

Global Comparisons The 10 Countries With Largest Populations

TABLE 15.1 The World's Most Populous Countries, 2011

Rank	Country or Area	Population	% of World's Population
1	China	1,336,718,015	19.1
2	India	1,189,172,906	16.9
3	United States	313,232,044	4.5
4	Indonesia	245,613,043	3.5
5	Brazil	203,429,773	2.9
6	Pakistan	187,342,721	2.7
7	Bangladesh	158,570,535	2.3
8	Nigeria	155,215,573	2.2
9	Russia	138,739,892	2.0
10	Japan	126,475,664	1.8

Source: Data from U.S. Bureau of the Census 2011.

TABLE 15.2 Population Size and Growth: The Role of Birth, Death and Migration.

This table shows the population size at two points in time; midyear 2010 and midyear 2011 for three countries: (1) India, the country that added the greatest number of people to its population between 2010 and 2011; (2) Zimbabwe, the country that increased its population size by the greatest percentage; and (3) Bulgaria, the country with the greatest percentage decrease in population size. How many births occurred in each country? How many deaths? How many people did each country gain or lose through migration?

		India	Zimbabwe	Bulgaria
Population (Midyear)	2010	1,173,190,000	11,563,000	7,038,000
Births		+24,937,000	+385,000	+66,000
Deaths		-8,895,000	-164,000	-102,000
Net Migration		-59,000	+300,000	-20,000
Population (Midyear)	2011	1,189,173,000	12,084,000	7,094,000
Growth Rate		1.3%	4.3%	-0.8%
Doubling Time		51 years	11.6 years	92.5 years country will disappear

Source: Data from U.S. Bureau of the Census 2011; U.S. Central Intelligence Agency 2011.

Age-Sex Composition

CORE CONCEPT 2 The age-sex composition of a population helps demographers predict birth, death, and migration rates.

A population's age and sex composition is commonly depicted as a **population pyramid**, a series of horizontal bar graphs, each representing a different five-year age cohort. A **cohort** is a group of people born around the same time—in this case, within a five-year time frame—who

No Borders No Boundaries World Population Growth A.D. 1 to 2045

The graph shows that it took approximately 1,150 years for the world's population to double from 170 million in A.D. 1 to 340 million in 1150. Around 1930, the world's population reached 2 billion people, taking less than 100 years

to double from 1 billion in 1850. By the 1960s, the world's population reached 3.04 billion, and it took just 30 years to double to 6.26 billion.

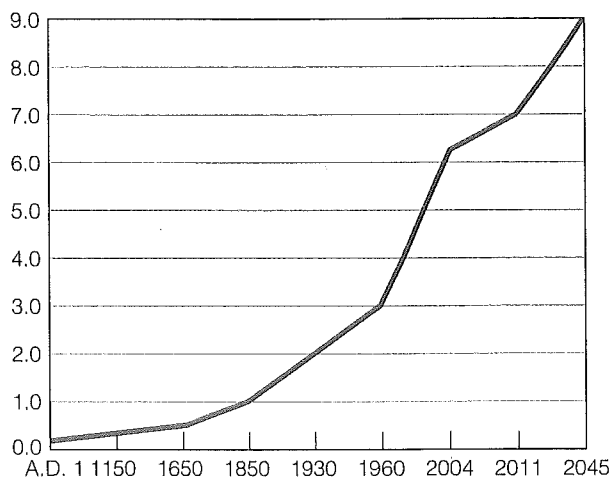


FIGURE 15.1

Source: Data from U.S. Bureau of the Census (2011)

share common experiences and perspectives by virtue of the time they were born. To create a population pyramid, we construct two bar graphs for each cohort—one for males and the other for females. We place the bars end to end, separating them by a line representing zero. Typically, the left side of the pyramid depicts the number or percentage of males that make up each cohort, and the right side depicts the number or percentage of females. We stack the bar graphs according to age—the age 0 to 4 cohort forming the base of the pyramid and the age 100+ cohort forming the apex. The population pyramid allows us to compare the sizes of the cohorts and to compare the numbers or percentages of males and females in each cohort.

The population pyramid offers a snapshot of the number of males and females in the various cohorts at a particular time. Generally, a country's population pyramid approximates one of three shapes: expansive, constrictive, or stationary. An **expansive pyramid** is triangular; it is broadest at the base, and each successive bar is smaller than the one below it. The relative sizes of the cohorts in expansive pyramids show that the population is increasing and consists disproportionately of young people. A **constrictive pyramid** is narrower at the base than in the middle. This shape shows that the population consists disproportionately of middle-aged and older people. A **stationary pyramid** is similar to a constrictive pyramid,

except that all cohorts other than the oldest are roughly the same size (see Figure 15.2).

Knowing age-sex composition can help demographers predict a country's birth, death, and migration rates. Bulgaria's population pyramid shows that there are few people age 14 and under relative to the size of the age cohorts that could be their parents. This suggests that many women of reproductive ages 15 to 54 are not having children or a small number of children.

population pyramid A series of horizontal bar graphs, each representing a different five-year age cohort, that allows us to compare the sizes of the cohorts.

cohort A group of people born around the same time (such as a specified five-year period) who share common experiences and perspectives by virtue of the time they were born.

expansive pyramid A triangular population pyramid that is broadest at the base, with each successive cohort smaller than the one below it. This pyramid shows that the population consists disproportionately of young people.

constrictive pyramid A population pyramid that is narrower at the base than in the middle. It shows that the population consists disproportionately of middle-aged and older people.

stationary pyramid A population pyramid in which all cohorts (except the oldest) are roughly the same size.

