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DEMOGRAPHIC ASPECTS OF URBANIZATION  
IN LATIN AMERICA

by the Population Branch, Bureau of  
Social Affairs, United Nations



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## DEMOGRAPHIC ASPECTS OF URBANIZATION IN LATIN AMERICA

### Introduction

The purpose of this paper is to give an over-all statistical picture of urbanization in the Latin American region and to describe and analyse the main demographic characteristics of the urban in relation to the non-urban population in the Latin American countries. The data used in the analysis were obtained mainly from reports on the most recent population censuses which, in the majority of cases, were taken around 1950. Explanations of the term, "urban population", are given in appendix A.

The countries of Latin America have for some time been undergoing relatively rapid urbanization, and recent estimates have indicated that over the past eight or ten years the process of urbanization has continued at the same pace as, and in some cases at a faster pace than, previously. The following paragraphs summarize the main findings from the analysis.

The countries of Latin America differ considerably in respect to the degree of urbanization that they have attained, but there are certain characteristics of the population living in cities which are common to all, or most all, of them:

- (1) the large cities are characterized by relatively low sex ratios and low fertility;
- (2) the distribution by marital status of the population living in cities differs significantly from that of the total population;
- (3) the more highly urbanized areas have a higher proportion of young and middle-aged adults and a lower proportion of children; and
- (4) cities also have higher literacy rates than the remainder of the population.

The available evidence does not establish a distinct difference in general mortality levels between the urban and the total population. However, rates of infant mortality in the cities are, on the whole, below the national averages.

/The more

The more rapid growth of the urban population as compared with the total population has been due primarily to rural-urban migration; rates of natural increase in urban and non-urban localities have apparently been fairly similar. Rural-urban migration is predominantly female in character and consists mainly of the movement of young adults, i.e., persons in the age-group 15-39. International migration, which would affect mainly the growth of metropolitan cities is heavily male, and at present of only minor importance in the majority of the Latin American countries.

The distribution of economically active males by branch of industry in selected large cities in the region differed somewhat from that in certain large cities located in the more economically advanced countries: the proportion engaged in manufacturing was similar for the Latin American and non-Latin American cities, but the former had larger proportions engaged in services and smaller proportions in commerce.

The manner in which the demographic characteristics of the population living in cities differs from those of inhabitants in other localities indicates the importance of urbanization not only in the demographic sense, but in the social and economic sense as well. The demographic traits of the total population of a country may be regarded as an average resulting from the weighting of the characteristics of urban and rural inhabitants. Therefore, if the process of urbanization continues and if city populations maintain their present characteristics, the total population of these countries will tend more and more to resemble the present urban population.

From the demographic standpoint this may mean a decrease in the level of fertility, which would necessarily bring about an important change in the rate of population growth and the age composition of the population.

From the standpoint of economic and social development, the spread of urbanization may be a primary factor in raising the national level of literacy, lowering the proportion of couples living in consensual unions, increasing the proportion engaged in industrial pursuits, and so on. The latter is likely to result in higher productivity and,

/consequently, higher

consequently, higher per capita income. In addition, the changes in the age composition of the population would be such as to lower the burden of dependency.

It is perhaps useful at this point to reconsider the hypotheses upon which the preceding theories are based. They are (1) that the process of urbanization will continue, an assumption which seems reasonable in view of our present knowledge of urban growth and the factors affecting it, and (2) that the demographic traits which presently distinguish the urban from the rural population will remain relatively unaltered.

The population of some large cities is increasing at a very rapid rate; in major cities of Colombia and Venezuela, for example, the increase is around 6 or 7 percent per year. In order to at least maintain the present urban living standards, it would be necessary to provide, inter alia, at a pace approximately similar to the rate of urban growth, 1) schools and teachers, so that the level of literacy will not decline, 2) vocational training, to ensure an adequate supply of skilled labour for the expansion of industry, 3) adequate housing facilities for the annual crop of newly weds and for migrants, and so on. If efforts are not made to at least maintain current standards as regards these and other important social and economic needs, increased urbanization is likely to have the effect of depressing rather than improving the level of living in a country.

### 1. Status of urbanization in Latin America

Census definitions of urban and rural areas do not permit a comparative analysis of the degree of urbanization attained by the various countries in the region; the definitions vary considerably from one country to the next.<sup>1/</sup> It has therefore been necessary to utilize a measure of urbanization which would make it possible to compare levels and trends in the different countries. For each country of the region, the following indexes of urbanization were calculated from the most recent censuses, taken generally around 1950:<sup>2/</sup>

- (1) The percentage of the total population living in places of 20,000 and more inhabitants;
- (2) The percentage of the total population living in places of 100,000 and more inhabitants.

Either measure is suitable for purposes of analysis. Even the census definitions (which shall be designated as "index 3") may be applied under certain conditions; actually, the coefficient of correlation between indexes (1) and (3) was 0.93 and between (2) and (3), 0.82. Table 1 gives for 20 Latin American countries the percentage of the population living in localities of 20,000 and more and 100,000 and more inhabitants, and shows the urban percentage according to census definitions.

From the standpoint of the world situation, the percentage of the Latin American population living in places of 20,000 and 100,000 inhabitants is slightly above the average, although in 1950 it was among the three less urbanized regions. Weighted means for the major regions of the world are given in table 1.2. It should be remembered, however, that among the Latin American countries there are marked variations in the degree of urbanization, particularly if the lower index (20,000) is used. Argentina (1947), Chile (1952) and Uruguay (1950) are among the 15 most urbanized countries of the world;<sup>3/</sup> their percent urban (20,000 plus inhabitants) was 48.3, 42.9 and 36.2, respectively. On the other

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1/ For general comments on the subject, see U.N. Demographic Yearbook 1952, chapter I.

2/ For Uruguay, where no census has been taken since 1908, an estimate is employed.

3/ K. Davis and H. Herts, "The World Distribution of Urbanization", Bulletin of the International Statistical Institute, Vol. XXXIII, Part IV, p. 237.



Table 1  
 INDICES OF URBANIZATION IN LATIN AMERICA

Country	Census year	Percentage of total population <sup>a/</sup> living in localities with more than		Percentage of urban population (by census definition)
		20 000 inhab.	100 000 inhab.	
<u>Central America</u>				
Costa Rica	1950	17.5	17.5	33.5
Cuba	1953	36.5	21.9	57.0
Dominican Republic	1950	11.1	8.5	23.8
El Salvador	1950	13.0	8.7	36.5
Guatemala	1950	11.2	10.2	25.0
Haiti	1950	5.1	4.3	12.2
Honduras	1950	6.8	0.0	31.0
Mexico	1950	24.1	15.1	42.6
Nicaragua	1950	15.2	10.3	34.9
Panama	1950	22.4	15.9	36.0
<u>South America</u>				
Argentina	1947	48.3	37.2	62.5
Bolivia	1950	19.7	10.6	33.6
Brazil	1950	20.2	13.2	36.2
Chile	1952	42.9	28.5	60.2
Colombia	1951	22.3	14.7	37.8
Ecuador	1950	17.8	14.6	28.5
Paraguay	1950	15.2	15.2	34.6
Peru	1940	13.9	8.4	36.1
Uruguay	1950 <sup>b/</sup>	36.2	32.6	... <sup>c/</sup>
Venezuela	1950	31.0	16.6	53.8

Sources: U.N. Demographic Yearbook 1955 and official census reports. For Cuba: H.L. Browning, "Recent Trends in Latin America Urbanization", The Annals of the American Academy of Political and Social Science, March 1958.

<sup>a/</sup> In Panama and Colombia the basic data included tribal Indian populations.

<sup>b/</sup> Estimate quoted from "The World Distribution of Urbanization" by Kingsley Davis and Hilda Hertz, Bulletin of the International Statistical Institute, Vol. XXXIII, Part IV, page 237.

<sup>c/</sup> Data not available.

/hand, for

hand, for the five Central American countries and Panama combined, the low percentages in localities of 20,000 plus inhabitants (13.0) and 100,000 plus (9.5) more nearly approximate the averages for Asia than those for Latin America.

The process of urbanization assumes different forms in different countries, depending, inter alia, upon the size of the country, the history and status of the economy, the location of natural resources, harbours, etc., and upon various socio-cultural factors. It may assume any of the following forms: 1) an increase in the number of cities with populations of various sizes together with increases in the populations of these cities; 2) an increase in the number of inhabitants living in certain cities, with no increase in the number of localities classified as cities; or 3) continuous important increases in the population of a major city only, usually the capital city.

The data in column 3 of table 2 show the differences between major world regions in the extent to which the urban population is concentrated in cities of 100,000 plus inhabitants. It will be observed that Latin America has a relatively high index of concentration. Frequent reference has been made to the fact that urbanization in this region is characterized by the concentration of the urban population in the big cities, usually the largest city in the country. A partial explanation for this phenomenon may be the multifarious functions of major cities in the region: the largest city in each country usually serves as the political capital, the centre of commerce and industry and the seat of culture, education and entertainment.<sup>4/</sup>

## 2. Historical trends in Latin American urbanization

The long term trend in urbanization may be observed in two ways: the evolution of the proportion of the population living in localities of different sizes at consecutive censuses may be studied, or the increase in the population that resides in a specific number of cities may be conferred with the increase in the total population of the country. Inherent in the

<sup>4/</sup> K. Davis and H. Hertz, Op.Cit.; Harley L. Browning, "Recent trends in Latin American Urbanization", The Annals of the American Academy of Political and Social Science, March 1958, pp. 111-120.

Table 2

PERCENTAGE CITY POPULATION IN MAJOR WORLD AREAS, 1950

Area	Percent of population in cities		Index of concentra- tion in big cities
	20 000	100 000	
	(1)	(2)	$\frac{100 \times (2)}{(1)}$
World	21	13	62
Oceania	47	41	87
North America <sup>a/</sup>	42	29	69
Europe <sup>b/</sup>	35	21	60
U.S.S.R.	31	18	58
<u>Latin America</u>	25	17	68
South America	(26)	(18)	(69)
Central America	(21)	(14)	(64)
Asia <sup>b/</sup>	13	8	63
Africa	9	5	51

Sources: Data for all regions, except Latin America, were taken from UNESCO, Urbanization in Asia and the Far East, Proceedings of the Joint UN/UNESCO Seminar, Bangkok, 8-18 August 1956. Calcutta 1958, Chapter IV, quoted from "The World Distribution by Urbanization", by Kingsley Davis and H. Hertz, Bulletin of the International Statistical Institute, Vol XXXIII, Part IV, pages 227-242.

Latin America U.N. Demographic Yearbook 1957 and table 1.1

a/ Includes USA and Canada.

b/ Without USSR.

/first method

first method of analysis is the problem of comparability between censuses. For example, when the population of a locality with say, less than 20,000 inhabitants at one census exceeds that number in the next census, the population is considered non-urban at the first enumeration and urban at the next. The increase in the total urban population from one census to the next is due both to the growth of the population in localities that shifted from the non-urban to the urban class. With the second method of analysis the urban population always refers to the same localities, and therefore its growth is due only to the increase in their population.

Table 3 gives data on the average annual rate of population growth over various periods in localities of specified size and the total population for 15 countries of the region.<sup>5/</sup> The principal feature of the table is that, for each country, excluding Panama, and for each intercensal period, the rate of increase of the population living in cities of 20,000 plus has been higher than the corresponding rate for the total population of the country, and, a fortiori, than the population living in localities of less than 20,000 inhabitants. In Panama, from 1940 to 1950 both the population in small localities and that in the rural areas grew more rapidly than that of Panama City and Colon - the two cities with more than 20,000 inhabitants. This represents a very significant deviation from the general pattern. On the whole, it may be said that the population of the large cities is increasing more rapidly than that in cities of 20,000 - 100,000 inhabitants. Rates of growth for cities of 20,000 plus inhabitants are, with few exceptions, very high. Average annual increases above 4 or 5 per cent are frequent. In Venezuela, for example, the rate of increase for the period 1941-50 averaged 7 per cent per annum. In this and some of the other countries shown in the table, there is even evidence of an acceleration of urbanization.

Fragmentary data on the de facto population of certain large cities in 9 countries permit an extension of the study of urban growth beyond

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<sup>5/</sup> The original data for table 3 are contained in table 4.

