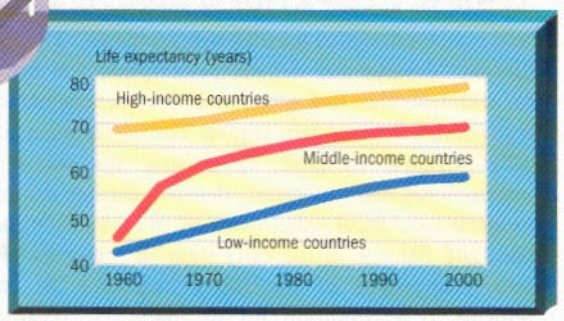
PICTURE THIS

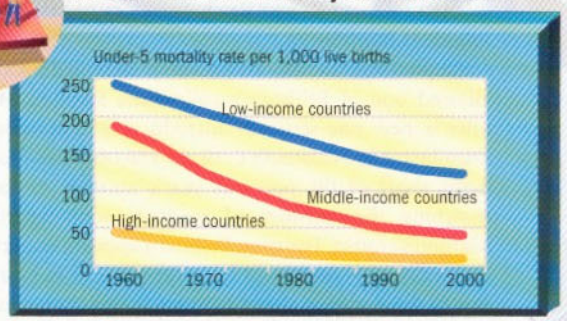
Checking Up on Health

IN MOST parts of the world, people are healthier and living longer, thanks to improved health services and living conditions and the more widespread use of immunization, antibiotics, and better contraceptives. Although this trend is likely to continue, hopes are fading in some regions where progress slowed or stopped in the 1990s, primarily as a result of the AIDS epidemic. Indeed, life expectancy in sub-Saharan Africa declined from 50 to 46 years between 1990 and 2001. Moreover, most regions of the developing world will not, at the current pace, reach the Millennium Development Goals for health by 2015—including reducing child and maternal mortality and combating HIV/AIDS, malaria, and other diseases. Here, we give a snapshot of changes in the world's health and demographic conditions, and, in the following pages, four articles explore the importance of good health for economic development.

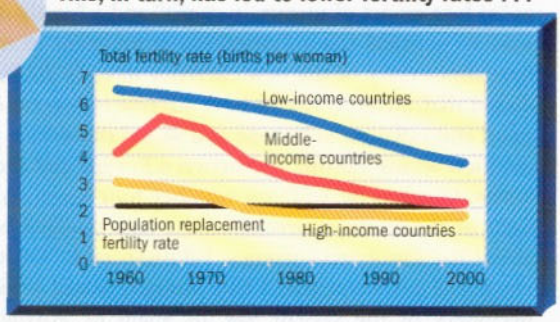
Better health care has extended lives and . . .



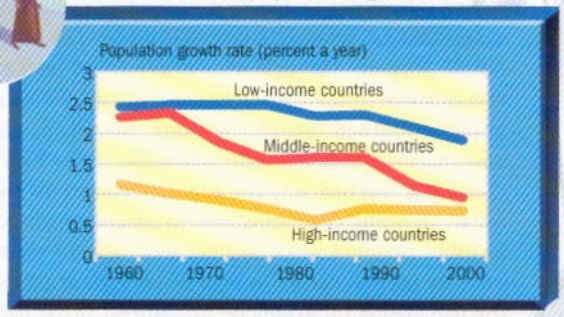
lowered under-5 mortality rates worldwide.



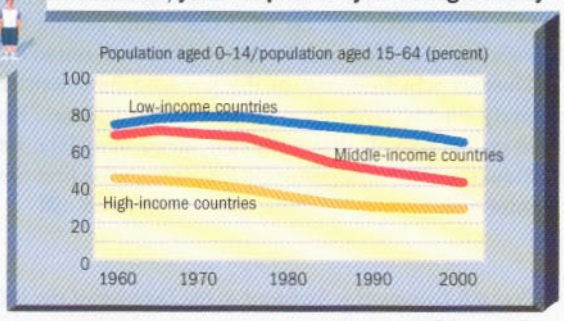
This, in turn, has led to lower fertility rates . . .



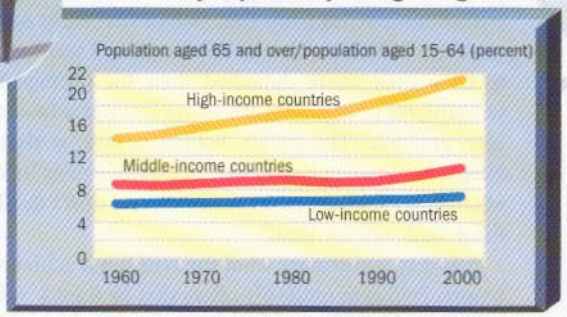
and thus slower population growth rates.