Student Activity: The U.S. Census Bureau has created population pyramids for all 50 states and territories of the U.S. Simply use the search terms "2010 Census Population Profile Maps" in Google or another search

engine. Ask students to write a short profile of their state using only the information gleaned from the population pyramid.

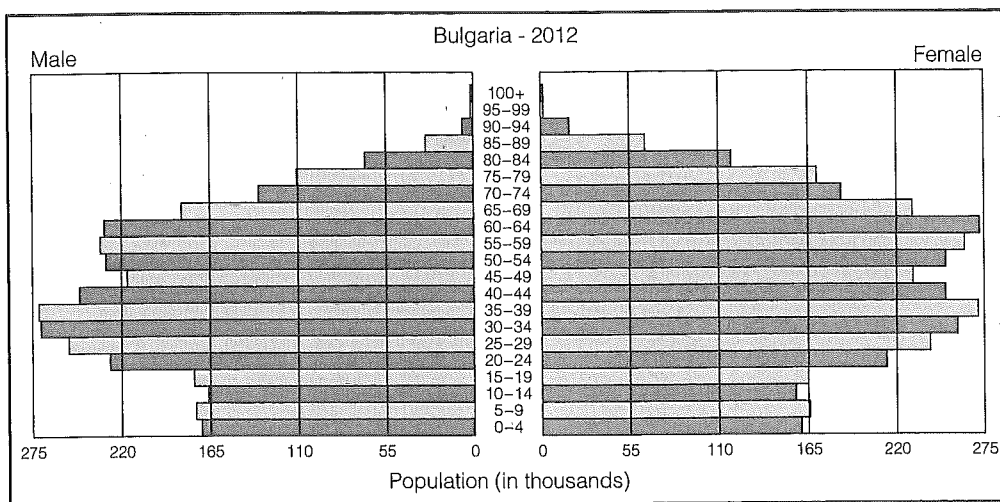


FIGURE 15.2a Bulgaria's population pyramid can be labeled as constrictive because it is narrower at the base than in the middle, showing that the population consists disproportionately of middle-aged and older people. Notice that the base is scaled in thousands. So there are about 165,000 females age 0 to 4 and about 171,000 males of that age. Note that there are about 275,000 females age 60 to 64 and about 231,000 males.

Source: Data from U.S. Bureau of the Census (2012)

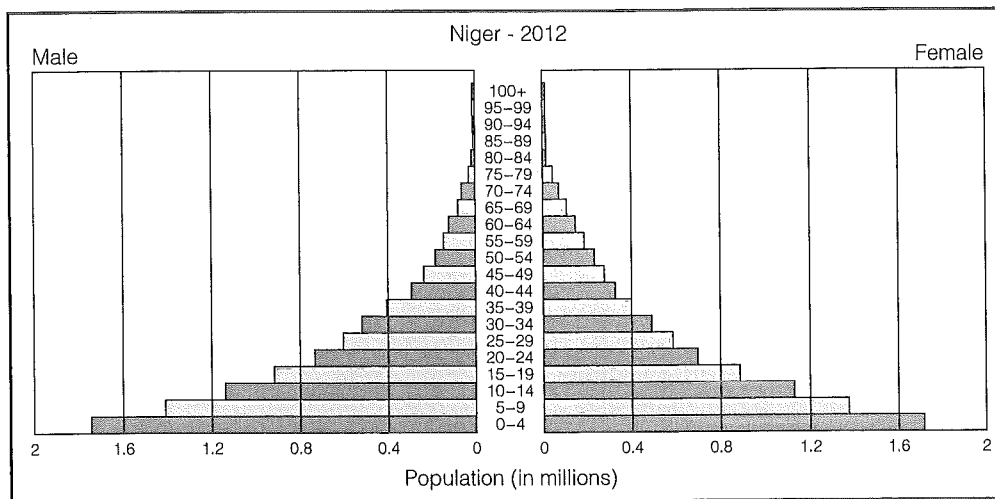


FIGURE 15.2b The population pyramid for Niger can be labeled as expansive because it is broadest at the base, and each successive bar is smaller than the one below it. The relative size of the bars indicates that Niger's population consists disproportionately of young people. Note that there are about 1.65 million females ages 0 to 4 and 1.7 million males of that age.

Source: Data from U.S. Bureau of the Census (2012)

When we know age-sex composition, we can calculate the **sex ratio**—the number of males for every 100 females (or another preferred constant, such as every 10, 100, or 10,000 males). The country of United Arab Emirates has the greatest imbalance in favor of males relative to females with 219 males for every 100 females. The country Russia has the greatest imbalance in favor of females: 86 males per 100 females (U.S. Central Intelligence Agency 2011).

