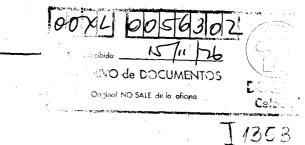
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INTERNAL MIGRATIONS AND DEVELOPMENT IN LATIN AMERICA: DEMOGRAPHIC ASPECTS

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Internal Migrations and Development in Latin America:

Demographic Aspects

Juan C. Elizaga

Introduction

20 Pro 1972

The purpose of this document is to give a view of the present state of the urbanization and its tendencies in a significant group of six Latin American countries, its relationship with the demographic growth and particularly, with the migratory movements which are immediately responsible for the spatial distribution of the population.

The transferring process of important shares of population from rural areas and small towns to medium size and big cities, is a phenomenon that has been observed for the last three decades. The urban migration towards the countries' primary metropolitan areas is a fact as or even more significant than the previously mentioned one.

The Latin American thought, in the last five years, has elaborated the bases of a satisfactory enough explanatory theory of the rapid urbanization, and especially of the population centralization in the primary metropolitan areas. It is not a matter of this document to develop such ideas, although it can be said that they are based in the inherent characteristics of these countries' economic development that lead necessarily to the centralization of the activities. The importing of advanced technology, the external and scale economies, the regional relationships of prices and wages, the transportation network disposition, the information impact originated in the big cities, the accumulative effect of the migratory movement begun once at a great ratio through relationships of kindred and friendship, the existence of basic service infra-structures, among others, are important elements noted.

* Latin American Demographic Centre (CELADE).

The six countries considered had in 1970 a population of 210 million people, approximately the 77 percent of Latin America's population. They represent the countries with the larger populations, Peru excepted and not considered here for lack of adequate information, detailed as follows:

| Brazil | 94 509 t | housands | |
|-----------------------------------|-----------|--|---|
| Mexico | 48 313 | .: | |
| Irgentina | 23 364 | 57 | |
| Colombia (estimated) | 22 160 | an an an air an air an an air an | |
| Venezuela (estimated) | | | · · · |
| Chile | | | h . |
| an the source of a first a repti- | | an a | n Bernardan ay fi t han a tigata ang ta |
| Total | 207 935 t | | |

Urbanization level and pattern

All of the six countries under analysis present towards 1970 an urbanization level comparable to that that several of the most industrially developed countries in the world had in 1960. Argentina and Chile would have reached the level of 55-60 percent of population living in nuclei over 20 thousand inhabitants. Venezuela, Mexico, Colombia, and Brazil, in this same order, would be placed at variable levels between 55 and 40 percent.

The urbanization process in Argentina was anticipated in 30 or 50 years, in relation to the remaining countries considered. In 1914, the 38 percent of its population was urban; ratio reached by Chile after 1940, by Venezuela after 1950, and by the three remaining countries, after 1960. This special position of Argentina is explained by the location of foreign in-migrants in the major cities; so that half of the inhabitants of Euenos Aires in 1914 were foreigners, city that already represented, in its turn, a fourth of the country's population. This kind of in-migration had a considerably smaller effect in Brazil due to its larger population size compared to Argentina's. Certainly, it also played an important role in a more recent period in Venezuela's rapid urbanization, particularly in the relative position of its main nucleus (Caracas).

Eesides that, due to their general level of urbanization, Argentina and Chile are clearly differentiated from the group of the other four countries because of the relative importance of the population living in metropolitan areas¹ which was approximately 44 and 36 percent, respectively, in 1970, whereas at the same period it only reached 22-23 percent in Brazil and Mexico, and it could be estimated between 25 and 27 percent for Colombia and Venezuela. Really, Argentina's and Chile's facts show basically the relative importance of Greater Buenos Aires and Greater Santiago: 38 and 31 percent of each one of those two countries' population.

The predominance of these two metropolitan areas, is accompanied by demographic characteristics, precisely differentiating Argentina's and Chile' populations from the corresponding ones of the other four countries considered, to wit, a lower natural increase rate -due to the lower fertility- and to the weak growth of small and medium cities. In such conditions, only a high absorption rate of the internal migration, by the central metropolitan areas of these two countries would explain the existence of such a nigh degree of centralization, which is verified further in this document in the migratory movements as in the growth rate of different size nuclei.

