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Population Dynamics in Latin America

by Jorge A. Brea

*Rapid fertility declines
slowed Latin America's
population growth at
the 20th century's end.*

*The region's young
population profile assures
substantial population
growth until 2050.*

*Latin America is a major
source of international
migrants, especially to the
United States.*

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About the Author

Jorge A. Brea is associate professor of geography at Central Michigan University. He is also associated with Universidad Católica, Santo Domingo, Dominican Republic, where he leads a summer field study program. He received a master's degree from the University of Maryland and a doctorate from Ohio State University. His research interests focus on population and urban geography and the geography of Latin America. He has published articles on these topics in several journals, including the Journal of Economic and Social Geography (TESG), Economic Geography, and the Journal of Developing Areas.

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Population Dynamics in Latin America

by Jorge A. Brea

Latin America experienced explosive population growth in the middle of the 20th century as two demographic trends converged: high birth rates and rapidly declining death rates. With annual growth reaching 2.8 percent in the 1960s, Latin America's population was growing faster than that of any other world region except Africa. This unprecedented pace of growth slowed after 1970 as fertility fell with surprising speed, but the number of people added to the population each year continued to expand, and the region's population tripled between 1950 and 2000. Latin America's population is young, which generates substantial momentum for further growth well into the 21st century.

While some countries in Latin America welcomed additional population as a way to help tame their sparsely populated hinterlands, most of the growth was concentrated in urban areas. The region's population was being transformed from being overwhelmingly rural to predominantly urban. As the urban population grew by 4.5 percent per year, it taxed public services and created an expanding need for education and jobs. In 2000, three-fourths of Latin Americans lived in urban areas, with the most vigorous growth among medium-sized cities rather than the older megacities such as Buenos Aires, São Paulo, and Mexico City.

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Latin America's population tripled between 1950 and 2000, despite rapid declines in birth rates. The 21st century will see lower birth rates and slower growth.

Population change in Latin America is important to the United States as globalization strengthens the hemisphere's social and economic ties, and because migrant streams have brought more Latin Americans to U.S. communities. Immigration from Latin America contributes significantly to U.S. population growth.

Many North Americans are not aware of the vast ethnic, demographic, and social diversity of Latin America or of the different political and economic structures found in the region. While most Latin Americans speak Spanish, for example, Bolivia, Ecuador, Guatemala, Mexico, and

Figure 1

Latin America and the Caribbean: Geographic Regions



Mexico and Central America
Haiti and Latin Caribbean
Andean countries
Brazil and Southern Cone
Other

several other countries are home to large indigenous populations that speak a variety of native languages, including Quechua, Mixtec, and Kekchi. Brazilians, who make up nearly one-third of the region's population, speak Portuguese; English, French, and Creole are the predominant languages in some countries of the Caribbean and Central and South America. While most Latin Americans live in urban areas, distinct rural societies persist, especially in countries with large indigenous populations. And while many Latin American countries have a fairly large middle class, the region also faces vast and growing disparities in wealth.

This *Population Bulletin* examines major demographic trends in Latin America during the second half of the 20th century and highlights the demographic variations among Latin American countries. The *Bulletin* also considers the relationships between demographic and socioeconomic processes in the region. The *Bulletin* focuses on 18 Spanish-speaking countries of the Western Hemisphere, plus Brazil and Haiti (see Box 1).

Early Population Change

Population change in Latin America and the Caribbean may be divided into four distinct periods, beginning with the arrival of Europeans in 1492. A period of sharp population decline (1492–1650) was followed by periods of slow growth (1650–1850), moderate growth (1850–1950), and accelerated growth (1950–2000).

Catastrophic Decline: 1492–1650

Historically, Latin America and the Caribbean have accounted for a small fraction of the world's population. Geographer William Denevan estimated that the 7.9 million square miles of land area that make up Latin America and the Caribbean were populated by at least 50 million indigenous people when the Europeans arrived in 1492.¹ The native population was highly concentrated geographically in the highlands of central and southern Mexico and in the Andean region of South America. Most of the continent was sparsely populated. According to Denevan, 15th-century Mexico had an indigenous population of about 17 million, and the Andean region was home to about 16 million people. Archeologists continue to find evidence that these cultures had highly developed societies and efficient agricultural techniques.²

European colonization triggered a catastrophic population decline in the region (see Figure 2). By 1650, about 90 percent of the indigenous population who had come in contact with Europeans had died because of disease, famine, malnutrition, ill treatment, overwork, or (less often) homicide. The major killers were smallpox, measles, typhus, plague, influenza, and yellow fever—European and African diseases to which the native population lacked immunity. Anthropologist Henry Dobyns estimated that the population of Latin America and the Caribbean was reduced to approximately 4 million people by 1650.³

The precipitous decline of the indigenous population in the region also decimated the supply of workers available to European colonists. The Europeans turned to Africa as a source of labor, especially for Brazil and the Caribbean, where the original indigenous population had been small and the plantation agriculture introduced by the colonists required large numbers of workers. An estimated 9 million Africans were brought to Latin America as slaves during the colonial period.⁴

Slow Growth: 1650–1850

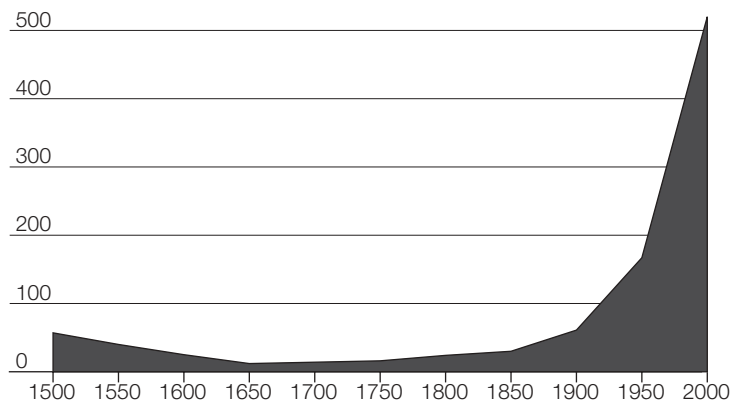
From the mid-1600s to the 1850s, high death rates throughout Latin America and the Caribbean produced a low rate of population growth. By 1850, Latin America's population still had not recovered from the depopulation initiated by the European contact more than 300 years earlier. The region's 1850 population was estimated at 30 million.

The European settlers—primarily Spanish and Portuguese—were not numerous during this period, but they held political and economic power. The intermingling of Europeans, indigenous people, and Africans produced a large mixed-race population, which contributed to Latin America's rich ethnic and cultural diversity (see Box 2, page 8).

Figure 2

Population of Latin America and the Caribbean, 1500–2000

Population in millions
600



Sources: D. Clawson, *Latin America and the Caribbean*, 2d ed. (2000): figure 12.13; United Nations, *World Population Prospects: The 1998 Revision, Briefing Packet* (1999); and CELADE, *Boletín demográfico* 69 (2002): table 1a.

Box 1

Defining Latin America

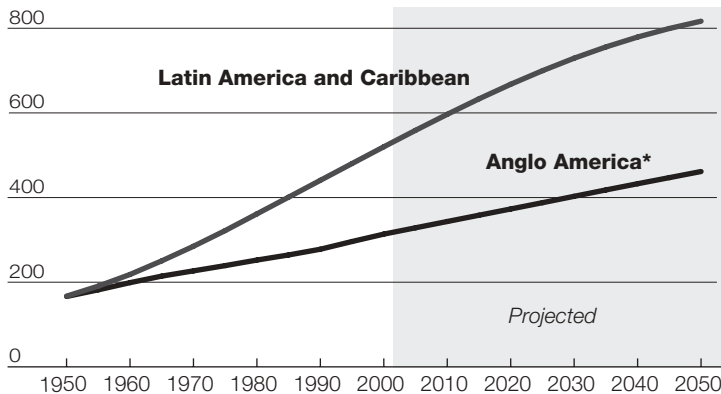
The term “Latin America” is not used consistently by geographers and writers. Some analysts define Latin America as encompassing all countries south of the United States, including the English-, French-, and Dutch-speaking countries as well as the Commonwealth of Puerto Rico. The United Nations Latin American and Caribbean Demographic Centre (CELADE) limits its definition of Latin America to 20 countries: the 10 Spanish- and Portuguese-speaking countries of South America; the six Spanish-speaking countries of Central America; Mexico; and Cuba, the Dominican Republic, and Haiti in the Caribbean region. The Statistical Abstract of Latin America (SALA) published by the Latin American Center of the University of California, Los Angeles, likewise includes only those 20 countries in its definition. French-speaking Haiti is included because of its historical interaction with its neighbor, the Dominican Republic. Puerto Rico, despite its cultural similarities to the rest of Latin America, is excluded because it has never been an independent country. In this *Population Bulletin*, Latin America refers to these 20 countries, in accordance with the CELADE definition; Latin America and the Caribbean refers to all political units south of the United States.

Within the region, countries are often described by their geography as shown in Figure 1, although the countries included in each category vary. Argentina, Chile, Paraguay, and Uruguay form the Southern Cone at the tip of the continent. Southern Brazil is sometimes included in the Southern Cone. Bolivia, Colombia, Ecuador, Peru, and Venezuela are often referred to as Andean countries, for the Andes mountain range.

Figure 3

Population Growth in Latin America and Anglo America, 1950–2050

Population in millions



* The United States and Canada.

Sources: CELADE, *Boletín demográfico* 69 (2000): table 1a; and U.S. Census Bureau, International Data Base (<http://blue.census.gov/cgi-bin/ipc/idbag>, accessed Jan. 28, 2003).

Moderate Growth: 1850–1950

Population growth in Latin America accelerated after 1850, concomitant with robust economic growth in some countries. The region's population doubled between 1850 and 1900, and doubled again by 1940, when it reached 124 million. Liberal trade policies implemented in most Latin American countries during the second half of the 19th century, as well as the introduction of the railroad, the telegraph, steam-powered ships, and other technological advances, stimulated foreign investment and economic growth. Export-oriented agriculture and mining, organized in a system of *haciendas*, plantations, and mining communities, provided the basis of Latin American socioeconomic structure until well into the 20th century.⁵

During this period, immigration contributed significantly to population growth. Immigration also brought an influx of investment capital and professional and industrial expertise to some Latin American countries. The Southern Cone region was transformed by international migration during the 19th century. Most immigrants came from Europe, particularly

from Italy and the Iberian peninsula. Brazil initially was settled primarily by Portuguese and the African slaves they imported. During the 1880s, however, Italians replaced the Portuguese as the largest group of immigrants in the state of São Paulo, where the immigrants supported the lucrative coffee industry.⁶ A large wave of immigrants from Germany also arrived in the 19th century, and settled primarily in southern Brazil and southern Chile.

Immigrants from outside Europe also arrived in the 19th century. A substantial number of people from South and East Asia settled throughout Latin America and the Caribbean. The first ship carrying Chinese workers to the Caribbean left home in 1847. By 1877, Asians made up 3 percent of the Cuban population.

