The entire world’s population, which exceeded 5.4 billion in 1992, is growing at about 1.7% a year. That means a doubling time slightly longer than 41 years, if that growth rate does not slow. This rate is down from a peak of about 2% during the sixties; since then, birth rates have declined in all parts of the world except Africa and the Middle East.

Despite slower growth in the world’s population, more people are added to the total now than ever before because of the larger population base. The difference of course is between a rate of growth and growth in absolute numbers.

In 1992, the world’s population grew by about 92 million people. Of that number, 94% lived in Africa, Asia, and Latin America, with Asia alone contributing 63% of the total. Natural increase in the United States contributed over a third of the remaining 6.0%.

It is possible to look at the geographic pattern of population growth in greater detail. Japan, Russia, Ukraine, Belarus, and most of Europe, which together made up 13% of the world’s population in 1992, were close to zero population growth in that year, with rates of natural increase at or below 0.3%. Even so, their contribution to the increase in world population was 1.2 million, or just over 1% of the total. One fourth of this increase was in Russia.

Another 8.4% of the world’s population was experiencing relatively slow but still substantial annual rates of natural increase—from 0.4% to 0.9%. Those countries included the United States, France, Poland, Canada, Australia, and the Netherlands. The United States made up more than half the population of this group and contributed almost two-thirds of the nearly 3.2 million annual increase in population.

A third of the world’s population is growing between 1.0% and 1.9% a year, a significant rate of increase, especially considering the large size of some members of this group. China, a fifth of the world’s population by itself, dominates it, but it also includes Indonesia, Brazil, Thailand, South Korea, and Myanmar. Together, these countries contributed 28% of the 92-million-person increase in world population in 1992; China alone contributed more than 15 million additional people.

Another third of the world’s population is growing at rates between 2.0% and 2.9% a year. These are very rapid rates that, without abatement, translate into doubling times of between 24 and 35 years. India, with nearly 900 million people, dominates this group, but several other giants are included as well: Bangladesh, Mexico, Vietnam, the Philippines, Turkey, Ethiopia, and Egypt. These countries contribute disproportionately to world population growth: 42% of the total increase in 1992.

A final 12% of global population is growing extraordinarily fast, at natural increase rates of 3.0% or more. Pakistan is the largest country in this group, and its growth rate means that, alone, it contributed nearly 3.8 million additional people to the world’s population in 1992. Other large countries, both in population size and annual increase, include Nigeria, Iran, and Zaire. Together, the countries in this group contributed nearly a fourth of the world’s total 1992 population growth.

The 17 countries that contributed a million or more people to the world’s population in
1992 are listed in Table 1 in order of their contribution. Together, they accounted for more than two-thirds of the total increase. If the countries of the former Soviet Union are aggregated, they contributed nearly another 2 million people to the world’s population. Europe as a whole added just over 1 million.

The pattern of fertility around the world today bears considerable resemblance to the pattern of population growth, but the match isn’t perfect. While any cutoff is a bit arbitrary, and the credibility and precision of data on fertility rates vary from place to place, it is useful to divide the countries of the world into the following groups:

1. Countries with TFRs at or below replacement level (2.1 children per woman in this discussion);

2. Those with TFRs above replacement but not as high as a three-child norm (TFR 2.2–2.9);

3. Countries with medium to high fertility rates (TFR 3.0–3.9);

4. Countries with high to very high fertility rates (TFR 4.0 and above).

Table 2 summarizes the total population and the percentage of the world’s population in each category. As that table shows, approximately one-fourth of the world’s population is in each group.

More specifically, about 1.2 billion people live in countries with fertility at or below replacement level. This group includes most of Europe, the European portions of the former Soviet Union, Canada, the United States, Australia, New Zealand, Japan, South Korea, and some Asian island states such as Singapore and Hong Kong—the industrialized, and usually wealthy, countries of the world. This low-fertility group does not correspond precisely with the lowest-growth group, because an uneven age structure keeps some of these countries growing.

Another 1.4 billion people live where fertility exceeds replacement but does not reach three children per woman. China dominates this group, which also includes Thailand, North Korea, Sri Lanka, Colombia, Argentina, Iceland, Ireland, and five former Soviet republics.

Almost 1.5 billion people live in countries where fertility is between 3.0 and 3.9 children per woman. These include India, Indonesia, Malaysia, and Myanmar in Asia; Costa Rica, Mexico, Brazil, Ecuador, and Venezuela in Latin America; Turkey, Tunisia, and Lebanon in southwest Asia; and Kyrgyzstan of the former Soviet Union.

Nearly 1.3 billion people live in countries where families have an average of four or more children. Included in this group are nearly all the countries on the continent of Africa and in the Middle East; Afghanistan and Iran; Nepal, Pakistan, and Bangladesh; Laos, Cambodia,
Vietnam, and the Philippines; all of Central America but Costa Rica, Mexico, and Panama; Peru, Bolivia, and Paraguay; and three former Soviet republics in central Asia. Two-thirds of the 1.3 billion people live in countries where families average five or more children.

