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Intraregional migration *of skilled manpower*

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Concern about the international migration of skilled human resources has traditionally focused on migratory flows to industrialized countries, i.e., about what has come to be known as the "brain drain". There are, however, migratory movements of this segment of the labour force within the region as well. This "horizontal" migration is analysed briefly in the present article; in so doing, the author reviews its causes, possible implications, the characteristics of these flows of skilled migrants, and the relationship between what is to be observed in some countries and the official attitude adopted by their Governments. This examination suggests that the emigration of skilled human resources, regardless of their destination, is invariably a loss for developing countries owing to these resources' high social value and economic cost. The author concludes that the subject calls for in-depth research at the intraregional level.

I

Introduction

Some time during the 1960s, the emigration of professionals and technical personnel –or, in other words, skilled manpower– to the industrialized countries became a cause of concern for developing countries, and since then has been the subject of numerous studies and debates in international forums. The emigration of these groups, especially when the move is a permanent one, poses a different sort of situation than the departure of other segments of the labour force because it occasions the loss of valuable and expensive human resources who are needed to help raise the population's level of well-being and to spur progress in the fields of health, scientific research, technology and culture. This consideration is what makes studies on the migration of skilled manpower of singular importance.

The migration of these groups, which has generally been perceived as a "problem" for developing countries, has been regarded as one aspect of the unequal economic relations existing between the developing and industrialized countries. This view has been reflected in the term "brain drain", which suggests that the phenomenon is some sort of indirect subsidy of rich countries by poor countries.

In Latin America, the brain drain has sparked a great deal of interest, owing mainly to large-scale migration from Latin America to the United States. In the course of the debate on the subject, this outflow of skilled manpower came to be regarded as a distinctive component of one of the region's major patterns of international migration, i.e., emigration to the United States.

For the most part, the study of this phenomenon started out by focusing on its possible implications in terms of the social and economic well-being of source countries, and only later has consideration been given to the factors which trigger migratory movements. For various reasons, studies on the subject have devoted very little attention to migration between developing

countries. None the less, an examination of those same studies demonstrates the need to include the subject of migration by skilled manpower between such countries. A consideration of this topic raises a number of questions relating to the countries of Latin America, and an attempt to address those questions will be made in the present essay.

First, the emigration of human resources who possess skills considered to be valuable to a given developing country would seem to represent a social and economic loss for that country, regardless of the emigrants' destination; thus, the current interest in studying the causes and consequences of the migration of skilled manpower can properly be extended to include flows between developing countries, rather than being confined to the portion of the brain drain flowing towards industrialized countries. Second, we need to know more about the migration of skilled human resources between Latin American countries and about any specific traits these resources may exhibit, as well as about the characteristics and scale of the flows themselves. Third, the above-mentioned aspects need to be considered in the light of the Governments' official attitudes towards international migration. The purposes of such a comparison are to ascertain the extent to which concern about the migration of skilled manpower between Latin American countries has come to be associated with concerns about the brain drain flowing towards developed countries; to determine whether a genuine effort has been made to seek solutions for the overall problem of the emigration of skilled human resources; and to see how closely the response forthcoming from some countries' Governments corresponds to the observable situation in those countries.

In addressing these concerns, this article reviews the chief aspects of the international migration of skilled manpower between Latin American countries, analyses its causes and consequences, and offers some theoretical observations regarding the importance of these migratory flows and the attitudes adopted by the Governments as reflected in official reactions to international migration, particularly of skilled manpower within the region.

■ This article is based in part on original research conducted by the author (Martínez, 1992) during the preparation of the thesis submitted by him in 1988 to the Master's Programme in Population and Development of the Latin American Demographic Centre (CELADE).

II

The international migration of skilled manpower between developing countries

Generally speaking, the emigration of skilled manpower –i.e., of highly educated segments of the population– from developing countries has been a cause of concern because industrialized countries have been the main destination of these migratory flows (the “brain drain”).¹

Unlike the “brain drain”, the migration of skilled manpower from one developing country to another is a horizontal process; in other words, it takes place between countries in a similar economic position, some of which are relatively more developed than others. This relatively higher level of development may be reflected, for example, in better social services (such as health and education) or in more progress in certain economic sectors or, perhaps, in more jobs and better wages. Social, economic and political circumstances may, of course, influence migratory trends over time, but it is unlikely that they will reverse those trends.

There is no question about the fact that developing countries need to make full use of their skilled human resources to promote their social and economic well-being (CELADE, 1977). Thus, for them, the emigration of these resources constitutes a problem whose severity will depend, *inter alia*, on the scale and characteristics (selectivity, permanence, fields of specialization involved) of the flows and on the size of the country’s supply of those resources. Even if the volume of the flow is small in relation to the national supply, however, emigration remains a problem for reasons that will be discussed later.

1. Determinants and the levels at which they operate

If we can identify the different levels at which determinants of the migration of skilled manpower operate, then those determinants can be ranked in a way that will contribute to a better understanding of the influence they exert in both source and destination countries. Attributing the phenomenon entirely to generalized international forces is tantamount to denying the influence of personal decisions and fails to explain why other skilled groups having similar characteristics do not emigrate.

The relationship among the various levels of causality would appear to be shaped by the conditions imposed by structural factors upon more specific, parallel processes. In an essay originally focusing on the brain drain, Portes (1977, pp. 351-369) draws a distinction among determinants at the international level (primary), the structural domestic level (secondary) and the individual level (tertiary).

The primary factors would thus be the political and economic differences observed at the international level between central and dependent countries. Within Latin America, these differences are manifested in the existence of countries that serve as “sub-centres” and others that act as “sub-dependents” within the larger framework of the region’s economically dependent position in world markets. These differences in the patterns of accumulation and the development of productive forces under fairly similar conditions of dependency gives the sub-centres a relative measure of autonomy in the management of their production resources and preferential access to higher-ranking positions. The result is the emergence of a limited number of enclaves that attract the bulk of intraregional immigration to specific areas within certain countries. In the case of horizontal migration, a hallmark of these primary determinants is that they operate on the basis of asymmetries which are less marked than those existing between central and dependent countries.

¹ This discussion does not touch upon a more general issue that may be of great interest in the future: the international mobility of the population, which includes the movements of individuals. This phenomenon may have something to tell us about the new forms of mobility that can be expected in coming years as a consequence of, among other factors, the increasing openness of national markets, as well as the behaviour of various economic agents involved in the process of economic globalization. See, in this regard, Pellegrino (1992).

Thus, horizontal migration of skilled manpower is caused, at a primary level, by the existence of an intraregional structure in which some economies are subordinated to the interests and priorities of other, generally stronger or more developed economies owing to certain advantages enjoyed by the latter, such as higher wages, better technical conditions for professional advancement, more social recognition, less restrictive living conditions and more political stability, as well as larger-scale operations by transnational corporations. These advantages are nothing more than what is commonly known as "preference differentials" (Otefza, 1971, cited in CID, 1981; also Portes, 1977, pp. 351-369). The countries having the greatest advantages will be those which, using the instruments provided by their immigration policy, are in a position to heighten the effect of preference differentials in order to attract human resources to certain economic sectors.

These primary factors are not the only causes of migration, however, since, if they were, countries having all or many of these advantages would not see any significant number of individuals emigrating to other countries of the region, as they in fact do. In other words, primary factors' chief influence has to do with immigration to a given country and they suggest the simultaneous presence in that country of a number of these advantages over a considerable time period.

Hence, other factors also are at work in the migration process within the framework of the international and, especially, intraregional structure. The internal processes taking place in countries from which there is a great deal of emigration constitute the secondary factors involved in the migration of skilled manpower; these factors have to do with emigration from the home country and, in combination with preference differentials, help trigger migration.

