

Highlights of the literature review on the effects of graduating during a recession for college graduates: main findings and practical implications¹

Javier Rodríguez S., Jared Colston, Zhixuan Wu, Zi Chen

Center for Research on College-Workforce Transitions (CCWT), University of Wisconsin Madison

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Introduction

The COVID-19 pandemic has caused a halt of the economy worldwide. The U.S. job market experienced an unprecedented downturn due to the pandemic-caused recession beginning in March 2020. As a consequence, thousands of jobs across industries have either become temporarily unavailable or are now facing wage cuts. The future of hundreds of thousands of college graduates transitioning from college to the labor market has thus become a matter of great concern for students, career advisors, higher education officials, and policy makers.

Research on the work trajectories of those who graduate during economic recessions can provide insights into how college graduates' lives are affected by finishing school and starting their working lives in the middle of a weak economy. Available evidence about what has taken place in previous recessions can inform potential strategies for students, administrators, and policy makers to cope with the economic uncertainty and career search obstacles caused by the pandemic.

Here we present a summary of the main findings from this research, aiming to contribute to the conversation about what students can expect and do as they start their professional lives in these difficult times.

Fast Facts

Mounting evidence shows that the macroeconomic context in which students graduate and enter the labor market matters: it not only determines the quality of the job that they get at first, but it can also generate long-lasting effects for their career development.

College graduates that start their careers during a strong economy are more likely to find a good job that gets them started in a stable and successful professional career (Schwandt and von Wachter, 2019).

¹ This document presents a summary of the more detailed literature review by the authors titled "Graduating during a recession: A literature review of the effects of recessions for college graduates", available at the CCWT website: <http://ccwt.wceruw.org/research/literaturereviews.html>

Graduates that enter the job market during an economic recession often face worse prospects for their earnings, promotion opportunities and future employment (Oreopoulos et. al, 2012). The following are some findings from previous studies about the effects of recessions on a number of outcomes for recent college graduates.

- **Heightened unemployment in the economy at the time of graduation often leads to reduced earnings for college graduates in their first year out of college**, compared to their counterparts graduating in a strong economy. It has been established that, on average, a one percent increase in the rate of unemployment at the time of graduation leads to between two and four percent less in annual earnings in the first year after graduation. In practice, individuals who enter the labor market in a recession, when the unemployment rate increases by 3-4 points, earn between six and sixteen percent less than their peers who graduate in a strong economy (Schwandt and von Wachter, 2019; Oreopoulos et al., 2012; Kahn, 2010; Altonji et al., 2016; Genda et al., 2010).
- **Annual earnings losses in the first year out of college occur because individuals who graduate in a recession, in general, have a hard time finding full-time work.** As the search for jobs takes longer for them, the total earnings they make in a year decreases. **Another reason is that, on average, they receive lower hourly wages for their work.** Recessions **do not** necessarily affect the ability of new labor market entrants to find a job right out of college.
- Despite these losses, **college graduates perform much better than individuals without a college degree.** The effects of unemployment at labor market entry on first-year earnings of college graduates are nearly half of those for workers with a high school degree or workers who have some college education but did not obtain a degree. All in all, college graduates are less affected by the circumstances of the economy at the onset of their careers (Schwandt and von Wachter, 2019).
- **A recession usually affects the earnings of recent graduates only during the first years of their working lives.** The negative effects of the unemployment rate at graduation usually disappear within 5-7 years. These effects usually dissipate within 3-5 years for students who graduate from majors with high expected returns, but can last for up to 10 years for students with degrees from lower return majors (Altonji et al., 2016).
- Effects dissipate because, within the first 4-5 years of work experience, graduates that start their careers in a weak economy switch to increasingly higher quality employers that pay better and are better matches for their level of skill. Then, along with economic recovery and through professional growth, college graduates continue to experience earnings increases (Oreopoulos et al., 2012).
- **Recession periods also mean that many graduates go back to school.** Postsecondary enrollment increases during economic recessions, in general. For recent college graduates, the likelihood of enrolling in graduate school increases during a recession (Foote and Grosz, 2020; Johnson, 2013).
- Regarding other outcomes, graduating in a recession has the effect of delaying marriage and having kids for men, and some evidence suggests that the effect is the opposite for women (Kawauchi and Kondo, 2020; Maclean et al., 2016).

- Graduating in recessions may have effects over individuals' health, but causal relationships are difficult to establish. Some evidence suggests that increased unemployment has an accumulated effect on mortality and life expectancy, where reductions in life expectancy are observed for individuals that enter the labor market during weak economic conditions. A recession labor market entrant may also adopt unhealthy behaviors, such as smoking or drinking, but these associations remain to be further explored (Maclean, 2013; Hessel and Avendano, 2013).