In 1849, Peru opened its frontier to immigration from China and Japan. Some 87,000 Chinese entered the country between 1859 and 1874. Most Chinese immigrants became laborers on sugarcane plantations in the northern part of the country; most Japanese immigrants worked in the cotton industry in the Chancay Valley north of Lima.⁷ By the end of the 19th century, approximately 800,000 Asians had entered Latin America, mostly as contract laborers.⁸ In the early 20th century, a substantial flow of Japanese immigrants settled in the Brazilian state of São Paulo, where they worked primarily in agriculture, first as laborers and eventually as landowners.⁹

Although immigration played an important role in Latin America's population growth in the late 1800s and early 1900s, changes in the region's birth and death rates had an even greater effect on population change. During the first decade of the 20th century, fertility and mortality were relatively high: The average annual birth rate was 44 births per 1,000 population, and the death rate was 26 deaths per 1,000 population. The difference between the birth and death rates yielded an average rate of natural increase of 1.8 percent, without considering migration. Birth rates remained generally high during the first half of

Table 1

Population Growth in Latin America, 1850, 1900, and 1950–2000

	Population in millions							
	1850	1900	1950	1960	1970	1980	1990	2000
Latin America^a	30.0	60.1	167.0	218.3	284.8	361.4	440.7	520.0
South America								
Argentina	1.1	4.7	17.2	20.6	24.0	28.1	32.5	37.0
Bolivia	1.4	1.7	2.7	3.4	4.2	5.4	6.6	8.3
Brazil	7.2	17.3	54.0	72.8	96.0	121.7	148.0	170.7
Chile	1.3	2.9	6.1	7.6	9.5	11.1	13.1	15.2
Colombia	2.2	3.8	12.6	16.9	22.6	28.4	35.0	42.3
Ecuador	0.8	1.4	3.4	4.4	6.0	8.0	10.3	12.6
Paraguay	0.5	0.4	1.5	1.8	2.4	3.1	4.2	5.5
Peru	1.9	3.8	7.6	9.9	13.2	17.3	21.8	25.9
Uruguay	0.1	0.9	2.2	2.5	2.8	2.9	3.1	3.3
Venezuela	1.5	2.3	5.1	7.6	10.7	15.1	19.5	24.2
Mexico and Central America								
Costa Rica	0.1	0.3	0.9	1.2	1.7	2.3	3.0	4.0
El Salvador	0.4	0.9	2.0	2.6	3.6	4.6	5.1	6.3
Guatemala	0.9	1.4	3.0	4.0	5.2	6.8	8.7	11.4
Honduras	0.4	0.4	1.4	1.9	2.6	3.6	4.9	6.5
Mexico	7.7	13.6	27.7	36.9	50.6	67.6	83.2	98.9
Nicaragua	0.3	0.5	1.1	1.5	2.1	2.9	3.8	5.1
Panama ^b	—	—	0.9	1.1	1.5	2.0	2.4	2.9
Caribbean								
Cuba	1.2	1.6	5.9	7.0	8.5	9.7	10.6	11.2
Dominican Republic	0.2	0.7	2.4	3.2	4.4	5.7	7.1	8.4
Haiti	0.9	1.3	3.3	3.8	4.5	5.5	6.9	8.4
Others	—	—	6.3	7.4	8.7	9.8	10.8	11.9
Anglo America^c	25.6	81.4	166.3	198.9	226.8	252.3	277.7	306.8

^a Includes countries not shown.^b Until 1903 Panama was included in Colombia.^c The United States and Canada.

— Not available or not applicable.

Sources: N. Sánchez-Albornoz, *The Population of Latin America* (1974): tables 5.11 and 6.1; CELADE, *Boletín demográfico* 69 (2002): table 1a; and U.S. Census Bureau, International Data Base (www.census.gov/cgi-bin/ipc/idbsprd, accessed May 23, 2002).

the 20th century; in the early 1950s, the region's annual birth rate was 42, not far below the average at the beginning of the century. At the same time, however, widespread improvements in health caused the region's death rate to plummet from 26 to 16 between 1900 and 1950, pushing the rate of natural increase to 2.6 percent.

Rapid Growth: 1950–2000

The annual rate of natural increase for Latin America peaked in the early 1960s at 2.8 percent. The rate was 3.0 percent or higher in all the Central American countries except Costa Rica, as well as in Colombia, Ecuador, Venezuela, and the Dominican

Republic. In 1950, the total population of Latin America and the Caribbean was about the same as the total population of Anglo America (the United States and Canada) (see Figure 3), but the demographic changes of the 1950s and 1960s created a period of explosive growth that pushed Latin America's population well above that of Anglo America. The region's population more than doubled between 1950 and 1980, as it grew from 167 million to 361 million (see Table 1).

Brazil's population grew from 54 million to 122 million between 1950 and 1980, and to 171 million by 2000, solidifying Brazil's position as the largest Latin American country.

*The
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influence is
widespread in
South America.*

The population of Mexico, the second-largest country in the region, also tripled between 1950 and 1990. Latin America's dramatic growth alarmed many social scientists in the international community and contributed to the widespread concern that rapid population growth would hinder economic development.¹⁰

Economic Growth

The acceleration of population growth after World War II coincided with important economic changes, particularly the introduction of import-substitution industrialization (ISI) policies.¹¹ Under this development strategy, Latin American countries sought to stimulate domestic

manufacturing and reduce their dependence on imported manufactured products by subsidizing national industries and raising barriers to imports. New industries usually located in large cities—such as Mexico City; Santiago, Chile; and Santo Domingo, Dominican Republic—and attracted large numbers of laborers from the countryside.¹² A massive rural-to-urban migration ensued, sparking a major redistribution of the population in some countries.

Although they helped expand manufacturing in many Latin American countries, in the long run ISI policies led to the proliferation of inefficient, state-subsidized industries and the stagnation of the agricultural

Box 2

Ethnic and Racial Diversity in Latin America

Latin America is a rich mixture of European, African, and indigenous or Amerindian cultures, reflecting the three main population groups that have lived there for the past 500 years. Although the dominant culture and political structure is primarily European, only three countries—Argentina, Uruguay, and Costa Rica—have predominantly European populations. In other Latin American countries, the populations are a mix of the three original groups often described by such terms as mestizo (mixed Amerindian and European ancestry) and mulatto (mixed African and European ancestry).

The Amerindian influence is widespread in South America. Millions of Quechua-speaking Amerindians live in the Andean countries of South America, particularly in Bolivia, Peru, and Ecuador. In 1975, Peru adopted Quechua as its second official language (after Spanish), a testimony to the continued importance of the indigenous culture. Many indigenous Bolivians, especially around Lake Titicaca, speak Aymara. East of the Andes, Paraguay, or “place of great water” in the Guaraní language, has a large mestizo population. Guaraní—Paraguay's second language—is widely spoken

among all social classes. The populations of Colombia and Venezuela also tend to be mestizo, but with large minorities of European ancestry in the large cities and large numbers of blacks and mulattos along the coasts.

Brazil is Latin America's largest and most populous country; it is also one of the most diverse. In colonial times, the Portuguese brought large numbers of African slaves to work on the sugarcane plantations in northeastern Brazil, and these areas have large black and mulatto populations today. The Brazilian state of Bahía became the heart of Afro-Brazilian culture, where European and African religion and culture blended. African culture is reflected in Bahía's art, music, religion, and food. The practice of Candomblé, an Afro-Brazilian religion, is as visible as the practice of Christianity in the region.

Central America and Mexico are also culturally and racially diverse. Mexico's population is largely mestizo, but indigenous communities still exist in the central plateau, the Yucatán peninsula, and in the southern highlands of Chiapas and Oaxaca. Millions of people speak one of the 20 or more indigenous languages still spoken throughout Mexico. Nahuatl, Mayan, Mixtec, Zapotec, and Tarascan are among the

sector. Since the 1980s, Latin American countries have been shifting toward an economic model based on the liberalization of trade, privatization of state industries, and promotion of nontraditional exports, including manufactured products and agricultural specialties.

While many countries' economies enjoyed considerable growth in the early and mid-1990s, conditions soured by the early 21st century, especially for Argentina. Argentina's structural reforms in the 1990s ended decades of economic stagnation and high inflation and made Argentina's economy one of the region's strongest; but by 2000, Argentina's economy was near collapse, with nearly 20 percent unem-

ployment. Other countries fared better, but still saw little growth between 2001 and 2002.

Because of globalization, Latin American economies are increasingly linked to conditions outside the region, and were hard hit by recessions, first in Asia and then in the United States and other more developed countries. The recessions cut revenue from exports and reduced the amount of money sent home from Latin Americans working in the United States. Remissions from workers abroad make up one-tenth or more of the gross domestic product in Haiti, Ecuador, Nicaragua, and several other countries. The World Bank estimated that Latin Americans in the United States

most widely spoken Amerindian languages in the country.¹ Nahuatl, the language of the Aztec empire that was destroyed by Spanish conquistadors in the 16th century, is still heard today in the Mexican states of Puebla, Veracruz, Hidalgo, and Guerrero. English words such as tomato, chocolate, avocado, and coyote are of Nahuatl origin.

A large number of Mayan-speaking Mexicans live in the Yucatán peninsula and the Chiapas highlands in southern Mexico and Guatemala. Guatemala has a predominantly Amerindian population, especially in rural areas. Descendants of Africans and Amerindians form the majority of the population along the Caribbean coast of Central America, especially in Honduras and Nicaragua.

Haiti and the Spanish-speaking Caribbean islands have little evidence of Amerindian population; their populations are primarily of African or European origin.²

Racial identification is extremely fluid in Latin America and is often based on social and cultural factors as much as physical characteristics or ancestry. In Guatemala, for example, Amerindians who adopt an urban lifestyle and speak Spanish are known as *ladinos*—the same term used for urban Guatemalans of European ancestry.

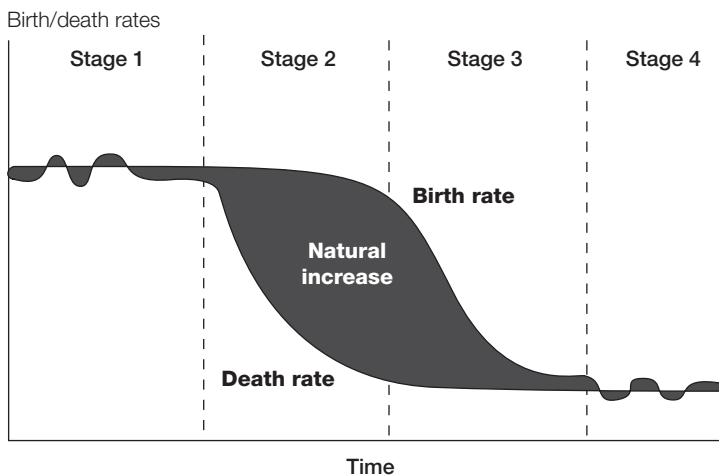
While the racial definitions are not clear-cut in Latin America, there are stark economic differences among some groups. Blacks, mulattos, and indigenous populations historically have been disadvantaged. In Guatemala, 87 percent of the indigenous population was living below the poverty line in the late 1990s, compared with 66 percent of Guatemala's total population. In Mexico, 82 percent of the indigenous population was poor, compared with 23 percent of the general population. A study in Brazil found that at least one-quarter of blacks, mulattos, and indigenous people were in the poorest income quintile in 1996, while just 13 percent of whites and 8 percent of Asians were in the lowest group. Conversely, 59 percent of Asians and 28 percent of whites in Brazil were in the wealthiest income quintile, compared with less than 10 percent of the other groups.³

References

1. Kenneth Katzner, *The Languages of the World* (New York: Routledge, 1995): 34-35.
2. David L. Clawson, *Latin America and the Caribbean: Lands and Peoples*, 2d ed. (Boston: McGraw-Hill, 2000): 164-67.
3. Pan American Health Organization (PAHO), *Health in the Americas*, 2002 ed., Vol. 1 (Washington, DC: PAHO, 2002): tables 20 and 21.

Figure 4

The Classic Stages of Demographic Transition



Note: Natural increase is produced from the excess of births over deaths.

sent home at least US\$20 billion in 2001.¹³ Brazil, Argentina, and other countries that borrowed heavily during the 1990s faced staggering international debts by the early 21st century.

Importance for the United States

Latin America's rapid population growth during the second half of the 20th century was accompanied by rapid urbanization and internal population redistribution; labor-force shifts from agriculture to manufacturing and service industries; increased education for men and women; increased labor force participation for women; and, more recently, a shift from an inward-oriented development strategy to an export-oriented economy. These economic shifts have also fueled emigration, often to the United States.

Demographic trends in Latin America are of enormous importance to Anglo America in general and to the United States in particular, because of the country's geographic proximity and increasing social and economic ties to the region through communications and transportation networks and expanded trade. El Salvador, Ecuador, and Panama use the U.S. dollar as their national currency,

at least temporarily. The implementation of the North American Free Trade Agreement (NAFTA) in 1994 and the Free Trade Area of the Americas (FTAA), which is planned for 2005, will undoubtedly strengthen the hemisphere's existing ties and Latin America's significance to Canada and the United States.