Table 3

AVERAGE ANNUAL RATE OF INCREASE OF THE POPULATION LIVING IN  
 SELECTED AREAS AND OF THE TOTAL POPULATION OF EACH COUNTRY

Country	Intercensal period	Average annual rate of increase <sup>a/</sup>				Total population
		Size of localities (inhabitants) in last Census				
		more than 100 000	20 000 to 100 000	More than 20 000 (Urban)	less than 20 000 (Rural) <sup>b/</sup>	
<u>Central America</u>						
Costa Rica <sup>c/</sup>	1927-1959	3.0	-	3.0	2.1	2.2
Cuba	1919-1931	3.4	2.5	3.1	2.4	2.6
	1931-1943	2.2	1.9	3.1	1.4	1.6
Dominican Republic	1920-1935	5.4	4.6	5.1	3.3	3.4
	1935-1950	5.8	3.2	5.1	2.1	2.4
El Salvador	1930-1950	2.9	1.6	2.4	1.1	1.3
Mexico <sup>d/</sup>	1940-1950	4.5	3.0	4.1	2.3	2.6
Nicaragua <sup>e/</sup>	1920-1940	3.8	...	3.8	1.2	1.3
	1940-1950	5.4	...	5.4	2.0	2.3
Panama <sup>f/</sup>	1930-1940	3.8	3.7	3.7	2.2	2.6
	1940-1950	1.3	1.6	1.4	3.3	2.8
<u>South America</u>						
Argentina	1869-1895	4.2	2.5	3.8	2.7	3.0
	1895-1914	4.8	3.9	4.6	2.8	3.5
	1914-1947	2.5	2.5	2.5	1.7	2.0
Bolivia	1900-1950	2.9	2.0	2.4	0.9	1.1
Brazil <sup>g/</sup>	1940-1950	4.2	4.0	4.2	2.3	1.9
Chile <sup>h/</sup>	1865-1875	2.1	2.2	2.1	1.2	1.3
	1875-1885	2.4	3.3	2.7	1.5	1.7
	1885-1895	2.7	3.5	3.0	0.1	0.7
	1895-1907	2.3	3.3	2.6	1.1	1.5
	1907-1920	2.4	1.9	2.2	0.6	1.1
	1920-1930	2.7	2.4	2.6	0.9	1.4
	1930-1940	2.4	1.8	2.1	1.3	1.6
1940-1952	2.6	2.4	2.6	0.7	1.5	
Colombia	1938-1951	5.4	4.9	5.2	1.5	2.2
Paraguay <sup>i/</sup>	1937-1950	4.9	-	4.9	2.4	2.7
Peru	1876-1940	2.1	1.7	1.9	1.1	1.2
Venezuela	1936-1941	4.8	4.5	4.7	2.2	2.7
	1941-1950	6.8	7.3	7.0	1.5	3.0

Footnotes are on the following page.

Table 3 (Continued)

- a/ The average annual rate of increase is computed by dividing the increase over the intercensal period by the mean population (defined as the mean average of the initial and last census population) and by the intercensal period expressed in years.
- b/ This class is formed by subtracting from the total population, the population living in cities 20 000 plus. It does not represent exactly the population living in localities with less than 20 000 inhabitants in Costa Rica, Mexico, Nicaragua and Brazil. See footnotes corresponding to these countries.
- c/ The population in the class "more than 100 000", i.e. the population of San Jose, is approximately estimated by summing the populations of the "cantones" Central, Goicoechea, Tibás and Montes de Oca, which form part of the San José Metropolitan area. Source: Algunas Características Demográficas del Area Metropolitana de San José. ESAPAC, San José 1957.
- d/ The population in the class "20 000 to 100 000" corresponds to only 19 cities. Source: Población by Julio Durán Ochoa, Fondo de Cultura Económica México D.F. 1955.
- e/ Data are not available for two cities in the class "20 000 - 100 000".
- f/ The basic data excluded the tribal Indian population.
- g/ Population of the city Sao Caetano do Sul (55 399 in 1950) and the "villa" Coelho da Rocha (21 392) are included in the class "less than 20 000" because data for these localities are not available for 1940.
- h/ Data on the population of some cities in the class "20 000 - 100 000" are not available for censuses before 1907.
- i/ The basic data for 1937 is derived from the results of the 1936 census.

Table 4

GROWTH OF POPULATIONS IN SELECTED LOCALITIES ACCORDING TO  
THEIR POPULATION SIZE AT LAST CENSUS

Country	Census dates	Population in localities with indicated population size at last census				Total population of the country
		more than 100 000	20 000 to 100 000	more than 20 000 (urban)	less than 20 000 (rural)	
(Number of cities in parenthesis)						
		(8)	(39)	(47)		
Argentina	1869	285 093	146 142	431 235	1 305 841	1 737 076
	1895	972 552	286 444	1 258 996	2 695 915	3 954 911
	1 VI 1914	2 572 092	618 564	3 190 656	4 694 581	7 885 237
	10 V 1947	6 189 777	1 492 114	7 681 891	8 211 936	15 893 827
Bolivia		(1)	(5)	(6)		
	1 IX 1900	52 697	93 147	145 844	1 550 556	1 696 400
	5 IX 1950	321 073	272 402	593 475	2 425 556	3 019 031
Brazil		(11)	(88)	(99)		
	1 IX 1940	4 512 777	2 373 630	6 886 407	34 349 908	41 236 315
	1 VII 1950	6 873 235	3 542 043	10 416 278	41 528 119	51 944 397
Chile		(3)	(21)	(24)		
	19 IV 1865	199 773	90 829	290 602	1 528 621	1 819 223
	19 IV 1875	245 821	112 865	358 686	1 717 285	2 075 971
	26 XI 1885	318 464	161 422	479 886	2 017 911	2 497 797
	28 XI 1895	418 687	229 708	648 395	2 039 589	2 687 984
	28 XI 1907	550 501	341 551	892 052	2 328 479	3 220 531
	15 XII 1920	753 792	439 580	1 193 372	2 521 515	3 714 887
	27 XI 1930	983 327	557 628	1 540 955	2 746 490	4 287 445
	28 XI 1940	1 247 833	647 114	1 894 947	3 128 592	5 023 539
	24 IV 1952	1 692 328	851 490	2 543 818	3 389 177	5 932 995
Colombia		(6)	(22)	(28)		
	5 VII 1938	823 275	459 150	1 282 425	7 419 391	8 701 816
	9 V 1951	1 698 590	880 841	2 579 431	8 968 741	11 548 172
Paraguay		(1)		(1)		
	31 XII 1937	104 820	-	104 820	831 306	936 126
	28 X 1950	201 340	-	201 340	1 127 112	1 328 452
Peru		(1)	(9)	(10)		
	14 V 1876	101 488	99 690	201 178	2 497 928	2 699 106
	9 VI 1940	520 528	339 897	860 425	5 347 542	6 207 967
Venezuela		(3)	(19)	(22)		
	26 XII 1936	349 781	292 515	642 296	2 722 051	3 364 347
	7 XII 1941	444 807	366 209	811 016	3 039 755	3 850 771
	26 XI 1950	835 922	722 618	1 558 540	3 476 298	5 034 838

/Table 4 (continued)

Table 4 (Continued)

Country	Census dates	Population in localities with indicated population size at last census				Total population of the country
		more than 100 000	20 000 to 100 000	more than 20 000 (urban)	less than 20 000 (rural)	
Costa Rica	11 V 1927	(1) 75 152	-	(1) 75 152	396 372	471 524
	22 V 1950	153 636	-	153 636	647 239	800 875
Cuba		(3)	(16)	(19)		
	15 IX 1919	456 290	348 559	804 849	2 084 155	2 889 004
	21 IX 1931	693 358	473 963	1 167 321	2 795 023	3 962 344
	25 VII 1943	898 312	593 610	1 491 922	3 286 661	4 778 583
Dominican Republic		(1)	(1)	(2)		
	24 XII 1920	30 943	17 152	48 095	846 570	894 665
	13 V 1935	70 091	34 175	104 266	1 375 151	1 479 417
	6 VIII 1950	181 553	56 558	238 111	1 897 761	2 135 872
El Salvador		(1)	(2)	(3)		
	1 V 1930	89 385	57 155	146 540	1 287 821	1 434 361
	13 VI 1950	161 951	78 404	240 355	1 615 562	1 855 917
Mexico		(10)	(19)	(29)		
	6 III 1940	2 448 805	793 485	3 242 290	411 262	19 653 552
	6 VII 1950	3 900 568	1 080 289	4 980 857	810 160	25 791 017
Nicaragua		(1)		(1)		
	1 I 1920	27 839	...	27 839	610 280	638 119
	23 V 1940	62 516	...	62 516	773 170	835 686
	31 V 1950	109 352	...	109 352	947 671	1 057 023
Panama		(1)	(1)	(2)		
	1 I 1930	74 409	29 765	104 174	323 847	428 021
	8 IX 1940	111 893	44 393	156 286	410 303	566 589
	10 XII 1950	127 874	52 204	180 078	576 553	756 631

Note: See footnotes to table 3.

/the latest



the latest census year. However, the rates of increase given for these cities in table 5 are based upon estimates and are, therefore, probably less reliable than the data in table 3, which are based upon census returns. The post-census rates indicate that the tendency for the population in major cities to increase at a faster rate than that of the total country during the last intercensal period persisted in the more recent years. The evidence, which is given in table 5, shows an opposite trend only for Argentina. In that country the rate of population growth is slightly higher than that of the city of Buenos Aires. However, the difference is fairly negligible.

### 3. Sex ratios

In the region as a whole (excluding Uruguay, for which no data are available) the number of males nearly equals the number of females; the ratio is estimated at 99.5 males per 100.0 females for mid-year 1950. When the native population only is taken into consideration the ratio is somewhat lower; international migration, which is predominantly male, has obviously contributed to the region's balanced sex ratio. Sex ratios of the total population and of the population living in localities of 20,000 plus inhabitants are presented for each country in table 6. It may be observed that the urban sex ratio is lower than the national in every country of the region, except Peru; there is no obvious explanation for this single deviation. The differences between the rural and urban sex ratios in the various countries are apparently a result of the predominantly female rural-urban migration which is characteristic of the region.

This feature of urbanization in Latin America bears an interesting similarity to the experience in Europe, North America and other regions with populations of European origin, and it presents a noteworthy contrast to the situation in Africa and Asia where, according to census returns, sex ratios are higher in towns than in rural areas, reflecting predominantly male rural-urban migration. The countries of Europe and North America are generally more urbanized and economically more advanced than the majority of the Latin American countries, whereas the countries

Table 5

ANNUAL RATE OF INCREASE OF POPULATION IN SELECTED URBAN AREAS  
 AND IN THE WHOLE COUNTRY. SELECTED LATIN AMERICAN  
 COUNTRIES. POST-CENSAL YEARS

Country	Period	Average annual rate of increase, <sup>a/</sup> percent of population in		Urban area
		Total country	Urban areas	
Argentina	1947-58	2.2	2.1	Buenos Aires
Brazil	1950-57	2.3	3.9	13 municipios <sup>b/</sup>
Chile	1952-58	2.4	3.2	4 big cities <sup>c/</sup>
Colombia	1951-55	2.2	6.6	6 municipios <sup>d/</sup>
Cuba	1943-53	2.1	2.8	4 big cities <sup>e/</sup>
El Salvador	1950-56	3.3	3.8	San Salvador
Mexico	1950-54	2.8	3.3	Mexico D.F.
Peru	1940-57	2.0	3.8	Lima, Callao, Arequipa
Venezuela	1950-55	3.0	7.6	4 big cities <sup>f/</sup>

Sources: U.N. Demographic Yearbook 1957, Argentina: Boletín Mensual de Estadística Año III No. 7, julio 1958, Buenos Aires, Chile: Information provided by the Servicio Nacional de Estadística y Censos, Santiago, Colombia: Anuario General de Estadística 1955, Colombia, 1956, Perú: Boletín de Estadística Peruana, Lima, Año 1, No. 1, 1958.

- <sup>a/</sup> Computed by dividing the increase over the period by the mean population (defined as the mean average of the initial and last population) and by the period expressed in years.
- <sup>b/</sup> Distrito Federal, São Paulo, Recife, Salvador, Porto Alegre, Belo Horizonte, Fortaleza, Belem, Curitiba, Niteroi, Natal, Maceio, Joao Pessoa.
- <sup>c/</sup> Greater Santiago, Valparaíso, Concepción, Viña del Mar.
- <sup>d/</sup> Bogotá, Medellín, Cali, Barranquilla, Cartagena, Bucaramanga.
- <sup>e/</sup> Habana, Mariana, Santiago de Cuba, Camagüey.
- <sup>f/</sup> Caracas, Maracaibo, Barquisimeto, Valencia.

