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THE POPULATION OF LATIN AMERICA

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RESUMEN

Las naciones de América Latina difieren considerablemente en su situación demográfica. Este trabajo pretende suministrar una visión de conjunto del alcance de esta variación. En términos de densidad, distribución urbano-rural, composición de la población, participación de la fuerza de trabajo, tasas de natalidad, tasas de mortalidad, y tendencias de la migración existe amplia variación y este artículo proporciona un resumen de la información o mejores estimaciones disponibles. En todas las naciones de América Latina hay un gran oleaje de urbanización y migración del área rural a la urbana. Aun cuando los niveles de fecundidad son más bajos en las naciones de la zona templada que en las naciones de la zona tropical, el crecimiento es moderadamente rápido o rápido en casi todas partes. Hay poca evidencia de una tendencia importante hacia la reducción de la fecundidad en las naciones de alta fecundidad. Mientras tanto, la reducción en la mortalidad continúa a un paso rápido. Esto crea la perspectiva de un crecimiento demográfico rápido y sostenido para el futuro inmediato.

By early 1963, 14 Latin American countries, including the 3 most populated of the region and comprising around 82 percent of the estimated population of the 20 Republics, had taken a census of population. With the exception of that of Peru, which came 21 years after the previous enumeration, all these censuses will afford for the first time the unique opportunity of analyzing the changes in the demographic structure and trends of these countries, occurring in the last decade. At the time of writing (Winter, 1963), only a rather limited amount of data from the 1960–63 censuses had been released. Most of it gives only preliminary results of the total count by sex and geographic distribution, and where data on characteristics were available, they were based on sample tabulations which are undoubtedly subject to revision. Besides, no over-all evaluation either of the total count or of the quality of the information obtained appears to have been made yet.[1] In spite of these limitations, several striking features of the Latin American populations, which have been pointed out in the past, can be

[1] Omissions are suspected to exist. Work done at CELADE, for example, has placed the under-enumeration of children 0–9 in the 1960 Mexican census close to 7 percent. It has also been estimated that about half a million persons were missed in the census count of the city of Buenos Aires. Cabelle has calculated a 5 percent omission in the last Chilean census.

confirmed on the basis of the more recent census data and that obtained from other sources.

I. SIZE, DENSITY, AND RATE OF GROWTH

Table 1 presents, for the 14 countries taking a census in or around 1960, the total population according to the two or three most recent enumerations. The comparison goes as far back as 1914 for Argentina, comprising for most of the countries considered the two decades between 1940 and 1960. Mean annual rates of growth during the corresponding intercensal periods are also included. While the intercensal rate of increase might be affected in many cases and in varying degrees by the reliability of the different population counts, it offers sufficient evidence of the behavior of the already high demographic increment of the countries included in the table. Only in Argentina the rate for the last 13-year period (1947–60) does not differ markedly from that of the 33-year period of 1914–47. The distribution of the 14 countries according to the last intercensal mean annual rate of growth is shown in the accompanying tabulation.

Number of countries	Percent
3	3.5 +
4	3.0–3.4
5	2.5–2.9
1	2.0–2.4
1	<2.00

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Table 1.—INTERCENSAL POPULATION GROWTH IN LATIN AMERICAN COUNTRIES WITH A CENSUS IN OR AROUND 1960

Country	Census Date	Enumerated Population (in thousands)	Mean rate of growth (percent) [a]
Middle America and Caribbean			
Costa Rica	22/V/1950 1/IV/1963	800.9 1 325.2	3.8
El Salvador	13/VI/1950 1/V/1961	1 855.9 2 511.3	2.8
Honduras	18/VI/1950 17/IV/1961	1 368.4 1 866.4	2.8
Mexico	6/III/1940 6/VI/1950 8/VI/1960	19 653.6 25 791.0 34 923.1	2.6 3.0
Nicaragua	23/V/1940 31/V/1950 VI/1962	835.7 1 057.0 1 578.3	2.3 3.3
Panama	8/IX/1940 10/XII/1950 11/XII/1960	622.6 805.3 1 075.5	2.5 2.9
Dominican Republic	6/VIII/1950 7/VIII/1960	2 135.9 3 013.5	3.4
Tropical South America			
Brazil	1/IX/1940 1/VIII/1950 1/IX/1960	41 236.3 51 944.4 70 967.2	2.3 3.1
Ecuador	29/XI/1950 25/XI/1962	3 202.8 4 650.0	3.1
Peru	9/VI/1940 2/VII/1961	6 208.0 10 364.6	2.4
Venezuela	7/XII/1941 26/XI/1950 26/II/1961	3 850.8 5 034.8 7 524.0	3.0 3.9
Temperate South America			
Argentina	1/VI/1914 10/V/1947 30/IX/1960	7 885.2 15 893.8 20 008.9	2.0 1.7
Chile	28/XI/1940 24/IV/1952 29/IX/1960	5 023.5 5 933.0 7 375.2	1.4 2.5
Paraguay	28/X/1950 29/XII/1962	1 328.5 1 816.9	2.6

[a] $r = \dfrac{(P_n - P_o)2}{(P_n + P_o)n}$

Where: r = mean annual rate of growth

P_o and P_n = the population according to first and second (or last) census in the period considered

n = the intercensal period expressed in years

Sources:

For censuses prior to 1960, Demographic Yearbook 1955, U. N.

For censuses in or around 1960, América en Cifras 1961 -I-Estadísticas Demográficas y de la habitación, UP -IASI; and Noticiero del Censo de las Américas - IASI

It should be pointed out that in the case of Peru the rate refers to a year period, thus concealing the true level of the rate for the last decade, which is probably higher than 2.4. The same can also be said of the rate of natural increase for Paraguay, where a rather high level of emigration has been suspected for a number of years, which would tend to diminish the intercensal increment. The high rate of growth for Venezuela is partially the result of immigration from abroad,[2] but the same explanation cannot be advanced in the case of Nicaragua, where perhaps underenumeration occurred during the 1950 count. It should be pointed out, though, that the Nicaraguan rate is consistent with that of Costa Rica, where the census results tend to confirm the very high level of fertility which has been persistently suggested by the vital statistics of that country.

[2] The number of immigrants from 1951 to 1960 is estimated at around 264,000. Source: Eduardo Arriaga, "Proyección de la Población de Venezuela por Sexo y Grupos de Edad 1960–1980" (unpublished study prepared at CELADE).

The pace of the acceleration of population increase in the region can be appreciated by comparing the distribution of the countries according to their estimated annual rate of growth and the proportion that its population represents in the total for the region (see Table 2). Around 1935, 12 countries comprising 39 percent of the Latin American population had annual rates of growth under 2 percent. It is estimated that only 2 countries and 10 percent of the population of the region will be growing at that rate by 1975. On the other hand, while only 1 country with 1 percent of the population grew in 1935 at a rate over 3 percent, it is estimated that 10 countries comprising 67 percent of the population will increase at this pace by 1975.

By using the data from the new censuses, it has been possible to revise upward previous estimates for the region. The estimate of total number of persons in Latin America by mid-1962 has now been fixed by ECLA/CELADE at nearly 216.5 million. This represents 6½ million more than

Table 2.—DISTRIBUTION OF THE LATIN AMERICAN COUNTRIES BY ORDER OF MAGNITUDE OF THEIR MEAN ANNUAL RATE OF GROWTH AND PERCENTAGE OF THE ESTIMATED TOTAL POPULATION 1925-35, 1945-55 AND 1965-75

Mean annual rate of growth (Percent)	1925-1935		1945-1955		1965-1975	
	No. of Countries	Proportion of the Population of the region. (Percent) a/	No. of Countries	Proportion of the Population of the region. (Percent) a/	No. of Countries	Proportion of the Population of the region. (Percent) a/
Under 1.5	4	9	-	-	1	1
1.5 - 1.9	8	30	4	7	1	9
2.0 - 2.4	6	58	5	24	2	6
2.5 - 2.9	1	2	8	65	6	17
3.0 - 3.4	0	-	2	1	6	63
3.5 and more	1	1	1	3	4	4
TOTAL	20	100	20	100	20	100

a/ Based on the estimated population for the region at the end of the corresponding period.

