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Growing labour absorption with persistent underemployment

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CEPAL has always devoted special attention to the problems of employment, to the extent that it considers the phenomenon of the productive absorption of labour to be the most obvious manifestation of economic development. From that point of view, this article is particularly interesting for its analysis of what has occurred in Latin America with respect to this phenomenon between 1950 and 1980, and to that end the author expresses his intention from the start of explaining the apparent paradox implied in the coexistence of a considerable growth in the absorption capacity of the non-agricultural modern strata along with a persistence or slow decline in underemployment.

The basis of his argument is to demonstrate that the series of phenomena whose interaction explains the results of absorption in modern segments and the evolution of underemployment has a different impact according to groups of countries and leads to very differentiated results: countries which show a rapid absorption in modern segments along with a slow but significant reduction in underemployment, and countries which show a slow absorption in these segments along with persistently high rates of underemployment. In particular, the substantial and increasing difference in resource requirements per employed person between modern activities and traditional agricultural activities, together with the rapid growth of the non-agricultural economically active population (EAP), the small initial importance of the modern strata and the slow rate of job retention in modern agricultural activities largely explain why even those countries which show a great effort at accumulation and economic growth, although they manage to reduce underutilization, are unable to absorb the entire transfer of labour from the agricultural sector to the modern segments. As a result, the author concludes that it is a problem not only of the size of capital formation —especially in the countries which show slower rates of absorption— but also of the limited effects of this capital formation and the pressures of the urban labour supply. Thus, what is relevant is not only the size but also the composition of the use of resources and their greater or lesser homogenizing effects.

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Introduction*

Since the end of the war, the majority of Latin American countries have been undergoing profound changes in their occupational situation, which correspond essentially to a dual phenomenon: the process of transfer of labour to more highly productive activities and the pressure of the growth —natural and migratory— of the urban labour force, with a decline in the relative weight of the agricultural sector in total employment.

For explanatory purposes —and by oversimplifying the analysis— it is possible to construct two opposite hypotheses with respect to the results of the abovementioned processes. The first of these would hold that in the decades after the war there was a significant growth in employment in Latin America, essentially non-agricultural, in acceptably productive strata or activities. The second hypothesis would emphasize the persistence of serious underemployment problems in the context of the growing urbanization of this underemployment.

Two opinions with respect to the process of capital formation might also be associated with these two approaches. The first would emphasize that Latin America's attempts to promote investment and economic growth during the past decades have been more than considerable, reaching at least the level of the historical experience of many of today's advanced countries in their respective periods of change in occupational structure. The second opinion would hold that the effort to promote investment has been insufficient to absorb, in the modern non-agricultural strata, the growth and transfer of the economically active population which has occurred in the past decades.

It is not the purpose of this study to offer a comprehensive interpretation of these phenomena. Its objective is less ambitious: to contribute elements to the discussion, in the sense of suggesting that what has occurred in Latin America in the past three decades tends to be a synthesis of the above two hypotheses

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and their respective sub-hypotheses. Thus, besides verifying a part of the evidence and/or the empirical estimates available, the study points out some of the factors which allow the two apparently opposite hypotheses to be reconciled.

These factors correspond, on the one hand, to phenomena present in the development of most of the countries of the region in the postwar period; and, on the other, to the different intensity with which they act in the various countries of the region. As a result, the reconciliation or synthesis of the opposing hypotheses is proposed at a dual level: first, that of the presence of phenomena which in themselves explain why in many countries of the region there is simultaneously a high growth of employment in modern non-agricultural strata and a persistence —in some countries declining— of high levels of underemployment, in the context of a great effort to invest. The second level is that of the increasingly decisive importance of differentiated behaviours among the various countries, the identification of which may help to explain the coexistence in the region of trends which are nearer to one or the other hypothesis.

Section I of this study analyses the absorption capacity of modern non-agricultural activities during the period 1950-1980, in the light of the available evidence, and points out the problems arising from it. Section II summarizes the available estimates on the evolution of total underutilization of labour and the coverage of underemployment —and its composition—, and it brings out the most relevant features for the purpose of the study. The following section develops a working hypothesis with respect to resource requirements in general —not only investment— imposed by a process of long-term transfer of the labour force; it relates its intensity to the initial degree of, and trends in the period with respect to, structural heterogeneity and points out the various investment efforts being made in the region in the generation and use of resources. Section IV discusses three phenomena in addition to those already mentioned, which are useful for an understanding of why the interpretation of what has occurred in Latin America is closer to a synthesis of the abovementioned hypotheses; namely: (i) the rate of growth of the non-agricultural economically active population; (ii) the initial impact of the modern non-agricultural strata on total employment; and (iii) the evolution of employment in modern agricultural activities. Finally, the last section states the principal conclusions, and re-emphasizes the reconciliation of the above hypotheses on the dual level already mentioned: principal elements or factors and diversity of behaviour by groups of countries.

I

Absorption capacity of modern non-agricultural activities

It is useful as a first step to verify the available evidence. Table 1 summarizes the estimates of employment growth in modern non-agricultural activities[1] —which PREALC calls formal urban activities— for 14 countries which represent 95% of the economically active population (EAP) of Latin America in 1980, so that its conclusions are representative of the region as a whole. This table shows three groups of countries:[2] *Group A*, including those which show a reduction in the rate of underutilization of their urban labour force in 1950-1980, particularly

[1] The definition and methodologies of estimation are similar to those used in a previous study —see note 2 below. In regard to the evolution of modern non-agricultural employment, the *proxy* used is the employment of *salaried* non-agricultural workers, excluding domestic service and including professionals, technicians, executives and similar classifications within the category of own-account workers.

[2] The same grouping criterion is used here as by PREALC in *Dinámica del Subempleo en América Latina*, Santiago, Chile, CEPAL, 1981, chapter II and Methodological Annex.

due to a decline in underemployment;[3] *Group B*, including those countries which do not show a significant decline in this rate; and *Group C*, including three countries in special situations, because of the characteristics of their population and productive structures at the beginning of the period of study and because of the effect of the reorientation of the economic policy model (in the last five years of the period) on the formal-informal composition of urban employment.

The growth rates in table 1 may be considered one of the indicators of labour absorption in *modern* non-agricultural strata, during a period in which most of the countries of the region were going through the process of transfer of EAP from agricultural activities to non-agricultural activities with relatively higher productivity.

As a result, any evaluation assumes an implicit reference to the historical experiences of other countries, during the period in which they transferred the bulk of their labour force from traditional rural labour to more highly productive activities; otherwise, it is difficult to qualify the efforts as either strong or weak. Taking this into account, let us now see what table 1 suggests.

1. For the region as a whole, the growth rate of modern non-agricultural employment was 3.7% on average annually. Nevertheless, a study of table 2 shows that by 1950 the relative weight of the modern non-agricultural sector in the national EAP averaged 26.3% for the group of countries analysed, excluding Argentina, while in this latter country, by 1950, 57% of the EAP was located in modern non-agricultural activities.

If the purpose is to analyse, as mentioned, the long-term transition process of the occupational structure, the problem here is that in the case of Argentina most of this process has already occurred in the decades *previous* to 1950. Thus, in this perspective, it is helpful to exclude Argentina and analyse what occurred in the remaining countries.[4] Excluding Argentina, the growth rate of modern non-agricultural employment for the region was *4.2% over 30 years*. In contrast with the record of other historical experiences, this performance cannot be considered poor, but rather significant.

