

Contents lists available at [ScienceDirect](https://www.sciencedirect.com)

# Labour Economics

journal homepage: [www.elsevier.com/locate/labeco](http://www.elsevier.com/locate/labeco)

## The impact of mass layoffs on the educational investments of working college students<sup>☆</sup>

Ben Ost<sup>a,\*</sup>, Weixiang Pan<sup>a</sup>, Doug Webber<sup>b</sup><sup>a</sup> Department of Economics, University of Illinois at Chicago, 601 South Morgan UH718 M/C144 Chicago, IL 60607, United States<sup>b</sup> Department of Economics, Temple University, 1301 Cecil B. Moore, Ritter Annex Office 883 Philadelphia, Pennsylvania 19122, United States

### A B S T R A C T

Analyzing how working students weather personal economic shocks is increasingly important as the fraction of college students working substantial hours has increased dramatically over the past few decades. Using administrative data on Ohio college students linked to matched firm-worker data on earnings, we examine how layoff affects the educational outcomes of working college students. Theoretically, layoff decreases the opportunity cost of college enrollment, but it could also make financing one's education more difficult, so the net effect is ambiguous. We find that layoff leads to a considerable reduction in the probability of employment while in school, but it has little impact on enrollment decisions at the extensive margin. On the intensive margin, we find that layoff leads to an increase in enrolled credits, consistent with the fact that the opportunity cost of college has decreased.

© 2017 Elsevier B.V. All rights reserved.

### 1. Introduction

Over the past 40 years, there has been an unprecedented rise in the fraction of college students who simultaneously enroll full time in school and work in the labor force. In 2011, 72% of U.S. college students worked and 20% of college students were employed full time (Davis, 2012). In addition to being more likely to work, college students work longer hours and are less likely to work at stereotypical “student” jobs.<sup>1</sup> In particular, 39% work outside of the service industry, more than half work at the same employer as they had prior to enrolling in college, and 38% report working at a job related to their major field

of study.<sup>2,3</sup> Given the working behavior of today's college students, it is increasingly relevant to understand not only how college attendance impacts future labor market success, but also how contemporaneous labor market events impact college attendance. Our study explores such a question by considering how students' educational investments change as a result of layoff.

While the consequences of job loss have been studied extensively (Jacobson et al., 1993; Charles and Stephens Jr., 2004; Brand et al., 2008; Sullivan and Von Wachter, 2009; Couch and Placzek, 2010; Hallock et al., 2012; Ananat et al., 2017), being laid off as a college student presents a unique set of challenges. First, working students may rely on their labor market earnings to pay college tuition. To the extent that working students face credit constraints, those who are laid off might be forced to withdraw, take time off, or reduce their course load. Second, though financial considerations could necessitate reductions in

<sup>☆</sup> We would like to thank Catherine Maclean, Carrie Ost and seminar participants at the University of Illinois at Chicago for helpful comments on this paper. We particularly thank Lisa Neilson and the entire Ohio Education Research Data Center for making available the data used in this study. Legal disclaimer: This workforce solution was funded by a grant awarded to the U.S. Department of Labor's Employment and Training Administration. The solution was created by the Center for Human Resource Research on behalf of the Ohio Department of Job and Family Services and does not necessarily reflect the official position of the U.S. Department of Labor. The Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timeliness, usefulness, adequacy, continued availability, or ownership. This solution is copyrighted by the institution that created it. Internal use, by an organization and/or personal use by an individual for non-commercial purposes, is permissible. All other uses require the prior authorization of the copyright owner.

\* Corresponding author.

E-mail addresses: [bost@uic.edu](mailto:bost@uic.edu) (B. Ost), [douglas.webber@temple.edu](mailto:douglas.webber@temple.edu) (D. Webber).

<sup>1</sup> A recent analysis by the American Council on Education (ACE) reports that one third of working students described themselves as employees who are also enrolled in college as opposed to the reverse.

<sup>2</sup> The statistic on the relevance of one's job to one's major comes from an ACE Issue Brief analyzing the 2004 National Postsecondary Student Aid Study (NPSAS). All other statistics are based on our own analysis of college students in the state of Ohio and may not be representative of the nation. While there are many studies of working college students, we are not aware of any research that reports the industrial composition of students' jobs or whether these jobs were held prior to enrolling in college. Though not our principal contribution, using administrative data to provide these basic descriptive statistics is useful to researchers interested in understanding working college students.

<sup>3</sup> These changes are part of a broader shift in the type of individuals who are college students. While the majority of students at highly selective schools still fit the profile of a “traditional” college student (i.e. recent high school graduate dependent on their parents), at most institutions, the majority of students are *not* “traditional”. According to a recent National Center for Education Statistics (NCES) report, only 24.8% of all students are “traditional”. More than half are independent of their parents, 24.6% have dependents themselves and 36% are over age 25. This is a dramatic change from recent history since nearly two thirds of students characterized as “traditional” as late as 1995. (Radford, Cominole and Komsvold 2015)

college attendance, laid-off workers also have additional time to invest in college and thus might be more likely to persist in college, increase their course load, or improve their grades. Thus, the theoretical impact on educational investment is ambiguous.

Our study provides the first evidence of the impact of working at a firm which experiences a mass layoff on the educational outcomes of working students. We use administrative matched employer-employee data for nearly every worker in the state of Ohio linked to administrative data on higher educational enrollment at all Ohio public universities to identify students working at firms that experience mass layoffs. We then explore how these students respond to the layoff in terms of their enrollment decisions, credits attempted, GPA, and borrowing behavior. These data are uniquely well suited to answering this question because they provide detailed information on both labor market and educational outcomes for a large sample of individuals.