The already shown data take as reference the country's total population. For a better comparison of the relative importance of the metropolitan areas, of the cities over 100 thousand people and, in general, of the urban population structure, according to population size of localities, it corresponds to take as a reference base only the population living in nuclei over 20 thousand inhabitants.

Between 1940 and 1960 Brasil, Chile and Venezuela had two thirds of their urban populations in localities over 100 thousand people, this ratio not showing a definite tendency during the period. On the contrary, the ratio went in continuous increase in Colombia and Mexico, countries in which it went from 56 percent (approx.) in 1940, to 70 percent (approx.) in 1960. Now, the analogy

1/ Localities over 500 thousand inhabitants in 1960.

• 3

within both groups of countries has a different meaning, for while in Chile that segment of urban population is headed by Creater Santiago, in Brazil and Venezuela the medium size cities gain relative importance in relation to their respective metropolitan areas; $\frac{2}{2}$ the same phenomenon is so seen in Colombia as in Mexico, but with even greater strength. That is to say, in the four lastly mentioned countries, there was a high gain in the segment of medium cities, greater than the one in the metropolitan areas. $\frac{3}{2}$ This fact has its confirmation in the increase rates of medium cities, similar and even bigger than the average increase rates of the metropolitan areas (see further ahead). In the two countries from which there is information for 1970, Erasil and Mexico, the relative importance of the urban segments of the cities over 100 thousand inhabitants increased considerably, whereas the part that lived in the metropolitan areas descended, also in both cases, which corroborates what has been previously said. In these two countries, the urban population in cities over 100 thousand people would reach the 79 percent, getting near Argentina's 82 percent in 1960. Colombia (75 percent in 1964) would probably reach a similar level towards 1970. Chile will certainly stay behind (64 percent in

1960) due to the lack of dynamics of the medium cities.

In the following table, the countries are presented under examination indicating the rank in which they were located in 1940 (circa) and in 1970 according to several urbanization indexes:

Localities that in 1960 had over 500 thousand inhabitants. It must be taken into account that, also contributing to the growth of cities over 100 thousand inhabitants (apart from the metropolitan areas), are those muclei reaching and surpassing that figure in the interval of two consecutive censuses. On the contrary, the metropolitan areas considered are the same in all the censuses. (See 2/).

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| | Percentage i to the popu | | |
|-------------------------------|---|---------------------------------|---|
| Country and year ^a | Nuclei over 20 thousand inhabitants | Metropol- itan areas | Nuclei over Metropol- 100 thousand itan inhabitants areas |
| Argentina · 1947 | 1 | 1 | 1 – |
| Chile : 1940 | .2 | 2 | 4 - |
| Venezuela : 1941 | 3 | 3 | $\frac{1}{3} - \frac{1}{2}$ |
| Mexico : 1940 | 3-4 | . se batera are €0. 4 | . ¹ ••••••2} • • • • • • • • • • • • • • • |
| Colombia : 1938 | 4 | 5 States | 5 - |
| Brazil : 1940 | 5 | 45 | 2 − − − − − − − − − − − − − − − − − − − |
| Argentina : 1970 | . 1 . | .1 | |
| Chile : 1970 | 2 | 2 | 4 4 |
| Venezuela : 1970 | 3 | 3 | 3. 3. |
| Mexico : 1970 | 4 | 4 | 2 2 |
| Colombia : 1970 | 5 | 4 | 2 2 2 |
| Brazil : 1970 | 5 | 5 | 2 2 |

- a/ The differences in the census dates were taken into account through estimation.
- b/ Estimated rank. There was only information from Brazil and Mexico. The ranks in 1960 were: 1 Argentina, 2 Brazil and Chile, 3 Colombia, 4 Mexico and Venezuela.

The previous table confirms the already commented position of the urban population and of the metropolitan areas in relation to the country's population, kept almost without change in the 1940-1970 period the similarity of Brazil, Colombia and Nexico is also confirmated. The relative position of each country is different when comparing the urban population structure. In fact, in 1970, and if the localities over 100 thousand inhabitants are compared as well as the metropolitan areas, Argentina excepted keeping the rank 1, the rank 2 is now equally shared by Brazil, Colombia and Mexico, whereas Chile occupies the last place. It must be observed that around 1940 the rank of these countries was the same as in 1970 with the important difference that the two countries occupying the last rank (Colombia and Mexico) went up to share rank 2 with Brazil.