The Theory of Demographic Transition

CORE CONCEPT 3 The demographic transition links the birth and death rates in western Europe and North America to the level of industrialization and economic development.

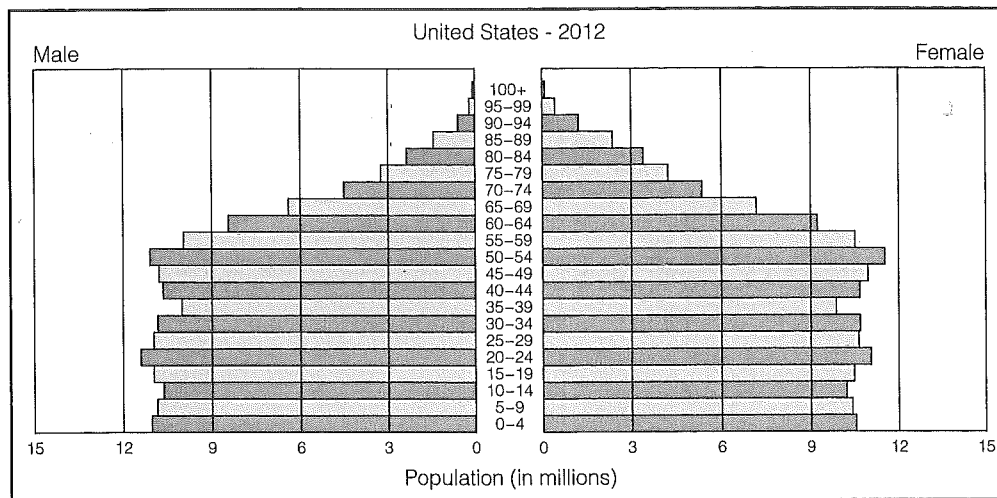


FIGURE 15.2c The population pyramid of the United States yields a near stationary pyramid, because, except for the older age categories, each cohort is roughly the same size. In the United States, there are about 10 million females age 0 to 4 and 10.5 million males of that age.

Source: Data from U.S. Census Bureau (2012)

In the 1920s and early 1930s, demographers observed birth and death rates in various countries. They soon noticed that both birth and death rates were high in Africa, Asia, and South America. In eastern and southern Europe, death rates were declining and birth rates remained high. In western Europe and North America, birth rates were declining and death rates were low. At that time, demographers observed that western Europe and North America had the following sequence of birth and death rates:

1. Birth and death rates remained high until the mid-eighteenth century, when death rates began to decline.
2. As the death rates decreased, the population grew rapidly, because more births than deaths occurred. The birth rates began to decline around 1800.
3. By 1920, both birth and death rates had dropped below 20 per 1,000 (see Figure 15.3).

Based on these observations, demographers put forth the theory of the demographic transition. They proclaimed that the characteristics of a country's birth and death rates are linked to its level of industrial or economic development, and they hypothesized that the less economically and industrially developed countries would follow the pattern of western Europe and North America.

Note that this four-stage model documents the general situation; it should not be construed as a detailed description of the experiences of any single country. Even so, we can say that for the most part the countries of the world have followed the essential pattern of the demographic transition, although they have differed in

the timing of the declines and the rates at which their populations have increased since death rates began to fall. The theory of the demographic transition also sought to explain the events that caused birth and death rates to drop in western Europe and North America, and to predict when these declines would occur in the rest of the world.

Stage 1: High Birth and Death Rates

For most of human history—the first 2 to 5 million years—populations grew very slowly, if at all. The world population remained at less than 1 billion until around A.D. 1850, when it began to grow explosively. Demographers speculate that growth until that time was slow because **mortality crises**—violent fluctuations in the death rate, caused by war, famine, or epidemics—were a regular feature of life. Stage 1 of the demographic transition is often called the stage of high potential growth: If something happened to cause the death rate to decline—for example, improvements in agriculture, sanitation, or medical care—the population would increase dramatically. In this stage, life is short and brutal; the death rate almost always exceeds 50 per 1,000. When mortality crises occur, the death

sex ratio The number of females for every thousand males (or another preferred constant, such as 10, 100, or 10,000).

mortality crises Violent fluctuations in the death rate, caused by war, famine, or epidemics.

Teaching Tip: The population pyramid allows people to make rough estimates of the size of various age-sex groups. More precise estimates are available at www.census.gov/population/international/data/idb/

informationGateway.php: Simply download the Excel sheet below the requested population pyramid.

