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CEPAL AND DEVELOPMENT STYLES

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CEPAL and Development Styles

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The purpose of these notes is twofold: firstly, to expound the nature and ends of the concept of styles of development as it has been set forth in several CEPAL documents or in others by authors connected with the Commission; secondly, to summarize the content of some of the main studies on this topic carried out by the institution.

I. CONCEPTUAL MODEL

The diffusion of the term in recent years might be interpreted as yet another episode in the quest for more appropriate categories whereby to identify the nature and complexity of the processes of socio-economic change. There have been some who -rightly at times- have criticized the succession of terms in vogue as merely a sort of verbal sleight-of-hand to pour old wine into new bottles. But importance could hardly be denied, for example, to ousting a shift of emphasis from the formerly predominant "growth" to the more substantive "development", although the latter too has undergone a sufficient share of wear and tear to turn "developmentism" into something a little less than respectable. Nevertheless, not even these categories have completely lost their significant measure of validity. They have survived, but as subordinate ingredients in contexts which are assumed to be more comprehensiv and relevant. One of these contexts is that of Styles.

What lies behind this quest when it goes beyond the merely formal? Obviously, an endeavour to incorporate more (or different) dimensions into the analysis of the changeful social situation, moderated by caution as regards extending the spectrum so much too widely as to make it very difficult or impossible to deduce interpretative and/or normative judgements on the socio-economic phenomena which are the objects of concern.

As the styles-of-development approach has evolved in Latin America (and this locus needs stressing) three dimensions have been preferred and combined -and in this instance the order of the components is unquestionably of prime importance for the nature of the product.

At the top of the hierarchical ladder is the question of equity, or, more specifically, the degree to which the basic needs of the majority of the population are met. In other words, what is of paramount interest is to define for whom to produce, which, by derivation, involves an option as to what is produced. This point will be reverted to later, but it may be said in advance that this priority -appart from the ethical reasons for it- has been gradually accorded in the light of the relatively rapid, but patently inequitable and -what is more- "marginalizing" type of growth that has characterized Latin America.

The second element is linked to the necessary strengthening of the forces of production, understood not only in the conventional and quantitative sense of growth strictu senso but mainly in the qualitative sense of a process which implies transformations promoted by the widespread dissemination of technical progress and of the correlative changes in the structure of production and employment.1/

Of similar calibre is the third aspect emphasized, namely, the attainment of maximum autonomy or national power of decision-making within the limits of the

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inevitable and necessary world-wide interdependence. This implies both full exploitation of endogenous development opportunities -including the creation and adaptation of technology- and a search for modes of insertion into the external economy which will override the "outdated system" (still, however, largely in force) of the international division of labour.

In short, when speaking of a style of development the first and basic idea in mind is that of the degree and manner in which a specific economy meets the basic needs of the population, expands its production potential to that end, and establishes a margin of national autonomy which enables it to fulfil its aims.

It is worth reiterating that these definitional priorities correspond to a specific scenario: the Latin American region. Indubitably, a difference would be made by a switch-over to an industrialized economy, with high levels of income and relatively homogeneous, as is shown, besides, by discussions on the subject in such cases, where the main emphasis falls on different facets of the "quality of life". Furthermore, everyone is aware of the relativity (absolute and dynamic) of the concept of "basic needs" -an aspect of the question which will be dealt with later.

Stages of the exercise

To supplement what has been said of its central objects of concern, it may be useful to sketch the main stages involved in an analysis in this perspective. Broadly, the following may be singled out.

In the first place, the formulation of a diagnosis and a prognosis with regard to a given state of affairs, and critical reflection upon them, with due consideration, obviously, of the priority dimensions. In other words, it is a matter of characterizing the prevailing style, particularly in respect of its deficiencies and distortions from the angle in question.

The second step is a design for an alternative scenario or style. Faithful to the end-objectives, it will have to combine the desirable and the possible, that is, it must be grounded on a realistic assessment of its viability within a certain time span, conditioned by structural and political circumstances which will be reverted to later, apart, of course, from those of a conjunctural nature, which, although they may be decisive at specific moments (e.g., an international recession) have no place in this introductory discussion.

The drawing-up of policies directed towards establishing a new style is the third stage of the process. This relates basically to the question of how, i.e., to the intermediate objectives and their breakdown to the level of instruments. Clearly, a proper approach to it is possible only in "concrete historical" scenarios.

It is this phase, however, that most lends itself to confusion over the meaning of the concept under discussion. Questions such as the priority of industrialization, the importance and interrelationships of sectors of production, the greater or lesser degree of openness to the exterior and the patterns followed in this respect, the nature and instruments of distribution policies, etc., are sometimes chosen as means of identifying or appraising a style when they should be regarded as modalities or devices for attaining the pre-established end-objectives by which the style is really defined.

The last distinctive stage is the periodical -and at the same time constant- evaluation of the changes pursued, or, in other words, of the transition from the prevailing style to the state of affairs desired. Needless to say, this is a dynamic and permanent exercise, in which the points of departure and arrival are in a perpetual state of flux.

/It will

It will easily be seen that this sequence is a reproduction of that followed in planning exercises. The difference lies in that it is inserted in -and at the service of- a development style project, which transcends and integrates the targets set up. It is precisely the absence of this frame of reference that has been one of the outstanding causes of the limitations and failures experienced in this field.

To put it another way, the styles-of-development approach seeks to provide the criteria or end-objectives by which the diagnosis and critique of the existing scenario can be guided; a definition of an alternative scenario; and an assessment of the forward strides and setbacks recorded on the way. At another level, doubtless more technical than evaluative, it should be of help in selecting instrumental policies and devices and, above all, in combining them in such a way that they will be compatible and effective vis-à-vis the ruling aims.

Context of viability

It was noted above that the styles-of-development approach seeks to design desirable and possible alternative projects, a purpose which entails, at the outset, defining the circumstances or contexts which delimit their viability.

In the view of Oscar Varsavsky -unquestionably a pioneer of Latin American analysis of the subject-2/ three questions stand out:

(a) physical ("whether the natural, human, technological and installed capital resources are sufficient to produce the goods and services required");

(b) social ("whether the attitude and traditions of the social groups -their degree of awareness, their expectations, their motivations, their mobilization- and the institutional organization do not place over-formidable obstacles in the way of the national project"); and

(c) political, including ideological and military questions ("whether at each stage the forces opposing the project are powerful enough, in comparison with those supporting it, to bring it to a halt or divert its course").

In subsequent efforts by CEPAL to grapple with the problem, these elements have been grouped in two general contexts, one relating to the politico-institution system and the other to the socio-economic structure.

With respect to the first, a distinction must be drawn between two levels. At the more general of these are to be seen the principal forms of political organization which co-exist and battle with each other in contemporary life: the capitalist and the socialist systems. As far as this distinction is concerned, it matters little that those called by one name or the other do not correspond to their pure archetypes. But what do in fact matter are the kinds of capitalism and socialism "really existing", as it would be put in the language of today. The differences between them are sufficiently substantial and striking for the man in the street to entertain a clear-cut notion of their identity and contrasting features, which does not rule out perception of the variants within the two households.

From another angle, more specific and relating to almost the whole of the Latin American region, consideration must be given to the politico-institutional patterns of the capitalist societies in existence. Clearly, a cardinal element here is the power structure and in particular its greater or lesser permeability or flexibility vis-à-vis the pressures and needs of the groups aiming at transformation of the status quo. In other words, any alternative development style will have to appraise the possibilities of change -radical or moderate, rapid or gradual- taking into account the real situation in that respect and the degree of adaptation which such possibilities necessitate.

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The second conditioning framework is represented by the set of material and social elements constituting the "skeleton" or basic structure of a community and characterized by their considerable rigidity through time or their virtual immutability.

Ot outstanding importance here, in the first place, is everything concerning the physical environment, which has spectacularly risen in rank of late, either as wealth at the service of the dynamics and pattern of development, or as a factor restricting and selecting options that may have a negative or positive effect upon it. Secondly, issues relating to the population may be singled out. Its growth trends, migratory movements and internal settlements, composition by age groups, level of training, distribution by activities -to mention only a few aspects- are questions that the analysis cannot sidestep. Closely linked to all this is the social structure, expressed in terms of the stratification of classes and estates, corporate organizations, the existing distribution of property ownership and income, deep-rooted cultural patterns, etc. The organization of production by sectors of activity, the heterogeneity of technological strata, the spatial distribution of economic activity, degrees of concentration, capacity utilized, production potential, etc., are also components of this other dimension.

Lastly -and in a special position because of its links with one of the end-objectives of the development style- attention must be drawn to everything concerning the pattern of external relations, characterized by the ties of various kinds that interweave national units with the rest of the world (above all with the central economies), establishing different systems in respect of the international division of labour and situations of dependence, subordination or autonomy.

It is not superfluous to recall the manifest interrelations between these major categories (style, system, structure), which in many cases overlap and which must always be interpreted in a dynamic perspective of active reciprocal influences. Bearing this fact in mind, it is possible at this stage to attempt a more comprehensive definition of the concept of style itself, taking it now to mean the specific and dynamic development modality adopted by a community at a particular historical moment, in the context established by the political system and the material and social structure existing, which corresponds to the interests and pressures of the predominant social forces.3/

From a loftier standpoint, Professor José Medina Echavarría summed up some basic issues relevant to this analysis in a manner well worth recalling:

Development styles, he wrote,4/ "are not abstract constructions set in motion one fine day but concrete configurations of the historical process which are here visible and operating in all their imperious presence... Fragments of the historical reality which incarnates them, they offer limited options at particular moments which can only with difficulty be overcome through the analytical construction of what appears to be possible... Our possible preferences for a particular style of development -regardless of whether it exists in reality or is simply a theoretical

/possibility- run

possibility- run into the difficulty that each of them depends for its realization on the framework of facilities and difficulties which, in a given situation and at a given time, are the obligatory prevailing conditions for a particular country or group of countries. The existing material and human resources, the established courses deriving from insertions of a geographical or political character, or from longstanding cultural traditions in respect of the deep-rooted customs and attitudes which make them up, and the level of economic organization from which the process starts, are (among other factors) the effective conditions and current trends with which it is unavoidably necessary to reckon".

II. EVOLUTION OF THE REGION FROM THE STANDPOINT OF THE DEVELOPMENT STYLE

Thanks to various background data, an approximate idea can be formed of the Latin American style of development in the light of the social distribution of its fruits, the dynamism of growth and the autonomy of the process in recent decades. These data do not, however, cover the most recent period, with its serious external and internal upheavals.

What and for whom?