Worldwide, youth dependency is falling steadily . . .



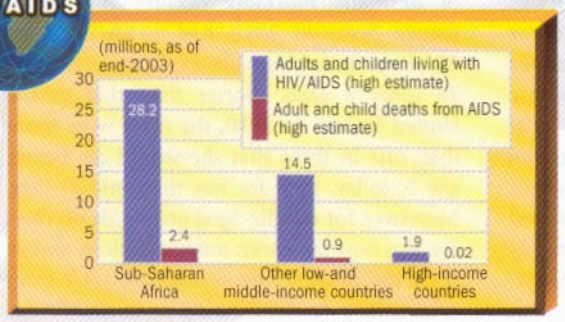
while elderly dependency is beginning to rise.



Source: The World Bank Group, World Development Indicators online at http://devdata.worldbank.org/dataonline/.

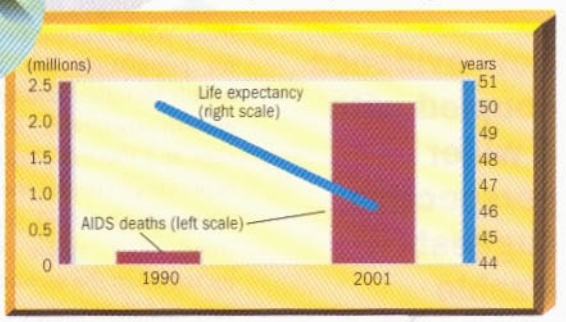
PEOPLE IN developing countries suffer from far higher rates of infectious diseases than do people in the developed world. For example, about 99 percent of all the deaths from AIDS, tuberculosis, and malaria occur in developing countries. To finance a dramatic turnaround in the fight against these diseases, the UN Global Fund was created in 2001. AIDS, in particular, has ravaged populations in the developing world, and major childhood infections and maternal mortality continue to present formidable challenges. At the same time, noncommunicable diseases, such as heart disease and cancer, already pose huge and rapidly growing threats as populations continue to age. In 2001, over 13 million people in developing countries died of cardiovascular diseases alone. This figure is startling compared with the 7.9 million people who died of all causes in high-income countries. Tobacco, which is a major contributor to three main causes of death worldwide—heart disease and stroke; cancers, particularly lung cancer; and chronic obstructive pulmonary disease—is already killing 2 million people a year in the developing world, and the number of tobacco-related deaths is expected to more than triple over the next quarter century.

Over 44.6 million people worldwide are living with HIV/AIDS, most of them in Africa.



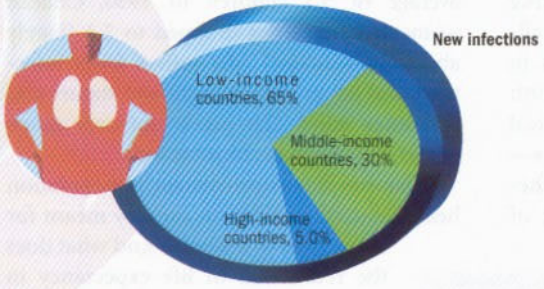
Sources: UNAIDS; and World Health Organization.

AIDS accounted for 2.2 million deaths in Africa in 2001, and life expectancy is falling.



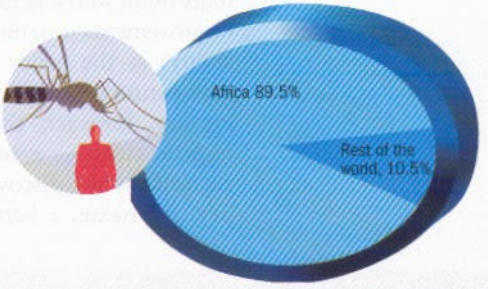
Sources: The World Bank Group, World Development Indicators online; and Disease Control Priorities Project Working Paper Number 20, November 2003.

Tuberculosis killed 1.7 million people in 2000; most new infections occurred in low-income countries.