Demographic growth rates

The population of Latin America has evolved, the same as that of other developing regions, with growth rates continuously increasing since 1930. The rate of the 1930-1940 decade has been estimated in 1.9 percent per year, whereas the one of the 1950-1960 period -the last one from which there are complete available data- was 2.7 percent. The main cause is well known: the decrease in mortality.

The urban population $\frac{4}{}$ exclusively has benefited by this growth. For in the three decades from 1930 to 1960 its rate was: 3.4, 4.8 and 5.4 percent successively. On the other hand, the rural population kept a rate near to the level of 1.6-1.7 percent.

The average growth of Latin America reflects well enough the behaviour of the countries with larger population as Brazil, Mexico and Colombia. These three countries had in the last decades similar growth rates, both in their total population as well as in their urban and rural ones. Argentina, Chile and Venezuela deviate from this common denominator, although not in the same direction. In the following table those differences are shown, with the most recent available data in each case:

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4/ Population that in each census lived in localities over 20 thousand inhabitants.

--^{--'}6 -

| Country an | d Period | Total | Urban | Rural ^{b/} |
|----------------|-------------|-------------|--|---------------------|
| Argentina | (1947–1960) | 1.7 | 2.7 | 0.4 |
| Chile | (1952-1960) | 2.5 | 3.6 | 1.5 |
| Venezuela | (1950-1961) | 3.9 | 6.1 hate and | 0.8 |
| Mexico | (1950-1960) | 3.0 | 4.7 | 2.2 |
| | (1960-1970) | 3.3 | and a state of the second s • • • | |
| Colombia | (1951–1964) | 3 .1 | 5.9 | 1.9 |
| Brazil | (1950-1960) | 2.9 | 5.1 | 2.3 |
| n an that such | (1960–1970) | | | • |

 a/ Population of localities that in the 1960 (circa) census had over 20 thousand inhabitants, being rural the country's remaining one.
b/ Approximately estimated.

The almost null rural growth in Argentina obeys to the combination of the low natural increase of population and the persistent migratory movements towards the most important urban centres, whose increase has been reinforced by the international migration as well. The small rural growth of Venezuela (0.8 percent), in spite of the country's natural increase rate of 3.3-3.4, could be explained by a combination of circumstances: I- the migrants absorption capacity of the middling importance nuclei, comparable to the larger nuclei's one, as shown by the fact that out of 9 nuclei having from 50 to 100 thousand inhabitants in 1960 increased with rates higher than 5 percent, and the same thing happened in the four cities having from 100 to 500 thousand inhabitants; II- the relatively small size of the country's population (7.5 millions in 1961) compared to the population of Brazil, Mexico or even Colombia (17.5 millions in 1964), which makes the impact of a certain volume of migration greater in the urban distribution, and III- the economic prosperity derived from the oil industry.

In the four countries with high growth rates (Brazil, Colombia, Mexico and Venezuela), of a total of 149 cities over 50 thousand inhabitants in 1960, 92 of them increased with rates higher than 5 percent per year; 27 with rates from 4 to 5 percent, and only 10 (7 in Mexico) with rates lower than 3 percent, i.e., inferior to what could be taken as natural increase. None of the cities over 500 thousand inhabitants in these countries increased with rates lower than 4 percent; the general rule was an increase over 5 percent in most of the cities. In Colombia and Venezuela all the cities over 50 thousand inhabitants increased with rates higher than 5 percent; moreover, in 33 out of 39 cities of this size, the rate exceeded the 5 percent.

