

How a Healthy Economy Can Shorten Life Spans

By AUSTIN FRAKT

The health of a nation's economy and the health of its people are connected, but in some surprising ways. At times like these, when the economy is strong and unemployment is low, research has found that death rates rise.

At least, in the short term. In the long term, economic growth is good for health. What's going on?

One study of European countries just before and during the Great Recession found that a one-percentage-point increase in the unemployment rate is associated with a 0.3 percent decline in the overall mortality rate. Other studies of Europe during different periods, as well as those of the United States, found a similar relationship between joblessness and mortality.

This is counterintuitive, since economic growth is a major factor in higher living standards. When the economy is more productive, we have more resources to promote health and well-being.

But a surging economy does more than generate greater income. An industrial economy also pumps out more air pollution as more goods are produced. Polluted air, it turns out, is a major contributor to the mortality-increasing effect of an economic boom. In their analysis of how economic growth increases mortality, David Cutler and Wei Huang, of Harvard University, and Adriana Lleras-Muney, of U.C.L.A., found that two-thirds of the effect can be attributed to air pollution alone.

It's a different story with agricultural economies. The Cutler, Huang and Lleras-Muney study, published as a National Bureau of Economic Research working paper, found that mortality rates fall when such economies are growing. Before 1945, when agriculture was more dominant in the United States economy, growth was not associated with rising mortality either.

Other research published in the journal *Health Economics* supports the pollution hypothesis. In their analysis of the Great Recession in Europe, José Tapia Granados of Drexel University and Edward Ionides of the University of Michigan found that a one-percentage-point increase in the unemployment rate is associated with a one percent lower mortality rate for respiratory illnesses, as well as reductions in mortality for cardiovascular disease and heart conditions, which are known to be sensitive to air pollution. In countries where the recession was more severe — the Baltic States, Spain, Greece and Slovenia —

respiratory disease mortality fell 16 percent during 2007-2010, compared with just a 3.2 percent decline in the four years preceding the recession.

Other factors contribute to rising mortality during expansions. Occupational hazards and stress can directly harm health through work. Some studies find that alcohol and tobacco consumption increases during booms, too. Both are associated with higher death rates. Also, employed people drive more, increasing mortality from auto accidents.

During recessions, people without jobs may have more time to sleep and exercise and may eat more healthfully. One study found that higher unemployment is associated with lower rates of obesity, increased physical activity and a better diet. On the other hand, suicides increase during economic downturns.

Some recent work suggests that economic booms may have become less deadly and busts more so in recent years. This could be a result of less polluting production in modern, expanding economies, or of better medical care for those with conditions

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sensitive to pollution. Safer roads and cars, and less driving under the influence of alcohol and other substances, could also play a role.

"It's also possible that opioids and other drugs may have made recessions more harmful to health than they used to be," Mr. Cutler said.

Other analysis shows that although smaller economic booms increase mortality, larger ones decrease it. Japan's economic booms in the 1960s and 1970s are associated with longer life spans there, for example. Serious and lengthy downturns — like the Great Depression — are associated with shorter lives, even as smaller ones lengthen them.

Wealthier nations are healthier nations, an effect seen across generations. People in their formative years — children and teenagers — are particularly sensitive to the economic environment. Conditions in utero can have lasting health and economic effects. Graduating from college during a recession can depress one's earnings for a decade. People growing up during a strong economy are more likely to have access to resources and to develop skills and opportunities that promote health. These benefits can last a lifetime, increasing longevity.

In total, there's little question that long-term economic growth broadly improves the human condition. But not everyone enjoys the gains equally. In the short run, economic expansions can cut short the lives of some.

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