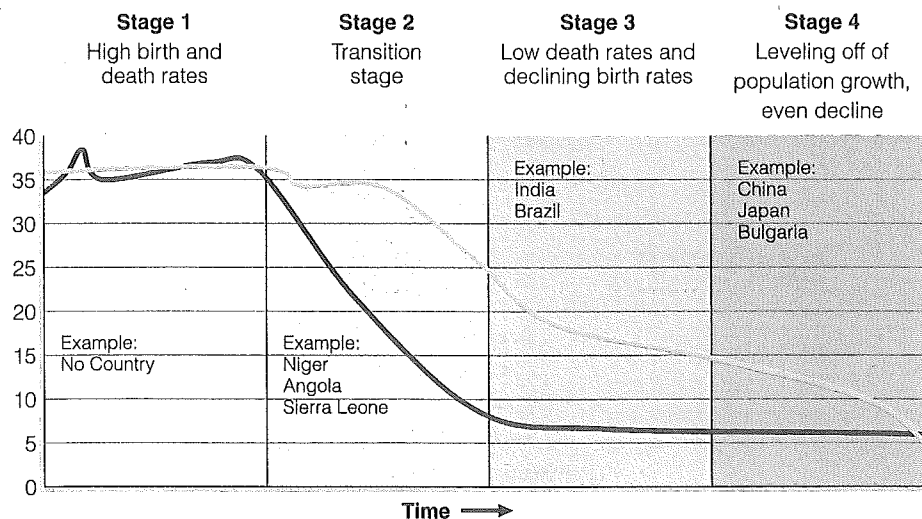


FIGURE 15.3 The Demographic Transition

The theory of the demographic transition is represented by a graph of historical changes in birth and death rates that reflect the path followed by western European countries and the United States.

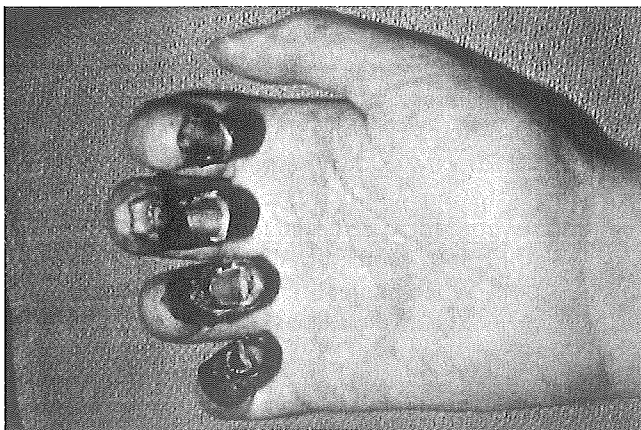
rate seems to have no limit. Sometimes half the population is affected, as when the Black Death struck Europe, the Middle East, and Asia in the mid-fourteenth century (the plague recurred periodically for approximately 300 years). Within 20 years of its onset, the plague killed an estimated three-fourths of all people in the affected populations.

Another mortality crisis—but one that has not received as much attention as the Black Death—affected the indigenous populations of North America when Europeans arrived in the fifteenth century. A large proportion of the native population died because they had no resistance to diseases such as smallpox, measles, tuberculosis, and

influenza, which the colonists brought with them. Historians continue to debate what proportion of the native population died because of this contact; estimates range from 50 to 90 percent.

In stage 1, then, average life expectancy at birth remained short—perhaps 20 to 35 years—with the most vulnerable groups being women of reproductive age, infants, and children younger than age 5. It is believed that women gave birth to large numbers of children and that the crude birth rate was about 50 per 1,000—the highest rate recorded, and thus believed possible, for humans. Families remained small, however, because one of every three infants died before reaching age 1, and another died before reaching adulthood. If the birth rate had not remained high, the society would have become extinct. Demographer Abdel R. Omran (1971) estimates that in societies where life expectancy at birth is 30 years, each woman must have an average of seven live births to ensure that two children survive into adulthood. Theoretically, she must bear six sons to ensure that at least one son survives into adulthood. In western Europe before 1650, high mortality rates were associated closely with food shortages and famines. Even when people did not die directly from starvation, they died from diseases that preyed on their weakened physical state.

Thomas Malthus (1798), a British economist and an ordained Anglican minister, concluded that “the power of population is so superior to the power in the earth to produce subsistence for man, that premature death must in some shape or other visit the human race” (p. 140). According to Malthus, **positive checks** served to keep population size in line with the food supply. He defined *positive checks* as events that increase deaths, including epidemics of infectious and parasitic diseases, war, famine, and natural disasters. In



Center for Disease Control

The plague known as the Black Death hit Europe, the Middle East, and Asia in the mid-fourteenth century, recurring periodically for approximately 300 years. The plague's name came from one of its symptoms: gangrene.



Department of Defense, U.S. Navy Photo

The March 11, 2011 earthquake in Japan registered a 9.0 magnitude. An estimated 30,000 people died, and more than 250,000 people lost their homes and were moved to evacuation shelters.

2010, 373 natural disasters worldwide killed about 300,000 and affected 208 million (Centre for Research on the Epidemiology of Disasters 2011). In terms of human life lost, two disasters stand out—the January 12 earthquake in Haiti in which 222,500 people died, and the Russian summer heat wave that resulted in 56,000 deaths. In addition to disasters, Malthus believed that the only moral ways to prevent populations from growing beyond what the food supply could support were delayed marriage and celibacy.