Source: CEPAL Boletín Económico de América Latina Vol. VII No. 1, Octubre, 1962. Santiago. Table 5, page 9 and unpublished revised population estimates and projections.

what was estimated for the region less than two years ago when the results of recent censuses were not available.[3] The population occupies an area of 20 million square kilometers, that is to say, an average density of 10.8 persons per square kilometer. This average, as can be seen

[3] CEPAL, *Bolétin Económico de América Latina*, Suplemento Estadístico, VI (November, 1961), 9–10, Table 2.

in Table 3, conceals significant differences in the density of Middle America and the Caribbean and those of Tropical and Temperate South America, the former being almost three times higher than the other two. There are also great disparities in the average density of the various countries, the two extremes being Haiti with 156 inhabitants per square kilometer and Bolivia with less than 4. Within countries

Table 3.—Estimated Population and Average Density for Each
Latin American Country by Mid-1962

Country	Area in Km^2 a/	Population (in thousands) b/	Density per Km^2
Latin America	20 007 196	216 456	10.8
Middle America and Caribbean	2 674 624	64 484	24.1
Costa Rica	50 900	1 305	25.0
Cuba	114 524	7 078	61.8
El Salvador	20 000	2 601	130.0
Guatemala	108 889	3 980	36.5
Haiti	27 750	4 330	156.0
Honduras	112 088	2 088	18.6
Mexico	1 969 269	37 166	18.9
Nicaragua	148 000	1 583	10.7
Panama	74 470	1 114	15.0
Dominican Republic	48 734	3 239	66.5
Tropical South America	13 218 715	117 856	8.9
Bolivia	1 098 581	3 863	3.5
Brazil	8 513 844	74 554	8.8
Colombia	1 138 355	16 360	14.5
Ecuador	270 670	4 579	16.9
Peru	1 285 215	10 642	8.3
Venezuela	912 050	7 858	8.6
Temperate South America	4 113 857	34 126	8.3
Argentina	2 778 412	21 726	7.8
Chile	741 767	7 987	10.8
Paraguay	406 752	1 858	4.6
Uruguay	186 926	2 555	13.7

a/ From Características da Estructura Demografica dos Paises Americanos, Instituto Interamericano de Estadística, Tabla I, Pag. 13.
b/ Estimates prepared within the ECLA-CELADE joint research programme.

there are also wide variations. Table 4 shows the distribution of major administrative divisions in 7 Latin American countries by average density, around 1960. With the exception of the Dominican Republic, one of the densely populated countries of the Caribbean, the great majority of the territory of these countries is very sparsely settled. Even considering only arable land, it cannot be said that on the average the Latin American populations are exercising pressure over the land. Data for the period around 1950 show the "agricultural" densities[4] (see accompanying tabulation).

Country	Inhabitants per km² of arable land	Country	Inhabitants per km² of arable land
Argentina....	9.2	Honduras....	54.6
Brazil........	22.4	Nicaragua....	44.6
Costa Rica...	43.2	Panama......	69.5
Chile........	21.4	Dominican	
El Salvador...	121.3	Republic...	91.7
Ecuador......	53.4	Venezuela....	22.8

It is expected that by 1980 the population of Latin America will have reached 354 million, twice that of 25 years ago. In comparison, it took 30 years for the population of 1932 to double to 216 million in 1962. The estimated population for 1980 implies that the average density for the different areas of the region will change to 41 persons per square kilometer in Middle America and the Caribbean; 15 for Tropical South America and 12 for Temperate South America. It also implies an average rate of growth of nearly 3 percent per year.

II. GEOGRAPHIC DISTRIBUTION AND URBANIZATION

Contrasted with the very low densities of the undeveloped rural areas within the countries, there exists a very high concentration of population in the cities, particularly in the capitals. Table 5 summarizes data for the capital city of 8 countries where a recent census was taken. The

[4] Inhabitants related to arable land. Source: "America en Cifras, 1961," *Estadísticas Económicas* No. 2.

Table 4.—DISTRIBUTION OF MAJOR ADMINISTRATIVE DIVISIONS IN SEVEN LATIN AMERICAN COUNTRIES BY AVERAGE DENSITY, ACCORDING TO LAST CENSUS OF POPULATION

Average Density (Inhabitants per Km²)	Argentina 1960	Brazil 1960	Chile 1960	Paraguay 1962	Peru 1961	Dominican Republic 1960	Venezuela 1961
Less than 1	4	5	2	3	1	–	3
1 – 4.9	9	3	.4	5	5	–	4
5 – 14.9	8	3	7	4	9	2	6
15 – 24.9	–	7	8	1	5	1	3
25 – 49.9	2	6	1	2	1	10	4
50 – 99.9	–	3	1	1	1	8	3
100 and over	1	1	2	1	1	5	1
TOTAL	24	28	25	17	23	26	24

Sources: Argentina. Censo Nacional de 1960. Resultados Provisionales
Brazil. Sinopse Preliminar de Censo Demográfico
Chile. IASI Noticiero No. 31
Paraguay. Censo de Población de 1962. Resultados Preliminares
Peru. IASI. Noticiero No. 50
Dominican Republic. Cuarto Censo Nacional de Población
Venezuela. Censo de Población de 1961. Resultados Preliminares CN-PV-02 y
     CN-IV-03

most striking feature is the unusually high rate of growth of these cities. Even Buenos Aires, where it is suspected that an important proportion of the population of the city was omitted by the 1960 census,[5] the rate is 3 percent. In the two cases (Rio de Janeiro and Caracas) where data for a previous intercensal period have been in-

[5] Work done at CELADE places the omission at around half a million persons. See Alejandro Dehollain y Jorge L. Somoza, "La Población de la Ciudad de Buenos Aires en 1960." CELADE D. 4/5 (mimeographed July, 1962).

cluded, the rate appears to have slowed down. The fact that other big cities in both Brazil and Venezuela are also growing fast can offer an explanation of the slackening in growth. The establishment of Brasilia may have also contributed to check increments in Rio. The 1961 census of the latter country enumerated close to 1 million inhabitants in 4 cities which have doubled their population in the last decade, a growth similar to that experienced by the metropolitan area of Ca-

Table 5.—INTERCENSAL GROWTH OF CAPITAL CITIES IN EIGHT LATIN AMERICAN COUNTRIES

City and census date	Capital of	Population (in thousand)	Percentage of		Intercensal Annual Mean Rate of Growth (Percent)
			Total Population	Urban Population	
Buenos Aires [a]	Argentina				
10/V/1947		4 595.3	28.9	46.3	
30/IX/1960		6 734.5	33.7	47.6 [b]	2.9
Mexico [c]	Mexico				
6/VI/1950		2 884.1	11.2	26.3	
8/VI/1960		4 666.0	13.4	26.4	4.9
Río de Janeiro [d]	Brazil				
1/IX/1940		1 519.0	3.7		4.5
1/VII/1950		2 335.9	4.5	12.2	
1/IX/1960		3 223.4	4.5	10.1	3.2
Caracas [e]	Venezuela				
7/XII/1941		324.6	8.4	26.8	
26/XI/1950		693.9	13.8	28.8	8.8
26/II/1961		1 336.1	17.8	28.4	6.6
Santo Domingo	Dominican Republic				
6/VIII/1950		181.6	8.5	35.7	
7/VIII/1960		367.1	12.2	40.0	7.8
Quito	Ecuador				
29/XI/1950		209.9	6.5	23.0	
25/XI/1962		365.0	7.8	22.6	4.7
Asunción [f]	Paraguay				
28/X/1950		206.6	15.5	43.9	
29/XII/1962		305.2	16.8	47.5	3.3
Panamá	Panamá				
10/XII/1950		164.1	20.4	56.6	
11/XII/1960		273.4	25.4	61.3	5.2

[a] Greater Buenos Aires
[b] Based on non official estimates that place the urban population in 14 millions
[c] Urban population of the Federal District
[d] Rio de Janeiro has ceased to be the Capital of Brazil. For purposes of comparison it is retained in this table. In Brasilia, the present Capital of Brazil, the 1960 census enumerated 89,698 persons.
[e] Metropolitan Area
[f] Asunción and Lambaré

racas. In Brazil the last census enumer-
ated another 3 million persons in São
Paulo and close to 7 million in 29 cities
with more than 100,000 inhabitants; in
1950 they contained 4 million only.

It is also interesting to note the im-
portance of the capital city in terms of
the total and the urban population of the
country. For the 8 countries considered,
in one (Argentina) the capital and sur-
rounding areas comprise more than 33
percent of the total for the country and
nearly 48 percent of its urban population.
In another (Panama) it represents more
than 25 percent of the total and more
than 60 percent of the urban. In all cases,
with the exception of Rio, the capital con-
centrates more than 20 percent of the
urban population.

For all countries the rate of growth of
the capital is consistently higher than the
national rate. In the absence of important
foreign immigration it is obvious that in
a considerable measure the increase is a
consequence of internal movements of the
population. The differential rates of in-
crease of the urban and rural areas con-
firm this. Table 6 contains, for 12 Latin
American countries, data on the distribu-
tion of the population between these two
areas. While differing census definitions of
the urban population might affect the
intercountry comparisons, the data are
valuable for examining the general trend
of urbanization in Latin America. With
the exception of Costa Rica and Para-
guay, for the rest of the countries included
in the table the proportion of urban popu-
lation has increased through time, and the
rate of growth is considerably higher than
that of the rural segment.[6] Outstanding is
the rate increase of the urban population

[6] It might be argued that the rate does not
reflect strictly the growth of the urban popula-
tion since it includes, as additions to this sector,
the complete population of towns reaching, dur-
ing the intercensal period, the urban category as
defined by the country. To avoid this, it is some-
times considered advisable to include these towns
in the total for the previous census even though
they were not urban at the time. This has not
been done in Table 6.

of Venezuela (6.3 percent). While the in-
clusion of the metropolitan area of Ca-
racas in the urban population influences
the level of this rate, it can be shown that
the rest of the urban population is growing
at more or less the same pace as Caracas.
The contrary is true of Rio de Janeiro,
which has increased much less than the
Brazilian urban population.

Table 7 allows a comparison of differ-
ential growth of the total, urban, and
rural populations, as well as that of the
capital city, for those countries where
data were available. The table reveals
that only in Costa Rica and Paraguay the
rural population is growing more or less
at the same rate as that of the total popu-
lation. Both in Chile and in Venezuela the
rural population appears to be practically
stationary, a trend which was already evi-
dent in the previous intercensal period.

