Economic Aspects of the Opioid Crisis
Testimony before the Joint Economic Committee of the United States Congress

Sir Angus Deaton[1]
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Thank you, Chairman Tiberi, Ranking Member Heinrich, Vice Chairman Lee, and the members of the committee for holding this hearing on economics and the opioid crisis.

Deaths from legal and illegal drugs are contributing to an almost unprecedented increase in overall mortality among middle-aged white non-Hispanics. A century of mortality decline came to a halt at the end of the 20th century and mortality rates for this group were higher in 2015 than in 1998. Driven by these developments, life expectancy at birth, a key indicator of how well a society is doing, fell for white non-Hispanics from 2013 to 2014, and for the whole population from 2014 to 2015.

Rising life expectancy in America, and around the world, is one of several key indicators that life today is so much better than 50 or 100 years ago. That this measure should go into reverse is both stunning and devastating. No such reversal has taken place in other rich countries, though there are warning signs in other English-speaking countries, such as Britain, Ireland, Canada, and Australia. Nor is it happening for Hispanics in the US, nor for African Americans, whose mortality rate remains higher than that for whites, but is rapidly declining.

Opioids are a big part of this story. Supplies of opioids—the new forms of heroin, of fentanyl, and prescription opioids—have stoked and maintained the epidemic. Selling heroin is profitable and illegal. Selling prescription drugs is profitable and legal. Pharmaceutical companies have made tens of billions on prescription opioids alone while life expectancy has fallen. Our health care system has sometimes been better at generating wealth than at generating health.

Opioids have a legitimate if limited role in treating pain. But a case can be made that it would have been better if they had never been approved; physicians are far from infallible in deciding which patients are likely to become addicted and, once patients are addicted, treatment is difficult and often unsuccessful. A stronger case can be made against the widespread prescription of opioids within the community, by general practitioners and dentists. Enough opioids are prescribed each year to give every American adult a month's supply. Other countries restrict opioid use more carefully, for example to acute hospitalization or end of life care. It is estimated that the US, with 5 percent of the world's population, consumes 80 percent of the world's opioids.

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[1] Sir Angus Deaton, a Laureate of the Nobel Prize in Economic Sciences, is Senior Scholar and the Dwight D. Eisenhower Professor of Economics and International Affairs Emeritus, Woodrow Wilson School of Public and International Affairs and the Economics Department at Princeton University and Presidential Professor of Economics at the University of Southern California.

My own research, with my Princeton colleague Anne Case, has looked at opioid deaths as part of a broader epidemic of rising mortality. These are the deaths that we refer to as "deaths of despair." They consist of suicides and deaths from alcoholic liver disease as well as accidental overdoses from legal and illegal drugs. The opioid deaths are the largest component, but the other two causes are not far behind. In 2015, for white non-Hispanic men and women aged 50 to 54 without a college degree—who are much more seriously at risk than those with a college degree—deaths of despair are around 110 per 100,000, of which 50 are accidental overdoses, 30 are suicides, and 30 are alcoholic liver disease and cirrhosis.

In the last year or two, there has also been a turn-up in the mortality rate from heart disease—after many years of decline—and if obesity is the cause, as many argue, some of these deaths might also be classed as deaths of despair, which would put the total deaths of despair at levels approaching deaths from cancer or from heart disease, the two major killers in midlife the US today.

Figure 1 shows the all-cause mortality rates for the somewhat broader 45-54 group of white non-Hispanics (WNH), together with mortality rates for selected comparison countries. The mortality rates in midlife in those other countries continue to decline at the rates that were standard in the US prior to 1998. This turnaround in the US is driven by the opioid epidemic, by suicides, by cirrhosis, and by the slowing (and recent reversals) in the decline in heart disease. People are killing themselves by drinking, by accidentally overdosing, by overeating, or much more quickly, by committing suicide directly.

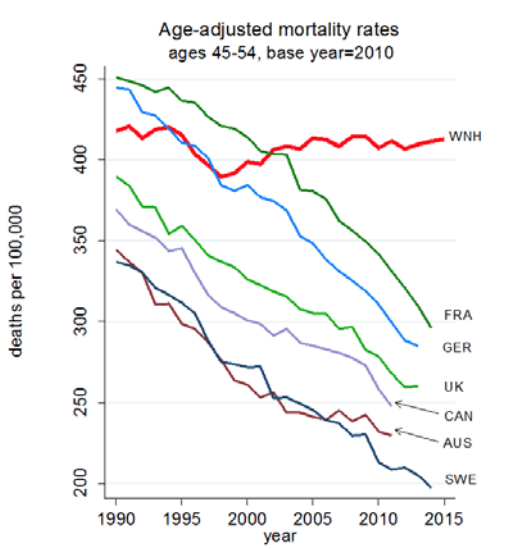

Figure 1: Age-adjusted mortality rates in midlife for the US and selected countries

Deaths of despair have risen in parallel for men and women, see Figure 2. Such deaths, like all suicides, are lower for women than for men, but the increases for men and women have marched in lockstep. For all-cause mortality, there are differences that reflect the history of men's and women's smoking, and the long-term effects on lung cancer, but those are not part of my story here. Rather, the rise in deaths of despair is a story of contrast between those with more and those with less education.

