ad hoc* basis.

Why a "new" form of regionalism at this time? The answer is that globalization and the emergence of supranational groups like the European Community have produced a backlash: the desire of individuals to belong to a smaller community. At the same time, new technologies are turning Schumacher's dream that small is beautiful into reality, and today the region is seen as the optimal unit for managing economic development, while the nation-State is being questioned in every way: for being too small to cope with global issues or too large to deal with local matters.

Table 1 below summarizes the main characteristics of the three kinds of regions.

Is all this a "light" proposal for regionalization, that is to say, typically post-modern in its lightness? In no way.

The post-modernism of the proposal lies in the overcoming of the typically "modern" temptation to homogenize and in the introduction of a considerable degree of flexibility: a characteristic more typical of "post-Fordism" than "post-modernism" and, in any case, an inescapable requisite of the present times. "The idea is now taking hold that society is a set of uncontrollable and ever-changing flows, in the midst of which the actors work out individual strategies and

hang on to fragmentary cultural identities. This is post-modern culture..." (Montero, 1993).

Independently of personal preferences, modern meta-stories have lost part of their validity and society seems to be regressing to certain fundamentalisms that were once thought to belong to the past, some negative and others not: nationalism, racism, regional sentiment, new mysticisms, and even the return of wizards.

(Original: Spanish)

TABLE 1

Essential characteristics of pivotal, associative and virtual regions

	Pivotal	Associative	Virtual
Formation	Historical	Consensual	Contractual
Structure	Complex	Heterogeneous	Complementary
Construction	Self-constructed	To be constructed	Selective
Type of planning	Strategic	Managerial	Tactical
Type of regional project	Strategic	Political	Conjunctural
Space	Continuous	Continuous	Discontinuous
Societal motivation	Self-affirmation	Power+development	Competition
Duration	Permanent	Long-term	Negotiated
Decentralization	Territorial	Territorial + political	Functional
Decision-making system [a]	(P)	(O + P)	(T + O + P)

[a] These categories correspond to those used by Linstone (1987): technical perspective (T), organizational perspective (O) and personal perspective (P).

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A cultural view *of the ECLAC* proposals

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This article argues that the ECLAC proposal for changing production patterns with social equity should take account of the cultural features of the region's societies. It therefore examines the ECLAC proposal from a cultural standpoint, with special attention to the links between citizenship, economic development and modernity (section II). It then analyses the processes of internationalization of culture, the relation between cultural identity and citizenship, and the impact of the processes of internationalization of culture on the region (section III). It goes on to examine one of the most persistent problems in the project for modernity in Latin America and the Caribbean –the dialectics of the negation of the other–, which has decisive effects on the relations between the elite and the masses and on the pattern of integration and exclusion followed by development dynamics in the region (section IV). Next, it puts forward some reflections on the intercultural fabric running through the history and geography of the region, which is constantly renewed through the interaction and modification of the various cultures (section V). Finally, it proposes some policy guidelines which incorporate the cultural dimension into the development agenda and make it possible to enhance the systemic nature of the proposal for changing production patterns with social equity (section VI).

I

Introduction

This article seeks to contribute to the debate and reflections which ECLAC set in motion as from 1990 with its proposal for changing production patterns with social equity. This proposal calls for broad consensus among the various agents and for a democratic context if it is to be viable, and as the construction and extension of modern citizenship is seen to be an essential aspect of it, this warrants a special effort of reflection and proposals for action. Such citizenship involves, in turn, the existence of social actors with the possibility of self-determination and the capacity to represent interests and demands, with full enjoyment of their legally recognized individual and collective rights. Without this, it is futile to talk about building consensus, an integrated society, or stable democratic systems.

In defining the construction of modern citizenship as a function of the self-determination capacity of the agents of development, an increasingly crucial issue in our region and other parts of the world is the tension between cultural identity and modernity in the development process. In other words, what is involved is to take up the challenge of reconciling the special historical and cultural features of regions with the universalist vocation of development and modernity. As we shall see below, this tension not only affects the other developing regions but is also one of the most outstanding societal traits of these final years of the century. The tension between cultural identity and modernity is particularly strong in societies which are experiencing the so-called post-communist phase, and it is also felt with particular force in the most highly industrialized countries.

The hypothesis which led us to undertake this study is that the process of changing production patterns with social equity, as a development proposal for the countries of the region, cannot be approached without taking into account the main cultural features of our societies. These features are: the intercultural fabric which is the mainspring of our own form of openness to the world, and the need to get away from the dialectics of negation of the other as a fundamental requirement for attaining our social integration and the consolidation of a democratic culture. On this basis it is possible to construct a form of modern citizenship in which "the subject will be the desire of the individual to be a producer and not just a consumer of his experience and social environment" and modernity –as well as referring to economic, technological and social progress– will be above all "the demand for freedom and defence against everything that tends to turn human beings into instruments or objects" (Touraine, 1992, p. 272).

II

Changing production patterns with social equity as a critical view of access to modernity

The development of democracy in the region raises the following challenge: How can positive links be established between citizenship defined in the traditional sense (i.e., citizenship which gives priority to society's capacity for self-determination and rational intercourse among its actors) and a dynamic of economic modernization with social effects that foster inclusion? And how can the construction of such citizenship be reflected in recourse by the social actors to their cultural heritage in order to innovate from their own history?

In this new scenario, the proposal for changing production patterns with social equity prepared by ECLAC for Latin America may be understood, in its cultural dimension, as a critical view of access to modernity. [1] In our understanding, a critical view emphasizes the following aspects or values of modernity: respect for diversity of values and cultures; greater respect for each other's rights in relations between dissimilar actors; greater openness to new scenarios and challenges, and renewed importance for technical progress as a means of increasing global communication and interconnection, promoting general well-being, and providing broader fields for the development of various kinds of potential.

As already noted, we are facing a new and extremely changeable international situation marked by a far-reaching revolution in science and technology, progressive globalization of markets and communications, and economic competition increasingly based on the incorporation and spread of technical progress. This evolving situation rules out any dream (or nightmare) of autarkic development for the region and forces it to look instead towards a form of incorporation in the outside world capable of meeting the demands of a globalized setting. As noted by Alain Touraine, "we are all passengers on the hip of modernity: what we really need to know is whether we are sailing as galley-slaves or as passengers with their own possessions, plans and memories" (Touraine, 1992, p. 236).

Naturally, instrumental rationality, efficiency of production, technical progress and response to aspirations for consumption are all elements of modernity without which it is impossible to talk about an advantageous international position for the region. These elements are not enough, however, to ensure the incorporation of the other elements involved in changing production patterns with social equity: that is to say, a higher level of social cohesion, environmental sustainability and the existence of stable democratic systems.

A reductionist reading of modernity which does not include, in a full and complementary manner, these elements of equity, sustainability and democratization would merely tend to foster processes of incomplete modernization destined to produce enormous differences between the fully integrated elites and vast marginalized and fragmented sectors of the population. In such a case, the latter sectors would be a hotbed of anti-development reactions, retreat into individual identities, and cultural "defensiveness".

The proposal for changing production patterns with social equity is aimed at linking up, in cultural terms, with a concept of modernity which seeks to go beyond the limits of instrumental rationalization but also tries to break through the blockage imposed by inward-looking individual cultural patterns. In this sense, it shares a critical view of modernity: it seeks to reconcile individual freedom and modernizing rationalization with the sense of belonging to a community.

In this view of modernity individual identities are not doomed to come into conflict with modernization or changing production patterns. On the contrary, they can be an important element for furthering them if they can work as factors of democratic and consensus-based mobilization.

What, then, are the cultural factors that can further the construction of a form of modernity understood in these terms?

A first factor is the conviction that true modernity can only come from an endogenous effort: that is to say, from the mobilization of the social forces that make society feel responsible for its actions and their results. This represents an effort to break away from what José Arico called "querulous thinking", which he explained as follows: "This is the kind of thinking that claims that Latin America cannot reach its goals because somebody condemns us not to reach them. The theories advocated this kind of dream, of a Europe that was never attained. The theory of dependence and the theory of underdevelopment sought to explain to us that the real source of all our ills was elsewhere. It was not due to shortcomings in our own governance, our own management capacity or our own development. I am not saying that dependency or underdevelopment do not exist: I am talking about the ideological and political utilization of these kinds of facile categorization. Under this approach, the reasons for our ills were sent abroad" (Aricó, 1992, p. 303).