Some data have been assembled here on the basis of which it is possible to discern the most important elements of the question. As will be seen, figures are presented for Latin America and in some cases for country variants.

Table 1 shows the growth rates of the main industrial categories, which with some exceptions and reservations, give some idea of the aggregate rate, since they imply or indirectly reflect the performance of the primary and tertiary sectors.5/

From the figures for the region in the period 1960-1971 it will be seen at first glance that the average growth rate of total manufacturing industry (6.8%) is based on rates which vary considerably between one category and another. Generally speaking, they are lower for the "traditional" activities mainly producing non-durable consumer goods, close to or above the average in the case of the intermediate goods industries, and well above the average in the basic metal categories, especially those producing "heavy" durable goods, i.e., appliances, motor vehicles, etc.

There is nothing surprising about the picture which has taken shape, and which has been anticipated or assumed in many analyses. The usual explanation of these trends, in which they are almost tautologically attributed to the different income-elasticities of demand for the various goods and services, is also only too well known.

The important fact to determine, however, is where that income-elasticity of demand originates, i.e., in what groups the demand is generated, and in what volume for the various kinds of products.

In other words, the uneven growth rates of the industrial categories give an approximate indication of the slant of the system or style as regards "what" to produce. What must now be determined is who are the users and, at the same time, the economic dictators of the production effort, i.e., "for whom" (primarily or exclusively) the system is producing the various goods.

In table 2 an attempt is made to give an approximate answer to these queries, in the light of the participation of different income strata in the total consumption of principal items classified according to their nature -food, wearing apparel, housing, services, durable consumer goods.

Without going into too much detail, it is possible to bring out some important relationships.

If the share of the poorest half of the population and that of the 10% receiving the highest incomes are taken as points of reference, it is immediately obvious that the share of the first segment is invariably smaller than that of the second, except in the consumption of cereals. It is equally apparent that the former's share decreases as the goods or services become more specialized and costly. On the other hand, as is obvious, that of the top 10% increases, and reaches very high levels in the case of items such as motor cars (85%), recreation (74%), domestic service (82%), appliances (50%), clothing (44%), meat (40%), housing (44%), etc.

/Table 1

Table 1

LATIN AMERICA: GROWTH RATES OF THE MANUFACTURING SECTOR, BY INDUSTRIAL GROUPINGS

(Cumulative average annual rate for the period 1960-1971)

	Average for Latin America
Food, beverages and tobacco	4.8
Food products, except beverages	4.6
Beverage industries	4.9
Tobacco manufactures	4.3
Textiles, wearing apparel and leather industries	4.1
Wood and wood products, including furniture	2.9
Paper and paper products; printing and publishing	7.4
Chemicals and chemical, petroleum, coal, rubber and plastic products	9.0
Industrial chemicals	9.9
Other chemical products	
Petroleum refineries	6.4
Miscellaneous petroleum and coal products	
Rubber products	7.3
Non-metallic mineral products, except petroleum and coal products	7.0
Basic metal industries	8.8
Metal products, machinery and equipment	9.5
Metal products, exluding machinery and equipment	8.3
Machinery, except electrical	
Electrical machinery, apparatus, appliances and supplies	10.4
Manufacture of transport equipment	10.2
Motor vehicles	13.5
Other manufacturing industries	8.2
Total manufacturing industries	6.8

Source: CEPAL, on the basis of official statistics.

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Table 2

LATIN AMERICA: SHARE OF DIFFERENT POPULATION STRATA IN TOTAL CONSUMPTION, BY ITEMS OF CONSUMPTION, AROUND 1970 a/

Items of consumption / Population strata	Poorest 20%	Poorest 50%	20% below the richest 10%	Richest 10%
Food, beverages and tobacco	5	23	29	29
Meat	2	12	34	41
Cereals	8	32	24	19
Other foods	5	25	28	28
Beverages and tobacco	5	22	29	30
Wearing apparel	2	14	32	42
Clothing	2	13	32	44
Footwear	3	16	32	36
Housing b/	2	15	29	44
Transport	1	5	25	64
Personal care c/	2	15	31	41
Domestic service	-	1	16	82
Other personal services	1	4	25	67
Recreation and amusement d/	-	3	20	75
Durable goods	1	6	26	61
Motor vehicles (purchase)	-	1	13	85
Houses and apartments (purchase)	2	9	29	54
Furniture	2	5	16	74
Electrical and mechanical appliances	1	5	37	50
Total	3	15	28	43

Source: CEPAL estimates based on national surveys.

a/ Estimated average on the basis of data from Argentina, Brazil, Chile, Colombia, Honduras, Mexico, Paraguay, Peru and Venezuela.

b/ Housing includes: rents, textile articles for the home, fuels, electricity, gas, water and household goods.

c/ Personal care includes: toilet articles, drugs and medicines, medical services, hairdressing and suchlike.

d/ Recreation and amusement includes: holidays and tourism, recreation, newspapers and magazines, dues of social clubs and suchlike.

/If the

If the consumption of the next 20% is added to that of the top stratum, it will be seen that the consumption of these two groups absorbs between 75 and nearly 100% of the total in several cases, particularly in that of durable goods with higher unit costs.

The data for Argentina and Honduras (see tables 3 and 4), as might have been expected, show more attenuated or more accentuated versions of the table for the region. The share of the top stratum is consistently smaller in Argentina, while that of the lower half is bigger. The 30% with the highest incomes absorb 58% of total consumption in Argentina and 73% in Honduras.

Moreover, if consideration is given to some key items in the modernized categories of consumption, it will be seen that the expenditure of the lower-income 50% on electrical and mechanical appliances is barely 3% of the total in Honduras, compared with 25% in Argentina. In the case of motor cars, however, the lower half absorbs a very small share in Argentina, the expenditure being concentrated in the top stratum (60%). In Honduras, of course, the proportion is 94%.

Although not strictly comparable, the tables on rates of growth of industrial activities and on the social distribution of various items of consumption are sufficiently clear and eloquent to substantiate a well known hypothesis: that the most dynamic centres of the production apparatus are primarily and sometimes exclusively linked with and dependent upon demand from the groups at the top of the income distribution structure. In other words, given the average income of the region and of the individual countries, if the present development style is to "move" and function, it is essential that income-expenditure be concentrated in those strata so as to sustain and step up demand for the favoured goods and services. To the extent that this occurs and that this aim is achieved, the production apparatus will gradually adjust or continue to adjust primarily to these types of demand.

Questions and options

This situation raises some questions which may be expressed in the form of the following options.

(a) The situation continues to develop and other income strata are progressively incorporated in the "new types of consumption" until a point of mass consumption is reached;

(b) The situation continues to develop, without promoting any increasing or significant integration of large groups, which remain excluded from such types of consumption and moreover, continue in a deplorable state as regards their vital needs.

The first option is a reproduction of the process in the central capitalist economies. The differences between them have been pointed out in many studies, so there is no point in recapitulating them here. At any rate, the "special case" of Argentina indicates that mass marginalization is not a necessary factor in the Latin American experience. This question will be dealt with later at a regional level. However, the most important element is obviously the time factor. The progressive integration which in the past may have taken a century or many decades is not likely to be feasible in present circumstances, unless politico-social restrictions are imposed, which is a probability that cannot be overlooked in the light of certain experiences in the region.

/Table 3

Table 3

ARGENTINA: SHARE OF DIFFERENT POPULATION STRATA IN TOTAL CONSUMPTION, BY ITEMS OF CONSUMPTION, AROUND 1970

Items of consumption / Population strata	Poorest 20%	Poorest 50%	20% below the richest 10%	Richest 10%
Food, beverages and tobacco	9	32	26	21
Meat	9	33	26	20
Cereals	11	37	25	18
Other foods	9	32	26	22
Beverages and tobacco	7	27	29	23
Wearing apparel	5	20	28	31
Clothing	4	18	29	34
Footwear	6	26	28	24
Housing a/	8	28	27	26
Transport	3	15	32	40
Public	5	23	29	29
Private (operation)	1	7	34	51
Personal care b/	8	30	27	27
Domestic service	2	6	26	61
Other personal services	2	13	28	40
Recreation and amusement c/	3	14	28	44
Durable goods	2	12	27	47
Motor vehicles (purchase)	-	5	27	60
Houses and apartments (purchase)	1	7	29	53
Furniture	1	6	20	70
Electrical and mechanical appliances	5	25	26	24
Total	6	25	27	29

Source: CEPAL estimates based on national surveys.

a/ Housing includes: rents, textile articles for the home, fuels, electricity, gas, water and household goods.

b/ Personal care includes: toilet articles, drugs and medicines, medical services, hairdressing and suchlike.

c/ Recreation and amusement includes: holidays and tourism, recreation, newspapers and magazines, dues of social clubs and suchlike.

/Table 4

Table 4

HONDURAS: SHARE OF DIFFERENT POPULATION STRATA IN TOTAL CONSUMPTION, BY ITEMS OF CONSUMPTION, AROUND 1970

Items of consumption / Population strata	Poorest 20%	Poorest 50%	20% below the richest 10%	Richest 10%
Food, beverages and tobacco	6	18	29	35
Meat	3	9	30	52
Cereals	9	25	25	25
Other foods	6	18	30	35
Beverages and tobacco	7	21	33	27
Wearing apparel	5	13	28	46
Clothing	5	13	27	47
Footwear	5	13	30	44
Housing a/	4	12	30	46
Transport	2	6	28	60
Personal care b/	4	12	30	45
Domestic service	-	-	17	82
Other personal services	2	5	23	67
Recreation and amusement c/	1	3	14	81
Durable goods	3	8	23	61
Motor vehicles (purchase)	-	-	5	94
Houses and apartments (purchase)	4	12	26	49
Furniture	3	8	25	58
Electrical and mechanical appliances	1	3	28	66
Total	5	14	28	45

Source: CEPAL estimates based on national surveys.

a/ Housing includes: rents, textile articles for the home, fuels, electricity, gas, water and household goods.

b/ Personal care includes: toilet articles, drugs and medicines, medical services, hairdressing and suchlike.

c/ Recreation and amusement includes: holidays and tourism, recreation, newspapers and magazines, dues of social clubs and suchlike.

/Some of

Some of the foregoing observations are also valid in evaluating the second option, where the prevailing style excludes large segments of the population living in marginal rural areas and other regions and in the periphery of the cities. As a result, there is an absolute or even relative increase in the number of those "not participating", who remain at the "critical poverty" level.

Without expressing any opinion about the concrete viability of this path in the short or the long term, it is clearly unacceptable in terms of the values professed by the international community.