Table 1

LATIN AMERICA: GROWTH OF EMPLOYMENT IN FORMAL NON-AGRICULTURAL ACTIVITIES, 1950-1980

(Annual cumulative average rates, in percentages)

	1950-1980	1950-1970
Group A		
Mexico	4.6	4.5
Panama	4.2	4.7
Costa Rica	5.2	5.1
Venezuela	5.1	4.6
Brazil	4.4	4.4
Colombia	4.3	4.5
Guatemala	4.5	4.3
Group B		
Peru	4.2	4.0
Ecuador	2.9	1.4
Bolivia	3.8	4.0
El Salvador	4.2	4.0
Group C		
Argentina	1.8	2.1
Chile	2.6	2.8
Uruguay	0.8	0.8
Latin America (14 countries)	3.7	3.7
Latin America (excluding Argentina)	4.2	4.1

Source: Developed from preliminary PREALC estimates, based on population censuses, economic censuses, household and establishments surveys, compatibilized and adjusted.

[3] The third chapter describes the categories mentioned. To facilitate their interpretation at this stage, it is useful to recall that the underemployment rate is an indicator of the coverage of this phenomenon, whereas the total underutilization rate is an indicator of coverage and intensity which includes open unemployment and equivalent underemployment in terms of totally non-utilized workers. For the respective definitions, see PREALC, *Dinámica del subempleo..., op. cit.*

[4] Similar reasoning may be used for Uruguay, which by 1950 showed 63.4% of its national EAP in modern urban activities. For reasons of relative weight, the exclusion of Uruguay does not change the regional averages.

Table 2

LATIN AMERICA: RELATIVE WEIGHT OF THE FORMAL NON-AGRICULTURAL EAP IN 1950 AND 1980

(Percentages)

	Share of the formal EAP in total EAP		Share of the formal EAP in non-agricultural EAP	
	1950	1980	1950	1980
Group A				
Mexico	21.6	39.5	62.5	64.3
Panama	26.8	41.2	74.7	68.4
Costa Rica	29.7	52.9	70.6	81.0
Venezuela	34.7	62.6	67.9	79.2
Brazil	28.5	45.2	72.5	72.8
Colombia	23.9	42.6	61.0	65.7
Guatemala	15.2	26.7	48.5	60.0
Group B				
Peru	19.1	35.0	53.0	59.6
Ecuador	21.5	22.7	64.8	47.3
Bolivia	9.1	19.9	37.8	43.6
El Salvador	18.5	28.6	57.3	60.2
Group C				
Argentina	56.8	65.0	78.9	77.0
Chile	40.8	54.1	64.8	72.9
Uruguay	63.4	63.3	81.4	76.9
Latin America (14 countries)	30.5	44.9	69.3	69.8
Latin America (excluding Argentina)	26.3	42.6	66.4	68.7

Source: Developed from preliminary PREALC estimates, based on population censuses, economic censuses, household and establishments surveys, compatibilized and adjusted.

2. Furthermore, table 1 shows the diversity of situations present in the region in the period 1950-1980. Countries in Group A show growth rates of modern non-agricultural employment in general *higher* than the average regional rate of 4.2% mentioned: all the members are located in the range of 4.2% to 5.2% on average annually. Group B shows average rates in a range of 2.9% to 4.2% annually, and Group C 0.8 to 2.6% annually. It should be recalled that the three countries of this latter group are those which at the beginning of the period already showed considerable advances in the process of transfer of labour to modern non-agricultural activities. As a result, two conclusions in addition to those mentioned in the previous point may be drawn: (i) the long-term average regional growth in modern non-agricultural employment conceals fairly diverse behaviours; (ii) in particular, if it is agreed that the regional average of 4.2% annual growth indicates an outstanding performance, this is even more true for the historic record of *Group* A, whose members show higher rates than this average. This latter point is important in view of the fact that Group A represented around 70% of the EAP of the region in the period analysed.

3. In the region as a whole, there do not appear to be very significant changes between the record from 1950 to 1970 and what occurred in the last decade. Changes did occur at the country level, but none were so great as to imply that the previous conclusions are based on what occurred in the last decade. In general, a comparison of columns 1A and 2A of table 1 suggests that the countries which had been doing well—on the level analysed— in the first two decades continued to show a favourable record in the last decade.[5]

4. The three conclusions above suggest a relatively high dynamism in the long-term growth of modern non-agricultural employment in most of the countries of the region. Nevertheless, it is useful to situate their incidence correctly in order to be able to evaluate their impact. Table 2 provides information on the relative weight of modern non-agricultural EAP in the total EAP for 1950. This brings out a fact which is not usually taken into account when only the employment growth rates are analysed in modern non-agricultural sectors, namely that by 1950 the proportion of modern non-agricultural employment in total employment was fairly low: 26.3% on average for the region, excluding Argentina. As a result, even though the growth rates may be significant, they refer to and have an impact on an initially *much lower* base than total non-agricultural employment. (Thus, while the modern non-agricultural EAP represented 30.5% of the regional EAP by 1950, the total non-agricultural EAP amounted to 44% of the regional EAP.[6]) We will see the implications of this fact in section IV.

II

Evolution of total underutilization in 1950-1980

The underutilization of the labour force, in the Latin American context, includes basically the incidence of open unemployment and the expansion and intensification of invisible underemployment. The open unemployment rate reflects both the extension (coverage) of the phenomenon and its intensity, since the openly unemployed, with a productive contribution of zero, are fully underutilized. The underemployment rate is an indicator of the extension of the phenomenon which does not reflect the degree of intensity of the underutilization affecting the underemployed, since the latter are employed at very low levels of activity but their productive contribution is not zero. The concept which takes into account the extension and the intensity of underemployment expresses the number of underemployed in equivalents of fully underutilized persons and is thus known as equivalent unemployment.[7, 8] Thus, the total underutilization rate is a result of adding the open unemployment rate to the equivalent unemployment rate.

The idea of utilized underemployment corresponds principally to employed persons in *activities with very low productivity*, which are unorganized, weakly integrated into the modern productive apparatus, and which have very little access to resources, little or no accumulation and incipient or backward technologies. This applies both in agricultural areas —where these activities are usually called

[5] Two of the most significant changes occurred in Venezuela and Ecuador, where there was a sharp acceleration in the growth of modern non-agricultural employment in the last decade. The favourable impact on the modern urban centre of the oil boom in the last decade is undoubtedly one of the explanatory factors of this acceleration period.

[6] Excluding Argentina, the regional figures are 26.3% and 40% respectively.

[7] For a summary of the operational definitions of these categories and the respective method of estimation, see PREALC, *Dinámica del subempleo...*, *op. cit.*, Methodological Annex.

[8] The expression of the number of underemployed in terms of the corresponding number of fully underutilized persons implies using a weighting system which reflects the average rate of underutilization of the underemployed persons.

traditional— and in non-agricultural areas, where there predominates what PREALC has been calling informal urban activities. As a result, there is a clear relationship between underemployment and the structural heterogeneity of the productive apparatus.[9]

The results of a recent study have made available the indicators of the phenomena initially mentioned for the period 1950-1980. This chapter presents some of its principal results and respective conclusions.[10] Table 3 illustrates the coverage and composition (agricultural and non-agricultural) of underemployment in 1950-1980, in the same 14 countries analysed in the previous section. Table 4 provides information on the rates of open unemployment, equivalent unemployment and total underutilization for the same period and group of countries. (It is interesting to note that the results which may be inferred from both tables justify the grouping of experiences mentioned in the previous section. *Group A* was defined as the series of experiences which had shown, in the period 1950-1980, a significant reduction in underemployment and total underutilization; *Group B* are those which did not experience this trend; and *Group C* reflected the situation of experiences whose structural data at the start and conjunctural situation at the end of the period suggested they should be analysed separately.) The principal conclusions which are interesting to note for the purpose of this study are the following:

1. For the region as a whole, the principal result is the slow rate at which the rate of total underutilization is reduced, and this is explained essentially by the persistence —although declining— of high levels of underemployment (coverage and intensity). Between 1950 and 1980, the total underutilization rate fell from 22.9 to 19.9%.