A second factor is the idea that such an effort requires "manageable" levels of conflict and high levels of consensus and stability. Consensus does not deny the existence of conflicts, but it does propose a

[1] We refer to the proposal contained primarily in three central documents presented by ECLAC over the last three years (ECLAC, 1990, 1992a and 1992b).

system for their institutional solution through negotiation and compromise which excludes the negation of the other and always seeks to avoid the generation of any attitude of confrontation. The consensus-based culture therefore represents a significant change from the traditional political culture in most of Latin America and the Caribbean, since it includes at least three items which have been problems for the political culture of the region: recognition of the diversity of the various actors in society at large and the need to strengthen them; fostering of negotiations involving the establishment of compromises; and the transformation of agreements and compromises into shared cultural reference points.

In this context, citizenship is seen as a value which should unite the needs of both democracy and development.[2] From this standpoint, citizenship and competitiveness are the two hubs of a virtuous circle: "To imagine that such a form of citizenship can become fully valid without an effective effort with regard to competitiveness is just as groundless in this decade of the 1990s as to think that competitiveness –which is necessarily of a systemic nature– can be maintained even though there are serious shortcomings in the area of citizenship" (ECLAC, 1992b, p. 18). Thus, citizenship must be seen as a source of positive interaction between democracy and development.

The modern idea of citizenship also has sociological and cultural connotations which are worth mentioning, however. Firstly, modern citizenship is associated with the processes of individual and group secularization through which: i) actors (individuals, groups and institutions) who imbue their options and forms of behaviour with a certain rationality are formed; ii) the processes of social change are institutionalized as a function of the expansion of political and social rights; and iii) roles and institutions are progressively differentiated according to their specific functions.

Secondly, the growing interaction of different cultural and social actors implies and expresses an institutionalized consensus based on relations of mutual recognition between different actors. In this sense, citizenship is closely linked with *recognition of others as fellow human beings*. Emphasis on socialization and education in modernization processes, for example, is not only crucial for the demands for increased production involved in such modernization, but also for the strengthening of democratic culture through the spread of values inherent in the construction of citizenship.

Thirdly, it is no longer a question of seeing citizenship merely as the satisfaction of rights previously conculcated by authoritarian regimes, but rather as the crystallization of a set of demands for the elimination of all forms of discrimination in the market and in the political decision-making system. It is a question of attaining a solid and renewable manner of building up institutions which permits the conduct of negotiations among actors and individuals in accordance with established rights and rules of conduct: in other words, the building up of institutions consistent with an increasingly inclusive type of economic development.

The recent ECLAC proposal, in which ever-greater importance is assigned to education and the production of knowledge within the growth dynamic, coincides with the effort to make economic development compatible with the construction of democratic and modern citizenship. As noted in the ECLAC document referred to earlier, "the prospective studies show that since knowledge will be the central element of the new paradigm of production, educational change will become a fundamental factor for developing the qualities of innovation and creativity, together with integration and solidarity, which are key aspects both for the exercise of modern citizenship and for attaining a high level of competitiveness" (ECLAC, 1992b, p. 113).

The growing importance of knowledge and education for development significantly affects the dynamics of a democratic order, since the material base of democracies no longer consists exclusively of a particular type of economy or production relationships, but also of the stock of knowledge, information and communication and the use made of those elements. How, then, can the central importance of knowledge for development in the region be combined with the building of citizenship and the very fabric of living culture in Latin America and the Caribbean?

This brings us to an essential point in our concerns: namely, the place of cultural identities in the dynamics of development and in the building of citizenship in present-day society.

[2] "The economic strategies and policies must be applied within a democratic, pluralistic and participatory context" (ECLAC, 1990, p. 15).

III

The internationalization of culture and citizenship

There are phenomena connected with the internationalization of economic, political and cultural life which make it indispensable today to rethink the cultural dimension of citizenship in both post-industrial societies and in developing countries. At least three of these processes, and their global nature, need to be taken into consideration: otherwise our reflections would lack some decisive elements.

Firstly, the reformulation of citizenship as a function of cultural identities is a matter which is increasingly present and important all over the world. In the industrialized world, and especially in the United States and Western Europe, international migrations are heightening the impact of minorities not only in demographic terms, but also in a sociocultural, and hence also political sense. In the developing world, the impact of globalization on endogenous cultures has equally marked effects. The case of Islam is highly illustrative in this respect: not only does it show how a cultural factor affects economic and political relations, but it also shows how, in the Islamic countries themselves, the lack of social integration in the dynamics of modernization strengthens cultural integration through messianic traditionalism.[3] In Asian, African and Eastern European countries too, their ethno-cultural variety increases social conflict as these societies open up to world markets and incorporate such values as freedom of expression and cultural assertion, thereby also intensifying demands for ethno-territorial and religious assertion. The cultural factor is not only a decisive variable within the countries but is also increasingly affecting international relations.

[3] Maxime Rodinson recently put forward quite a heterodox view in which he explains the spread of Islamic fundamentalism not so much as a return to a past which was in fact never so integralist but rather as the result of the intermingling of crisis and exclusion in those countries. According to Rodinson, it is this crisis and exclusion which have led to a re-reading of the sacred texts in messianic terms and a re-founding of an integralist past as a basis for the legitimation of movements seeking a radical-integralist way out of the crisis (see Rodinson, 1993).

Secondly, both advanced and developing societies face a common problem: namely, that modernization of production, if it aims to reach rising levels of competitiveness, now demands the formation of a hard core of intelligence. At the same time, however, in view of its own aspirations to democracy and national development, it also requires that this hard core should not be constructed in an elitist manner but should form part of a process of construction in which society as a whole participates.

Democratic construction of development does not seem to be viable when the field of negotiations and political consensuses is restricted to the elites. The very delegation of political authority from the governed to the governors obliges the techno-political elites, in the emerging scenarios of the "communications-based society" and the "knowledge-based society", to mobilize the intervention capacity of the citizens at large by providing means for information, communication and the socialization of knowledge among the members of society.

Thirdly, the globalization of culture resulting from the culture industry and the cultural market has given rise to a number of phenomena which raise anew the question of the processes of national construction. One of the most urgent of these is the construction of a synchronic cultural time for national societies as a whole, in which events and decisions in one place immediately affect another, generating worldwide simultaneity of information. On the economic level, this means that there is a tendency towards the disappearance of national economies proper and the formation instead of an international economic unit which likewise functions in a synchronic manner. There would thus be a tendency towards the imposition of internationalized economic policies. In the same line of thinking, the reorganization of cultural scenarios and the constant crossing of identities demand that we ask ourselves about the orders that systematize the material and symbolic relations between the groups. Particularly important phenomena for a number of situations would be the

de-territorialization of cultural identities and the tendency of transnational corporations to decentralize their activities (García Canclini, 1990, pp. 288-289).

The above processes relocate the question of the construction of modern citizenship in a line where culture is of fundamental importance but at the same time means that this construction must take place in a situation of conflict. It is clear, for example, that tension exists between the cultural tradition and the instrumental rationale involved in the needs for the reconversion of production and increased international competitiveness of national economies. Modernization processes can take advantage of this existing cultural stock, but they can also come into conflict with it. The case of Japan, for example, is highly illustrative of the dynamic relations between the cultural stock and rapid modernization.

The modernity associated with the industrial cycle has been a limited historical process, since it has not achieved the full integration of society as a product of its own activity. The limits of modernity differ, however, according to the society in which one lives or considers such modernity. In the advanced societies of the West, the construction of citizenship has attained much broader conquests than in Latin America and the Caribbean. In the Islamic countries, on the other hand, it would seem that the failures in the area of social integration have strengthened the development of a new type of anti-modern communitarianism. In South-East Asia and Japan, modernization has had elitist origins but has turned out to be more inclusive in social matters than in our own region, and it has enjoyed greater cultural legitimacy. In these regions, however, modernization is seriously behind in terms of citizenship and recognition of cultures different from the ruling nationalities.