Of the mentioned cities over 50 thousand inhabitants, 68 of them had increased really with rates over 6 percent, as shown below:

| | Increase rate: 1950-1960 | | | |
|---------------------|--|--|--|--|
| Size | Cities with rates Total of over 6 percent cities a/ | | | |
| 1 000 000 and over | 2 ^{b/} 5 | | | |
| 500 to 999 thousand | 5 ^{c/} 8 | | | |
| 100 to 499 thousand | 19 ^d / 52 | | | |
| 50 to 99 thousand | 42 ^{e/} 84 | | | |
| Totals | 68 149 | | | |

a/ Brazil, Colombia, Mexico and Venezuela.
b/ Caracas and Bogota.
c/ Belo Horizonte, Cali, Medellin, Guadalajara and Monterrey.
d/ Brazil 11, Colombia 2, Mexico 3, Venezuela 3.
e/ Brazil 23, Colombia 6, Mexico 6, Venezuela 7.

The above facts give occasion to state that at least half of the cities over 50 thousand inhabitants (1960) of the four countries considered received migrants at a rate of about 3 percent per year or even higher in many cases. In the remaining cities of this category it could be estimated that a great

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majority of them received in-migrants at varying rates between 1.5 to 2.5 percent per year. Of course, these are rates that exceptionally arose in the United States and European countries (at least in recent times), even in cities located in regions of strong expansion.

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The average growth of the cities in Chile and Argentina is clearly lower that that of the four countries above considered. In spite of that, since the country's natural increase is low and especially that of the important cities, there is an important margin of migratory growth left. In fact, in Argentina's second city (Rosario) with a growth rate of only 1.8 percent (1947-1960), probably half of it is due to migratory movement; five other cities over 100 thousand inhabitants (out of a total of 11) recorded rates of about 4 percent and in such cases the migrations' contribution could not be lower than 2 percent, or than 3 percent in the case of Greater Buenos Aires.

In Chile, of the 3 cities over 100 thousand inhabitants (1960), only one (Greater Santiago) increased with a rate around 4 percent, whereas the other two (Concepcion and Valparaiso-Viña del Mar) had rates from 2.5 to 3.3 percent. Since the natural increase rates were higher than 2 percent, only Greater Santiago had a substantial net migratory gain (approx. 1.7 percent). Other six minor cities (over 50 thousand inhabitants) out of a total of 9, experienced a more important increase (over 3.5 percent).

Migrations

At the same time that a country is urbanized, the inter-urban migratory movements grow in importance. Research studies in several metropolitan areas of Latin America around 1965 reveal that 2/5 or more of the in-migrants come from nuclei over 20 thousand inhabitants. However, the dominant (net) stream has been the rural-urban one in the majority of the countries of the region, at least until recent times, including Brazil, Mexico, Colombia and Venezuela. In the two first mentioned countries, their urban population almost doubled its number between 1940 and 1960; in Colombia and Venezuela it over duplicated. In the 1960-1970 decade the increase of the urban ratio was greater than in the previous decade in Brazil (40.0 and 28.4 percent) and in Mexico(44.0 and 34.7 percent). This last fact shows that even at a relatively high level of urbanization, the volume of rural-urban displacement is important in relative terms, $\frac{5}{2}$

Moreover, the rural population increase rate, below the presumed natural increase rate of that population (frequently between 2/3 and 1/2 of the latter) can only be explained by a population exodus. In its turn, the high increase rates of the population of the big and medium cities, observed in the majority of the countries of the region (see previous section), are a clear indication of the existence of migratory movements oriented towards those cities. Finally, it is reasonable to suppose, lacking direct evidence and on the basis of the existence of important rural-urban and urban-urban movements that the losses suffered by the medium or regionally important cities are restored frequently in excess by the movements from the country and small villages.

Based on census data and according to the type of information usually available, net movements of in-migration and out-migration can be established, at least net balances of migration -of major administrative divisions. The examination of these data shows that only a few areas have important positive balances, while the majority of them show negative balances and positive ones of little significance in relation to the national volume. The benefited divisions hold in, invariably, the primary metropolitan areas towards which a national migratory stream flows. Many of the administrative areas having a relatively small positive balance of migration, or even that are losing population, can hold in cities -sometimes second rate metropolitan areas- whose populations

5/ It must not be forgotten that some part of the urban population increase obeys to the cities' changing of category (cities over 20 thousand inhabitants) during the period considered. The contribution of the changing of category can easily be of 20 percent and even more.

increase at great speed. Intra-regional migrations not revealed by statistical figures should explain this apparent contradiction.