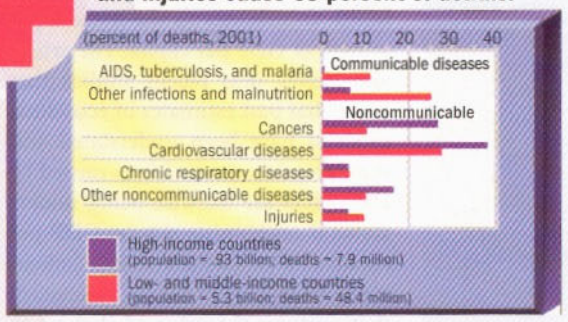
Source: World Health Organization.

Malaria was responsible for an estimated 1.1 million deaths in 2000, most of them in Africa.



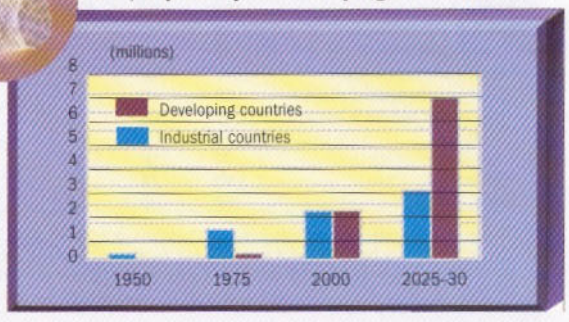
Sources: World Health Organization; and the World Bank Group, World Development Indicators.

In poorer countries, noncommunicable diseases and injuries cause 63 percent of deaths.

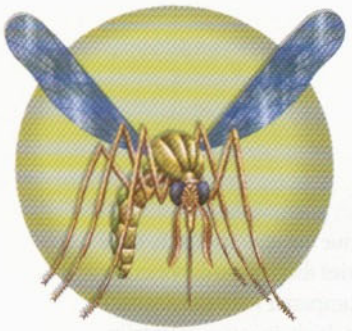


Source: World Health Organization.

Tobacco-related deaths are expected to soar, especially in developing countries.



Source: World Health Organization.



Health, Wealth, and Welfare

David E. Bloom, David Canning, and Dean T. Jamison

New evidence coupled with a wider perspective suggest sizable economic returns to better health

THE LAST 150 years has witnessed a global transformation in human health that has led to people living longer, healthier, more productive lives. While having profound consequences for population size and structure, better health has also boosted rates of economic growth worldwide. Between the 16th century and the mid-19th century, average life expectancy around the world fluctuated but averaged under 40 years, with no upward trend. Life spans slowly but steadily increased in the second half of the 19th century and then jumped markedly in the 20th century, initially in Europe and then in the rest of the world (see table). Economic historians and demographers still debate the genesis of these changes, but they increasingly point to rising incomes (and resulting improvements in sanitation and food availability) as the major cause of declines in 19th-century mortality rates. For the 20th century, however, they believe technical improvements were the catalysts—particularly the discovery of the germ theory of disease, a better understanding of hygiene, and the development of antibiotics and vaccines.

Chile provides a well-documented example of dramatic mortality decline. A Chilean female born in 1910 had a life span of 33 years. Today, her life expectancy exceeds 78 (only 2 years shorter than that in the United States). In 1910, the odds were more than one in three that she would die before age 5; today, they are less than one in fifty. Moreover, for middle-aged people, death rates are also now far lower: today's Chilean female is far less likely to die as a young adult from tuberculosis or childbearing or in middle age from cancer. Mirroring these mortality changes are marked changes in her quality of life. She can choose to have fewer pregnancies and spend less time raising children: from an average of 5.3 children in 1950, Chilean women's fertility has dropped to 2.3 (barely above replacement). She suffers fewer infections and has greater strength and stature and a quicker mind. Her life is not only much longer, it is much healthier as well.

What has this improvement in population health since the mid-19th century meant for economies as a whole? And what does the recent fall in life expectancy in Africa and elsewhere as a result of the HIV/AIDS epidemic portend? This article tries to answer these questions by exploring the increasingly strong body of evidence showing that better health contributes to the more rapid growth of GDP per capita. The article also delves into recent studies that argue that past estimates of economic progress have been understated and that recent economic losses caused by HIV/AIDS are likewise being understated if economists rely on GDP per capita as a yardstick. A better indicator would be "full income," a concept that captures the value of changes in

Living longer

Life expectancy rose sharply around the world in the second half of the 20th century, but AIDS is undermining progress in Africa and elsewhere.