The internal conditions that constitute these secondary factors are primarily imbalances between a country's capacity to produce highly-qualified resources and its capacity for absorbing them; this type of disequilibrium is found even in advanced societies (Portes, 1977, pp. 351-369). According to a study conducted by the Latin American Demographic Centre (CELADE), it is not simply that the educational system is turning out a surplus of qualified human resources; the main problem is the production system's limited ability to make use of those resources and, paradoxically, the repeated appearance of severe deficits in fields vital to a country's economic and

social development, such as medical services or scientific and technological research (CELADE, 1979, pp. 5-37).

This disequilibrium has been described as a "structural tension" (Hoffman-Nowotny, 1983; Portes, 1977, pp. 351-369) that has a differential effect on highly qualified groups because a given country's educational system is geared to preparing human resources for a level of development it has simply not attained. Thus, we are faced with an absurd situation: if a country raises its population's levels of academic training, it will be encouraging emigration (Kidd, 1967, cited by Portes, 1977, pp. 351-369). Emigration would thus have the effect of re-establishing a balance between what professionals have to offer and what the production structure demands, which would reduce structural tension and the anomie people feel as a result of this situation.

In some cases, structural tensions are associated with a lack of opportunities; in others, this is compounded by an imbalance between the opportunities that do exist and the high level of training achieved. In other words, professionals in the poorest countries emigrate primarily in search of employment, whereas the professionals of countries in a better international position emigrate either in search of employment or in search of better opportunities commensurate with their high educational level. In either case, emigratory pressures are being generated.

It follows from the above that a country at a relatively higher level of development would witness a greater degree of selectivity among its emigrants and would also, at the same time, be receiving immigrants. A country that is more developed than others may attract a large number of professionals, but the structural tension within it may also be pushing many of its own professionals out of the country.

Identifying the emigratory factors associated with structural tensions that are acting as secondary determinants sheds more light on the reasons for the migration of skilled manpower, but it does not explain why some individuals do not emigrate. The answer must be sought at the level of the individual, where factors are at work that will help round out our understanding of the phenomenon; these are the tertiary factors.

Individual or tertiary factors that may ultimately play a role in the decision to emigrate include, for example, wage levels, family situations and professional incentives (Portes, 1977, pp. 351-369). These variables are related to the type and level of an

individual's professional training and to his or her social relationships. Put simply, in a given field of specialization, the higher the level of training, the more limited a person's family obligations, and the greater the extent of inter-personal stimulus, then the greater the chances that a person will emigrate.

In short, as shown in table 1, the three levels of causality, when taken together, contribute to an understanding of the horizontal migration of skilled human resources, beginning with the specific

effects of primary factors in terms of flows between economically dependent countries. It is important to ensure the viability of effective policies for dealing with emigration, and in order to do so, policy measures need to be focused on the internal processes or structural tensions that prompt valuable human resources to emigrate or, in other words, on striking a basic qualitative and quantitative balance between the supply and demand for skilled manpower.

TABLE 1

**Horizontal migration of skilled human resources:
determinants**

| Factors | Primary | Secondary | Tertiary |
|-----------------|--|--|---|
| Level | International | National | Individual |
| Characteristics | Horizontal differences in the political and economic structures (preference differentials) | Imbalances between the output of skilled resources and the capacity to absorb them (structural tensions) | Type and level of professional training, context of social relationships (personal decisions to emigrate) |

Source: Author.

2. Overall losses

The consequences of the emigration of skilled manpower can generally be regarded as social and economic losses for developing countries, where a full utilization of the countries' qualified human resources (which are urgently needed but, paradoxically, for which there is no actual demand within the production system) is essential for the promotion of social well-being. This continues to be the case regardless of which country the emigrants choose as their destination.

The overall effects of emigration should not be measured or assessed solely on the basis of the number of emigrants, which might in some cases seem negligible and lead to an incorrect diagnosis of the situation. The more important issue has to do with the characteristics of emigrants and their line of work, since their departure may lead to the disappearance of a given specialty (Rodríguez, 1982). Thus, the consequences of emigration are primarily social and economic and are occasioned by the loss of expensive human resources that are valuable from a development standpoint.

First of all, regardless of the emigrant's destination, there is always the loss of an investment which

the country had hoped to recover through the individual's contribution to society; this loss can be quantified on the basis of the direct costs of the individual's education (Chaparro, 1971). This loss is greater if the emigration is permanent or long-term and if the professions of the emigrants are ones with above-average training costs.²

Another overall effect is the loss of production resources: the human resources who emigrate cannot be used by the country that trained them, and this represents a decrease in its production capacity (De Sierra and Petrucci, 1979). According to Chaparro (1971), this problem has been addressed from two different vantage points: the inputs of leadership, creativity and dynamism forthcoming from highly qualified persons, and the services which these persons can provide, especially in certain occupations that are considered to be of strategic importance.

² Actually, in the case of emigration to industrialized countries, calculations of the net loss should also take into consideration, *inter alia*, compensatory international assistance and the probable positive effects (remittances) of emigration. Another variable that should be factored in is the recovery of the investment afforded by a number of years of work in the home country after graduation and before emigration.

As noted by this author, emigrants usually include a large percentage of persons with specializations in which there is a manpower shortage (such as scientific and technological research); these are also generally the more "modern" occupations in which personnel are in demand in advanced countries.

The foregoing provides grounds for the conclusion that the emigration of skilled manpower is both a quantitative and a qualitative problem. The greatest social and economic losses will be sustained by the

less developed countries; these countries have a smaller national supply of human resources to start with and emigration from them is highly selective in the sense that the emigrants making up these flows are concentrated in crucial specialties, are at the age of greatest intellectual productivity and remain for a long time in the destination country. These losses become more severe if the number of emigrants is large, if emigration is sustained over time and if the return rate is low.

III

Migratory flows of skilled manpower within Latin America

There has been a great deal of publicity in the region about one of the hallmarks of intraregional migration: the presence of a large number of unskilled migrants moving between neighbouring countries, many of whom do so illegally. Particularly well-known cases involving large numbers in absolute terms are those of Colombians in Venezuela and of Paraguayans, Chileans and Bolivians in Argentina. A parallel phenomenon is the "brain drain" flowing towards the United States (and forming part of the migration to that country), which has become a cause of concern because of the large number of skilled Latin Americans residing there and, obviously, owing to its social and economic implications.

The data indicate that intraregional migration is not confined to unskilled individuals and that, in addition to the brain drain represented by the outflow of skilled Latin Americans to the United States, intraregional migration of skilled manpower is also taking place. This brings to light the importance of studying horizontal migration.

1. Information and its sources

Population censuses are currently the only source of information for the study of intraregional movements of skilled migrants, which may be regarded as a basic step in the analysis of horizontal migration. Census information on migrants in the professional, technical and related categories covers the foreign-born (immigrant) population present in a country; this, by extension, can be used to identify the population groups

born in a given country that have left it to reside in other countries which have also gathered information on their foreign populations (emigrants). Thus, the term foreign population can be generally defined as being composed of those individuals who are in a country other than the country of their birth at the time of the census and who have answered the census question regarding place of birth.

The migrants covered by such information are drawn from a country's stock of immigrants, i.e., from the total number of surviving immigrants in a country; this information can be used to arrive at an approximate estimate of the total number of migrants who have left their country of birth (not including returnees) during the time period considered and who have been enumerated in countries which have taken censuses around that time. It should therefore be borne in mind that when we refer to an individual migratory flow, we are actually using data regarding a number of different flows.

The information used here was gathered in the censuses taken during the 1970s and 1980s in Latin America and, in some cases, in those conducted by the United States during the same period. These data have been provided by the Investigation of International Migration in Latin America (IMILA) Programme of CELADE, whose purpose is to gather information from population censuses on Latin Americans present in countries (primarily within the region) other than that of their birth.