For a better understanding of this question, it may be useful to refer to some figures on income distribution in the region and the changes that took place between 1960 and 1970 (see table 5). Although the documentation is acknowledged to be unsatisfactory, the trends and relations it reveals seem to be fairly close to the facts.

A study of the data on the share of the various strata in total income reveals a number of striking facts. First, the share of the poorest 20% declined slightly, while that of the poorest 50% remained virtually unchanged. At the other end of the spectrum -contrary to what is usually supposed- the share of the 10% and the 5% receiving the highest incomes was moderately reduced. In contrast, the 20% representing the stratum below the top 10% increased its share (from 24.6 to 28%). In fact, this group and that consisting of the 30% above the poorest 20% are the only strata which improved their relative position.

In the light of these facts it might therefore be argued that a slight deconcentration of income is observable at the peak of the social structure, which benefits the upper middle-income groups. At the other end of the scale, the poorest stratum lost ground.

This approach will have to be supplemented by one based on absolute magnitudes, which clarifies and at the same time modifies some of the hypotheses suggested above.

As can be seen, per capita personal income in the region rose by 27% between 1960 and 1970, which represents 245 dollars (at 1980 prices) in absolute terms. This average or global increase has a varying significance for the different stata. In the first place, the smaller percentage increases of the two groups receiving the highest incomes represent absolute improvements of 840 dollars for the top 5% and 782 dollars for the top 10%. As regards the next stratum (the 20% below the top 10%), the significant relative increase (45%) means an absolute increment of 497 dollars, which is twice the gain for the whole structure.

If the other levels of the distribution pyramid are examined, the first point that stands out is the stagnation of the poorest 20% at very low income levels. Secondly, the lower 50% taken as a whole increased its income in absolute terms by a mere 78 dollars, reaching only 316 dollars annually in 1970.

If these striking facts are viewed from the angle of the present notes, some implications as regards the forces that are driving the style of development may be deduced.

As a first step to that end, one must consider that the increment in personal income over this period amounted to 65 725 million dollars. From a somewhat restricted standpoint, since other items such as retained profits and government saving are not considered, this sum represents the main factor of expansion of the market or of total demand.

How has this greater purchasing power been distributed among the social strata considered?

/Table 5

Table 5

LATIN AMERICA: PER CAPITA INCOME IN 1980 DOLLARS a/ AND CHANGES IN THE SHARE OF THE DIFFERENT SOCIO-ECONOMIC STRATA IN TOTAL INCOME OF THE REGION

Socio-economic strata	Share of each stratum in total income		Per capita income b/ (1980 dollars a/)		Rise in per capita income		Total rise by strata	Rise in each stratum as percentage of total rise
	1960	1970	1960	1970	Percentage	1980 dollars	(millions of 1980 dollars)	
Poorest 20%	3.1	2.5	137	142	3.8	5	278	0.4
Next 30%	10.3	11.4	305	432	41.5	127	10 138	15.4
Poorest 50%	13.4	13.9	238	316	32.6	78	10 416	15.8
Next 20%	14.1	13.9	628	792	25.9	164	8 690	13.2
20% below the richest 10%	24.6	28.0	1 096	1 593	45.3	497	26 447	40.3
Richest 10%	47.9	44.2	4 250	5 032	17.7	782	20 180	30.7
Richest 5%	33.4	29.9	5 963	6 803	14.1	840	11 230	17.1
Total	100.0	100.0	893	1 138	27.5	245	65 725	100.0

Source: CEPAL estimates on the basis of national surveys.

a/ The original tables were prepared in dollars at 1960 prices. Conversion to 1980 dollars was effected very roughly, by applying to the original figures the rate of domestic inflation in the United States, and all that is intended to give an approximate idea of magnitudes in current dollars.

b/ Per capita personal income.

Note: The average distribution for Latin America in 1970 was estimated on the basis of information from Argentina, Brazil, Chile, Colombia, Honduras, Mexico, Paraguay and Venezuela.

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As may be noted from the last two columns in table 5, almost one-third of the increment (31%) went to the 10% with the highest incomes, and the proportion rises to 71% if the next 20% is included.

In contrast, the poorer half received only 16% of the total increment, from which the 20% at the base of the pyramid was almost completely excluded.

If the strata in the poorer half of the structure are considered together with the next 20%, it will be seen that 70% of the population received 20% of the increase in income, which is less than the share of the top 10% (31%).

From a different standpoint and also in the light of these absolute figures, it may be affirmed that the market expansion attributable to the upper 30% amounted to some 47 000 million dollars, and that corresponding to the lower 29% to only 18 000 million.

These figures indicate clearly in which strata the increments in income were concentrated during the period under review, and evidently this trend is roughly the same as that noted in the allocation of resources -which, as we have seen, is reflected in differential rates for the growth of productive activities. It is worthwhile repeating that "what" to produce has had to be adjusted to "for whom" to produce.

The whole question can be seen more clearly if we consider the relation between the absolute levels of income and the main items of consumption. In the light of the figures in table 5, it is possible to put forward some reasonable hypotheses.

First, it seems obvious that at the regional level approximately half the population, with average per capita incomes of some 320 dollars a year, are confined to satisfying only their most elementary needs. Within this spectrum, the first 30% is probably below any "poverty line" which might be drawn.

The upper layer of the 50% inferior segment, together with the next 20% (with an average income of some 800 dollars) has no doubt already entered the market for basic low-cost industrial products and a cheap range of urban services. However, only with considerable sacrifice or by cutting down on essential items of consumption could this group gain access to durable goods and more specialized services. Neither the share nor the absolute increments of these strata show any significant changes at this stage.

Very different, as has been pointed out, is the development of the 20% below the top 10%. Both its share and the absolute increase in per capita income (about 45% over the decade, which brought it to over 1 600 dollars annually) acquire undoubted significance. Indeed, this stratum absorbed 40% of the increment in total income, which represents over 26 000 million dollars.

It seems reasonable to suppose that its members have crossed the threshold of the market for durable goods. Looking again at table 2, it will be seen that this group accounts for 37% of the consumption of electrical and mechanical appliances, 30% of the purchases of housing and related expenditure, 32% of the consumption of clothing and footwear, etc. On the other hand, its access to more expensive products such as motor cars is still limited (only 13%), although it probably absorbs an increasing share of the trade in second-hand cars.

Without reverting to the significance of the highest strata in the system, some hypothetical conclusions can be formulated on the basis of the foregoing observations.

First, there is little doubt about the style's trend towards the concentration of income, which is particularly noticeable if attention is given to the absolute increments in per capita income and in the potential market. From this

/point of

point of view, there is obviously a cause-and-effect spiral in operation, in which this trend in income distribution influences the orientation of the production system and, inasmuch as this orientation consolidates or extends the scope of a given structure of supply, this structure demands a related system of income distribution. Because of the level of average income and the social use of the most dynamic types of production, this system will necessarily make for the concentration of income. Thus the spiral continues.

Secondly, however, the style seems to be less exclusive than is sometimes maintained. The figures suggest that it has been able to expand its base in the upper-middle strata (the 20% below the top 10%) and that it has even succeeded in achieving some positive changes in the upper segments of the poorer half -although their absolute levels are still very low. (See table 5.)

The third point to consider is the undoubted marginalization and deplorable conditions of a significant proportion of the population, at least one-third of which is indisputably situated below the "critical poverty" line. This brings us to the basic question regarding the prevailing style, i.e., whether or not its functioning holds out any possibilities of improving or substantially alleviating the living conditions of the under-privileged, from an ethical, social and political point of view, within a reasonable span.

Welfare indicators

To obtain a more balanced picture of the social implications of the development style it is useful to consider its incidence on some of the physical indicators of welfare. As can be seen in table 6, those relating to nutrition, health and education point to improvements in the situation in almost all countries, with no exceptions in the case of a highly appreciated record like that of expectation of life. As a recent study notes, in the field of health and education there can be no doubt that the improvements are more closely related with State participation in the provision of such services than with the evolution of monetary income.6/

Be this as it may, taking for granted the blatantly obvious fact that in the case of the upper income strata the needs in question were met from the start, there is reason to assume that the progress made was extended to the less privileged strata.

/Table 6

Table 6

EVOLUTION OF PHYSICAL INDICATORS OF WELFARE, 1960-1975

Country	Calorie intake 1960-1970	Physical index of quality of life 1960/74-75 DRR	Expectation of life at birth 1960-1975		Rate of infant mortality 1960-1975		Literacy rate 1960-1974	
			Absolute variation	Percentage DRR	Absolute variation (-)	Percentage DRR	Absolute variation (+)	Percentage DRR
Haiti	-5	1.4	7	1.5	50	2.0	10	0.8
Bolivia	8	n.a.	5	1.0	-	-	-	-
Honduras	12	2.7	13	2.9	18	3.4	14	2.0
El Salvador	0	2.5	11	3.0	18	2.0	12	1.9
Colombia	3	n.a.	6	2.1	44	4.2	-	-
Guatemala	11	1.7	9	2.1	17	1.5	9	1.0
Ecuador	8	2.1	9	2.8	30	2.6	2	0.4
Paraguay	9	2.1	8	2.8	6	0.5	7	2.1
Nicaragua	13	2.1	7	1.7	24	3.3	19	2.4
Dominican Republic	-1	n.a.	9	2.6	58	6.2	-	-
Peru	1	2.1	7	1.9	27	2.5	11	2.2
Cuba	-	n.a.	8	5.0	-	-	-	-
Costa Rica	12	3.7	7	3.8	33	4.7	5	2.5
Chile	5	2.9	7	2.7	46	3.2	6	3.1
Jamaica	16	4.1	7	4.5	32	8.0	4	1.7
Mexico	3	2.9	7	2.7	24	2.9	14	3.0
Brazil	7	n.a.	5	1.8	-	-	3	0.5
Panama	-2	2.6	6	3.1	21	3.6	4	1.3
Uruguay	-8	1.3	3	2.4	+1	0.2	1	0.7
Argentina	4	1.5	3	1.9	3	0.4	2	1.7
Trinidad and Tobago	-1	n.a.	8	5.0	7	1.4	-	-
Venezuela	10	3.4	8	3.4	8	1.2	17	4.3

Source: IBRD, World Tables 1976, has a reference to changes in the percentages of requirements met. For the remainder, see J.P. Grant, Disparity Reduction Rates in Several Indicators, Overseas Development Council, Washington, 1978. DRR is the disparity reduction rate and is defined as the relation between the change in the indicator for a specific country and the level already attained in the most advanced country in the world.

III. DYNAMISM AND STRUCTURE OF GROWTH

Reference may now be made to the developmentist propensity, mainly linked to the recorded and potential growth of the production apparatus.