The increasing social and economic ties and geographic proximity also have demographic effects, especially as Latin American migrant communities in the United States and Canada expand. Immigration accounts for an increasing proportion of population growth in the United States, especially in border states such as California and Texas; at least one-half of U.S. immigrants are from Latin America.¹⁴

Projected Population

Because the population is growing faster in Latin America than in the United States or Canada, it is likely to increase in importance to its northern neighbors. The United Nations Latin American and Caribbean Demographic Centre (CELADE) projects Latin America's population will grow from 508 million in 2000 to 802 million in 2050. Brazil's population is projected to reach an estimated 250 million in 2050; Mexico's population is projected to be 147 million. The U.S. population is projected to reach about 420 million by 2050, while Canada's population is projected to be about 41 million.¹⁵ The future size and characteristics of the Latin American population will depend in part on whether it completes the demographic and health transition that occurred in the United States and other more developed countries.

Demographic Transition

Population trends in Latin America appear to be consistent with the demographic transition model, which is based on the experience of European

nations between the mid-18th century and the 20th century, when these countries evolved from predominantly rural to primarily urban societies.

In the first stage, which is characteristic of traditional agrarian societies, birth rates and death rates are high. Because births are nearly matched by deaths, there is little net population growth through natural increase (see Figure 4). In some parts of Latin America this first stage lasted until the mid- to late 1800s.

In the second stage of transition, death rates begin to decline as living standards and health care improve. Birth rates remain high, reflecting the preference for large families among the predominantly rural population. The combination of high birth rates and declining death rates leads to increasing rates of population growth. This was Latin America's situation from the late 1800s to the peak growth years of the 1960s. Mortality declined first in cities that had access to medical innovations and health practices developed in Europe and the United States. In Havana, for example, life expectancy was about 39 years in 1905, about the same as in the United States at that time. For the Latin American region, however, life expectancy at birth was estimated at 26 years in 1890, and did not improve substantially until after 1930.¹⁶

The third stage of transition occurs when birth rates decline, usually in association with urbanization and economic change. As birth rates decline, the rate of population growth begins to drop. Latin America appeared to enter this stage at the end of the 1960s. The demographic transition model includes a fourth stage, characteristic of many western and northern European countries, in which countries have low birth rates, low death rates, and low rates of natural increase. In some cases, birth rates drop below death rates and population declines, unless the deficit is filled by migration.

There is some debate about whether the demographic transition model applies to Latin American and Caribbean countries. In Europe, the

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Increased education for girls has been associated with a general decline in birth rates, as young women waited longer to marry and have children and learned more about family planning.

mortality decline occurred very slowly, following incremental improvements in nutrition, living standards, and health care. As recently as the early 1970s, some demographers were arguing that socioeconomic conditions in Latin America were radically different from those prevailing in Europe during its transition.¹⁷ In Latin America, they contended, imported medical technology rather than socioeconomic development was responsible for most of the decline in mortality. Some demographers argued that fertility reduction would be hampered by the existence of a large and very traditional rural population and by attitudes—expressed by the 19th-century Argentine thinker Juan Bautista Alberdi as “To govern is to populate”—that promoted high fertility. The idea that additional people were needed to settle the sparsely populated frontier and provide the labor for economic development was widely accepted in Latin America.¹⁸

Other analysts were more optimistic about the applicability of the demographic transition theory to Latin America, noting that even in Europe there were country-to-country differences in how the transition occurred. In general, Latin American countries are following the demographic transi-

Table 2

Birth and Death Rates in Latin American Countries, Early 1950s and Late 1990s

	Early 1950s			Late 1990s		
	Birth rate	Death rate	Rate of natural increase (%)	Birth rate	Death rate	Rate of natural increase (%)
Latin America	42	16	2.6	23	6	1.7
South America						
Argentina	25	9	1.6	20	8	1.2
Bolivia	47	24	2.3	33	9	2.4
Brazil	44	15	2.9	20	7	1.3
Chile	36	14	2.3	20	6	1.4
Colombia	47	16	3.1	25	6	1.9
Ecuador	46	19	2.6	26	6	2.0
Paraguay	42	11	3.1	31	5	2.6
Peru	47	22	2.6	26	7	2.0
Uruguay	21	11	1.1	18	9	0.8
Venezuela	46	12	3.4	25	5	2.0
Mexico and Central America						
Costa Rica	47	13	3.5	23	4	1.9
El Salvador	48	20	2.8	28	6	2.2
Guatemala	51	22	2.9	37	7	2.9
Honduras	53	23	3.0	34	5	2.8
Mexico	45	17	2.8	25	5	2.0
Nicaragua	54	23	3.2	35	6	3.0
Panama	40	13	2.7	23	5	1.7
Caribbean						
Cuba	30	11	1.9	13	7	0.6
Dominican Republic	51	20	3.0	25	6	1.9
Haiti	44	28	1.6	32	11	2.1

Note: The birth rate is the number of annual births per 1,000 population. The death rate is the number of annual deaths per 1,000 population. The rate of natural increase is the birth rate minus the death rate, divided by 10. The rate was calculated from unrounded birth and death rates.

Source: CELADE, *Boletín demográfico* 69 (2002): tables 4 and 8.

tion model, but it is unclear when or if all Latin American countries will reach the fourth stage of low fertility and mortality rates.

Latin America and the Caribbean as a whole are generally in the third stage of the demographic transition model. The demographic transition is a complex process, however, and countries differ in the way they experience the transition and in closely associated factors such as urbanization, educational attainment, and economic structure. Demographers Juan Chackiel and Renate Plaut classify Latin American countries as falling into one of four phases of demographic transition.¹⁹

Incipient Transition

Bolivia and Haiti have death rates and birth rates higher than the regional average (see Table 2). Death rates in both countries, however, are considerably lower than their birth rates, so their rates of natural increase have not declined, placing Bolivia and Haiti at the beginning of the third stage of demographic transition. These countries also have a young age structure, widespread poverty, low educational attainment, and relatively low urbanization, all of which have probably retarded the economic growth that might have fostered better health and preferences for smaller families.

Moderate Transition

A second group of countries, including El Salvador, Guatemala, Honduras, Nicaragua, and Paraguay, are in an early intermediate stage of transition. These countries have experienced some mortality decline, but their fertility is still high, and their rates of natural increase, between 2.2 percent and 3.0 percent in the late 1990s, are among the highest in Latin America. These countries also have young populations and a relatively low level of urbanization.²⁰

Transition in Progress

Brazil, Colombia, Costa Rica, Ecuador, Mexico, Panama, Peru, the Dominican Republic, and Venezuela are in a late intermediate stage of transition. Fertility, although still higher than mortality, is trending downward, so rates of natural increase are falling. The population is mostly urban and its age structure is still young, reflecting high fertility rates in the past. This group accounts for the majority of the Latin American population and comprises almost half of the countries of the region.

The most notable feature of these countries is the pronounced decrease in fertility since 1965. Average fertility declined from 6.2 children per woman between 1965 and 1970 to 2.8 children per woman in the late 1990s.

These countries have also made remarkable progress in health over the past 50 years. The nine countries have experienced a considerable increase in life expectancy at birth, from an average of 59.6 years in the late 1960s to 71.5 years in the mid-1990s, according to Chackiel and Plaut. Costa Rica's life expectancy at birth—76.5 years in 2002—has been the highest in Latin America since the 1980s and is as high as that of the United States and several other more developed nations.

Advanced Transition

Countries in the fourth stage of transition include Cuba and the Southern Cone countries of Argentina, Chile, and Uruguay, all of which have below-average fertility, mortality, and rates of natural increase. Their life expectancies are among the highest in Latin America; in 2002, estimates of life expectancy at birth ranged from 74 years in Argentina to 76 years in Cuba (see Table 3).

Cuba has the region's lowest birth rate, at 13 births per 1,000 population in the late 1990s. Argentina and Uruguay have had low birth rates and moderate death rates since the early 20th century. Argentina's birth rate, for example, was 25 births per 1,000 population in the early 1950s, when the regional average was 42 births per 1,000 population. The fertility and mortality declines in Cuba and particularly in Chile have been more recent.²¹ The countries in this group also have the oldest age profiles and are the most urbanized in Latin America.

Mortality

The demographic transition in Latin America, as elsewhere, involves the interplay of mortality, fertility, age structure, population mobility, and urbanization and related factors. Mortality decline, which ushered in the region's demographic transition, was already underway in some countries early in the 20th century, but it began in most of the region after

Table 3

Infant Mortality and Life Expectancy at Birth in Latin America, Early 1950s and 2002

	Infant mortality rate ^a		Life expectancy at birth (years)	
	Early 1950s	2002 ^b	Early 1950s	2002 ^b
Latin America	128	30	52	71
South America				
Argentina	66	18	63	74
Bolivia	176	61	40	63
Brazil	135	33	51	69
Chile	120	12	55	77
Colombia	123	21	51	71
Ecuador	140	30	48	71
Paraguay	73	37	63	71
Peru	159	33	44	69
Uruguay	57	14	66	75
Venezuela	106	19	55	73
Mexico and Central America				
Costa Rica	94	11	57	77
El Salvador	151	30	45	70
Guatemala	141	41	42	66
Honduras	169	42	42	66
Mexico	121	25	51	75
Nicaragua	172	40	42	68
Panama	93	17	55	74
Caribbean				
Cuba	81	6	60	76
Dominican Republic	149	47	46	69
Haiti	220	80	38	49

^aIMR is the annual number of deaths of infants under 1 year of age per 1,000 live births.

^bMost recent estimate, circa 1999–2002.

Source: CELADE, *Boletín demográfico* 69 (2002): tables 5 and 6; and C. Haub, 2002 *World Population Data Sheet* (2002).

World War II. By the 1930s, death rates were already below 16 deaths per 1,000 population in Argentina, Cuba, Panama, and Uruguay. In the rest of the region, death rates generally ranged from 20 to 30.²² By the 1960s, death rates were already down to the low teens or below in eight other countries: Brazil, Chile, Colombia, Costa Rica, Ecuador, Mexico, Paraguay, and Venezuela. At the end of the 20th century the regional death rate was 6, and only Haiti had a death rate above 10.

Although Uruguay is a low-mortality country with a high life expectancy, it has a relatively high death rate, at 9 in 2002. As Uruguay's rate demonstrates, the death rate is not always a

good indicator of a country's general health status, because the rate is affected by the population age structure: A high national death rate may result from high rates of death at some ages, or it can reflect an older age structure in which a large proportion of the population is in the older ages at which most deaths occur. Uruguay's history of low fertility caused its population to age, pushing up its death rate.

Life expectancy at birth is often a better indicator of a country's health status because it is not affected by age structure and it is sensitive to infant and child mortality levels. Life expectancy at birth in Latin America increased from 52 years in the late 1950s to 71 years in the late 1990s (see Table 3, page 13). This impressive gain significantly reduced the gap in life expectancy between Latin America and the English-speaking countries of North America. Many Latin American countries gained the technology to prevent and treat the infectious and parasitic diseases that caused a large proportion of deaths, especially to children. Malaria eradication programs implemented during the 1940s led to a dramatic decline in malaria deaths; the introduction of antibiotics reduced mortality from tuberculosis, pneumonia, and influenza. Several vaccines were also introduced in the 1940s, reducing deaths from measles, diphtheria, tetanus, and typhoid. The introduction and diffusion of public health services and new measures for preventing and treating communicable diseases reduced mortality even in low-income regions with poor living conditions. The importance of imported technology to public health prompted demographer Eduardo Arriaga to say in 1970, "Public health programs are no longer dependent on the country's economy but rather to a large degree on the technology and concern of the most advanced countries."²³

In the early 1950s, life expectancy for Latin America as a whole was 52 years, but it ranged from 66 years in Uruguay to 38 years in Haiti. Only

three countries—Argentina, Paraguay, and Uruguay—had life expectancies above 60 years in the 1950s. In the early 1960s, the regional life expectancy had increased to 59 years, and the intercountry differential had narrowed to 24 years. The highest life expectancy was for Uruguay (69 years); the lowest was for Bolivia (45 years).