A singularly important phenomenon in the new processes of internationalization of culture and politics is the generation of a number of "anti-modern cultures" in many developing countries. At the same time, however, it is also possible to observe fundamentalist traits in the industrialized societies. It seems essential to understand these phenomena in order to be able to propose, in and for Latin America and the Caribbean, the forms that should now be assumed by the dynamics of modernization and universality in our region. This conflictive situation being experienced by the various regions of the globe mutes the optimistic expectations that identified the end of the Cold War with a generalized and rapid spread of modernity and democratic systems. We are now witnessing even greater complexity in the relations between modernity and cultural identity, or between "modern" universality and special regional features.

The various national or international conflicts currently rending much of the developing world –this kind of sixth continent which has emerged with the post-Communist era and in which 17 new States have made their appearance in less than three years (Ramonet, 1993)– share a common pattern: the attempt to strengthen, found or re-found anti-modern "identity-based" constructions. These are due to profound disenchantment with the modernization processes, which are seen by a large or even majority sector of the population as being induced from outside: almost as a downright intervention in someone else's history (Gouffenic, 1985).

This perception of modernization processes as foreign bodies coincides with the economic crisis of many developing countries and with the inability of their States to meet the expectations of general well-being and progress which they aroused at some time in the past and around which they built up a capacity for mobilization which they have now lost. These modernization processes in crisis did not all have the same inspiring principle, however. In order to illustrate the diversity of such principles we need only look at the secular nationalist inspiration in India, the State socialism of Algeria, the conservative pro-Western line of Imperial Iran, the various kinds of African one-party States, and the Communist models in the Soviet Caucasus and the Balkans.

All these crisis situations, however, are due to the difficulties in achieving integration by way of economic and social modernization. They all experience difficulties in facing up to the challenge of merging traditional culture with modernity, share the emergence of a ruling elite seen as being divorced from society at large, and have not succeeded in establishing broad, solid channels of democratic participation.

Various Latin American and Caribbean countries also display conflictive tensions in the relationship between cultural identities and political democracy, although in a very different way: the tension is between the desire of political parties and businessmen to institutionalize the political system, on the one hand, and on the other the desire for cultural and social change on the part of important social move-

ments representing the ideas of ethical, symbolic/expressive, regional, cooperative, indigenous, women's, young people's, workers', and urban and rural local interest groups. This gives a new significance to the notion of citizenship, placing it at the intersection between the right to political representation and the right to use public spaces to assert cultural identities. Demands by society for more participation, information, communication or publicity are closely connected with the cultural identities of the lower-class or excluded sectors: Aymara and Quechua culture in the Andean regions, the culture of the "underdogs" in Mexico, or that of the urban marginal sectors in Rio or Caracas.

These cultural identities are constantly being redefined in their interaction with modernizing forces. Some of their features are lost in the course of history, but others survive and are modified through their relations with the more universal tendencies with which they are linked. Today, their exposure to the latter is reaching unprecedented levels of intensity. The processes of internationalization, access to global communication, changes in the educational profile of the population, new relations between generations and the sexes, new patterns of behaviour and consumption: all of these give rise to an irresistible tendency towards conflictive dialogue and possible breaks with tradition. In this context, there is an increasingly urgent need to understand how these new intersections are being formed and their potential impact on the development process.

Assigning greater importance to the cultural dimension of development could re-create outlooks which can imbue politics –and policies– with a mobilization potential which could arouse and win over the social actors who are most withdrawn into their own identity. The question is, then, to penetrate the cultural fabric made up of the totality of representations and self-images circulating among those concerned, especially those for whom citizenship is so far more of a lack than a concrete fact. As we shall see below, the dialectic between those who are integrated and those who are excluded in our region has deep cultural roots which strengthen this pattern of exclusion and inequality and place great difficulties in the way of the construction of modern citizenship.

IV

The dialectics of negation of the other, as an impediment to citizenship

Understanding the conflictive relationship with other persons who are seen as different from oneself is essential in order to penetrate more deeply into the relations between culture, development and citizenship in the region: the dialectics of exclusion which have repeatedly cut across the path of modernization in the region since the end of the last century, and the dialectics of domination between the elites (political and economic/social) and society at large, have their historical roots (not so much as a sufficient condition, but rather as an indispensable precedent) in the dialectics of negation which go back to the times of conquest and evangelization and have been prolonged throughout our history in the form of negation of others, be they women, indians, negroes, peasants or members of the marginalized urban poor.

Negation of the other has presented various aspects in the course of its past development. It differs, for example, depending on whether the encounter between cultures was with societies which already had a complex form of organization, such as the Andean societies or the Mayas, or with less complex or more scattered societies such as Amazonian, Mapuche or Caribbean communities. The dynamics of negation have also been very different when they have involved slave migrations from Africa, although in these cases they have been superimposed on the previous cases, giving rise to different scenarios, such as those observed in Brazil or much of the Caribbean. The details become even more complex in the case of the more recent migrations from Europe, which have merged with established republican societies and made the construction of national identities even more complex, as in Argentina and Uruguay. Moreover, as R. Adams has so rightly pointed out with respect to Guatemala –and this can be extended to

much of the rest of the continent– these processes of socio-cultural change involve the transition of culturally special and relatively de-structured societies towards the formation of national cultures in which the weight and the always uneven evolution of socio-cultural relations militate against the full configuration of integrated modern societies. [4]

The dialectics of negation have many twists and turns. In the case of the discoverer, conqueror, evangelist, colonizer, creole and, ultimately, white men in general, the negation has a dual action: on the one hand, the other person is seen as different from oneself, and then also he is seen as being of less worth and is automatically attributed the shortcomings of sinfulness, error or ignorance. In Latin American thinking, and even in its ideologies of progress and development, this automatic classification is still perpetuated today in the differentiation between the place of "reason" and the place of ritual. Other, different people –indians, natives, non-Westerners– are associated with ritual: magical reality, folklore, pre-scientific wisdom, spontaneous expressiveness or local art. "Reason" –the mastery of rationality, of "true" discourse, of science and development– is the preserve of the "white man" or Westerner: in other words, the voice of progress (see Bravo, 1992). Thus, the merging of native and of universal knowledge required in order to form "authentic" modernity is still absent.

In schematic terms, it may be said that colonizers, evangelists and the members of the dominant culture in general have respected the production and reproduction practices of the subjugated cultures: their systems of cultivation, community organization, survival strategies, etc. It has been seen, in this respect, that the autochthonous production rationale has not necessarily been at variance with the exogenous instrumental rationale. [5] The dominant culture has been reluctant, however, to recognize that history shows concrete examples of mutual enrichment between the spheres of ritual and reason. It forgets that the other culture is not only a majority presence in areas such as the Caribbean and the Andean region but also has been and continues to be an unavoidable presence in the most varied manifestations of culture and society.

Negation of the other by the political and economic elites also has other opposing and pendular facets. On the one hand, foreigners are seen as other, different persons, and the most traditionalist and authoritarian versions of Latin American political culture have often shown resistance to such aliens: people who threaten our identity from outside and undermine the nation like a virus brought in across the frontier. At the other extreme, Latin American creoles have themselves negated other, different persons within their own country (indians, half-breeds, etc.), while identifying themselves in an uncritical and emulative manner with non-native values, be they European or North American. This process of identification and differentiation has been very important and effective in the construction of real institutions.

On the part of the negated persons (indians, blacks, mulattos, slaves, women, half-breeds, marginal elements, peasants), the process of negation of the other also has more than one facet. On the one hand, it is internalized as self-negation: that is to say, as a truncation of one's own identity in one's own eyes. Bereft of the support that their own cultural identity could give them and of the sense of direction that such identity would give to their life, they drift like lost souls through a world in which they cannot recognize their place.

The negated underdog is always on the fringes of the social spaces in which the main collective projects are formulated and decided upon and resources are assigned. This lack of access largely defines the oppressed culture. [6] On the part of these negated persons, too, strategies are developed for preserving their different features, as is clearly seen in the areas of music, art, dances, religious ritualism and syncretism, systems of cultivation and survival, community links and demands for territorial spaces and the use of native tongues.

[4] Quoted in José Medina Echavarría, 1980, pp. 119-120.