Some qualifying statements are called for regarding the data's relative lack of chronological

synchronization, the migrants' place of study, the migrants' length of stay in the receiving country, the failure to define refugee status,³ and the variable quality of the information. As regards the supply of information, for the censuses of the 1970s as well as of the 1980s IMILA has detailed tabulations on 11 of the 20 Latin American countries covered by the programme, and information from both census rounds is available for only seven of these. This means that the total number of emigrants from the various countries cannot be determined, which in some measure affects any comparisons with migration to the United States.

2. The situation according to the 1970s and 1980s censuses

A comparison of the total number of skilled intraregional migrants with the total number of skilled Latin American emigrants present in the United States reveals that the percentage of the latter is greater than

of the former during the period under study: 64% versus 36% around 1970 and 65% versus 35% around 1980 (see table 2). This bears out the general view of the magnitude of the Latin American brain drain constituted by migratory flows to the United States, and is thus hardly a surprising finding. What is remarkable, however, is the large proportion of Cubans and Mexicans in the United States and in overall migration to that country, but since these flows of emigrants are occasioned by very specific situations, this phenomenon will not be analysed here. Another way of gauging these flows is therefore to factor out the Cubans and Mexicans present in the United States; this having been done, the comparison yields quite a different result: skilled intraregional migrants then outnumber those who go to the United States, with the figures being 55% versus 45% for both periods (see table 2); this means that there are indeed large-scale migratory flows which are concentrated in the region (considering 11 Latin American countries only).

TABLE 2

Latin America: emigrants in the professional, technical and related categories residing in the region and in the United States, around 1970 and 1980

| Region of residence | Around 1970 ^a | | Around 1980 ^b | |
|---|--------------------------|--------------|--------------------------|--------------|
| | Number | % | Number | % |
| Latin America | 39 404 | 35.6 | 73 646 | 34.8 |
| United States | 71 195 | 64.4 | 138 002 | 65.2 |
| Total | 110 599 | 100.0 | 211 648 | 100.0 |
| Latin America | 39 404 | 54.9 | 73 646 | 54.7 |
| United States (not including Cubans and Mexicans) | 32 401 | 45.1 | 60 999 | 45.3 |
| Total (not including Cubans and Mexicans in the United States) | 71 805 | 100.0 | 134 645 | 100.0 |

Source: Jorge Martínez P., *La migración de mano de obra calificada dentro de América Latina*, LC/DEM/G.126, series A, No. 275, Santiago, Chile, CELADE, 1992, October.

^a Includes 11 countries that conducted censuses (Argentina, Chile, Costa Rica, Dominican Republic, Guatemala, Haiti, Mexico, Nicaragua, Panama, Paraguay and Venezuela) for the total number of resident foreigners corresponding to the 20 countries covered by the Investigation of International Migration in Latin America (IMILA) Programme being executed by CELADE.

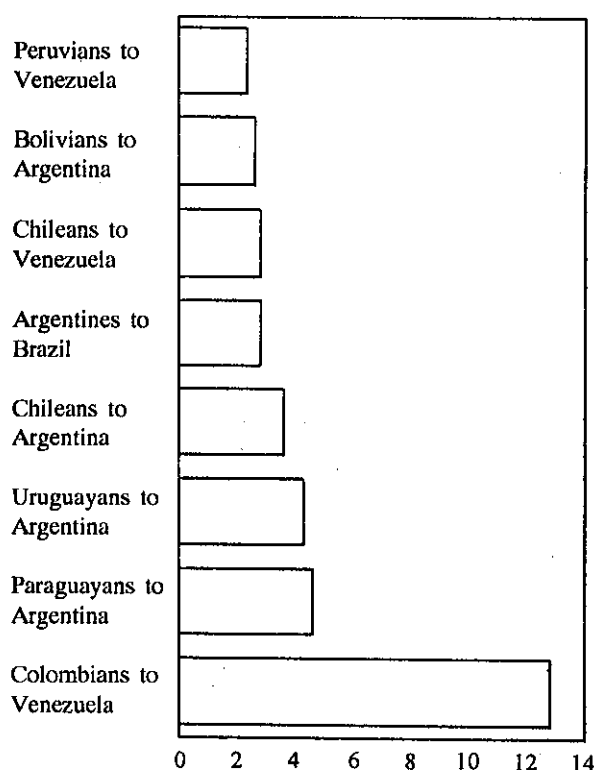
^b Includes 11 countries that conducted censuses (Argentina, Bolivia, Brazil, Chile, Costa Rica, Ecuador, Guatemala, Panama, Paraguay, Uruguay and Venezuela) for the total number of resident foreigners corresponding to the 20 countries covered by the IMILA Programme being executed by CELADE.

³ To provide some idea of the magnitude of this phenomenon, in the 1970s about 100 000 persons are thought to have emigrated within the region for political reasons, according to the Office of the United Nations High Commissioner for Refugees (UNHCR) and the Intergovernmental Committee for Migration (ICM). See CID (1981).

Some of the nationalities of skilled emigrants that are most heavily concentrated in the region are Paraguayans, Uruguayans, Bolivians, Chileans and Colombians, in that order, and the presence of these groups, in turn, is especially notable in two countries

FIGURE 1

Latin America: main flows of professional, technically-trained and related emigrants within the region, around 1980
(Thousand of persons)



Source: Jorge Martínez P., *La migración de mano de obra calificada dentro de América Latina*, LC/DEM/G.126, series A, No. 275, Santiago, Chile, CELADE, 1992, October.

(Argentina and Venezuela). Around 1980, these flows accounted for more than one half of all intraregional migrants (Martínez, 1992). Figure 1 shows the main flows of emigrants in absolute terms, by country of destination; the largest such flows are directed towards Argentina, Venezuela and, to a lesser extent, Brazil.

Perhaps the most salient point here, at a descriptive level, is the existence of a connection between the proportion of skilled personnel in the economically active population (EAP) and the distance between the home and recipient countries; this is illustrated by the cases of Chileans and Peruvians in Venezuela and Argentines in Brazil, as well as by other, smaller flows. Generally speaking, the greater the distance involved, the larger the proportion of skilled labour among the economically active migrants as a group.

Table 3 shows that Venezuela, Argentina and Brazil, in that order, receive the largest numbers of migrants from within the region, with some of the major flows being made up of Colombians going to Venezuela; of Paraguayans, Uruguayans and Chileans moving to Argentina; and of Argentines and Chileans headed to Brazil. In the majority of cases, the flows involve immigrants from neighbouring countries. In Venezuela, skilled immigrants make up a significant proportion of the country's professional and technical personnel (around 7%).

With regard to countries of origin, as may be seen from table 4, Colombia, Chile and Argentina, in that order, have been the sources of the largest numbers of emigrants. Colombia and Chile have the largest percentages of emigrants in the professional, technical and related categories relative to their national totals. Colombian emigrants are not only concentrated within the region, but specifically in Venezuela. Chilean emigrants mainly go to Argentina, although the concentration is less marked.

Emigration is also a significant phenomenon in other countries of the region, such as those of Central America and the Caribbean. Since most of the emigrants from these countries go to the United States (Dominicans, Haitians, Nicaraguans, Panamanians and Salvadorans), an analysis of intraregional migration in relation to these countries is of less interest, despite the quite significant figures for Costa Rica. None of the Central American countries individually exceeds any of a number of South American countries as a source of intraregional emigrants (Martínez, 1992).

The main facet of this regional situation that is of interest to us here, in any case, is that migration of skilled human resources is indeed taking place and that the size of these flows is far from negligible in comparison to migration to the United States. It is also clear that countries such as Venezuela, Argentina and Brazil are particularly attractive destinations; this would appear to be associated with the larger size and higher level of development of their economies. This suggests the presence of at least some sort of advantages in these countries—better wages for professional occupations, for example—which, in conjunction with other factors, are operating as “preference differentials” in attracting skilled manpower from other countries.

