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Recession Graduates: The Long-lasting Effects of an Unlucky Draw

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KEY TAKEAWAYS

- Leaving school for work during an economic downturn has negative consequences later in life for socioeconomic status, health, and mortality.
- In particular, recession graduates have higher death rates in midlife, including significantly greater risk of drug overdoses and other so-called "deaths of despair."
- It is not certain what causes these effects, but workers beginning their careers in a depressed labor market might get permanently stuck on a downward-shifted economic trajectory or they may adopt unhealthy behaviors.
- Public and private agencies may be able to mitigate these effects through interventions that take into account the economic conditions people faced when they entered the labor force.

Research shows that college graduates who start their working lives during a recession earn less for at least 10 to 15 years than those who graduate during periods of prosperity (Oyer 2006, Kahn 2010, Wozniak 2010, Oreopoulos et al. 2012). But it has been unclear whether these effects linger beyond that, whether they matter for those with less education, and to what extent they impact a broader set of outcomes, including health and mortality.

It is well known that wealthier people are healthier and live longer but, surprisingly, there is little solid evidence that income or wealth directly fosters good health. A case could be made that it is the other way around — that being healthy improves an individual's chances of economic success.

The opioid epidemic that has devastated communities across the country is a case in point. Some scholars have hypothesized that the socio-economic decline of increasingly marginalized parts of society might be a key driver of opioid addiction and its associated mortality and pathologies (Case and Deaton 2015, 2017). But there is no agreement among researchers analyzing addiction and mortality data that poor economic conditions specifically cause drug overdose deaths (Ruhm 2018, Bound et al. 2018, Currie et al. 2018).

Graduating in an Economic Downturn and Midlife Mortality

To explore these questions, Till von Wachter of the University of California-Los Angeles and I examined the effects of graduating school and joining the labor force during a recession, using large population-wide data sets spanning over three decades (Schwandt and von Wachter 2019a/b). Previous studies that have focused mainly on college graduates entering the labor market have found that economic fluctuations can have lasting consequences.

Our research is the first specifically to expand the analysis to those without college degrees and show impacts on socioeconomic outcomes and mortality when recession graduates reach midlife.

Our first main finding is that high school graduates and dropouts suffered even stronger income losses than college graduates when entering the labor market during a recession. Second, we find that negative impacts on socioeconomic outcomes persist in the long run. In midlife, recession graduates earned less, while working more. And they were less likely to be married and more likely to be childless.

Our third important finding is that recession graduates had higher death rates when they reached middle age. These mortality increases stemmed mainly from diseases linked to unhealthy behaviors such as smoking, drinking, and eating poorly. In particular, we discovered a significantly higher risk of death from drug overdoses and other so-called "deaths of despair" among those who left school during a downturn.

Our results demonstrate that health, mortality, and economic and personal well-being in midlife can bear the lasting scars of disadvantages that come during young adulthood. Simply put, the bad luck of leaving school during hard times can lead to higher rates of early death and permanent differences in life circumstances.

We arrived at these findings using a method that allowed us to harvest large cross-sectional data sets. They included U.S. Vital Statistics, which provide information on causes of death and basic demographic characteristics of decedents, including where they were born. We also used U.S. Census Bureau data, including the decennial census, the American Community Survey (ACS), and the Current Population Survey (CPS), which provide demographic, social, and economic statistics.

The main challenge is that these data sets do not show when and where college graduates got their first job. An additional challenge is that those factors might also be affected by labor market conditions. This implies that even if this information were available, the measured relationship could be biased.

We addressed these issues by dividing the data sets into cohorts based on individuals' year of birth and state of birth — characteristics that are not affected by future changes in local economic conditions. We then use census and ACS data to estimate at which ages different parts of a cohort typically graduate and which groups move to different states.

Finally, we summarize for each cohort the economic conditions across all the different graduation ages and different migration states. This gives us the average economic conditions a cohort faces around graduation, net of educational or migration responses to any economic shocks in a given year.

Our findings on the economic effects of graduating during a recession confirm previous studies showing that reduced earnings tend to fade after 10 or 15 years. Moreover, we show that high school graduates and dropouts suffered greater losses at labor market entry, in line with a less structured and therefore more vulnerable transition into the labor market of those with less education.

But that was not the full story.

Income effects became apparent again when people reached their late 30s. These effects appeared for all education groups and stayed significantly negative until age 50, at around 1 percent for each percentage-point increase in the graduation-year state unemployment rate. We also found higher divorce and childlessness rates in midlife.