[5] John Murra's studies on the Andean production rationale, its multicyclical organization at various ecological levels, and its linkages with processes of macroregional and non-mercantile distribution show that the Andean culture had a highly rationalized system of production which still persists and is reproduced today (Murra, 1975). For an analysis of this question, see Rivera Cusicanqui, 1992, pp. 83-108.

[6] "Oppressed culture is the name given to cultures which lack institutions responsible for producing knowledge and rules or strategies for negotiating, changing and adapting the societal projects of their members" (Casimir, 1984, p. 67).

Negation of the other in the region is most clearly and persistently reflected in discimination against indigenous and Afro-American races. Racial discrimation against the negroes of Afro-American cultures did not disappear after the abolition of slavery: "The negative view taken of negroes, seen as the essential explanation of the disastrous picture presented by some Latin American republics in the nineteenth century, was further strengthened when, with the passage of time after abolition, it became clear to simple-minded racists that negroes were not a backward factor because they were slaves, but because they were negroes" (Romero Fraginals (ed.), 1977, p. 49). Moreover, there are few mechanisms that recognize old and new dynamics of indigenous extraction, and the upsurge of new indigenous movements and mobilizations stems from demands to fill this gap. In various countries of the Americas, Indians form the majority of the population, "but their language is not the official language, their culture is not the dominant culture, nor are their institutions the basis for the organization of the State". It is not by chance that in much of the region the indigenous movements, which are increasingly interlinked with each other, call forcefully for major cultural reforms and demand the establishment of multiracial and multinational States.[7]

The dialectics of negation of the other precedes the dialectics of exclusion. In many countries of the region, economic and social differences are still accompanied by differences based on colour or language. The master-servant relationships with domestic staff in middle- and upper-class households, or with agricultural or factory workers, persist in spite of the supposed equalitarian mission of modernity, and they are living proof that such dynamics are still an unresolved challenge in most of our societies.

This negation/exclusion of the other involves a dual rejection of the more democratic and integrative sense that modernity may claim to give. On the one hand, there is the rejection by those who assume universalist values of modernization but instead of associating them with the specific cultural identities of the region despise those identities and ape the elites of the industrialized countries. At the other extreme to this feeling, the rejection of modernity is expressed in those who see it as a threat to their cultural roots and take refuge in inward-looking ideologies opposed to change and to the opening-up to world exchanges. Thus, the attitude of the former, who refuse to look within their societies, is complemented and strengthened with this essentialist attitude which refuses to look outwards. In both cases there is strong resistance to essentially modern features, that is to say, to social dynamics, intercultural tensions, and the uncertainty typical of modernization processes. This resistance is usually based on rigid values often reflected in a conspiratorial and undemocratic political culture.

Understanding the cultural dimension provides us here not only with an explanation of the origins of exclusion but also of the spectres that still loom over us. The long initial insensitivity to these ethnic and cultural differences has given rise to many sequels, but mostly truncated: truncated integration, truncated modernization, truncated democratization. Obviously, the original fault is not sufficient to explain the failure of so many other projects. If we do not understand this difference –and the difference within ourselves–, however, we will hardly be able to deduce a project for the future from our identity.

As long as a cultural rationale based on this dialectic of negation of the other is in force, there will also be negation of mutual social links: everything that is "different" will be devalued, satanized, repressed or silenced. This negation of mutuality of rights and identities means, in turn, that those who formulate discrimination and put it into practice (whether they be conquerors, colonizers, evangelists, white men, rich men, members of oligarchies, political, business or trade union leaders, military men, public technocrats or "modern" operators) arrogate to themselves the exclusive possession of the truth, sound judgement and correct reasoning. The discriminator thus becomes both judge and jury in the discrimination process: he creates the discrimination, reproduces it, and awards himself the exclusive right to decide on the hierarchies established by it.

As a constituent cultural feature in the region, negation of the other is ambiguous in its concrete historical development. Such ambiguity is marked by the transformation of the person who negates and the victim of such negation, whose relationship has been complex and ambivalent over the course of time; negation is also linked with some features of acceptance and adoption of the characteristics of the other

[7] See in this respect Bonfil Batalla (1981) and Albó (1991). With regard to Afro-Americanism in the French-speaking Caribbean, see Casimir (1992).

as one's own. A classic example of this ambivalence is provided by the role of the Catholic Church in the region, which in various phases of modern and present-day history has provided doctrinal bases both for anti-modern, elitist and anti-equalitarian political ideologies and, on other occasions, for modernizing, democratic and tolerant ideologies. Another form of ambivalence was observed last century, in the quest for legal institutions based on emulation of the French, English and United States constitutions, at a time when the masses of the various countries in the region were suffering from marked exclusion in political and cultural terms.

This exclusive and hierarchical tradition has been fed with constant violation of the rights of the masses by military leaders in the heat of civil wars and in crusades for the extermination of the indigenous population, with furtive prolongation of negro slavery and the use of very low cost labour for the hardest and most degrading tasks.

While the juridical construction of citizenship in the region has tended to copy constitutions conceived in very different social and cultural contexts, the traditional dictatorships have indulged in repeated violations of those constitutions. The social fabrics characteristic of the hacienda system, the plantations and the mining enclaves, together with the persistence of traditional family relationships of a patriarchal nature, have made possible this dissociation of citizenship, and this dissociation has not been completely overcome with the transition from oligarchic societies to more modern structures of production.

In this respect, the transition to modernity still has a long way to go. In many societies of the region, especially in relations between the sexes and in many kinds of work (in domestic service, in rural areas, and even in part of modern urban employment), master/servant relationships continue to strengthen the reproduction of a system of domination which derives from this dialectic of negation of the other: others who are not only different from oneself, but also inferior. The culture of servitude and degradation continues to act as the cultural axis for the reproduction of inequality in many areas of economic activity and social relations.

However, the present-day history of the region is made up of ebbs and flows, and the defeats suffered in the struggle to further citizenship also forge "citizenship utopias" which now seem to be gaining strength with the renewed value placed on democratic systems. As José Martí poetically said, "our gaping wounds are the liberties we lack". The region is filled with a culture of struggles for citizenship in which the struggle for the inclusion of the other in a system of shared rights has been notably present, one way or another. In the twentieth century, much of the development and formation of the workers' and peasants' movement and the women's movement has been centered on obtaining citizens' rights at the political and social level.

The so-called national popular regimes have made possible significant advances in the areas of political citizenship (such as suffrage for those previously excluded from it) and social citizenship (access to education, health, land of one's own and other basic social rights). However, the creation of complex systems of intermediation, such as bureaucratic clientage, corporativism and the formation of States where sinecures and fiefdoms are rife, undermined the capacity for building citizenship in the national popular projects and also tended to subordinate cultural identities and social interests to the dynamics of a political system with a high degree of concentration of power.

The failure of these efforts to build democratic citizenship, and the traumatic effects left by subsequent military dictatorships in the region, have combined today to bring about an authentic revaluation of democracy as a political system and way of life. For the first time, democratic rules have come to occupy a place in the shared feelings of sectors holding different political ideas. In the political consciousness of many, these rules no longer figure as mere circumstantial instruments: instead, they now have an ethical value of their own. Many of the actions of the various social movements during the last decade have been aimed at expanding democracy as a system of broad, shared rights. This reconstruction of democracy has made it possible to resume the search for extended citizenship.

In this context, demands for greater rights are also being put forward by various cultural and regional groups. A new area of conflict among citizens, in which acceptance of the other stands out as a central issue, is now entering the arena of public discussion more forcibly. The struggle by ethno-cultural majorities and minorities for a greater public presence, women's movements and their demands on all levels, communitarian and localist movements, are all signs that today democracy cannot dispense with the building of citizenship, with its important cultural element.

All this may lead to a change in the widespread expectations of social integration. Such integration is no longer sought solely in terms of access to material goods, but is increasingly conceived as a balance between access to material goods and broader access to symbolic goods. Together with the demand for housing, health attention and more diversified consumption, there is now a specially forceful demand for information, useful knowledge, transparency of decisions, greater communication in the workplace and in society as a whole, and mechanisms for political representation and public visibility. This greater access to symbolic goods is stimulated both by the current democratization processes, which open up channels of public participation, and by the ever-greater impact of the cultural industry, which integrates society in terms of symbolic consumption.