Stage 2: Transition

Around 1650, mortality crises became less frequent in western Europe; by 1750, the death rate there had begun to decline slowly. This decline was triggered by a complex array of factors associated with the onset of the Industrial Revolution. The two most important factors were (1) increases in the food supply, which improved the nutritional status of the population and increased its ability to resist diseases, and (2) public health and sanitation measures, including the use of cotton to make clothing and new ways of preparing food. The following excerpt elaborates on these trends:

The development of winter fodder for cattle was important; fodder allowed the farmer to keep his cattle alive during the winter, thereby reducing the necessity of living on salted meats during half of the year. . . . [C]anning was discovered in the early nineteenth century. This method of food preservation laid the basis for new and improved diets throughout the industrialized world. Finally, the manufacture of cheap cotton cloth became a reality after mid-century. Before then, much of the clothes were seldom if ever washed, especially among the poor. A journeyman's or tradesman's wife might wear leather stays and a quilted petticoat until they virtually rotted away. The new cheap cotton garments could easily be washed, which increased cleanliness and fostered better health. (Stub 1982, p. 33)

Teaching Tip: The International Disaster Database, Center for Research on Epidemiology of Disaster posts a weekly list of natural and technologi-



Library of Congress Prints and Photographs Division

Preserving foods in airtight jars, cans, or pouches and then heating to destroy contaminating microorganisms improved the nutritional status of the population in industrialized societies, leading to lower death rates.

Contrary to popular belief, advances in medical technology had little influence on death rates until the turn of the twentieth century—well after improvements in nutrition and sanitation had caused dramatic decreases in deaths due to infectious diseases. Over a 100-year period, the death rate fell from 50 per 1,000 to less than 20 per 1,000, and life expectancy at birth increased to approximately 50 years of age. As the death rate declined, fertility remained high. Fertility may even have increased temporarily, because improvements in sanitation and nutrition enabled women to carry more babies to term. With the decrease in the death rate, the **demographic gap**—the difference between the birth rate and the death rate—widened, and the population grew substantially.

Accompanying the unprecedented growth in population was **urbanization**, an increase in the number of cities and

positive checks Events that increase deaths, including epidemics of infectious and parasitic diseases, war, famine, and natural disasters.

demographic gap The difference between a population's birth rate and death rate.

urbanization An increase in the number of cities in a designated geographic area and growth in the proportion of the area's population living in cities.

cal disasters around the world. Malthus labeled these disasters "positive checks" on population growth.

growth in the proportion of the population living in cities. (As recently as 1850, only 2 percent of the world's people lived in cities with populations of 100,000 or more.) Around 1880, fertility began to decline. The factors that caused birth rates to drop are unclear and continue to inspire debate among demographers. But one thing is clear: The decline was not caused by innovations in contraceptive technology, because the methods available in 1880 had been available throughout history. Instead, the decline in fertility seems to have been associated with several other factors.

First, the economic value of children declined in industrial and urban settings, as children no longer represented a source of cheap labor but rather became an economic liability to their parents. Second, with the decline in infant and childhood mortality, women no longer had to bear a large number of children to ensure that a few survived. Third, a change in the status of women gave them greater control over their reproductive life and made childbearing less central to their life.

Stage 3: Low Death Rates and Declining Birth Rates

Around 1930, both birth and death rates fell to less than 20 per 1,000, and the rate of population growth slowed considerably. Life expectancy at birth surpassed 70 years—an unprecedented statistic. The remarkable successes in reducing infant, childhood, and maternal mortality rates permitted accidents, homicides, and suicide to become the leading causes of death among young people. The reduction of the risk of dying from infectious diseases ensures that people who would have died of infectious diseases in an earlier era can survive into middle age and beyond, when they face an elevated risk of dying from degenerative and environmental diseases (such as heart disease, cancer, and strokes). For the first time in history, people age 50 and older account for more than 70 percent of annual deaths. Before stage 3, infants, children, and young women accounted for the largest share of deaths (Olshansky and Ault 1986).

As death rates decline, disease prevention becomes an important issue. The goal is to live not merely a long life but a "quality life" (Olshansky and Ault 1986, Omran 1971). As a result, people become conscious of the link between health and lifestyle (sleep, nutrition, exercise, and drinking and smoking habits). In addition to low birth and death rates, stage 3 is distinguished by an unprecedented emphasis on consumption (made possible by advances in manufacturing and food production technologies).

Since the time the demographic transition was first proposed, a fourth stage has been added in which both birth rates and death rates are low. Birth rates drop to levels that fall below that needed to replace those who die. Although death rates are low, there is an increase in lifestyle diseases caused by lack of exercise, poor nutrition, and obesity. Birth rates fall below replacement when the average

TABLE 15.3 Percentage of Total U.S. Deaths by Age Cohort, 1900, 1950, 2005

At one time in the United States—1900—death was something people in every age group experienced, but especially those less than 1 year of age. Twenty percent of all deaths in 1900 involved infants less than 1 year old. As late as 1950, 20 percent of deaths (one in every five) involved people under age 45. By 2005, that percentage dropped to about 8 percent. Today, death is something we have come to associate primarily with people of older ages as those 55 and older account for 85 percent of all deaths.

Age	1900	1950	2005
less than 1	20.72	7.15	1.16
1 to 4	9.44	1.25	0.19
5 to 14	4.27	1.01	0.27
15 to 24	6.34	1.95	1.40
25 to 34	8.31	2.92	1.71
35 to 44	8.18	5.30	3.46
45 to 54	8.25	10.20	7.50
55 to 64	9.94	17.50	11.25
65 to 74	11.57	23.61	16.27
75 to 84	9.48	21.06	28.05
85 plus	3.19	8.02	28.72

Source: Data from U.S. Centers for Disease Control and Prevention 2009.

woman has fewer than two children over the course of her reproductive life. Italy and Japan are examples of countries in which this is the case.