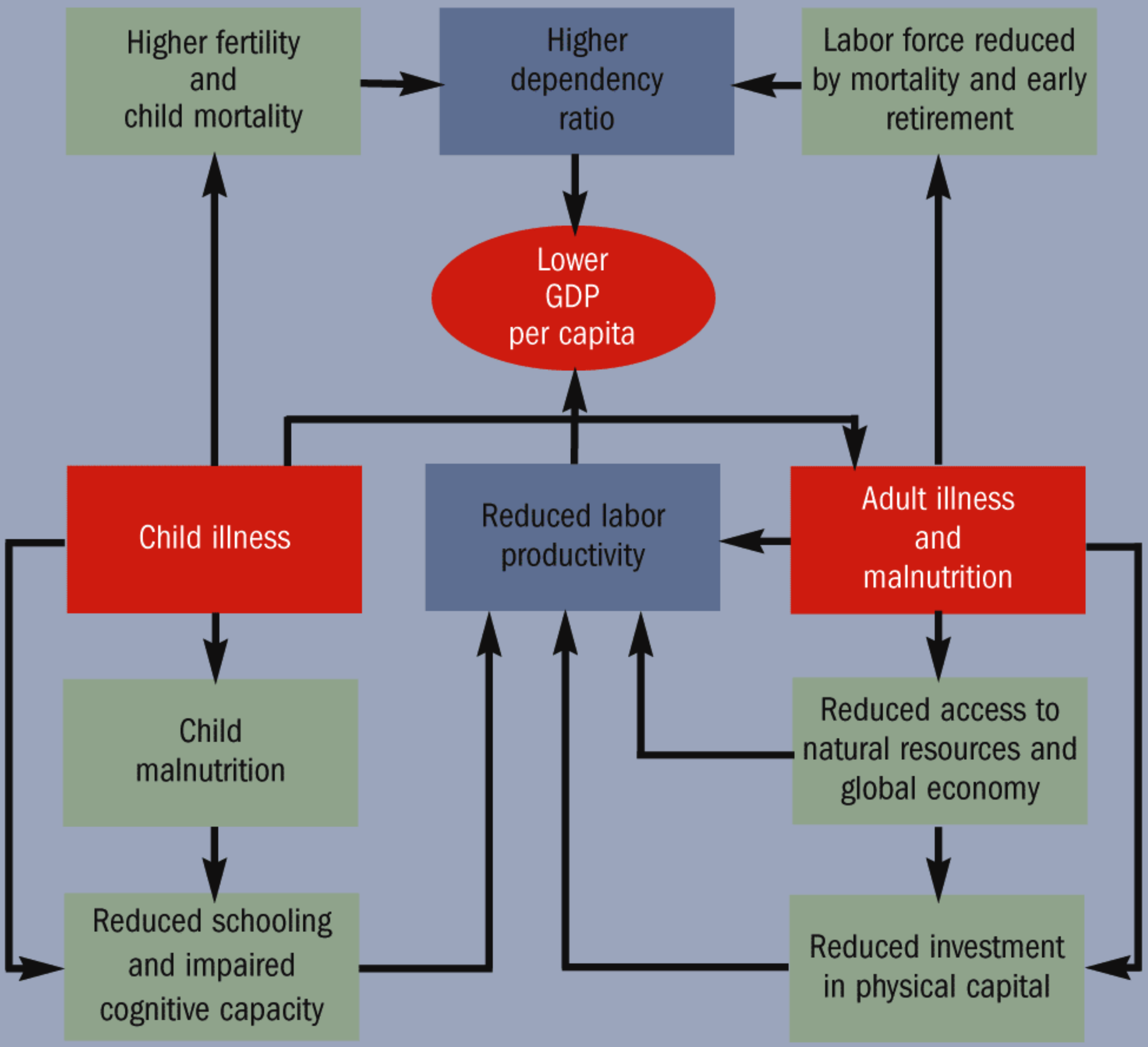
	Life expectancy, years			Rate of change in years per decade	
Region	**1960**	**1990**	**2001**	**1960–90**	**1990–2001**
Low and middle income	**44**	**63**	**64**	**6.3**	**0.9**
East Asia and Pacific	39	67	69	9.3	1.8
Europe and Central Asia	n/a	69	69	n/a	0.0
Latin America and Caribbean	56	68	71	4.0	2.7
Middle East and North Africa	47	64	68	5.7	3.6
South Asia	44	58	63	4.7	4.5
Sub-Saharan Africa	40	50	46	3.3	-3.6
High income	**69**	**76**	**78**	**2.3**	**1.8**
World	**50**	**65**	**67**	**5.0**	**1.8**

Source: *World Development Indicators 2003* (Washington: World Bank, 2003).
Note: Entries are the average of male and female life expectancies. Assignment of countries to regions uses the World Bank convention for 2003 that is listed on the inside back cover of *WDI 2003*.