Summary of Findings

Effects on post-graduation earnings and employment

Graduating and finding a job during an economic recession directly affects young workers' earnings at the beginning of their working careers. Studies have found that that, on average, a one percent increase in the rate of unemployment at the time of graduation leads to between two and four percent less in annual earnings for new workers in the first year of their working life. In practice, this means that individuals who graduate and enter the labor market in a recession, when the unemployment rate increases by 3-4 points, earn between six and sixteen percent less than their peers who graduate in a strong economy, in their first year out of college.

Two main reasons explain this loss of earnings during the first year of work: individuals who graduate in a recession work less than year-round full-time jobs and/or receive lower hourly wages for their work. The loss in earnings does not occur because recession graduates are more likely to be unemployed in their first year.

Despite these initial losses, studies suggest that the negative effects of the unemployment rate at graduation disappear within 5-7 years. Within 5-7, college graduates who graduate in a recession are able to "catch up" with their counterparts, meaning that they close the gap and start earning the amount they would've earned had they graduated in a period of economic prosperity.

The catch up in earnings process occurs in two phases. First, graduates that start their careers in a bad economy find jobs with unsatisfying employers, but tend to switch to increasingly higher quality employers in their first 4-5 years. These are employers that pay better and fit better with their skills and abilities. In this first phase earnings grow rapidly. Then, after they attain better positions at better firms, although college graduates continue to experience increases in earnings in their industry, earnings growth slows down (Oreopoulos et al., 2012).

While college graduates are better-off than workers without a college degree in terms of their ability to recover from the initial shock of a recession, research also shows that there are differences among college graduates in their labor market trajectories. These differences are mainly observed between students from different college majors that, in turn, exhibit different earnings potential.

Comparing different quintiles in the distribution of college graduates based on their predicted earnings by major at the time of graduation, Oreopoulos et. al (2012) showed that graduates in the bottom quintile, on average, reported 2.7% less in earnings in their first year for a one percent increase in the unemployment

rate at the time of graduation. Graduates in the middle quintile reported 2.3% less, and those in the top quintile reported earnings losses of only 1.5% in their first year. The authors' estimate for all graduates in the first year was 1.8% less in annual earnings.

The negative effects of entry conditions on annual earnings are also more persistent for graduates with the lowest predicted earnings. At 4-5 years of experience, these graduates reported, on average, about 1.7% less in earnings, and at 10 years of experience, the magnitude of their lost earnings remained, on average, at 1.6%. Graduates in the middle quintile of the predicted earnings distribution reported losses of 1.2% annual earnings at 4-5 years of experience, and the gap in earnings for them disappeared after 10 years of experience (Figure 4). Graduates from the top quintile were on average, able to catch up with the earnings of those who graduated in more prosperous times within five years (Oreopoulos et al., 2012).

Effects on Postsecondary Enrollment, Family Formation and Health

For recent college graduates, the likelihood of enrolling in a graduate school increases during a recession. One study indicated that a one standard deviation increase in unemployment for a given U.S. state was associated with an average increase in graduate school enrollment of 4.3% for women (Johnson, 2013). An earlier study found a similar result for men, with unemployment increases being associated with increased enrollment in graduate schools. This finding was higher for men with higher GPAs in their undergraduate career, and graduate school enrollment was concentrated in Ph.D. programs in STEM fields (Bedard & Herman, 2008).

Some evidence suggests that recession graduates are less likely to be married or have kids at midlife compared to non-recession graduates. One study found that men who graduate during periods of high unemployment were less likely to be married or have children at age 45. The effects for women seem to be different: women graduating during recessions were more likely to have children and were no different compared to their counterparts in their marriage rates (Maclean, Covington, & Sikora Kessler, 2016). Results also showed that the effects for men were largely concentrated in individuals with low-skill employment.

Some studies have found that economic downturns actually decrease the age at which women get married. Kondo (2012) found that a one percent increase in female unemployment is associated with, on average, a decrease of 0.416 years in the median age of marriage. Again, the effect is the opposite for men: a one percent increase in unemployment was associated with an increase of 0.178 years in the median age of marriage for men. These results, however, did not affect the overall share of women who were married by age 30 in the author's study. As a potential mechanism for the observed trend, the author suggested that women who already would have been married by age 30 without the increased unemployment were expediting the premarital courtship and increasing their search intensity, thus lowering the median age (Kondo, 2012).

Finally, the available evidence on downstream health effects of entering the labor market in a recession remains scarce. The effect that has been most credibly identified as causal pertains to reduced life expectancy. Schwandt and von Wachter (2020) established that the nearly four percent increase in unemployment at labor market entry that some cohorts experienced resulted in an effect that accumulates

over the life cycle of individuals and results in a reduction of between 6-8 months in life expectancy. Other health effects are not clear, and the mechanisms by which heightened unemployment at the time of graduation may cause poor health outcomes in midlife or later remain actively debated.