If the region is taken as a whole -with the exception of the petroleum-exporting countries- the available figures show a relatively satisfactory balance from the standpoint of historical behaviour patterns and allowing for their vicissitudes.7/ In the period 1950-1970 the annual growth rate was 5.4% and in 1970-1980 it was close to 6.2%. Furthermore, the contribution of gross domestic investment, which had represented a little less than 17% of the product in 1950, rose moderately to about 22% in the second half of the 1970s.8/

These records require qualification, however, in view of two major circumstances. One of these is the high rate of increase of the population (almost 3% per annum). The other is the composition of investment, in which too much weight is carried by investment in construction. This represented over 50% of capital formation during the past decade and a considerable proportion of it corresponds to urban building, with economic repercussions (e.g., low product/capital ratio) and social effects (e.g., flagrant distributive inequity) that have been diagnosed over and over again.

From other angles, it is of interest to assess the participation of imported capital goods in total investment, as well as the share of metal products, machinery and equipment (ISIC Divison 36) in manufacturing activity.

In the first respect -and for the entire region- between 1950 and 1973 the proportion represented by imported goods perceptibly declined (although it is obvious that their volume and value increased), falling from 28 to 15%. Here, of course, inter-country contrasts are glaring. While the decrease was very marked in the larger countries, in the smaller ones there was very little variation.9/

The differences are also striking when attention is turned to the second element -the proportion represented by branches of manufacturing linked to capital accumulation or alternative uses (e.g., certain means of transport). In the three largest countries, it rose between 1950 and 1975 from 12% to 28% of the production of the industrial sector. In the medium-sized countries the corresponding share climbed from 6 to 17%; and in the small ones, from 1 to 9%. Individual study also shows pronounced disparities.10/

A point that cannot be overlooked is the incidence of agriculture on the issue under analysis. The old insistence on the "subsistence fund" and on the need to count on food surpluses to permit the development of other activities, including, of course, those linked to capital formation, has not lost its validity.

An overall view in this field brings to light some outstanding features.11/ One of these is the remarkably constant rate of development of the agricultural domestic product, which increased by approximately 3.5% yearly between 1950-1952 and 1973-1975, a rate which recurs in several selected intermediate periods. It goes hand in hand with a gradual decrease in the sector's share in the total GDP (from a little over 20% in 1950-1952 to rather more than 13% in 1973-1975), a reduction in the proportion of agricultural population (from 54% in 1950 to 38% in 1975) -despite the fact that its size increased from 87 million to about 116 million between the years mentioned- and lastly, in per capita terms, a rise in agricultural productivity of some 2% per annum between 1950-1952 and 1973-1975.

/Again, between

Again, between these first and last periods agricultural production for domestic consumption expanded at an annual tempo of 3.7% and production for export by 2.8%. Lastly, the agricultural trade balance (export-import ratio) showed fairly large surpluses in the years covered by the research that was used for reference purposes.12/

Brief as it is, this background information -intended more to shed light on the developmentist facet of styles than to evaluate their real significance and evolution- it nevertheless warrants suggesting the hypothesis that the region's performance was moderately favourable, although allusion must once again be made to inter-country disparities.

The propensity to autonomy

It has already been remarked that the nature of external relations is one of the basic elements in the politico-institutional structure and systems. It ranks equally high in the characterization of styles.

The approach adopted here will be confined to a study of the question of trends towards greater or lesser autonomy (or subordination) in relation to the exterior and the basic realities that drive a given style in one or the other direction. In the last analysis, they testify to the degrees and modes of insertion in the international economy.

From an economic standpoint, there are several elements to which particular importance has been attached in appraising this dimension.

One of a general character is the greater or lesser significance of trade and financial flows and, as a complementary factor, of their composition, for domestic activity. The first facet indicates the degree of openness; the second, its nature. The two together serve to calibrate projections respecting the radius of sovereignty and of subordination in relation to external events.

On both subjects there are reasonably complete studies of recent date.13/ A few of the main conclusions have been summarized as follows:

> "In the first place, the pattern of trade relations from 1950 until recently shows both the considerable growth of export and import flows (particularly after the mid-1960s) and also that this growth only represented a partial return to the degrees of openness to the exterior which prevailed at the beginning of the period. This is also more or less true of the trends in the terms of trade.
>
> "Secondly, it is clear that financial flows followed a very different course, increasing substantially -even during the difficult international period following 1973- and changing in some fundamental regards (for example, the privatization of the flows). The main consequence in recent years has been the dependence of a considerable proportion of imports upon external financing and the absorption of a large proportion of export earnings by debt servicing (and it should be recalled that only public debt could be considered). In addition, there are more moderate changes in the relationship between the regional product and debt, although here again there is a clear deterioration over the period.

/"The

"The consequence has been a very troublesome vicious circle in which the growth of imports has called for a rising amount of external financing, the servicing of which in turn absorbs increasingly large proportion of the value of exports, despite the growth of the latter. "These circumstances raise clear-cut and difficult choices, especially if the underlying situation remains the same or grows worse. On the one hand, to hold down the growth of imports in order to reduce the burden -and vulnerability- involved in the absorption of export earnings by rising service payments can unquestionably affect the rate of economic development, with foreseeable consequences and whatever opinion one may hold of that indicator's significance. On the other hand, if this approach is rejected and it is desired to maintain the growth of imports -albeit at more moderate rates- it will be necessary to secure either more external financing or a more vigorous growth of exports -or both at once, in varying combinations".

As regard the margin of openness to the exterior, the study quoted above shows that for the region as a whole the relative importance of external trade followed a downward trend between 1950 and 1980, despite its expansion as from the mid-1960s. Its contribution to the GDP dropped from about 15% in the first year to 12% in the second. This was primarily due, however, to the evolution of the three biggest countries. In the case of those of medium size, the trend is similar but occurs at higher levels (above 20% of the GDP in respect of imports). In the smaller countries, on the other hand, the margin widens and the level rises, until by 1980 it would seem to have reached about 25%.

Grosso modo -and in relation to the topic analysed here- it might be maintained that there has been some attenuation of the crucial significance which used to attach to the external sector in the phase of "outward-directed growth". Conversely, in the great majority of the countries the contribution of the resources mobilized in relation to the domestic market has increased. To borrow the metaphor coined by Professor A. Lewis, the role of foreign trade as an "engine" of development would seem to have dwindled and its importance as a "lubricant" to have increased.

It is impossible to review here the discussions on this point that have been stirred up by the question of "openness" in the last few years. But stress must inescapably be laid on the contradictory effects of the phenomenon under consideration. For while greater support in the domestic market involves in principle a strengthening of autonomy, the precariousness of the balance of foreign trade is still in evidence -and, moreover, may grow worse. It may be aggravated by the disparities that are being generated between the increase in demand for imports that inward-directed development itself creates and the dynamics of exports -the principal means of satisfying that demand.14/

Qualitative elements

The coefficients of openness to the exterior, however, do not constitute per se a reliable clue to the greater or lesser independence of the growth pattern and, in the last analysis, of the development style in vogue. More important, undoubtedly, are other aspects of a qualitative character.

/The indicators

The indicators most commonly consulted in this connection relate to the composition of exports and imports. Some relevant data will be briefly presented below.

With regard to exports, certain salient and well-documented facts emerge: on the one hand, that primary commodities continue to represent a high proportion of the region's sales abroad (about 80% in the mid-1970s); on the other hand, that there has been a considerable diversification (or deconcentration) of exports in relation to their structures in the past; and that the share of industrial products has been increasing. As in other instances referred to, the changes have taken place mainly in the relatively developed economies, but the trend is comparatively widespread (in some cases, as in Central America, because of the headway made by subregional integration, despite all the stumbling-blocks encountered).15/

Where imports are concerned, the overall variations have been less marked and are appreciably affected by the upswing in petroleum prices since 1974. Before this decisive change, the overall trend was towards a decrease in the participation of consumer goods (about 15%); a rise in that of intermediate products, as a corollary of industrialization processes (about 55%); and stability in the share of capital goods, within, of course, an increment in terms of absolute magnitudes. Once again a reminder must be given of inter-country differences in this respect. To begin with, the tendency towards increased participation of intermediate goods is very marked in the larger economies, whereas the consumer goods which were the objects of import substitution in the early stages of industrialization continue to represent relatively small proportions.16/

Financial relations: direct investment and the transnational corporations

The influence of foreign investment on Latin America is well known to be a burning question and it is impossible to recapitulate here its effects on the greater or lesser autonomy of development styles.

If in the past such investment was of decisive importance in the orientation of productive activity, it is no less so today, particularly now that it has moved outside the traditional area of primary exports and certain basic services towards the industrial-financial business complex, essentially with an eye to the domestic markets.

At all events, it should be borne in mind that by the mid-1970s, only 11% of the world's cumulative direct investment was placed in Latin America, and that half this quota was absorbed by two countries (Brazil and Mexico). Nevertheless, the representative enterprises (whose spectrum has been diversified, with an increase in the participation of Europe and Japan at the expense of that of the United States, which, however, is still predominant) have come to control -completely or on a majority basis- a vital part of the so-called modern or dynamic sector, in particular the manufacture of durable goods, motor vehicles and chemical products, inter alia.17/ Thus there has been a pronounced "externalization" of productive assets, which reproduces on different lines a basic characteristic of outward-directed growth, with highly significant implications which will be discussed later.

/Given the

Given the impossibility of covering here all the relevant aspects of the question, from the angle with which the present study is concerned we shall merely confine ourselves to reproducing what has been written elsewhere on some consequences of the "internalization" as it is called (because of the switchover towards the domestic market) of foreign direct investment:

"As foreign investment abandoned or was displaced from the field of commodity exports and began to be concentrated in industry and other activities, an 'internalization' process took place to a degree which was more or less significant but in any case undoubtedly greater than in the past. The basic reason for this fact, as we know very well, is that the enterprises came to depend upon the domestic market for their profitability and expansion, although they continued to be subordinated to the exterior through various channels (imports of inputs and capital, technological subjection, finance, etc.). On the other hand, depending on the host countries' bargaining power, this was accompanied by the expansion of the manoeuvring capacity of national policies and even the emergence of new forms of linkage with the transnational enterprises.

"This 'internalization' has many important consequences. One of them is the bigger irradiation of its effects over the societies which act as hosts to such enterprises, extending from the intensification and extension of the demonstration effect, with the consequent reproduction of the consumption patterns of the transmitting centres, to social and political impacts. It has been convincingly argued that all this has increased the co-optation capacity of the foreign presence, which covers the political, business and wage-earning classes, to say nothing of that part of the population which is incorporated (or hopes to be incorporated) in the market for consumer goods which is characteristic of the process. Paradoxically, in consequence, this 'internalization' becomes a force which activates the tendencies towards internationalization already referred to.