TABLE 3

Latin America: main recipient countries of immigrants of Latin American origin in the professional, technical and related categories, based on 1980s censuses^a

| | Number | % | As a percentage of human resources in the professional, technical and related categories in the recipient country |
|-------------|--------|-------|---|
| Venezuela | 25 889 | 100.0 | 6.9 |
| Colombians | 12 994 | 50.2 | |
| Chileans | 2 894 | 11.2 | |
| Peruvians | 2 367 | 9.1 | |
| Other | 7 634 | 29.5 | |
| Argentina | 18 179 | 100.0 | 1.8 |
| Paraguayans | 4 698 | 25.8 | |
| Uruguayans | 4 372 | 24.1 | |
| Chileans | 3 629 | 20.0 | |
| Other | 5 480 | 30.1 | |
| Brazil | 11 138 | 100.0 | 0.4 |
| Argentines | 2 907 | 26.1 | |
| Chileans | 2 217 | 19.9 | |
| Uruguayans | 1 596 | 14.3 | |
| Other | 4 418 | 39.7 | |

Source: Jorge Martínez P., *La migración de mano de obra calificada dentro de América Latina*, LC/DEM/G.126, series A, No. 275, Santiago, Chile, CELADE, 1992, October.

^a Includes the 11 Latin American countries covered by the IMILA Programme which conducted censuses during the relevant period.

This explanation of the migratory phenomenon is incomplete, however, since it does not take into account the influence of expulsive factors. The emigration of large numbers, in absolute terms, of Argentine professionals and technical personnel would appear to confirm the fact that general factors alone cannot account for migration entirely; emigratory pressures within the countries must therefore also be at work.

3. Impacts of the migration of skilled manpower

The significance of the migration of skilled manpower also depends upon some of its effects on the countries concerned. By analysing the selectivity of the major migratory flows based on a comparison between the proportion of economically active migrants falling into the professional, technical and related categories and the proportion of skilled personnel in the economically active population of the source or destination country, we can gauge the

TABLE 4

Latin America: main source countries of emigrants in the professional, technical and related categories going to other countries of the region, based on 1980s censuses^a

| | Number | % | As a percentage of human resources in the professional, technical and related categories in the source country |
|-----------|--------|-------|--|
| Colombia | 16 572 | 100.0 | 6.1 |
| Venezuela | 12 994 | 78.4 | |
| Ecuador | 2 027 | 12.2 | |
| Panama | 428 | 2.6 | |
| Others | 1 123 | 6.8 | |
| Chile | 10 872 | 100.0 | 3.9 |
| Argentina | 3 629 | 33.4 | |
| Venezuela | 2 894 | 26.6 | |
| Brazil | 2 217 | 20.4 | |
| Others | 2 132 | 19.6 | |
| Argentina | 8 786 | 100.0 | 0.9 |
| Brazil | 2 907 | 33.1 | |
| Venezuela | 1 775 | 20.2 | |
| Uruguay | 1 250 | 14.2 | |
| Others | 2 854 | 32.5 | |

Source: Jorge Martínez P., *La migración de mano de obra calificada dentro de América Latina*, LC/DEM/G.126, series A, No. 275, Santiago, Chile, CELADE, 1992, October.

^a Includes the 20 Latin American countries covered by the IMILA Programme being executed by CELADE.

relative impact of migratory flows on those countries and express it in terms of a selectivity index for those flows.

Let us first look at the indexes for source countries (emigration). When the proportion of skilled personnel among economically active emigrants is greater than in the EAP of the source country (positive selectivity), then that country will be adversely affected, since the percentage of emigrants in the professional, technical and related categories exceeds the percentage of skilled manpower in the resident EAP. When the proportion of skilled manpower among economically active emigrants is smaller than in the source country's EAP (negative selectivity), then the impact of emigration is less marked, unless the actual number of skilled emigrants is large.

The use of the same index for countries of destination (immigration) denotes the favourable effects on those countries, even in the case of a negative selectivity index –i.e., even when the proportion of skilled personnel among economically active

immigrants is smaller than in the destination country's EAP— because, in the final analysis, the entry of skilled personnel is always advantageous for the recipient country. The only difference between a positive and negative selectivity coefficient for a country on the receiving end of a migratory flow is that with a negative coefficient, when the number of skilled immigrants is small, the favourable effect is less appreciable owing to the larger percentage of semi-skilled or unskilled immigrants.

An analysis of the main intraregional migratory flows around 1980 indicates that the highest positive selectivity coefficients recorded for source countries corresponded to Peruvian emigrants in Argentina and Venezuela, Argentine emigrants in Venezuela and Brazil, Chileans in Brazil and Venezuela, and Bolivians in Brazil (see table 5). These flows would therefore appear to have had a strongly adverse effect on the source countries, since the proportion of skilled human resources in these flows was far higher than in the source countries' EAPs.

In contrast, the Chilean, Bolivian and Paraguayan immigrants in Argentina and the Colombians in Venezuela had negative selectivity coefficients, which means that the adverse effect of these emigratory flows on their source countries was less severe because of the large proportion of less skilled emigrants within them. Nevertheless, since the number of personnel in professional, technical and related categories emigrating from those countries is large, it is useful to compare the percentage of skilled human resources in the emigrant and national labour forces in order to assess the effect of such emigration on the national labour supply.

With respect to immigrants and their impact on the receiving countries, positive selectivity coefficients were recorded for most of the main flows of immigrants, except for Chilean, Bolivian, Paraguayan and Uruguayan immigrants in Argentina and Colombians in Venezuela. All of these flows are instances of migration between neighbouring countries.

Thus, we can see that flows with positive selectivity coefficients for both source and destination countries are in the majority, and these flows have thus had appreciable adverse effects on their source countries and favourable effects on their countries of destination, since these migratory flows contain a significant percentage of personnel who fall into professional, technical and related categories. Furthermore, the positive selectivity coefficients for source

TABLE 5

Latin America: selectivity of the main migratory flows within the region, around 1980^{a b}

| Flow and percentage of emigrants in professional, technical and related categories | Source-country selectivity (%) | Recipient-country selectivity (%) |
|--|--------------------------------|-----------------------------------|
| Argentines | | |
| Brazil (33.1) | 151.5 | 295.2 |
| Venezuela (20.2) | 371.4 | 257.8 |
| Bolivians | | |
| Argentina (48.2) | -29.3 | -58.6 |
| Brazil (33.9) | 327.6 | 293.7 |
| Chileans | | |
| Argentina (33.4) | -57.1 | -66.7 |
| Brazil (20.4) | 254.6 | 333.3 |
| Venezuela (26.6) | 197.4 | 175.9 |
| Colombians | | |
| Venezuela (78.4) | -17.0 | -47.0 |
| Paraguayans | | |
| Argentina (79.9) | -20.9 | -65.7 |
| Peruvians | | |
| Argentina (29.8) | 407.7 | 300.0 |
| Venezuela (40.2) | 141.0 | 126.5 |
| Uruguayos | | |
| Argentina (60.7) | 22.1 | -16.2 |
| Brazil (22.2) | 122.1 | 139.7 |

Source: Jorge Martínez P., *La migración de mano de obra calificada dentro de América Latina*, LC/DEM/G.126, series A, No. 275, Santiago, Chile, CELADE, 1992, October.

^a Includes the 11 Latin American countries covered by the IMILA Programme which conducted censuses during the relevant period.

^b Selectivity is defined as the difference between the percentage of professional, technical and related personnel in the migratory flow and the corresponding percentage in the country of reference, divided by the percentage of professional, technical and related personnel in the country of reference. The result is then multiplied by 100.

countries increase in proportion to their distance from the destination country, but they are not consistently higher for all emigratory flows from a given country.