The disparity between the slower-moving trend towards integration in economic and social processes (promoted by changing production patterns and social rationalization) and the heightened trend towards such integration at the symbolic and cultural level (as a result of the democractic political opening-up process and the cultural industry) could become an important core issue in the next few years in the struggle for citizenship in many of the societies of the region. This more favoured place for symbolic exchanges will be strengthened by the so-called "knowledge-based society", in which the dissemination of knowledge is a central element for the construction of a form of citizenship in which "others" can be equals.[8]

If the knowledge-based society challenges us to broaden our *weltanschauung* and open up our sensitivity, then this presence of others should represent an asset that can be developed. If, instead of negating the identity of the other, we recognize it as being present even within ourselves, then our *weltanschauung* will be broadened. Our world will not collapse if we open our minds to the idea of identity-in-difference: on the contrary, it will be enriched with new contents. Abandoning negation of the other and instead recognizing the other as part of a collective identity which also includes ourselves may be the symbolic means of transforming past negation into forward-looking assertion. It goes without saying that this is not a synthesis which will take place spontaneously or all at once, but one which can only occur through a conflictive process strewn with obstacles. The process itself, however, will bring cultural enrichment and help to build shared citizenship.

V

The intercultural fabric as a force of modernity

Another central element running through the cultural substrate of the region is what we have called here the intercultural fabric, understood as the intercultural penetration or "active assimilation" of the culture of modernity from one's own historico-cultural heritage. The concept of intercultural fabric expresses both the idea of permeability among cultures and the idea of the coexistence of various past periods in the present of our region. In this sense, Latin America and the Caribbean is a region with a special fabric, because it combines multiple cultural flows; because from its origin it has incorporated syncretism as part of its dynamics of culture and identity; because the modern and the non-modern coexist and mingle both in its culture and its economy; and because the consciousness of most Latin Americans is itself made up of linguistic or cultural mixtures.

Beneath the concept of modernity in the region there is a profound underlying error, because while we have so frequently wanted to interpret modernity as the abandonment of all exclusive particularisms or

[8] This must be understood as the dissemination of knowledge in the broadest sense: i.e., the acquisition of productive skills, critical capacity, self-esteem as a function of one's own potential, self-awareness as a citizen, greater openness for the assimilation of information and values, etc. This corollary of the foregoing reflections thus coincides with the proposals made in the ECLAC document (ECLAC, 1992b) in the sense that the spread of education and knowledge must "synergically" further both competitiveness and citizenship by spreading what are termed the "codes of modernity".

as a sort of "exhaustive westernization" of our region, in so doing we have turned our back on the element of modernity which is most closely related with ourselves: the capacity to dynamically integrate cultural diversity within a shared societal order. Both the "pure" Indians who have managed to defend their identity by re-creating their cultural roots and the recently arrived Korean immigrants or the descendants of Spanish, Italian or German migrants bear the mark of being "different" –either as a form of denigration or as a liberating impulse–, so that day by day they build their own specific identities on the basis of cultural interactions with other cultures having a Western basis. In Latin America and the Caribbean, this concept of cross-breeding as an "intercultural fabric" has been enshrined in many figures and has been given various names: ladinization, cimarronization, creolism, chenko, etc.

Like negation of the other, syncretism or the intercultural fabric, which is the obverse of such negation, is not just an original event: it is also living history, and although its source lies in the encounter between different cultures –which are always renewing themselves– it spreads out to embrace all kinds of things. The peasant migrant struggling to survive in the big city is an expression of spatial syncretism; the intercultural mixtures generated by modernity are another aspect of cultural syncretism; opening up to world markets and structural heterogeneity also have connotations of intercultural fabric; and even the populist tradition represents a syncretic fabric in which features of modernity are intermingled with pre-modern political cultures.

In this respect, various hypotheses on the Latin American identity warrant critical consideration (J. Vergara Estévez and J. I. Vergara, 1992). The first of them is the hypothesis that the technological changes taking place all over the world mean that concern for local identities is outdated and that, if there really is a Latin American identity, then the dynamics of greater openness and technological penetration doom it to gradual dissolution. A second questionable hypothesis is that our region is marked by its lack of an identity and that the problem is therefore how to be full-blooded Europeans or North Americans. At the other extreme, the ultra-Indianist and Hispanist hypotheses are also exclusive in so far as they ignore the phenomenon of the intercultural fabric as the basis of our historical identity.

In contrast with these positions, whether they be of negation or unilateral assertion, the thesis of cultural syncretism has a much sounder historical base. According to this thesis, the Latin American identity must be understood in the light of the combination of cultural elements coming from Amerindian, European, African and other societies. The cultural encounter is seen as having produced a cultural synthesis which is manifested in artistic productions such as eighteenth century Latin American baroque or the muralism of our own century. This intercultural fabric is also expressed in music, rites, popular celebrations, dances, art and literature, and it permeates strategies of production and survival mechanisms.

This identity in the form of intercultural fabric has been considered from the point of view of both its limitations and its potential. With regard to the former, it has been noted that this identity has never been fully formed nor assumed. This is the position taken by Octavio Paz (1978) and Roger Bartra (1987), for example. In the metaphor of the development of an insect used by Bartra, the Latin American identity would be of the nature of a larva, doomed never to mature to the full. In the second case, it is asserted that the intercultural identity constitutes a cultural core from which we can enter and leave modernity in a versatile manner, and with which –if we assume to the full the condition of intercultural fabric– we could have a heritage from which to counteract the excessively instrumental or "de-historicizing" bias of the waves and ideologies of modernization. [9]

Thus, the intercultural fabric is, at one and the same time, our way of being modern and our way of resisting modernity: our condition for cultural openness to exchanges with others and our way of incorporating modernity always in a syncretic manner. It is at once identity and disidentity, or identity and the problem of identity. The clearest reflection of this is offered by the great cities of the region: Mexico City, Rio de Janeiro, Caracas and Lima are outstanding metaphors of this history made up of mixtures.

[9] García Canclini (1991) is an example of the first case, and Morandé (1984) of the second.

This cannot be explained solely as the effect of the special pattern of modernization of the national economies. These are phenomena which repeatedly manifest, with the irrepressible force of identity, a syncretic cultural state. Both in the truncated or unequal development defining the maps and contrasts of the cities, and in the new heterogeneity which involves both fragmentation and diversity, and in which multiple and precarious relations of belonging arise, this intercultural fabric stands up to the homogenizing assault of modernization.

Just like the relation with others, this cultural condition forces us to rethink the challenges of modernization and of the construction of citizenship in cultural terms. How, then, can we capitalize on the region's experience in the history of intercultural mixtures so as to turn it into a comparative advantage in the new concert of an interconnected and globalized world?

How can we make use of our long and conflictively syncretic history in order to take on more advantageously this challenge which is now being faced by the industrialized societies too, and which consists of rethinking the content of citizenship on the basis of the progressive coexistence of different ethno-cultural identities? Assuming our own intercultural fabric is perhaps today the most authentic manner of doing this in the midst of a process of modernity marked by a type of diversity which is increasingly complex in terms of identity.

VI

The cultural dimension in the proposal for changing production patterns with equity

If we look at the path followed by the region since the end of the last war up to the present day, we see that there have been profound changes in all fields which give a completely new sense to modernization, equity, citizenship, the conflicts in course and the patterns of linkages between the State and society. In this context, it seems inconceivable that any development proposal could be based on rejection of modernity. It is much rather a question of "configuring the content of modernity so as to make it compatible with equity in economic and social matters and with citizenship in the political and institutional field" (Rosales, 1993, p. 156).

When legal and political equality is obstructed by the diversity of cultures, a severe dissociation takes place in which it is difficult to reconcile three requisites for expansionary modernity: the political representation of different actors and demands in an institutional framework; the balanced and reasoned participation of actors in the decision-making system; and greater equity in the results of economic development. Indeed, our region's experience is an eloquent illustration of this difficulty.