"Without prejudice to the foregoing, it is clear that these impulses run counter to other very powerful impulses in the opposite direction: i.e., towards the absolute or relative (but in any case conflictive) exclusion of a considerable part of the population of the periphery, with the proportion varying according to the particular situations of the countries, as many studies have convincingly demonstrated.

"There is no room here to go into greater detail on this topic of such outstanding importance, but we cannot proceed without stopping to speak about a manifestation which is new in this matter and which is of particular significance for the central discussion.

"Going to the root of the matter, we must recall the undoubted export-orientation of the former system of investment, which had as its counterpart -and made possible- the flow in the reverse direction represented by imports and service payments on foreign capital.

"The new circumstances, and particularly the 'internalization' mentioned radically changed this circuit. With the international enterprises transformed into the main actors in the so-called second phase of substitution industrialization (which only really flourished, it may be noted in passing, in the larger countries of Latin America), the propensity to import replaced the former export propensity".18/

/Financial openness

Financial openness

The change in the relative significance of the external flows linked to direct investment and of those deriving from various types of credit is one of the most vitally important features in the financial scenario of the last decade. And Latin America has certainly been no exception. If "openness to the exterior" in the field of trade has been far from corresponding to its current image -as we have already seen-, there can be not doubt that it has been considerable in respect of the financial stream. And this change is combined with another of no less significance: the "privatization" of the financial flows, i.e., the dominant presence of the international private banking system which has drastically thrust into the background the traditional sources of financing (World Bank, government loans, International Monetary Fund, etc.).

Both phenomena, as is well known, have acquired such extraordinary importance of late as to turn external indebtedness into a crucial problem of economic policy in a large number of countries. There is no point, however, in dwelling upon this in the present longer-term perspective, except to stress the decisive weight it carries nowadays in the matter with which we are concerned.

Greater or lesser dependence?

This rough sketch leads us to pose an inevitable question as to what it all means in relation to the greater or lesser degree of autonomy inherent in the development style. From a historical standpoint, and bearing in mind the outward-directed growth model of the past, does the present picture imply a greater or a lesser degree of dependence upon the exterior and the central economies?

Apart from the oft-repeated caveat with respect to national contrasts (which were also present in the mode of external insertion and operation in former times), several circumstances come into to play which cannot be overlooked in formulating hypotheses on the subject.

One of them, of course, is that the dependence-independence counterpoint, intrinsically relative, has become even more complex as a result of the general phenomenon of internationalization and in particular the dramatic impact of the petroleum problem. And it is idle to harp on a point that is more than sufficiently attested. Nevertheless, it should not be forgetten that the "interdependence" which all acknowledge today does not mean the same thing for the centre and for the periphery, given the differences between their structural conformation and their possibilities of adjustment and reaction in face of external events.

But perhaps what is of paramount importance as far as Latin America is concerned is that the question is not so much one of degreess of dependence as of a different type of dependence in relation to the nineteenth-century pattern. Even on the premise that there has been no substantial modification of their role in the international division of labour, it seems clear that the Latin American economies which are inserted in that system are not the same as in the past -in accordance with their degrees of internal change and other factors.

/Taking this

Taking this fact indirectly into account, various CEPAL publications have drawn attention to the region's greater capacity for defence against external contingencies, which is in manifest contrast with the extreme and passive vulnerability by which it was formerly characterized.

Lastly, it seems opportune to remember that the formation of opinions on this subject should pivot upon the original approach to dependence and development adopted by Cardoso and Faletto and not upon a limited and simplified consideration of external domination or tutelage, as was pointed out not long ago by the first of the two authors named. The novelty of the analyses dealing with dependence, he says, did not consist in emphasizing the external subordination of the economy, which had already been demonstrated by CEPAL. Where it did lie was in the stress placed on the existence of structural and global relations which linked the realities of the periphery with the centre. Studies on dependence showed that the interests of the central economies (and of the local ruling classes which support them) are articulated with those of the local ruling classes within the underdeveloped countries. Accordingly, there is a structural articulation between the centre and the periphery which penetrates into society, forging bonds of solidarity between the interests of groups and classes, external and internal, and generating political pacts among those who wield influence in the sphere of the State.19/

Be this as it may, the analysis of these and other elements is of primary importance in detecting how far styles of development lean towards autonomy or towards subordination.

IV. CEPAL STUDIES ON MODELS AND STYLES OF DEVELOPMENT

The problems discussed in the foregoing sections and the need to foresee their essential long-term implications led to the establishment of a method of work which made it possible to tackle them in the light of a global criterion, taking into account the manifold interrelations between the different variables of the socio-economic system. Such an approach makes it indispensable to use models constructed on a basis of mathematical language. With this orientation, adopted virtually from the start of the research on styles of development in Latin America, a series of studies on the subject 20/ was prepared by CENDES (in Venezuela), ILPES, the Fundación Bariloche and CEPAL.

The purpose of this part of the present document is to present the most important characteristics of the model formulated by the CEPAL Secretariat and to summarize the main conclusions reached.

To that end, a brief review is given of the various types of model used by CEPAL, of the conceptual aspects which justify the method adopted to study development styles, and of the most significant conclusions deduced from the exercises carried out.

1. Development models in CEPAL

In presenting the development models used by CEPAL, three stages can be distinguished.

In the first stage the basic concern was to explain the difficulty experienced by the peripheral countries in absorbing the benefits of the

/modernization which

modernization which characterized the countries with high income levels. The explanation given had a substantial economic content and was related to the problem of growth.

During this stage growth models were used, but, in contrast to what happened in the central countries, they were characterized by a special concern with the external sector and the inter-sectoral structure. In this latter connection they reflected CEPAL's early leaning towards structural aspects, which found expression in models that from then on used such techniques as the input-output matrix. Lastly, it should be pointed out that in this stage CEPAL had to encourage and guide, in most countries, the creation of systems of national accounts capable of providing supporting data for the models used.

The second stage was one of sectoral specification of the global theses and of the emergence, as yet in isolation, of social aspects. A better knowledge of major sectors such as industry and agriculture was acquired. The nature of exports and imports was studied in depth. Concern began to be felt for the problems of regions and large cities arising out of the shortcomings in respect of housing, education and health which were brought into prominence by the large-scale internal migratory movements.

While it is true that the problem of economic growth continued to be the focal point of the models, it must also be recognized that the variables utilized for specification purposes were not the same as those included in the models usually current in developed countries. In addition, the social sectors, as they were called, appeared on the scene, although only from the angle of their incidence on the use of resources. Lastly, a beginning was made on formalizing the regional problem, although the shortage of information was particularly serious in this case.

The last stage was characterized by the explicit incorporation of the social and political aspects of development. Economic problems moreover were dealt with more comprehensively and structured on new lines.

In the social and political field the problems of the viability of plans and policies and the study of power structures were incorporated.

In economic affairs, major changes in external trade and financing were witnessed, and development patterns emerged that were based on mass inflows of foreign capital, on substantial increases in exports, on attempts at regional and subregional integration and on the formation of associations of producers of raw materials. The internal changes were of no less importance. Many structural reforms were supported, and in some countries industrialization reached the stage of producing capital goods and agriculture was modernized.

In the case of current development models, which seek to combine a response to the new approaches with the study of economic growth, their structure and social projections are being analysed in greater depth. Thus, not only is the dynamism of the main macroeconomic variables taken into account, but also their implications in terms of economic, social, technological, sectoral and regional content and options, elements which ultimately help to shape the image of the desired society. Formerly these elements were introduced into the analysis on a qualitative basis and were often superimposed on the study of the economic situation. Consequently, in order to incorporate them into a joint analysis, it became necessary to formulate methods of presenting the fundamental options in question, clearly indicating their main requirements and implications.

/It is

It is of special interest to examine different conceptions or styles of development, together with the corresponding policies and strategies. In this connection, such studies can only be meaningful and useful if they are successfully incorporated in the fullest possible global picture. This particular problem of development styles led to the necessity of defining them in conceptual terms and establishing a method whereby they could be analysed and evaluated.

The justification of the method adopted, the definition of the model and the manner of using it and the main conclusions reached are based on various studies carried out by the CEPAL Secretariat. A concise account of the content and scope of these documents follows below.

2. Presentation of the method of analysis

In the first of them 21/ an attempt is made to systematize a series of planning concepts, orienting them towards the formulation and evaluation of long-term options in which express consideration is accorded to their social and political as well as to their economic implications. The first step is to discuss and justify the long-term view of national objectives and the difficulties that have to be faced in defining them. A fact which comes to the fore is that failure to make these long-term objectives explicit implies nothing less than tacit acceptance of a specific pattern of development which assumes that the "less developed" countries must follow in the footsteps of "developed" countries. The need at least to make a study in depth of the desirability of this "follow-my-leader" style is therefore undeniable; just as is the necessity of applying social criteria in determining major long-term objectives.

It is established that many of the hindrances to rational study of this type of problem stem from the lack of a method whereby alternative styles can be propounded and compared in the light of their implications, and from obstacles at different levels relating to the definition of the objectives themselves.

For the definition of long-term objectives the essential categories supplies). established are the basic needs of the population. Given the objectives, there are many strategies -or ways of using reources- whereby to attain them. Not all of these are feasible in the sense that the resources required for their implementation are within the real bounds of possibility (or of available . For testing the strategies associated with each style mathematical models are postulated as the instrument and numerical experimentation as the procedure. The needs of the population that are taken into account in defining objectives must cover all aspects of human activity which have any social cost.

Every style, and the strategy pursued to attain the objectives by which it is characterized, must be analysed in connection with the satisfaction obtained by each social group (which does not necessarily coincide with the objectives) and in relation to the resources it requires. The model to be used in the analyses must allow for sufficient disaggregation to enable the corresponding conclusions to be deduced and must cover the horizon necessary for observing the effect of long-term policies (educational and population policies are typical cases in point). The model must relate objectives to resources by means of the technical coefficients and the instruments pertinent to each case. Natural, human, capital and external resources are those whose availability determines the physical feasibility of the style.

/Work is

Work is based on numerical experiments. Each experiment consists in defining a style, selecting a strategy, adopting the relevant hypotheses for parameters and exogenous variables and computing the physical and financial discrepancies of the style. The first aspect calls for a numerical expression of the objectives pursued, of the instruments and policies supporting the strategy and of the parameters and exogenous variables for each of the periods included in the predetermined time horizon. The second necessitates computation of the indicators that show the viability or non-viability of the style through comparison of the available resources with the resources required, through the income and expenditure of the various social agents or groups and through the expectations and achievements of each. The results may lead to the rejection of the strategy, to the ranking of alternative strategies, to the formulation of variants which make for the solution of the problems observed.