By the late 1990s, the regional average life expectancy had increased to 71 years, but the gap between the highest- and lowest-mortality countries—Costa Rica and Haiti—was 28 years. In 2002, life expectancy at birth was 75 years or higher in Chile, Costa Rica, and Cuba. At the other extreme, life expectancy at birth was less than 65 years in Bolivia, Guatemala, and Haiti.

Since the 1970s, the increase in life expectancy and narrowing of intraregional differences has proceeded much more slowly, and the leading causes of death and the age structure of mortality have changed. At the beginning of the 20th century, when life expectancy at birth was less than 50 years, more than two-thirds of all deaths were due to communicable diseases; more than 60 percent of deaths from such diseases occurred before the age of 15. The shift from high to low mortality generally evolves from a health transition in which deaths from infectious and parasitic diseases decline. As communicable diseases recede, other causes of death—especially cancer, heart disease, stroke, and injuries—are responsible for a larger percentage of deaths.

In countries where life expectancy at birth approaches 75 years, more than two-thirds of all deaths are caused by noncommunicable diseases such as heart disease and cancer and by injuries or similar causes; most of these deaths occur in the older age groups.²⁴ In Argentina, for example, the proportion of deaths from communicable diseases fell from 10 percent to less than 5 percent between 1960 and 1985. In Chile, Costa Rica, and Cuba the drop was even more pronounced: from between 15 per-

cent and 30 percent in 1960 to about 5 percent in the mid-1980s.

Mortality from communicable diseases has remained high, however, especially in countries with a low life expectancy. In Guatemala, for example, about 45 percent of all deaths in the 1980s were attributed to communicable diseases.²⁵ Throughout Latin America, mortality from communicable disease is greater for low-income and less-educated people and is especially high among rural residents and indigenous populations.²⁶

The incidence of some communicable diseases, such as malaria and dengue fever, actually increased during the 1980s in some areas. Dengue is now endemic in many parts of Latin America; 770,000 cases were reported in 1998. Jorge Arias of the Pan American Health Organization (PAHO) has suggested several reasons for dengue's resurgence: water supply problems, deterioration of prevention and control programs, inadequate health education, and disorganized growth in large resource-strapped cities. Other significant emerging or reemerging diseases include bubonic plague, which has affected Peru since 1992; yellow fever, especially in Brazil; malaria in areas of the Amazon Basin; hantavirus infections in the Southern Cone; and cholera in many countries of Central and South America.²⁷

While the initial jump in life expectancy in Latin America resulted from imported medical technologies and better public sanitation, further gains in life expectancy will require more widespread improvements in living conditions, particularly among low-income groups. Better living conditions within as well as among countries will likely require an increase in income, wider access to education and medical services, improved nutrition, cleaner drinking water, and adequate sanitation.

The increase in life expectancy at birth during the past few decades has resulted from decreases in mortality at all ages, but mainly from improved survival of children under age 5, particularly infants (see Table 3, page

13). In Latin America and the Caribbean, the infant mortality rate decreased from 128 annual infant deaths per 1,000 live births in the early 1950s to about 30 infant deaths per 1,000 live births in 2002. There are wide differences among countries, even within the same region of Latin America. While infant mortality is generally higher in Central America than elsewhere in Latin America, the rates are highest in Bolivia and Haiti, at 61 and 80, respectively, in 2002. Cuba's infant mortality rate was 6 in 2002, similar to the U.S. level. The increase in child survival has been associated primarily with progress in controlling communicable diseases and with the ability to treat life-threatening conditions during the weeks just before and after birth.²⁸

In general, life expectancy is higher for women than for men in Latin America, as it is in every world region, but the gap between male and female longevity varies among countries. In Uruguay, for example, women live an average of eight years longer than men, while in Bolivia, the female advantage is only three years.²⁹ The sex differential in life expectancy at birth is generally greater where the overall level is highest. Uruguay and Argentina, with life expectancies of 75 years and 74 years, have sex differentials of eight and seven years, respectively; conversely, Bolivia and Haiti, with life expectancies of 63 years and 49 years, have sex differentials of three and four years, respectively. There are several exceptions to this general rule: Costa Rica and Cuba have high life expectancies (77 years and 76 years, respectively), but the sex differential in both countries is only four years.

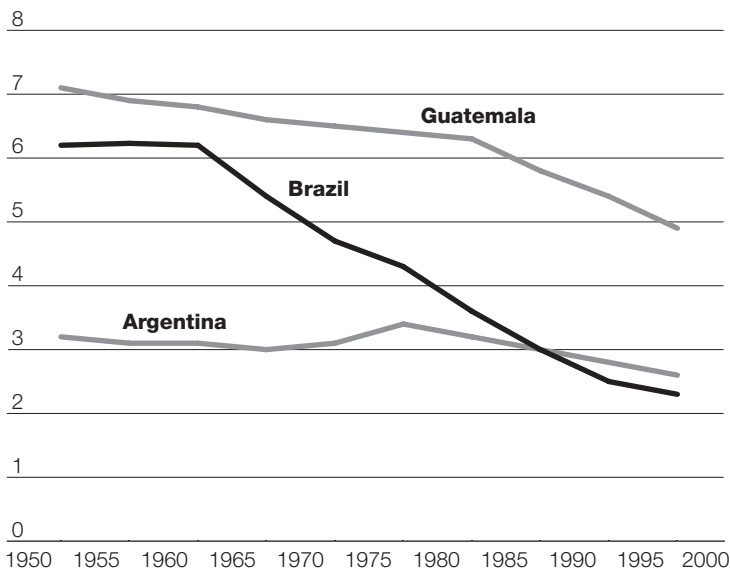
Mortality differentials between men and women tend to be pronounced among young adults. In this age group, accidents and violence, which kill more men than women, are leading causes of death. Before the Latin American health transition, maternal mortality, which affects women of childbearing age, was

Further gains in life expectancy will require widespread improvement in living conditions.

Figure 5

Patterns of Fertility Decline in Argentina, Brazil, and Guatemala, 1950s to 2000

Children per woman



Source: CELADE, *Boletín demográfico* 69 (2002): table 3.

extremely high in most countries, and the gender gap in mortality among young adults was narrower. Although maternal death is still a leading cause of death among women ages 15 to 49 in some Latin American countries, the risk of a woman dying from pregnancy or complications of childbirth decreased by 54 percent between 1970 and 1989. Mortality rates fell faster for young women than for young men, which widened the gender gap in death rates for young adults.³⁰

Fertility Trends

A profound social and demographic transformation has occurred in Latin America since the early 1960s. Key to this transformation has been the adoption of new values and attitudes concerning childbearing, family size, and fertility control. The use of family planning has been widely adopted, which enabled the rapid decline in fertility.³¹

In most Latin American countries, fertility remained high until at least the mid-1960s. Between 1960 and 1965, birth rates exceeded 40 in most countries. The total fertility rate (TFR)—the average number of children born per woman given current birth rates—was about 6. There is evidence that fertility increased in some countries between 1940 and 1960, following a rapid decline in mortality. Demographers attribute the initial fertility increases to a reduction in sterility from infections as general health levels improved and to the decline in widowhood as male survival rose.³² In addition, women were marrying at younger ages, and younger average marriage ages tend to boost birth rates.³³ The marriage boom may have been fueled by the robust economic growth and the expanding job market associated with import-substitution industrialization after World War II.

A large group of countries that had relatively high fertility during the early 1960s experienced pronounced fertility decline during the late 1960s and 1970s, as shown for Brazil in Figure 5. This group also includes Colombia, Costa Rica, the Dominican Republic, Ecuador, Mexico, Peru, and Venezuela, and encompassed three-fourths of the region's population. During the early 1950s, the TFR was 6.1 or higher in each of these countries, but by 2002 the rate had fallen below 3.0 in all but Ecuador and the Dominican Republic (see Table 4).

Fertility decline began much later and was more modest in Bolivia and Paraguay, much of Central America, and Haiti. In the early 1950s, women in Guatemala, Honduras, and Nicaragua had more than seven children, on average. By 2002, the average was well below five children per woman; the TFR ranged between 4.1 and 4.7.

Argentina and Uruguay already had fairly low fertility in the 1950s, with TFRs of 3.2 and 2.7, respectively. Argentina's TFR of 2.6 in 2002 was not far below the 1950 rate. Uruguay's TFR declined to about 2.2 in 2002, making it one of the lowest in South America. Fertility rates in Cuba and

Chile were also below the regional average by the 1950s, and both countries experienced subsequent fertility declines, Chile during the early 1960s and Cuba in the early 1970s. By the late 1970s, Cuba had by far the lowest fertility in Latin America. In 2002, Cuba's TFR was about 1.5, well below that of the United States.

Fertility Differences

National fertility rates mask important intracountry differences that are crucial to understanding the process of fertility decline. Urban versus rural residence, level of education, and socioeconomic status are three particularly relevant variables for fertility.

Fertility rates tend to be lower in urban areas than in rural areas, although the extent of this difference varies. In 1980, urban women in Chile and Cuba had about one fewer child than their rural counterparts, whereas urban women in Honduras and Paraguay had nearly four fewer children than rural women, on average. The urban-rural fertility differential tends to be larger in countries that are lagging in the demographic transition process. In Bolivia, for example, the TFR for urban women was 3.3, compared with 6.4 for rural women in 1998 (see Figure 6). Poverty and geographic isolation may contribute to the higher fertility—and mortality—in such areas.³⁴ As it does with urbanization, fertility tends to decrease as the level of education—particularly women's education—and socioeconomic status increase. Middle- and upper-class urban women with relatively high levels of education tend to have lower fertility even in traditional high-fertility societies. Women with more education are more likely to adopt values and attitudes that favor smaller families. More-educated women tend to have higher aspirations for themselves and their children, which are easier to fulfill if they have small families. Education also contributes to lower fertility because women often delay marriage and childbearing to attend school. A 2001

Table 4

Total Fertility Rates and Contraceptive Prevalence in Latin American Countries, 1950s and 2002

	Total fertility rate ^a		Contraceptive prevalence ^b	
	1950-1955	2002	1996-2000 Any method Modern method ^c	
Latin America	5.9	2.7	70	62
South America				
Argentina	3.2	2.6	—	—
Bolivia	6.8	4.1	48	25
Brazil	6.2	2.2	77	70
Chile	5.0	2.4	—	—
Colombia	6.8	2.6	77	64
Ecuador	6.7	3.3	66	52
Paraguay	6.5	4.2	57	48
Peru	6.9	2.9	69	50
Uruguay	2.7	2.2	—	—
Venezuela	6.5	2.8	—	—
Mexico and Central America				
Costa Rica	6.7	2.5	80	72
El Salvador	6.5	3.5	60	54
Guatemala	7.1	4.6	38	31
Honduras	7.5	4.4	50	41
Mexico	6.9	2.9	68	59
Nicaragua	7.3	4.1	60	57
Panama	5.7	2.6	—	—
Caribbean				
Cuba	4.1	1.5	73	72
Dominican Republic	7.4	3.1	64	59
Haiti	6.3	4.7	28	22

^aThe total fertility rate is the average total number of children a woman would have given current birth rates.

^bContraceptive prevalence refers to the percentage of married women ages 15 to 44 who practice any form of contraception.

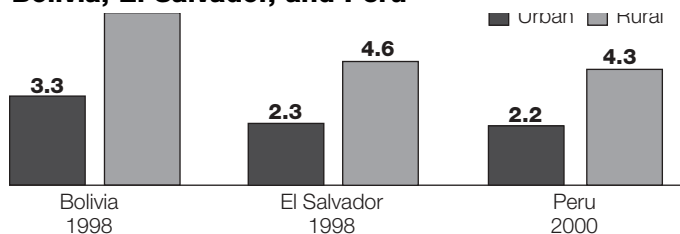
^cModern methods exclude douche, abstinence, rhythm, withdrawal, and folk methods.