Practical Implications

This review shows that recessions have an effect on college graduates entering the labor market that is independent of their individual characteristics and, ultimately, presents itself beyond their control. As recessions are periods of great uncertainty that can bring feelings of insecurity and affect young adults' mental health, it is important to note at the outset that struggles following college graduation are not a matter of personal failure. As this review of the research shows, equally capable, qualified, and skilled individuals exhibit disparate outcomes right out of college just by virtue of entering the labor market when jobs are scarce and the unemployment rate is high.

That acknowledged, the research reviewed here is instructive for advancing our thinking on what college graduates can expect, and the potential strategies they can adopt to effectively cope with the COVID-19 pandemic and its accompanying recession.

Recession graduates are more likely to find starting jobs that do not match their level of skill and/or interests. A fact about recessions is that employers may opportunistically inflate the skill or experience requirements for positions in their firms in order to maintain productivity (Hershbein and Kahn, 2018; Modestino et al. 2016). Younger workers and new entrants may be affected by this shift in the structure of the labor market and may have to take positions typically filled by individuals with lesser levels of skill.

Although one's starting position can generate long-term consequences, these consequences are not all equal; some positions are good steppingstones for career advancement while others can hinder advancement in a more permanent way. Workers in the long-run **can benefit from continuously develop job search skills in order to find a better match** that offers more prospects for promotion or wage growth. Job search skills include networking, resume building, cover letter writing, interviewing skills, finding job opportunities, etc.

Frequent job mobility is a fact of working life for virtually all workers under normal circumstances. Young workers move quite a bit during their first years of work experience, and these frequent moves between employers allow them to attain better paying jobs. As noted earlier, recession graduates are likely to start in worse starting jobs as a result of the economic downturn. **Young workers can benefit from alternative opportunities that become rapidly available as the economy recovers** –that is, staying aware of potential opportunities is particularly important as workers get re-matched with new jobs during periods of economic recovery. This may require individuals to consciously develop internal (e.g., career adaptability) and external resources (e.g., support network) to enable themselves to cope with unstable labor market and frequent job transitions (Savickas, 2012).

Starting in a “bad economy” can be difficult and discouraging. Nevertheless, job market signals remain important through the first years of young workers professional lives. **Constant development or acquisition of new skills will always be relevant**, particularly in this everchanging economy environment.

Job requirements and desired competencies may change rapidly due to the rise of new technology or social unrest. Therefore, students are encouraged to keep attention on needed skillset by desired industry or career path, and even more so when workers climb up job and wage ladders during post-recession recoveries.

In a similar vein, if circumstances are favorable, **new graduates may be benefit from pursuing further formal education credentials.** Considering further postgraduate education is important in several respects. In recessions, jobs become scarce and it becomes difficult to secure good-fitting full-time employment. Attending graduate or professional school can be a part-time alternative, with the prerequisite that personal circumstances and cost-benefit calculations make enrolling in school a realistic possibility. If personal finances or available financial aid makes it possible, research shows that further education serves as a signal of higher skills and makes workers more versatile in the pursuit of opportunities during times of economic recovery.

Additionally, it is worth keeping in mind that despite the negative effects, college graduates exhibit much better results at the beginning of their professional lives than workers who lack a college credential. All in all, a college degree remains an important source of protection against the ups and downs of economic cycles. It is thus worth noting that extra attention and support is needed for young people with disadvantageous education resources and access.

Higher education administrators, counselors and faculty might use the insights from the research reviewed here in order to inform their advising role. It is important to help graduating students calibrate their expectations according to the macroeconomic circumstances, help them know what to expect as they enter the labor market, and educate them in the dynamics that may affect their earnings, employment, health and other outcomes in the first few years out of college. Awareness of the obstacles but also a better understanding of the paths to recovery might be useful tools to approach the market for young new entrants.

In addition, higher education plays a critical role in developing students' career competencies, which can make students more resilient when facing changes and challenges after graduating from college and transitioning to workforce. Well-designed career intervention programs, events, and curriculums can not only help students build specific skills such as interview and networking but also boost students' sense of future planning, self-management, confidence, etc.

Finally, policy makers aware of this research might be better suited to design employment and assistance policies that can aid recession labor market entrants. A better understanding of the trajectories of workers in their first years out of college can help design and implement strategies to ameliorate this structural source of inequality.

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The mission of The Center for Research on College-Workforce Transitions (CCWT) is to conduct and support research, critical policy analysis, and public dialogue on student experiences with the transition from college to the workforce in order to inform policies, programs, and practices that promote academic and career success for all learners.

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Center for Research on College to Workforce Transitions (CCWT)
1025 West Johnson Street, Madison, WI 53706
For more information contact Amy Rivera (arivera3@wisc.edu)
ccwt.wceruw.org