3. Definition of the method

This conception of a method for comparing long-term policies is presented in more exact and better-organized fashion in a second study 22/ on the subject. In this the method is described in fuller terms bringing out its applications, a more specific definition is given of some of the categories to be incorporated in a model with the aim propounded and some policies susceptible of being tested by means of the model are discussed.

For the purposes of this description, it is pointed out that the method helps to formulate, analyse and compare long-term policies, where objectives are not determined by the growth, investment, employment and other indicators commonly used, but consist in the satisfaction of certain specified human needs. The axis is not production but its destination -the planned final demand (welfare functions are not used, however); and therefore the following would seem to be the main applications of the method:

(a) Feasibility studies of long-term politico-socio-economic objectives, and of strategies for attaining them;

(b) Proposition of alternative and qualitatively different policies and a comparative study of these (styles of development);

(c) Identification of the bottlenecks which hamper the viability of a policy, and an approximate estimate of the social effort required to overcome them;

(d) Integration of economic, social and political (and to some extent ethical) aspects;

(e) A search for the analytical categories most appropriate to the objectives;

(f) Establishment of priorities for obtaining and processing information.

The mathematical model postulated as the instrument of calculation for the method does no more than formalize calculable relations between the objectives proposed, the instruments defining strategies, the exogenous variables and the result variables. In particular, it establishes relations which make it possible to estimate the resource requirements (manpower, capital, natural resources and external resources) associated with each of the categories established for the study of the production process by means of different kinds of "technical coefficients". At the same time, it determines the available resources on the basis of which the physical viability of the style is assessed. To this end,

/hypotheses are

hypotheses are formulated with respect to technical coefficients, exogenous variables and parameters, the objectives and the strategy are expressed in quantitative terms, and the model calculates year-by-year resource requirements and the corresponding discrepancies.

A preliminary small-scale version of the model describes the economic system in terms of five sectors: agriculture, consumer goods, intermediate and capital goods, education and services. Each of these is subdivided into two levels of technology, according to the size and capital-intensiveness of enterprises. In the case of education, the technologies relate to two levels of education, lower (primary) and intermediate (secondary)-higher. The population is classified in three groups: rural, low-income urban and high-income urban; and manpower in two categories, skilled and unskilled. Six destinations are defined for the value added: low wages, high wages, profits, rent and interest, taxation of all kinds and gross saving. Profits in their turn are classified by three sources, according to the ownership of capital: public enterprises, domestic private enterprises and foreign private enterprises.

With reference to the styles, strategies or policies susceptible of being tested through the model, some aspects are discussed which would necessarily have to be considered: (a) the structures of demand in the different social groups and the resulting sectoral structure of production; (b) technology, where at least two different levels are distinguished, depending upon the degree of capital-intensiveness; (c) free time, with its implications for productivity and employment; (d) dependence, in economic, social and cultural terms; (e) idle capacity, because of its incidence on levels of investment and employment; (f) individual or collective consumption; (g) income distribution; (h) participation and other qualitative needs; (i) population; (j) education; (k) ownership of means of production; (l) regional implications; (m) housing, with regard to the possibility of covering the deficits and to modes of construction.

Furthermore, some alternative ways of satisfying individual and social needs are analysed; an exact definition of certain concepts concerning them is given, together with some pointers to the implications of the various ways of meeting them. Special attention is devoted to education and to technological policy, stress being laid on their scope and coverage and on the possibilities for the materialization of various qualitative alternatives, in terms of social costs and of effects on diverse economic variables and feasibility indicators which could be rationally detected through the integrating element constituted by the method (and the models) propounded. In this connection, emphasis is placed on the importance of the opinion (and consensus) of experts (in different disciplines, given the interdisciplinary character of the problem) as an induction method for the formulation of hypotheses and the establishment of reasonable estimates which can then be tested or whose implications can be worked out with relative speed by means of numerical experimentation.

4. The model and some methodological exercises

For illustrative purposes, and in order to describe in more specific terms the methodology sketched out in the foregoing paragraphs, the above-mentioned small-scale model was programmed, values were assigned to the different variables, a strategy was formulated with diverse modifications and the results were analysed.[20]/

/The experiments

The experiments carried out are purely methodological, since the information could not be sifted to the degree desirable; but as the data related to a situation with features similar to those found in several Latin American countries, an attempt was made to examine the connotations in various essential respects that would be implicit in a 23-year projection of the structures, patterns and modalities characteristic of the current development process.

To begin with, some basic features of the initial situation were defined, together with a particular way of utilizing human and physical resources in line with specific educational, technological and other patterns. Outstanding among the distinctive characteristics of the initial situation were the adoption by some groups of the consumer patterns of countries with higher income levels, and the importance of the external sector. To describe the first of these and follow up its evolution, three groups of consumers were distinguished with, in addition, the consumption targets of the upper income groups. The role of the external sector, in its turn, was gathered from import coefficients and assumed export trends.

The use of resources is influenced by the slant that consumer patterns impose on production; furthermore, the constant changes in consumer habits necessitate not only the creation of new installed capacity but also the adaptation of what already exists. Increasing importance is therefore conceded to the more capital-intensive type of technology, which in turn entails external financing requirements and a policy of openness to foreign capital. Similarly, it conditions educational policy, which must be directed towards management rather than creation of new technology. As regards income distribution policy and the function of the State, since the evolution that was taking place is to be prolonged through time, the historical trends of the corresponding parameters are maintained.

Within this structural framework, requirements in respect of sectoral production, investment, imports, employment and external resources were determined, and financial balance-sheets, so to speak, were drawn up for each of the social and institutional groups defined. The general conclusion to be deduced from the results obtained is that the basic experiment testifies to a situation that seems to be non-viable because of the external deficit, the wide gap between the income levels of low-income families and the levels of consumption postulated, and the government deficit, although slight improvements appear in unemployment figures towards the end of the projection period. The reason lies in the changes introduced in the sectoral structure of the product in favour of sectors and technologies requiring more capital and imports.

These conclusions do not appreciably alter with the introduction of modifications that leave intact the basic characteristics of the style postulated. For example, the external deficit is not wiped out, there is no significant decrease in the government deficit and income distribution grows no better on the supposition of different rates of expansion of exports, an improvement in the relative levels of consumption in the low-income groups or a reduction of capital requirements per unit of output.24/ A more marked change occurs in levels of employment if the relative importance of traditional technology is stepped up (although this variant runs counter to historical trends).

/The position

The position is different if fairly considerable modifications take place in the structure of the system. A style based on the containment of consumption but incorporating a redistributive criterion that benefits the low-income groups, emphasis on education, discouragement of the tendency to follow in the footsteps of the developed countries, reduction and control of foreign investment and the flight of capital, and changes in the production patterns of certain sectors, corrects the external-sector bottleneck and improves the relative position of the low-income strata. But it does not solve the problem of unemployment and aggravates the financial situation of the government (which de facto would make the style non-viable).

5. Analysis of some results obtained through the model

In the light of the experience gained through the methodological exercises described in the former paragraphs, and after more careful processing of the basic data, the model was applied to an economy with characteristics similar to those of Brazil.25/ A number of experiments were carried out to analyse various economic policy options within the framework of the development style indicated by historical experience prior to 1968, the benchmark year for the projections. That is, economic growth would continue to pivot upon a modern sector whose products and methods of production adhered to the modalities prevailing in the industrialized countries and the patterns of consumption of the upper income groups would continue to resemble those of the industrialized countries of the West.

The model postulates the attainment of certain targets, and then determines what must be done to achieve them, and what happens to the major variables during that process. The most important goal is expressed in terms of levels of consumption, but a further objective included is the expansion of enrolment in the educational system. Values for the complete model are calculated on an annual basis, and the programme is extended up to the year 2000. In the basic experiment the following consumption targets were established for the three social groups incorporated in the model. The highest income group corresponded to the upper urban stratum, and accounted for 10% of the population at the beginning of the period covered by the model. In this group per capita consumption rises by about 5% per annum, in keeping with the basic assumption of continuity, which allows the consumption levels of this group to keep pace with those of the industrialized countries. The other two income groups comprise the lower urban stratum, which represents 40% of the population, and the rural population, which constitutes the remaining 50% at the starting-point of the model. The per capita consumption of these two groups rises somewhat more slowly, at an average annual rate of 3.5% throughout the whole period.

The coverage of education is extended so that by the end of the century almost the whole of the appropriate age group is enrolled in primary schools. In secondary and higher education enrolment comprises nearly 80% of the pertinent age group in urban areas and over 20% of the corresponding group in rural areas. As can be seen, enrolment greatly increases, but requirements and changes in the economic system are basically determined by the changes in consumption.

/According to

According to different hypotheses and coefficients estimated on the basis of the figures for Brazil, to attain the consumption targets stipulated, i.e., for per capita consumption to rise at an average annual rate of 3.5% to 4%, a total growth rate of approximately 8% is needed, which is very high in comparison with levels in the past. With a growth rate of this magnitude the balance of payments rapidly deteriorates and the deficit very soon becomes impossible to sustain; from 35% of current export earnings at the beginning of the period, it soars to more than two and a half times total export earnings by the end of the century.

Given this continuity-oriented -or "continuist"- development, not even so high a rate of growth resolves the major social problems. By the end of the century a large proportion -over 40%- of the labour force is still toiling in subsistence activities (mainly in the cities), and income distribution remains very unequal.

Many experiments with the basic model have been carried out. In these, variants are introduced in different aspects of the model to see how the variation affects the operation of the system. The experiments conducted are of assistance in evaluating the relative importance of the different aspects of the economic system, and in clarifying the nature of the changes required in order to attain various policy objectives. Each of the experiments postulates some considerable change in one aspect of the system or another, but without its modifying the development style, which is a very important point. The experiments all relate to possible variations in the "continuist" economic system described in the basic model.

The following avenues were explored by means of the experiments carried out: (i) the possibilities of raising the level of welfare of the lower income groups; (ii) the implications of lower consumption targets for all groups; (iii) the factors influencing the balance-of-payments position; (iv) the impact of a reduction in investment requirements; (v) the possibilities of boosting employment levels; and (vi) the implications of population and migration policies.

The first group of experiments resulted in higher consumption targets for the lower income groups without affecting the consumption of the highest urban group, and in various alternative patterns of income distribution. The main conclusions drawn from these experiments concern, on the one hand, the need for higher growth rates and, on the other, the fundamental obstacle constituted by income distribution. The lower income groups receive only a fraction of the income required to finance the consumption levels stipulated, and if redistribution is posited, the problem lies in the possibility of achieving it (on a sufficiently large scale) in the framework of economic "continuism".