— Not available.

Sources: CELADE, *Boletín demográfico* 69 (2002): table 3; and C. Haub and B. Herstad, *Family Planning Worldwide: 2002* (2002).

Figure 6

Total Fertility Rate by Urban/Rural Residence, Bolivia, El Salvador, and Peru

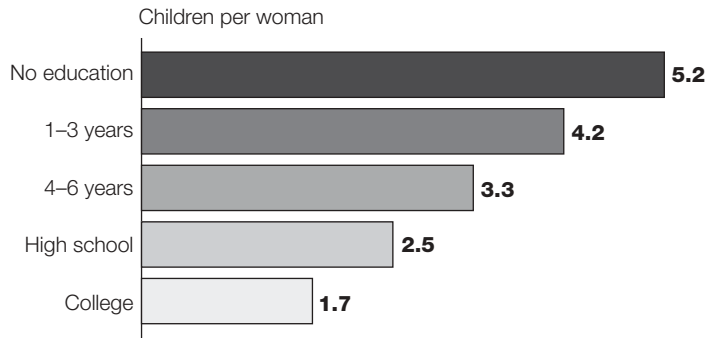


Note: The total fertility rate is the average total number of children a woman would have given current birth rates.

Sources: Bolivia, Instituto Nacional de Estadística et al., *Encuesta Nacional de Demografía y Salud 1998* (1998): table 3.3; Asociación Demográfica Salvadoreña et al., *Encuesta Nacional de Salud Familiar 1998, Informe Final* (2000): table 3.2; Peru, Instituto Nacional de Estadística e Informática et al., *Encuesta Demográfica y de Salud Familiar 2000* (2001): table 4.4.

Figure 7

Fertility Rates by Mother's Education Level, Nicaragua, 2001



Note: The total fertility rate is the average total number of children a woman would have given current birth rates.

Source: Nicaragua, *Encuesta Nicaragüense de Demografía y Salud 2001* (2002): table 4.3.

survey found that Nicaraguan women with no formal education had 5.2 children, on average, while women with at least a high school education had just 2.5 children and college-educated women had 1.7 children (see Figure 7). Further, women with more education are more likely to use modern contraceptives to limit their family size. The 2001 Nicaraguan survey showed that 52 percent of married women with no education used contraceptives, while 73 percent of women with a high school education used contraceptives.

Family Planning

Social and economic changes have played a fundamental role in Latin America's fertility decline, primarily by molding values and attitudes toward childbearing. Increased access to family planning has allowed couples to limit their family size. Contraceptive use has been an important determinant of fertility decline in the region.³⁵ In 2002, 70 percent of married women ages 15 to 44 used family planning in Latin America and the Caribbean—well above the world average of 61 percent and much higher than the averages for South and Western Asia and Africa. The average for more developed countries was 68 percent in 2002.

Within Latin America, contraceptive prevalence ranged from 28 percent in Haiti to 80 percent in Costa Rica in 2002. Countries with high contraceptive prevalence tend to have lower fertility and vice versa, as shown in Table 4, page 17. In Cuba and Costa Rica, where more than 70 percent of married women used contraception in 2002, the TFR was less than 3.0; alternatively, where contraceptive prevalence was less than 50 percent, the TFR was above 4.0. Contraceptive use has risen since the 1970s; the increase has been especially rapid in Colombia, Ecuador, El Salvador, Honduras, and Mexico, among other countries. In Guatemala, rates have lagged behind those of other Latin American countries, perhaps because of persistent problems with access to services.³⁶ Just 38 percent of married Guatemalan women of childbearing age used contraceptives in 2002. In Haiti, social and economic factors may have interfered with the availability and adoption of family planning, keeping the rate low.³⁷ In 2002, about 28 percent of Haitian women used family planning.

Female sterilization and oral contraceptives account for almost two-thirds of all contraceptive use in Latin America and the Caribbean. Female sterilization, used by about 31 percent of women of reproductive age in the late 1990s, has been increasing in most countries. In 10 of the 16 countries for which comparable data are available, female sterilization accounted for over half of the increase in the general level of contraceptive practice during the 1970s and 1980s.³⁸ Female sterilization is remarkably common in the Dominican Republic and Brazil, where more than 40 percent of married women of reproductive age are sterilized; in El Salvador and Mexico, roughly 30 percent are sterilized. Although female sterilization is becoming more common in most countries, it is still relatively rare in Bolivia, Paraguay, and Haiti. Male sterilization is not commonly practiced in Latin America. Condoms are also not commonly used in Latin

America, although their use has been widely promoted as crucial to stemming the spread of HIV/AIDS.³⁹

Oral contraceptives (the Pill) are used by about 13 percent of married women of reproductive age in Latin America and the Caribbean. The Pill is the region's second most popular contraceptive method and is the leading method in Costa Rica and Paraguay.

Intrauterine devices (IUDs) and rhythm (periodic abstinence) have become more popular in several countries. The IUD is the leading contraceptive in Cuba and is widely used in Mexico although it is seldom used in Brazil and several other countries. Rhythm has been the top method of contraception in Bolivia and Peru, but it accounts for just 5 percent of family planning use in Latin America.

Demographers credit contraceptive use with the rapid fertility decline in Latin America. In some countries, government-sponsored programs were crucial for making contraceptives widely available to the general public, but the government's role varied tremendously.⁴⁰ In Brazil and several other countries, most women turned to the private sector for family planning supplies.

Age Structure

Almost all social phenomena are influenced by a population's age structure, making age structure one of the most meaningful population characteristics. Age structure affects and is affected by the components of population growth: mortality, fertility, and migration. Data on age composition are relevant for planning social services as well as for measuring and projecting school enrollment, the labor force, and the economically dependent population.

The age dependency ratio, often defined as the ratio of the dependent population—those under age 15 and those age 65 or older—to the working-age population (ages 15 to 64), provides a useful summary of a popu-

Table 5

Population Under Age 15 and Age Dependency Ratio, 1965 and 2000

	Under age 15 (percent)		Dependency ratio*	
	1965	2000	1965	2000
Latin America	43	32	89	59
South America				
Argentina	30	28	57	60
Bolivia	43	40	86	77
Brazil	44	29	89	51
Chile	40	29	82	55
Colombia	47	33	100	60
Ecuador	45	34	97	63
Paraguay	46	40	108	76
Peru	44	35	91	65
Uruguay	28	25	57	61
Venezuela	46	34	96	63
Mexico and Central America				
Costa Rica	48	32	104	60
El Salvador	47	36	97	68
Guatemala	46	44	97	89
Honduras	48	42	100	82
Mexico	46	33	102	61
Nicaragua	49	43	105	84
Panama	44	31	93	58
Caribbean				
Cuba	36	21	70	45
Dominican Republic	48	34	102	61
Haiti	41	40	84	78

*The age dependency ratio is the sum of the population under age 15 and age 65 or older divided by the population ages 15 to 64, multiplied by 100.

Source: CELADE, *Boletín demográfico* 69 (2002): tables 9 and 10; and C. Haub, 2002 *World Population Data Sheet* (2002).

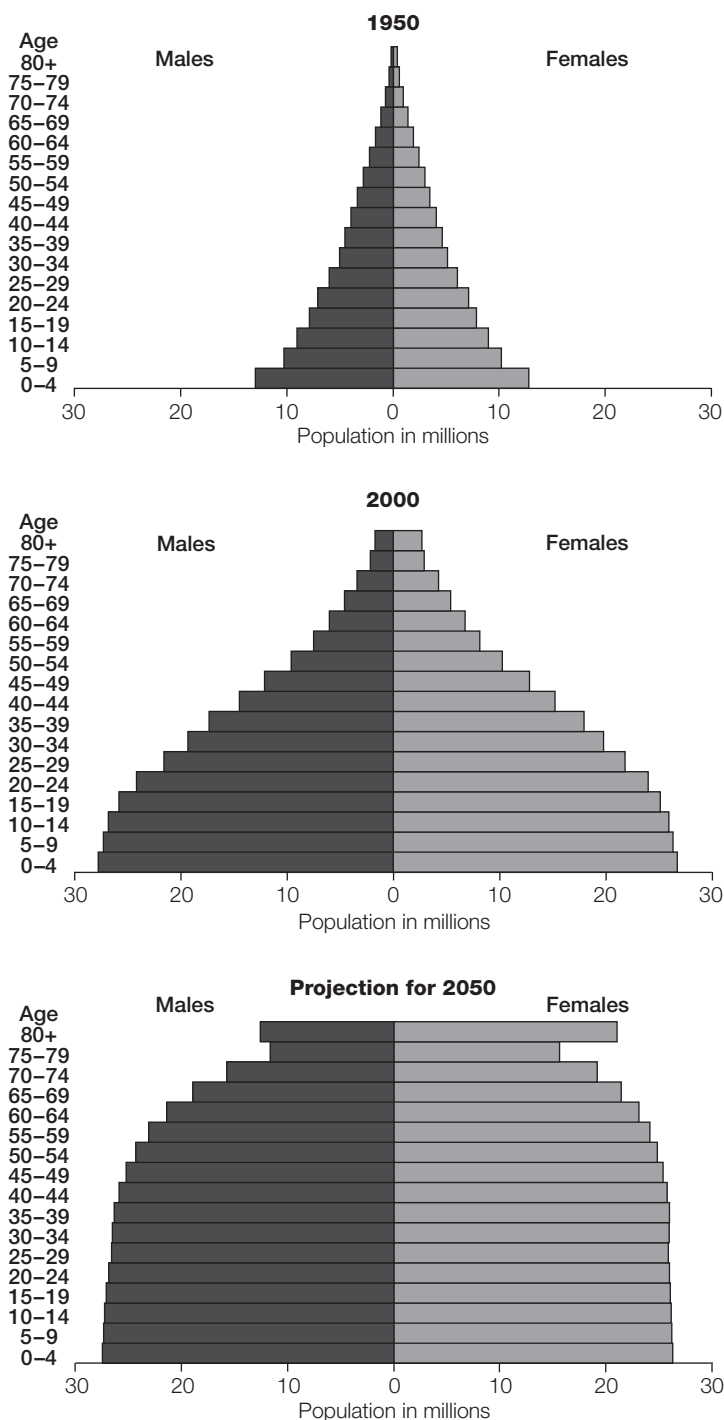
lation's age structure. A high age dependency ratio signals that the economically active population is supporting a large population of children and elderly.

Latin America has long had a young age structure, with a large proportion of children under age 15. The mortality decline that began in the 1930s dramatically improved the survival of infants and children, which perpetuated the region's youthful age structure even as fertility began to fall.

Eduardo Arriaga analyzed demographic data for 11 Latin American countries for the 1960s and concluded that nearly 60 percent of 27 million additional people alive because of the mortality decline were under age 15.⁴¹ The percentage of the population

Figure 8

Latin American Population by Age and Sex, 1950, 2000, and 2050



under age 15 peaked in the mid-1960s at about 43 percent, as did the age dependency ratio, at approximately 89 dependents per 100 working-age people. In 1965, the region's youngest populations were in Mexico, the Dominican Republic, the Central American countries, and in Colombia, Paraguay, and Venezuela—where more than 45 percent of the population was under age 15. In contrast, between 28 percent and 36 percent of the population was under age 15 in Argentina, Cuba, and Uruguay (see Table 5, page 19).

The dramatic decline in fertility since the 1960s has reduced the share of the population under age 15 in all Latin American countries. The percentage of children below age 15 in the region declined from 43 percent in 1965 to 32 percent in 2000, which is still fairly “young.” If a country in which at least 35 percent of the population is below age 15 is considered “young,” Bolivia, El Salvador, Guatemala, Haiti, Honduras, Nicaragua, and Paraguay all qualify.