We note that deaths of despair among midlife whites have risen roughly in parallel for all levels of urbanization in the US, from inner-city MSA to rural counties. The *level* of deaths is lower, by about 20 per 100,000, or 70 compared with 90, in the fringe areas of large MSAs, but the growth over time has been the same as elsewhere

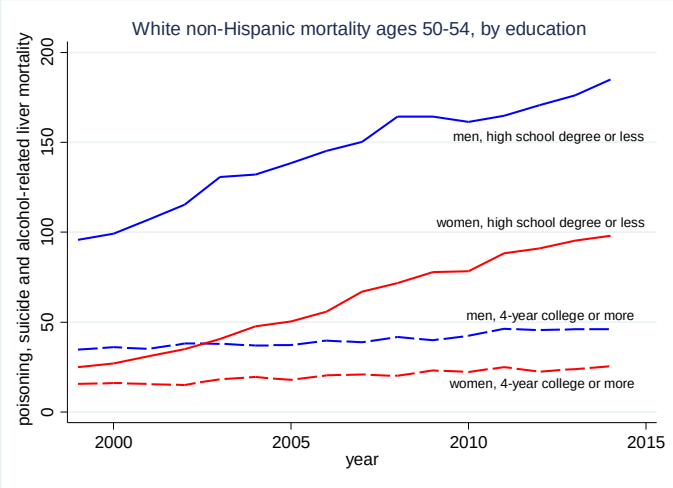

Figure 2: Deaths of despair (suicides, alcoholic liver disease, and accidental poisonings) by sex and education

Our work has also documented an increase in morbidity—especially pain, but also inability to function in various capacities—in the same age and ethnic group. Once again, people with less than a college degree do worse than those who have completed a four-year BA. One might have hoped that the increase in the use of opioids to combat pain might have *decreased* the prevalence of pain, but that has not happened. Perhaps the increase in pain would have been even larger without opioids, but that would leave us with a huge increase in pain to be explained.

We think of opioids, not as the fundamental cause of the epidemic of midlife mortality and morbidity, but as an accelerant, a set of drugs that added fuel to the fire, and made an already bad situation much worse. And it is in that broader context that we can begin to see the economic underpinnings of the epidemic.

Deaths of despair cannot be readily explained by the contemporaneous state of the economy, by the Great Recession, by unemployment, or by family incomes. There are many documented links between the economy and health, not always in the same direction, but neither the opioid epidemic nor the broader epidemic of deaths of despair can be matched to patterns of unemployment or income over the past 20 years. In particular, opioid deaths, and deaths of despair more broadly were increasing year on year prior to the Great Recession, and continued to increase year on year afterwards. This was in spite of large fluctuations in employment and in incomes. We tend to regard all of these deaths of despair as suicides in one form or another, and we believe that suicides respond more to prolonged economic conditions than to short-term fluctuations, and especially to the social dysfunctions, such as loss of meaning in the interconnected worlds of work and family life, that come with prolonged economic distress.

A longer-term perspective is more promising. Those who were in their early 50s in 2010 were born in the early 1960s. Raj Chetty and his collaborators have estimated that about 60 percent of this cohort had higher incomes at age 30 than did their parents at the same age, compared with 90 percent of those born 20 years earlier. This is the group that was first hit by the long-term decline in median earnings that set in after the early 70s, and those without a four-year college degree would not have benefited from the rising college wage premium.

Workers who entered the labor market before the early 70s, even without a college degree, could find good jobs in manufacturing, jobs that came with benefits and on the job training, and could be expected to last, and that brought annual increases in earnings, and a road to middle class prosperity. Such jobs have become steadily less prevalent over time.

The loss of good jobs for people with no more than a high school degree has come with a decline in other socially significant outcomes. There has been a decline in marriage rates, though couples often cohabit and have children out of wedlock. These cohabiting relationships are relatively unstable (more so than in Europe), so that many fathers do not live with their children, and many children have lived with several "fathers" by their early teens. Changing social views on marriage and out-of-wedlock childbearing have permitted these dysfunctional outcomes.

Heavy drinking, obesity, increasing social isolation, drugs, and suicide are plausible outcomes of these cumulative processes that deprive white working class lives of their meaning.

We do not know why it is that African Americans and Hispanics are protected from these outcomes nor why we do not see these events in Europe. The existence of more generous social safety nets in Europe is often noted as is the greater stability of cohabitation. Tighter control of opioids undoubtedly helps. But we do not know, and it is possible that the European reprieve is a temporary one.