These indexes, which help to illustrate the significance of the intraregional migration of skilled manpower, are a basic tool for measuring migratory selectivity as one among various factors to be taken into consideration in reviewing the results of selected policies in countries that claim to be promoting selective immigration.

IV

The stance adopted by governments and the migration of skilled manpower

In examining the Governments' official attitudes towards international migration, we should remember that such attitudes can be expressed in two different ways. The first, which is found in almost all countries, is the regulation of people's arrivals, departures and their length of stay in a country's territory. The second, less frequent, form of expression is the design of explicit policies on international migration, which include regulations as well as policy objectives such as speeding up or slowing down the rate of population growth, ensuring the settlement of the territory or taking action to influence the supply of manpower in labour markets, depending on the situation in each country.

The types of official responses formulated by Governments provide a basis from which to evaluate their approach to international migration and, within that broader category, the migration of skilled manpower. In Latin America, the predominant official position has been to regulate population movements through legislation drawn up, in most cases, in response to specific circumstances; in other words, legislation that does not take into account the compatibilization of long-term social, economic and demographic objectives. As noted by Torrado some years ago, although such measures may come to form "implicit policies" when objectives are defined in conjunction with them, they are none the less seriously flawed in terms of their effectiveness because they are formulated and implemented without reference to more general sets of objectives (Torrado, 1979, pp. 117-136).

Governments have attributed a great deal of importance to the migration of unskilled manpower in Latin America; this phenomenon involves large contingents of the population and, in some cases, a large percentage of illegal immigrants. A great deal of attention has also been focused on the emigration of skilled manpower to industrialized countries.

The present analysis of the intraregional migratory flows of a particular segment of the labour

force indicates that greater attention should be devoted to the migration of skilled manpower within the region: first, because it has been demonstrated that intraregional migratory flows are not always composed of an overwhelming majority of unskilled or semi-skilled manpower, since the economically active migrants in a number of these flows include a significant percentage of skilled human resources; and second, because the figures on migrants indicate that the quantitative scale of the brain drain represented by an outflow of skilled manpower to the United States is less than that of the intraregional migration of skilled manpower, in which the flows of very large numbers of skilled emigrants from South American countries are directed mainly towards just two or three countries in the region.

In view of the foregoing, it will be useful to analyse the official attitudes adopted by some Governments with regard to the migration of skilled manpower and to see how they tie in with the available information so that specific topics may be identified for further study.

1. Selective immigration and skilled immigrants in selected countries

Policy measures regarding immigration in the countries of the region have been limited to a few cases in which Governments have promoted selective immigration.⁴

⁴ Skilled immigrants from developed countries are not taken into consideration here. According to the censuses of the 1980s, for example, a total of 10 000 emigrants from the United States who fell into the professional, technical or related categories were living in 11 Latin American countries, and almost one half of that number was concentrated in Brazil and Venezuela (Martínez, 1992). Viewed in its proper proportions, immigration from outside the region is currently an important issue which should be investigated in the future.

Based on the assumption that policy measures might be more effective than simple regulations, an analysis of the information regarding skilled immigrants in some of those countries may enable us to ascertain the actual effectiveness of such policies while leaving no doubt as to the fact that, in dealing with horizontal migration, consideration should at all times be given to what happens in the home country when it becomes a source of skilled human resources for those countries that are promoting the immigration of such resources.

By the late 1980s, explicit, selective immigration policies had been implemented in Latin America by Argentina (1977), Bolivia (1976), Ecuador (1987), Honduras (1971), Paraguay (1974) and Venezuela (1976); in all these cases, the object was to promote immigration by legislative means within the framework of these countries' overall development objectives. The incentives primarily took the form of requirements that preferential conditions be provided for immigrants based on their skills, the activities they would pursue, their age and available capital (ICM, 1981).

The Governments of the remaining countries of the region have adopted regulatory measures relating to illegal immigrants and labour-market conditions (CIME, 1981) or have participated in the selective immigration programmes of the Intergovernmental Committee for Migration (ICM)⁵, whose aim is to select skilled immigrants, primarily of European origin, and to channel them to requesting countries.

The policies applied by Venezuela and Argentina were shaped by a long-standing legal tradition in this matter. For Argentina, selective immigration policies have a demographic basis (faster population growth) while for Venezuela, where the policy tool of choice would usually take the form of a programme (Pellegrino, 1987), these policies are chiefly a means of addressing the country's needs for certain types of skills. In both countries, however, the focus is on skilled people who can make a contribution to national development.

⁵ In November 1989, the Intergovernmental Committee for Migration (ICM) changed its name to the International Organization for Migration (IOM). However, since this article deals with events, pre-dating the name change, the Organization's former name and its corresponding acronym (ICM) will be used here.

In the other countries studied, both of these objectives (albeit with some variations) are also at work, since they perceive immigration as providing benefits in the form of supposed improvements in production. In some cases the policies appear to be of a quite general nature and might more accurately be described as governmental declarations of intent than as instruments for implementing policy actions. For example, Ecuador's population policy statement (1987) defines "the need to implement incentives for selective immigration" very broadly and those incentives are not, for the time being, specified (CONADE, 1988).

In view of this interest in selective immigration, with the term being defined in terms of the skills possessed by immigrants, it will be useful to analyse the information on immigrants of Latin American origin in the professional, technical and related categories who are residing in the main receptor countries of the region. Our analysis should therefore cover two different facets of the subject: the impact on the supply of skilled human resources in the source countries, and the effect of immigration on recipient countries. These effects can be identified by determining the selectivity of the corresponding migratory flows and examining the occupational characteristics of skilled immigrants and their position in the labour market.

An exploration of the effects of selective immigration on the domestic supply of skilled human resources in the countries of origin brings to light the existence of substantial impacts which should be taken into account in the study of migratory policies when dealing with movements between developing countries.

As noted earlier, the censuses of the 1980s round indicated that Venezuela and Argentina were the destinations of the greatest number of skilled Latin American immigrants. Table 6 shows that in Venezuela, Colombians –by far the most numerous group– represented nearly 5% and Chileans 1% of their respective home country's supply of skilled manpower. In Argentina, the main flows of immigrants were fairly homogeneous and represented an even larger percentage of their home countries' skilled labour forces. Paraguayans, Uruguayans and Chileans, in that order, were the most numerous, with the number of skilled emigrants representing a substantial percentage of their countries' domestic supply in the case of Paraguay (nearly 11%) and Uruguay (6%); in other words, these countries had transferred many of

TABLE 6

Venezuela and Argentina: main flows of Latin American immigrants, broken down by selected occupational and educational characteristics and as compared to the same characteristics as present in the country of birth, around 1980

| Country of birth | Immigrants | | Immigrants as a percentage of national labour | |
|------------------|--|-------------------------------|--|-------------------------------|
| | Professionals, technicians and related personnel | 10 years of schooling or more | Professionals, technicians and related personnel | 10 years of schooling or more |
| Venezuela | | | | |
| Argentina | 1 775 | 5 536 | 0.6 | ... |
| Chile | 2 894 | 11 553 | 1.0 | 0.6 |
| Colombia | 12 944 | 60 516 | 4.8 | 7.4 |
| Peru | 2 367 | 11 256 | 0.6 | 1.0 |
| Argentina | | | | |
| Bolivia | 2 602 | 14 558 | 3.0 | 3.8 |
| Chile | 3 629 | 28 338 | 1.3 | 1.5 |
| Paraguay | 4 698 | 28 284 | 10.6 | 12.4 |
| Uruguay | 4 372 | 30 659 | 6.0 | 5.9 |

Source: Jorge Martínez P., *La migración de mano de obra calificada dentro de América Latina*, LC/DEM/G.126, series A, No. 275, Santiago, Chile, CELADE, 1992, October.

their professional, technical and related human resources to Argentina. This same table also provides information on the proportion of the population having 10 or more years of schooling, since the behaviour of this segment is to some extent correlated with that of skilled human resources.