Primarily because fertility declined, the proportion of the population in the older ages has also increased (see Box 3, page 22). Uruguay is the region's only “old” country, with 13 percent of its population at least 65 years old in 2002. Argentina and Cuba are close behind, with 10 percent age 65 or older. By comparison, 13 percent of the U.S. population was age 65 or older in 2002. After 2030, the proportion of elderly will increase, raising the dependency ratio. The age profile of the region will shift from a broad-based pyramid to a more rectangular shape by 2050, with roughly equal proportions in each age group up to about age 55 (see Figure 8).

The changing age structure of Latin America's population has lowered the dependency ratio from 89 dependent-age people per 100 working-age population in 1965 to 59 dependents per 100 working-age population in 2000. Because rapid fertility decline reduces the proportion of young people in the population, the dependency ratio will continue to

Source: CELADE, *Boletín demográfico* 69 (2002): table 11a.

decline until about 2030, according to projections by CELADE.⁴²

This temporary decline in the dependency ratio produces what some social scientists call a “demographic dividend,” which gives countries in transition an opportunity for substantial economic growth while their working-age population is larger than their young or elderly populations. Several East Asian countries experienced an even more dramatic—but shorter-lived—demographic dividend after fertility dropped rapidly after the 1960s, coincident with crucial improvements in education and health. Some economists attribute up to one-third of the economic expansion in South Korea, Taiwan, and Singapore to the rapid increase in the labor force that was created by demographic shifts.⁴³ While a series of economic crises and problems have prevented many Latin American countries from reaping the full benefit of their demographic dividends so far, economists point out that these countries still have at least two decades before this window of opportunity closes.

Population Movement

Like fertility and mortality, population mobility is a major component of population change. Migration between Latin America and other world regions, between Latin American countries, and within countries has played an important part of the region’s history. In addition to changing the size and geographic distribution of a population, migration affects a population’s fertility, mortality, and the age and sex structure. Migration also influences the economies of the places of origin and destination.

International Migration

During the 20th century, Latin America was transformed from a major destination for international migrants to a leading source of migrants to other

regions, especially North America. Before 1930, waves of international migrants came to Latin America mostly from Spain, Portugal, and Italy. The newcomers settled throughout the region, but they were concentrated in Argentina, Brazil, Uruguay, and, to a lesser extent, Chile and Cuba.⁴⁴ By 1914, foreign-born residents outnumbered native-born residents in the Argentine provinces of Buenos Aires, Córdoba, and Santa Fe by a ratio of two to one. Brazil, second only to Argentina as an immigrant-receiving country, was home to many migrants from Portugal and Italy. Smaller migration streams originated in Germany, Japan, Russia, and Spain. These six countries contributed more than three-fourths of all immigrants who entered Latin America between 1884 and 1957.⁴⁵

The immigrant flows to Latin America have been remarkably diverse. Most immigrants were from Europe, but smaller numbers came from the Middle East—mostly Lebanon and Syria—and from South and East Asia. While most immigrants settled around urban areas, some groups fleeing persecution or political unrest at home were attracted to sparsely populated regions. In the late 19th century and early 20th century, for example, Mennonites from the United States and Europe settled in frontier areas of Mexico, Bolivia, and Paraguay, and Welsh communities were established in Argentina’s Patagonia. In the 1970s and 1980s, white South African farmers settled in agricultural regions within the Southern Cone.⁴⁶

Latin American immigration slowed after 1950, and by the end of the 20th century emigrants from the region outnumbered immigrants. Emigration from Latin America was fed by political events—including the Cuban Revolution in the 1950s, conflict in Central America in the 1970s and 1980s, and military coups in several South American countries. Economic hardship, and natural disasters, such as hurricanes and earthquakes, also encouraged emigration.⁴⁷

Latin America was transformed from a major destination for to a leading source of international migrants.

The United States became the most important destination for Latin Americans coming from Mexico, Central America, and the Caribbean. Largely because of immigration, the Latino population in the United States reached 35 million by 2000, or 13 percent of the U.S. population. Two-thirds of U.S. Hispanics are of Mexican origin. Cuba, the Dominican Republic, Haiti, Central American countries, and Colombia have also sent substantial numbers of migrants to the United States.⁴⁸ In the early 21st century, thousands of Argentines have fled their country's economic and financial crises and settled in the United States. A large number have settled in the Miami area; a small section of Miami Beach is already known as Little Buenos Aires.

A sizeable number of Latin American emigrants have also headed toward Europe. Most have gone to Spain and Italy, attracted by cultural affinities, family ties, and legislation in those countries that encourages the immigration of persons of Spanish or Italian ancestry. Some of this migration is temporary, such as the movement of tens of thousands of laborers from the Dominican Republic, Colombia, and Ecuador to Spain as a result of a labor migration agreement signed in 2001. In smaller numbers, Latin American workers are found in many other European countries, as well as in Canada and Australia; and in 2001, more than 200,000 South Americans of Japanese ancestry were living and working in Japan.⁴⁹

Latin American emigrants tend to fall into one of two broad categories.

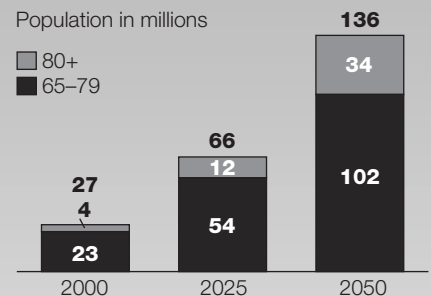
Box 3

The Graying of Latin America

Latin Americans born in the 1960s era of soaring population growth will begin to pass into their 60s by 2020, signaling a surge in the retirement-age population that will last for several decades. The number of Latin Americans age 65 or older is projected to more than double between 2000 and 2025 and to double again by 2050 (see figure). In Colombia, Costa Rica, and Mexico, the number of elderly is projected to triple between 2000 and 2025. The increase will be more modest in Argentina and Uruguay, where population growth was slower in the last half of the 20th century, but the number of elderly will increase by more than half in both countries between 2000 and 2025.

The rapidly declining fertility and improving health of adults in Latin America during the past 50 years have also set the scene for a remarkable increase in the elderly's share of the total population. While those age 65 or older accounted for less than 4 percent of the total population in 1950 and for 5 percent in 2000, they will make up at least 17 percent by 2050. Latin America is considerably younger than the United States, Japan, and most European countries. In the United

Projection of the Population Age 65 or Older, Latin America, 2000, 2025, and 2050



Source: CELADE, *Boletín demográfico* 69 (2002): table 11.

States, 13 percent of the population was age 65 or older in 2000, while 17 percent of the Japanese population was elderly, and the percentages in both countries are expected to rise.

The aging process is occurring fastest in countries that have seen the most rapid fertility declines. Between 2000 and 2050, the percentage of the population age 65 or older will rise from 10 percent to nearly 27 percent in Cuba, for example, and from 5 percent to 18 percent in Brazil.¹

The first consists of well-educated, highly skilled people who seek employment in more developed countries. This “brain drain” has received considerable attention from academics and policymakers, in part because it represents a significant loss to the sending countries that invested in the training and education of the emigrants but do not benefit from their services. In 1989, at least 300 leading Argentine researchers and 15,000 professionals were living abroad.⁵⁰ Most Colombians who emigrated to the United States had more than 12 years of education.⁵¹ U.S. and Canadian immigration policies that favor the admission of skilled professionals also encourage a “brain drain” from Latin American countries.

The second category of emigrants includes a massive number of un-

skilled or semiskilled laborers and an undetermined number of refugees fleeing political conflict in countries such as El Salvador, Nicaragua, and Guatemala during the 1970s and 1980s. An unknown proportion of this migration is undocumented, and it includes a large number of temporary and seasonal migrants.⁵² Although people migrate for many reasons, research indicates that the vast majority of Latin American migrants leave their homes in search of better jobs or education, or to join family members already abroad.⁵³

Within South America, Argentina and Venezuela tend to attract migrants from poorer nations or from countries experiencing political conflict. Migrants from Bolivia, Chile, Paraguay, and Uruguay have tended to settle in

In some countries, especially smaller Central American and Caribbean countries, emigration to the United States has accelerated the aging process. Younger adults are the most likely to migrate abroad to find work, leaving behind the middle-aged and older adults. The most rapid aging—which is already occurring in many countries—often results from the migration of younger adults from rural to urban areas within the same country. International and urban-rural migration can remove the primary breadwinners from a community, depleting the financial support of older residents. Younger relatives working in the cities are unlikely to be able to provide direct care for aging kin in the countryside—although they may be able to provide some financial support.²

The rapid population aging in Latin America, combined with the region’s widespread poverty and economic troubles, will put enormous strains on the governments of many countries in the region, especially as their public sectors are assuming more responsibility for the welfare of citizens. The coming boom in the number of elderly raises questions about

how to structure pension programs so they do not encourage early retirement and do not depend on a high ratio of current workers to retirees.³ Uruguay, for example, recently raised the minimum retirement ages from 55 to 60 for women and from 60 to 65 for men. The larger elderly population will also increase demands for health care for chronic diseases, even as many countries are still battling communicable diseases associated with poverty and overcrowding. Providing health care, housing, and economic support for this burgeoning older population will present major challenges for national governments during the 21st century.

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*Rural migrants to Latin American cities
often live in makeshift housing and work
within an informal economy.*

Buenos Aires, where the construction and service industries offered jobs for unskilled and semiskilled workers. In the 1990s, the illegal status of some of these immigrants caused some friction between the ruling Peronist party, which sought to crack down on illegal immigrants, and the opposition Alliance party, which advocated the legalization of all immigrants. In 1994, an amnesty legalized 210,000 undocumented immigrants who had come mostly from Bolivia, Peru, and Paraguay.

Venezuela has been the leading immigrant-receiving country in the Andean region. During the first part of the 20th century, many immigrants from Italy and other European countries moved to Venezuela. The petroleum-driven economic boom of the 1970s also attracted a large number of immigrants, who came primarily from Colombia and, in smaller numbers, from Ecuador, Peru, and the Dominican Republic.⁵⁴ The establishment of totalitarian government regimes in Argentina, Chile, and Uruguay generated a new wave of immigration from these countries to Venezuela in the 1960s and 1970s. Some migrants returned home in the 1980s and

1990s as Venezuela's economy sank into crisis and the political climate improved in the Southern Cone countries. In the 1990s, Venezuela still hosted an estimated 1.5 million Colombians—many of whom were in the country illegally—and a large contingent of Southern Cone immigrants, who were predominantly professionals. Venezuela also has attracted a number of Chinese immigrants, some of whom arrived clandestinely through Caribbean countries.⁵⁵

Other important migrant flows in Latin America include Nicaraguans and Salvadorans going to Costa Rica; Haitians headed for the Dominican Republic; and immigrants from several Central American countries moving into Mexico, sometimes as a stopover to the United States. Colombia is the leading sending country of the Andean region. The ongoing political violence in Colombia has fueled emigration to Venezuela, the United States, Europe, and elsewhere.

Internal Migration

Rural-to-urban flows were the dominant type of internal migration in Latin America during much of the 20th century. Population has actually declined in many rural areas of Latin America, including rural sections of Argentina, Brazil, Chile, Cuba, Uruguay, and Venezuela. Rural out-migration is generally caused by the lack of cultivable land, particularly in areas with high rural population density; isolation from urban centers that can serve as markets for rural products or where nonagricultural employment can be found; and low agricultural productivity and lack of nonagricultural employment opportunities in rural areas.⁵⁶

Out-migration is often considered detrimental to rural areas because the loss of young, economically active people contributes to the economic stagnation of the sending regions. As in most migration streams, the people most likely to migrate to urban areas tend to be the more educated,

younger, and more resourceful adults in a community. Conversely, the very young, the elderly, and the less innovative individuals tend to remain behind. Migration can have positive consequences: Migrants typically send home money that can be spent or invested in the rural community.

Rural-urban migration also encompasses short-term, cyclical moves, including weekly or monthly commutes to urban jobs. Most permanent rural-urban migrants have been women, while temporary migrants tend to be men who leave their wives and children in their home communities while they work in the city. These temporary or seasonal migrations can have a negative effect on rural families and communities. Migration of male household members often disrupts rural households by upsetting the division of labor, shifting more of the financial and household and childrearing tasks to wives and mothers. Nevertheless, rural families often rely on earnings from family members who are working away from home.