If the analysis of the increase of the
urban population is limited to cities hav-
ing 20,000 or more inhabitants, recent
figures indicate that the growth is pro-
ceeding more rapidly in the larger cities,
those of 100,000 and over in the smaller
countries and those of 50,000 and over in
the populated larger ones. To the extent
that the four countries included in Table 8
can be taken as representative of the re-
gion, an examination of changes registered
in the last decade is made possible. The
pattern of the distribution of the popula-
tion by size of locality in the four coun-
tries under examination is somewhat di-
verse, both in terms of the total and urban
population, but in all of them the propor-
tion of urban population residing in cities
under 20,000 inhabitants has decreased.
In some cases, as the Dominican Republic
and Venezuela, the decrease has been
sizable.

It is difficult to make estimates and
projections of urban and rural popula-
tions. Aside from the difficulty posed by
the incomparability of the data through
time, due to the application of different
definitions and classification criteria, it is
practically impossible—in part due to
limited knowledge about the phenomena

Table 6.—INTERCENSAL RATE OF GROWTH OF THE URBAN AND RURAL POPULATION OF TWELVE LATIN AMERICAN COUNTRIES WITH A RECENT CENSUS

Country and Census Year	URBAN			RURAL		
	Number (in thousands)	Percentage of Total Population	Mean Annual Rate of Growth (Percent)	Number (in thousands)	Percentage of Total Population	Mean Annual Rate of Growth (Percent)
Brazil						
1940	12 880.1	31.2	3.8	28 356.1	68.8	1.6
1950	18 782.9	36.2	5.2	33 161.5	63.8	1.6
1960	31 990.9	45.1		38 976.2	54.9	
Costa Rica						
1950	268.3	33.5	4.0	532.6	66.5	3.7
1963	456.6	34.5		868.6	65.5	
Chile						
1940	2 639.3	52.5	2.6	2 384.2	47.5	-0.09
1952	3 573.1	60.2	3.7	2 359.9	39.8	0.5
1960	4 902.5	66.5		2 472.7	33.5	
Ecuador						
1950	913.2	28.5	4.6	2 288.8	71.5	2.3
1962	1 616.6	34.8		3 033.4	65.2	
El Salvador						
1950	677.2	36.5	3.3	1 178.7	63.5	2.4
1961	980.0	39.0		1 531.3	61.0	
Mexico						
1950	10 983.5	42.6	4.7	14 807.5	57.4	1.5
1960	17 705.1	50.7		17 218.0	49.3	
Nicaragua						
1950	369.2	34.9	4.9	687.8	65.1	2.2
1960	677.2	42.9		901.1	57.1	
Panamá						
1940	210.5	33.8	3.0	412.1	66.2	2.3
1950	289.7	36.0	4.3	515.6	64.0	2.0
1960	446.2	41.5		629.3	58.5	
Paraguay						
1950	459.7	34.6	2.8	868.7	65.4	2.5
1962	642.6	35.4		1 174.3	64.6	
Peru						
1940	2 240.3	36.1	3.5	3 967.6	63.9	1.5
1961	4 877.8	47.1		5 486.8	52.9	
Dominican Republic						
1950	508.4	23.8	5.7	1 627.5	76.2	2.5
1960	918.0	30.5		2 095.5	69.5	
Venezuela						
1941	1 206.7	31.3	7.5	2 644.0	68.7	-0.01
1950	2 411.8	47.9	6.3	2 623.0	52.1	0.7
1961	4 705.3	62.5		2 818.7	37.5	

Table 7.—Intercensal Rates of Growth of the Total Urban and Rural Population and That of the Capital City in Twelve Latin American Countries in the Period Around 1950–60

Country	Period	(Mean Annual Rate of Growth (Percent))			
		Total	Urban	Rural	Capital
Brazil	1950-1960	3.1	5.2	1.6	3.2 a/
Costa Rica	1950-1963	3.8	4.0	3.7	-
Chile	1952-1960	2.5	3.7	0.5	-
Ecuador	1950-1962	3.1	4.6	2.3	4.7
El Salvador	1950-1961	2.8	3.3	2.4	-
Mexico	1950-1960	3.0	4.7	1.5	4.9
Nicaragua	1950-1962	3.3	4.9	2.2	-
Panamá	1950-1960	2.9	4.1	2.0	5.2
Paraguay	1950-1962	2.6	2.8	2.5	3.3
Perú	1940-1961	2.4	3.5	1.5	-
Dominican Republic	1950-1960	3.4	5.7	2.5	7.3
Venezuela	1950-1961	3.9	6.3	0.7	6.6

a/ It refers to Rio de Janeiro, former Capital

Table 8.—Distribution of the Urban Population by Size of Locality for Four Latin American Countries with a Recent Census, 1950 and 1960

Country and Size of Localities	Number of Localities		Urban Population (in thousands)		Percentage of Urban Population		Percentage of Total Population	
	1950	1960	1950	1960	1950	1960	1950	1960
Mexico								
-20 000	-	-	4 778.1	7 437.0	43.5	42.0	18.5	21.3
20 000- 49 999	43	68	1 376.8	2 108.6	12.5	11.9	5.3	6.0
50 000- 99 999	14	24	928.0	1 647.2	8.5	9.3	3.6	4.7
100 000-499 999	9	15	1 665.8	2 346.4	15.2	13.3	6.5	6.7
500 000 and over	1	3	2 234.8	4 165.9	20.3	23.5	8.7	11.9
TOTAL			10 983.5	17 705.1	100.0	100.0	42.6	50.6
Panama								
-20 000	-	-	73.4	90.1	25.3	20.2	9.1	8.4
20 000- 49 999	-	1	-	22.9	-	5.1	-	2.1
50 000- 99 999	1	1	52.2	59.6	18.0	13.4	6.5	5.5
100 000-499 999	1	1	164.1	273.4	56.7	61.3	20.4	25.4
500 000 and over	-	-	-	-	-	-	-	-
TOTAL			289.7	446.2	100.0	100.0	36.0	41.5
Dominican Republic								
-20 000	-	-	270.2	353.6	53.2	38.5	12.7	11.7
20 000- 49 999	-	5	-	113.8	-	12.4	-	3.8
50 000- 99 999	1	1	56.6	83.5	11.1	9.1	2.6	2.8
100 000-499 999	1	1	181.6	367.1	35.7	40.0	8.5	12.2
500 000 and over	-	-	-	-	-	-	-	-
TOTAL			508.4	918.0	100.0	100.0	23.8	30.5
Venezuela								
-20 000	-	-	793.1	1 152.7+	32.9	24.5+	15.8	15.3+
20 000- 49 999	12	22+	376.7	675.5+	15.6	14.4+	7.5	9.0+
50 000 999 999	3	9+	207.2	621.2+	8.6	13.2+	4.1	8.3+
100 000-499 999	2	4+	340.9	919.8+	14.1	19.5+	6.8	12.2+
500 000 and over	1	1+	693.9	1 336.1+	28.8	28.4+	13.8	17.8+
TOTAL			2 411.8	4 705.3+	100.0	100.0+	47.9	62.5+

+ Refers to 1961

—to predict the future course of internal population movements. In spite of this, CELADE prepared estimates of the urban and rural populations for the years 1940 to 1962 and projections to the year 1975.[7] These were prepared before the results from some of the recent censuses were available and are therefore subject to revision. As can be seen in Table 9, it was estimated that by 1963 the two populations would be almost of the same size, while in 1964 the urban sector would be 1.7 percent larger than the rural. This percentage would have increased to 30.1 in 1975. Further examination of the data that are now becoming available will help to evaluate the validity of the projections. It is worth recalling that already the estimate for the total population by mid-1962 is in this case almost 7 million below the revised figure to which Table 3 refers. What will undoubtedly stand after a revision of the projection is the gradual shifting of the Latin American population from the rural to the urban area.

III. INTERNAL MIGRATION

Very little direct information on volume and characteristics of the internal movements of the Latin American population exists at the present time. Measure-

[7] For assumptions and definitions adopted, see CELADE, "Analisis demográfico de la situacion educativa en America Latina," D. 6/1 (mimeographed January, 1962).

ment of number and characteristics of migrants, direction of movements, etc., have depended on indirect estimates obtained from census figures. The limitations of this type of data have been amply discussed in the demographic literature. Such estimates are particularly imperfect when used to assess total volume of recent movements of population, so no attempt will be made in this paper to summarize data of this nature available for a number of countries.[8] The measurement of differentials, particularly by sex and age through census data, while also subject to shortcomings, might be taken as representative of the characteristics of recent migrants. Masculinity ratios of the populations enumerated in the urban and rural areas, for example, provide indirect information on sex differentials among migrants. Table 10 presents, for 9 countries with a recent census, the ratios corresponding to these two areas and for two census dates, when available. The consistent prevalence of ratios below 100 percent in the urban sector reflects, undoubtedly, a higher emigration of women from the rural areas. This ratio is as low as 88 percent in 3 countries (Costa Rica, Chile,

[8] For a detailed list of work of this nature done by CELADE and ECLA see Jorge Somoza, "Demographic Research of the Centro Latinoamericano de Demografica" (Paper No. 5, submitted to the 40th Annual Conference of Milbank Memorial Fund, September 17–18, 1963).