Table 6

MALES PER 100 FEMALES IN THE TOTAL POPULATION AND THE POPULATION LIVING IN LOCALITIES WITH 20 000 OR MORE INHABITANTS. LATIN AMERICAN COUNTRIES

(Sex ratio)

Country (census year)	Total popul- ation	Population in cities 20 000 plus	Country (census year)	Total popul- ation	Population in cities 20 000 plus
<u>Central America</u>			<u>South America</u>		
Costa Rica (1950)	99.7	83.9	Argentina (1947)	105.1	96.8
Cuba (1943)	109.6	97.3	Bolivia (1950)	96.2	93.3 <sup>a/</sup>
Dominican Republic (1950)	100.5	83.7	Brazil (1950)	99.3	92.9 <sup>a/</sup>
El Salvador (1950)	98.0	84.4	Chile (1952)	96.4	86.1 <sup>a/</sup>
Guatemala (1950)	102.2	89.7	Colombia (1951)	98.9	86.2
Haiti (1950)	94.5	72.4	Ecuador (1950)	99.2	89.7
Honduras (1950)	100.5	93.0	Paraguay (1950)	95.6	91.3
Mexico (1950)	97.0	86.8	Peru (1940)	97.7	102.5 <sup>a/</sup>
Nicaragua (1950)	97.0	75.7	Venezuela (1950)	102.8	98.7
Panama (1950)	103.8	95.6			

Sources: Official census reports. Bolivia: "Aspectos generales de la población boliviana" by Asthenio Averanga Mollinedo, La Paz, 1956.

<sup>a/</sup> Sex ratio of the "Urban Population" as defined in Appendix A.

of Asia and Africa are generally less urbanized and economically underdeveloped - the latter is a trait common also to the Latin American countries. A general conclusion from this may be that, "while the volume of rural-urban migration is largely dependent on the economic situation, the demographic characteristics of the migrants are conditioned by long established societal patterns".<sup>6/</sup>

Frequent reference has been made to the outstanding importance of capital cities in Latin America.<sup>7/</sup> They belong for the most part to the group of cities having 100,000 or more inhabitants and usually contain a relatively high proportion of the total population of the country. An analysis of the characteristics of the population living in these cities is of special interest, since the demographic characteristics peculiar to urban inhabitants are more pronounced for metropolitan cities than for small or medium-sized localities. Sex ratios of the total population and the native population only in the largest city and of the total urban inhabitants are given for six countries in table 7. According to these figures, the number of males per 100 females in the major city does not differ in any systematic manner from that in the total urban population. What differences there are arise principally from differences between males and females in the extent and direction of internal migration. However, as previously noted, a second factor - international migration - is known to have some bearing on the problem in question. The major cities have important proportions of foreign-born persons in their populations, and these have a very high sex ratio, sufficient no doubt to conceal the low ratios for the native population in the urban centers. If the native population only is considered, the sex ratios given for major cities are somewhat below those for the total urban population.

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6/ UNESCO, Urbanization in Asia and the Far East, Proceedings of the Joint UN/UNESCO Seminar, Bangkok, 9-18 August 1956, Chapter IV, Demographic aspects of urbanization in the ECAFE region. Calcutta 1957, p. 108.

7/ See for example Harley L. Browning, "Recent Trends in Latin American Urbanization", The Annals of the American Academy of Political and Social Science, March 1958.

Table 7

MALES PER 100 FEMALES IN THE URBAN POPULATION AND IN THE POPULATION LIVING IN THE LARGEST CITY OF EACH COUNTRY. TOTAL AND NATIVE POPULATION SELECTED LATIN AMERICAN COUNTRIES

Country (census year)	Native and foreign born		Native b/		Largest city
	Urban <sup>a/</sup> popul- ation	Popula- tion in largest city	Urban <sup>a/</sup> popul- ation	Population in largest city	
Argentina (1947)	96.8	97.4	90.6	90.2	Greater Buenos Aires
Brazil (1950)	92.9	96.6	90.7	93.9	Distrito Federal and Sao Paulo
Chile (1952)	86.1	85.7	85.1	82.6	Greater Santiago
Cuba (1943)	97.3	93.6	92.7	92.3	Habana
Peru (1940)	102.5	102.1	99.0 <sup>c/</sup>	97.9	Lima
Venezuela (1950)	100.1	101.4	92.2	89.6	Caracas

Sources: Same as in table 6.

a/ In Argentina: population living in cities with 20 000 or more inhabitants; in Venezuela: population of the municipios where 12 cities with more than 20 000 inhabitants are located; in the remaining countries urban populations as defined in the appendix A.

b/ In Peru national instead of native population.

c/ Estimated.

Table 8

SEX RATIOS AND ORIGIN OF THE POPULATION IN TOTAL URBAN AREA, THE DISTRITO FEDERAL AND THE MUNICIPIO OF SAO PAULO, BRAZIL

Area	Total	Native population		Foreign born population
		Born in state where city belongs	Born else- where in Brasil	
Total urban <sup>a/</sup>	90.7	-	-	123.4
Distrito Federal	92.2	91.3	94.7	141.5
Sao Paulo	95.8	94.0	107.1	109.1

Source: Same as table 6.

a/ Urban population defined as explained in appendix A.

/In Brazil

In Brazil, however, there is apparently an exception to the general pattern; in 1950 the Distrito Federal and Sao Paulo combined had a sex ratio of 93.9, whereas the figure for the total urban population of Brazil was only 90.7. The pattern persisted when the observation was restricted to the native population. Inasmuch as this constitutes a departure from the normal situation in the region, a further examination of the Brazilian data seems appropriate.

The available information permits the division of the big city population of Brazil into two groups: persons born in the state in which the metropolis is located (in the case of the Distrito Federal the neighbouring state of Rio de Janeiro is taken as the "home" state) and persons born elsewhere in Brazil. The number of males per 100 females in these groups and in the foreign-born population is given for the Distrito Federal, Sao Paulo and the total urban population of Brazil in table 8. The data provided in this table suggest several conclusions. With respect to the native population the sex ratios are higher among those born outside the state in which the city is located than for those born in that state. This suggests that the further the distance covered by internal migration, the higher the sex ratio. The ratio for the native population living in São Paulo, but born outside the state of Sao Paulo is quite high, 107.1, a figure close to that observed for the foreign-born population (109.1) in the city of Sao Paulo. The implication is that internal migration may be similar in sex composition to international migration if the former involves very long distance.

An effect of internal migration upon the native sex ratio has been to increase it from 91.3 to 92.2 males per 100 females in the Distrito Federal and from 94.0 to 95.8 in the Municipio of Sao Paulo. However, this upward influence is hardly sufficient to explain the relatively high sex ratios in these two major cities, especially if account is taken of the evidence that the ratios for the populations born in the states in which the two cities are located (i.e., considering heavily feminine, short-distance migration only) are above the average sex ratios for the total urban population. Although the difference is fairly

/negligible in

negligible in the case of the Distrito Federal, the sex ratio for Sao Paulo is well above the average for the total urban population of Brazil, and is therefore exceptional in this respect among the major Latin American cities.

#### 4. Fertility

Birth registration is known to be incomplete in the majority of the Latin American countries, and there are differences between various localities within the countries in the extent of completeness of vital registration. Crude birth rates are therefore inadequate as a basis for analysing urban-rural fertility differentials. But in addition to the problem of vital registration, urban and rural populations also differ from the standpoint of age-sex composition (the age structure is an important determinant of the level of fertility), and the births are very often recorded by place of occurrence rather than by place of residence of the mother. These and other problems make the undertaking of a study of fertility differentials on the basis of crude birth rates a rather perilous one.

The child-woman ratio (the number of children 0-4 years of age per 1,000 women of childbearing age) is generally a more effective instrument for measuring fertility differentials. It is based upon census data, therefore excluding the problem of reporting births by place of residence or occurrence, and it is not affected by the variation of the proportion of women in the childbearing ages. However, its usefulness is impaired somewhat by the fact that it is affected by the distribution by age of women within the reproductive age-group and by child mortality. It also reflects the underenumeration of children 0-4 years of age, and the extent of underenumeration of these children usually varies from one country to the next.<sup>8/</sup>

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<sup>8/</sup> For general comments on the problem, see UNESCO, Urbanization in Asia and the Far East, Proceedings of the Joint UN/UNESCO Seminar, Bangkok, 8-18 August 1956, Calcutta 1957, Chapter IV. See also United Nations, Report on the World Social Situation, New York 1957, Chapter II.

Even so simple a measure as the child-woman ratio could not be obtained for the urban population (localities with 20,000 plus inhabitants) in each of the Latin American countries. Census tabulations of males and females by age are not available for every city, therefore the ratios could not be computed for communities by size class. Table 9 gives ratios of children to all women of reproductive age and to non-single women for the total country and for urban localities at the latest census, together with ratios of urban to national fertility. The countries are listed in order of degree of urbanization.

Perhaps the most striking feature of this table is the absence of any systematic relationship between degree of urbanization and level of fertility, although the most urbanized country - Argentina - has the lowest fertility. This is more obvious with respect to non-single women than to all women, although such a comparison requires caution, for there exists a lack of comparability as regards the age-groups of non-single women. It is also evident that the region as a whole is characterized by markedly high fertility; the number of children 0-4 years of age per 1,000 women aged 15-49 ranged from 423 in Argentina (1947) to 749 in the Dominican Republic (1950). However, all countries except Argentina and Haiti had child-woman ratios above 500. It may be noted for the purpose of comparison that the highest ratio of children to women reported in an industrialized country outside of Latin America around 1950 was 498 in Canada (1951).

Available data for Haiti (1950) suggest that in that country fertility is quite low by the region's standards, but this apparently low fertility probably masks the widespread underenumeration of children aged 0-4 years and high rates of child mortality as well as errors in the reporting of women's ages. This table also shows that effective fertility (that is with allowances for child and female mortality) is uniformly lower in urban localities than elsewhere in these countries. The figures in column (4) of table 9 suggest that relative differences between urban and rural fertility are apparently unrelated to the degree of urbanization within the country. It should be borne in mind, however, that there is some lack of comparability with regard to definitions of "urban" population in these countries (see appendix A).



Table 9

FERTILITY INDICES FOR TOTAL AND URBAN POPULATION  
 LATIN AMERICAN COUNTRIES. LAST CENSUS YEAR

Country (census year)	Index of urban- ization  a/	Fertility indices						
		Total women b/ population		Urban (as a (per- cent- age of total (ferti- lity	Non-single women c/ population		Urban as a (per- cent- age of total (ferti- lity	
		Total	Urban d/		Total	Urban d/		
		(Per thousand)	(Per thousand)	(Percent)	(Per thousand)	(Per thousand)	(Percent)	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	
Argentina (1947)	48.3	423	263	62	567	326	57	
Chile (1952)	42.9	517	406	79	907	724	80	
Cuba (1943)	31.4	515	295	57	869	446	51	
Venezuela (1950)	31.0	711	585	82	1 019	859	84	
Mexico (1950)	24.1	626	482	77	664	556	84	
Panama (1950)	22.4	695	460	66	874	628	72	
Colombia (1951)	22.3	691	527	76	949	805	85	
Brazil (1950)	20.2	653	402	62	1 086	724	67	
Bolivia (1950)	19.7	648	473	74	...	...	...	
Ecuador (1950)	17.8	705	564	80	1 136	1 018	90	
Costa Rica (1950)	17.5	686	464	68	1 191	928	78	
Nicaragua (1950)	15.2	650	539	83	930	795	85	
Paraguay (1950)	15.2	694	395	57	1 374	870	63	
Peru (1940)	13.9	655	414	63	806	629	78	
El Salvador (1950)	13.0	623	389	62	1 093	815	75	
Guatemala (1950)	11.2	695	555	80	1 031	988	96	
Dominican Republic (1950)	11.1	749	453	60	929	673	72	
Honduras (1950)	6.8	666	493	74	1 043	1 128	108	
Haiti (1950)	5.1	457	322	70	814	689	85	

a/ Percentage of total population living in cities 20 000 plus.

b/ Proportion of children aged 0-4 to women aged 15-49 (in Cuba 14-49).

c/ Proportion of children aged 0-4 to non-single women aged 15-49 in Chile, Brazil, Ecuador, Costa Rica, Paraguay, El Salvador, Guatemala and Haiti. Proportion of children aged 0-4 to non-single women in all ages in Argentina, Cuba, Venezuela, Mexico, Panama, Colombia, Nicaragua, Peru, Dominican Republic and Honduras.

d/ Urban population as defined for each country in appendix A except the case of Peru. The urban population here considered in Peru is the population of Lima and the Province of Callao. The urban population considered in Chile for the computation of the fertility index of non-single women is formed by the total population of the comunas where 15 cities 20 000 plus are located.