As the proportion of Latin America's population living in cities increases, the incidence of rural-urban migration decreases and other forms of internal migration, for example, migration between cities and from urban to suburban areas, gain importance. In recent decades, the number of people moving to Santiago, Chile, has been offset by the number of people moving out of the city.⁵⁷ These forms of migration are expected to increase in the 21st century.

Another form of internal migration important in Latin America is associated with the settlement of new lands. The most significant of these movements has been the settlement of vast areas of the Amazon basin in Brazil. Since 1970, the Brazilian government has promoted the settlement of Amazonia and has invested heavily in large-scale road construction, particularly the Transamazon Highway, to facilitate the migration of farmers and landless laborers from northeastern Brazil to the

Amazon basin. Multinational companies and Brazilian investors also have sought land for commercial agriculture in the region, sparking a fierce competition for land among government-sponsored and independent settlers, land speculators, agribusinesses, and indigenous people native to Amazonia.

Bolivia too has seen a major settlement of its eastern frontier, especially around the city of Santa Cruz. Agrarian reforms of the 1950s and construction of a highway network linking Santa Cruz to the much larger cities of La Paz and Cochabamba contributed to the frontier expansion. Santa Cruz evolved into Bolivia's most prosperous and rapidly growing region as rice, cotton, and sugar became lucrative commercial crops, and petroleum and natural gas reserves were developed. Coca production also flourished, which led to extensive drug trafficking in the region.⁵⁸

Latin America is becoming one of the world's most urbanized regions.

Urbanization

During the 20th century, Latin America was transformed from a largely rural, agriculture-based society to one of the world's most urbanized regions. At the beginning of the 20th century, nearly 90 percent of Latin Americans lived in rural areas. In the ensuing decades, international and internal migration shifted the population toward cities, and by 1950 an estimated 41 percent of the region's population lived in urban areas. The pace of urbanization accelerated after 1950. Between 1950 and 2000, Latin America's urban population grew at an average annual rate of 3.5 percent, while the rural population barely grew at all and declined in some countries. Largely because of massive migration from rural areas, Latin America's urban population swelled from about 65 million people in 1950 to 380 million in 2000, when urban residents accounted for three-fourths of the region's population. The percentage of the population

Table 6

Urban Agglomerations With 5 Million or More Inhabitants, 1950–2015

Population in thousands									
1950		1975		2000		2015			
1	Buenos Aires	5,042	1	Mexico City	10,691	1	São Paulo	21,229	
Total		5,042	2	São Paulo	10,333	2	Mexico City	20,434	
			3	Buenos Aires	9,144	3	Buenos Aires	13,185	
			4	Rio de Janeiro	7,963	4	Rio de Janeiro	11,543	
			Total	38,131	5	Lima, Peru	9,388		
					6	Bogotá, Colombia	8,970		
					7	Santiago, Chile	6,495		
					Total	78,385	8	Belo Horizonte, Brazil	5,395
							9	Guatemala City	5,268
							Total	101,907	

Source: United Nations, *World Urbanization Prospects: The 2001 Revision* (2002; www.un.org/esa/population/publications/wup2001/wup2001dh.pdf, accessed Jan. 27, 2003): table A.12.

living in urban areas increased steadily during the 20th century and is expected to continue to increase well into the 21st century, although at a much slower pace. In 2002, the urban share of the population in Latin America and the Caribbean was about the same as in Europe and the United States.

Both the level of urbanization and the growth rate of the urban population vary greatly across Latin America. At least 80 percent of the population in Argentina, Brazil, Chile, Cuba, Uruguay, and Venezuela was urban in 2000. At the other extreme, less than 50 percent of the population in Haiti, Guatemala, and Honduras was urban.

The fastest and greatest urban growth in the last 50 years occurred in countries with low to moderate urbanization and expanding economies, including Brazil, Colombia, Ecuador, the Dominican Republic, Mexico, and Venezuela. Urbanization came later to Bolivia, Haiti, Paraguay, and much of Central America.

Rapid urbanization in Latin America sparked tremendous growth in the region's largest cities. In 1950, only one Latin American city, Buenos Aires, had a population of 5 million or more inhabitants. The second-largest city was Mexico City, with fewer than 2.9 million people; by 2000, there were seven cities with 5 million or more residents. By 2015,

the United Nations projects nine Latin American cities will have 5 million or more residents, with a combined population of more than 100 million people (see Table 6).

Between 1950 and 1970, the massive urban growth was concentrated in Latin America's largest cities, continuing the phenomenon of "urban primacy" that characterized urban trends in many less developed regions (see Box 4, page 30).⁵⁹ But the population concentration in such megacities changed unexpectedly toward the end of the 20th century. The proportion of national urban populations living in Latin America's four largest cities—Mexico City, São Paulo, Buenos Aires, and Rio de Janeiro—has been declining since the 1970s. At the beginning of the 21st century, the highest rates of growth are in medium-sized cities such as Toluca, Mexico, and Valencia, Venezuela, rather than in the largest cities, Mexico City and Caracas. The growth of medium-sized cities may be welcomed by governments concerned about problems related to accelerated, highly concentrated urban growth. The full extent and significance of this process, however, are still unclear. The vast majority of Latin America's large cities are still growing in absolute terms, albeit at a slower pace, and they still contain a large proportion of the national population.

Sources of Urban Growth

Rapid rates of urban growth were initially caused by migration from rural areas and, to a lesser extent, from abroad. The rural exodus began at the end of the 19th century in Argentina and Uruguay and became more widespread in the 1940s.⁶⁰ An estimated 27 million Latin Americans moved from the countryside to cities between 1950 and 1980, with the peak movement during the 1960s.⁶¹ The expansion of manufacturing related to import-substitution industrialization was a major attraction for the rural migrants. Also, governments invested heavily in the cities, often at the expense of agricultural development. Meanwhile, agrarian reforms and the adoption of modern methods of cultivation displaced rural labor. These changes, combined with declining mortality and high birth rates, left many rural families with few choices other than migration to cities.

Rural-urban migration slowed during the 1970s. This slowdown reflected the relative decline of the rural population and a smaller pool of would-be migrants, and the severe economic recession that gripped Latin America during the 1980s. Some analysts also point to negative effects from structural adjustment programs during the 1980s and 1990s that emphasized export production, trade liberalization, and cutbacks in public expenditures. Real wages fell, unemployment increased, and the quality of life in large urban areas deteriorated for many residents. Rural-urban disparities in wealth were reduced as the incidence of urban poverty increased. Large cities also suffered from pollution, congestion, poor infrastructure, and rising crime rates. Migrants began to seek alternative destinations. Annual migration to Santiago, Chile, decreased from an estimated 10 migrants per 1,000 population between 1977 and 1982 to 2 migrants per 1,000 between 1987 and 1992. In contrast, medium-sized Chilean cities such as Antofagasta, Coquimbo, and Temuco had higher migration rates.

Table 7

Cities by Population Size and Share of Urban Population, Latin America and the Caribbean, 1975 and 2000

	10 million or more	5 million– 10 million	1 million– 5 million	500,000– 1 million	Less than 500,000
Number of cities					
1975	2	2	17	26	—
2000	4	3	43	56	—
Percent of urban population					
1975	11	9	16	9	55
2000	15	5	22	10	48

— Not available.

Source: United Nations, *World Urbanization Prospects: The 2001 Revision* (2002; www.un.org/esa/population/publications/wup2001/WUP2001AnnexTab.pdf, accessed Jan. 29, 2003); table A.17.

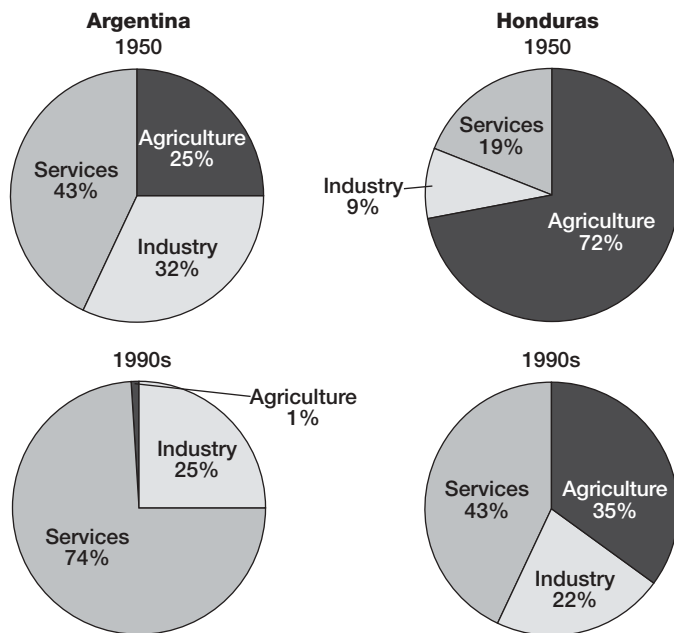
The story was similar in other Latin American countries. In Brazil, the cities of Belém, Belo Horizonte, Curitiba, Fortaleza, Porto Alegre, and Salvador expanded more quickly than São Paulo and Rio de Janeiro during the 1980s. And in Mexico, U.S. border cities such as Tijuana, Ciudad Juárez, and Mexicali grew faster than the larger urban centers. Some estimates suggest that Mexico City experienced a net loss of 300,000 people from migration between 1985 and 1990.⁶²

The changing patterns of internal migration meant that natural increase gradually became the primary source of urban population growth, particularly for the largest cities. While migration contributed 70 percent of Rio de Janeiro's growth between 1940 and 1950, for example, it accounted for just 42 percent of the city's growth between 1960 and 1970.⁶³ Natural increase is becoming more important for urban growth partly because vast numbers of young rural migrants moved to the city and started families. Rural migrants often have more children than longer-term urban residents, fueling natural increase.

The recent rapid growth of medium-sized cities is still due mostly to migration. Since 1980, there have been significant movements both from the countryside and from large cities to medium-sized cities, affecting the

Figure 9

Labor Force by Economic Sector in Argentina and Honduras, 1950 and 1990s



Source: International Labour Office (ILO), *Economically Active Population 1950–2025*, Vol. III (1986); and ILO, *Key Indicators of the Labour Market, 2001–2002* (2002): table 4.

distribution of the national urban populations. For Latin America as a whole, the proportion of the urban population living in cities of more than 5 million is decreasing, while the proportion living in cities of 1 million to 5 million continues to increase (see Table 7, page 27). The number of cities with between 1 million and 5 million inhabitants grew from 17 in 1975 to 43 in 2000. The dispersal of the urban population, however, is more characteristic of the larger, more highly urbanized countries of Latin America. In smaller countries with predominantly rural-based economies, such as Costa Rica, urban populations are still concentrated around the largest cities.⁶⁴

Labor Force

Rapid urbanization and economic policies during the second half of the 20th century brought dramatic changes in the structure and composi-

tion of Latin America's labor force. The proportion of the labor force engaged in agriculture declined throughout the region. In 1950, the majority of the labor force was involved in agriculture, except in Argentina, Chile, Cuba, Uruguay, and Venezuela. By the end of the 20th century, agriculture accounted for more than half of the labor force only in Haiti; in 15 out of 20 countries, agriculture accounted for less than one-fourth of the labor force. In Argentina, only about 1 percent of the labor force worked in agriculture in the 1990s (see Figure 9).

During the same period, the proportion of the labor force working in industry increased in most countries, reflecting the manufacturing expansion associated with import-substitution industrialization (ISI) policies that used tariffs and quotas to protect domestic industries from foreign competition. In the economic restructuring that has occurred in many countries since 1980, however, many manufacturing industries have lost their protected positions. Many industries downsized or ceased to operate, and industrial employment declined in several countries.