Table 9.—ESTIMATES AND PROJECTIONS OF THE URBAN AND RURAL
POPULATION FOR LATIN AMERICA, 1962–75

| Year | Total | URBAN | | Rural (Number in millions) |
		Number (in millions)	Percent of the Total	
1962	209.6	103.3	49.3	106.3
1963	214.9	107.2	49.9	107.7
1964	220.5	111.2	50.4	109.3
1965	226.2	115.4	51.0	110.8
1970	257.0	138.3	53.8	118.7
1975	292.8	165.5	56.5	127.3

Source: See footnote 7 in page 11.

and El Salvador), reaching 98 percent in Peru. Contrasting with these are the high masculinity ratios of the rural segment. In Chile, for example, the 1960 census recorded 115 men per 100 women in rural areas, followed by Panama where almost 111 were enumerated and the Domican Republic with a ratio of 108 percent. The data under examination also suggest that the rural imbalance of the sexes has deepened through time. In 6 of the 9 countries considered, the masculinity ratio, according to the last census, is higher than that of the preceding one.

Having the distribution by age of the population at two successive censuses taken at a 10-year interval, it has been possible to estimate differential migration by age using cohort analysis and applying estimated survival ratios. In some instances this indirect method has been further refined when classifications by age cross-tabulated by place of birth were available. It has not been possible to carry out computations of this nature with recent censuses, since the necessary tabulations are not yet available. Analysis performed with data from previous cen-

suses indicates, however, that male in-migrants into cities are rather young, the group from 20–29 years predominating. Females seem to migrate at younger ages, with ages 20–29 having less importance than they do among men. The figures in Table A from work done at CELADE are indicative of the pattern of the age differentials among in-migrants to urban places in Latin America.

Data on in-migration into two Latin American cities are now available from recent surveys. In February, 1960, a socio-economic survey was conducted in the City of San Salvador.[9] It included, among many other items, questions on the migration history of the in-migrants coming to San Salvador in the preceding decade. A more detailed study of in-migration was conducted by CELADE for the City of Santiago, Chile in May, 1962.[10] The discussion that follows is based on the pre-

[9] Louis J. Ducoff, "The Migrant Population of a Metropolitan Area in a Developing Country: A Preliminary Report on a Case Study of San Salvador" (Paper No. 52 submitted to the International Population Conference, 1961).

[10] Survey on In-migration into Greater Santiago.

Table 10.—URBAN AND RURAL MASCULINITY RATIOS IN NINE LATIN AMERICAN COUNTRIES WITH A RECENT CENSUS

Country	Census Year	Masculinity Ratio (Men per 100 Women)		
		Total	Urban	Rural
Costa Rica	1950	99.7	86.7	106.9
	1963	100.7	88.4	107.7
Chile	1952	96.4	87.5	111.8
	1960	96.3	88.0	115.3
El Salvador	1950	98.0	86.9	104.2
	1961	97.4	88.3	103.7
Honduras	1950	100.5	94.5	103.3
	1961	99.2	90.7	103.2
Mexico	1950	97.0	89.7	102.7
	1960	99.5	94.6	104.8
Panama	1950	103.5	93.6	109.5
	1960	103.0	92.9	110.9
Paraguay	1950	95.6	89.2	99.1
	1962	97.2	89.2	101.9
Peru	1961	99.1	98.3	99.9
Dominican Republic	1950	100.5	84.9	106.0
	1960	102.0	89.2	108.1

Table A—PERCENTAGE DISTRIBUTION OF MIGRANTS BY AGE IN SELECTED PERIODS AND COUNTRIES*

PLACE	PERIOD	10–19	20–29	30–39	40–49	50–Over
		Males (Percentage)				
State of São Paulo, Brazil......	1940–50	30.8	52.3	13.4	3.5	†
State of Parana, Brazil.........	1940–50	33.7	30.2	18.1	9.6	8.4
City of Rio Janeiro, Brazil.....	1940–50	26.1	56.9	11.9	2.3	2.8
State of Zulia, Venezuela.......	1941–50	32.6	51.5	8.3	6.1	1.6
City of Caracas, Venezuela.....	1941–50	37.1	50.3	6.2	2.7	3.7
		Females (Percentage)				
State of São Paulo, Brazil......	1940–50	37.0	42.3	13.6	5.2	1.9
State of Parana, Brazil.........	1940–50	37.4	21.1	17.8	9.4	6.3
City of Rio Janeiro, Brazil.....	1940–50	35.0	47.5	11.7	4.0	11.8
State of Zulia, Venezuela.......	1941–50	33.6	40.2	12.5	5.9	7.8
City of Caracas, Venezuela.....	1941–50	41.7	38.7	7.6	4.9	7.1

* Source: Latin American Demographic Centre, "Differential Migration in Some Regions and Cities of Latin America in the Period 1940–1950: Methodological Aspects and Results" (Paper No. 127 submitted to the International Population Conference, 1961).

† It gives a negative value.

Table 11.—SUMMARY DATA FROM IMMIGRATION SURVEYS CONDUCTED IN SAN SALVADOR (1960) AND SANTIAGO, CHILE (1962)

A. AGE STRUCTURE

Age Group		Immigrants San Salvador	Santiago	Natives San Salvador	Santiago
Under 15	Both sexes	9.8	8.5	55.4	54.4
	Males	10.6	9.5	61.2	56.4
	Females	9.3	7.8	52.0	52.6
15-39	Both sexes	56.8	47.1	31.7	33.2
	Males	54.6	45.3	28.2	32.9
	Females	58.1	48.3	34.9	33.4
40-59	Both sexes	23.4	31.3	5.9	9.6
	Males	26.8	31.8	8.1	8.7
	Females	16.4	31.0	9.7	10.5
60 and more	Both sexes	9.8	13.1	2.6	2.8
	Males	7.6	13.4	2.3	2.0
	Females	11.1	12.9	2.9	3.5
Unknown	Both sexes	0.2	–	0.4	–
	Males	–	–	0.2	–
	Females	0.3	–	0.5	–

B. LENGTH OF RESIDENCE IN THE CITY

Length of Residence	San Salvador a/ Both Sexes	Males	Females	Santiago Both Sexes	Males	Females
Less than 5 years	23.9	19.9	26.5	21.0	20.2	21.6
5-9	16.6	19.0	15.1	15.8	15.3	16.0
10-14	22.2	23.2	21.6	13.0	12.8	13.2
15-19	10.5	9.2	11.3	11.0	11.1	10.9
20 years and over	26.2	27.2	25.5	39.2	40.4	38.3
Unknown	0.6	1.5	–	–	–	–

a/ Excludes foreign immigrants

Table 11—*Continued*

Category	Percentage of Total	
of Locality	Males	Females
20 000 and over	40.1	39.8
5 000 - 19 999	24.8	23.6
900 - 4 999	17.0	19.0
Rural	10.9	12.8
Abroad	6.0	3.6
Unspecified	1.2	1.2

+ Size according to 1952 census of population

liminary findings of these surveys, some of which are summarized in Table 11.

That the cities of San Salvador and Santiago have grown in considerable measure due to population influx from other areas of the country is shown by the percentage of in-migrants found—42 percent for the former city and 34 for the latter. The contribution of foreigners to these percentages is very small in both cases—less than 4 percent in San Salvador and less than 6 percent in Santiago. The proportion of migrants among women is in both cities higher than that among men, as shown below:

City	Males	Females
San Salvador.............	37.3	53.6
Santiago................	48.3	53.0

The age structure of the migrant group differs significantly from that of the native population of the cities. While the largest proportion of natives (around 55 percent) is under 15 years of age, young adults predominate among the in-migrants. It is interesting to note that these present an older age structure in the City of Santiago, a feature which is clearly related to the fact that in-migration into this city seems to have started earlier than in San Salvador. When length of residence is examined, it is found that 30 percent of all migrants came to Santiago during a period removed at least 20 years in the

past, as compared with only 26 percent for the same period in the case of San Salvador. If the comparison is made of the proportion arriving within 15 years from the date of the surveys, the percentages are 63 for Santiago and 50 for San Salvador.

It is sometimes said that in-migrants into the cities come primarily from the rural areas. On the other hand, intermediate movements are believed to exist. No evidence has been advanced up to now as to what is actually happening in Latin America. The Santiago In-migration Survey provides, for the first time, information on place of origin of the migrants and number of movements prior to arrival in Santiago. Only 11 percent of the male migrants came directly from rural areas. This percentage would be increased to almost 28 if towns under 5,000 are included in the rural category. The most important proportion (40 percent) came from cities of 20,000 and over, while 25 percent emigrated from cities in the 5,000 to 19,999 group. Foreign in-migrants, as it has been said before, comprise less than 6 percent. Percentages for female migrants are approximately similar for localities over 5,000, with a slightly higher proportion of women coming from rural areas and towns under 5,000 (almost 32 percent).

As for the number of movements, it was found that among migrants arriving at ages 14 and over and within a 20-year

period from the date of the survey, 62 percent of the males and 66 percent of the women came directly to Santiago. The percent of migrants having made previous moves prior to coming to Santiago is shown in the accompanying tabulation.