The primary empirical obstacle to estimating the impact of losing one's job on educational investment is the possibility that individuals who lose their jobs differ from those who remain continuously employed at the same establishment. In other contexts, workers who experience job loss have been shown to be quite different than their counterparts who remained employed, with these differences persisting even when focusing on individuals who are displaced as part of a mass layoff event (Hilger, 2016). We address this issue by exploiting data on the exact timing of the layoff event for each individual. Essentially, we focus on students who are working at a firm that will have a mass layoff event in the near future, but at different points in their college careers. Our treatment group is the set of students whose firm will have a mass layoff event during their first year enrolled in school. Our control group is the set of students whose first-year firm will have a mass layoff event during their third year after initial enrollment.<sup>4</sup> We then measure all outcomes during the fall semester of the second year so that the treatment group's layoff could impact the outcomes, but the control group has not yet experienced a layoff. The treatment and control groups both work at the type of firm that experiences layoff events and only differ in terms of the timing at which that event occurs. We show that these two groups have quite similar observable characteristics which provides reassurance that the control group likely yields a valid counterfactual for the treatment group.

The main threat to our identification strategy is the possibility that the control group could anticipate their future layoff and is thus partially treated. This concern is particularly pertinent since it is well known that laid-off workers begin to experience earnings declines several quarters prior to the layoff event, a feature often referred to as an Ashenfelter dip (Ashenfelter, 1978). To the extent that this anticipatory effect occurs, our estimates will be downwardly biased since the control group might be thought of as partially treated. We provide several pieces of evidence suggesting that this is not a major concern in our context. Most importantly, there is a large employment gap in the second year between our control and treatment group. Furthermore, we show that our estimates are broadly robust to several alternative identification strategies that could not be affected by anticipation effects.

Our study is complementary to two broad literatures that explore how the labor market impacts educational investment. First, several papers have explored how aggregate college enrollment changes in response to recessions (Berger and Kostal, 2002; Betts and McFarland, 1995; Card and Lemieux, 2001). Second, a large literature seeks to understand how working during college hinders or helps college performance (Ehrenberg and Sherman, 1987; Hotz et al., 2002; Stinebrickner and Stinebrickner, 2003; Hakkinen, 2006).

The literature studying how aggregate enrollment responds to labor market downturns is motivated by the notion that recessions lower the opportunity cost of college by reducing current labor market opportunities (Betts and McFarland, 1995). Past work has used variation in local unemployment rates to assess whether college enrollment rises or falls in response to changing labor market conditions. Our study complements this aggregated analysis by using micro-level variation in individual employment opportunities. We view our study as complementary to this literature as opposed to directly comparable because there are several reasons that individual layoffs may lead to a different effect compared to aggregate changes in employment opportunities. First, in addition to reducing current employment, being laid off likely reduces individual wealth and this wealth reduction could directly impact enrollment if credits constraints bind. Second, individual job loss will not impact supply side factors whereas a generally weak labor force could alter university funding directly. Finally, unlike studies of aggregate enrollment cyclicality that emphasize initial enrollment decisions, our study is focused on whether individuals who initially were working while in college decide to drop out.

The literature that studies the impact of working during college on academic performance is motivated by the idea that students who work many hours during college may develop useful skills through that work, but may also be unable to devote sufficient time to their studies. Though few studies in this literature can completely overcome the problem that employment decisions are endogenous, most studies find that large amounts of work is detrimental to educational outcomes (Ehrenberg and Sherman, 1987; Tyler, 2003; Hakkinen, 2006). This conclusion is broadly confirmed by Stinebrickner and Stinebrickner (2003) who use quasi-experimental variation in the amount of time spent working based on the assignment of work study jobs.

Though conceptually related, our study identifies a somewhat different parameter than the literature estimating the impact of working during college. Past work typically compares academic outcomes for students who choose to work to otherwise similar students who choose not to work. Our study, however, compares students who choose to work to otherwise similar students who are no longer allowed to work at their former job. This difference suggests that our study identifies the impact of working for a somewhat different population compared to the prior literature. Furthermore, since laid-off students are likely searching for employment, or may be suffering from the negative health effects of losing one's job (i.e. depression), our estimates correspond to the net effect including such mechanisms.

Our study is most closely related to Frenette et al. (2011) that considers the impact of mass-layoff on the post-secondary enrollment of workers. They find that workers affected by mass-layoff events are slightly more likely to subsequently enroll in college compared to workers not affected by mass-layoff events. Our study differs from Frenette et al. (2011) in several ways. First, we focus on whether working college students persist whereas Frenette et al. (2011) focuses on initial enrollment decisions of the general work force. Second, their work only considers the enrollment decisions at the extensive margin whereas our administrative higher education data allows us to study credits attempted, GPA, and borrowing behavior. Finally, the identification strategy used in Frenette et al. (2011) relies on the comparability of individuals working at firms with mass layoffs and individuals working at firms without mass layoffs.

We find that working at a firm where a layoff occurs substantially reduces the probability of employment in the following term. On the intensive margin, we find robust evidence that students enroll in more credits. We view this finding as consistent with the idea that laid-off students have a lower opportunity cost of investing in their education. On the extensive margin, we find little evidence of any impact on enrollment status overall. This suggests two possible conclusions: (1) students do not make enrollment decisions on the basis of employment opportunities (although they do matter for the intensity of enrollment), (2) several conflicting forces balance each other out. For example,

<sup>4</sup> Importantly, we define the treatment and control group entirely based on the firm that a student is working at during their first year. In other words, the control group consists of students whose first-year firm will have a mass layoff in two years. To avoid sample selection, students are considered as part of the control group even if they are no longer at their first-year firm when the mass layoff event occurs.

Download English Version:

<https://daneshyari.com/en/article/7371114>

Download Persian Version:

<https://daneshyari.com/article/7371114>

[Daneshyari.com](https://daneshyari.com)