The service industry has become the major source of employment in most Latin American countries. By 2000, the service sector engaged the majority of the labor force in 16 of 20 Latin American countries. The exceptions were El Salvador, Haiti, Honduras, and Nicaragua, countries where a large proportion of the population still lives in rural areas. But the situation is changing even in those countries: In Honduras, for example, agriculture's share of the labor force shrank from 72 percent in 1950 to 35 percent in the late 1990s, while the service sector share grew from 19 percent to 43 percent.

Growth of the Informal Sector

The expansion of manufacturing jobs associated with ISI and the growth in the service sector did not compensate

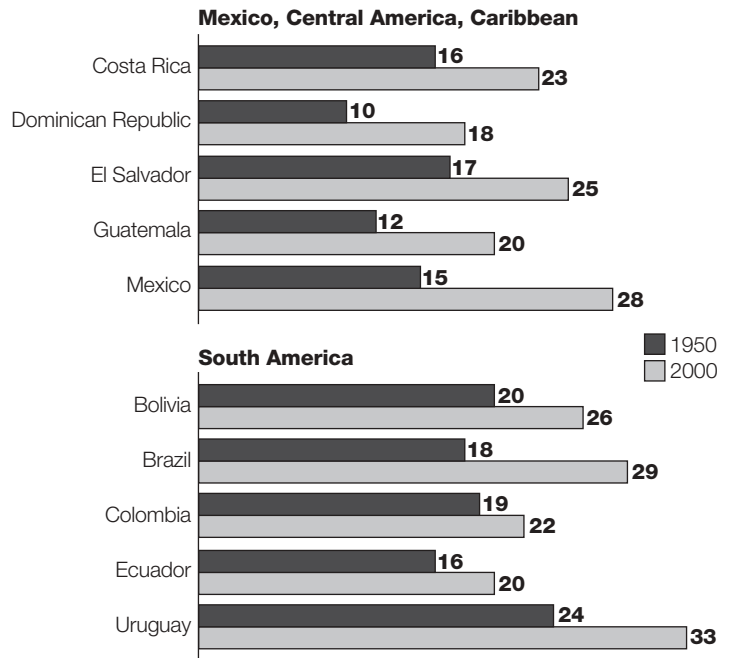
for the losses of agricultural employment. Consequently, an increasing number of people have drifted into an informal sector that encompasses a great variety of services and industries ranging from streetvending, shoe-shining, and car-watching to small-scale construction, metalwork, and machinery repair. Operating outside the legal system, the informal sector of the urban economy comprises all “income-generating activities unregulated by the state in contexts where similar activities are so regulated.”⁶⁵ The informal sector is made up mostly of low-productivity, low-profit commercial and service activities and employs a large proportion of the low-income population.

The informal sector in Latin America expanded between the 1940s and the 1970s, mainly because of massive migration from rural to urban areas, but the formal job sector increased more rapidly. During the same period, self-employment, an indicator of informal-sector activity, decreased from 29 percent to 20 percent of total employment.⁶⁶ In contrast, the informal sector expanded markedly in both absolute and relative terms during the 1980s and 1990s. By 1990, the informal sector accounted for approximately 30 percent of total employment.⁶⁷

The informal sector expanded during the 1980s and 1990s primarily for economic rather than demographic reasons: recession and debt crises, economic restructuring, and cutbacks in public expenditures and employment. After the protective measures offered under ISI policies were reduced or eliminated, many firms closed because they were unable to cope with increased competition. The formal and informal sectors were increasingly linked: The latter produced components and semifinished products for the former, then helped distribute and market finished products. Many people who had been employed by the formal sector were forced into informal activities by decreasing job opportunities.⁶⁸ Unemployment in the formal sector

Figure 10

Women as a Percentage of the Labor Force in Selected Latin American Countries, 1950 and 2000



Source: C. Clarke and D. Howard, “Cities, Capitalism, and Neoliberal Regimes,” in *Latin America Transformed*, ed. R. Gwynne and C. Kay (1999): table 12.5.

increased from about 6 percent of the labor force in the mid-1970s to 14 percent in the mid-1980s. Between 1986 and 1994, Nicaragua’s unemployment rose from 5 percent to 24 percent of the labor force.⁶⁹ Argentina’s unemployment rate reached 24 percent in 2002.

Women in the Labor Force

Women’s participation in the labor force has increased significantly in Latin America and the Caribbean. Across Latin America, women’s share of the labor force expanded from 19 percent of the total labor force in 1960 to 28 percent in 2000, although the levels and the magnitude of the increase vary tremendously among countries (see Figure 10). The rise in women’s labor force participation is tied to the decline in agricultural employment and the growth of industry and services. Industry and services

*Working outside
the home has
not released
most women
from household
responsibilities.*

often generate low-paying, labor-intensive occupations; because women often will work for lower wages than men, women are often hired for such jobs. Demand for female labor appeared to increase as economic restructuring, with its emphasis on export-oriented assembly plants, moved forward. The proliferation of assembly plants and industrial free zones throughout many Latin American countries has greatly increased the number of employment opportunities for women. Young women make up about 60 percent of the workers at

the *maquiladora* assembly plants just south of the U.S. border in Mexico. These plants employed more than 1 million workers in 1998, although the number has declined during the U.S. recession.⁷⁰

The increase in the number of women entering the labor force also reflects the migration of young women from rural to urban areas in search of work. The major force encouraging more women to participate in the labor force has been economic hardship exacerbated by recession and rising male unemployment and underemployment.⁷¹

Box 4

Urban Primacy

Latin America's population history has long been characterized by urban primacy: the concentration of a country's urban population in its largest city. Geographer Arthur Morris traces urban primacy in Latin America to the early colonial period, when Spanish and Portuguese settlers concentrated in the region's few major port cities, which became the centers of political and economic power.¹ These cities, which included Rio de Janeiro; Buenos Aires; and Lima, Peru, often became the administrative capitals as countries became independent, which only increased their primacy. In the mid-20th century, import-substitution industrialization policies further concentrated economic activity in the largest cities by promoting large-scale manufacturing operations that were protected from outside competition. The largest cities attracted the most migrants during the massive rural exodus in the decades after World War II. According to geographer Alan Gilbert, Santiago, Chile, and Lima, Peru, are examples of increasing urban primacy: "Santiago had 1.3 times as many people as [second-ranked] Valparaíso in 1875, 2.8 times as many in 1920, and 7 times as many in 1971. Lima was eight times larger than [second-largest] Arequipa in 1940 but 11 times larger in 1972."² Despite the slowdown in urbanization and the growth of middle-sized

cities in the past two decades, primacy is still evident Chile and Peru. In 2000, Santiago was 7.5 times larger than Valparaíso-Viña del Mar, and Lima was nearly 10 times larger than Arequipa.³

Primacy is considered detrimental to economic development because it concentrates political and economic power in the hands of an urban elite and perpetuates inequities among regions. Further, the stream of rural migrants to the largest cities often overwhelms the housing and labor markets and public services. These "primate" cities often sprout unregulated shantytowns where the rural migrants and urban poor erect make-shift housing. Residents in such slums usually live and work in the informal sector, with no regular jobs and little access to public health or education services.

In recent decades, Argentina, Mexico, Venezuela, and a few other countries have seen a decline in urban primacy as medium-sized cities have begun to grow faster than the capitals. Primacy has never been as high in Brazil and Colombia, where manufacturing located in the secondary cities of São Paulo and Medellín, which then grew faster than Rio de Janeiro and Bogotá. The capitals of Panama, Costa Rica, Guatemala, and the Dominican Republic have remained much larger than any other cities in those countries.

As women have entered the labor force, many have gained autonomy, independence, and decisionmaking power as they assumed a more important economic role within the household. But women's employment opportunities remain more limited than men's, their wages tend to be lower than men's, and they are often restricted to low-skill occupations with little advancement potential. Furthermore, working outside the home has not released most women from household responsibilities. Combined with the stresses produced by eco-

nomie crises and male unemployment or underemployment, the increased participation of women in the labor force may cause additional stress within households.⁷²

Future Growth and Change

Significant demographic changes have occurred in Latin America since the 1960s. Rapid fertility declines in the largest countries have lowered the rate of natural increase. In com-

Urban Primacy in the United States and Selected Latin American Countries, 1950, 1975, and 2000

Country	Largest city	Three next-largest in 2000	Ratio of largest to 3 next-largest combined		
			1950	1975	2000
Argentina	Buenos Aires	Córdoba, Rosario, Mendoza	4.2	4.0	3.4
Brazil	São Paulo ^a	Rio de Janeiro, Belo Horizonte, Porto Alegre	0.8	0.8	0.9
Colombia	Bogotá	Medellín, Cali, Barranquilla	0.7	0.9	1.0
Mexico	Mexico City	Guadalajara, Monterrey, Puebla	2.9	2.5	2.0
Venezuela	Caracas	Maracaibo, Valencia, Maracay ^b	1.4	1.3	0.6
United States	New York City	Los Angeles, Chicago, Philadelphia	1.0	0.8	0.7

^aIn 1950, Rio de Janeiro's estimated population was slightly greater than São Paulo's; Salvador, not Belo Horizonte, was the fourth-largest urban agglomeration.

^bIn 1950 and 1975, Barquisimeto, not Maracay, was among the four largest urban agglomerations.

Source: Ratios calculated by the author based on United Nations, *World Urbanization Prospects: The 2001 Revision* (2002): table A.12.

Globalization may also counter the tendency for population growth to be concentrated in a single large city in each country: Export-oriented development and greater tourism have encouraged growth outside primate city areas and sometimes in new geographic regions.

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2. Alan Gilbert, *The Latin American City* (London: Latin American Bureau, 1994): 37.
3. United Nations, *World Urbanization Prospects: The 2001 Revision* (New York: UN, 2002).

bination with falling mortality rates, the slower growth rates have led to population aging in many countries. Latin American fertility is expected to continue to decline, with the total fertility rate falling to replacement level (approximately 2.1 children per woman) between 2025 and 2030. Likewise, mortality is expected to continue to drop, although at a slower rate. The infant mortality rate is expected to decrease from 35 infant deaths per 1,000 live births in 2000 to less than 10 deaths per 1,000 live births in 2050; life expectancy at birth is expected to increase from 70 years to 79 years during the same period. The decline of both fertility and mortality will produce an older population, with the percentage of children under age 15 declining from 32 percent in 2000 to 20 percent in 2050. The aging of the population will be reflected in a slight increase in the crude death rate after 2015.

Net migration rates for Latin America have been negative since the late 1950s, reflecting the region's shift from being a migration destination to being a sending nation. Since 1990, only Argentina and Costa Rica have had positive net migration rates. These general trends are likely to continue, and migration is not expected to make any positive contribution to the Latin American population until after 2050. As a result, total rates of population growth will continue their downward trend from 1.6 percent in 2000 to less than 0.5 percent in 2050. Despite declining fertility, negative migration rates, and declining growth rates, the absolute size of Latin America's population is expected to continue to increase during the coming decades, reaching approximately 800 million by 2050.

Is there then reason to be concerned about overpopulation in Latin America? The answer depends on how overpopulation is defined. With 14 percent of the world's land area and 8 percent of the world's population, Latin America often has been deemed "underpopulated."⁷³ The region's population density, at 66 persons per square mile, is comparatively low. Yet, there is little or no correlation between a country's population density and its level of well-being.⁷⁴

Age structure—which determines the economic burden of the working age population—and the geographic distribution of the population—especially whether it is concentrated in a few teeming megacities or more evenly distributed among smaller urban areas—are more important than the simple number of people per unit of land.

The generally young age composition of the Latin American population points to the critical need to ensure that there are enough jobs for the growing labor force. Current economic policies in the region often reduce jobs, at least in the short run, which aggravates the problem. Living conditions for a large share of the urban population also continue to be a concern. High rates of urban growth in recent decades, largely a consequence of rural-urban migration, have dramatically increased the population concentrations in certain cities. Urban economies have been unable to absorb this additional labor force and governments have been unable to provide adequate urban services, such as housing and energy, to a large proportion of residents. These conditions are likely to persist into the future. Increased interurban population mobility, particularly from large to medium-sized cities, and emigration can be expected.

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