Number of moves	Percent Males	Percent Females
One previous movement.......	16.0	15.0
Two previous movements......	7.0	8.0
Three or more previous movements....................	14.0	7.0

Age upon arrival in the city confirms in general what has already been suggested by the census figures. Nearly 54 percent of the male in-migrants arrive at ages between 10 and 29. Women arrive younger —60 percent of the female migrants fall within the ages just mentioned. The age at migration is very closely related with the motive which prompted the movement. In Santiago, 55 percent of the recent male migrants and 35 percent of the women gave a reason connected with work (search of work, better remuneration, contract or transfer) as the leading cause of their migration. Eight percent among men and seven percent among women mentioned "educational" motives. Another factor which has important bearing on the decision to move is the need to accompany a migrating member of the family. This is particularly important in the case of women: 37 percent of those coming to Santiago did so on account of this reason. In the case of men the proportion is only 11 percent. The survey tried to gather information on this subject, and the results show that 54 percent of the migrant males and 49 of the women come to Santiago alone, while 13 percent of the men do so with their wives and one or two children. The proportion of women coming to the city without a husband but with one or two children is over 5 percent.

Since most of the migrants claim to have moved to the city for reasons connected with work, it is interesting to discover in what type of occupation they were engaged prior to their migration to Santiago. Also there is need to learn what the first occupation in the city was and what kind of work they were doing at the time of the survey. The figures of Table B summarize the situation for the most important occupational groups within each sex for migrants who arrived in Santiago at 14 years of age and over in the 20-year period preceding the survey and who were active at the time of the interview.

Data of the nature quoted above would undoubtedly be very useful for interpreting and qualifying whatever demographic projections are made with the intention of mapping the future course of geographic movements of populations and planning programs of housing, education, and professional training directed toward the incoming population into the Latin American cities.

IV. AGE COMPOSITION

Fertility, mortality, and migration leave their imprint in the age composition of any population. Latin American populations may be generally characterized as having high levels of fertility and declining mortality; they have an age structure that is typical for such populations, with around 43 percent of the population under 15 years of age, close to 3 percent at ages 65 and over, and approximately 54 percent belonging to age group 15 to 64. The exceptions to this pattern are Argentina and Uruguay and in a lesser degree Chile and Cuba, where aging of the population has been associated with lower and declining fertility and in certain degree with foreign immigration.

Table 12 gives estimates of the age composition of the Latin American countries by mid-1960 and projections to 1975. Consistent with the proposition that no important changes in the fertility of the Latin American populations are to be expected in the near future, no marked changes in the age composition of these populations are envisaged by the projections. Now that the preliminary data from

some of the recent enumerations are available, it should be interesting to compare in what way the estimates and projections have deviated from the census results. In comparing the figures below (see Table C) with those of Table 12, caution should be exercised because the quality of census data on age, particularly in underdeveloped countries, is doubtful. This shortcoming is to some extent overcome by using broad age groups. Furthermore, the data for the recent census are in many cases based on sample tabulations with different degrees of reliability.

In spite of the limitations of the data, one very clear conclusion emerges: the proportion of persons under 15 years of age has increased in all the 6 countries considered.

In most countries of the region, internal migration has contributed to distort in the cities and in some rural areas the typical national age structure. The influx of young adults mentioned before in this paper has tended to reduce in the cities the importance of the group under 15 years of age and to increase that of the other two groups, producing exactly the reverse situation in rural areas of heavy emigration.

V. MARITAL STATUS

Considerable importance has been attributed to the influence that changes in

Table B.—PERCENT DISTRIBUTION OF MIGRANTS BY OCCUPATION

OCCUPATIONAL GROUP AND SEX	PERIOD		
	At the time of the survey	First upon arrival	At place of departure
Males:			
Non-manual workers..............	36.0	31.9	26.0
Professionals and technicians.....	7.3	6.3	4.5
Managers, administrators, etc.....	6.1	1.8	2.0
Clerks and salesmen.............	22.6	23.8	19.5
Manual workers.................	60.0	62.2	41.8
Artisans and semiskilled workers..	39.0	36.6	29.1
Workers in personal services......	11.4	12.2	6.9
Domestic servants..............	1.7	2.6	2.5
Agriculturists, fishermen, etc.......	2.0	3.8	29.5
Other workers not elsewhere specified	2.0	2.1	2.7
Totals........................	100.0	100.0	100.0
Females:			
Non-manual workers..............	27.1	26.6	25.0
Professionals and technicians.....	10.2	10.8	13.4
Managers, administrators, etc.....	1.7	0.6	0.5
Clerks and saleswomen..........	15.2	15.2	11.1
Manual workers.................	71.9	73.2	70.4
Artisans and semiskilled workers..	15.9	12.3	11.6
Workers in personal services......	10.8	6.7	6.0
Domestic servants..............	43.1	53.4	52.8
	2.1	0.8	....
Agriculturists, fishermen, etc........	0.6	0.2	3.7
Other workers not elsewhere specified	0.4	....0......	0.9
Totals........................	100.0	100.0	100.0

Table 12.—ESTIMATED AGE COMPOSITION OF THE POPULATION OF THE
LATIN AMERICAN COUNTRIES, 1960 AND 1975

| Country | Percentage of the Total | | | | | |
| | Under 15 | | 15-64 | | 65 and over | |
	1960	1975	1960	1975	1960	1975
Middle America and Caribbean						
Costa Rica	44.1	44.3	53.2	52.6	2.7	3.1
Cuba	36.0	32.5	59.6	61.8	4.4	5.7
El Salvador	43.1	43.5	54.3	53.5	2.6	3.0
Guatemala	44.7	46.6	52.9	51.0	2.4	2.4
Haiti	41.6	42.5	55.8	54.5	2.6	2.9
Honduras	42.0	42.7	54.7	54.1	3.3	3.0
Mexico	43.7	42.4	53.5	54.3	2.8	3.3
Nicaragua	44.6	45.2	53.0	52.2	2.4	2.6
Panama	41.5	40.2	54.6	55.4	3.9	4.4
Dominican Republic	43.9	45.1	52.8	51.6	3.3	3.3
Tropical South America						
Bolivia	41.9	43.0	55.1	54.0	3.0	3.0
Brazil	42.3	41.8	55.0	55.0	2.7	3.2
Colombia	44.3	42.6	53.0	54.3	2.7	3.1
Ecuador	44.0	44.9	52.9	52.0	3.1	3.1
Peru	44.1	44.3	52.9	52.4	3.0	3.3
Venezuela	42.5	39.8	54.7	56.9	2.8	3.5
Temperate South America						
Argentina	30.4	28.7	64.5	64.3	5.1	7.0
Chile	38.8	38.2	57.1	57.2	4.1	4.6
Paraguay	42.4	44.2	54.2	51.9	3.4	3.9
Uruguay	26.2	24.3	65.9	64.7	7.9	11.1

Source: CEPAL Boletín Económico de América Latina, Vol. VI No. 1, Suplemento Estadístico,
Cuadro 5

Table C.—AGE COMPOSITION OF THE POPULATION OF SIX LATIN
AMERICAN COUNTRIES WITH A RECENT CENSUS

| COUNTRY | CENSUS YEAR | PERCENTAGE OF TOTAL | | | |
		Under 15	15-59	60 and over	Unknown
Chile............	1952	37.2	56.0	6.5	0.3
	1960	39.8	53.5	6.7	....
El Salvador.......	1950	41.1	53.8	5.0	0.1
	1961	44.8	49.6	5.5	0.1
Honduras.........	1950	40.6	53.1	6.3	....
	1961	48.0	47.5	4.4	0.1
Mexico...........	1950	41.7	52.6	5.5	0.2
	1960	44.2	49.9	5.6	0.3
Panama..........	1950	41.6	52.8	5.5	0.1
	1960	43.2	51.2	5.6	....
Venezuela........	1950	41.9	53.4	4.5	0.2
	1961	44.8	50.6	4.6	....

the trend of nuptiality may have in the future growth of the Latin American populations. One school of thought postulates that increases in the proportion of legally married couples with corresponding decreases in the proportion of consensual unions will tend to augment the level of fertility, while others argue that this is not to be expected, because concomitant with this change there will be a tendency toward marriage at later ages.

It is a very well-known fact that an important proportion of the Latin American population lives in consensual unions, which are often classified as "stable," although no factual evidence exists to substantiate their permanent character. The distribution of 17 Latin American countries according to the percentage of married and consensual unions, in or around 1950, is shown in the accompanying tabulation.[11]

The figures quoted indicate that at least in 7 countries of the region the prevalence of consensual unions among the 15 years and over age group is above 20 percent. The countries with the highest percentage of consensual unions are, on the contrary, those having the lowest proportions of legally married. As urbanization proceeds and the level of literacy rises, changes in these proportions are bound to

[11] Giorgio Mortara, "Les Unions consensuelles dans L'Amérique Latine" (Paper No. 73, International Population Conference, 1961).

occur. It has been predicted that they will imply the reduction of consensual unions and corresponding increase of legal marriages. Preliminary data from censuses around 1960 for 5 countries to some extent tend to confirm this, as can be appreciated in Table 13. In all countries included in the table the percentages of married males and females have increased. Consensual unions remained more or less at the same level in two countries; they rose in one country and decreased in two. Urban and rural differentials in marital status are available for 1950 only for Panama and Venezuela. They are in both cases very significant, especially in Panama where a higher proportion of consensual unions exists. For females, for example, the rural percentage is twice that of the urban sector. There is every reason to believe that changes in these patterns will be another contribution of urbanization.