The introduction of specific instances illustrates the previous comments beginning by Argentina. In this country the inter-provincial net migration during the 1945-1960 period was estimated in 770 thousand people of which 750 correspond to the balance of the Buenos Aires Province - Buenos Aires City Region. As in its turn the districts of the Province of Buenos Aires lose population going to the area formed by Greater Buenos Aires, the result is that the net balance of this latter metropolitan area is about 1 200 thousand people. As a contrast it must be pointed out that the Province of Cordoba had a negative balance while its capital city (Cordoba), which is the most important industrial centre behind Greater Buenos Aires, increased with a rate higher than 4 percent. Finally, it is interesting to mention that the population of Greater Buenos Aires had an increase of 2.7 percent including 2.0 percent of net migration (1.2 percent of natives and 0.8 percent of foreigners) and consequently only 0.7 percent of natural increase.

The inter-provincial net migration of Chile was estimated in about 350 \checkmark thousand people for the 1952-1960 period. If this total is taken as in-migrants towards various provinces, 192 thousand people corresponded to the Santiago Province. From the point of view of the out-migration, only 34 thousand go out of this province. It is not difficult to deduce that the balance of the Santiago Province shows the situation of Greater Santiago. Two other provinces having the higher urban concentrations after Santiago, had migratory balances in each case of around 6 thousand people. These two provinces benefit by discreet streams from neighboring provinces, but they are tributary, in their turn, mainly of Santiago.

The Metropolitan Area of Caracas stretches out over the Federal District and the State of Miranda. To give an idea of the attraction of that area, the migration of both administrative divisions can be compared to the inter-state migration of the whole country, once the mutual movement between the Federal District and Miranda State has been eliminated. In the 1950-1961 period, the so defined inter-state movement could be estimated in 625 thousand people, a third of which went to the region held by the Metropolitan Area of Caracas. The relative magnitude of the inter-state (inter-regional) migration, oriented towards Venezuela's primary metropolitan area, although important, is so in a lower degree than the one observed in Argentina and Chile in relation to their respective primary metropolitan areas.

Eight of the 32 Mexican states absorbed the 97 percent of the inter-state net migration for the 1950-1960 period (people over 10 years old in 1960). However, the Federal District-Mexico region represented 60 percent while the remaining six states gathered 37 percent. Another direct estimation on the Metropolitan Area of Mexico shows that the latter exceeded that ratio of 60 percent. Whatever may be the attraction of the Metropolitan Area of Mexico in relation to the inter-regional migration, it is even higher than the one exercised by Greater Santiago in Chile. It is worth while mentioning that the three states following the Metropolitan Area of Mexico concerning migratory attraction, are seat of secondary metropolitan areas (Guadalajara and Monterrey) and of bordering cities of rapid increase (Tijuana and Mixicali).

Unfortunately the census data of Brazil for 1960 and 1970 that would be needed to make estimations of the internal migration movements is not available. For this reason, information of the 1940-1950 period had to be taken in order to present a view of the main streams of that period, movements that probably kept prevailing greatly; particularly those oriented towards the regions where the main metropolitan areas are:Sao Paulo and Rio de Janeiro. During the said period, between 1.5 and 2.0 million people changed their state of residence. The State of Parana received almost 500 thousand people, Sao Paulo around 400 thousand and the State of Guanabara 370 thousand, gathering the three regions together 2/3 or more of the total volume of migration. The population exchange between states has been intense as it happened in the State

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of Sao Paulo that, at the same time of incorporating to its population 400 thousand in-migrants it lost, through out-migration, 300 thousand natives who summed up mainly to the population of Parana; Pernambuco, with an almost null balance, since the 90 thousand in-migrants were compensated by a similar number of out-migrants; or the State of Rio de Janeiro with 180 thousand in-migrants and 115 thosand out-migrants. Since the Metropolitan Area of Rio comprises the State of Guanabara and some important nuclei of the neighboring State of Rio de Janeiro, a significant part of said movement occurred between both states.