For the case of the region, the foregoing pages posit the need to incorporate the cultural dimension into the project for economic development and the construction of a modern and broader form of citizenship. The weight of our cultural marks makes this operation essential, even though in principle we lack the tools for tackling it. There are, however, emerging indications that may weaken the past resistance experienced in this area, such as the following:

i) Processes of establishment of democratic institutions which had never before covered such a high proportion of the countries of the region and which are making the broad masses more sensitive to the values of tolerance, acceptance of others, and consensus.

ii) Broad social experiences of the furtherance of order and stability, in spite of the socially regressive costs of the crisis and the economic adjustment.

iii) The spread of a cultural industry which favours socio-cultural cross-fertilization and opens up technical possibilities for making the public spaces more permeable to submerged cultures.

iv) The need to incorporate the sectors excluded by the current pattern of modernization into the sphere of politics and the exchange of positions, in order to ensure greater governance, economic stability and institutional continuity.

These are some of the elements that can help overcome the dialectic of negation of the other and strengthen the intercultural fabric in the construction

of citizenship. These elements must be incorporated into the current ECLAC development proposal, because of their importance in the systemic articulation of that proposal: in our region, in view of its history, economic development requires the cultural construction of consensuses that will ensure continuity and dynamism.

There are also unresolved queries and serious problems in the relation between cultural features and the viability of changing production patterns, however. How can the "agents of development" whose existence is assumed in the proposal for changing production patterns with equity be reconciled with the real cultural identities of the region? Are the agents of development (economic, social and political actors) culturally prepared for promoting that process?

In order for the very wide range of socio-cultural actors existing in the region to have a significant incidence in the construction of a consensus for development, it is necessary to get away from the "rent-seeking mentality" and generate a modern entrepreneurial ethos and an ethic of solidarity, as well as seeking mechanisms for the unification and politicization of the demands of the masses.

A strategic link could be established between the aspirations of the actors to equality of rights and opportunities and the central lines of the proposal. The efforts to enhance the importance of the social actors in decision-making processes and in the new directions of modernization could be centered on this linkage between the demand for rights and recognition and the demand for incorporation into the new dynamics of productive development. The mechanisms of democratic exchange, which are essential for consensus, and those of incorporation into modernity must in turn set in motion mechanisms for the assertion of collective identities in order to make their demands and potential more clearly visible.

Democratic consensus for the promotion of sustained development calls for cultural strength, that is to say, an extended awareness of the cultural identities assumed and the need for reciprocity as regards rights and commitments. The important thing is how to further this cultural strength and what policies may serve this end.

This transformation of stigmas into cultural potentials will probably need more than just sectoral policies in the fields of culture, the cultural industry and mass communication. The possibility of mobilizing these media in order to spread a culture of tolerance and intercultural synthesis must undoubtedly be exploited to the full. However, the spread of these values will also have to gain "permeability" in a very wide range of actions, routines and institutions making up the social fabric. Within this framework, the need for a form of cultural strength which will promote consensus to guide development in a direction in keeping with the lines of the proposal and will at the same time permit the incorporation into that direction of the values and identities characteristic of our societies means that at least four conditions having high systemic effects must be pursued.

Firstly, education and knowledge, which are the driving forces of changing production patterns with equity, must be capable of combining the construction of a modern form of citizenship with the spread of an entrepreneurial ethos to society at large, all this in keeping with the cultural and economic possibilities and profiles of each country.

Secondly, progress must be made in the construction of extended citizenship through policies adapted to the various national contexts which seek to further an institutional culture based on contracts, standards of conduct and rights which are increasingly shared by the actors involved. There is growing consensus between the agents of development and social analysts on the idea that cultural values affect institutions, while the latter, in turn, have a decisive effect on the behaviour of the economy. It follows from this that there is a need to incorporate, from the level of basic education onwards and in a generalized manner, both a creative relation with instrumental rationality and productive skills and a process of socialization of values and forms of behaviour which strengthen the sense of citizenship and of legal and democratic institutions. This socialization should not be restricted, however, to basic education but could also be fostered through a system of institutions for training, vocational education, and adult education.

Thirdly, there is an urgent need for the application of a policy of recognition, promotion and integration of the sectors which are suffering three-fold exclusion: cultural discrimination (due to ethnic factors or clear educational lags), economic and social exclusion, and marginalization from mechanisms of political representation and participation. Such a policy should imbue a series of integration initiatives, both on the symbolic level (through growing participation by those sectors in the decision-making

system, especially on local matters) and on the material level (through the promotion of productive, community and training activities to strengthen the competitiveness and organization of the excluded sectors). Substantial political backing could be given to these kinds of actions through the implementation of national pacts for overcoming poverty.

Fourthly, and independently of the policy lines described above, there should be full awareness of the fact that all cultural policies must be integrated with and adapted to the changes taking place in the emerging informatized societies. In the final analysis, cultural policy (or policies with a systemic impact which also involve the cultural dimension) must promote maximum flexibility, creativeness and adaptability with regard to the central pillars of these emerging societies, namely, communication (connected with the cultural industry, the cultural market and the communications media); management (increasingly connected with the interactive information networks), and consumption (adapted to the needs and cultural patterns of our societies).

In short, what is needed is to take a systemic view of the relations between economic and cultural matters: to recognize that cultural values and practices affect the institutions and the behaviour of the economic agents, and that the dynamics of the economy, in turn, affect the possibilities of building a cultural environment compatible and in keeping with the challenges of modernity.

In this respect, there is probably a good deal of truth in the oriental proverb that by merely setting out on a journey one is already half way to one's destination.

(Original: Spanish)

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ECLAC and neoliberalism

An interview with Fernando Fajnzylber

As a homage to Fernando Fajnzylber, the second anniversary of whose death took place last December, CEPAL Review is reprinting an interview originally published in Industria y Desarrollo (Bogotá, vol. 3, No. 10) in 1991. (Minor editorial changes have been made).

Industria y Desarrollo: Some specialists see certain similarities between the ECLAC proposal and neoliberal thinking. Are there in fact such similarities?

Fernando Fajnzylber: There are four apparent similarities between the neoliberal proposal and the ECLAC proposal. The first is the belief that changes in economic management are urgently needed; the second has to do with the importance attributed to our countries' linkages with the global economy; the third refers to the necessity of altering the role of the State in this new phase of Latin America's development; and the fourth is that both proposals place importance on maintaining, within certain limits, macroeconomic equilibria. There are similarities, then, in these four areas: urgency, global linkages, a new role for the State and macroeconomic balances.

I. & D.: In your response you emphasized that the proposals' similarity was an apparent one. Are there, then, fundamental differences between the two?

F.F.: Indeed there are. A detailed analysis of the ECLAC proposal will show up fundamental differences; the similarities are more a matter of form than of substance. The first difference has to do with the method used in formulating the proposal. The ECLAC proposal was built upon the foundation of the realities of the 1980s, viewed within an international context and taking into account the cases that were discussed and analysed and the dialogue maintained with the leading agents of development in Latin America. It was on the basis of this contrast between the Latin American development process and that of other world regions –rather than on the basis of some theoretical model– that the courses of action advocated in the proposal were determined to be both necessary and feasible for Latin America.

In contrast, the neoliberal proposal is based on a theoretical model that sets forth the conditions felt to be necessary for an economy to function well, and this model is then compared to actual conditions. The neoliberals then take a look at the ways in which one differs from the other and say: "we must change the existing situation so that it will more closely resemble the conditions dictated by the theoretical model".

The second difference has to do with the question of social equity. The neoliberal proposal assumes that social equity will be safeguarded through the operation of the market, though it introduces programmes to alleviate extreme poverty; its approach to the issue of social equity thus goes no further than recognizing the existence of extreme poverty. It is important to remember, however, that in a number of Latin American countries, a large percentage of the population is living in extreme poverty. The essential element in the ECLAC proposal is that social equity is considered to be necessary for competitiveness. This implies the inclusion of the various agents and

principal actors that take part, either directly or indirectly, in the production process. In the presence of severe social inequity, competitiveness will be eroded in the medium term.

The third difference involves the issue of technical progress. Technical progress is a pivotal component of the ECLAC proposal; it denotes a learning process incorporating various actors among whom there is a synergic relationship that requires time and a shared purpose. Technical progress is therefore a basic element in this proposal because it plays a crucial part in boosting productivity and competitiveness, which will make it possible to raise living standards and redistribute wealth in a more equitable fashion.