/It may

It may be well to point out here that differences observed in child-woman ratios between the urban and total populations of the countries in the region could reflect not merely differences in fertility (and mortality), but also differences in marital status, as well as the pronounced migration of young women from rural areas to the major cities. As previously noted, consensual marriage is relatively far more widespread in rural than in urban areas. Thus urban communities should contain a higher proportion of women of childbearing age who are not living in a "state" of marriage and, consequently, should have lower fertility. The lower incidence of consensual marriage in cities and the rural-urban migration of unattached females of reproductive age combine to render the child-woman ratio somewhat ineffective as an indicator of urban-rural fertility differences in this region.

A non-single fertility ratio (children 0-4 per 1,000 non-single women of childbearing age) is therefore a somewhat more sensitive measure of the urban-rural fertility differential in countries of the Latin American region. Figures are shown in the last three columns of table 9 where it may be seen that, with the exceptions of Argentina and Cuba, the ratio of urban to national fertility is higher for non-single women than for total women. However there is evidence that in both Argentina and Cuba consensually married women are reported as single by the censuses. The national index of fertility in Honduras, obtained by considering non-single women, is lower than the urban index. This would indicate a remarkable deviation from the general pattern if it were true. However, examination of the census data would probably disclose numerous and important inaccuracies in the reporting of marital status which could explain the anomaly.

In general, therefore, it may be said that, within the limitations of the data, in this region the fertility of the urban population is uniformly below that of the total population. It was possible to compute ratios of children to total and non-single women for the major city in seven countries. The figures are in table 10. The finding of importance is that for each country, both sets of child-woman ratios show an inverse association of the level of fertility with size of

Table 10

FERTILITY INDICES IN THE URBAN POPULATION AND THE POPULATION  
 OF THE LARGEST CITIES IN SELECTED LATIN AMERICAN COUNTRIES

Country	Census year	Fertility indices						Largest city
		Total	Total female population		Total	Non-single female population		
			Urban	In largest city		Urban	In largest city	
				Thousands			Thousands	
Argentina	1947	423	263	244	567	326	290	Greater Buenos Aires
Brazil	1950	653	402	372	1 036	724	631	Distrito Fed. and Sao Paulo
Chile	1952	517	406	385	907	724	689	Greater Santiago
Venezuela	1950	711	585	538	1 019	859	766	Caracas
Cuba	1943	515	295	229	869	446	325	Habana
Mexico	1950	626	482	456	664	556	538	Mexico, D.F.

Note: For definitions of the indices and urban population in each country, see table 9.

/locality. A

locality. A number of the factors which have important bearing upon this relationship, such as age-sex composition, marital status, mortality and internal migration are discussed in other chapters.

#### 5. Marital status

An analysis of the division by marital status of urban and non-urban populations of countries in this region poses a particularly difficult problem: relatively large proportions of adults live in consensual unions and are often reported as single by the censuses; whereas a number of countries provide separate census tabulations of legally married and consensually married persons, some others do not. The distribution by marital status of urban and total males and females in two broad age-groups is given for four countries in table 11. Similar data on females only are shown for seven additional countries in table 12. For the most part, the findings from these tables are in keeping with the patterns usually observed in other countries. 1) The urban populations have a higher percentage of single persons. This may be attributed at least partially to the rural-urban migration of young, and presumably, single adults and to the tendency for urban inhabitants to marry at older ages. The figures show a lower percent single in the urban localities of Argentina than in the country as a whole. However, these figures may not depict the true situation; the 1947 Census of Argentina does not distinguish between consensually married and legally married women and indications are that the former group is included among the single women. 2) The percent married is generally higher in the total than in the urban population. The same may be said of the relative number of consensually married persons; with respect to the latter group, the difference between the total and urban population is, however, more pronounced. The data for Argentina again show a deviant pattern; the reasons given earlier are also applicable in this case. For Venezuela and Haiti the statistics give evidence of higher proportions married in the urban than in the total population.

/However, this

However, this is offset by the differential in proportions consensually married. (It is worth reiterating here that the difference in the proportions of women married (consensually and legally) is a major factor in the urban-rural fertility differential observed throughout this region.)<sup>9/</sup> 3) The proportion of widows is generally higher in the urban than in the total population, while the reverse is true with respect to widowers. These differences may be ascribed, inter alia, to the characteristics of rural-urban migrants, urban-rural mortality differences and to the tendency for widows and widowers to remarry more or less frequently in one area than in the other.<sup>10/</sup> 4) As in countries of other regions, divorced and separated persons constitute a higher proportion of city populations than of total population.

#### 6. Mortality

A comprehensive analysis of urban-rural mortality differentials requires at least good statistics of death by age, sex and place of residence. Inasmuch as the crude death rate - the most accessible measure - is affected by the age-sex composition of the population and, since urban and rural areas differ in this respect, such measures as infant and child mortality rates and life table summaries - expectation of life at specified ages - are the only instruments which depict the actual mortality differences between rural and urban areas or between city and non-city inhabitants. Unfortunately, statistics that would yield such measures are not available for the majority of these countries, and data for individual cities are even more scant. Therefore, the discussion of urban-rural mortality differentials is limited to what can be gleaned from the sparse data that are available for Argentina, Brazil, Chile, Panama and Venezuela.

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<sup>9/</sup> Report on the World Social Situation, loc.cit.

<sup>10/</sup> A. Casis and K. Davis, "Urbanization in Latin America," The Milbank Memorial Fund Quarterly, Vol. XXIV, No. 3, July 1946.

Table 11

PERCENTAGE DISTRIBUTION BY MARITAL STATUS OF MALES AND FEMALES  
 IN BROAD AGE-GROUPS, URBAN AND TOTAL POPULATION.  
 SELECTED LATIN AMERICAN COUNTRIES

Country (Census year)	Popul- ation	Age group	Marital status					Total
			Sin- gle	Mar- ried	Consen- sually married	Widowed	Separat- ed and divorc- ed	
<u>M a l e s</u>								
Brazil (1950)	Total	15-49	48.9	49.7	...	1.3	0.1	100.0
	Urban	15-49	52.3	46.3	...	1.1	0.3	100.0
	Total	50 plus	9.8	77.4	...	12.5	0.3	100.0
	Urban	50 plus	11.5	76.2	...	11.6	0.7	100.0
Costa Rica (1950)	Total	15-49	50.5	39.9	7.5	0.9	1.2	100.0
	Urban	15-49	49.9	43.9	3.8	0.6	1.8	100.0
	Total	50 plus	12.6	63.9	8.0	12.5	3.0	100.0
	Urban	50 plus	11.7	67.1	4.7	12.9	3.6	100.0
El Salvador (1950)	Total	15-49	51.6	22.5	24.7	1.0	0.2	100.0
	Urban	15-49	55.3	18.9	24.9	0.5	0.4	100.0
	Total	50 plus	17.9	43.8	26.0	12.0	0.3	100.0
	Urban	50 plus	25.4	39.7	25.8	8.2	0.9	100.0
Paraguay (1950)	Total	15-49	54.9	28.9	15.3	0.5	0.4	100.0
	Urban	15-49	59.7	25.1	14.4	0.4	0.4	100.0
	Total	50 plus	16.9	59.0	14.8	7.4	1.9	100.0
	Urban	50 plus	18.6	58.1	14.4	7.6	1.3	100.0
<u>F e m a l e s</u>								
Brazil (1950)	Total	15-49	40.0	55.8	...	4.0	0.2	100.0
	Urban	15-49	44.5	49.9	...	5.2	0.4	100.0
	Total	50 plus	13.6	46.0	...	40.2	0.2	100.0
	Urban	50 plus	14.6	40.4	...	44.5	0.5	100.0
Costa Rica (1950)	Total	15-49	42.4	44.2	8.2	2.7	2.5	100.0
	Urban	15-49	50.0	39.5	3.5	3.0	4.0	100.0
	Total	50 plus	19.7	38.1	3.5	34.4	4.3	100.0
	Urban	50 plus	23.3	32.4	1.4	36.5	6.4	100.0
El Salvador (1950)	Total	15-49	43.2	24.8	28.8	2.8	0.4	100.0
	Urban	15-49	52.6	18.3	26.1	2.1	0.9	100.0
	Total	50 plus	30.3	26.6	14.1	28.4	0.6	100.0
	Urban	50 plus	42.5	19.3	13.2	23.8	1.2	100.0
Paraguay (1950)	Total	15-49	49.5	31.5	16.2	1.8	1.0	100.0
	Urban	15-49	54.6	27.5	15.2	1.7	1.0	100.0
	Total	50 plus	36.8	33.6	6.8	20.7	2.1	100.0
	Urban	50 plus	40.3	28.0	5.7	24.2	1.8	100.0

Note: Definition of urban population in each country is given in appendix A.  
 People with age not stated are included in the group 50 plus.

Table 12

DISTRIBUTION OF 100 FEMALES AGED 15 AND OVER <sup>a/</sup> BY MARITAL STATUS.  
 TOTAL AND URBAN POPULATION. SELECTED LATIN AMERICAN COUNTRIES

Country (census year)	Popu- lation	Marital status					Total
		Sin- gle	Mar- ried	Consen- sually married	Widowed	Separat- ed and divorced	
Argentina (1947)	Total	42.8	47.7	...	8.9	0.6	100.0
	Urban	38.4	50.6	...	10.1	0.9	100.0
Chile (1952)	Total	37.4	46.8	3.4	10.7	1.7	100.0
	Urban	37.8	45.5	2.6	11.7	2.4	100.0
Haiti (1950)	Total	42.0	12.7	40.2	3.3	1.8	100.0
	Urban	51.5	15.9	24.7	5.5	2.4	100.0
Honduras (1950)	Total	49.8	22.7	22.3	3.8	1.4	100.0
	Urban	64.4	18.0	12.3	4.2	1.1	100.0
Mexico (1950)	Total	27.8	48.0	12.4	11.2	0.6	100.0
	Urban	33.9	42.3	9.3	13.3	1.2	100.0
Peru (1940)	Total	36.1	32.7	18.5	12.5	0.2	100.0
	Urban	44.8	29.6	14.9	10.0	0.7	100.0
Venezuela (1950)	Total	43.2	28.5	20.4	7.3	0.6	100.0
	Urban	44.8	31.0	14.3	8.8	1.1	100.0

Note: Definition of urban population in each country is given in appendix A.

a/ For Argentina, Mexico and Honduras, data relate to females 14 years and over.

Life table data are available for Argentina and its capital city, Buenos Aires for the year 1947. At that time, the life expectancy for females in Buenos Aires was longer at all ages than that for all females in Argentina at comparable ages. For males, however, the situation was largely reversed, except for expectation of life at birth; the level of male mortality up to age 1 seems to be rather uniform throughout the country. The figures are given in table 13. However, as these life table values are based upon registered deaths, as well as census data, the information provided in this table must be accepted with caution; death registration is probably more complete in Buenos Aires than in the rest of Argentina. Moreover many deaths which occurred in Buenos Aires were not properly allocated to the usual place of residence. These conditions would tend to inflate the mortality rates for Buenos Aires. The question may be asked, whether the conditions stated above apply to the male and not to the female mortality rates. Obviously they apply to both. It is apparent that female mortality is lower (perhaps lower than the figures suggest) at all ages in Buenos Aires than in the whole of Argentina, but it is not possible to ascertain whether the same holds for male mortality.