The second group of experiments was formulated in terms of growth rates for per capita consumption which were not only lower but also the same for all three income groups. The resulting situation is far from satisfactory. The necessary growth rate is still relatively high and difficult to achieve and the balance-of-payments deficit goes on looming large. At the same time, the moderate reduction of the growth rate (in comparison with the basic experiment) causes a serious deterioration in employment, the government deficit acquires unmanageable proportions, the distribution of welfare deteriorates and the burden of the relative loss falls mainly on the unemployed. Another crucial

/point is

point is that the maintenance of per capita consumption levels in each group requires a growth rate of 4.5% to 5% for the product, in consequence of the rapidity of population growth and the considerable rural-urban migration.

The third group of experiments seeks to analyse the most important implications of the factors affecting the behaviour of the external sector: export earnings, returns on foreign capital and foreign-owned installed capacity. In the first case the impact analysed was that of a fall in the growth rate of exports; in the second, that of a decrease in the rate of profits of foreign enterprises; and in the third, that of the elimination of transactions in which foreign enterprises are concerned and the limitation of direct investment from abroad. The results throw into relief the paramount importance of export earnings for the balance-of-payments deficit: a reduction in these earnings significantly swells the deficit on current account; they also affect the growth rate of the economy and the financial situation of the government and of families, although here their influence is much less. The decrease in remittances of profits on foreign capital substantially improves the balance-of-payments position, inasmuch as it reduces the deficits on current account, but the maintenance of the export-import imbalance is reflected in continuous foreign capital accumulation and in constantly increasing service payments. That is, although better conditions as regards returns on foreign capital (lower rates of profit, interest and debt amortization) alleviate the external situation, over the long term the servicing of capital (owing to its accumulation) continues to act as a factor of instability. In the same way, curbing the inflow of foreign capital also leads to an improvement in the external situation but does not correct the structural trend towards external disequilibrium. In the last analysis, to surmount the obstacle represented by the external sector it is necessary to wipe out (or at least to reduce) the trade deficit. Measures to influence the other elements that have a bearing on the problem mitigate it, but it remains latent and makes itself felt over the long term.

In studying the effect of reduced investment needs, capital requirements per additional unit of output (marginal capital-output ratios), were kept constant at the initial level, and so were the coefficients of replacements and repairs and the useful life of installed capacity.

The major impact were produced on the growth of the economy and on the balance of payments through the imported component of capital formation. If there is an improvement in the productivity of capital, which is the principal determinant of investment requirements, the possibilities of attaining specific growth rates for the product are greater; i.e., the feasibility of an alternative can be determined in the sense that a lower growth rate of the product is needed to attain certain consumption targets. Furthermore, the smaller volume of investment means a smaller volume of imports, which improves the situation of the external sector. A fact worth mentioning is that despite the constancy of the sectoral capital coefficients (for each of the production techniques) the changes in the sectoral structure of production generate an upward trend in the global coefficients.

Study was devoted to the possibilities of raising employment levels through a direct increment in government employment and as a result of lower rates of increase of productivity. The first of these policies is of much assistance in improving the employment situation, but the problem is too great to be resolved

/by these

by these means alone; at the end of the century about one-third of the labour force is still engaged in subsistence activities. Furthermore, a policy of this type disrupts the government budget, by pushing up total government expenditure to about one-third of the gross domestic product and the fiscal deficit to unmenageable figures. In conceding a less rapid increase in productivity, it is presupposed that all the other elements in the system remain unalterable. That is, it is assumed that productivity may vary independently of other aspects of the economy. This is not a realistic assumption, but it gives an idea of the importance of levels of productivity in relation to employment. In effect, the results show that with a given growth rate of the product the structure of employment would greatly improve. Which means that the rate of increase of productivity and the growth rate of the economy are the determinants of the employment situation.

In the last experiment carried out it is assumed that the rate of population growth is lower and that the rural population declines more slowly in relative terms (less rural-urban migration) than in the basic experiment. The lower growth rate of the population and the decrease in migration greatly relieve the pressure on urban areas. Since the urban population increases much less rapidly, various infrastructure and other social costs are appreciably reduced, and the problem of employment in the cities becomes less acute. Some of this improvement, however, is achieved at the cost of transferring the problem to the rural areas. The per capita consumption targets established may also be attained with a considerably lower rate of growth. But this is not of much help in resolving the employment problem, since it is only in the last decade of the century that the slower growth rate of the population begins to be reflected in a significant diminution of the increment in the labour force.

6. The propects for the current development style

On the basis of these experiments and a reprocessing of the data approximating them to estimates valid for the region as a whole, the model was applied with the aim of identifying the main problems that may arise in the event of continued development of a traditional type and of systematizing the conclusions obtained. 26/

In much the same way as in the case of Brazil, the initial situation of Latin America at the end of the 1960s was defined and the characteristics of the style of development current at that period were incorporated in the model, on the assumption that they would be maintained in the future up to the end of the century. As already mentioned, the targets relate to levels of consumption and levels of education, to which are added various assumptions and hypotheses that characterize the style: for example, concentration on modern-type production, maintenance of population growth trends and a policy of openness to foreign capital.

The first general conclusion to be drawn from the model is that a high rate of growth (7%) is required in order to reach goals which at first sight seem modest: levels of per capita consumption that increase by 2% per annum in the two most numerous population groups and by 3.4% in the high-income group (an average rate of about 2.6%). The factors determining this increase are the relatively rapid growth of the population and the movements of persons from low to higher income groups (the most important of these shifts is rural-urban migration).

/The second

The second conclusion is that growth dominated by the expansion of modern-type production implies increasing investment requirements. This happens despite the fact that the assumptions relating to the marginal capital/output coefficients are quite optimistic (it is assumed that they do not change). The reason is that these coefficients are appreciably higher in modern than in traditional production, so that the relative shift of traditional production to the modern area of the sector calls for more capital formation, and in consequence, the investment coefficient rises. And it would rise still farther, if investment requirements per unit of output were to increase, as might be expected in the course of technological progress.

The third important conclusion is that the main problem in this type of development is that of reaching adequate employment levels. Even with the high resultant growth rate which is projected for thirty years, the problem of overt unemployment and underemployment remains serious at the end of the century, when 45% of the labour force is still engaged in low-productivity activities or unemployed (53% at the starting-point of the projection). And this despite the rather moderate assumptions as to an increase in productivity which, together with the rapid expansion of production, determine an annual rise of 4% in employment in the modern areas as a whole. But as the labour force also increases rapidly, this does not suffice to bring about a substantial change in the structure of employment. A further significant aspect is that relating to the change in the composition of the subsistence sectors, which from clearly being predominantly rural at the starting-point of the projection, by the end of the century come to show a majority in the urban areas.

Closely linked to the structure and trends of employment is income distribution. A general conclusion that may be noted in this respect is that although there is a slight improvement in distribution the basic imbalance persists: relative income levels in the groups considered are still very unequal and above half the labour force remains in the low-income group. It must be pointed out, however, that the size of the latter group decreases in relative terms, while there is a relative increase in the high-income group; consequently, the ratio between the average incomes of the two groups falls from 16:1 at the beginning of the period to 13:1 by the end. This behaviour derives from the moderately optimistic assumption that the share of wages and profits in the value added in each sector and area will remain unchanged, which means that wages rise along with productivity.

A fifth conclusion deduced from the model is that the external sector is another fundamental obstacle encountered by rapid growth centred on the expansion of modern-type production. The volume of imports gradually increases in relative terms owing to the changing structure of the economy. And even with fairly optimistic assumptions as to individual import coefficients, the growing proportion represented by modern-type production and the increase in the size of the high-income group make for an expansion of imports. Which means, given the necessity of keeping the trade balance stabilized if a gradual and cumulative deterioration of the balance of payments is to be avoided, that there must be a correlative increase in export earnings. In so far as high import levels are needed, the trend towards disequilibrium makes its appearance if a parallel expansion of exports does not take place. The over-optimistic assumption that

/exports grow

exports grow at the same rate as the gross domestic product (the high rate required to attain the targets set up) is reflected in the moderate but unremitting deterioration of the trade balance. To this must be added the cumulative effect of remittances of profits and service payments on foreign capital, which steadily increase.

Another of the important features of the basic projection, which it is easy to overlook in presenting the results, is the magnitude of the changes implied by the growth rates involved. Thus, the 7% annual growth rate of the gross domesti product means that after 30 years the size of the economy is almost eight times larger than at the starting point of the projection; in other words, production at the beginning of the period does not amount to 15% of the levels that will be attained by the end of the century, i.e., a major proportion of output will be the result of expansions and of a new structure which will have been created by then. The same thing happens, and to a more marked extent, in the case of industrial production and invesment, whose levels after 30 years would be nine times higher than at the outset. This is tantamount to saying that the entire 1970 economy could be re-created in little more than a year. Even in respect of population the magnitude of the changes can be perceived: the total population more than doubles and the urban population is quadrupled, or, in other words, only one out of every five city-dwellers lived in an urban area at the beginning of the period. These high figures are an indication of the depth of the changes which will be brought about by rapid and steady economic growth and which must be reckoned with in order that they may be carried out as expeditiously as possible without the emergence of problems as serious as those which it is sought to resolve.

From the standpoint of how to overcome the formidable obstacles inherent in the current type of development, some general possibilities have been examined with the help of the model. As regards employment, much of the problem stems from the large proportion of the labour force which does not manage to find a niche in the more productive areas of the economy and has to engage in activities where levels of productivity and income are low. The solution, therefore, lies in expanding employment in the more productive areas or in boosting production and productivity in the traditional areas so as to place them at less of a disadvantage beside the modern areas. In both cases a more uniform distribution of productivity and income in the economy would be achieved, but the paths are not the same and imply different development styles. The expansion of employment in the more productive areas may be based on increases in their production or on limitation of the rise in their levels of productivity. The first alternative would entail even higher overall economic growth rates -about 9% per annum- up to the end of the century, with the consequent impact in terms of investment and balance of payments. The second alternative would represent more moderate overall growth rates but the products and methods of production of the modern areas would gradually diverge from the patterns prevailing in the industrialized countries as the rates of increase of productivity were reduced. In effect, this alternative signifies a very serious modification of the development style analysed, since it would mean a gradual adoption of less modern techniques or the creation of new and less capital-intensive types of technology. The other approach postulated, which

/envisages boosting

envisages boosting production and productivity in the traditional sectors, deviates still farther from the type of development centered on the expansion of modern-type production and would constitute a very different style; it is stated only as a logical possibility. In all three options presented, the solution of the employment problem is accompanied by a substantial improvement in income distribution. In terms of feasibility, the first option would encounter its main stumbling-block in the balance-of-payments situation, whereas in the two latter the difficulty would lie in their political viability.