2. The aggregate behaviour of the region conceals situations and performances which are very differentiated. Group A shows a significant reduction in total underutilization, mainly explained by the clear decline in equivalent unemployment, although underemployment —coverage and rate— continued to be very high. Group B did not show any significant drop, and it has the highest rates of equivalent unemployment in the region. In both groups, the coverage and rate of underemployment are the principal determining factors of the rates of underutilization recorded. In Group C, the coverage and intensity of underemployment were much lower by 1950 than in the rest of Latin America, which explains why it shows a much lower underutilization. Open unemployment is, in this case, an important part of the explanation of the levels of underutilization shown. (In this group, the drastic reorientation of the economic policy models used in the last five years of the period alters the long-term trends, either on the level of open unemployment or on that of equivalent unemployment —or both— and it is an important part of the explanation of the results achieved at the end of the last decade.)

3. The above confirms that, for Latin America as a whole, open unemployment is not the principal form of underutilization. Nor does there seem to be any explosive and widespread trend with respect to the evolution of the open unemployment rate; if anything may be said in this respect, it is that in general, with occasional exceptions, there were no large fluctuations in the trends.

4. Table 3 points out an important aspect: the trend towards growing urbanization of underemployment. By 1950, 70% of those affected by underemployment were in agricultural activities; in 1980, this figure had been reduced to 53%. This reflects the rapid growth in the significance of what PREALC calls informal urban activities in the total EAP. It is the latter which explains why the coverage of non-agricultural underemployment —essentially urban— rose from 13.6% of the total EAP of Latin America in 1950 to 19.4% in 1980, while the coverage of agricultural unemployment fell from 32.5% of the total regional EAP in 1950 to 22.6% in 1980. As a result, the slow decline in underemployment is occurring in a context of a growing urbanization of this under-

[9] In the sense used by Aníbal Pinto. See this author, "Concentración del progreso técnico y de sus frutos en el desarrollo latinoamericano", in *El Trimestre Económico*, Mexico City, Fondo de Cultura Económica, January-March 1965, and also, in the same review, "Naturaleza e implicaciones de la heterogeneidad estructural de la América Latina", January-March 1970.

[10] PREALC, *Dinámica del subempleo..., op. cit.*

Table 3

LATIN AMERICA: COVERAGE AND COMPOSITION OF UNDEREMPLOYMENT, 1950-1980

(Percentages of EAP)

		Coverage of underemployment		
		1950	1970	1980
Group A				
Mexico:	Total	56.9	43.1	40.4
	(Agricultural)	(44.0)	(24.9)	(18.4)
	(Non-agricultural)	(12.9)	(18.2)	(22.0)
Panama:	Total	58.8	47.5	45.5
	(Agricultural)	(47.0)	(31.7)	(24.6)
	(Non-agricultural)	(11.8)	(15.8)	(20.9)
Costa Rica:	Total	32.7	31.5	27.2
	(Agricultural)	(20.4)	(18.6)	(14.8)
	(Non-agricultural)	(12.3)	(12.9)	(12.4)
Venezuela:	Total	38.9	42.3	31.5
	(Agricultural)	(22.5)	(19.9)	(15.1)
	(Non-agricultural)	(16.4)	(22.4)	(16.4)
Brazil:	Total	48.3	48.3	44.5
	(Agricultural)	(37.6)	(33.4)	(27.6)
	(Non-agricultural)	(10.7)	(14.9)	(16.9)
Colombia:	Total	48.3	40.0	41.0
	(Agricultural)	(33.0)	(22.3)	(18.7)
	(Non-agricultural)	(15.3)	(17.7)	(22.3)
Guatemala:	Total	61.0	54.3	50.9
	(Agricultural)	(44.8)	(37.0)	(33.1)
	(Non-agricultural)	(16.2)	(17.3)	(17.8)
Group B				
Ecuador:	Total	50.7	64.9	63.3
	(Agricultural)	(39.0)	(41.2)	(37.9)
	(Non-agricultural)	(11.7)	(23.7)	(25.4)
Peru:	Total	56.3	58.4	55.8
	(Agricultural)	(39.4)	(37.7)	(32.0)
	(Non-agricultural)	(16.9)	(20.7)	(23.8)
Bolivia:	Total	68.7	73.1	74.1
	(Agricultural)	(53.7)	(53.5)	(50.9)
	(Non-agricultural)	(15.0)	(19.6)	(23.2)
El Salvador:	Total	48.7	44.6	49.0
	(Agricultural)	(35.0)	(28.0)	(30.1)
	(Non-agricultural)	(13.7)	(16.6)	(18.9)
Group C				
Argentina:	Total	22.8	22.3	25.7
	(Agricultural)	(7.6)	(6.7)	(6.3)
	(Non-agricultural)	(15.2)	(15.6)	(19.4)
Chile:	Total	31.0	26.0	28.0
	(Agricultural)	(8.9)	(9.3)	(8.8)
	(Non-agricultural)	(22.1)	(16.7)	(20.1)
Uruguay:	Total	19.3	23.7	27.0
	(Agricultural)	(4.8)	(6.9)	(8.0)
	(Non-agricultural)	(14.5)	(16.8)	(19.0)
Latin America (14 countries)	Total	46.1	43.8	42.0
	(Agricultural)	(32.5)	(26.9)	(22.6)
	(Non-agricultural)	(13.6)	(16.9)	(19.4)

Source: PREALC, *Dinámica del subempleo en América Latina*, Santiago, Chile, CEPAL, 1981.

Table 4

LATIN AMERICA: OPEN UNEMPLOYMENT, EQUIVALENT UNEMPLOYMENT AND TOTAL UNDERUTILIZATION, 1950-1980

(Percentage of EAP)

	Equivalent unemployment rate			Open unemployment rate			Total rate of underutilization		
	1950	1970	1980	1950	1970	1980	1950	1970	1980
Group A							*24.7*	*23.0*	*19.7*
Mexico	22.4	15.3	12.7	1.3	3.8	4.3	23.7	19.1	17.0
Panama	27.8	18.2	13.0	9.3	7.7	7.3	37.1	25.9	25.8
Costa Rica	16.9	12.6	9.3	4.1	3.5	3.9	21.0	16.1	13.2
Venezuela	11.0	10.3	8.0	6.3	6.2	4.2	17.3	16.5	12.2
Brazil	20.2	21.4	17.0	3.4	2.5	2.9	23.6	23.9	19.9
Colombia	27.3	23.1	22.8	6.2	6.0	5.2	33.5	30.3	28.0
Guatemala	26.2	24.2	22.2	0.4	1.4	1.4	26.6	25.6	23.6
Group B							*35.9*	*37.7*	*36.3*
Peru	34.3	31.7	29.6	3.8	5.6	6.7	38.1	37.3	36.3
Ecuador	28.0	34.1	31.1	4.0	3.2	3.0	32.0	37.3	34.1
Bolivia	37.2	39.3	38.5	0.8	4.2	3.0	38.0	43.5	41.5
El Salvador	24.5	20.4	22.4	5.1	10.2	11.2	29.6	30.6	33.6
Group C							*8.5*	*7.7*	*8.4*
Argentina	2.2	2.5	2.2	2.8	2.4	1.8	5.0	4.9	4.0
Chile	12.6	9.2	9.7	5.2	5.7	10.0	17.8	14.9	19.7
Uruguay	5.3	4.2	6.6	6.0	6.7	6.0	11.3	10.9	12.6
Latin America (14 countries)	19.5	18.5	16.0	3.4	3.8	3.9	*22.9*	*22.3*	*19.9*

Source: PREALC: *Dinámica del subempleo..., op. cit.*

employment, which introduces qualitative differences and social implications which transcend what is reflected by the abovementioned quantitative indicators.