An examination of similar data for Panama and Venezuela indicate the pattern of the mortality differential in Argentina may be fairly general in the region. Table 14 gives statistics on the expectation of life of males and females at specified ages for Panama and its chief cities, Panama and Colon (1952-54), and table 15 provides comparable data for the Distrito Federal and the Andean States (a region relatively developed from the economic standpoint) of Venezuela (1940-41). For both Panama and Venezuela the data indicate that: 1) life expectancy at birth for both males and females in the most urbanized areas is higher than the national average; 2) urban females mortality is usually lower; and 3) male urban mortality is generally above the national average, particularly at advanced ages.

Since 1952 the Chilean government has published death statistics by year of occurrence and usual place of residence. Thus, annual crude death rates and infant mortality rates for the year 1952 could be compared



Table 13

EXPECTATION OF LIFE AT GIVEN AGES, MALES AND FEMALES  
 BUENOS AIRES AND ARGENTINA - 1947

Age	Males		Females	
	Argentina	Buenos Aires	Argentina	Buenos Aires
	(In years)			
0	59.3	60.0	64.0	66.7
1	62.6	62.0	67.0	68.4
30	37.5	36.3	42.0	42.4
50	21.0	20.0	24.9	25.1

Source: Indices de sobrevivencia de ciertas regiones de la República Argentina en 1947 by José Barral Souto; Proceedings of the World Population Conference 1954 United Nations, E/CONF.13/413.

Table 14

EXPECTATION OF LIFE AT GIVEN AGES, FOR MALES AND FEMALES:  
 PANAMA REPUBLIC, PANAMA CITY AND COLON CITY  
 (1952-54)

Age	Males			Females		
	Panama Republic	Panama City	Colon City	Panama Republic	Panama City	Colon City
	(In years)					
0	61.0	62.8	60.5	63.6	68.7	62.9
1	63.6	65.3	64.0	66.1	70.8	66.7
30	40.6	39.0	38.7	43.2	44.1	41.2
50	24.1	21.3	21.5	26.9	26.4	24.3

Source: Dirección de Estadística y Censos de la República de Panamá.

Table 15

EXPECTATION OF LIFE AT GIVEN AGES, MALES AND FEMALES VENEZUELA-  
 ANDEAN STATES AND DISTRITO FEDERAL, 1941-1942

Age	Males		Females	
	Andean States <sup>a/</sup>	Distrito Federal	Andean States <sup>a/</sup>	Distrito Federal
0	48.0	48.8	46.9	54.1
1	53.0	53.0	52.7	57.7
30	35.5	30.7	34.5	36.5
50	22.1	17.7	21.1	22.3

Source: Determinación de la vida media en Venezuela. José V. Montesino Samperio, Dirección General de Estadística, Oficina Central del Censo Nacional. Departamento de Elaboración Técnica. Caracas 1952.

a/ Andean States: Mérida, Táchira, Trujillo.

/for provinces

for provinces and their cities of 20,000 and more inhabitants. This facilitates the extension of the urban-total analysis to smaller and therefore more homogeneous units. Crude death rates (total deaths in a year per 1,000 population at mid-year) and infant mortality rates (deaths of children under 1 year in a given year per 1,000 live births in the same year) are shown in table 16 for 24 provinces and cities. The pattern observed is hardly uniform. In groups (1) and (2) the crude death rates for the cities are higher than those for the provinces in which they are located, whereas with respect to group (3) the reverse is true. Further, in the first and third groups urban infant mortality is below that of the provinces as a whole, while the opposite pattern may be observed among provinces and cities in group (2).

Differences in the age composition of the cities and the provinces as a whole are such that if the same set of age-specific mortality rates were applied to each, a higher crude death rate would be obtained for the provinces. Therefore, if deaths are strictly and punctually registered according to place of residence and if registration is equally complete in each province and its cities, it may be concluded from the pattern exhibited in the majority of cases (17 out of 24) shown in the table that urban mortality is above the average. The two premises are, however, probably false, and, consequently, the conclusion does not necessarily represent the situation in Chile. However, there can be little doubt as to the validity of this conclusion in the case of Lota, a mining centre, where the crude death rate is clearly higher than that for the province of Concepción in which it is located. But this example may not be taken as representative of differences in mortality between urban and rural communities throughout Chile.

As regards infant mortality, it is clear that the urban rates are generally lower than the average. Table 16 shows this to be true in 19 out of the 24 city-province comparisons offered.

The Conselho Nacional de Estadística (IBGE) of Brazil has provided good estimates of general mortality and infant mortality in that country. The discussion which follows is based in large part upon research carried

Table 16  
 GENERAL AND INFANT MORTALITY IN CHILEAN PROVINCES AND CITIES, 1952

Province	City	Crude death rates		Infant mortality rates	
		Province	City	Province	City
		Thousands			
	(1)				
Tarapacá	Iquique	10.7	12.2	75.6	56.6
Antofagasta	Antofagasta	11.4	12.5	109.0	101.5
Valparaíso	Valparaíso	12.0	12.9	109.5	98.5
Santiago	Santiago	11.0	11.5	100.5	92.6
Santiago	Puente Alto	11.0	12.2	100.5	97.5
Curicó	Curicó	15.3	17.4	133.1	134.0
Talca	Talca	15.3	17.6	158.9	151.9
Ñuble	Chillán	15.3	17.3	164.2	139.5
Bío Bío	Los Angeles	15.7	17.1	178.8	161.7
Valdivia	Valdivia	15.5	16.3	210.3	168.0
Llanquihue	Puerto Montt	14.7	15.5	198.7	160.6
Magallanes	Punta Arenas	9.8	10.7	70.1	61.5
	(2)				
Coquimbo	Coquimbo	15.5	17.5	147.4	150.9
Valparaíso	Quillota	12.0	13.1	109.5	115.4
Santiago	San Bernardo	11.0	12.9	100.5	127.6
O'Higgins	Rancagua	14.1	15.9	139.7	142.6
Concepción	Lota	14.7	20.6	141.2	199.1
	(3)				
Antofagasta	Chuquicamata	11.4	8.9	109.0	89.8
Coquimbo	La Serena	15.5	14.8	147.4	134.0
Valparaíso	Viña del Mar	12.0	10.8	109.5	88.4
Concepción	Talcahuano	14.7	12.4	141.2	109.0
Concepción	Concepción	14.7	13.9	141.2	116.8
Cautín	Temuco	13.9	12.7	185.1	137.4
Osorno	Osorno	17.7	17.5	236.0	206.6

Source: Demografía año 1952 - Servicio Nacional de Estadística y Censos  
Santiago, abril 1955.

out at the Institute.<sup>11/</sup> The mortality levels that prevail in the different regions of this vast country vary markedly. For example, in the northern states (Amazonas and Para) expectation of life at birth for both sexes is estimated at having been about 38 years for the decade 1940-1950. In marked contrast is the longer life expectancy for inhabitants of southern Brazil during the same period; for Sao Paulo and Santa Catarina states, the figure was 50 years and for Rio Grande do Sul, 53 years. It is impractical, therefore to compare levels of mortality in the various metropolitan cities with that for Brazil as a whole. Thus, as with Chile, mortality levels in the major cities have been compared with that in the states in which the cities are located.

Infant mortality rates could be computed for the cities of Sao Paulo (1939-1941) and Porto Alegre (1948-50), and these may be compared with rates for the states of Sao Paulo and Rio Grande do Sul, respectively for the same periods. The figures are shown in table 17. It will be

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11/ The works considered here are:

- (1) Nota sobre a vida nos diversos Estados do Brasil by G. Mortara, IBGE, Estudios Demograficos No. 230, Rio de Janeiro, 1957;
- (2) Tabuas de sobrevivencia para o Distrito Federal, segundo a mortalidade do trienio 1949-51 by Giorgio Mortara, Eligio Alves, Orencio Longino de Arruda Gomes and Moyses Isaac Kessel;
- (3) Dados e conjeturas sobre a mortalidade infantil no Brasil by G. Mortara;
- (4) Analise Comparativa de varias tabuas de sobrevivencia referentes ao estado de Sao Paulo by Orencio Longino de Arruda Gomes and Moyses Isaac Kessel, all three published in Pesquisas sobre a mortalidades no Brasil, Estadística Demografica No. 18, IBGE, Rio de Janeiro, 1954;
- (5) A mortalidade no Brasil by Marcos Vinicius da Roca, Revista Brasileira de Estadística, Ano XV, OCT/DEC 1954, No. 6;
- (6) A sobrevivencia dos filhos tidos pelas mulheres recenseadas nas diversas Unidades da Federaçao segundo a situação do domicilio by Eligio Alves, Estudios Demograficos No. 224, Rio de Janeiro 1957.

/observed that

observed that these data disclose conflicting patterns. This may be due at least partially to the fact that the information for the state of Sao Paulo and its municipio relates to about 1940, and that for Rio Grande do Sul and Porto Alegre reflect the situation approximately 10 years later. In any case, data are not available that would permit additional comparisons of differences in infant death rates between other states and their cities, and thus little can be said at this time of the nature of the urban-rural infant mortality differential in Brazil.

An indication of urban-rural differences in general mortality in Brazil is provided in table 18 which shows the expectation of life at birth for both sexes in the city of Sao Paulo and the Distrito Federal,<sup>12/</sup> in the states of Sao Paulo and Rio de Janeiro and in the whole of Brazil during the decade, 1940-1950. It is immediately apparent from these figures that the city inhabitants have a longer life expectancy than do persons residing in the surrounding areas. Moreover, mortality in both cities is below the national average.<sup>13/</sup>

Additional information on the urban-rural mortality differential in Brazil is available from a study carried out at the IBGE,<sup>14/</sup> which deals with the survival ratio of children born to women enumerated at the 1950 census. The analysis, which was carried out separately for each state in Brazil, was concerned with differential rates of survival (up to an indefinite age) of children born to mothers residing in urban, suburban and rural areas (by nation definition). It was found that

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<sup>12/</sup> For several other "municipios" there are mortality tables, but they do not reflect an experience comparable, in time, with that of the states.

<sup>13/</sup> For the sake of simplicity only one mortality table is used in each case. The study could have been extended by considering male and female mortality separately. The conclusion would have been the same.

<sup>14/</sup> See footnote 11, (6).

Table 17

ANNUAL INFANT MORTALITY RATES PER MIL

Area	Period	Rate per mil
State of Sao Paulo	1939-41	159.58
Município of Sao Paulo	1939-41	137.82
State of Rio Grande do Sul	1946-50	95.00
Município of Porto Alegre	1948-50	107.26

Source: See footnote 11 (3).



Table 18  
EXPECTATION OF LIFE AT BIRTH, MALES AND FEMALES  
SELECTED AREAS IN BRAZIL, 1940-1950

Area	Expectation of life at birth (in years)
State of Sao Paulo	49.3
Município of Sao Paulo	53.3 <u>a/</u>
State of Rio de Janeiro	38.1
Distrito Federal	47.6 <u>a/</u>
Brazil - whole country	43.7

Source: See footnote 11, (1), (2), (4) and (5).

a/ Mean average between the expectation of life at birth for 1939-41 and 1949-51. The values for the "município" of Sao Paulo are 49.1 and 57.5 respectively and those of the Distrito Federal 42.4 and 52.8.

/the mortality

the mortality of children (that is, offspring of any age) is generally higher in suburban than in urban areas and, in turn, higher in urban than in rural communities. Thus, in 20 out of 25 federal states, urban mortality was higher than rural mortality, while in the other five states, the reverse was true. It is of interest that the state of São Paulo and the Distrito Federal were among the five areas for which the deviant pattern was observed, and that Rio Grande do Sul - whose infant death rate was below that of its municipio, Port Alegre - was among the states having higher urban than rural mortality. The results of this study confirm the findings outlined above: in São Paulo and the Distrito Federal urban general mortality is below the average, whereas in Rio Grande do Sul, mortality appears to be higher in urban areas than elsewhere in the state.

On the whole, it may be said that in the five countries for which mortality data have been examined, infant mortality is generally less widespread in the urban than in the total population. However, evidence of the nature of the general mortality differential is considerably less conclusive; in some cases female mortality appears to be lower in cities, while the reverse is more often true with respect to mortality among males. The latter finding is supported by the results obtained from the analysis of the data on the marital status of women; the proportion of widows in the urban population was found to be significantly higher than that in the total population. Several factors may be in operation to achieve this; and a higher urban mortality rate for males may be one of them. Further investigation, based upon more accurate and more detailed data than that used here would be necessary before definite conclusions regarding urban-rural differences in male mortality can be arrived at.