A more detailed analysis when figures for other countries become available is needed before accepting figures from Table 13 as representative of what is happening in the region. It should be pointed out that in spite of potential incomparability between censuses, due to inadequate reporting during enumeration, which could easily distort reality, changes such as those occurring in Mexico do not appear to be accidental.

	No. of countries	Countries
Percentage legally married:		
40 and over.............	6	Bolivia, Chile, Mexico, Argentina, Costa Rica, and Ecuador
30–40..................	3	Colombia, Cuba, and Paraguay
20–30..................	6	Nicaragua, Venezuela, Dominican Republic, El Salvador, Panama, and Honduras
Less than 20..............	2	Guatemala and Haiti
Percentage in consensual unions:		
40 and over.............	1	Guatemala
30–40..................	1	Haiti
20–30..................	5	El Salvador, Honduras, Nicaragua, Panama, and Dominican Republic
Less than 20..............	10	Bolivia, Costa Rica, Cuba, Colombia, Chile, Ecuador, Mexico, Paraguay, Peru, and Venezuela

VI. ECONOMICALLY ACTIVE POPULATION

A very comprehensive study of demographic aspects of manpower has been published by the United Nations.[12] Therefore, detailed discussions of the characteristics of the Latin American economically active population in this paper would only be repetitious. Perhaps it would be opportune to examine here, with the data that have become available recently, what appear to be the trends of the participation within sectors of the economy and in different age groups.

Table 14 summarizes data for 6 countries on activity, by sectors, for each sex. Agriculture has gradually continued to lose importance, although no very pronounced change seems to have occurred in the last decade in the percentage of males active in agriculture. Venezuela, appears to be an exception; this is con-

[12] *United Nations Demographic Aspects of Manpower*, Report I, "Sex and Age Patterns of Participation in Economic Activities" (New York, 1962).

sistent with the extremely fast process of urbanization under way in that country. What could be considered unexpected is the very little increase, and in some instances, decrease experienced in manufacturing activities among males. In general, services employ a higher proportion of males than in 1950, particularly in Venezuela.

Percentages for females have to be taken more cautiously, due to the very well-known and amply discussed incomparability between censuses, lack of rigorous definitions and enumeration practices, etc. In spite of this, there is no doubt that the proportion of women engaged in services reflects what is actually happening in the Latin American countries: women coming to the cities enter into activity as domestic servants or in other kinds of personal services. Again Venezuela, which presents a composition by sector which is different from the other countries considered (both for males and females) deviates somewhat, with a de-

Table 13.—PROPORTION MARRIED AND IN CONSENSUAL UNIONS IN FIVE
LATIN AMERICAN COUNTRIES WITH A RECENT CENSUS

Country and Census Year		Percentage of Population 15 Years and Over			
		Married		In Consensual Unions	
		Males	Females	Males	Females
Chile	1952	48.8	46.7	3.4	3.4
	1960	51.4	48.6	3.2	3.3
Honduras	1950	22.6	22.7	22.4	22.3
	1961	30.0	30.0	25.3	26.8
Mexico	1950	31.5	30.2	11.8	12.1
	1960 a/	44.8	44.4	8.1	8.7
Panama	1950 b/	23.6	25.0	27.6	31.6
	1960 a/	25.9	27.4	20.7	23.4
Venezuela	1950 b/	29.0	28.2	18.1	20.3
	1961	33.1	33.6	17.5	20.1

a/ 12 years and over

b/ The distribution by urban and rural was the following:

Panama, 1950				
Urban	31.4	29.4	19.3	20.4
Rural	18.5	21.3	33.0	41.0
Venezuela, 1950				
Urban	33.3	30.4	14.2	15.8
Rural	23.7	25.3	23.0	26.4

crease of the proportion of women engaged in services between 1950 and 1961.

As for the participation rates by age, the meager information available up to now shows (see Table 15) some striking facts: the decrease experienced both in Chile and El Salvador in the participation rate of males 65 and over (which in the case of Chile extends also to the group 45-64) probably is a reflection of the social service and retirement system of the country. Equally interesting is the considerable reduction experienced in El Sal-

vador males in groups 10-14 and 15-19, which could be interpreted as implying a postponement of entrance into the labor force, possibly due to a more extended period of education. Rates for women are more difficult to interpret, but it should be pointed out that for Chile female participation rates in 1961 are consistently lower than those of 1952. In El Salvador they are higher for the groups 20 to 29 and 30 to 44. The data are indeed too scanty to attempt any general conclusions valid for the region.

Table 14.—PERCENTAGE DISTRIBUTION OF THE ECONOMICALLY ACTIVE POPULATION BY SECTORS AND SEX IN SIX LATIN AMERICAN COUNTRIES WITH A RECENT CENSUS

Sector	Chile		El Salvador		Honduras	Mexico	Panama		Venezuela	
	1952	1960	1950	1961	1960	1960	1950	1960	1950	1961
				MALES						
Agriculture	38.5	34.1	74.2	71.3	74.9	59.0	64.4	61.2	50.8	38.1
Mining	6.5	5.2	0.3	0.1	0.3	1.4	0.2	0.2	3.4	2.3
Manufacturing	18.0	16.5	9.9	10.2	6.3	14.1	8.0	7.8	10.0	11.1
Construction	6.6	8.9	3.7	5.1	2.0	4.2	5.3	5.8	7.3	6.5
Public utilities		a/	0.2	0.2	0.2	0.4	0.7	0.6	0.4	1.2
Trade	10.8	9.3	3.7	3.8	3.5	8.4	8.6	8.6	10.7	13.5
Transportation	5.8	6.2	2.0	2.5	1.7	3.6	3.8	3.6	4.1	5.2
Services	13.8	14.1	6.0	5.9	5.4	8.2	9.0	10.8	13.3	15.7
Not specified		5.7		0.9	5.7	0.7		1.4		6.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
				FEMALES						
Agriculture	7.8	4.3	11.1	10.2	9.1	32.6	14.0	7.5	12.5	6.5
Mining	0.5	0.4	0.0	-	0.0	0.5	0.0	0.0	1.1	0.6
Manufacturing	25.4	19.7	24.6	23.1	16.3	12.2	13.3	9.9	18.0	17.1
Construction	0.2	0.2	0.1	0.0	0.1	0.7	0.2	0.2	0.4	0.4
Public utilities	a/	a/	0.0	0.0	0.1	0.2	0.4	0.3	0.1	0.3
Trade	10.8	10.4	17.7	17.4	11.0	14.3	13.4	14.9	6.3	8.8
Transportation	1.1	1.2	0.3	0.4	0.4	0.9	1.8	1.9	0.7	1.0
Services	54.2	59.8	46.2	47.6	52.8	37.7	56.9	63.5	60.9	58.7
Not specified	-	4.0	-	1.3	10.2	0.9		1.8	-	6.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

a/ Included in Services

VII. FERTILITY

With mortality declining and expected to continue that trend, the future course of fertility, not so responsive to change, will determine the pace of increase of the Latin American populations in the coming years. In spite of the inaccuracy and lack of completeness of the vital statistics of these countries, it has been possible, with the additional help of census data, to estimate present levels of the natality rate and its past trends. Table 16 gives estimates prepared by ECLA on the approximate level of the crude birth rate in the periods 1945–50 and 1955–60. More recently, the United Nations has estimated the level of the gross reproduction rates for these countries. The corresponding figures have also been added to the table. In general, the picture is one of high, and to some extent, constant fertility. All countries of Middle America and the Caribbean have crude birth rates over 40 per 1,000 with the exception of Cuba, where the rate for the last period has been estimated to be around 32 per 1,000. In the higher extremes we find Guatemala and the Dominican Republic, in terms of the birth rate and Costa Rica and Honduras in terms of the gross reproduction rate. Fertility in Tropical South America seems in general to be lower, while Temperate South America shows, with the exception of Paraguay, a pattern quite different from that of the rest of Latin America. The gross reproduction rates for Argentina and Uruguay are below 1.5.

What will be the future couse of fertility in Latin America? What are the factors that will determine changes in its present trend, making it start downward? If this can be expected, how soon will it start to show its effects in the rate of growth and in the age composition of the population? Some have tried to find partial answers to these questions by examining differential fertility by residence of women and by social classes. In the paragraphs that follow, some factual evidence is brought together in the hope of classifying at least potential avenues of research.

In spite of its well-known deficiencies (underenumeration of children, misstatements of ages of women in censuses, effects of migration on the urban and rural age structures, etc.), the ratio of children to women has been widely used to measure fertility differentials according to residence of the women. With data from the 1950 census for several Latin American countries it has been possible to postulate

Table 15.—RATES OF PARTICIPATION BY AGE IN TWO LATIN AMERICAN COUNTRIES WITH A RECENT CENSUS

Participation rates by age group	Chile		El Salvador	
	1952	1960	1950	1961
Males	(percent)			
10 - 14	13.3 a/	-	37.9	29.3
15 - 19	66.2	63.6	88.9	78.1
20 - 29	93.8	95.1	95.9	95.6
30 - 44	97.2	97.7	97.7	97.8
45 - 64	91.6	87.3	96.7	96.7
65 and over	70.2	52.0	82.1	78.0
Females				
12 - 14	5.8	-	7.9	5.5
15 - 19	28.5	23.6	20.6	20.3
20 - 29	33.1	30.2	19.7	22.9
30 - 44	27.7	22.8	17.1	19.0
45 - 64	23.9	17.9	15.1	15.8
65 and over	13.3	7.1	10.4	9.9

a/ Refers to 12 to 14.

the existence of urban-rural differentials in fertility, with an urban ratio significantly lower than that of the rural area. The figures quoted in Table D attest to this affirmation.