The fourth difference concerns the form of linkages with the global economy. ECLAC draws a distinction between genuine competitiveness, which necessarily entails technical progress, and the type of competitiveness that is based on wage cuts or the exploitation of natural resources. The neoliberal proposal stresses the importance of linkages with the global economy and exports, but makes no such distinction because technical progress is not a central consideration and the question of whether the type of competitiveness achieved is genuine or not is not regarded as important.

A fifth difference is in the area of production linkages. Improving such linkages presupposes recognition of the special features of the different sectors. Services, manufacturing and agriculture are not all the same. All these sectors have complementary yet different roles. Manufacturing plays a crucial role because it is the vector for technical progress, but it must be interlinked with the other sectors. The neoliberal proposal, however, starts off with the assumption of intersectoral neutrality; in other words, it considers that it makes no difference which production activity is promoted.

The sixth difference lies in the area of strategic consensus-building by the public and private sectors, which is another crucial component of the ECLAC proposal. In contrast, neoliberal thinking stresses the idea of a subsidiary role for the State: it considers that the smaller that role, the better, and even then only for tasks that the private sector cannot carry out. The ECLAC proposal, in contrast, discerns different roles in view of the synergy that is at work and the centrality of technical progress, because it sees the State as it really is.

A seventh difference is that, even though both proposals place importance on safeguarding macroeconomic equilibria, the ECLAC proposal maintains that, while this is a necessary condition, it is not sufficient in and of itself, hence the importance of a selective dynamic. There must, however, be some correspondence between what one wants to do and what it is institutionally possible to do. If the institutional structure is very weak, it must be strengthened, rather than using this fact as an argument for avoiding all forms of complementary selective action.

Finally, an open, participatory democratic system is an intrinsic part of the ECLAC proposal for changing production patterns with social equity, whereas in the neoliberal proposal the specific type of political system is more a matter of preference.

In sum, we can say that the four similarities –some of which are more apparent than real– are similarities in terms of emphasis, since there are significant substantive differences between the two proposals.

I. & D.: Are some issues given priority in this new ECLAC proposal?

F.F.: I don't think we can talk about priority issues, but the proposal does emphasize certain topics. The ECLAC proposal's main objectives are competitiveness and social equity, and it argues that the two ought to go hand in hand. Competitiveness without social equity will eventually prove to be ephemeral, while social equity without competitiveness –at least as we see it– may also be ephemeral.

A review of past experiences shows that importance has tended to be placed on only one of these dimensions. Nevertheless, and more specifically in the realm of economics, because competitiveness is a systemic phenomenon it also requires social equity. It is not simply an ethical, political or social problem: it is an economic problem in the strictest sense. As countries need to become more competitive –because they want to improve their linkages with the global economy and gain access to modern goods and services– their efforts to augment their competitiveness will facilitate progress towards social equity; in other words, social equity has to be achieved not only for ethical, political and social reasons, but also because it is necessary in order to gain access to modern goods and services.

There is no conclusive empirical evidence regarding the nature of the relationship between

population growth and social equity. It is true that, in Latin America, the countries with the fastest-growing populations have lower levels of social equity than the countries with slower population growth rates; but if we look outside the region and consider the economies of Asia, for example, we see that the Republic of Korea, which has a population growth rate of approximately 2% (i.e., higher than a number of Latin American countries), nevertheless has a much higher level of social equity. Obviously, however, when population growth rates are high, investment rates also need to be high; greater financial restraint on the part of the high-income segment of the population is called for, and the development process becomes more demanding in terms of the austerity effort required in order to undertake investment efforts commensurate with the needs of the population.

We cannot accept the somewhat deterministic proposition that if the population grows very rapidly, social equity is not possible. During various periods in the United States, the population was growing very swiftly, yet that expansion is advanced as one of the reasons for its prosperity. Thus, the rate of population growth is not a limiting factor *per se*.

I. & D.: Emphasis has been placed on the importance of science and technology and the need to integrate the public and private sectors. Is that emphasis reflected in the new proposal as well?

F.F.: In the past, work in the field of science and technology was pursued separately from production activities, not because entrepreneurs were intrinsically old-fashioned, but because they had no incentives to move into this field; instead, the focus was on institution-building. Training activities in Latin America during the past 30 or 40 years have considerably increased the pool of skilled human resources, but in coming years, in what are going to be more open economies, there will be a pressing need to absorb technical progress, which will be a crucial factor in business enterprises' survival. In ECLAC's view, this is a fundamental issue involving synergies between the public and private sectors, among large-, medium- and small-scale industry, and between the academic and production sectors. Technical progress is not a piece of merchandise that is acquired individually or instantaneously; it is learned as part of a gradual process in which various actors take part over time. The greater the cohesiveness of businesses, of employers and workers, of the public and private sectors, the more fruitful the process of absorbing and disseminating technical progress will be.

I. & D.: What role do industrialization, international cooperation and small and medium-scale industry play in this proposal?

F.F.: We are entering into a new stage of industrialization; the last few years have been a time of transition. The unsatisfactory results of the preceding stage were foremost in the collective consciousness, the capacity of the existing public-sector apparatus was eroded, and in some areas the general inclination was to forget about manufacturing and return to the exploitation of natural resources, while in some other circles, the idea gained ground that neither manufacturing nor the exploitation of natural resources were necessary any longer, and that services alone were now needed. That period of confusion has passed, however, and there is a new conviction in Latin America and, especially, in the industrialized countries, that technical progress and the manufacturing sector are vital and inseparable.

In Latin America, the industrialization process of the past tended to turn its back on natural resources to some extent, partly as a reaction to earlier eras in which the main emphasis had been on such activities; but in the future we are going to have a manufacturing sector that links together a growing number of elements and that will be strengthened by the incorporation of the idea of environmental sustainability as part of the common-sense approach of the 1990s. Manufacturing is at the centre of these production linkages because it is the starting point for the dissemination of technical progress, but it is also linked with natural resources, services and the sphere of operation of the State: a State that is going to delegate responsibilities in the area of production to the existing stock of entrepreneurial capabilities; a State that is going to concentrate on the task of boosting productivity, the pace of technical progress and the level of training; a State that is going to promote social equity, or social cohesiveness, in order to give credibility to this proposed form of linkage with the global economy. This new form of industrialization is part of the process of changing production patterns. The entrepreneurial

sector will assume a clearly dominant position in terms of decision-making responsibilities, given the fact that it will be exposed to greater competition and will quite probably embark upon a phase of internationalization. In a number of countries we are already seeing firms which, in order to export, are having to invest in technological or collateral production activities.

Some countries of the region –not only the larger ones but medium-sized and smaller nations as well– are readying themselves to embark upon the internationalization of their leading firms as a means of consolidating their positions in the world economy. In this respect, international cooperation is expected to make a significant contribution that will enable our countries to grow in an authentic manner on a sustained basis.

I. & D.: In the eyes of Fernando Fajnzylber, an ECLAC expert with a profound understanding of the realities of Latin America's situation, what is the basic significance of this new development proposal?

F.F.: The 1990s pose a challenge for Latin America, and the ECLAC proposal is the harbinger of a new and optimistic approach which calls for a great deal of hard work and effort in order to restore this continent to its rightful place in the international community.

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Recent ECLAC publications

Industrialización y desarrollo tecnológico (Industrialization and technological development), Report No. 14 (LC/G.1778), ECLAC Division of Production, Productivity and Management, Santiago, Chile, September 1993, 75 pages.

This document contains two articles. The first, by Wilson Peres, is entitled "Dynamic effects of economic integration: some analytical approaches" and presents the main advances made over the last decade in analysis of the effects of economic integration processes on the dynamics of growth and innovation in a country, with particular attention to models centered on innovation and imitation, which are specially important in cases of integration between developed countries and relatively advanced developing nations. It concludes with some policy proposals.

The second article –"Foreign direct investment and regional integration: the recent experience of Latin America and the Caribbean"–, by Alvaro Calderón, highlights the growing importance of foreign direct investment in the process of globalization of the world economy and evaluates the results of policies aimed at promoting regional integration in the context of the new attitude to foreign capital. In conclusion, it examines the new forms of foreign direct investment and their potential contribution to the integration process.