## 7. Foreign-born

The process of urbanization is interrelated with the level of and the trends in economic development. Since international migrants tend to settle in places where they believe their economic prospects are brightest, it may be of interest to determine whether in this region foreign-born populations constitute a higher proportion of the total in countries with higher degrees of urbanization. However, the political and social conditions which prevail in a country are also factors which determine the extent of its attraction for migrants, and these may account in part for the absence of a systematic relationship between the level of urbanization and the relative number of foreign-born persons within countries in the Latin American region. Another consideration is that governments usually adopt measures which either encourage or restrict immigration, and these measures are not, and have not in the past been, similar in all countries in the region.

Table 19 presents for each country in Latin America, except Uruguay, the proportion of the total population composed of immigrants from the Americas and immigrants from other continents, largely Europe. It also gives the urbanization index and the proportion foreign-born of the total urban population. It may be well to point out here that the relative number of foreign born from other continents probably reflects the attraction which a country holds for immigrants to a greater extent than does the proportion born in the Americas - usually the neighbouring countries.

The material provided in table 19 shows that in some countries the foreign born constitute such a small proportion of the total population that international migration could have had only a very minor effect upon urbanization. In other countries, for example Argentina and Panama, the amount of immigration has been such as to accentuate urbanization for, as is indicated in the table, relatively larger numbers of foreign-born than of native born persons prefer to live in cities. In all of these countries the foreign-born constitute a higher percentage of the urban than of the total population, and in the seven for which data are given in table 20, the major metropolis has relatively more foreign born than does the total urban population.

Table 19

PROPORTION OF FOREIGN-BORN IN THE TOTAL AND URBAN POPULATION

Country	Census year	Index of urbanization a/	Foreign-born b/ per 1 000 population		Total	Foreign-born per 1 000 urban population d/
			Born in America	Born overseas c/		
Argentina	(1947)	48.3	20.8	132.5	153.3	210.8
Chile	(1952)	42.9	4.5	13.0	17.5	26.9
Cuba	(1943)	31.4	10.7	40.9	51.6e/	77.1
Venezuela	(1950)	31.0	15.1	26.4	41.5	94.5
Mexico	(1950)	24.1	4.1	3.0	7.1	22.7
Panama	(1950)	22.4	55.8	10.3	66.1	165.5
Colombia	(1951)	22.3	2.1	1.9	4.0	...
Brazil	(1950)	20.2	1.3	22.1	23.4	78.1
Bolivia	(1950)	19.7	8.8	4.3	13.1	...
Ecuador	(1950)	17.8	5.6	1.7	7.3	...
Costa Rica	(1950)	17.5	31.3	10.2	41.5	49.9
Nicaragua	(1950)	15.2	8.1	1.5	9.6	14.8
Paraguay	(1950)	15.2	21.6	19.2	40.8	46.8f/
Peru	(1940)	13.9	3.0	7.1	10.1	47.1
El Salvador	(1950)	13.0	9.3	1.1	10.4	29.3
Guatemala	(1950)	11.2	9.4	1.4	10.8	23.5
Dominican Rep.	(1950)	11.1	12.6	3.6	16.2	26.0
Honduras	(1950)	6.8	22.7	1.2	23.9	46.9
Haiti	(1950)	5.1	5.7	0.4	6.1	...

a/ Percentage of total population living in cities with more than 20 000 inhabitants.

b/ In Colombia, Ecuador, Peru and Honduras, foreigners instead of foreign-born, i.e. naturalized excluded.

c/ And in countries not stated in census returns.

d/ Urban population as defined in appendix A, except in Argentina, Peru and Venezuela. In Argentina the urban population here considered is formed by the population of all cities with more than 20 000 inhabitants; in Peru it is composed of the population of 7 out of 10 cities in that category and in Venezuela it is the population of 12 predominantly urban "municipios" with more than 20 000 inhabitants.

e/ The proportion foreign-born in the total population according to the 1953 census is 39.5 per thousand.

f/ Persons classified as foreigners, the number of which is 35.5 per 1 000 of the country's total population.

Table 20

PROPORTION OF FOREIGN-BORN IN THE URBAN POPULATION  
 AND IN THE POPULATION OF THE LARGEST CITIES.  
 SELECTED LATIN AMERICAN COUNTRIES

Country (census year)		Foreign- born per thousand urban <u>a/</u> population	Foreign-born per thousand population in largest city	Largest city
Argentina	(1947)	210.8	266.8	Greater Buenos Aires
Brazil	(1950)	78.1	115.2	Distrito Federal and Sao Paulo
Chile	(1952)	26.9	34.4	Grater Santiago
Cuba	(1943)	77.1	115.2	Habana
Mexico	(1950)	22.7	26.7	Mexico D.F.
Peru	(1940)	47.1	54.0	Lima
Venezuela	(1950)	94.5	127.1	Caracas

a/ Defined in each case as indicated in table 19, footnote d/.

### 8. Rural-urban migration

Information as to the relative importance of each of the three components of urban population growth, i.e., natural increase, rural-urban migration and international migration, would afford a fairly accurate description of the form that the process of urbanization has assumed in these countries. It is almost superfluous to state that data adequate for this purpose are not available. However, the data at hand do permit the establishment of some rough estimates of the effect that migration, both internal and international, had upon urban growth during the latest intercensal period in selected countries. <sup>15/</sup>

Several procedures were involved in the estimates of the effect of rural-urban migration upon the growth rate of the urban populations: these related mainly to steps taken to establish rates of natural increase for the total and urban populations. (1) A rate of natural increase was adopted for each country, in accordance with the size of the population at the two most recent census enumerations. Except for Venezuela, which received a sizeable number of immigrants between 1941 and 1950, the proportion of foreign born persons in the countries under consideration is very small (an indication that international migration in these countries has been of minor importance) or is diminishing (indicating that many of the foreign-born immigrated some time prior to the most recent intercensal period). In neither case has the volume of international migration been an important determinant of the growth rate of the total, nor of the urban, population. It was estimated that for Venezuela the annual rate of natural increase during 1941-1950 was about 26.6 per 1,000 population, the rate of growth of the Venezuelan-born population during this period. The average annual net increase, i.e., including net migration, was 29.7 per 1,000.

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<sup>15/</sup> "Urban" population denotes that in localities of 20,000 and more inhabitants. Countries for which the most recent intercensal period covers 20 or more years were excluded. Panama was not included because from 1940 to 1950 (the latest census year) the rate of growth of total population exceeded that of the population in localities of 20,000 plus inhabitants.

(2) In view of the type of differences in population characteristics that exist between urban and rural areas in these countries (which have already been outlined), it is not possible to determine whether the rate of natural increase of the total population was higher or lower than that of the urban population during the most recent intercensal periods. In Chile, for which vital statistics are recorded by usual place of residence, the rates of natural increase in 1952 were 19.8 per 1,000 of the total population and the unweighted mean for places of 20,000 and more inhabitants was 20.1 per 1,000 population.

(3) Assuming that the rate of natural increase of the urban population is roughly equivalent to that of the total and having knowledge of the number of inhabitants living in places of 20,000 plus at the earlier of the two censuses under consideration, it is possible to compute for the latest intercensal period the urban population that would have existed at each of these censuses if no migration into cities had taken place. The difference between the total urban population enumerated at the latest census and that estimated for the first of the two censuses yields an estimate of the amount of urban growth that may be attributed to migration (international and internal). As previously noted, it is only in Venezuela that the volume of international migration was of importance during the period under consideration. For the remaining countries, the estimates obtained may be regarded as a rough indication of the effect of internal migration upon urban growth. Estimates of the amount of urban growth attributable to natural increase and to migration are provided in table 21.

The table discloses two extremes; one relates to Venezuela, the other to Cuba. As regards the former, urbanization was due mainly to internal and international migration. The estimates suggest that in Cuba, it was due largely to natural increase among urban inhabitants. This is probably not true. The hypothesis, that urban and total rates of natural increase were the same, is perhaps inapplicable to Cuba; the urban rate of increase was no doubt below the national average. Cuba is more highly urbanized than the other countries under consideration; urbanization got under way earlier; and its fertility is lower. The method used to estimate the effect of internal migration upon urban growth in that

Table 21

PERCENTAGE OF THE TOTAL URBAN POPULATION GROWTH DUE TO  
 NATURAL INCREASE AND TO IMMIGRATION DURING THE LAST  
 INTERCENSAL PERIODS, FOR SELECTED COUNTRIES

Country	Intercensal period	Approximate percentage of the urban growth due to	
		Natural increase	Migration
Venezuela	1941-1950	29	71
Colombia	1938-1951	32	68
Dominican Rep.	1935-1950	35	65
Nicaragua	1940-1950	35	65
Paraguay	1937-1950	45	55
El Salvador	1930-1950	46	54
Brazil	1940-1950	51	49
Chile	1940-1952	53	47
Mexico	1940-1950	58	42
Cuba	1931-1943	74	26

/country may



country may therefore be too rough.

As for the remaining countries, it may be said that internal migration is an important factor in urban population growth, although its contribution to this growth varies markedly; for the last intercensal period, the range was from approximately 40 per cent in Mexico to about 70 per cent in Colombia.

#### 9. Age distribution

The age distribution of a population reflects certain of its other demographic characteristics, mainly its past levels of fertility and patterns of migration. The age structure was used previously (section 4) as a means of analysing the fertility of urban populations. It is used here to emphasize the role that migration, together with lower fertility, has played in increasing the proportion of the urban population aged 15-59 and to determine differences between urban and rural areas in the burden of economic dependency.

It is generally characteristic of the urban populations in most countries that they contain a larger proportion of young adults and a lower proportion of children than the rural population. Findings for the Latin American countries are in keeping with this pattern. The evidence of this is provided in table 22, which gives the per cent distribution by broad age groups of the total and urban populations of countries in the region and of certain of their major cities.

These data show not only that the total urban population in these countries contains lower proportions of children and higher proportions of persons in the young and middle adult ages (i.e., persons aged 15-39 and 40-59) particularly the former, but also that these urban-rural differentials are more pronounced in the major metropolises than in the total urban area. This is, of course, the combined result of differential fertility and the existing patterns of rural-urban migration (outlined in previous chapters). In Venezuela, recent international immigration has also affected the age structure of the metropolitan population.

The moderate differences between total and urban population in the proportion aged 40-59 serve to emphasize the importance of the rural-urban differences in the relative numbers of young adults, i.e., 15-39,

Table 22

PERCENT DISTRIBUTION OF THE TOTAL AND URBAN POPULATION BY BROAD AGE-GROUPS, TOTAL AND URBAN DEPENDENCY RATIO  
 (RATIO OF THE DEPENDENT POPULATION -UNDER 15 AND OVER 60- TO THE POPULATION IN WORKING AGES -15-59)  
 LATIN AMERICAN COUNTRIES