If one accepts that underenumeration of infants is more pronounced in the rural than in the urban areas, then it can be surmised that the differentials are higher than the crude figures show. Work done

at CELADE,[13] on the other hand, has questioned the reliability of the child-woman ratio, either for total or for non-single women to measure differentials in populations like those of Latin America where the age structure is affected by migration as well as by the level of fer-

[13] For this section of the paper I have drawn on work at present being done at CELADE by Robert O. Carleton.

Table 16.—ESTIMATED CRUDE BIRTH RATES FOR THE LATIN
AMERICAN COUNTRIES, 1945–50 AND 1955–60

Countries	Births per 1 000 population		Gross Reproduction Rate	
	1945-1950	1955-1960	Date	Level
Middle America and Caribbean				
Costa Rica	44-48	45-50	1960	3.5
Cuba	32-36	30-34	1943-48	2.1
El Salvador	44-48	44-48	1961	3.3
Guatemala	48-52	48-52	1960	3.4
Haiti	42-50	42-50	1935-40	2.8
Honduras	45-50	45-50	1951-56	3.6
Mexico	44-48	44-47	1960	3.1
Nicaragua	45-52	45-52	1940-45	3.1
Panama	38-42	39-42	1960	2.7
Dominican Republic	48-54	48-54	1950-55	3.2
Tropical South America				
Bolivia	41-45	41-45	1940-45	2.9
Brazil	43-47	43-47	1940-45	3.0
Colombia	44-47	43-46	1941-46	2.9
Ecuador	45-50	45-50	1940-45	3.2
Peru	42-48	42-48	1930-35	3.1
Venezuela	44-48	45-50	1960	3.1
Temperate South America				
Argentina	25-26	23-24	1961	1.4
Chile	34-37	35-38	1960	2.4
Paraguay	45-50	45-50	1940-45	2.9
Uruguay	20-23	19-22	1957	1.3

Source: Crude Birth Rate: Boletín Económico de América Latina. Suplemento Estadístico Vol. VII. No. 1, October 1962. Table 4.
Gross Reproduction Rate: Unpublished United Nations report on a world survey of fertility.

Table D.—Urban and Rural Child-Women Ratios in Ten Latin American Countries

Country	Census Year	Percentage Urban	Child-Women Ratio (Children 0-4 per thousand women 15-44)			
			Total	Urban	Rural	Rural/Urban
Costa Rica.............	1950	29	739	543	866	1.59
Cuba.................	1953	49	553	415	792	1.91
Chile.................	1952	59	567	471	764	1.62
El Salvador............	1950	28	674	537	767	1.43
Guatemala.............	1950	24	752	605	786	1.30
Mexico................	1960	46	787	734	847	1.53
Nicaragua.............	1950	28	702	585	780	1.33
Panama...............	1950	42	752	547	922	1.68
Paraguay.............	1950	28	752	551	878	1.59
Dominican Republic.....	1950	21	798	542	906	1.67

* Places of 2,000 or more inhabitants.

Table 17.—Average Number of Children Ever-Born[a] to Women in Age Group

Age Group	Cuba 1953 Urban	Rural	R/U	Brazil 1950 Urban	Rural	R/U	Panama 1950 Urban	Rural	R/U	Mexico 1960 Urban	Rural	R/U
12 - 14	0.002	0.002	1.0				0.004	0.01	2.50	0.01	0.01	1.00
15 - 19	0.13	0.25	1.92	0.11	0.17	1.55	0.21	0.44	2.10	0.16	0.27	1.69
20 - 24	0.69	1.26	1.83	0.83	1.28	1.54	1.16	1.82	1.57	1.06	1.55	1.46
25 - 29	1.30	2.46	1.89	1.89	2.96	1.57	2.09	3.32	1.59	2.29	3.04	1.33
30 - 34	1.85	3.54	1.91	2.94	4.59	1.56	2.56	4.46	1.74	3.47	4.29	1.24
35 - 39	2.29	4.43	1.93	3.81	6.00	1.57	2.83	5.21	1.84	4.22	5.33	1.26
40 - 44	2.68	4.99	1.86	4.43	6.81	1.54	3.02	5.40	1.79	4.44	5.69	1.28
45 - 49	3.01	5.41	1.80	4.92	7.27	1.48	3.28	5.48	1.67			
50 - 54	3.33	5.74	1.72	5.34	7.24	1.36	3.57	5.34	1.50	4.00	4.96	1.24
55 - 59	3.63	6.03	1.66				3.82	5.32	1.39			
60 - 64	3.98	6.13	1.54	5.64	6.99	1.24	3.90	5.12	1.31			
65 - 69	4.22	6.21	1.47				3.96	5.05	1.28			
70 - 74	4.11	5.09	1.43	5.72	6.79	1.19	3.95	5.02	1.27			
75 - 79	3.98	5.67	1.42				4.06	4.93	1.21			
80 - 84	3.82	5.17	1.35	5.58	6.42	1.15						
85 and +	3.78	4.57	1.21									
Unknown				3.10	4.30	1.39	1.83	2.35	1.28	1.47	1.33	0.90
Total	1.85	2.65	1.43	2.76	3.73	1.35	2.08	3.07	1.48	2.39	2.93	1.23

a/ Refer to live births.

tility. Carleton believes that census data on children ever-born by age of mother offer a relatively unexplored approach for determining urban-rural differentials that would seem to be free of the difficulties of the child-woman ratio. The principal objection to the use of census data on children ever-born would be the problem posed by the forgetfulness associated especially with uneducated women in the older ages. Fortunately a difficulty of this nature is much less serious when the method is used to estimate urban-rural differentials rather than levels of fertility. Any underestimation of the level of fertility by the children ever-born approach tends to be greater in the rural sector with the consequence that despite deficiencies that may exist in the estimated levels of urban and rural fertility, any bias in the resulting urban-rural differential can be taken as being at least as large as that shown by the estimates.

Table 17 gives for 4 Latin American countries the average number of children ever-born to women in the different age groups by urban and rural residence. It can clearly be appreciated that the number of children born to rural women is significantly higher than for the urban women in all 4 countries. Although the magnitude of the differential varies from one country to another, there can be no question that rural fertility according to this measure is greater than that of the urban sector.

Another feature of the children ever-born data to which attention should be called is the light they shed on past fertility trends. The countries included in the table, with the exception of Mexico, are countries where higher levels of fertility probably prevailed earlier in the century. The three of them, at least for the urban women and sometimes both for urban and rural women of the ages 50 and over, actually report more children born than for women ages 45 to 49. These data are suggestive of a reduction in the level of fertility in these countries.

Following the method developed by Lorimer for the November 1962 United Nations Seminar on Population Problems in Africa, CELADE has estimated age-specific rates and then crude birth rates for the urban and rural sectors of the same 4 countries. The results in terms of the crude birth rate appear in the accompanying tabulation. When they have been standardized to control the effect of the different age countries, the urban-rural differentials are more pronounced.

	Rural	Urban	Rural/ Urban
Cuba (1953):			
Unstandardized....	33.07	24.53	1.35
Standardized.......	40.10	21.59	1.86
Brazil (1950):			
Unstandardized....	49.37	40.32	1.22
Standardized.......	50.04	34.98	1.54
Mexico (1960):			
Unstandardized....	40.54	35.14	1.15
Standardized.......	42.75	33.47	1.28
Panama (1950):			
Unstandardized....	38.77	28.78	1.35
Standardized.......	43.39	24.67	1.76

Differentials by social class also seem to have been established at least for certain cities in Latin America. The Guanabara Demographic Pilot Survey conducted by CELADE with the collaboration of the United Nations Population Branch and the Government of Brazil in the city of Rio de Janeiro in 1961 obtained the following crude birth rates by social class.[14]

Class	Rate (per 1,000)
High and medium high..........	18.3
Medium and low high..........	22.3
Low.........................	29.9
Total.....................	23.3

The Santiago Fertility Survey, also conducted by CELADE, found that the average number of children born alive to women varied inversely with the level of expenditure of the family. The corre-

[14] IBGE and CELADE, "Encuesta Demográfica Experimental de Guanabara," *Informe Final*, C. 62/4 (mimeographed, December 1962).

sponding figures are quoted in the accompanying tabulation.[15]

	Average number of live children born to non-single women
Illiterate or three years of primary education...........	3.86
3d to 6th grade of primary education.....................	3.34
First to 4th year of secondary education...................	2.67
5th and 6th years of secondary and university education.....	2.53

The differentials according to level of expenditures fluctuated from 5.5 live births in the lower end to 1.9 in the upper end (see accompanying tabulation).