When the theory of the demographic transition was put forth, a hypothesis was also put forth that the so-called developing countries would follow this model. In some ways, most of the developing countries have followed the broad overall pattern but with some differences that we will discuss.

Industrialization in Developing Countries: An Uneven Experience

CORE CONCEPT 4 Industrialization was not confined to western Europe and North America. It pulled people from across the planet into a worldwide division of labor and created long-lasting, uneven economic relationships between countries.

The Industrial Revolution was not confined to western Europe and the United States. In fact, during this revolution, people from even the most seemingly isolated and remote regions of the planet became part of a worldwide division

TABLE 15.4 Demographic Differences between Selected Labor-Intensive Poor Economies and Core Economies

Labor-intensive poor economies differ markedly from core economies on a number of important indicators, including doubling time, infant mortality, total fertility, and per capita income.

	Population Doubling Time (years)	Infant Mortality (per 1,000)	Total Fertility	Per Capita Income (\$U.S.)
Labor-Intensive Poor Economies				
Afghanistan	20.7	149.2	5.39	1,000
Haiti	41.9	54.02	3.07	1,200
India	51	47.57	2.62	3,400
Core Economies				
United States	78	6.06	2.06	47,400
Japan	636	2.78	1.21	34,200
Germany	1,750	3.54	1.41	35,900

Source: Data from U.S. Central Intelligence Agency 2011.

of labor. Industrialization's effects were not uniform; they varied according to country and region of the world.

With regard to industrialization, the countries of the world are commonly placed into two broad categories, such as developed and developing. Comparable but equally misleading terms for this dichotomy include *industrialized/industrializing* and *first world/third world*. These terms are misleading because they suggest that a country is either industrialized or not industrialized. The dichotomy implies that a failure to industrialize is what makes a country poor, and it camouflages the fact that as Europe and North America plunged into industrialization, they took possession of Asia, Africa, and South America—establishing economies there that served the industrial needs of the colonizers, not the needs of the colonized. The point is that countries we label as “developing” or “industrializing” were actually part of the Industrial Revolution from the beginning.

The World Bank, the United Nations, and other international organizations use a number of indicators to distinguish between so-called developed and developing countries, including the following: doubling time, infant mortality, total fertility, per capita income, percentage of the population engaging in agriculture, and per capita energy consumption. Instead of the term *developing*, *industrializing*, or *third world*, it might be more accurate to think in terms of **labor-intensive poor economies**. Instead of the term *developed*, *industrialized*, or *first world*, we will use the term **core economies**. Table 15.4 shows how labor-intensive poor economies differ from core economies on a number of important indicators, such as per capita electricity consumption and doubling time.

The Demographic Transition in Labor-Intensive Poor Economies

CORE CONCEPT 5 Labor-intensive poor economies differ from core economies in several characteristics: In particular, they have experienced relatively high birth rates despite declines in their death rates, resulting in more rapid population growth and unprecedented levels of rural-to-urban migration (urbanization).

Birth and Death Rates in Labor-Intensive Economies

Sociologists Bernard Berelson (1978) and John Samuel (1997) have identified some important “thresholds” associated with declines in fertility:

1. Less than 50 percent of the labor force is employed in agriculture. (The economic value of children decreases in industrial and urban settings.)

labor-intensive poor economies Economies that have a lower level of industrial production and a lower standard of living than core economies. They differ markedly from core economies on indicators such as doubling time, infant mortality, total fertility, per capita income, and per capita energy consumption.

core economies Economies that have a higher level of industrial production and a higher standard of living than labor-intensive poor economies. They include the wealthiest, most highly diversified economies in the world.

Student Activity: Ask students to select a labor-intensive poor country and a core economy country from Table 15.4. Use Google News to check out and compare headline news for each of the two countries. Write a one

page paper comparing those headlines and what they say about life (that makes the news) in each country.

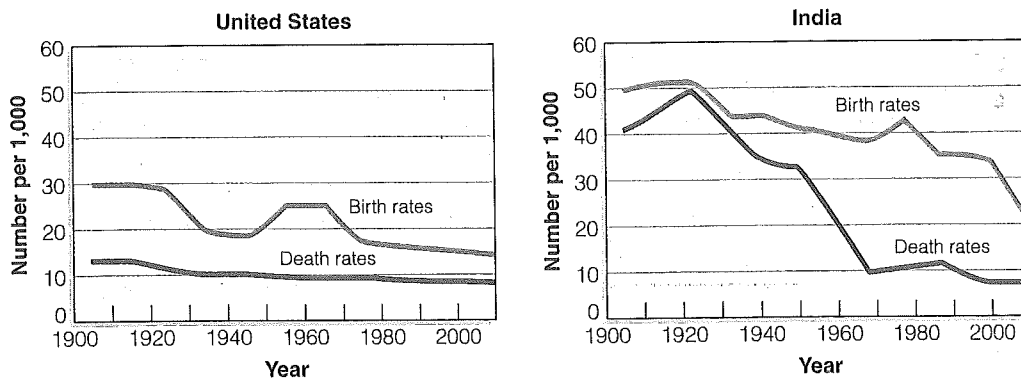


FIGURE 15.4 Birth and Death Rates in the United States and India, 1900–2010

Study the two graphs. What does it mean when the gap between birth rate and death increases? The answer explains why India's population is growing at a much faster pace than the U.S.