Country and census year	Population a/	Age groups				Total	Dependenc ratio percent
		Under 15	15-39	40-59	60 and over		
<u>Middle America</u>							
Costa Rica (1950)	Total	42.9	39.3	19.0	4.8	100.0	91
	Urban	35.6	43.1	15.3	6.0	100.0	71
Dominican Republic (1950)	Total	44.5	39.0	11.9	4.6	100.0	96
	Urban	34.3	47.9	13.4	4.4	100.0	63
El Salvador (1950)	Total	41.2	39.9	13.9	5.0	100.0	86
	Urban	32.1	47.2	15.3	5.4	100.0	60
Guatemala (1950)	Total	42.3	40.2	13.1	4.4	100.0	88
	Urban	37.4	42.7	14.9	5.0	100.0	74
Haiti (1950)	Total	38.0	41.2	14.5	6.3	100.0	80
	Urban	32.8	48.3	13.8	5.1	100.0	61
Honduras (1950)	Total	40.6	38.4	14.7	6.3	100.0	88
	Urban	35.0	45.2	14.2	5.6	100.0	68
Mexico (1950)	Total	41.8	38.6	14.1	5.5	100.0	90
	Urban	35.8	42.4	16.1	5.7	100.0	71
	Mexico D.F.	34.5	44.1	16.1	5.3	100.0	66
Nicaragua (1950)	Total	43.3	39.3	12.6	4.8	100.0	93
	Urban	39.1	40.9	14.0	6.0	100.0	82
Panama (1950)	Total	41.6	39.5	13.4	5.5	100.0	89
	Urban	32.4	44.5	16.6	6.5	100.0	64
<u>South America</u>							
Argentina (1947)	Total	30.9	42.5	20.0	6.6	100.0	60
	Urban	22.6b/	45.0b/	24.6	7.8	100.0	44
	Greater Buenos Aires	20.9b/	45.0b/	25.9	8.2	100.0	41
Bolivia (1950)	Total	39.6	39.4	13.8	7.2	100.0	88
	Urban	35.5b/	45.6b/	13.6	5.3	100.0	69
Brazil (1950)	Total	41.9	40.4	13.5	4.2	100.0	86
	Urban	30.8	46.8	17.2	5.2	100.0	56
	Distrito Federal and Sao Paulo	28.8	47.3	18.4	5.5	100.0	52
Chile (1952)	Total	37.4	39.7	16.4	6.5	100.0	78
	Urban	33.0	43.2	17.5	6.3	100.0	65
	Greater Santiago	31.8	43.9	18.1	6.2	100.0	61
Colombia (1951)	Total	42.6	39.4	12.9	5.1	100.0	91
	Urban	37.3	44.0	13.6	5.1	100.0	74
	Bogota D.E.	35.0b/	47.0b/	14.0	4.0	100.0	64
Ecuador (1950)	Total	42.5	38.3	13.5	5.7	100.0	93
	Urban	38.1	42.2	14.6	5.1	100.0	76
Paraguay (1950)	Total	43.7	37.5	12.7	6.1	100.0	99
	Urban	33.6	46.7	14.2	5.5	100.0	64
Peru (1940)	Total	42.1	38.0	13.5	6.4	100.0	94
	Urban	33.0	48.0	14.6	4.4	100.0	60
	Lima	32.6	48.5	14.5	4.4	100.0	59
Venezuela (1950)	Total	42.0	39.8	13.7	4.5	100.0	87
	Urban	36.9	44.5	14.2	4.4	100.0	70
	Caracas Metropolitan area	34.1	46.5	15.0	4.4	100.0	63

Sources: Official census reports.

Bolivia: Aspectos generales de la Población Boliviana, op. cit.

Colombia: Estudio de Población de Bogotá by D.E. Hans Rother, Segundo Bernal, Marcos Fulop, Oficina de Planificación Distrital de Bogotá, Departamento de Investigación, Bogotá, D.E., 1950.

a/ Urban population as defined in appendix A except for Peru. In Peru the urban population here considered is formed by the population of Lima and the province of Callao.

b/ Estimated.

/who constitute

who constitute by far the bulk of the migrants from rural areas to metropolitan centres.

There appears to be no appreciable urban-rural differential in the proportion of persons aged 60 and over. In Argentina, Brazil, Costa Rica, Nicaragua and Panama the proportion is higher in the urban population, but in Bolivia, Haiti and Peru, the reverse is apparently true. In the remaining countries the differences between urban and rural areas are rather insignificant, and in some cases may well be due to under enumeration and/or errors in age reporting at the census.

As noted above, the urban areas, and particularly the major cities, have a disproportionately small share of the countries' youth and a relatively large share of its population aged 15-59. The latter group may be taken to represent, roughly, the working force, and the ratio of the numbers in this group to the number of persons under age 15 and over age 59 - the non-working segment of the population yields a rough estimate of the burden of dependency upon the (potential) working force.

The last column of table 22 gives the number of dependents per 1,000 population of active ages for total, urban and, where possible, major cities in the countries of the region. It is suggested by these data that the total labour force bears a greater economic burden than the urban and that, in turn, the problem of dependency is more acute in the total urban population than in the major metropolitan community. The pattern observed throughout the Latin American region is that which generally prevails in nearly all countries of the world. However, at best the statistics merely indicate the pattern; as measures of the burden of dependency upon the working force, they have certain important shortcomings. They imply that the employment of women outside the home is equally as widespread as that of men, and that the active population in a given locality supports only persons who reside in that locality.

The ratios also imply that only persons aged 15-59 work, and that all of these are employed. Obviously, in this region rates of labour force participation are lower for females than for males. Further, not all persons of working age are employed, and many children and aged persons are economically active, particularly in the rural areas. Moreover,

Table 23.

LITERACY INDICES OF THE TOTAL AND THE URBAN POPULATION

Country	Census year	Index of urbanization a/	Literacy index b/	
			Total population	Urban population c/
Argentina	(1947)	48.3	86.4	93.3
Chile	(1952)	42.9	80.2	91.8
Cuba	(1943)	31.4	77.6	90.0
Venezuela	(1950)	31.0	51.0	76.2
Mexico	(1950)	24.1	56.8	81.9
Panama	(1950)	22.4	71.7	94.9
Colombia	(1951)	22.3	57.5	80.1
Brazil	(1950)	20.2	49.4	80.3
Ecuador	(1950)	17.8	55.7	86.1
Costa Rica	(1950)	17.5	79.4	93.3
Nicaragua	(1950)	15.2	38.4	77.0
Paraguay	(1950)	15.2	65.8	85.6
Peru	(1940)	13.9	42.4	89.1
El Salvador	(1950)	13.0	39.4	77.1
Guatemala	(1950)	11.2	27.8	74.7
Dominican Republic	(1950)	11.1	42.9	75.5
Honduras	(1950)	6.8	37.1	77.7
Haiti	(1950)	5.1	10.5	56.8

Sources: Official census reports.

a/ Proportion of the total population living in cities with more than 20 000 inhabitants.

b/ Proportion of literate in total population aged 15 or more. This lower age limit is different in some countries, as follows: Argentina 14 years, Cuba 20 years, Mexico 6 years, Colombia and Guatemala 7 years, Honduras and Panama 10 years.

c/ Urban population as defined in appendix A in all cases, Guatemala excepted. In this table the urban population for Guatemala is the population living in cities with more than 20 000 inhabitants.

Table 24

LITERACY INDICES OF THE URBAN POPULATION AND OF THE  
 POPULATION IN THE LARGEST CITIES, SELECTED  
 LATIN AMERICAN COUNTRIES

Country	Census year	Literacy indices <u>a/</u>		Largest city
		Urban population <u>a/</u>	Population in largest city	
Argentina	(1947)	93.3	93.8	Greater Buenos Aires
Chile	(1952)	91.8	92.8	Greater Santiago
Cuba	(1943)	90.0	94.4	Habana
Peru	(1940)	89.1	92.1	Lima
Brazil	(1950)	80.3	84.2	Distrito Federal and Sao Paulo
Mexico	(1950)	81.9	84.2	Mexico D.F.
Venezuela	(1950)	76.2	84.5	Caracas

a/ See table 23, footnotes b/ and c/.

/rural migrants

rural migrants living in cities probably send regular remittances to their families, although, owing to the fact that the majority are young females, the extent of this practice in the Latin American region may be less important than in the Far East region where internal migration is largely the movement of young adult males. It is also possible that many urban inhabitants receive their incomes from rural areas. Finally, differences between rural and urban areas in salary scales and cost of living must also be taken into consideration.

#### 10. Literacy

In the countries of this region the urban population is more literate than the total; and literacy is more widespread among big city inhabitants than among the remainder of the urban population. <sup>16/</sup> This is the result usually obtained from studies of urban-rural literacy differentials and, as may be observed from data given in tables 23 and 24, the pattern persists throughout Latin America.

Perhaps the most significant observations that may be made from the data at hand are the following: (1) the rural-urban differential is greatest in countries whose average level of literacy is very low, and it is least noteworthy in countries where literacy is very widespread. In the former group are Guatemala, Peru, Haiti and Honduras, and in the latter are Argentina, Chile, Cuba and Costa Rica; (2) where urbanization proceeded at an extraordinarily rapid pace, changes in population characteristics that normally accompany urban expansion were perhaps less rapidly achieved, creating thereby a kind of cultural lag. Venezuela presents a striking example of this; between 1951 and 1950 its urban population increased at the rate of 7 per cent per annum, whereas the literates in the total population 10 years old and over declined from 57 to 51 per cent during this period. On the other hand, Costa Rica has attained a high level of literacy, 79 per cent of its population

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<sup>16/</sup> By literacy is meant the ability to read and write. Unless otherwise indicated, the comparisons made in this discussion refer to the population 15 years of age and over.

15 years old and over, but it is relatively unurbanized; only San Jose which contains 17.5 per cent of Costa Rica's population may be regarded as urban according to the definition applied here. However, urbanization has not figured so prominently in the economic development of this country as it has in others in this region. As for Cuba, the level of literacy there is probably higher than in Costa Rica; the data given for Cuba are for persons 20 years old and over, in 1943. However, there is no reason to suggest that the level of literacy in these countries should vary systematically with the degree of urbanization.

11. Distribution of active population by branch of economic activity

The trend towards the concentration of people in large urban centres has, historically, been strongly interrelated with a trend away from employment in agriculture. The first movement is known as urbanization and the second, as industrialization. Where the flow of rural migrants to cities has been in response to the need in these cities for additional labour, as was the case in the vast majority of the now highly industrialized countries, the result has generally been the achievement of a balance in economic development. But where the migration has been due mainly to high agricultural density, to the economic problems associated with it and to other non-industrial causes, the result has been over-urbanization, or significant increases in the urban population which are not accompanied by the industrial growth needed to support this population.<sup>17/</sup> The analysis of the industrial composition of the urban labour force is an indirect method of determining the economic character of localities which meet the statistical criteria for cities. Thus, the aim of the discussion which follows is to provide some information on the subject, so that added

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<sup>17/</sup> For a more detailed discussion, see UNESCO, Urbanization in Asia and the Far East, Proceedings of the Joint UN/UNESCO Seminar, Bangkok, 8-18 August 1956 (Calcutta 1957). Chapters III and VI. See also United Nations, Report on the World Social Situation (New York 1957), pp.170- and Kingsley Davis and Ana Casis, "Urbanization in Latin America", The Milbank Memorial Fund Quarterly, Vol. XXIV, Nos. 2 and 3, April and July 1946.

perspective may be given to the findings from the analyses of the demographic traits of the inhabitants of these cities.

Indexes of the degree of urbanization and industrialization (percentage of economically active males engaged in manufacturing, construction, gas and electricity) are given for 9 countries in table 25. The countries are listed according to the per cent urban (population in places of 20,000 and more inhabitants) of the total population. These data suggest that the degree of urbanization is positively associated with the degree of industrialization, although a stronger relationship would probably be indicated, if there were greater comparability with regard to the definitions of "industries" in the censuses of the different countries. Nevertheless, the figures do show that, among the countries for which data are given, urbanization is in some respect related to the degree of industrialization that has taken place. Working with data from censuses taken in and around 1940, Davis and Casis found that urbanization in this region had resulted largely from factors other than industrialization.<sup>18/</sup> However, this may not apply to the situation in Latin America over the past 15 years, during which emphasis has been placed upon economic development through industrialization.

Actually, two different patterns may be observed from the data in table 25: the five most urbanized countries are considerably more urbanized than they are industrialized; the remaining four countries have achieved approximately the same degree of each. In the latter group of countries, industry is apparently not concentrated in major cities, but is scattered through the villages in the form of handicraft and home-craft.

A comparison of the distributions of the urban and rural labour force by branch of economic activity would yield nothing more than additional support for the commonly accepted fact that a high proportion of the rural working force is engaged in agriculture, whereas the bulk of the urban labour force is engaged in secondary and tertiary activities. It is useful, however, to observe the differences between, and the similarities in, the

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<sup>18/</sup> Kingsley Davis and Ana Casis, loc. cit.



Table 25

INDICES OF URBANIZATION AND INDUSTRIALIZATION FOR SELECTED  
 LATIN AMERICAN COUNTRIES, IN THE LATEST CENSUS YEAR

Country	Census year	Indices of	
		Urbanization	Industrialization
Argentina	1947	48.3	26.9
Chile	1952	42.8	24.2
Venezuela	1950	31.0	15.6
Colombia	1951	22.3	14.6
Brazil	1950	20.2	12.6
Bolivia	1950	19.7	15.4
Ecuador	1950	17.8	17.8
Paraguay	1950	15.2	15.5
Peru	1940	13.9	13.2

Source: Official census reports.