The foregoing confirms the advisability of incorporating these aspects into the examination of any migration policy, inasmuch as the promotion of selective immigration could have undesirable implications for other countries of the region. Indeed, even though the results of a country's policy cannot be measured directly using the general sort of data being discussed here, it is clear that migratory policies could be a significant ancillary factor when their influence is added to the more general types of factors that prompt the migration of skilled manpower.

The effect of immigration on recipient countries depends upon the type of selectivity characterizing overall migratory flows. As stated earlier, in Venezuela and, especially, Argentina, the flows coming from neighbouring countries exhibit negative selectivity; this means that they include a large percentage of semi-skilled and unskilled labour, and the countries of destination therefore receive a more limited number of skilled human resources.

If we now look at the occupational characteristics of skilled immigrants by considering the

different categories of professionals received by countries of destination in the region, we see that the predominant group among the skilled immigrants present in Venezuela and Argentina around 1980 (see table 7) were "teachers and other", which represented about one third and one half of the total, respectively. This group was composed chiefly of Colombians and Chileans in the case of Venezuela and of Uruguayans, Paraguayans and Chileans in Argentina.

The breakdown of the remaining professional categories in these two countries differed greatly from one another. In Venezuela, the remaining skilled Latin American immigrants were principally "architects, engineers and related occupations", most of whom were Colombians, Chileans and Peruvians (this was partly due to aggressive recruiting programmes carried out in Chile and Peru) (Pellegrino, 1986) and "writers, artists and related occupations", among whom Colombians, Argentines and Chileans were the most numerous nationalities; the large size of this latter occupational group would appear to place Venezuela in a particularly strong position for the development of cultural activities. In Argentina, the other half of the population of skilled immigrants was composed chiefly of "nurses, midwives and related occupations", most of whom were Paraguayans and Chileans, and "doctors, dentists and related

TABLE 7

**Argentina, Brazil, Venezuela: Latin American immigrants
present around 1980, by occupational category^a**

| Occupational category | Country of immigration | | | | | |
|---|------------------------|--------------|---------------|--------------|----------------|--------------|
| | Argentina 1980 | | Brazil 1980 | | Venezuela 1981 | |
| | Number | % | Number | % | Number | % |
| Architects, engineers and related occupations | 495 | 2.7 | 3 405 | 30.5 | 6 666 | 25.8 |
| Chemists, physicists and related occupations | ... | ... | 431 | 3.9 | 243 | 0.9 |
| Biologists, agronomists and related occupations | ... | ... | 298 | 2.7 | 287 | 1.1 |
| Doctors, dentists and related occupations | 2 575 | 14.2 | 1 732 | 15.5 | 1 743 | 6.7 |
| Paramedics and related occupations | ... | ... | 213 | 1.9 | 574 | 2.2 |
| Nurses, midwives and related occupations | 4 179 | 23.0 | 454 | 4.1 | 2 142 | 8.3 |
| Mathematicians, statisticians and related occupations | 595 | 3.3 | 1 061 | 9.5 | 528 | 2.0 |
| Lawyers and related occupations | 362 | 2.0 | 1 820 | 16.3 | 947 | 3.7 |
| Writers, artists and related occupations | ... | ... | 1 385 | 12.4 | 3 035 | 11.7 |
| Church personnel and related occupations | ... | ... | 174 | 1.6 | 371 | 1.4 |
| Teachers and other | 9 973 | 54.9 | 184 | 1.7 | 9 353 | 36.1 |
| Total | 18 179 | 100.0 | 11 157 | 100.0 | 25 889 | 100.0 |

Source: Jorge Martínez P., *La migración de mano de obra calificada dentro de América Latina*, LC/DEM/G.126, series A, No. 275, Santiago, Chile, CELADE, 1992, October.

^a Includes 10 countries of origin for Argentina and 19 for Brazil and Venezuela.

occupations", with Peruvians and Paraguayans being the most numerous practitioners.

If we divide the professional categories into two groups based on their skill levels (advanced and intermediate),⁶ significant differences emerge: slightly less than 22% of skilled immigrants in Argentina were in the advanced skill-levels category, whereas in Venezuela nearly 52% were (with Colombians being in the majority). In Brazil—which is also a destination, albeit a slightly less popular one, for immigrants within the region—the figure for this category was 91% and was composed primarily of Chileans and Argentines.

This information on the occupational characteristics of skilled immigrants indicates that a large share of these immigrants fall into the "teachers and

other" category in Venezuela and Argentina, but that this is not the case in Brazil. In view of this situation, it is of interest to recall that in promoting selective immigration (including, of course, selective intraregional immigration), what the Governments are trying to do is to attract scarce, preferably very high-level, human resources who may then be channeled into crucial sectors of their economies.

An examination of skilled immigrants' positions within the labour force can be expected to illustrate the attraction exerted by recipient countries and, in particular, to tell us whether the resources those countries manage to attract are the types of resources they need for pivotal sectors of their economies.

In the three countries in question, skilled personnel are concentrated in the services (social and financial) sectors, and the main flows of immigrants continue to conform fairly closely to that pattern (Martínez, 1992). Thus, the immigrants' positions within the labour force, broken down by area of economic activity, do not provide us with a great deal of information about the factors that attract those immigrants, and it will therefore be necessary to look for their reasons in the general types of conditions that are conducive to certain specialized occupations, specifically in the educational and health sectors.

⁶ The advanced skill-level category includes: architects, engineers and related occupations; chemists, physicists and related occupations; biologists, agronomists and related occupations; doctors, dentists and related occupations; mathematicians, statisticians and related occupations; lawyers and related occupations; and writers, artists and related occupations. The intermediate skill-level category includes: paramedics and related occupations; nurses, midwives and related occupations; church personnel and related occupations; and teachers and other.

Since services are not a sector that can be regarded as of decisive importance (regardless of how valuable the individual contributions made by skilled immigrants working in that sector may be), the next step is to ascertain the relative significance of other sectors, such as manufacturing. In this connection, Argentina displays the least concentration of skilled personnel in the services sector and a fairly significant number of such personnel in the manufacturing and construction sectors. In Venezuela, the concentration of immigrants in the services sector is more marked, although the percentage of skilled immigrants in manufacturing is also considerable. Brazil is the country with the greatest concentration of skilled human resources in services and manufacturing (Martínez, 1992).

These figures bear a relation to the traits of the immigrants concerned. In Venezuela, for example, slightly over one-half of skilled immigrants fall into the advanced skill-level category, which would appear to account for their presence in the services and, to a lesser extent, manufacturing sectors. In Brazil, skilled immigrants are concentrated only in services and manufacturing, and the majority of them are in the advanced skill-level category.

Consequently, a higher skill level among immigrants appears to be associated with a higher percentage of immigrants in the services and manufacturing sectors. However, the fact that the percentage of immigrants in manufacturing usually comes in second place, despite this sector's strategic importance for the economy of the recipient country, indicates that the distribution of skilled immigrants among the various branches of economic activity does not necessarily correspond to the objectives pursued through the promotion of selective immigration. Moreover, in the case of Brazil, no explicit incentives have been provided but immigrants nevertheless exhibit a higher skill level and are more strongly oriented towards manufacturing.