The out-migration suffered by many of the regions did not hindered -as seen in other countries- the movements towards the important regional urban centres. Thus, the city of Belo Horizchte had probably and increase by migration of about 3.5 percent between 1940 and 1960 (the intercensal rate was approximately 6.6 percent); at the same time the State to which it belongs (Minas Gerais) has been, during that period, the region of higher out-migration in absolute figures. That much can be said of the North-Eastern Area composed of seven states, traditional source of out-migrants to the more prosperous regions of the East, Center-West and South of the country where, nevertheless, the inter-regional migration towards the major cities (Recife, Fortaleza, Joao Pessoa, Natal) had a great importance as proved by the increase rates of their population after 1950.

Metropolitan Areas

During the last decades the urbanization has been the principal aim of the studies of the spatial re-distribution of the population of Latin America. Now that the main countries, due to the magnitude of their populations and economical powers, have surpassed the level of 40 percent living in nuclei over 20 thousand inhabitants and in several cases surpassing the mark of 50 percent, it can be thought that there is a great advancing towards a new state of ruralurban equilibrium in which the most important transformations occur within the urban system. This new situation has already a real expression with the

emerging of huge metropolitan areas exceeding 8 million inhabitants (Buenos Aires, Mexico and Sao Paulo) which are easily located among the first dozen largest metropolis in the world.

In the following table some outstanding characteristics of the primary metropolitan areas in the six countries examined in this document are presented: (i) magnitude in absolute figures, (ii) rate of increase in the last decade, (iii) ratio of their population in the country's total, and (iv) relative part they absorb from the country's population increase.

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| | | | | | |
| | | | | | |

| Countries | Primary metropolitan areas | Population (1970) (thousands) | Rate of increase (1960-1970) % | Country's ratio (1970) | Ratio absorbed by the country (1960-1970) |
|-----------|----------------------------------|-------------------------------------|--|---|---|
| Argentina | Buenos Aires | 8 774.5 | 2.6 | 37.6 | 61 |
| Chile | Santiago | 2 779.5 | 4.6 | 31.4 | 60 |
| Venezuela | Caracas | 1 336.4 | 6.6 ^b | 17.8ª | 26 ^{-D} |
| | " (estimated 1970) | 2 300.0 | n ta tura di se anna anna da an Iomraidheanna anna anna anna anna anna anna ann | - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 | n de la composition de La composition de la comp |
| Mexico | Mexico | 8 589.6 | 5.5 | 17.8 | 27 |
| Colombia | Bogota | 1 697.3 ^C | 6.8 ^d | 9.7 ^{C/} | 17 ^d |
| · · · · · | " (estimated 1970) | 2 400.0 | n nordala ana. Mi ri | ار چر کر شخه د اس است از در در اس اس اس از در | |
| Brazil | Rio de Janeiro | 6 934.7 | 4.8 | 7.3 | |
| 11 | Sao Paulo | 7 904.3 | 5.7 | 8.4) | -3- |

a/ 1961. b/ 1950-1961. c/ 1964. 1/ 1951-1964.

With the exception of Buenos Aires, in the other six metropolitan areas the rates of increase are around 5 percent or higher. Twenty years ago, few might have dared to think that the 1940-1950 increase rate would remain the same and the reality says that they have excelled, notwithstanding the absolute size of these nuclei. It would be daring to think that cities of 7 and 8 million inhabitants will continue to grow for a long time with rates of 5-6 percent, among other things before the expectation of a descent in the natural increase of the country's population (Brazil, Mexico). But it is not unlikely for it to occur, for one or two decades yet, in the case of cities from 2 to 3 million people (Caracas, Bogota).

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Perhaps the position of the primary metropolitan areas can be more signif- \bigvee icant if we consider the share of population growth that is captured by them. In the extreme cases of Argentina and Chile that portion was around the 60 percent and there would be no reason to think that it can not increase, though at a less rapid pace. The cities of Mexico, Caracas and Rio - Sao Paulo, already \bigwedge absorb 1/4 part of the country's increase.

Although the two examined indexes are significant, the absolute magnitude of these cities' population is even more. Even if their future growth were only moderate, it would imply the addition of several hundreds of thousands and even millions of people, a good share of them in-migrants. Only this fact would be enough to expect that the human streams towards these cities would keep on having a predominant role in the national concert.