/industrial composition

industrial composition of the labour force in two major Brazilian cities, Sao Paulo and the Distrito Federal. The figures are in table 26. It will be observed that nearly 45 per cent of the male labour force in Sao Paulo is engaged in manufacturing and mining, and about an equal proportion of that in the Distrito Federal is occupied in "other services". This is in keeping with what is generally known of the character of the two cities; Sao Paulo is an industrial city, and the Distrito Federal is the political and cultural centre. This difference in function accounts in large measure for the difference in sex ratio between the two cities. Sao Paulo has a higher ratio of males to females.

The proportion of the total Brazilian male labour force engaged in manufacturing and mining and in "other services" is, of course, significantly smaller than that in either the Distrito Federal or Sao Paulo, because over one-half of the working males in Brazil are engaged in agriculture.

Statistics showing the distribution by branch of economic activity of active males in various cities of the world are provided in table 27. It will be noted that, among the cities of each region, there exists a considerable variation in the industrial distribution of the male labour force. Unweighted averages of the percentages for the cities in each region are shown in table 28. As regards men occupied in "industry", the unweighted means of the percentages for the Latin American are similar to those for cities in Europe, the United States and Japan, but are distinctly higher than those for Asian cities. However, this does not permit the conclusion that Latin American cities are equally as industrialized as European cities; the size of the industries and the productivity of the workers are factors of considerable importance in accurately measuring the degree of industrialization, and these have not been taken into consideration here.

For the Latin American cities, the proportion of males engaged in transport is low in comparison with the average for the European cities and New York and more in keeping with the situation in Asia, particularly if Manila and Singapore are excluded. This no doubt reflects the fact that only a few of the Latin American cities are ports. The cities in this region also have relatively small numbers engaged in commerce. On

Table 26

PERCENT DISTRIBUTION, BY MAIN ECONOMIC SECTORS, OF THE  
 ECONOMICALLY ACTIVE POPULATION, BRAZIL AND  
 SELECTED MUNICIPIOS, 1950

Main Sectors	Brazil	Distrito Federal	Sao Paulo
Agriculture and forestry	57.8	1.9	1.6
Manufacturing and mining	15.8	26.8	44.7
Transport, storage and communications	4.1	9.4	6.2
Commerce, banking, insurance	6.3	15.5	15.6
Other services	15.7	45.8	31.7
Not classifiable elsewhere	0.3	0.6	0.2
Total	100.0	100.0	100.0

Source: 1950 census reports.

Table 27

PERCENT DISTRIBUTION BY BRANCH OF ECONOMIC ACTIVITY OF ECONOMICALLY  
 ACTIVE MALES IN SELECTED CITIES IN THE WORLD

City	Year	Agri- cul- ture <u>a/</u>	Indus- try <u>b/</u>	Trans- port <u>c/</u>	Com- merce <u>d/</u>	Other ser- vices	Not speci- fied <u>e/</u>	To- tal
<u>Europe and North America</u>								
New York	1950	0	33	11	31	22	3	100
Greater Paris	1954	1	50	8	19	20	2	100
London A.C.	1951	0	40	17	20	23	0	100
Madrid	1950	3	38	12	16	23	8	100
Lisbon	1950	4	32	15	23	26	...	100
<u>Latin America</u>								
Buenos Aires	1947	1	40	9	23	24	3	100
Dist. Federal (Brazil)	1950	2	30	12	18	37	1	100
Sao Paulo	1950	2	47	8	19	24	0	100
Greater Santiago	1952	4	45	9	19	18	5	100
Depto. Libertador Dist. Federal (Venezuela)	1950	2	36	6	17	24	15	100
Lima	1940	6	35	9	17	30	3	100
Medellín	1951	4	43	10	13	18	12	100
Asunción	1950	5	40	9	14	32	...	100
Ciudad Trujillo	1950	3	30	8	18	24	17	100
San Salvador	1950	3	41	8	15	25	8	100
Panama <u>f/</u>	1950	1	34	10	23	31	1	100
<u>Asia</u>								
Tokyo	1955	3	43	8	25	21	...	100
Greater Bombay	1951	1	40	10	22	27	...	100
Manila	1956	3	31	15	20	30	1	100
Bangkok	1956	2	29	8	20	29	12	100
Rangoon	1953	1	16	9	22	40	12	100
Island of Singapore	1947	8	20	16	25	28	3	100
Colombo	1953	2	18	7	17	54	2	100

Sources: Cities in Europe, U.S.A. and Latin America: official census reports. Cities in Asia: A forthcoming report on population for casts for Asian countries being prepared by the Population Branch of the U.N. Bureau of Social Affaires

Note: The classes in all countries are not strictly comparable. The coverage of each group of activities is generally as indicated in the footnotes to the table, although there are some exceptions. For example in Paris and the Asian cities, water, gas, and electricity are not included in "transport" with other basic services, but in the class "other services". The shortcomings derived from this lack of strict comparability are assumed to be of not great importance.

a/ Including forestry and fishing.

b/ Including mining and construction.

c/ Including other basic services as water, gas, electricity and communications.

d/ Including banking and insurance.

e/ Including not classifiable elsewhere, and in some cases unemployed.

f/ Men working in the Canal Zone have been excluded.

Table 28

DISTRIBUTION BY BRANCH OF ECONOMIC ACTIVITY OF 100  
 ECONOMICALLY ACTIVE MALES, IN FOUR SELECTED  
 GROUPS OF CITIES IN THE WORLD

Groups of cities	Agricul- ture	Industry	Trans- port	Commerce	Other servi- ces	Not specified	Total
<u>(Unweighted means of the percentages)</u>							
Five cities in Europe and North America	1.6	38.6	12.6	21.8	22.8	2.6	100.0
Eleven cities in Latin America	3.0	38.3	8.9	17.8	26.1	5.9	100.0
Tokyo	3.0	43.0	8.0	25.0	21.0	-	100.0
Six cities in Asia	3.3	25.7	10.7	22.3	33.7	4.3	100.0

the other hand, a comparatively large percentage is in "other services". However, this industrial group is even more prominent, comparatively speaking, in the cities of Asia, excluding Tokyo.

The regional differences observed in the proportion of the male labour force that is included in the blanket category, "other services" are due to a number of factors. Among them are the following: 1) Differences in the relative number engaged in personal service (the inclusion of large proportions in this category is characteristic of the more under-developed countries), and in the usage of the term, "service"; 2) Lack of comparability as regards the grouping of occupations within industries; 3) The varying proportions in the "unspecified" category, and the meaning of the term (it may mean "unemployed" as well as "unknown"); and 4) Differences in function between cities. For example, because of their administrative function, capital cities have a higher proportion of people engaged in "services", including government service, than do cities whose function is basically an economic one. The value of the comparisons suggested in this table are also limited by the fact that the information for some of the cities relates to the population of city proper, whereas that for others covers the inhabitants of the metropolitan area.

In spite of the serious limitations of the data, there is some basis for the conclusion that the industrial composition of the male labour force in Latin American cities bears a closer similarity to that of cities in industrialized countries than to the distribution by economic activity in cities in the under-developed countries of Asia.

APPENDIX A

Definitions of the urban populations of the Latin American countries,  
as used in this text

In order to facilitate comparisons between countries with respect to levels of urbanization, it is preferable to adopt a uniform criterion and to apply this to all countries under consideration. Although this procedure is desirable, it is not indispensable to a study of the characteristics of urban and rural populations. Instead, localities with distinctly urban traits, such as a major metropolitan city - usually the capital in Latin America - may be compared with the population of the country as a whole. The demographic characteristics associated with urbanization are then readily apparent, and their significance is not decreased by the weight of marginal populations that may be regarded as urban, if a very elastic definition of urban is used.

An "urban population" with clear urban characteristics has been designated for each country of the region for which the basic data are available. The population living in localities of 20,000 and more inhabitants is considered urban. Unfortunately, for the majority of countries, the available data do not permit the classification of the urban population according to such a simple definition. For some countries, it has therefore been necessary to adopt the closest approximation to the definition based upon census returns. The results for each country for which such a procedure was followed are given below.

In addition to the urban population as defined in each case, the population of the largest city in each country is considered separately, where this population does not constitute the whole or a preponderant portion of the urban population. Again, data are not always available for this purpose, and statistics for approximate areas are sometimes used, although such is always indicated.

In Cuba (latest available census 1943), the Dominican Republic (1950), El Salvador (1950), Haiti (1950), Honduras (1950), Panama (1950) and Paraguay (1950) whenever a figure is given for the urban population, it relates to persons living in localities of 20,000 and more inhabitants,

/and in

and in each country, the largest city is the capital city proper. In Costa Rica, where the latest census was taken in 1950, the population designated as urban refers to that in the metropolitan area of the city of San José, the capital. The difference between the metropolitan population and that of the city proper was 9,716 at the census of 1950. In both Costa Rica and Paraguay, there is only one city with 20,000 or more inhabitants; in each country, this is also the capital city.

Argentina (last census year 1947). By urban population, if not explicitly defined otherwise, is meant the population living in the urban "partido" or "departamento" where a city with more than 100,000 inhabitants is located. The total population included according to this definition is 6,007,148 people. The population living in cities with more than 20,000 inhabitants: 7,681,891. The population of Greater Buenos Aires comprises the urban population of the "partidos" with more than 100,000 inhabitants which are included in the official definition of Greater Buenos Aires. As a result, the population considered amounts to 4,270,227 out of 4,603,035 according to the official definition.

Bolivia (1950). The urban population studied comprises the population of the cities of La Paz and Cochabamba - the two more populous cities. The resulting total, namely 341,712 people represents nearly 2/3 of the total enumerated population living in places with more 20,000 inhabitants.

Brazil (1950). Urban population: population of 15 predominantly urban "municipios". In each "municipio" a city is located with a population greater than 3/4 of the total population of the "municipio". In fact the smallest city considered is Victoria with 49,735 inhabitants. All big cities (population over 100,000) except Santos, are included. The resulting urban population amounts to 7,629,148 people. The population living in cities with 20,000 or more inhabitants is 10,493,071. The "municipios" of the Distrito Federal (pop. 2,377,451) and of Sao Paulo (pop. 2,198,096) are studied instead of the cities of Rio de Janeiro (pop. 2,303,063) and Sao Paulo (pop. 2,017,025) respectively.

Colombia (1951) Urban population: population living in 11 cities with 20,000 or more inhabitants for which the data are available. The resulting total is 946,414 out of 2,579,431 which corresponds to the 28



cities with more than 20,000 in Colombia. Unfortunately the city of Bogota cannot be included in the urban population here considered. The largest city included is Medellin (pop. 328,294).

Chile (1952). Urban population: urban population (by national definition) of the "comuna" where the 24 cities with 20,000 or more inhabitants are located. Resulting figure: 2,587,194. The population of the cities with more than 20,000 inhabitants is 2,543,818. The population of Greater Santiago is formed by the urban population of the "comunas". The total population so calculated is 1,356,091 as against the official figure: 1,353,400.

Ecuador (1950). The urban population is formed by the people living in localities with 20,000 or more inhabitants, unless otherwise explicitly stated. No separate analysis is made for Quito and Guayaquil which together represent more than 80% of the population living in places with more than 20,000 inhabitants.

Guatemala (1950). The available data are not appropriate to constitute a sector of urban population restrictively defined. So, in this country, the urban population according to the national definition is used.

Mexico (1950). Urban population of the predominantly urban "municipios" for which data are available. A "municipio" is considered predominantly urban: 1) if its "cabecera" has 20,000 or more inhabitants, and 2) if the population of the "cabecera" is greater than 3/4 of the total population of the "municipio". The resulting urban population amounts to 4,015,791 corresponding to 20 "municipios". The total population living in the 67 cities with 20,000 or more inhabitants is 6,205,370. Data for Mexico DF are available.

Nicaragua (1950). Urban population: urban population of the 3 "departamentos" where the cities with 20,000 or more inhabitants are located. Resulting total: 186,169 as against 160,931 which is the total official population of those cities.

Peru (1940). Urban population: population of 6 predominantly urban "distritos" if not explicitly otherwise defined. In each "distrito" a city with more than 20,000 inhabitants is located with a population so defined: 771,625 people. The total population living in the 10 cities

with more than 20,000 inhabitants is 860,425. Lima: population data of the city are available.

Venezuela (1950). Urban population: population living in 12 cities with more than 20,000 inhabitants for which the data are available. The resulting total is 1,225,270 out of 1,588,540, which corresponds to the 22 cities with more than 20,000 inhabitants. Caracas: population data of the city proper are available.