Source: Data from U.S. Bureau of the Census (2011)

- At least 50 percent of people between the ages of 5 and 19 are enrolled in school. (Especially for women, education "widens horizons, sparks hope, changes status concepts, loosens tradition, and reduces infant mortality" (Samuel 1997).)
- Life expectancy is at least 60 years. (With increased life expectancy, parents can expect their children to survive infancy and early childhood.)
- Infant mortality is less than 65 per 1,000 live births. (When parents have confidence that their babies and children will survive, they limit the size of their families.)
- Eighty percent of the females between the ages of 15 and 19 are unmarried. (Delayed marriage is important when it is accompanied by delayed sexual activity or protected premarital sex.)

Death rates in the labor-intensive poor economies, such as India, have declined much more rapidly than they did in the core economies, such as the United States. Demographers attribute the relatively rapid decline to cultural diffusion. That is, the labor-intensive poor economies imported Western technology—such as pesticides, fertilizers, immunizations, antibiotics, sanitation practices, and higher-yield crops—which caused an almost immediate decline in the death rates. Figure 15.4 shows that the death rate in India was so high at the beginning of the twentieth century that the gap between the birth rate and the death rate was relatively small. Around 1920, the death rate began to steadily decline because of medical advancements, especially mass inoculations. But the birth rates have remained high relative to death rate.

The swift decline in death rates and relatively slower decline in birth rates has caused the populations in India and

other labor-intensive poor economies to grow very rapidly. Some demographers believe that such countries may be caught in a **demographic trap**—the point at which population growth overwhelms the environment's carrying capacity:

Once populations expand to the point where their demands begin to exceed the sustainable yield of local forests, grasslands, croplands, or aquifers, they begin directly or indirectly to consume the resource base itself. Forests and grasslands disappear, soils erode, land productivity declines, water tables fall, or wells go dry. This in turn reduces food production and incomes, triggering a downward spiral. (Brown 1987, p. 28)

International agencies such as the World Food Programme (WFP) and World Health Organization reject the



Barbara Houghton

India's death rate has declined dramatically over the 50 to 60 years but its birth rate has lagged, declining at a much slower pace. Today, the birth rate is 20.97 per 1,000, and the average woman has 2.6 children over the course of her lifetime. Of course, average means that there are women who have more or fewer children than the average number for the women of the country.

demographic trap The point at which population growth overwhelms the environment's carrying capacity.



Missy Gish

Many people who are overweight do not have resources to buy nutritious food—food low in salt and sugar, for example. This bottle of apricot juice costs about \$4.00. The bottle of Mountain Dew costs \$1.50. For people who earn minimum wage, the apricot juice takes more than 30 minutes to earn before taxes. The Mountain Dew takes 12.5 minutes to earn.

idea that rapid population growth, by itself, overwhelms the environment's carrying capacity. In fact, enough food is produced each year to nourish the estimated 800 million people in the world who are chronically hungry or that go to bed hungry each night. There is also enough food produced to meet the needs of the 2 billion who suffer from food insecurity—that is, they do not have the financial resources to secure food that is consistently safe, sufficient, and nutritious. The simple fact is that these 2.8 million people simply do not have the income to buy the food they need. That is because the world economy is structured so that access to sufficient amounts of food remains highly uneven across the globe.

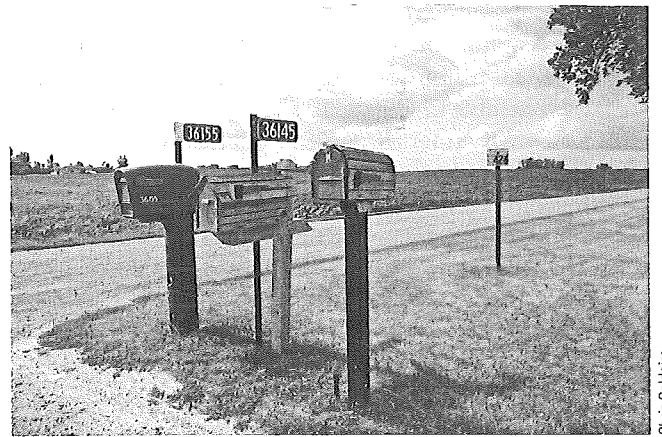
Urbanization

CORE CONCEPT 6 Urbanization is a transformative process by which people migrate from rural to urban areas and change the way they use land, interact, and make a living.

Urbanization encompasses (1) the process by which a population becomes concentrated in urban areas and (2) the corresponding changes in land use, social interaction, economic activity, and landscape. What constitutes an urban area varies by country. The U.S. Bureau of the Census (2010)

Teaching Tip: Read about the People's Republic of China's plan to create the world's largest city with 42 million people. Simply use a search

engine to find any number of articles about this historical plan.