5. Another relevant aspect which may also be seen from table 3 is that the reduction in agricultural underemployment has been much more accentuated in Group A than in the rest of the region. This is important because the trend towards the urbanization of underemployment, which is present in the three groups, acquires a different meaning according to whether it is accompanied by very significant or not very significant reductions in the proportion of agricultural underemployment. We will return to this point in section IV.

6. In Group A two very well-defined patterns of reduction in underemployment were recorded. The first was characterized by a very significant drop in agricultural underemployment accompanied by a partial transfer of the latter to urban areas; such are the experiences of Mexico, Panama, Brazil and Colombia. The second is characterized by a decline in agricultural underemployment, without an increase in the relative weight of non-agricultural underemployment, such as in Costa Rica and Venezuela.[11, 12]

[11] The Experience of Guatemala shows a pronounced decline in agricultural underemployment accompanied by a small increase in the relative weight of non-agricultural underemployment.

[12] It should be pointed out that Venezuela initially shows a considerable transfer of agricultural underemployment to urban areas, as can be seen by observing the data for 1970 in table 3. Subsequently, at the beginning of the 1970s, there was accelerated reabsorption of non-agricultural underemployment, as a result of the rapid expansion of modern urban activities stimulated by the oil boom.

7. A fact which should be pointed out is that the greater success of Group A in reducing the coverage and rate of underemployment is not explainable by a slower growth in its labour force. All the experiences of Group A —except Guatemala— show equal or higher growth rates in the total EAP and the urban EAP than those recorded by Groups B and C. In particular, the two experiences which show the greatest reductions in underemployment and total underutilization —Costa Rica and Venezuela— are also those which show the highest rates of total EAP growth and urban EAP growth in Latin America. (This does not mean that the behaviour of the labour supply does not have an influence on the evolution of underutilization, but that it is not an explanatory factor in the differences in performance between groups with respect to the reabsorption of underemployment.)

III

Differences in productivity and resource requirements

The higher the difference in the total resources necessary to generate jobs in modern activities *vis-à-vis* traditional activities, and the higher the proportion of the employed EAP in the latter, the greater the pressure on the resources required by the transfer of the bulk of the traditional EAP to more productive activities. The gradual incorporation of new population contingents into more productive occupations helps to raise productive potential and thus makes it theoretically —but not necessarily— possible to reproduce additional resources. This latter is undoubtedly a way of dealing with the greater pressure on resources required by the long-term process of transferring labour. But it is useful to keep one fact in mind: the expenditure of resources necessary to allow for the absorption of a new contingent of labour in modern activities —or at least a large proportion of the latter— must necessarily be implemented *before* the possible reproduction of new resources coming from the greater productivity of those recently transferred can take place. As a result, the financing of this initial expenditure, period to period, depends on the amount of surplus per employed person accumulated previously in the modern sector, or rather, on the part of this surplus which is not devoted to other uses. (It should be recalled that essentially we are dealing with the surplus generated by those who are already employed in the modern sector.) In a dynamic perspective, the process described has a problem: the greater the resource requirement per worker to be transferred, in relation to the available portion of the surplus of the modern sector, the greater the historical period required to transfer a given proportion of the EAP. (Incidentally, note that another factor affecting the length of time is the destination or use of the surplus: the greater its non-productive use, the lower the proportion of the surplus generated, period to period, which may be used to cover the resource requirements of the transfer process.)

As a result, the expenditure of resources required to implement the transfer continues to be great, even in a dynamic perspective which accepts the greater productivity of the use of resources in modern sectors, because it is one of the factors which influence the *amount of time* necessary to complete the transfer. In this perspective, it is not the total amount of resources required to create a job in modern activities that matters, but rather the *difference* between the latter and the amount of resources required to create a job in traditional activities.

In the context of a process of long-term transfer of labour from traditional agricultural activities to modern non-agricultural activities, the notion of resources required for the transfer[13] transcends the well-known concept of dif-

[13] The difference between the resource requirements for generating jobs in modern activities for that proportion of the labour force and the resources required to generate jobs in traditional activities.

ferences in investment per employed person between modern and traditional activities. As an example, one may reflect on the fact that the gradual transfer of a given proportion of the EAP from agricultural activities to modern industry implies dealing with significantly more than the already high difference between the respective capital-labour relations.[14] It implies meeting the greater resource requirements of the differences in productive infrastructure, without which modern industry could not operate. It also requires taking into account the differences in social infrastructure in urban areas *versus* traditional rural areas, and their implications in terms of resources. Finally, it requires commiting resources to satisfy the differences in per capita consumption between the level associated with the new occupations in modern activities and that prevailing in traditional rural areas. One part of this greater consumption by the population group transferred is required for reasons of *functionality* at the higher levels of productive efficiency of modern activities.[15] Another part is explained by the social pressure to identify with the urban patterns of consumption and the legitimate desire to participate in the fruits of the greater productivity achieved.

Thus, the difference in resources required to generate jobs in modern activities *vis-à-vis* traditional activities is not only a result of trends in technology and scale of plants in modern industry *versus* those predominating in traditional agriculture, which already in themselves lead to sharp differences in investment per person. It is also a result of a series of phenomena —with their corresponding expression at the level of resource use— which are indispensable if the modern activities are to develop, function more or less efficiently and retain the labour necessary in a form which is functional for their development.[16] As a result, different variants of models or styles of development of modern activities may lead to different resource requirements for the transfer, even in a similar historical and technological context.

There are no indicators available which, if added to the incidence of the diversity of phenomena mentioned, would reflect the difference in resource requirements for generating employment in modern non-agricultural activities in Latin America in the period 1950-1980. Nevertheless, if we accept that the differences in productivity between modern and traditional activities express, to some extent, differences in resource requirements per person, we have, in a broad sense, an indirect indicator, especially in understanding the evolution of the phenomenon discussed.[17] Although in reality the difference in resource requirements per employed person might be *lower than* the difference in productivities between modern and traditional activities, the relevant point is whether the evolution of the respective productivities is an acceptable *proxy* for the long-term behaviour of this difference in resource requirements.[18] If this hypothesis is correct, the

[14] Even at the level of the units of production, there are additional expenditures of resources involved in the transfer which transcend the notion implied in a capital-labour relationship. Accordingly, technology and know-how are not free goods, and this cost is present in the transfer. Similarly, the type of efficiency required by a modern productive process makes it necessary to organize the plant and allocate resources for a continual and ongoing system of apprenticeship and on-the-job training.

[15] And, in this sense, it would be required for the process of labour transfer. A modern plant requires behaviour, habits and permanent labour contracting which are difficult to achieve without this greater consumption, both for reasons of incentives and because it is materially required in order to develop this behaviour.

[16] This is one of the principal factors which is usually ignored when, in analysing the resource requirements for transferring labour to more productive activities, it is concluded that it is just this greater productivity that will make possible the real financing of the effort. As observed, the pressure on the resources is much greater than the initial investment effort alone in the modern plants. And, perhaps more important, the commitment of resources involved is implemented *before* the modern plant can reproduce, with its production flow, the financing of *all* the expenditure of resources involved. In other words, although the modern sector may operate with high productivity of the resources invested and a high saving coefficient, the *amount* of the initial requirements and the *delay* in time between the initial requirement and the implementation of the new flow of production implies real saving needs which necessarily bring pressure to bear on the product and saving capacity in the modern activities which *are already in operation*. The contribution of these new activities may be high, but it requires *time* to materialize. Thus, this process begins to introduce a *limitation of resources* which is not absolute but rather temporary, from period to period.

[17-18] To avoid confusion, it is worth clarifying the meaning of the above. In more technical terms, the significance of a limited process of technological spread —particularly technological progress which is not incorporated in capital

increase over time in the already originally high *difference* in productivities could be accepted as an indicator that the difference in resource requirements per employed person tends to rise in the period analysed.[19, 20] This would imply accepting a growing expenditure of resources during the period, for the transfer of labour from traditional agricultural areas to modern non-agricultural activities, which would have acted as a restriction, extending the length of time necessary to implement the absorption of the bulk of the traditional EAP.

