

the number of people who are too young or too old to work, compared to the number of people in their productive years. The larger the percentage of dependents, the greater the financial burden on those who are working to support those who cannot.

To compare the dependency ratios of different countries, we can divide the population into three age groups—0 to 14, 15 to 64, and 65 and older. People who are 0–14 years of age and 65-plus are normally classified as dependents. Nearly one-half of all people living in countries in stage 2 of the demographic transition are dependents, compared to only one-third in stage 4 countries. Consequently, the dependency ratio is nearly 1:1 in stage 2 countries, whereas in stage 4 countries the ratio is 1:2 (one dependent for every two workers).

Young dependents outnumber elderly ones by 10:1 in stage 2 countries, but the numbers of young and elderly dependents are roughly equal in stage 4 countries. More than 40 percent of the people are under age 15 in sub-Saharan Africa, compared to 20 percent or less in Europe and North America (Figure 2-18). The large percentage of children in sub-Saharan Africa strains the ability of these relatively poor countries to provide needed services such as schools, hospitals, and day-care centers. When children reach the age of leaving school, jobs must be found for them, but the government must continue to allocate scarce resources to meet the needs of the still growing number of young people.

As countries pass through the stages of the demographic transition, the percentage of elderly people increases. The higher percentage partly reflects the lower percentage of young people produced by declining CBRs. Older people also benefit in stage 4 countries from improved medical care and

higher incomes. People over age 65 comprise 16 percent of the population in Europe compared to 3 percent in sub-Saharan Africa.

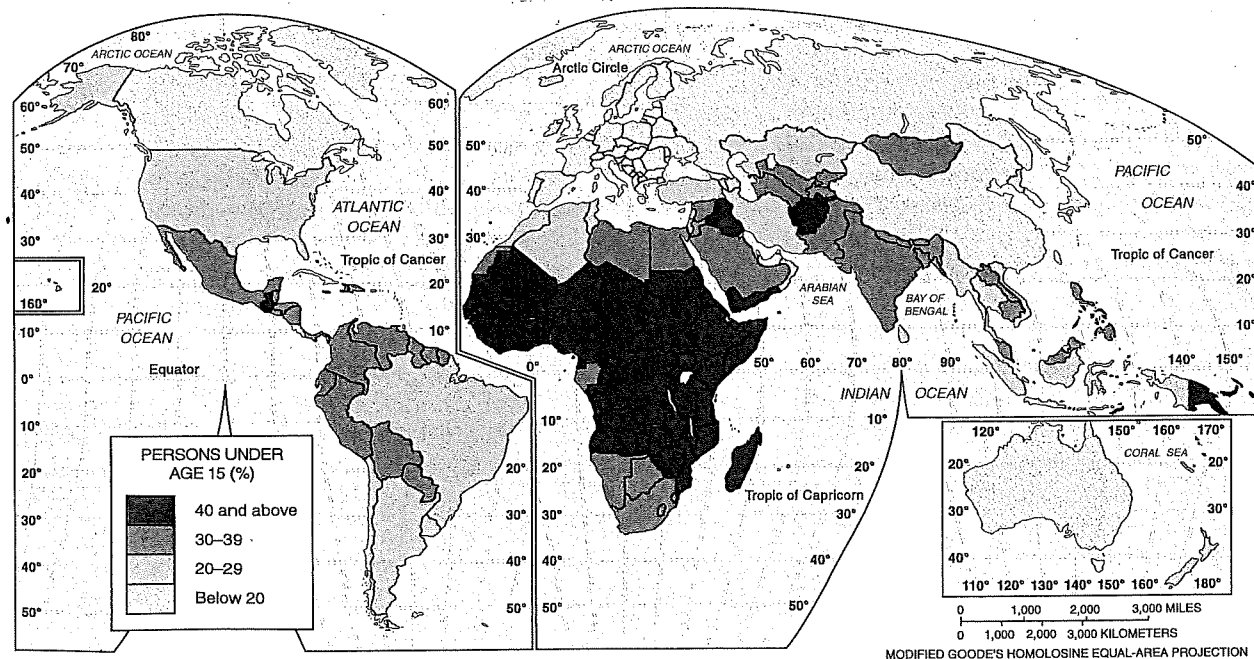
Older people must receive adequate levels of income and medical care after they retire from their jobs. The “graying” of the population places a burden on European and North American governments to meet these needs. More than one-fourth of all government expenditures in the United States, Canada, Japan, and many European countries go to Social Security, health care, and other programs for the older population. Because of the larger percentage of older people, countries in stages 3 and 4 of the demographic transition, such as the United States and Sweden, have higher CDRs than do stage 2 countries.

## Sex Ratio

The number of males per hundred females in the population is the **sex ratio**. It varies among countries, depending on birth and death rates. In general, slightly more males than females are born, but males have higher death rates. The ratio of men to women is about 93:100 (that is, 93 men for each 100 women) in Europe and 97:100 in North America. In LDCs, the ratio is 103:100.

In the United States, males under age 15 exceed females 105:100. Women start outnumbering men at about age 40, and they comprise 58 percent of the population over age 65.

In stage 2 countries, the high mortality rate during childbirth partly explains the lower percentage of women. The difference also relates to the age structure, because stage 2 countries have a larger percentage of young people—where males generally outnumber females—and a lower percentage of older people, where females are much more numerous.



**FIGURE 2-18** Percent of population under age 15. A map of the percentage of people over age 65 would show a reverse pattern, with the highest percentages in Europe and the lowest in sub-Saharan Africa and the Middle East.