Are New Graduates Left Behind in a Recession?

BY TIM SABLIK

The process of leaving school and searching for that first job can be intimidating for any college graduate. Graduating into an economy with high unemployment poses even greater challenges. Economic studies have documented that availability of jobs and opportunities for growth at firms decline during recessions. Do students who graduate during a recession suffer a long-term disadvantage in the labor market compared to students who graduate in healthier economic times? And if so, how long does it take them to recover?

Researchers Philip Oreopoulos of the University of Toronto, Till von Wachter of Columbia University, and Andrew Heisz of Statistics Canada set out to answer that question. They look at 20 years of employer-employee matched data on male college students in Canada to determine if graduating in a recession has an effect on wages earned over 10 years.

They find that if the unemployment rate increases 5 percentage points (the benchmark the authors use to denote a shift from a healthy economy to recession), annual wages are 9 percent lower for graduates entering the workforce compared to students graduating into a healthy economy. After five years, that average wage gap is 4 percent, and after 10 years, the effect largely fades out.

"The Short- and Long-Term Career Effects of Graduating in a Recession." Philip Oreopoulos, Till von Wachter, and Andrew Heisz. *American Economic Journal: Applied Economics*, January 2012, vol. 4, no. 1, pp. 1-29.

Not all students appear to face the same penalty, however. The authors use a statistical model to predict earnings in nonrecessionary times based on college attended and program of study. The estimate of earnings captures college quality and student ability, since each student chooses which college to attend and what to study. Highly skilled students are more likely to attend high-quality colleges and choose more challenging and marketable majors, partly accounting for the higher predicted wages.

Whether the predicted wages are more a function of college quality, employer demand for a given major, or innate student ability is unclear. What is clear from the authors' analysis is that students with lower predicted wages upon graduating incur much greater setbacks when entering the labor market during a recession than students with higher predicted wages. The authors find that students with the lowest predicted wages suffer 15 percent lower wages in the first year due to a 5 percentage point increase in unemployment. This effect is also highly persistent: Even after 10 years, these students earn 7.5 percent less than similar students who graduated into a better economy.

In contrast, students with the highest predicted wages earn 7.5 percent lower annual wages in the first year after a 5 percentage point increase in unemployment. But the gap between their earnings and what they should expect to make in stronger economic times drops to less than 2 percent after four years.

Young workers improve their wage and job position by switching employers more frequently in the first three to five years of their career. Compared to their peers graduating in healthy economic times, new graduates entering the labor market during a recession are more likely to get a job with a lower-quality employer in terms of total payroll and median wage. The authors find that roughly half of the recovery from this initial wage setback can be explained by job mobility.

Graduates with higher expected wages exhibit large increases in job mobility in the first years after graduating, and this allows them to move to higher-quality firms and close the wage gap in about four years. Students with lower expected wages, however, exhibit only a slight increase in job mobility in the first few years after leaving school. This means that they are not able to close the wage gap by switching to better-paying firms.

In fact, on average, these graduates are never able to fully recover from the initial impact of graduating during a period of high unemployment. The authors use a model that incorporates search frictions that grow larger as workers age. As workers get older, more factors tie them to a particular location, such as a house or spouse and family, making them less able to move between jobs. Consequently, graduates with the lowest expected wages, on average, don't recover from the initial shock of a recession before these search frictions permanently keep them at lower-paying firms.

Oreopoulos, von Wachter, and Heisz stress that these search frictions are critical for explaining the long-term impact of a recession on new workers' wages. If search frictions did not increase as workers aged, then workers with the lowest predicted wages would eventually be able to overcome the penalty to their wages, given enough time. Graduating during a recession hurts the wages of all students getting their first job, but for some it can depress wages over their entire lifetime. **RF**