Chart 1

Health's links to GDP

Poor health reduces GDP per capita by reducing both labor productivity and the relative size of the labor force.



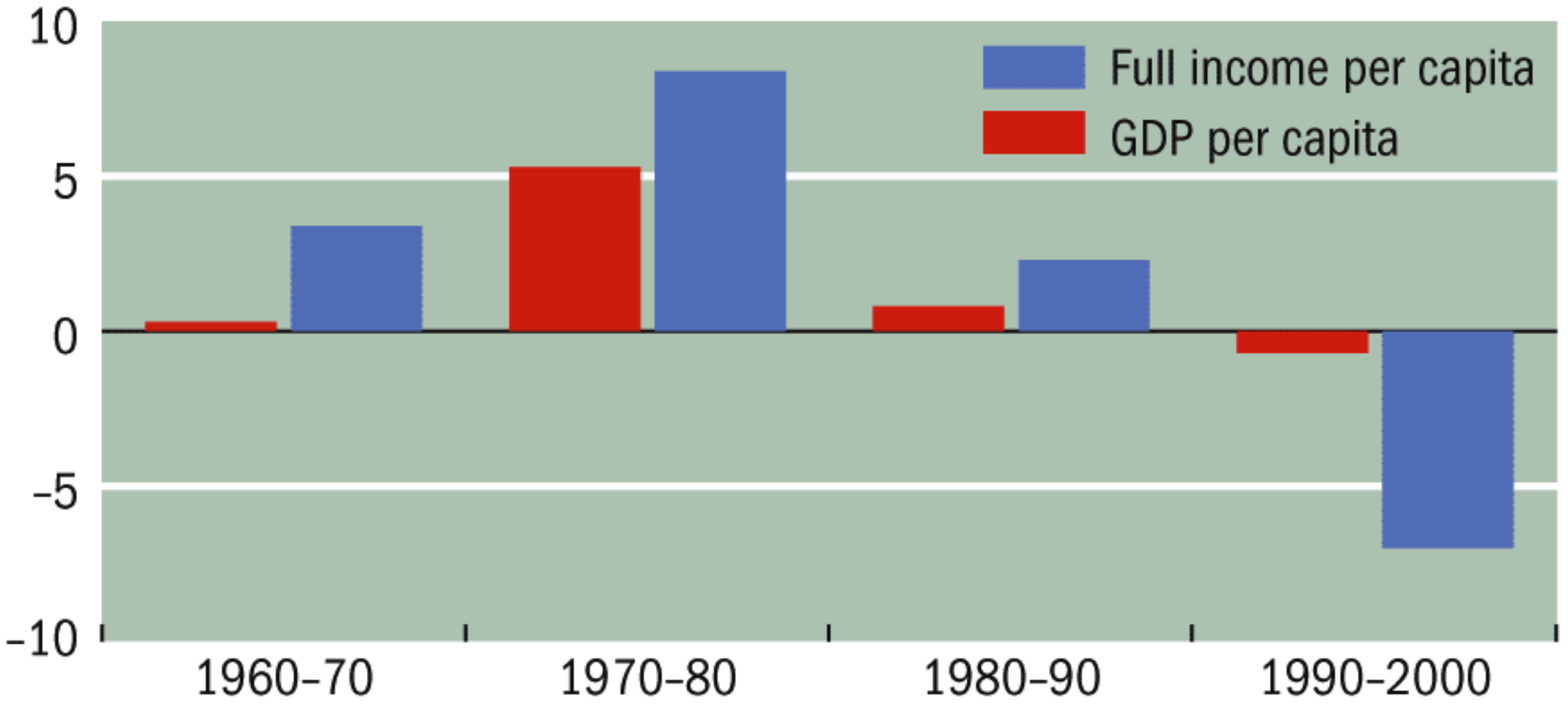
Source: Ruger, Jennifer Prah, Dean T. Jamison, and David E. Bloom, 2001, "Health and the Economy," page 619 in *International Public Health*, edited by Michael H. Merson, Robert E. Black, and Anne J. Mills (Sudbury, Massachusetts: Jones and Barlett).

Chart 2

Differing yardsticks

Trends in full income tell a very different story about Kenya's economic performance than trends in GDP.

(Average annual percentage change)



Source: Jamison, Sachs, and Wang, 2001.