Since World War II, accelerating globalization has affected population dynamics in several ways. The rapid diffusion of public health and contraceptive technology has improved life expectancy and lowered fertility in most parts of the world. Yet at the same time, international travel and migration have contributed to the global HIV/AIDS epidemic and the reemergence of other infectious diseases.

More indirectly, economic growth stimulated by globalization has improved standards of living with associated health benefits. Yet in some places, economic growth has brought negative health consequences, for example related to urban sprawl and dangerous levels of air pollution.

The size, growth, and age structure of national populations also affect globalization. Population change influences the movement of people, products, and investment capital among countries. Favorable changes in population age structure also have a positive influence on economic growth.


GLOBALIZATION REVIVED

After centuries of increasing globalization, the period from 1914 to 1945 can be described as a retreat behind national boundaries. Two world wars combined with a devastating economic depression left national markets operating virtually in isolation. In 1945, the international monetary system was in shambles, tariffs were high in virtually every country, and voluntary immigration was severely restricted.

Since then, tariff reductions have gradually restored the integrated global markets for manufactured goods characteristic of the late 19th century. In most countries, imports and exports have increased exponentially (Figure 1).

There are some exceptions to this trend, however. Trade in agricultural products remains heavily protected by most industrialized countries, and an elaborate maze of quotas still constrains international trade in textiles.

Restrictions on international investment—in place at the end of World War II—remained in effect in the United States, Europe, Japan, and most of the developing world for several decades. The United States began removing restrictions on the movement of capital in the 1960s. Japan and the European countries followed in the 1970s, and the trend accelerated in the 1980s. Under pressure from the International Monetary Fund, developing countries began removing restrictions in the 1980s and 1990s.

International migration has increased steadily over the past 50 years,
offsetting, to some extent, differences in national population growth and age structure. The United States admitted 2.5 million immigrants in the 1950s, 4.5 million in the 1970s, and 9.1 million in the 1990s. Despite restrictive immigration policies, the number of "registered foreigners" in Japan more than doubled between 1980 and 2000—from 783,000 to 1.7 million.

Immigrants tend to be young workers who have children or begin families once they relocate. Payroll taxes from these workers help support social security systems under pressure from the growing number of elderly retirees typical of today's advanced economies.

**POPULATIONS IN TRANSITION**

Countries all over the world have experienced, or are experiencing, a dramatic period of population change. In a process referred to as the demographic transition, first mortality and then fertility rates decline from high to low levels. During the interval between mortality and fertility decline, populations may grow very quickly.

The broad outlines of the transition are similar everywhere, but the pace and timing have varied widely. The transition from high to low fertility took nearly 200 years in France, for example, but only 100 years in the United States.

The mortality and fertility transition began more recently in developing regions of the world, and the changes have been much more abrupt than in the West. Variations in the demographic transition have profound implications for these populations' growth rate, age structure, and ultimate size.

One striking aspect of the demographic transition has been a growing and then shrinking gap in life expectancy and fertility between developed and developing countries. In 1820, life expectancy was only 12 years higher in Japan and the West than in the rest of the known world. Over the next 130 years, life expectancy improved everywhere, but the gap grew larger—reaching 22 years in 1950.

Then, in the second half of the twentieth century, life expectancies began to converge (Figure 2). In 1999, the gap between developed and developing countries was only 14 years. Fertility levels followed a similar pattern (Figure 2), with the gap between developed and developing countries growing and then shrinking over the course of the century.

The demographic transition also has an effect on population age structure. The economic importance of this phenomenon is depicted by changes in a population's dependency ratio—the young population (0–14 years) plus the old population (65+) divided by the working-age population (15–64). A decrease in the dependency ratio means "fewer mouths to feed" for every person of working age, providing opportunities for a higher standard of living and greater saving and investment.

The reduction in a population's dependency ratio as fertility declines has been referred to as a "demographic bonus." The relative abundance of workers—if combined with sound economic policies—can lead to outstanding economic growth.

In the West, the overall trend in the dependency ratio was downward until 1950, when it was close to 0.5. This means that there was one dependent in the population for every two people of working age.

In Western countries, the post–World War II baby boom produced a large, but temporary, increase in the dependency ratio. Currently, the dependency ratio in the West varies within a relatively narrow band near the 0.5 level. In Japan, the dependency ratio in 2000 was 0.47.

The trend in the developing countries has been noteworthy. Over the past century, the precipitous decline in infant and child mortality, combined with continued high levels of fertility, produced an enormous increase in the
dependency ratio. The resulting gap in dependency ratios between developed and developing countries peaked in the 1970s. Since then, birth rates have fallen all over the world, and the gap in dependency ratios has diminished.

As larger proportions of national populations move into the elderly age group, dependency ratios will rise again—starting first in the most advanced economies. As a result, dependency ratios over the next 50 years will be lower in some developing countries than in countries that are much wealthier today. Figure 3 shows how dependency ratios are projected to go up in Japan and South Korea, while they continue to go down in India, the Philippines, and Malaysia. This shift in countries enjoying the “demographic bonus” may well become a factor in their relative economic performance.