The mortality results were particularly striking. In line with previous research (Ruhm 2000), we found that recession cohorts had somewhat lower mortality rates right at the time of their labor market entry. But this effect is driven entirely by fewer fatal car accidents and is probably the result of recession-induced reductions in traffic.

By the time they reached their late 30s though, mortality rates started to edge higher. By age 50, one extra death per 10,000 was registered for every percentage-point increase in unemployment at graduation, affecting males and females similarly. During a moderate recession, the unemployment rate typically rises about three percentage points. Thus, graduating in a recession is associated with about a 6 percent increase in a cohort's age-specific mortality rate.

Recession graduates' greater likelihood of death in middle age was primarily related to heart disease, lung cancer, liver disease, or drug overdose. Despite measurement issues in the recording of the exact cause of death, more than half of the overall mortality impact at age 50 can be directly linked to these causes that are related to health behaviors.

These results are strong evidence that economic conditions around graduation can have significant consequences for socioeconomic outcomes and mortality decades later. While we focus on one particular type of economic shock, temporary fluctuations in the local unemployment rate, our findings support the notion that group- or area-specific changes in labor market opportunities can persistently affect the life trajectories of those most exposed to these shocks.

This statistical analysis doesn't explain the underlying reasons that graduating during a downturn increases socioeconomic, health, and mortality risk later in life. However, we can speculate that one of two phenomena is at work.

Workers beginning their careers in a depressed labor market might not only start with a lower-paying job but be permanently stuck on a downward-shifted economic trajectory. The temporary recovery 10 to 15 years into the work history is difficult to explain in such a scenario but might be linked to differences in income profiles over age, with profiles of lower-quality jobs flattening out more quickly. In midlife, the economic disadvantage accumulated over two decades and accompanied by a less-healthy lifestyle drags health down sufficiently to result in mortality increases. Less-stable relationships are formed along the way, resulting in lower marriage rates and fewer children.

Alternatively, a phenomenon that economists call "hysteresis" may be responsible. Hysteresis refers to effects that persist long after the original causes are removed. In this case, experiencing a recessionary economy just when one is transitioning from school into the labor force may have psychological or behavioral consequences. At an especially impressionable age and a vulnerable transition period, a person may be more likely to adopt unhealthy behaviors or struggle to shake off those acquired in high school or college. These poorer health behaviors may then result in raising mortality in midlife, when the incidence of adverse health generally increases.

Can Policy Mitigate Recessionary Effects?

Call it the peril of an unlucky draw. Our research offers evidence that the transitory economic shock of a recession experienced during a formative period may put some young adults on a riskier, economically less successful life trajectory.

Fortunately, understanding that these cohorts are vulnerable raises the possibility of policy intervention. In fact, we find that the social safety net successfully buffers part of the initial shock. In the years following their labor market entry, those with less than a college degree who leave school during a recession are more likely to receive welfare payments and be covered by Medicaid and food assistance programs. In midlife, however, the same cohorts appear to be less likely to receive welfare payments, despite persisting income losses compared with their luckier counterparts. They are falling through the social safety net at the same time that marriage and fertility rates start to lag those of luckier graduation cohorts.

More research is needed to identify the specific channels and mechanisms that make recession graduates vulnerable decades later — and on how they relate to the long-term consequences of other forms of economic disadvantage. Such research could help us understand what kinds of interventions most effectively help those with an unlucky draw at labor market entry.

Direct attention and resources to help these graduates could be provided, both by public and private institutions.

It's also worth noting that eligibility for unemployment insurance, a vital labor market program to buffer the impacts of recessions, is contingent on having a work history. So it doesn't cover the youngest, least-experienced workers. Our results suggest that we need similar programs for labor market entrants. But this is not to suggest a primary focus on monetary compensation. Instead, a more effective way to buffer those who come of age in hard economic times may be to provide counseling when they are preparing to enter the labor market and help them find constructive activity while they look for work. Moreover, just informing recession graduates about the vulnerability of graduating during a recession may help. It suggests that an unfavorable start is not a sign of personal failure and better prospects may be waiting once the economy picks up.

At the same time, it is important to emphasize that the average recession impacts are comparatively small. For the typical graduate, having a year or two of additional schooling is highly valuable even if the graduate ends up facing a recession at labor market entry. And additional education seems to be protective, in that effects tend to be larger for those with fewer years of schooling. To the extent that impacts remain later in life, however, social services and health agencies can take into account the economic conditions people faced when they left school.

What we can say today is that a longer perspective is needed. Recession graduates may need society's attention not only when they enter the labor force but decades later as well. More broadly, temporary economic fluctuations can permanently impact the life trajectories of vulnerable members of society, persisting over decades after the initial shock is long forgotten.

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