Classification of average expenditure (from lowest to highest)	Average number of children born to non-single women
1........................	5.50
2........................	4.50
3........................	3.68
4........................	3.05
5........................	2.84
6........................	2.61
7........................	2.32
8........................	2.13
9........................	2.35
10........................	2.31
11........................	1.89
Domestic Servant..........	2.30
Unspecified...............	3.29

Stycos also found class differentials in Lima[16] as are shown in the accompanying tabulation.

	LIVE BIRTH BY SOCIAL CLASS (FROM HIGHEST TO LOWEST)				
	I	II	III	IV	V
Age standardized mean.........	2.6	2.8	3.7	4.6	4.9
Class I = 100....	100	108	142	177	189
Women 40–44.....	3.8	4.3	5.3	7.2	7.6
Class I = 100....	100	113	139	189	200

The data quoted above, while limited to only three Latin American cities, can be taken as an indication that class differentials in fertility are a reality in the urban population of most of the countries of the region. It should be pointed out that the three cities from which the data have been drawn belong to countries which present quite different demographic characteristics.

VIII. MORTALITY

The postwar period brought with it an acceleration of the mortality reduction in the underdeveloped countries; this reduction had already started, mainly due to sanitary and preventive medicine measures that were being taken. The simple comparison of the crude death rate for some Latin American countries extracted from the United Nations *Demographic Yearbooks* of 1953 and 1960 is useful to portray what has been the course of mortality over the past 15 years after these developments gained momentum (see accompanying tabulation).

PERIOD	DEATH RATES (PER 1,000)			
	Argentina	Chile	Guatemala	Mexico
1945–49....	9.7	17.9	23.8	18.0
1950–54....	8.7	13.6	21.4	15.5
1955–59....	8.4	12.5	19.9	12.7

In those countries where the mortality rate was highest the decrease has been more pronounced, but in all countries, without exception, mortality has been reduced considerably. In keeping with this, all projections of population prepared for the region have automatically implied the assumption of a declining crude death rate or, more precisely, a continued rise in expectation of life at birth.

ECLA published recently estimates of

[15] Leon Tabah and Raul Samuel, "Resultados preliminares de una encuesta de fecundidad y de actitutes relativas a la formacion de la familia en Santiago de Chile," CELADE D. 5/3 (mimeographed November 1960).

[16] J. Mayone Stycos, "Social Class and Differential Fertility in Peru" (Document No. 34, submitted to the International Population Conference, 1961.)

these two measures for the periods 1945–50 and 1955–60, which are reproduced in Table 18.

There are at least three countries with an estimated crude death rate of over 20 per 1,000. The rest (with the exception of Argentina and Uruguay) have death rates which fluctuate between 10 to 20 per 1,000, with Costa Rica, Cuba, and Panama showing a certain trend toward lower levels. The expectations of life have been estimated, assuming different average annual gains in life expectancy, depending on the level reached by the mortality.

Recent works done at CELADE for

[17] Jorge Somaza and Odette Tacla, "La Mortalidad en Chile segun las Tablas de Vida de 1920, 1930, 1940, 1952, y 1960," CELADE D. 4/6 (mimeographed, 1963); Zulma L. Recchini, "Tabla abreviada de mortalidad, Republica de Mexico 1959–1961," CELADE B. 63.2/3.1

Mexico, Chile, El Salvador,[17] taking into consideration the results of recent censuses, give the following expectations of life at birth:

COUNTRY	EXPECTATION OF LIFE AT BIRTH	
	Males	Females
Chile, 1960–61........	54.68	59.91
El Salvador, 1950–61....	49.16	52.47
Mexico, 1959–61.......	57.63	60.29

If these are compared with data from previous life tables, we find that the average gain per year in the life expectancy

(mimeographed, 1963); Alex Antonio Alens Z., "Estimaciones de niveles de mortalided en base a la comparacion de los censos de 1950 6 1961," CELADE (unpublished, 1962).

Table 18.—ESTIMATED CRUDE DEATH RATE AND EXPECTATION OF LIFE AT BIRTH IN LATIN AMERICAN COUNTRIES, 1945–50 AND 1955–60

Countries	Crude death rate (per 1000)		Expectation of life at birth	
	1945-1950	1955-1960	1945-1950	1955-1960
Middle America and Caribbean				
Costa Rica	12 - 16	9 - 13	52 - 58	56 - 62
Cuba	11 - 15	9 - 13	52 - 58	56 - 62
El Salvador	18 - 23	14 - 18	40 - 47	48 - 52
Guatemala	22 - 27	20 - 24	37 - 42	40 - 46
Haiti	25 - 30	20 - 28	32 - 38	36 - 45
Honduras	18 - 24	15 - 20	40 - 46	45 - 50
Mexico	17 - 20	13 - 16	45 - 48	51 - 55
Nicaragua	16 - 20	12 - 17	45 - 52	50 - 55
Panama	14 - 17	9 - 13	48 - 53	54 - 59
Dominican Republic	20 - 25	16 - 20	38 - 45	44 - 50
Tropical South America				
Bolivia	23 - 27	20 - 25	36 - 42	40 - 45
Brazil	17 - 23	11 - 16	40 - 48	50 - 48
Colombia	17 - 21	14 - 17	44 - 48	48 - 53
Ecuador	20 - 25	15 - 20	38 - 43	43 - 48
Peru	18 - 24	13 - 18	40 - 48	48 - 55
Venezuela	16 - 20	10 - 15	45 - 50	53 - 57
Temperate South America				
Argentina	9 - 10	8 - 9	61 - 62	64 - 66
Chile	17 - 19	12 - 13	47 - 51	53 - 56
Paraguay	15 - 20	12 - 16	48 - 52	50 - 58
Uruguay	8 - 91	7 - 9	62 - 65	65 - 68

Source: ECLA, *Boletín Económico de la América Latina.* Suplemento Estadístico Vol. VII N° 1, October 1962, Table 4.

at birth of these countries has been as follows:

| COUNTRY | LENGTH OF PERIOD | GAIN PER YEAR | |
		Male	Female
Chile.......	8 years	0.22	0.39
Mexico.....	10 years	0.97	0.88

The gains in the case of Chile are small. If one considers that this country has a rather complete public health service with a high professional reputation, it is to be surmised that up to a certain limit changes in mortality depend more on a general rising of the standard of living of the population than on the availability of public health services.

Very little information exists on mortality differentials by social class, for example, which would throw some light on the preceding assertion. Maybe it is worth pointing out that the Guanabara Demographic Pilot Survey, already mentioned when discussing fertility, also recorded differentials in mortality by social class, although not so pronounced as in the case of fertility. They are quoted here, mainly for illustrative purposes:

Class	Death rate (per 1,000)
High and medium high......	8.0
Medium low and low high...	7.9
Low......................	9.1

Behm[18] has also shown the existence of social differentials in the infant mortality of Chile in 1957. His figures are given in the accompanying tabulation.

| TYPE OF MORTALITY | RATE PER 1,000 LIVE BIRTHS | | PERCENTAGE EXCESS OF LABORERS' RATES OVER NON-LABORERS' RATES |
	Laborers	Non-laborers	
Infant...........	126	67	88
Neonatal........	37	24	54
Post-neonatal....	89	43	107

No Latin American country has reached the levels now entertained by the more-developed countries, so further declines are to be expected in the mortality of the region, which, if not accompanied by changes in the fertility level, would make even higher the present rate of increase of the Latin American populations.

IX. CONCLUSIONS

This paper has been confined to the presentation of factual information, making no attempt while presenting it to elucidate the potential implications of the demographic behavior of the region on its economic and social well-being. When the population data for Latin America are contrasted with those portraying the economic and social development, the obvious conclusion is that the region is running against odds in the race toward economic growth.

Two variables seem to emerge as those most likely to influence the future course of population growth in Latin America—fertility and urban-rural migration. In the face of sustained fertility, aside from the problems posed by the increase in sheer numbers, Latin America will be confronted with the worsening of the dependency ratio. Pressure on "demographic" investments, particularly in the field of education, will distract part of the capital that otherwise would be channeled toward "economic" investments. Urbanization resulting from migration from rural areas and small towns to the larger cities could become the source of reductions in fertility. Even when urbanization has proceeded faster than industrialization, creating important social problems in the cities, it has produced significant demographic changes which, in turn, would be reflected in the level of fertility. Some of them have been mentioned in this paper, namely, imbalances between the sexes, distortion of age structures, increase in

[18] Hugo Behm Rosas, "Mortalidad infantil y nivel de vida" (Ediciones de la Universidad de Chile, Santiago 1962), Table 18, p. 90.

legal marriages, and, presumably, postponement of marriage, since consensual unions in Latin America generally occur at earlier ages than legal marriages. Also a diminution of the proportion of people engaged in agricultural pursuits is taking place, Theoretically this would create in these persons more modern attitudes toward life in general: higher participation of women in economic activities, with a tendency to reduce the average number of children born; higher educational levels, which have important bearing on individual behavior toward fertility; and increased individual income, which, together with rising aspirations, would also condition future attitudes toward fertility.

Unfortunately, it should be emphasized that not enough knowledge exists on the diverse and somewhat complicated interactions existing between fertility and urbanization. If our actions are to be planned soundly, more information is needed about the forces that cause fertility rates to be high or low.