The relevant difference in productivities which could act as *proxy* is that between modern non-agricultural strata and traditional agricultural strata.[21] This implies studying the evolution of the productivity between modern and traditional strata, and identifying the respective segments in each sector. Information is not yet available for the Latin American countries as a whole which would make it possible to estimate the long-term evolution of productivity among strata. Nevertheless, it is possible to infer something from the long-term evolution of the inter-sectoral difference in productivity by taking into account the probable trends in the modern segments in terms of product and employment, within the productive sectors being compared. Thus, by comparing the 1950-1980 evolution in non-agricultural productivity with agricultural productivity, if there is an increase in the difference in productivities it may be concluded that the difference in productivities between the *modern* non-agricultural activities and the *traditional* agricultural activities has increased even more, since (i) in the non-agricultural sector the increase in the share of modern activities in the product was greater than their share in employment; (ii) it is not likely that productivity in traditional agricultural activities has grown more rapidly than agricultural activity; on the contrary, the opposite would be expected.

goods— would lead to the assumption that: (i) differences in productivity would not necessarily be explained by the differences in the capital-labour relations between modern strata and traditional agricultural strata; and (ii) the difference in the growth rate of the respective productivities would not necessarily be explained by the difference in the growth rate of the respective capital-labour relations. But this *is not* the point under discussion; the text emphasizes the difference in resource requirements in general, not only capital requirements, and thus it does not focus attention on capital-labour relations but rather on the resource relationship in general, per employed person, in modern *versus* traditional strata. In this sense, technological progress, even that which is not incorporated in capital goods, brings pressure to bear not only on the capital of the modern establishment that incorporates it, but *also* on a wide range of additional functional resources required for its absorption with a minimum of efficiency. There is thus a need for apprenticeships and on-the-job training, know-how and management capacity, whose generation implies a cost in resources. Furthermore, the absorption of technical progress in a modern establishment, for it to yield a minimum of efficiency and result in increases in productivity, requires *surroundings* and a *context* that are functional to this process; it requires habits of behaviour and discipline within the establisment and *outside* of it. It necessitates a certain standard of living for those working in the establishment and for those working *outside* the establishment whose work is vital to the former for reasons of interaction (and this both for reasons of yield and for reasons of incentives). It thus requires a productive and socially functional infrastructure, and a standard of living and training for the workers inside the modern establisment and for those workers outside the establisment with whom the former interact. As a result, reaching a given level of productivity in modern *versus* traditional strata is not only a problem of more per capita capital invested in the establishment of this stratum, it is also —basically— a problem of reproducing *surroundings* or a *context* where the modern establishments are inserted, and without which the increases in productivity would not be realized with the same intensity. Thus, the significant point is not the difference in capital-labour relations between the modern establishments and traditional ones; what is relevant is the general pressure on resources required to employ a person in one context or the other. It is in this sense that the differences in productivity are more acceptable as *proxy*.

[19] Or they are not decreasing at the speed necessary to have a decisive impact on the rate of job creation in the modern sector within a reasonable period of time.

[20] Even recognizing a long-term increase in the productivity of the resources in modern activities, the above implies accepting that the *difference* between the growth in productivity and the growth in per capita resources in these activities is very low, and that the increases in the productivity of the resources in modern activities is very slow.

[21] Relevant in the sense of the high proportion of the labour force which was and is to be transferred from one to the other sector in Latin America. It would be theoretically possible today to identify some activity, in an advanced economy, whose productivity when compared with that of the modern activities shows a *similar* difference to that shown in Latin America between modern non-agricultural activities and traditional agricultural activities. But the relevant point is that the labour force employed in this particular activity would be a *tiny* proportion of the labour force of the modern sector. This is not only a problem of differences in productivity and requirements but also the size of the transfer and the proportion of the labour force employed at low levels of productivity which is to be transferred.

Table 5 provides some data on the evolution, from 1950 to 1980, of the *difference* between agricultural and non-agricultural productivities in the 14 Latin American countries analysed in this study. In Latin America, agricultural productivity was exceptionally low in 1950 in comparison with non-agricultural, in relation to the experience of today's advanced countries in a similar phase of the displacement of their respective EAPs.[22] For the region as a whole the *difference* in productivities —equivalent in 1950 to four times the agricultural productivity of the base year— has grown significantly over the three decades. In 1980, it totals an equivalent of 7.5 times the agricultural productivity of the base year.[23] This result for the region as a whole is representative of what occurred in practically *all* the countries, since, with the sole exception of Argentina, all show increases in the difference in productivities in the period 1950-1980.

As a result, if we take the statement of the previous paragraph as an indicator of what occurred with respect to the difference in resource requirements per person, we could conclude that, over the period 1950-1980, the expenditure of resources implied in the transfer of a given contingent of agricultural EAP tended to increase significantly (for the region as a whole, at a rate of 3% annually). But if we also admit that modern non-agricultural productivity grew during this period at a higher rate than total non-agricultural productivity, and that traditional agricultural productivity did so at a lower rate than total agricultural productivity, then the expenditure in resources required for the transfer of a given contingent of the EAP to modern non-agricultural activities must have grown at substantially higher rates than what would be suggested by the increase in the difference in productivities shown in table 5 (thus, at rates much *higher* than 3% annually for the region as a whole).

A complementary aspect of the above is related to the importance which the expenditure of resources might have had in the process of transfer as a limiting factor for the absorption capacity of the modern non-agricultural segments. An indicator which suggests that this must have been significant is the fact that the difference in productivities between non-agricultural and agricultural, as a proportion of non-agricultural productivity, rose in 1950 to 79% for the region as a whole, excluding Argentina[24] —which implies that as a proportion of the surplus per person employed in non-agricultural activities, the percentage must have been much higher— when, as mentioned, the share of the modern non-agricultural sectors in total employment was relatively low that year. In 1980, the difference in productivities continued to represent 78% of non-agricultural productivity, but now with a much greater relative weight of the modern non-agricultural sectors. All this suggests that the expenditure of resources involved in the process of transfer must have played an important role, but with the passage of time the growth of the productive potential of the modern segments generated a greater possibility of covering this expense.

All the above leads to one conclusion. Both the initial size of the difference in resource requirements per employed person and their probable trends in the period 1950-1980 are phenomena which have influenced the rate of absorption of labour in the modern segments of Latin America. It is therefore particularly relevant to bear in mind that the experiences of today's advanced countries, in similar phases in the evolution of their respective job struc-

[22] Latin America does not show —as did the majority of today's advanced capitalist economies in their time— a massive and complete productive transformation of the agricultural sector which precedes or accompanies the development of the modern non-agricultural strata. As a result, part of the explanation of the relatively high differences in requirements is that in Latin America, because of the relatively low level of productive transformation, agricultural activities require a low level of resources —in a broad sense— to generate jobs.

[23] Recall that since it is a question of a *proxy* for the behaviour of the *absolute difference* between the resources requirements per person employed in modern activities and those corresponding to traditional activities, the significant point is the *difference* in productivities at the start of the period, and the evolution of this difference through time.

[24] If we accept the difference in productivities (non-agricultural, agricultural) as a *proxy* for the resource requirements associated with the transfer of labour from traditional areas to modern non-agricultural activities, it is relevant to note that the productivity in the latter is also an indicator of the per capita productive potential, from which the real financing is obtained to cover these requirements.