**IMPACT OF GLOBALIZATION ON POPULATION**

Globalization has both direct and indirect effects on population. The movement of people around the world has accelerated the spread of disease, most notably of HIV/AIDS. On the other hand, the global spread of public health, medical, and family planning technology has played a key role in worldwide gains in life expectancy and reductions in fertility.

Indirectly, globalization influences the speed of development, stimulating faster economic growth in some countries than in others. The pace of development, in turn, influences job opportunities and incomes, nutrition and literacy levels, urbanization, women’s status, and other social and economic conditions that affect fertility, mortality, and migration.

In general, countries that liberalized trade in the decades after World War II have enjoyed higher than average economic growth. During the 40 years between 1960 and 2000, the relatively closed Japanese economy grew at an annual rate of 4.9 percent. Over the same 40-year period, annual economic growth was 6.5 percent in Malaysia and 7.4 percent in South Korea.

---

Figure 2 Life expectancy and fertility in selected countries of Asia, 1950–55 to 2000–2005


Note: Fertility is expressed as the total fertility rate (TFR), which indicates the average number of children that a woman would bear, at current age-specific fertility rates, throughout her reproductive years.

---

Figure 3 Dependency ratios in selected countries of Asia, 1950 to 2050


Note: Dependency ratios are calculated as the young population (0–14 years) plus the old population (65+) divided by the working-age population (15–64).
The proliferation of technology has helped usher in a global convergence in birth and death rates, particularly where combined with rapid economic growth. Japan and Singapore now rank number one and two in the world in life expectancy, while South Korea, Taiwan, Thailand, Hong Kong, and Singapore all have fertility rates lower than the United States. These Asian countries owe a large part of their success to their efforts to integrate themselves into the global economy. An even more widespread phenomenon has been the delinking of demography and development. Relatively poor countries such as India and the Philippines have managed to substantially increase life expectancies and lower birth rates. The demographic gap between rich and poor countries has diminished much more rapidly than the economic gap.

What accounts for this phenomenon? An important factor has been the successful globalization of health care, driven in large part by a proliferation of nonprofit and intergovernmental organizations dedicated to improving economic, social, environmental, and demographic conditions in developing countries. Before 1950, work to improve health in the developing world was the province of underfunded missionaries, a few private foundations, and the nascent efforts of the League of Nations. Large-scale efforts by national governments, multinational organizations, and private nonprofit groups only became an important force in the second half of the century.

Although development assistance has generally declined since the 1970s, aid from donor countries continues to be important for many developing countries. In 2000, for example, donor aid funded roughly 20 percent of all health-care expenditures in sub-Saharan Africa (excluding South Africa).

### COMPLETING THE CIRCLE: IMPACT OF POPULATION ON GLOBALIZATION

Historically, population growth has served as an impetus for global exploration, international migration, and colonization. In recent years, population dynamics have influenced globalization through effects on the distribution of labor and capital. Differences between each country’s supply of labor and capital have an important influence on trade, foreign investment, and international migration.

Countries with a limited supply of one of these economic resources gain by “cooperating” with countries that have an abundant supply. Either the resources themselves can be exchanged through the export of labor (migration) or capital (foreign investment), or the countries can specialize in the production of final goods and services in which they have a comparative advantage and then engage in trade.

Countries at an early stage in the demographic transition tend to be labor exporters, capital importers, and producers of labor-intensive goods and services. Countries at a late stage in the demographic transition tend to be labor importers, capital exporters, and producers of capital- and skill-intensive goods and services.

Thus, Hong Kong and Singapore, among the first Asian countries to achieve low fertility, have become major importers of labor. The Philippines and India, two countries at the early stages of fertility transition, are leading labor exporters.

In many developing countries, working-age populations will continue to expand for several decades, while population aging will raise dependency ratios in Japan, Europe, and—to a lesser extent—the United States. Given these demographic trends, Asia and other developing regions should be able to increase their share of global manufacturing production. Lower dependency ratios in these countries will provide an opportunity for export expansion and rapid economic growth.

### POLICY IMPLICATIONS

Over the past 50 years, support from international donors has been critical in stimulating the demographic transition through the global spread of modern health and family planning technology. In several Asian countries, these efforts have contributed to unprecedented economic growth. More broadly, international support has been remarkably successful in reducing the gap in fertility and life expectancy between rich and poor countries.

The global demographic transition is not yet complete, however. Many countries in Asia are just beginning to see significant increases in life expectancy and reductions in birth rates. In African countries severely affected by HIV/AIDS, life expectancy is actually decreasing. Now is not the time to reduce international assistance to population and reproductive health programs that have proven so spectacularly successful.

In addition to support from international donors, further improvements in life expectancy and reductions in fertility will require a supportive policy environment at the local level. Developing countries must continue to create and maintain institutions that promote modern public health and family planning. Sound economic planning and good governance are also required to ensure that improvements in health and fertility lead to success in the global market place.