With regard to the evolution of the external sector, the possibilities of resolving problems are grounded on the intensive development of exports and on inflows of external resources designed to relieve the economy's trend towards external disequilibrium, to which end the nature and terms of the inflows would have to be such that the service payments generated could be met with relative ease. The central factor, however, is the growth of export earnings. In this connection, in addition to the volume of exports, the evolution of their prices (in relation to the behaviour of import prices) may be an important complementary factor. Import substitution is an optional means of reducing the external deficit; but in the development style postulated this option would have only a relative validity, owing to the difficulties of reducing import requirements.

7. Application of the model to Argentina 27/

A model with similar characteristics to that described in the foregoing paragraphs has been applied in the study of long-term development strategies in the Argentinian economy.28/ In this case it was possible to obtain ample statistical data which make it possible to prepare social accounting matrixes and carry out the basic studies for the analysis and identificaion of the functional relations of the model more satisfactorily.29/ The model was calibrated for each of the years of the period 1970-1976, introducing the adjustments which were considered appropriate when its results were compared with actual data.

This study of Argentina is particularly important because of the special characteristics of this country in the Latin American context. This is an economy whose growth rate is comparatively low, while its level of industrialization is one of the highest in Latin America, as is the entrepreneurial organization of its agricultural activities; personal and family income distribution is also less unbalanced than in other Latin American countries and its position is more favourable as regards poverty situations and levels of employment.

The basic research made it possible to assess to what extent the assumptions of productive and social heterogeneity on which the model was based were applicable to the case of Argentina. To illustrate this, some of the results obtained in the field of production techniques, ownership of capital and level of labour skills and the assumptions derived from them for use in the trend scenario will be given here.

As regards the techniques used in the different branches of production, the criteria used to define them were not homogeneous and depended on the nature of the activity. In the case of agriculture, for example, data on land productivity for different regions was available. On the basis of the distribution of land productivity, the first technology was defined as that whose productivity was over the seventh decile.

/In the

In the various sectors of industry, the product per person employed was analysed, working at the level of ISIC to five digits. It was seen that in the majority of branches (ISIC, two digits) there were appreciable differences in manpower productivity, which reinforced the advisability of separation into two techniques. The consultation of specific studies at the level of sub-branches, sectors and establishments made it possible to observe the existence of a strong correlation between productivity levels and the amount of capital per person employed. For each of the two industrial sectors of the model, therefore, the techniques were divided at the level of the branch, using the average productivity of the branch as the dividing-line. Similar conclusions and criteria are applicable to the services sector.

In construction, the separation of techniques was estimated on the basis of information obtained from professionals, public bodies and entrepreneurial organizations in the sector.

Generally speaking, all the sectors displayed technical heterogeneity which, although appreciable, is less than in other Latin American countries. By way of example, the relation between the average productivities of the two techniques for the sectors considered is the following: for the agricultural and consumer goods sectors the ratio is nearly 2, while it is 2.5 in the intermediate and capital goods industry and 1.5 in the services sector.

The breakdown of capital according to whether it was of public, national private or foreign ownership was in response to the desire to investigate the possible behaviour of the different types of owners of capital in the use of technology and their influence on production and on income distribution.

The participation in ownership of these three agents was studied by sector for the period 1970-1976 in order to establish assumptions regarding trends in capital ownership. An analysis was then made of the relations between rates of profit in public, national private and foreign enterprises.

The research made it possible to establish that from 1959 onwards approximately 65% of foreign investment was channelled towards five branches of manufacturing: motor vehicles, big packing plants, tobacco, petroleum products and chemicals. The sales of the foreign enterprises included among the country's principal hundred units, assessed on the basis of their invoices, accounted for around 10% of the total of this group, the figure rising to around 20% if the analysis is limited to the manufacturing sector. On the basis of these and other data, assumptions were made as to the share of foreign sales in the different sectors.

It was observed that the foreign enterprises in all cases use high-productivity techniques.

The share of the public enterprises was established using similar criteria, with the extra feature that maximum rates were considered for their percentage share in total and sectoral sales. At all events, however, these percentages were always lower than those of the foreign enterprises. Owing to the nature of the services supplied by the public enterprises, their share in capital was three times greater than their share of sales.

The research showed that the rates of profit with respect to capital of foreign enterprises were approximately double those of national private enterprises and far higher than those of the public enterprises. However, in the latter case it should be recalled that their tariffs are usually subsidized especially in the services sector, so that the comparison is less relevant.

/The estimate

The estimate of employment by sector and techniques, according to the degree of skill, was made according to figures provided by the Economic Planning Institute on skilled employment by sector and in accordance with other research and information on the composition of employment and its remuneration. Generally speaking, both, at the level of sectors and of techniques there is good correlation between average productivity and the proportion of skilled persons in total employment.

The relation between skilled and unskilled wages, and between wages in either of the two classes for the two techniques, was estimated on a rather weak statistical basis. The differences are greater in agriculture than in the other sectors. In this sector it has been assumed that skilled wages are six times those of unskilled wages, whereas in the urban sectors the ratio is four to one. In any case, the tendency of the system to increase the ratio between skilled and unskilled workers is apparently accompanied by a reduction in wage differences, which may be attributed in the case of Argentina, to the smaller pressure from unemployment in comparison with other Latin American countries and to institutional factors connected with the organization of the trade unions.

/Notes

Notes

1/ In some preliminary approximations (e.g., in the Economic Survey of Latin America, 1970, Part Two), an association is established between the objectives of dynamic growth and of stability. Subsequently, however, the latter category was dispensed with because it was considered to be a condition or medium favourable or necessary to the former, rather than as an end in itself. Obviously, this criterion is at variance with certain orthodox positions which regard stability as a sufficient requisite to ensure dynamic production.

2/ See, by this author, Marco histórico constructivo para estilos sociales, proyectos nacionales y sus estrategias, Buenos Aires, Centro Editor de América Latina, 1975.

3/ Based on Jorge Graciarena, "Power and Development Styles", CEPAL Review, First Semester, 1976.

4/ José Medina Echavarría, "Latin America in the possible scenarios of détente", CEPAL Review, Second Semester, 1976.

5/ Inputs are obtained from the primary sector; the tertiary sector, in its turn, to some extent follows the growth trend of the industrial categories. The inclusion of primary production for direct consumption (other than exports and inputs) would not alter, but in fact would strengthen the trend shown in the table, in view of its lower growth rate. On the other hand, the table is obviously not so meaningful for the less industrialized countries, where the composition of imports is more important.

6/ See CEPAL/ILPES/UNICEF, Pobreza, Necesidades Básicas y Desarrollo, E/ICEF/TACRO/G.1006, November 1982.

7/ See Tendencias y proyecciones a largo plazo del desarrollo económico de América Latina, CEPAL Cuadernos, No. 20, 1978.

8/ Obviously, the weight carried by Brazil and Mexico strongly influences regional trends and situations. But it must also be borne in mind that these countries account for approximately 53% of the total population.

9/ See Tendencias y proyecciones..., op.cit., table 16.

10/ See CEPAL, Economic Survey of Latin America, 1978, Part Three, table 455.

11/ The data are taken from: Veinticinco años de la agricultura de América Latina: rasgos principales 1950-1975, CEPAL Cuadernos, No. 21, 1978.

12/ Veinticinco años en la agricultura..., op.cit.

13/ See particularly CEPAL, Economic Survey of Latin America, 1978, op.cit.

14/ These questions are discussed in some detail in the Economic Survey of Latin America, 1978, op.cit.

15/ See again Economic Survey of Latin America, 1978, op.cit.

16/ See Tendencias y proyecciones a largo plazo..., op.cit., table 15.

17/ In this connection see CEPAL, Economic Survey of Latin America, 1977.

18/ Economic Survey of Latin America, 1978, op.cit.

19/ F.H. Cardoso, "Interdependência e Desenvolvimento", Cadernos de Opinião, No. 15, 1980.

20/ CENDES, "Estilos de desarrollo", Trimestre Económico No. 144. CENDES, "Estilos de desarrollo: análisis comparativo de políticas a largo plazo", Caracas, June 1971; Varsavsky, Oscar, "Largo plazo: un solo estilo?", mimeographed text for the ILPES training course; Varsavsky, Oscar, "Comparación de políticas de largo plazo con grandes diferencias cualitativas", report prepared for CEPAL's Economic Projections Centre, July 1970; Fundación Bariloche, Catastrophe or new society? A Latin American World Order, Ottawa, International Development Research Center,

1976; CEPAL, "Un modelo para comparar estilos de desarrollo o políticas económicas optativas" (E/CN.12/907), 6 April 1971; CEPAL, "Algunos resultados de los trabajos realizados con un modelo numérico" (ECLA/IDE/CPE/DRAFT 49), 26 January 1972; CEPAL, "Different development models or styles", in Economic Bulletin for Latin America, vol. XIX, Nos. 1 and 2, 1974; CEPAL, "Un modelo de experimentación numérica para analizar políticas económicas alternativas de largo plazo", internal working paper, CEPAL, Buenos Aires Office, 1978; CEPAL, "Modelo de experimentación numérica: ajuste al período 1970-74 para el caso argentino" (CEPAL/BA/102), 10 October 1977; CEPAL, Charles Rollins, "Population and labour force in Latin America: some simulation exercises", CEPAL Review, No. 3, First Semester 1977.

21/ Oscar Varsavsky, "Largo plazo: ...", op.cit.

22/ Oscar Varsavsky, "Comparación de políticas de largo plazo", op.cit.

23/ CEPAL, "Un modelo para comparar estilos ...", op.cit.

24/ The changes are on scales that imply no impairment of the distinctive elements of the style.

25/ CEPAL, "Algunos resultados de los trabajos realizados ...", op.cit.

26/ CEPAL, "Different development models or styles", op.cit.

27/ Summary prepared for a provisional report to the ACC Task Force on Long-Term Development Objectives, "Selected Aspects of the Programme of Activities of CEPAL in the Field of Long-Term Economic, Demographic and Social Projections", and Summary of Main Findings and Conclusions (E/CEPAL/L.225), 7 July 1980.

28/ CEPAL, "Un modelo de experimentación numérica ...", op.cit.

29/ CEPAL, "Modelo de experimentación numérica: ajuste al período 1970-74 para el caso argentino", op.cit.