Table 5

LATIN AMERICA: DIFFERENCES BETWEEN AGRICULTURAL AND NON-AGRICULTURAL PRODUCTIVITIES, 1950-1980[a]

(Agricultural productivity in 1950 = 100)

	Agricultural productivity		Non-agricultural productivity[b]		Difference between non-agricultural and agricultural productivity	
	1950	1980	1950	1980	1950	1980
Group A						
Mexico	100	260	770	1 507	670	1 247
Panama	100	175	244	432	144	257
Costa Rica	100	213	294	498	194	285
Venezuela	100	412	1 000	1 336	900	924
Brazil	100	242	752	1 837	669	1 595
Colombia	100	265	233	409	133	144
Guatemala	100	192	400	611	300	419
Group B						
Peru	100	154	500	758	400	604
Ecuador	100	166	278	662	178	496
Bolivia	100	155	769	964	669	809
El Salvador	100	143	303	406	203	263
Group C						
Argentina	100	235	192	285	92	50
Chile	100	174	370	650	270	476
Uruguay	100	141	151	272	51	131
Latin America (14 countries)	100	216	500	967	400	751
Latin America (excluding Argentina)	100	234	481	1 067	381	833

Source: Based on figures on the gross sectoral product provided by the CEPAL Statistics Division, and data on the sectoral EAP provided by PREALC.

[a]Productivity defined as product per economically active person.

[b]Includes mining.

tures, do not show a very pronounced initial difference in productivities, nor is the long-term behaviour of this difference of the same intensity as that of the Latin American experience —which would suggest that the expenditure of resources involved in the transfer plays a less significant role as a limiting factor in the absorption capacity of their respective modern segments.[25]

[25]As shown in table 5, in Latin America the relationship between non-agricultural productivity and agricultural productivity remains practically constant in the long term; it went from 4.8% to 4.6% between 1950 and 1980. As an illustration of the discussion in the text, let us recall that in the United States the same relationship drops from 3.8% to 2.1% between 1870 and 1903. In Sweden, the relationship declines from 2.3% to 1.7% between1891 and 1920. See C. Clark, *The Conditions of Economics Progress*, London, MacMillan & Co. Ltd., 1951; S. Kuznets, "Quantitative Aspects of the Economic Growth of Nations: II. Industrial Distribution of National Product and Labour Force", in *Economic Development and Cultural Change*, Chicago, Research Center in Economic Development and Cultural Change, July 1957, supplement to volume V. (Quoted by V.E. Tokman, *Desarrollo desigual y absorción de empleo (América Latina 1950-1980)*, Santiago, Chile, PREALC, 1981; preliminary draft.)

Obviously, behind the high and still growing resource requirements for employing labour in the modern sectors lies the problem of the composition of investment by destination which, as already implied, responds to the characteristics of the models or styles of development current in the region in the period analysed, in the same way that other characteristics of the same styles explain the use of resources and the behaviour of productivity in traditional agricultural areas. It is not the purpose of this study to discuss relevant interpretations in this respect. But it is important to point out one implication: both the high difference in resource requirements involved in the process of absorption in modern areas, and the problems of composition of investment within these areas, would lead to the hope that the effort at capital formation to carry out the transfer of the bulk of the EAP to modern activities should be more intense and prolonged than has been shown by today's advanced economies during their respective processes of change in their occupational structures.

As a result, both points —high and still growing difference in resource requirements per person between modern activities and traditional agricultural activities and problems of composition of investment within the modern sectors— are *part* of the explanation of why, despite the strong efforts at capital formation made by Latin America between 1950 and 1980, they have been insufficient to absorb all the labour transferred from agricultural activities to the modern segments. In other words, even experiences which generate a surplus amount and show a higher accumulation rate than those of today's advanced economies in the period of transfer of the bulk of their EAP to modern activities may require longer periods of time to complete this process if the impact of this higher rate of accumulation is mediatized by the two factors mentioned above.

It is thus understandable why many of the countries analysed in this study, with gross investment coefficients and economic growth rates in the period 1950-1980 which place them at the level of or even above the record of today's advanced countries in the corresponding transition period, do not manage to absorb all the displacement of the active population from the agricultural sector in their modern segments.[26]

A glance at table 6 will show that all the countries of Group A —except Guatemala— are moving towards high investment coefficients in the period.[27] In some cases, they even *begin* the period with *higher* investment coefficients than the maximum reached by today's advanced capitalist economies in their respective transition phases and *maintain* the effort for 30 years. (See, for example, the cases of Brazil and Venezuela.)

In Group B —except Peru in the first half of the period— all the countries show —in 1950-1980— a lower investment effort than that shown by Group A, despite the increases in their respective coefficients in the last decade, once again excepting Peru.

Group C —as mentioned, with a much more advanced process of EAP transfer to modern sectors and lower EAP and urban EAP growth rates than the rest of Latin America— tend to exhibit a relatively less effort at capital formation than Group A (even though the long-term trend shows significant changes in the latter part of the period in some of the countries of this group, which makes it difficult to draw conclusions).

As a result, although the countries of the region showing a significant reduction in underemployment and higher growth rates of employment in the modern non-agricultural sectors (Group A) in 1950-1980 are the same ones which show relatively greater efforts in the area of gross investment, it is nonetheless true that after 30 years of such efforts —very strong by international standards— they do not manage to absorb all the EAP displacement of the period in their modern segments.

[26]From 1870 to 1900, the United States shows a similar growth rate in the EAP and a process of urbanization similar to those of Latin America since 1950. It is also the country which, in the period of transition, showed the greatest efforts at capital formation. Between 1870 and 1910 its investment coeffcient grew from 19% to 23% of the product, later to decline and stabilize after 1920 around 16%. All the other capitalist experiences of the period have *lower* long-term investment coefficients than those of the United States, but they also have lower total EAP growth rates and urban EAP growth rates than those of the United States.

[27]High in relation to the experience of today's advanced countries in the equivalent transitional phase.

Table 6

LATIN AMERICA: EVOLUTION OF THE GROSS INVESTMENT COEFFICIENT WITH RESPECT TO THE GDP, 1950-1980[a]

	Five-year periods					
	1950-54	1955-59	1960-64	1965-69	1970-74	1975-79
Group A						
Mexico	17.6	17.8	18.7	21.0	21.3	22.2
Panama	14.0	16.6	17.9	21.6	27.5	22.4
Costa Rica	17.4	18.8	18.6	20.2	22.1	26.5
Venezuela	47.0	42.9	26.1	26.8	30.6	41.4
Brazil	23.9	22.8	21.9	22.7	26.8	29.8
Colombia	24.2	24.2	21.5	20.5	20.5	19.1
Guatemala	10.2	15.6	11.3	12.8	13.1	16.5
Group B						
Peru	24.2	22.6	19.6	18.4	15.6	15.4
Ecuador	11.3	13.6	12.6	12.5	21.4	22.8
Bolivia	10.1	13.4	14.2	17.3	17.7	20.5
El Salvador	11.3	12.2	14.7	15.4	15.6	19.8
Group C						
Argentina	15.2	14.8	18.7	17.9	20.2	20.6
Chile	15.1	14.4	15.4	15.1	13.1	9.0
Uruguay	17.5	13.3	12.5	9.8	11.0	14.8

Source: CEPAL, Statistics Division.
[a] Five-year coefficients, simple average of the annual coefficients, in percentages.