In sum, migration among developing countries may have undesirable effects in terms of the supply of skilled human resources in the migrants' home countries. In addition, in cases where the immigrants come mainly from neighbouring countries, it is highly probable that the migratory flows towards countries within the region having a relatively higher level of development will exhibit negative selectivity in relation both to source and destination countries, which may obscure the actual extent of migration by skilled manpower. These two effects, measured in

relative terms, are general aspects that should be taken into account by selective immigration policies in any case where large numbers of migrants are concerned.

With regard to the occupational characteristics of skilled immigrants and their positions within the labour force, these variables are probably linked to the relatively higher level of development of some economic activities in the recipient country which create a demand for certain specializations, particularly in the services sector. Thus we can make the statement that, within the bounds of their freedom of action, selective immigration policies aimed primarily at attracting skilled human resources are successful when they result in a preponderance of highly-skilled immigrants and when these immigrants find their way into economic sectors of strategic importance to the recipient country.

All this points to the advisability of taking a closer look at the various countries' situations, both in order to ascertain how viable and effective immigration policies truly are in achieving their objectives and in order to apply such policies in a suitable way in other countries that have a shortage of skilled human resources in many sectors.

2. The emigration of skilled manpower and skilled emigrants in selected countries

Just as we have done in the case of immigration, reviewing some of the Governments' responses to emigration is a first step in evaluating what has been done in this regard. In many Latin American countries, the emigration of skilled manpower has prompted the issuance of regulations intended to form what might be characterized as an "implicit" policy. Despite justified concerns –mainly, it appears, about the problem of the brain drain and the lack of any form of compensation for source countries– however, this form of governmental response has not managed to move beyond the legislative bounds of such measures in order to address the overarching issue of emigration in the region.

An evaluation of the options appears to be a very complicated task, given the vast number of measures –and possible policies– that have to be considered, including the immigration policies of recipient countries. Basically, however, among all the different measures proposed in developing countries, the Latin American Governments have focused on means of retention (restrictions on the emigration of

professionals and technical personnel) and of return or repatriation (with the help of various sorts of programmes).

With regard to efforts at retention, the imposition of restrictions on the emigration of professionals and technicians has been controversial because such restrictions have generally taken the form of mechanisms for hindering such individuals from leaving the country. They do not address the factors that lead to emigration; they may infringe upon the individual's right to unhampered international mobility for purposes of intellectual work; and they are usually easy to evade, which renders them ineffective. The case of Haiti, where measures of retention were used in the 1970s, backs up these objections, inasmuch as during that period, up to around 1980, the number of professionals and technically-trained personnel who left the country actually increased (Martínez, 1992).

The most common sorts of mechanisms of retention used up until a few years ago were a refusal to issue or renew passports, special fees or charges for the issuance of an exit visa, foreign exchange controls, and other such measures. Many Latin American countries implemented such restrictions because of the perceived problem of the brain drain towards industrialized countries (Torrado, 1979, pp. 117-136).

If this was actually the main reason why Governments sought to justify and direct measures of retention, then they clearly had a mistaken impression of the usefulness of this type of measure, given the fact that a number of Latin American countries' skilled emigrants are concentrated—in some cases very markedly—in other countries within the region itself.

The return of skilled emigrants, for its part, is an underlying concern for countries that have re-established a democratic institutional structure as well as for countries that for some time now have simply seen their return as a viable option for counteracting the consequences of the emigration of professional, technical and related personnel. There are two types of procedures in this respect: the implementation of programmes and measures by some Governments of the region, and the implementation of ICM institutional programmes at the request of the Government concerned.

Programmes and measures designed to bring emigrants back to their home country, including those who left for political reasons, have been used much more frequently in Latin America than

measures of retention because they at least appear to be less complex and to have a lower economic cost (Torrado, 1982). Few of such programmes have gone beyond simply providing exemptions from customs or other duties, however, and they have therefore been largely ineffective. This signifies that "desirability" has been the main criterion for many countries in the region. The basic problem here is that these government responses have not actually constituted full-fledged policies, although they have sometimes been presented as such, but are instead simply measures or programmes largely unrelated to broader social and economic objectives. The above also underscores the fallacy of assuming that designing a policy aimed at securing emigrants' return is less complicated than designing a policy of retention, since a return to the home country is part of the migratory process.

The Programme for the Return of Professionals and Technicians in Colombia, which has been one of the Latin American countries to be most severely affected by emigration, is a good example in this regard. The programme, implemented in 1972, was chiefly aimed at professionals residing in industrialized countries; in addition to customs, tax and administrative incentives or concessions for the importation of basic goods, one of its main features was a provision regarding the rendering of services in the home country without a labour contract being required (as a means of providing returning emigrants with greater freedom in finding employment) and a requirement that they remain in the country for at least five years after returning (CID, 1981). An evaluation of this programme arrived at the conclusion that it had been a failure, according to the parties concerned, owing to the lack of protection afforded to returning emigrants with regard to conditions of employment, the insufficient information provided regarding employment and wages, and the fact that the requirement of a minimum length of stay in the country was regarded as an arbitrary measure.

Another useful example is the return of skilled emigrants to Uruguay with the help of the international community and various public and private organizations. In view of the unsatisfactory results achieved in this respect as of the late 1980s (even though the number of returnees was rising), the belief took hold that it had become necessary to place the subject within the context of an effort to mend the social fabric of Uruguayan society, which was in disarray; thus the repatriation of emigrants came to be

seen as an economically and socially viable form of social, rather than solely material, re-integration (Fortuna and Niedworok, 1988, pp. 27-122).

In terms of official government action, the repatriation of emigrants is an important element in the analysis of policies relating to emigration. It is therefore essential that a broad-ranging debate take place that can contribute to the achievement of the ultimate objective, which is the recovery of people who are valuable from a social standpoint and expensive from an economic one. Nor should we forget that the issue of returning emigrants also encompasses less skilled individuals and entire families.

At the request of its member Governments, ICM launched a series of institutional programmes in 1974 to facilitate the voluntary return of skilled Latin Americans who were living outside their home countries but who chose to return as part of what was seen as a repatriation of "talent" (ICM, 1986). As part of these programmes, which focus mainly on the return of emigrants residing outside the region, employment opportunities have been identified that cannot be filled by the human resources on hand in the Latin American countries but whose requirements could be met by professionals of the same nationality residing abroad.

ICM sought to recruit those who were willing to return to their home country by mounting campaigns to disseminate information about local job opportunities, living and work conditions, and customs laws. It also made the necessary arrangements itself, helping with the actual move back to the country and welcoming the returnees upon arrival, helping them to get settled and providing assistance during the adaptation phase. By the end of the 1980s, 1 126 professionals had returned under these programmes, almost all of whom came from outside the region; a particularly large proportion were Chileans returning to their country (CID, 1981).

The nature of this process suggests that little attention was paid to potential returnees residing in other Latin American countries at the time, even though, for countries such as Bolivia, Chile, Paraguay or Uruguay, this description fits the majority of their skilled emigrants. Obviously, assuming that a significant percentage of such emigrants wished to return to their home country, it would make sense to devote attention to this segment of the emigrant population.

The above-mentioned elements indicate the absence of explicit policies on emigration in Latin America, at least until a few years ago. Measures of retention have been controversial, highly ineffective and seem to have overlooked the intraregional emigration of professionals and technicians. A similar degree of ineffectiveness has characterized repatriation programmes. All these facts underscore the presence of serious shortcomings in respect of migration policies addressing the problem of the emigration of skilled manpower.

What has been said here about selective immigration and the emigration of professionals and technicians illustrates just how complex a task it is for developing countries to formulate and implement policies regarding the migration of skilled human resources. However, this does not justify simply neglecting to search for effective courses of action appropriate to each particular situation based on a prior understanding of the contexts in which they will have to be pursued (Torrado, 1982). It is very important that a comprehensive baseline analysis be conducted; the information referred to in the above discussion, as well as some of the interesting features of emigratory flows that will be mentioned below, may contribute to that analysis.