Chris Caldeira

The U.S. Bureau of Census defines all areas not considered urban as rural. To be rural, the density or number of people per square mile must be fewer than 1,000.

defines an urban area as a densely settled core with at least 1,000 people per square mile and adjacent territory containing nonresidential urban land uses. In addition, there are outlying densely settled territories that are considered part of the urban area. Greater San Francisco, for example, includes the downtown but extends its influence and reach to surrounding cities and suburbs.

The world has 483 agglomerations, urban areas with populations of 1 million or more. Of these, 80 are in China, 48 are in India, and 53 are within the United States. Within the agglomeration category is the **megacity**, cities in which at least 10 million people reside. According to this definition, 26 megacities exist in the world. Two lie in the United States: New York (22.2 million) and Los Angeles (17.9 million). The largest megacity in the world is Tokyo with 32.4 million people (Brinkhoff 2011).

Urbanization in Labor-Intensive Poor Economies versus Core Economies

Urbanization in labor-intensive poor economies differs in several major ways from urbanization in core economies. At comparable points in the demographic transition, the rate of urbanization in labor-intensive poor economies far exceeds that of the core economies. Consider that during the 25 years of its most rapid growth, New York City increased its population by 2.3 million. As one contrasting example, consider that during the 25 years of its most rapid growth, Bombay, India, added 11.2 million people (Brinkhoff 2011).

agglomerations Urban areas with populations of 1 million or more.

megacity An agglomeration of at least 8 million (UN definition) or 10 million (U.S. definition) people.

Why such a difference? For one thing, “new worlds” existed to siphon off the population growth of Europe (Light 1983). Millions of Europeans who were pushed off the land were able to migrate to sparsely populated places, such as North America, South America, South Africa, New Zealand, and Australia. If the people who fled Europe for other lands in the eighteenth and nineteenth centuries had been forced to make their living in the European cities, the conditions there would have been much worse than they actually were:

Ireland provides the most extreme example. The potato famine of 1846–1849 deprived millions of peasants of their staple crop. Ireland’s population was reduced by 30 percent in the period 1845–1851 as a joint result of starvation and emigration. The immigrants fled to industrial cities of Britain, but Britain did not absorb all the hungry Irish. North America and Australia also received Irish immigrants. Harsh as life was for these impoverished immigrants, the new continents nonetheless offered them a subsistence that Britain was unable to provide. (Light 1983, pp. 130–131)

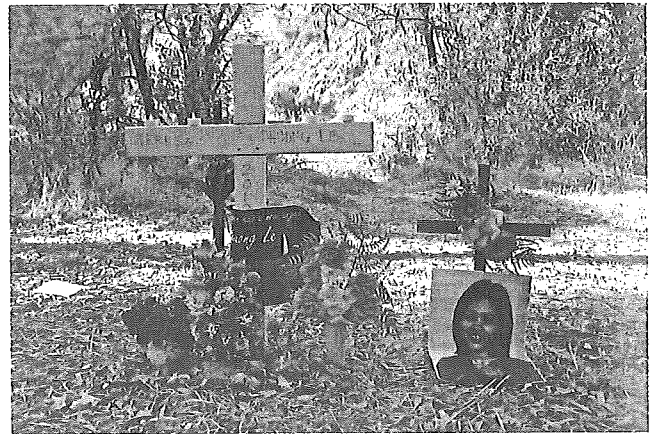
In India, for example, the problem of urbanization is compounded by the fact that many people who migrate to the cities come from some of the most economically precarious sections of India. In fact, most rural-to-urban migrants are not pulled into the cities by employment opportunities; rather, they are forced to move there because they have no alternatives. When these migrants come to the cities, they face not only unemployment, but also a shortage of housing and a lack of services (electricity, running water, waste disposal). One distinguishing characteristic of cities in labor-intensive poor economies is the prevalence of slums and squatter settlements, which are much poorer and larger than even the worst slums in the core economies.

It is a familiar sight in so-called underdeveloped countries to find somewhere, in the midst of great poverty, . . . a gleaming, streamlined new factory, created by foreign enterprise . . . Immediately outside the gates you might find a shanty town of the most miserable kind teeming with thousands of people, most of whom are unemployed and do not seem to have a chance of ever finding regular employment of any kind. (Schumacher 1985, p. 490)

Sociologist Kingsley Davis uses the term **overurbanization** to describe a situation in which urban misery—poverty, unemployment, housing shortages, and insufficient infrastructure—is exacerbated by an influx of unskilled, illiterate, and poverty-stricken rural migrants who have been pushed into cities out of desperation. In this regard, the United Nations estimates that one billion people worldwide live in slums lacking essential services such as water and sanitation (Dugger 2007).



U.S. Navy photo by Mass Communication Specialist 3rd Class Matthew



Chris Caldeira



Missy Gish

This chapter has focused on key experiences of human life, not just for individuals but also for societies. Those experiences are births, deaths, and migration. Specifically, we compared the countries that experience the highest and the lowest related rates. We emphasize extreme cases because they capture end points on the continuum of human experience. We learned how knowing a country’s birth, death, and migration rates allows us to think deeply about the human experience and the way a society is organized.