As expressed in the previous paragraphs, it is not incompatible to say that the investment coefficients of Group A were *high* but at the same time *insufficient* to absorb all the transfer of labour from agricultural areas. But by presenting it in this way, one implicitly adopts an approach which places all the emphasis for the explanation of the long-term adjustment process on the *amount* of capital formation. If the two factors mentioned above are introduced —high and still growing difference in the resource requirements needed to generate jobs in modern activities *versus* traditional activities and problems of composition or destination of investment *within* the modern activities— the explanatory emphasis changes and now includes other phenomena, closely associated with the implications of structural heterogeneity[28] with respect to the use and generation of resources. Both the sharp difference in resource requirements for generating employment in modern activities *versus* traditional activities —and their rapid growth— and the problems of the composition of investment within the modern segments are phenomena which are closely associated with the heterogeneous nature of the productive structure and with the maintaining of this nature as an essential feature throughout its development (thus, to say that Latin America shows a much higher difference in resource requirements for generating employment in modern strata *versus* traditional strata than that shown in their time by today's advanced capitalist economies, and to recognize that the long-term evolution of this difference was very dissimilar in the two cases, is equivalent to accepting that Latin America has had a much more pronounced heterogeneity which has lasted a much longer time historically, than that of today's advanced economies (as a result, it is not only a problem

[28] In the sense expressed by Aníbal Pinto in "Concentración del progreso...", *op. cit.*

of insufficient capital formation —more clearly perhaps in the countries of Group B— but essentially of the greater or lesser homogeneizing effects which might result from the long-term evolution of a given composition and destination of resource use in general and the structure of investment in particular.

IV

Additional reconciling factors

Section II presented a hypothesis to explain why a significant investment effort leads to a high absorption of labour in modern non-agricultural strata, but that it is insufficient to neutralize the quadruple impact of: (i) natural growth of the urban labour force; (ii) rural-urban migration; (iii) behaviour of the urban rates of participation; (iv) initial size of urban underemployment. The framework of the situation as perceived in the non-agricultural area is a very high growth of employment in modern non-agricultural strata, accompanied by a significant growth in underemployment. In this section, we will discuss three phenomena which need to be taken into account in any explanation which tries to reconcile the different hypotheses under discussion: (i) growth of the urban EAP; (ii) initial weight of the modern non-agricultural strata; (iii) employment in the modern agricultural strata.

1. *Growth of the non-agricultural EAP, 1950-1980*

Table 7 summarizes the information on the growth of the total EAP and non-agricultural EAP in the period under analysis. From this it can be seen that between 1950 and 1980 the total EAP —excluding Argentina— grew at a rate of 2.5% annually. Even more important, the non-agricultural EAP —excluding Argentina— increased at a rate of 4.1% annually, reflecting the triple impact of natural urban growth, rural-urban migratory pressure and the behaviour of the rate of participation. In particular, the countries in Group A show a *higher* average growth in their non-agricultural EAP than the Latin American average, or approximately 4.4% annually.

The first relevant fact is that the growth of the labour force and, in particular, that of the non-agricultural labour force, was very high during the period. Undoubtedly, it was much higher than the respective growth of the labour force —total and non-agricultural— of today's advanced European countries in their respective phases of change in their occupational structures. But with respect to the United States, the results of the comparison are different: from 1870 to 1903, the annual growth of the United States labour force was 2.4% on average annually, a figure similar to that of Latin America in 1950-1980, and slightly lower than that of Latin America excluding Argentina.[29] In the period 1870-1903 annual growth in the United States urban labour force totalled 3.7%, a similar figure to that shown for Latin America, but significantly lower than that of Latin America excluding Argentina (4.1%), and still lower than that of Group A (4.4%). As a result, if we exclude Argentina, the growth of the *non-agricultural* labour force in Latin America in 1950-1980 appears to have been *higher* than that of the United States in the relevant period of comparison; and here it should be recalled that among today's advanced economies, that of the United States had the highest rate of non-agricultural EAP growth during the period of change in its occupational structure.

[29]The period 1870-1903 was chosen because during this period the proportion of the agricultural labour force as a percentage of the total fell from 55% to 35% in the United States, showing similar figures to those of Latin America between 1950 and 1980. See V.E. Tokman, *Desarrollo desigual...*, *op. cit.* The figures cited, as well as those used in the text, come from S. Lebergott, *Manpower in Economic Growth: The American Record since 1800*, New York, McGraw Hill, 1964.

Table 7

LATIN AMERICA: GROWTH OF THE EAP, 1950-1980

(Annual cummulative average rates, in percentages)

	EAP total	*Non-agricultural EAP*
Group A		
Mexico	2.5	4.5
Panama	2.7	3.9
Costa Rica	3.2	4.8
Venezuela	3.1	4.6
Brazil	2.8	4.4
Colombia	2.4	4.1
Guatemala	2.5	3.7
Group B		
Peru	2.1	3.8
Ecuador	2.7	3.9
Bolivia	1.5	3.3
El Salvador	2.7	4.0
Group C		
Argentina	1.4	1.9
Chile	1.6	2.2
Uruguay	0.8	1.0
Latin America (14 countries)	2.4	3.7
Latin America (excluding Argentina)	2.5	4.1

Source: PREALC estimates.

It is in the above-mentioned sense that it may be asserted that the long-term growth of the non-agricultural labour force in the relevant countries of Latin America[30] was more intense in 1950-1980 than that of the advanced European and United States economies in the past.

A second aspect of interest arises from the contrast between the second column of table 7 and the first column of table 1. From this it may be inferred that in Latin America, excluding Argentina, the growth rate of employment in *modern* non-agricultural activities was *slightly higher* than the growth rate of the non-agricultural EAP (4.2% as against 4.1%). In particular, in all the countries of Group A the growth rate of modern non-agricultural employment exceeded the growth rate of the non-agricultural EAP, except in Brazil, where the two are equal. In all the countries of Group B the same occurs —except in Ecuador where the growth rate of non-agricultural employment is lower.

Thus, although in most of the countries of the region the growth rate of the non-agricultural labour force was *higher* than that of the United States and today's advanced economies of Europe, the expansion of the modern strata generated a modern non-agricultural employment growth rate which was equal to or higher than that of the respective labour force.

2. *Initial weight of the modern non-agricultural strata*

To evaluate the incidence of the growth rate of modern non-agricultural employment *versus* the growth rate of the non-agricultural labour force, it is relevant to take into account the relative *initial* weight of the two. For Latin America —excluding Argentina—, as shown in table 2, the weight of modern non-agricultural employment in 1950 was 26.3% of the total EAP, while the non-agricultural EAP represented nearly 40% of the total EAP that year. As a result —and this is a factor which is not usually taken into account— even though modern non-agricultural employment grew in 1950 at a slightly higher rate than that of the non-agricultural EAP, the significant point is that the respective growth rates operated on very different bases or amounts, the first being only two-third of the second. Accordingly, the *absolute annual increases* in modern non-agricultural employment were *lower* than the *absolute annual increases* of the non-agricultural labour force, which explains the raising trend in non-agricultural underemployment. Naturally this is not an explanation of the trends recorded, but it does make it possible to reconcile the trend in non-agricultural under-

[30] As explained in section II, the study centres its attention on the process of long-term transfer of labour from the agricultural sector to non-agricultural sectors. Given the fact that by 1950 Argentina had already completed the bulk of this transfer —in that year, only 27.5% of its EAP was in the agricultural sector— it is fair to exclude Argentina from the series of countries of the region, especially for international comparisons.

employment with the rapid growth of modern non-agricultural employment.

3. *Employment in modern agricultural activities*

A third relevant factor to be taken into account is the evolution of the relative weight of the modern agricultural strata. For Latin America as a whole, from 1950 to 1980, this fell from 22.2% to 12.3% of the total EAP. All the countries of Group A —except Panama— and all the countries of Groups B and C show a significant decline in their share of the *modern* agricultural strata in the total EAP. In *relative* terms, this reduction is more important than that shown in the *traditional* agricultural strata, whose share dropped from 32.5% to 22.6% of the EAP of Latin America in the same period.[31] Thus, although high growth rates of modern non-agricultural employment are shown, accompanied by high growth rates in the non-agricultural EAP —with the resulting rise in urban underemployment— the results in regard to *total* underemployment may vary according to the greater or lesser capacity for retaining labour shown by the modern agricultural strata *vis-à-vis* the traditional agricultural strata. Thus, the countries of Group B —except Ecuador— are characterized by having shown a *higher* growth rate of modern non-agricultural employment than the growth of the non-agricultural EAP, but with a drop in the proportion of the agricultural EAP in the total EAP, which is explained more by the decline in modern agricultural employment than by that of traditional agricultural employment. Consequently, in these experiences the high growth of modern non-agricultural employment co-exists with the continuation of a significant proportion of agricultural underemployment.