For example, skilled emigrants from Argentina, Chile and Uruguay together accounted for around one third of all intraregional emigrants around 1980. During that period the emigrants from these countries, especially in the case of the Chileans and Uruguayans, were concentrated within the region, whereas around 1970 only the latter had been.

Between 1970 and 1980, emigratory flows from these three countries, both those within the region and those directed towards the United States, expanded considerably. The increase in the intraregional flow was substantially greater, however, and was particularly marked in the case of Argentine and Chilean emigrants, whose numbers nearly quadrupled (Martínez, 1992).

These facts appear to indicate that repatriation programmes, customs exemptions and the ICM arrangements (certainly in Argentina and Chile) did not yield satisfactory results, although the percentage of political refugees who had to emigrate in the 1970s, especially from Argentina and Chile, is unknown.

Table 8 shows that the main flows of Chilean and Uruguayan emigrants had a number of destinations

TABLE 8

Argentina, Chile, Uruguay: emigrants in the professional, technical and related categories present in Latin America around 1980^a

| Country of residence and year | Country of birth | | | | | |
|-------------------------------|------------------|--------------|---------------|--------------|--------------|--------------|
| | Argentina | | Chile | | Uruguay | |
| | Number | % | Number | % | Number | % |
| Argentina 1980 | | | 3 629 | 33.4 | 4 372 | 60.7 |
| Bolivia 1976 | 454 | 5.2 | 501 | 4.6 | 19 | 0.3 |
| Brazil 1980 | 2 907 | 33.1 | 2 217 | 20.4 | 1 596 | 22.1 |
| Chile 1982 | 797 | 9.1 | | | 133 | 1.9 |
| Costa Rica 1984 | 142 | 1.6 | 267 | 2.5 | 36 | 0.5 |
| Ecuador 1984 | 328 | 3.7 | 912 | 8.4 | 80 | 1.1 |
| Guatemala 1981 | 44 | 0.5 | 56 | 0.5 | 10 | 0.1 |
| Panama 1980 | 82 | 0.9 | 152 | 1.4 | 14 | 0.2 |
| Paraguay 1982 | 1 007 | 11.5 | 143 | 1.3 | 202 | 2.8 |
| Uruguay 1975 | 1 250 | 14.2 | 101 | 0.9 | | |
| Venezuela 1981 | 1 775 | 20.2 | 2 894 | 26.6 | 740 | 10.3 |
| Total | 8 786 | 100.0 | 10 872 | 100.0 | 7 202 | 100.0 |

Source: Jorge Martínez P., *La migración de mano de obra calificada dentro de América Latina*, LC/DEM/G.126, series A, No. 275, Santiago, Chile, CELADE, 1992, October.

^a Includes the 11 Latin American countries covered by the IMILA Programme which conducted censuses during the relevant period.

in common. The greatest concentration of Chileans, by a slight margin, was found in Argentina, but many went to Venezuela and Brazil as well. Over one half of the Uruguayans settled in Argentina. The largest contingent of Argentines, for their part, headed for Brazil, and many others went to Venezuela.

If we examine certain features of these flows of emigrants, a number of significant aspects emerge. For example, 19% of all economically active Argentine emigrants were skilled, but this group represented only 1% of its country's stock of skilled manpower. In contrast, in Uruguay the latter figure was 10% (Martínez, 1992). Thus, although both countries exhibit a markedly positive selectivity in respect of their emigrants, the intraregional emigration of skilled human resources affected the two countries' national supplies of such resources very differently.

The intraregional emigration of Chileans, on the other hand, exhibited a low level of positive selectivity due, no doubt, to the large number of semi-skilled and unskilled workers who emigrate to Argentina; nevertheless, it had a fairly strong impact (nearly 4%) on the national stock of skilled resources (Martínez, 1992).

An analysis of the distribution of emigrants by skill levels brings out other differences as well. Human resources in the more highly skilled categories were in the majority only among Argentines (nearly 66%), with the largest category being "architects, engineers and related occupations"; this denotes a qualitatively significant migratory flow, which was directed primarily towards Brazil and Venezuela. Among the Chileans and Uruguayans, the majority of skilled emigrants fell into intermediate skill categories, the most numerous one being "teachers and other" (Martínez, 1992).

The foregoing information, although very general in nature, demonstrates the need to devote priority attention to the emigration of skilled manpower, especially in view of the fact that the flow of skilled personnel to the United States has continued, that, at least until the early 1980s, the phenomenon has been of increasing significance at the intraregional level, and that it may have a considerable impact on countries whose professional and technically-trained emigrants represent a substantial proportion of the national stock of such resources.

V

Conclusions

In this article an attempt has been made to demonstrate the significance of the international migration of skilled manpower between developing countries as illustrated by the case of Latin America. Some of the many relevant aspects of this phenomenon are set out below.

The migration of skilled manpower constitutes a problem for developing countries; this is especially true of emigration, regardless of the country of destination. It is therefore necessary to learn more about the causes and consequences of migratory movements, not only in the case of those directed towards the industrialized world, but also with respect to flows between developing countries (horizontal migration).

As is true of migration in general, the migration of skilled human resources between developing countries is prompted by factors of both attraction and expulsion. Its undesirable consequences, without delving too deeply into this aspect, are basically the loss of investment and of production resources; the specific nature of these losses can only be ascertained by means of case studies. The central argument in corroborating the existence of such losses is that, for developing countries, the full utilization of each nation's skilled human resources is essential to the promotion of the social and economic well-being of the population.

The pattern of migratory flows of skilled human resources within Latin America indicates that, both in the early 1970s and around 1980, a considerable portion of the skilled emigrants coming from a number of countries were concentrated in a few countries of destination. This means that some countries were transferring ("paying out") numerous professionals and a large percentage of their national stock of skilled resources to other countries. This is a significant aspect of the issue that should be explored in depth.

If we compare various Governments' reactions to some of the problems brought out by this analysis of migratory flows, on the one hand, with actual observations of the situation, on the other, a number of questions arise. The main migratory flows towards

countries that promote what has come to be known as "selective immigration" come from neighbouring countries and have an impact on the home countries' stock of skilled human resources. This has some undesired effects and generates a negative selectivity in these flows that appears to remain constant in the case of migration between neighbouring countries. Furthermore, a preponderance of highly skilled immigrants specialized in the fields vital to the receiving economy, which is the goal of such policies, has not been observed. All of this suggests that the objectives of selective immigration policies need to be realistically geared to the characteristics of each country's development process.

It is interesting to note that almost all the Governments have taken a quite favourable view of the immigration of skilled resources but that few countries have formulated and applied explicit policies in this regard.

The emigration of skilled manpower is a particular cause of concern. Given the fact that the migration of this segment of the labour force—to the United States and, especially, within the region—increased sharply between 1970 and 1980, government measures in this connection do not appear to have been very effective, above all because the Governments have not managed to design policies that are firmly based on a full understanding of the problems they seek to address.

One particularly salient aspect that emerges out of a country-by-country analysis of migratory flows is the quantitative scale of the intraregional emigration of skilled manpower as compared to that of Latin American emigration to the United States. This is a highly significant finding, especially with respect to the years around 1970, because, beginning with that high point in the debate surrounding the problem of the brain drain, this phenomenon came to be perceived primarily as one involving the emigration of Latin American professionals and technicians to the United States. This does not, of course, mean that this will inevitably be the trend of the future nor that the same pattern necessarily characterized the 1980s.

The foregoing observations are presented solely with the intention of addressing the subject and calling for detailed, current research on specific situations based on adequate empirical evidence. In view of its significance, the international migra-

tion of skilled manpower within Latin America merits a more in-depth analysis designed, above all, to contribute to the implementation of appropriate policies.

(Original: Spanish)

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