Another dominant feature of fertility patterns is their decline in many countries in the past three decades. Birth rates have fallen very rapidly in some parts of the world and by at least a third in some 26 countries. In Singapore, Hong Kong, and Taiwan, for example, total fertility rates have fallen by at least 70%, from more than six to fewer than two children per woman. In four other countries (China, Cuba, Mauritius, and Thailand), TFRs have fallen by about two-thirds, to levels close to but above replacement. In several other countries, women have around half as many children as their mothers and aunts had 30 years ago. Mexico, Brazil, Colombia, Costa Rica, Turkey, Venezuela, and the United States are in that category. In India, the Philippines, Egypt, and Peru, fertility has fallen by about a third.

**Exercises**

1. Using the Population Reference Bureau Data Sheet, make a table of the percentage of married women using modern contraception in each of the categories of total fertility rates used in this text (at or below replacement level; 2.2–2.9; 3.0–3.9; 4.0 and above) for countries with populations of more than one million (where data are available). What conclusions can you draw?

2. Plot on a graph the relationship between total fertility rate and gross national product per capita for countries with populations of more than 1 million from the data sheet (except include all the countries of Western Asia for which data are available regardless of population size). What conclusions can you draw?

**Discussion**

1. The following conclusions are based on 1992 data; your results may differ. It is perhaps not surprising that where fertility is lower, use of modern family planning methods is more widespread—in general. Modern family planning methods (the pill, condom, IUD, and sterilization; see the definitions on the back of the data sheet) are used by between 60% and 75% of married women of reproductive age in the countries where fertility is at or below replacement level, except in Italy, Portugal, Spain, Eastern Europe, and the European republics of the former Soviet Union. (In all but the former Soviet republics, similarly high percentages of fertile, married women use some form of contraception, but more than half use traditional methods that include coitus interruptus—withdrawal before ejaculation—and rhythm). In the Belarus, Russia, and the Ukraine, data on traditional methods do not exist, and less than a quarter of married women of reproductive age use modern methods. (It is widely understood that abortion is responsible for the low birth rates in those countries where modern contraception is not widely used.)
Where fertility exceeds replacement level but does not reach the three-child norm, and where data are available, 40% to 55% of women of reproductive age use modern contraception. Use rates are higher in Thailand and Puerto Rico, where nearly two-thirds of married women use modern contraception, and in China, where 70% do. And use rates are lower in the former Soviet republics: less than a tenth to a fifth of married women. (Again, abortion is responsible for the lower-than-expected fertilities in the former Soviet republics.)

Where fertility is between 3.0 and 3.9 children per woman, between a third and half of them use modern contraception. In countries where families have on average between four and five children, use of modern contraceptives runs from about a quarter to less than half of couples. In the highest-fertility countries, many use rates run in the single digits, with most of the rest lying between 10% and 25%. Zimbabwe and Honduras are exceptions, with approximately a third of couples using modern contraception.

While in general fertility goes down as use of modern contraception goes up, the relationship is far from perfect. For example, China and Thailand have total fertility rates—2.2 and 2.4, respectively—a bit higher than one would expect from their use of modern contraception: 70% in China and 64% in Thailand. Elsewhere in the world (for example in Switzerland, Norway, and the United Kingdom), contraceptive prevalence that high is associated with lower fertility. Similarly, Zimbabwe has a TFR of 5.6 with, if the numbers are reliable, 36% of women of reproductive age using modern contraceptives; Spain—again, if the numbers are credible—achieves a total fertility rate of 1.3 with 38% use of modern contraceptives.

Culture may explain why a very high use of modern contraception in China still yields a fertility of 2.2. The Chinese have a long tradition of large families, including a strong preference for sons, a tradition that is only partially overtaken by strong government policy in favor of small families. Likewise in Zimbabwe: couples may be using modern contraception there to space the five or six children they want to have, rather than to limit themselves to the three or four children one might expect from that level of contraceptive use.

2. Conventional wisdom holds that the strongest explanation of fertility lies with wealth—that as people become richer, they have fewer children. Again, this has a general truth to it, but it is not uniformly the case. The countries with the lowest fertility in 1992 do include the wealthiest—Japan and the countries of Europe and North America, with gross national products per capita of $15,000 to more than $30,000. Likewise, the highest-fertility countries are in general the poorest—most of Africa, Bangladesh, Nepal, southeast Asian countries with a recent history of war (Vietnam, Cambodia, and Laos), and some of the poorest countries of Latin America, such as El Salvador, Guatemala, Nicaragua, Bolivia, and Peru.

On the other hand, Middle Eastern oil-exporting countries with per capita GNPs of nearly $20,000, comparable to those in Europe and North America, have fertilities among the highest in the world. Among the rest of the high-fertility group, GNPs per capita vary from below $200 to $3,000; and included in the low-fertility countries are Greece, Portugal, South Korea, and some former Eastern Bloc countries, with per capita GNPs between $2,000 and $6,000. So the match between high income and low fertility is far from perfect.