V

Conclusions

It is now possible to draw together the various elements described in the preceding sections to obtain a more integrated view of their incidence:

1. The countries in Group A, during the period 1950-1980, showed the greatest investment efforts in Latin America, at a comparable level and in some cases higher than those of the United States and the European experiences during their respective processes of change in their occupational structures. This group also shows the highest growth rates of modern non-agricultural employment—in the range of 4.2% to 5.2% annually over 30 years—, and these are higher than the respective growth rates of the non-agricultural EAP in all the members of the group. The group is also characterized by a higher retention of employment in modern agricultural activities.[32] This clarifies why this group shows a significant reduction in the total underutilization rate between 1950 and 1980, essentially due to the slow but continual decline in total underemployment. In particular, one of the characteristics of this process is the sharp reduction in agricultural underemployment, at a faster rate than total underemployment.

2. In addition, Group A is characterized by having shown the highest rates of non-agricultural EAP growth in the region between 1950 and 1980, in a range of 4.0% to 4.8% annually, with a group cumulative average of 4.4% annually over the 30 year period. Among today's

[31]For a description of what occurred in the relative proportion of the modern and traditional agricultural EAP in the countries of the region, see PREALC, *Dinámica del subempleo..., op. cit.*, table 1 and section B of the annex to chapter II.

[32]Except for two experiences —Venezuela and Costa Rica— which showed a sharp decline in the relative share of modern agricultural employment in total employment; but in both cases, it is neutralized by the high absorption of the modern non-agricultural strata, without any consequences in terms of non-agricultural underemployment.

advanced countries, there is simply no experience whatever which has such a record. (As can be seen, the country which showed the highest growth rate of the non-agricultural EAP in its period of change in occupational structure was the United States, with a rate of 3.7% annually between 1870 and 1900.) Thus, the pressure of the labour supply in the countries in Group A acquires special significance in explaining what occurred in these experiences. At the same time, the initial weight (1950) of the modern non-agricultural strata in total employment was, in the countries of the group fairly low —slightly higher than the already mentioned average of 26.8% for Latin America excluding Argentina— and substantially lower than that of non-agricultural employment in total employment. (Accordingly, although the high rates of modern non-agricultural employment growth remained slightly above the growth rate of the non-agricultural EAP in the period, the difference in the relative initial weight explains why the absolute increase in modern non-agricultural employment was *lower* than the absolute increase in the non-agricultural EAP.) Finally, all the countries of the group had a much higher initial degree of structural heterogeneity than that of the experiences of today's advanced countries and, between 1950 and 1980, different —and more unfavourable— trends in this area than those shown in the above-mentioned experiences during comparable historical periods. This tended to be expressed in a much higher resource requirement for dealing with the transfer of significant proportions of the EAP to modern strata, in comparison with a comparable period in today's advanced countries. These higher requirements mediatized the impact of the great investment effort on the absorption capacity of modern strata, operating as a break on the speed of this process.

The three factors above led to pressures in the direction of *prolonging* the period of time required to complete the process of absorption of the bulk of the EAP in modern non-agricultural strata which were substantially stronger than those experienced by today's advanced countries.

3. If we now analyse the interaction of the factors described in the first and second paragraphs, we see that Group A's high rates of absorption in modern non-agricultural strata is perfectly reconcilable with the declining presence of serious underemployment problems. In particular, the growing importance of non-agricultural underemployment —or expansion of informal urban activities— is also explainable as an expression of the imbalance between absorption into modern non-agricultural activities and strong supply pressures.

4. With respect to Group B, the relative investment effort during the period 1950-1980 is substantially lower than that of Group A, and so are the employment growth rates in the modern non-agricultural strata —in this case, in the range of 3.0% to 4.2% annually. This group does not show as sharp a reduction in agricultural underemployment as Group A, a fact which is partly explained by the higher proportion of labour in the agricultural sector. Nor is there retention of employment in *modern* agricultural activities; on the contrary, the latter have lost relatively more significance in total employment than in Group A.

In addition, Group B shows lower non-agricultural EAP growth rates in 1950-1980 than Group A —they are closer to those shown by the United States in 1870-1900—, but the initial weight (1950) of the modern non-agricultural strata in total employment is substantially lower than the already low levels of Group A. Group B also shows the influence of structural heterogeneity on resource requirements; and one might speculate here that this must have been even more accentuated in this group than in Group A.

5. What is described in point 4 explains why, in Group B also, it is perfectly reconcilable that there should be a significant growth of employment in modern non-agricultural sectors —although less intense than in Group A— along with a persistence of high levels of underutilization, which are higher than those of Group A and not declining. As a result, unlike Group A, the reconciliation of the initial hypotheses of this study acquires, in this case, a different character: the absorption in modern non-agricultural strata is slower, and the total underutilization rate does not show any significant reduction. Underlying this last piece of information is the fact that the growing urban-

ization of underemployment takes place in this group *without* the same reduction in agricultural underemployment as in Group A. In other words, the imbalance between absorption in the modern non-agricultural strata and supply pressures occurs in the framework of very high contingents of labour surplus still retained in the agricultural sector.

6. The special characteristics of the countries of Group C, especially the change in long-term trends produced by the drastic modification of the strategic growth models adopted by them in the second half of the past decade, prevent us from making the same analysis of the long-term process as was discussed for the two previous groups. In any case, the different character of the problem faced may be emphasized, because these experiences have made much more progress than the rest of the region in the process of transfer of labour to modern strata, inasmuch as they present a total EAP and non-agricultural EAP growth rate which is significantly lower than that of the rest of Latin America, and they have been functioning with a considerably lower level of expansion and intensity of underemployment than the regional average. Even so, they are not an exception to the generalized trend towards a growing proportion of urban underemployment.

7. An additional point which can legitimately be introduced is related to the growing degree of urbanization of underemployment, even in those experiences which show a decline in total underemployment. One might reflect that a change in the composition of underemployment in the direction mentioned might be judged as an improvement in the standard of living of those affected, to the extent that the intensity and characteristics of agricultural unemployment make it a more difficult situation. On the other hand, the hardships arising from underemployment become more intolerable for persons who have to endure them in an environment in which the fruits of abundance are more clearly visible, such as in the urban environment. But the main point on this refers to the greater or lesser social productive contribution which this change assumes. And on this subject it is not at all clear that the social productive contribution of an urban underemployed person is much greater than that of a rural underemployed person. Nevertheless, it is undoubtedly a factor whose consideration is becoming decisive for those who are trying to appraise the progress made in the past decades in this area.

8. Lastly, it is feasible to integrate all the discussions of the previous paragraphs to reflect the predominant trend in Latin America as a whole. Essentially, this summary will be limited to pointing out, as the principal features of the period 1950-1980, a significant growth in the absorption capacity of the modern non-agricultural strata and a slow decline in the coverage and intensity of underemployment in a context of growing urbanization of this underemployment.[33] But, as we have seen, to explain this apparent paradox —as it appears to be if we contrast the experience of the region to that of today's advanced countries— it is essential to understand that the behaviour of the region as a whole conceals different trends by groups of countries and, especially, that the principal phenomena which determine the results under discussion act with varying intensity in the different groups.

[33]Recall that the three tendencies noted —especially the *slow rate* at which underemployment is reabsorbed— are a result of the interaction of the data recorded for the three groups analysed.