América Latina: comercio exterior según la Clasificación Industrial Internacional Uniforme de todas las actividades económicas (CIIU) (Latin America: external trade broken down by the International Standard Industrial Classification of all economic activities (ISIC), Volume I, *Exports* (LC/G.1754-P) and Volume II, *Imports* (LC/G.1754/Add.1-P), "Cuadernos Estadísticos de la CEPAL" series, No. 19, United Nations publication, Sales No.: S.93.II.G.10, Santiago, Chile, September 1993, 291 pages (vol. I) and 291 pages (vol. II).

This publication contains external trade data organized in line with the International Standard Industrial Classification, Rev 2 (ISIC, Rev. 2) and trading groups. It includes information on the 11 member countries of the Latin American Integration Association (ALADI), the five members of the Central American Common Market (CACM), each subregional grouping as a whole, and the total for the 16 countries in question, whose external trade represents over 90% of the total for Latin America and the Caribbean.

The statistical series correspond to the period 1985-1991, except for Peru's 1991 exports. They are designed to provide users with information supplementary to that given in Cuaderno Estadístico de la CEPAL No. 13, *América Latina: comercio exterior según la Clasificación Industrial Internacional Uniforme de todas las actividades económicas (CIIU)* (Latin America: external trade broken down by the International Standard Industrial Classification of all economic activities (ISIC)) (LC/G.1451/Add.1-P, December 1987), which gives series for exports and imports for the period 1970-1984, broken down by major divisions (one digit) and divisions (two digits) of ISIC, Rev.2. The same degree of disaggregation of the information and the same countries and groups of countries have been retained, since they are considered to be suitable for analysis of the nature and directions of trade and it was desired not to break the continuity of the series. It has also been considered that until such time as the members of the defunct Council for Mutual Economic Assistance (CMEA) join other integration groupings, this at least makes it possible to provide figures on the recent evolution of those countries' trade with Latin America in their current transitional stage.

The information used for organizing the statistics according to ISIC, Rev.2 comes basically from the various national tariff classifications. Most of these coincide in their first four or six digits with the Customs Cooperation Council nomenclature (CCCN); as from the seventh digit, the countries are free to classify other products as they wish. Furthermore, as the CCCN also served as the basis for the second revision of the Standard International Trade Classification (SITC, Rev.2), which is incorporated in the ECLAC External Trade Data Bank for Latin America and the Caribbean (BADECEL), a computer programme has been designed for automatically correlating the (five digit) items of SITC Rev.2 with the (four digit) groups of ISIC Rev.2. When there is no direct correlation, however, it is necessary to make an analysis at the product level in order to establish the origin according to type of economic activity. For this purpose, use is made of the national tariff classifications, which usually have a ten-digit breakdown and give more exact descriptions of products for determining their correspondence with the economic activities in which they were generated.

In the case of the member countries of ALADI, which adopted their tariff system around 1990, the statistics were organized in line with SITC Rev.3, with which the tariff system corresponds directly. The SITC Rev.3 classification was then reduced to SITC Rev.2, which is possible because the first-named classification has a broader subdivision of items in line with the same methodological principles, and a procedure similar to that described in the previous paragraph was applied.

The basic statistics were supplied by ALADI, the Permanent Secretariat of the General Treaty on Central American Economic Integration (SIECA), and the individual countries. It may be noted in this respect that ECLAC has an agreement for the exchange of statistics with these organizations, in line with the United Nations principle of not duplicating requests to the countries for periodic information, but when necessary special requests are made.

Finally, it may be noted that, like Cuaderno Estadístico No. 13, this Cuaderno Estadístico is presented in two volumes, the first of which refers to exports (FOB) and the second to imports (CIF), except for Mexico and Venezuela. In both volumes, the statistics are tabulated in the same way and cover the period 1985-1991.

Población, equidad y transformación productiva (Population, equity and changing production patterns) (LC/G.1758/Rev.1-P). United Nations publication, Sales No.: S.93.II.G.8, Santiago, Chile, September 1993, 158 pages.

Over the last 20 years, the region has undergone far-reaching changes in its demographic dynamics. The expectation of life at birth –an indicator of mortality– rose from 56 to 67 years between the beginning of the 1960s and the end of the 1980s, while the average number of children per woman declined from 6.0 to 3.4 over the same period. Equally great changes have been registered

in the proportion of children and old people, in the urban population, in female participation rates, and in other indicators. There have also been qualitative changes: in attitudes to reproduction; in the form, composition and role of the family, and in the social position of women.

These changes are reflected in very heterogeneous situations as regards demographic dynamics in the various countries, so that the averages for the region as a whole are of little use for expressing the situation in each individual country. Even more marked is the heterogeneity within the countries themselves in terms of social strata, areas of residence, educational level and, in many cases, ethnic groups. There are countries, for example, where infant mortality in strata with a low level of schooling is two or three times that of groups with a higher educational level.

Side by side with this demographic evolution, there has been a broad-ranging debate in the region on the relations between population growth and economic growth, in an effort to identify the causal relationships and draw policy conclusions from them, and population growth has been identified by some circles as the main obstacle to economic growth, but by others as a factor tending to stimulate the latter.

In practice, however, there is broad agreement that when deciding on policies it is necessary to take a pragmatic approach that avoids all simplistic associations in one sense or the other, although obviously the greater the size or growth rate of the population, the greater will be the pressure on the supply of basic services and the use of space and natural resources. It is also recognized that although the quality of human resources is just as important for the development process as their quantity, or even more so, training possibilities are reduced when there is a high population growth rate.

Within the United Nations, governments have given their support –among the inalienable rights of human beings– to the right to decide freely on their reproductive behaviour, and have committed themselves to guaranteeing the exercise of that right. Surveys and other investigations have revealed that the majority of the population wish to exercise that right in a responsible manner, but a large part of that majority are unable to do so for lack of information and material resources. The existence of this unsatisfied demand is perhaps the main justification for public concern and –when so decided– action through population policies.

The predominance of high-fertility reproduction patterns among the poorer strata is of itself an element fomenting the intergenerational transmission of poverty. In poor families with a large number of children –including those with women heads of household– each child receives little attention in terms of health, nutrition and education, and this impairs their chances of being able to gain satisfactory access to the labour market when they grow up, so that they tend to be trapped in the same state of poverty as their parents. All this means that, viewed from a broader time horizon, action to facilitate responsible individual decisions on reproduction patterns –that is to say, action to help overcome demographic inequality– will have a direct and favourable effect in helping to overcome inequality in its broader economic and social sense. These considerations regarding the rights of the individual and the elimination of inequality are particularly important when dealing with the status of women.

Chapter I of this work describes population trends in the region as a whole and in the individual countries, using a typology based on the descriptive scheme of what is known as the theory of demographic transition. It then analyses separately the trends in fertility and mortality, with special attention to some particularly important aspects such as adolescent fertility, infant mortality and some current challenges (such as the persistence of maternal mortality), going on to consider the implications of all these factors, especially for population growth and age structure.

Chapter II describes the main lines of the proposal for changing production patterns with social equity in a context of environmental sustainability and development of democracy. In this respect it highlights the three main elements linking such changes with population: human resources (with special emphasis on their quality), equity, and environmental sustainability.

Chapter III, on women and population, returns to certain aspects, such as the exercise of reproductive rights and the situation of displaced and refugee women, and goes into them in greater depth.

Chapter IV, on environmental sustainability, enlarges on the analysis of the environment and natural resources, linking its reflections to the issues of occupation of the territory and spatial distribution of the population. This clearly reveals that, apart from the significance of global measurements of population pressure on natural resources, it is extremely important to analyse the local ecosystems, which are extremely varied and more appropriate for the definition and application of specific policy measures.

Chapter V analyses population policy at the national level. It briefly considers its bases and studies some particular experiences. Its main conclusion is that policy measures should not be restricted to the establishment of specific institutional systems, but should also explore the use of existing bodies in the government machinery which could collaborate effectively in policy design and execution. After examining possible lines of such policy, including the fixing of targets, programmes acting more directly on population variables (i.e., family planning programmes) are considered.

Finally, chapter VI considers issues calling for broad attention at the national level which could be included in international cooperation agreements. The first of such issues is international migration. After considering both its intra-regional aspects and those raised by migration outside the region, the main consequences of this issue for the development process are set forth and the possibilities for action through national policies and international cooperation are examined.

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